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# 石油等消費動態統計月報

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## Monthly Report of the Current Survey of Energy Consumption

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経済産業省資源エネルギー庁  
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Ministry of Economy, Trade and Industry ( METI )

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## 利用上の注意

この月報は、統計法に基づく経済産業省特定業種石油等消費統計調査規則により実施された石油等消費動態統計調査（基幹統計調査）に関する月次の調査結果を編集公表するものです。

本統計調査の概要、統計表の作成方法及び統計表の見方は、以下のとおりです。

### I 石油等消費動態統計調査の概要

#### 1. 調査の目的

この調査は、工業における石油等の消費の動態を明らかにし、石油等の消費に関する施策の基礎資料を得ることを目的としています。

#### 2. 調査対象事業所

この調査の対象事業所は、経済産業省生産動態統計調査（基幹統計調査）の対象事業所のうち、第1表に掲げる9業種に属する事業所です。なお、業種によっては従事者規模による裾切りを行っています。

#### 3. エネルギーの調査範囲

エネルギーの調査範囲は、対象事業所の構内で使用したエネルギー（自家発生したもの及び原油、ナフサ等原料にも燃料にも使用され得るものを含む。）のうち、第2表に掲げるものです。

なお、石油系燃料とは第2表の区分の原油～再生油（石油由来）をいい、非石油系燃料とはコークス製造用炭（原料炭）～RPFをいいます。

#### 4. 調査項目の定義

##### (1) 燃料（事業所ベース）

##### 1) 受入

事業所及び事業所が契約の主体となって借り受けている倉庫又は保管場所に受け入れた燃料（原料用を含む。）の総量です。

##### 2) 発生・回収又は生産

事業所で発生・回収又は生産した燃料（原料用を含む。）の総量です。

##### 3) 消費

事業所で使用した燃料（原料用を含む。）の総量です。ただし、燃料種別ごとの消費量は、調査対象事業所で他の事業所から受け入れた分と事業所内で他の燃料（原料用を含む。）から転換（例えば、石炭から石炭コークスに転換。）した分の合計の数量です。

① 「ボイラ用（暖厨房等専用のものを除く。）」とは、生産工

程用の一般ボイラ及び自家発電用ボイラで燃焼させた燃料の数量です。

② 「コージェネレーション用」とは、熱電力併給システムで使用した燃料の数量です。

③ 「ボイラ用及びコージェネレーション用以外」とは、①②以外の用途に使用した数量です。

(ア)「原料用」とは、燃焼を目的とせず、他の製品を生産するための原料として使用した数量です。

(イ)「直接加熱用」とは、溶鉱炉、転炉、溶解炉、均熱炉、加熱炉、窯業用炉、焼結炉、培焼炉、乾燥炉等の各種工業炉及びこれらの設備と類似の設備で燃焼させた燃料の数量です。

(ウ)「その他用」とは、「原料用」、「直接加熱用」以外の構内運搬、試運転・検査用、冷暖房用、厨房用及び自家発電用の内燃機関（コージェネレーション用以外のディーゼル機関、ガスタービン等。）で使用した燃料の数量です。

なお、「原料用」を設けていない業種では、「その他用」に「原料用」消費を含んでいます。

##### 4) 払出

事業所で次の事由によって払い出した燃料（原料用を含む。）の総量です。

①他企業へ販売したもの

②同一企業内の他の事業所へ払い出したもの

③他企業へ委託生産などにより払い出したもの

##### 5) 月末在庫

調査期間の末日現在において、事業所及び事業所が契約の主体となって借り受けている倉庫又は保管場所に保管してある燃料（原料用を含む。）の総量です。

##### 6) 「受入」、「在庫」等の調査項目の調査を行っていない業種

① 「石油製品工業」については、石油製品の在庫を生産者在庫と消費者在庫に分割する必要がないことから、「在庫」の項目の調査を行っていません。また、原油と石油製品の重複を避けるため、原油の「原料用消費」の項目の調査を行っていません。このほか、「受入」についても、当該事業所が燃料用として使用するために受け入れた種別についてのみ調査を行っています。

② 「化学工業」のうち石油化学製品を生産している事業所については、調査上の制約から「炭化水素油（副生油）」と「石油系炭化水素ガス（副生ガス）」の「受入」、「在庫」及

び「原料消費」並びに「液化石油ガス」の「在庫」の項目の調査を行っていません。

## (2) 電力（事業所ベース）

### 1) 購入電力（買電）

事業所で電気事業者及び他企業から購入した電力量並びに同一企業内の他の事業所から受け入れた電力の総量です。

### 2) 自家発電

事業所で発電した発電端ベースの電力量です。「火力」は蒸気力で発電した電力量、「コージェネレーション」は熱電力併給システムの設備での発電、「水力」は水力発電、「その他」は太陽光発電、地熱発電、余熱・排熱発電、高炉炉頂圧発電、内燃機関（コージェネレーション用以外のディーゼル機関、ガスタービン等）などによる発電量です。

### 3) 消費

事業所で使用した電力量（変圧、変流によるロスを含む。）の総量です。

### 4) 販売電力（売電）

事業所で自家発電を行い、電気事業者及び他企業に販売した電力量並びに同一企業内の他の事業所に送電した電力量です。

## (3) 蒸気（事業所ベース）

事業所全体の蒸気の発生、消費等の状況を 100°C 1 気圧の乾き飽和蒸気量に換算（2.675MJ/kg）した蒸気（以下同じ。）の総量です。

### 1) 受入

事業所で他企業及び同一企業内の他の事業所から受け入れた蒸気の総量です。

### 2) 蒸気発生

#### ① 「一次蒸気」

事業所で生産工程用の一般ボイラ及び自家発電用ボイラで燃料を燃焼することによって発生させた一次蒸気（温水を含む。）の総量です。

#### ② 「一次蒸気以外」

(ア)「コージェネレーション」とは、コージェネレーションの排熱回収装置（温水熱交換器、蒸気発生器）で、発生又は回収した蒸気量です。

(イ)「その他」とは、余熱・排熱回収ボイラで発生又は回収した蒸気量です。

### 3) 消費

事業所で受け入れた蒸気量及び発生させた蒸気量のうち事業

所で使用した蒸気量です〔受入蒸気量+自家発生蒸気量-払出蒸気量の数値となります〕。

① 「生産工程用」とは、駆動、乾燥、加熱、温度調整等のために生産工程に送り出した蒸気量です。なお、タービンから抽気等を行い、それを生産工程用に送り出している場合は、その蒸気量を含んでいます。

② 「自家発電用」とは、自家発電（火力）のために実際に使用した蒸気量です。

③ 「その他用」とは、ボイラ運転に伴う所内蒸気量、並びに暖房用等に使用した蒸気量です。

## 4) 払出

事業所で次の事由によって払い出した蒸気の総量です。

①他企業に販売したもの

②同一企業内の他の事業所に払い出したもの

## (4) 部門別消費内訳（生産品目ベース）

部門別消費内訳とは、調査対象事業所で第1表の「指定生産品目」欄に掲げる品目の生産のため直接使用している燃料（ボイラ用及びコージェネレーション用以外）、電力及び蒸気（生産工程用）のエネルギー種別毎の消費量（直接投入エネルギー消費量）です。ただし、鉄鋼業については事業所全体の消費量です。

なお、指定生産品目（群）に含まれる品目の範囲は、経済産業省生産動態統計調査（基幹統計調査）で定めている品目の範囲です。詳しくは同統計調査を参照してください。

## II 統計表の作成方法と統計表の見方

統計表は、事業所ベースの業種別統計表（業種別エネルギー消費表、燃料受払表、電力受払表、蒸気受払表）と生産品目ベースの指定生産品目別統計表（直接投入エネルギー表、一次投入燃料換算表及び燃料在庫表）の2つから構成されています。

それぞれの統計表の作成方法及び見方は、以下のとおりです。

### 1. 業種別統計表（事業所ベース）

(1) 業種別統計表は、第1表に掲げる9調査対象業種に属する事業所について、9調査対象業種ごとに事業所ベース（事業所全体）の燃料、電力及び蒸気の消費量等をエネルギー種ごとに集計した結果です。換言すると、事業所ベースの消費量は、第1表の「指定生産品目」欄に掲げる品目以外の品目の生産のために消費したエネルギーを含む事業所全体の消費量です。

ただし、本統計調査では、調査対象業種を兼業している事業所があるため9調査対象業種を積み上げた全国計及び経済産業局別の計は、事業所の重複排除を行っており、この事業所の重複分は「重複事業所分補正量」としてそれぞれの表にマイナス計上しています。

- (2) 同統計表のうち、業種別エネルギー消費表と燃料受払表の燃料種別ごとの消費量は、調査対象事業所で他の事業所から受け入れた分と事業所内で他の燃料から転換（例えば、石炭から石炭コークスに転換。）した分の合計量です。

したがって、燃料消費量合計（原油換算値）は、この転換分だけ消費量が重複していますが、9調査対象業種計と化学工業、窯業・土石製品工業及び鉄鋼業の3業種については、調査対象事業所内で他の燃料からの転換分を排除したネットの消費量を掲載しています。

なお、ネットの消費量の算出方法は、燃料消費量合計（熱量換算ベース）から石炭コークス（ピッチコークスを含む）、タール、コークス炉ガス、高炉ガス、転炉ガス、電気炉ガス、酸素の7種別の発生・回収又は生産量（熱量換算ベース）を差し引くことによって求めています。

## 2. 指定生産品目別統計表（生産品目ベース）

- (1) 指定生産品目別統計表は、調査対象事業所で第1表の「指定生産品目」欄に掲げる品目の生産のために消費したエネルギー消費量をエネルギー種別ごとに集計した結果です。

ただし、本統計調査で指定した指定生産品目以外の品目の生産のために消費したエネルギー消費量については、原則として「その他の製品」として本統計表に含めて掲載していません。

- (2) 同統計表は、調査票の「部門別消費内訳」欄を単純集計した表（直接投入エネルギー表）と、調査対象事業所で自家発生蒸気、自家発電力の二次エネルギーに変換して使用している場合には当該事業所の一次投入燃料消費量ベースに換算して集計した表（一次投入燃料換算表）と、更に後者の集計結果に基づいて事業所ベースの主要燃料在庫を指定生産品目ベースに按分して集計した表の3つから構成されています。

### 1) 直接投入エネルギー表（調査票の単純集計表）

同統計表は、当該生産品目を生産するために実際に直接使用している燃料（鉄鋼業以外については、ボイラ用及びコージェネレーション用を除いたもの）、電力及び蒸気の消費量をエネルギー種別ごとに集計した結果です。

同統計表と燃料受払表、電力受払表及び蒸気受払表の関係は次のとおりです。

同統計表の「合計」欄の種別ごとの燃料消費量は、燃料受払表の「ボイラ用及びコージェネレーション用以外」燃料消費量「計」（なお、鉄鋼業については「ボイラ用」、「コージェネレーション用」燃料消費量を含んだ「合計」と、電力消費量は電力受払表の電力消費量「計」と、蒸気消費量は蒸気受払表の「生産工程用」蒸気消費量（機械工業については指定生産品目ベースの蒸気消費量の調査は行っていません。また、鉄鋼業については、「ボイラ用」と「コージェネレーション用」消費量を含んだ合計です。）とそれぞれ一致しています。したがって、電力消費量は購入分と自家発電分の合計から販売電力を差し引いた数量、蒸気消費量は「生産工程用」蒸気消費量の数量（鉄鋼業は事業所全体）です。

- 2) 一次投入燃料換算表（事業所の「ボイラ用」、「コージェネレーション用」燃料消費量ベースに換算して集計した表）

同統計表は、当該生産品目を生産するために使用している燃料、電力及び蒸気のうち、当該事業所内で燃料から変換している二次エネルギー（自家発生蒸気、自家発電電力（水力による自家発電電力を除く。））の消費分（二次エネルギーの外販分を除く。）を当該事業所の変換前の一次投入燃料（ボイラ用燃料、コージェネレーション用燃料）消費量ベースに燃料種別ごとに換算する一方、蒸気及び電力の消費量は購入分（又は受入分。）に換算してそれぞれ集計した結果です（なお、電力は購入分に水力による自家発電電力のうち自家使用分を含む。）。換算は、下記の方法で事業所ごとに行っています。

なお、機械工業については、電力消費量についてのみ事業所別に換算を行っています。

- ①ボイラ及びコージェネレーション向け一次投入燃料消費量の算出

$$\text{蒸気使用割合 (SU)} = \frac{\text{蒸気発生計} - \text{蒸気払出}}{\text{蒸気発生計}}$$

$$\text{ボイラ蒸気生産工程用使用割合 (BSP)} = \frac{\text{蒸気生産工程用消費量}}{\text{蒸気消費量計}}$$

$$\text{コージェネ蒸気生産工程用使用割合 (CSP)} = \frac{\text{蒸気生産工程用消費量}}{\text{蒸気消費量計} - \text{蒸気自家発電用消費量}}$$

$$\text{当該生産品目の蒸気使用割合 (SG)} = \frac{\text{当該生産品目の蒸気使用量}}{\text{部門別蒸気消費量計}} \quad (\text{注})$$

$$\text{電力使用割合 (EU)} = \frac{\text{自家発電電力量計} - \text{電力販売量}}{\text{自家発電電力量計}} \quad (\text{注})$$

$$\text{一次蒸気の自家発電用割合 (ES)} = \frac{\text{蒸気自家発電用消費量}}{\text{一次蒸気発生量}} \quad (\text{注})$$

$$\text{当該生産品目の電力使用割合 (EG)} = \frac{\text{当該生産品目の電力使用量}}{\text{部門別電力消費量計}} \quad (\text{注})$$

$$\text{コージェネ燃料消費の蒸気発生割合 (CS)} = \frac{\text{コージェネ蒸気発生} \times \text{単位熱量}}{(\text{コージェネ蒸気発生} \times \text{単位熱量}) + \text{コージェネ発電電力量} \times \text{単位熱量}}$$

$$\text{コージェネ燃料消費の発電電力割合 (CE)} = \frac{\text{コージェネ発電電力量} \times \text{単位熱量}}{(\text{コージェネ蒸気発生} \times \text{単位熱量}) + \text{コージェネ発電電力量} \times \text{単位熱量}}$$

(注) 鉄鋼業は「ボイラ用」「コージェネレーション用」を除いて計算。

(ア) 「火力」又は「コージェネ」発電を行っている事業所  
ア) 生産品目 (又は部門) 別の自家発生蒸気消費量 (生産工程用) の一次投入燃料換算値 (lin) (機械工業を除く業種)

$$\text{lin} = (\text{ボイラ用燃料消費量 (以下Bi)} \times \text{BSP} + \text{コージェネ用燃料消費量 (以下Ci)} \times \text{CS} \times \text{CSP}) \times \text{SU} \times \text{SG}$$

イ) 生産品目 (又は部門) 別の「火力」又は「コージェネ」発電消費量の一次投入燃料換算値 (I'in)

$$\text{I'in} = (\text{Bi} \times \text{ES} \times \text{SU} + \text{Ci} \times \text{CE}) \times \text{EU} \times \text{EG}$$

ウ) 生産品目別の一次投入燃料消費量 = 生産品目別の直接投入燃料消費量 + lin + I'in

エ) 機械工業の生産品目別の一次投入燃料消費量 = 生産品目別の直接投入燃料消費量 + (Bi + Ci) × EU × EG

(イ) 「火力」及び「コージェネ」発電を行っていない事業所  
生産品目別の一次投入燃料消費量 = 生産品目別の直接投入燃料消費量 + Bi × SU × SG

② 購入系電力 (購入電力 + 水力) 量の算出

$$\text{生産品目別購入系電力消費量} = (\text{購入電力量} + \text{水力発電量} \times \text{EU}) \times \text{EG}$$

③ 受入蒸気量の算出

$$\text{生産品目別受入蒸気消費量} = \text{受入蒸気量} \times \text{SG}$$

3) 指定生産品目別燃料在庫表

燃料 (原料を含む。) 在庫については、事業所ベース (事業所全体) の調査ですが、経済産業省生産動態統計調査等の関連から生産品目別に下記の方法で、事業所別、燃料種別ごとに按分して集計しました。

$$\text{生産品目別燃料在庫} = \text{燃料在庫量 (事業所ベース)}$$

$$\times \frac{\text{当該生産品目燃料消費量 (一次投入燃料消費量換算後)}}{\text{生産品目別燃料消費量計 (一次投入燃料消費量換算後)}}$$

### Ⅲ この月報で使用している地域別の内容

経済産業局別

北海道経済産業局 北海道全域

東北 // 青森、岩手、宮城、秋田、山形、福島  
の各県

関東 // 茨城、栃木、群馬、埼玉、千葉、東京、  
神奈川、新潟、山梨、長野、静岡の各都県

中部 // 富山、石川、岐阜、愛知、三重の各県

近畿 // 福井、滋賀、京都、大阪、兵庫、奈良、  
和歌山の各府県

中国 // 鳥取、島根、岡山、広島、山口の各県

四国 // 徳島、香川、愛媛、高知の各県

九州 // 福岡、佐賀、長崎、熊本、大分、宮崎、  
鹿児島  
の各県及び沖縄県

### Ⅳ その他

1. この月報で使用している記号の区分は下記のとおりです。

「0」は単位未満 「-」は実績なし

「…」は不詳 「r」は訂正

2. 単位未満を四捨五入しているため、内容の積み上げと合計が一致しない場合があります。

3. 熱量換算は、それぞれの調査項目ごとに行っているため、合計と内訳は一致しません。

4. 平成20年1月分より単位当たりの発熱量の改訂を行います。

した(9ページ 第2表 「単位当たりの発熱量」を参照。)

5. この月報に掲載された統計を他に転載するときは、必ず「石油等消費動態統計月報」による旨を明記してください。

## V 問い合わせ先

この月報の内容についてのお問い合わせは、下記宛てにご連絡ください。

〒100-8931 東京都千代田区霞が関一丁目3番1号

経済産業省資源エネルギー庁

長官官房総務課戦略企画室

電話代表 (03) 3501-1511 内線 4477-4479

第1表 石油等消費動態統計調査の調査対象業種、指定生産品目(群)及び調査の範囲

| 調査対象業種   | 指定生産品目(群)  | 調査の範囲                                 |
|--|--|---------------------------------------|
| パルプ・紙工業  | パルプ<br>紙<br>板紙   | 全部<br>従事者 50 名以上のもの<br>従事者 50 名以上のもの  |
| 化学工業<br>(化学繊維工業を除く。)                           | 石油化学製品<br>アンモニア及びアンモニア誘導品<br>ソーダ工業製品   | 全部<br>全部<br>全部                        |
| 化学繊維工業   | 化学繊維   | 従事者 30 名以上のもの                         |
| 石油製品工業   | 石油製品 (グリースを除く。)  | 全部                                    |
| 窯業製品及び土石製品工業<br>(ガラス製品工業 (板ガラス工業を除く。)<br>を除く。) | セメント<br>板ガラス<br>石灰   | 全部<br>全部<br>従事者 30 名以上のもの             |
| ガラス製品工業<br>(板ガラス工業を除く。)                        | ガラス製品  | 従事者 100 名以上のもの                        |
| 鉄鋼業  | 銑鉄、フェロアロイ、粗鋼、鋼半製品、<br>鍛鋼品、鋳鋼品、一般普通鋼熱間圧延鋼材、<br>特殊鋼熱間圧延鋼材、冷間仕上鋼材<br>(磨棒鋼及び線類を除く。)、めっき鋼材<br>(線類を除く。)、冷間ロール成型形鋼、<br>鋼管 | 全部                                    |
| 非鉄金属地金工業                                       | 銅<br>鉛<br>亜鉛<br>アルミニウム<br>アルミニウム二次地金   | 全部<br>全部<br>全部<br>全部<br>従事者 30 名以上のもの |
| 機械工業   | 土木建設機械<br>金属工作機械及び金属加工機械<br>電子部品<br>電子管・半導体素子・集積回路<br>電子計算機及び情報端末並びに電子応用<br>装置<br>自動車及び部品 (二輪自動車を含む。)              | 経済産業大臣の指定する従事者 500 名以上の<br>もの         |



第2表 エネルギー種別の単位及び定義

| 区分                 | 種別                 | 調査の単位                  | 単位当たりの発熱量  | 定義及び備考   |
|--------------------|--------------------|------------------------|--|--|
| 石油系燃料              | 原油                 | kl                     | 38.2MJ/l   | 「化学工業」のみ調査。<br>「化学工業」のみ調査。NGLとは天然ガス液をいう。<br>工業用ガソリンを除く。また、自動車用ガソリンのうち、構外運搬に使用されたものは除く。<br><br>石油化学で芳香族製品（純ベンゼン、純トルエン、キシレン等）を抽出するために使用するものをいう。<br><br>構外運搬に使用されたものは除く。<br><br>石油系の油（原油～B・C重油以外の油）をいう。<br><br>液化石油ガス（LPG）以外の石油系ガスをいう。<br><br>生コークスを含む。<br>アスファルトにストレートアスファルト等を含む。<br>石油系の潤滑油やグリース等から再生した油を燃料として使用したものの（廃油を含む。）をいう。 |
|                    | NGL・コンデンセート        | kl                     | 35.3MJ/l   |  |
|                    | ガソリン               | kl                     | 34.6MJ/l   |  |
|                    | ナフサ                | kl                     | 33.6MJ/l   |  |
|                    | 改質生成油              | kl                     | 35.1MJ/l   |  |
|                    | 灯油                 | kl                     | 36.7MJ/l   |  |
|                    | 軽油                 | kl                     | 37.7MJ/l   |  |
|                    | A重油                | kl                     | 39.1MJ/l   |  |
|                    | B・C重油              | kl                     | 41.9MJ/l   |  |
|                    | 炭化水素油（副生油）         | kl                     | 41.9MJ/l   |  |
|                    | 液化石油ガス（LPG）        | t                      | 50.8MJ/kg  |  |
|                    | 石油系炭化水素ガス（副生ガス）    | 1000m <sup>3</sup>     | 44.9MJ/Nm <sup>3</sup>   |  |
| オイルコークス            | t                  | 29.9MJ/kg              | 「鉄鋼業」のみ調査。<br>無煙炭を含む。<br>石炭コークスにピッチコークスを含む。<br><br>「鉄鋼業」、「化学工業」のみ調査。<br><br>炭鉱ガス抜きガスは含まない。<br>地域のガス事業者から液化天然ガス（LNG）専用の導管で供給されているものを含む。<br>地域のガス事業者から供給されているものをいう。ただし、「液化天然ガス（LNG）」を専用の導管で購入している場合は、「液化天然ガス（LNG）」として計上している。<br>「パルプ・紙・板紙工業」のみ調査。<br>「鉄鋼業」のみ調査。<br>バーク、木くず等を含む。<br>廃棄物となったタイヤを原形のまま、又はチップ状にしたものを燃料として使用したものをいう。<br>廃棄物となったプラスチックを圧縮又は破碎することによって成形したものを燃料として使用したものをいう。<br>廃棄物となった紙及びプラスチック等を主原料として、圧縮成型、押出成型によって固化化したものを燃料として使用したものをいう。 |  |
| 石炭系燃料              | 石炭製造用炭（原料炭）        | t                      |  | 29.1MJ/kg  |
| 石炭                 | t                  | 25.7MJ/kg              |  |  |
| 石炭コークス（ピッチコークスを含む） | t                  | 29.4MJ/kg              |  |  |
| ターナル               | t                  | 37.3MJ/kg              |  |  |
| コークス炉ガス            | 1000m <sup>3</sup> | 21.1MJ/Nm <sup>3</sup> |  |  |
| 非石油系燃料             | 高炉ガス               | 1000m <sup>3</sup>     |  | 3.41MJ/Nm <sup>3</sup>   |
|                    | 転炉ガス               | 1000m <sup>3</sup>     |  | 8.41MJ/Nm <sup>3</sup>   |
|                    | 電気炉ガス              | 1000m <sup>3</sup>     |  | 8.41MJ/Nm <sup>3</sup>   |
|                    | 天然ガス               | 1000m <sup>3</sup>     |  | 43.5MJ/Nm <sup>3</sup>   |
|                    | 液化天然ガス（LNG）        | t                      |  | 54.6MJ/kg  |
|                    | 都市ガス（A）（注1）        | 1000m <sup>3</sup>     |  | 13.2MJ/絶乾kg<br>7.12MJ/Nm <sup>3</sup><br>16.3J/絶乾kg<br>33.2MJ/kg<br>29.3MJ/kg<br>29.3MJ/kg   |
|                    | 都市ガス（B）（注2）        |                        |  |  |
|                    | 都市ガス（注3）           |                        |  |  |
|                    | 回収黒液               | 絶乾 t                   |  |  |
|                    | 酸素                 | 1000Nm <sup>3</sup>    |  |  |
| 廃材                 | 絶乾 t               |                        |  |  |
| 廃タイヤ               | t                  |                        |  |  |
| 廃プラスチック            | t                  |                        |  |  |
| RPF                | t                  |                        |  |  |
| 電力                 | 1000kWh            | 3.60MJ/kWh             | 「機械工業」は調査を行っていない。  |  |
| 蒸気                 | t                  | 2.675MJ/kg             |  |  |

注1. 都市ガス(A)は、調査項目の単純集計値（1000m<sup>3</sup>）です。  
 2. 都市ガス(B)は、都市ガス発熱量換算値を41.1MJ/m<sup>3</sup>で換算した集計値（1000m<sup>3</sup>）です。  
 3. 都市ガスは発熱量換算値（10<sup>6</sup>kJ）。  
 なお、都市ガスの単位当たりの発熱量は、事業所ごとの単位当たりの発熱量によります。

## Notes for Utilization

The objective of this monthly report is to compile and publish the results of the monthly survey concerning the Current Survey of Energy Consumption (Fundamental Statistical Survey), which is conducted under METI's regulations for the Statistical Survey of Energy Consumption in the Selected Industries based on the Statistics Law.

An outline of this statistical survey, the method used to compile the statistics, and an explanation of their uses are as follows:

### I. Outline of the Current Survey of Energy Consumption

#### 1. Purpose of the survey

This survey aims to clarify the current consumption of petroleum and other types of energy by industry and to obtain basic materials for making policies concerning the consumption of petroleum, etc.

#### 2. Establishments surveyed

This survey covers the establishments in the nine industrial categories listed in Table 1, among those covered by the Current Survey of Production (Fundamental Statistical Survey) by the Ministry of Economy, Trade and Industry. But, Smaller establishments in some industries are exempted from the survey, as determined by the number of employees.

#### 3. Scope of energy surveyed

The Scope of energy surveyed are those listed in Table 2, among those consumed by the establishments covered by this survey (including in-house generated types of energy and materials that are used both as material and fuel, such as crude petroleum and naphtha).

As shows in Table 2, petroleum-based fuels range from crude petroleum to reproduction oil(oil origin), and non-petroleum-based fuels range from coal for making coke (material coal) to refuse paper & plastic fuel.

#### 4. Definition of survey fields items

##### (1) Fuels (establishment base)

###### 1) Receipt

Total volume of the fuel (including that used as materials) received by the establishment, or by a warehouse or storage facility rented under a contract to which the establishment is a principal party.

###### 2) Generation, recovery and production

Total volume of the fuel (including that used as materials) generated, collected or produced by the establishment.

###### 3) Consumption

Total volume of the fuel (including that used as materials) consumed by the establishment. However, the consumption in the fuel category is the total of that of the fuels received from other establishments (including those used as materials) and that of the fuels converted from other categories (for example, from coal to coal coke).

① Fuels “for boilers (except for heating or cooking)” refers to the volume of fuels burned in general purpose boilers for the production process or in the boilers for private power generation.

② Fuels “for co-generation” refers to the volume of fuels used for co-generation.

③ Fuels “for purposes other than boilers and co-generation” refers to the volume of fuels used for purposes other than ① and ②.

(a) “As materials” refers to the volume used not as fuel, but as materials for manufacturing other products.

(b) Fuels “for direct heating” refer to the volume of fuels burned in various industrial furnaces, such as smelting furnaces, conversion furnaces, dissolving furnaces, soaking pits, heating furnaces, ceramic furnaces, sintering furnaces, ash-burning furnaces, drying furnaces, etc., and in similar equipment.

(c) Fuels “for other purposes” refers to the volume of fuels used for purposes other than “as materials” and “direct heating”, such as transportation within a plant, trial runs for inspection, air-conditioning, cooking, and internal combustion engines for private power generation (diesel engines and gas turbines, etc., for purposes other than co-generation).

For the industries for which the use “as materials” is not provided separately, fuels “for other purposes” include what is used “as materials”.

###### 4) Shipment

Total volume of fuels taken out of the establishment (including that used as materials) for reasons mentioned below:

① sales to other establishments,

② transfer to other divisions of the same company, or

③ transfer to other establishments for subcontracted production.

#### 5) Month-end inventory

Total volume of fuels (including those used as materials) stored at the end of the survey month at the establishment or at a warehouse or storage facility rented under a contract to which the establishment is a principal party.

#### 6) Industrial categories exempted from the survey for such items as “Receipt” and “Inventory”

① In the “Petroleum Product Industry”, the items related to “Inventory” are not surveyed because it is not necessary to divide the inventory of petroleum products into that owned as a producer or as a consumer. Furthermore, crude petroleum “consumption as materials” is not surveyed, to avoid the duplication of crude petroleum and petroleum products. As for “Receipt”, the survey is made only for the fuel category which the establishment received as fuel.

② For establishments manufacturing petrochemical products in the “Chemical industry”, surveys are not made for “Receipt”, “Inventory” and “Use as materials” for by-product hydrocarbon oil and by-product petroleum-based hydrocarbon gas and “Inventory” Of liquefied petroleum gas (LPG), due to the limitations of the survey.

#### (2) Electricity (establishment basis)

##### 1) Electricity purchased

This is the sum of the electric power purchased by the establishment from electric companies and other enterprises, and that received from other establishments of the same enterprise.

##### 2) Private power generation

This is the electric power generated by the establishment measured at the generation terminal. “Thermal” stands for steam-generated power, “Co-generation” for power generated via co-generation system facilities, “Hydro” for hydro-generated power, and “Others” for power generated using photovoltaic power generation, geothermal energy, extra or waste heat, the high pressure at the top of blast furnaces, or by using internal combustion engines (diesel engines, gas turbines, etc., not related to co-generation) etc.

##### 3) Consumption

Total electric power consumed by the establishment (including loss for changing voltage and amperage).

##### 4) Electricity sold

This is the sum of electric power sold by the establishment, for private power generation, to electric companies and other enterprises, and that delivered to other establishments of the same enterprise.

#### (3) Steam (establishment basis)

This refers to the volume of steam generated, consumed, etc., by the establishment converted to the volume of dry, saturated steam at 100°C and 1 atmospheric pressure (2.675MJ/kg).

##### 1) Receipt

Total volume of pressure the establishment received from other enterprises or other establishments of the same enterprise.

##### 2) Steam generation

###### ① “Primary steam”

Total volume of primary steam (including hot water) generated by the establishment by burning fuels in general boilers for production processes and boilers for private power generation.

###### ② “Non-primary steam”

(a) “Co-generation” stands for the volume of steam generated or collected by the waste-heat collecting device (hot-water heat exchanger, steam generator).

(b) “Others” stands for the volume of steam generated or collected by the extra-heat/waste-heat collecting boilers.

##### 3) Consumption

The volume of primary steam used by the establishment from that received from others or generated private (= Receipt + Generation – Shipment).

① “For production process” stands for the steam sent to the production process as driving power, or to dry or heat or adjust temperature.

If steam is extracted from turbines and used in the production process, such steam is included.

② “For private power generation” stands for the volume of steam actually used for private power generation (thermal), and does not include the steam extracted from turbines and used in the production process.

③ “For other uses” stands for the volume of steam generated by operating boilers, and includes steam used for heating and cooking.

##### 4) Shipment

Total volume of steam shipped out from the establishment for:

① sales to other enterprises, or

② use in other establishments of the same enterprise.

(4) Breakdown of consumption by division (Product base)

The breakdown of consumption by division is the breakdown of the energy directly used by the surveyed establishment for manufacturing the products mentioned in the “Product” column of Table 1 (consumption of direct input energy) into fuels (excluding those for boilers and co-generation), electricity and steam (used for production process). But, in the iron and steel industry, amount of consumption is the amount by the entire establishment.

The scope of “Designated Products” is as provided in the Current Survey of Production by the Ministry of Economy, Trade and Industry (Fundamental Statistical Survey). For further details, please refer to the said survey report.

II. Method of preparing statistical tables, and their uses

The statistical tables are composed of two parts: the statistical tables classified by industrial category (energy consumption table, INPUT/OUTPUT tables for fuels, electricity and steam), which are on an establishment basis, and statistical tables for the designated products (direct input energy table, conversion table for the primary input fuels and inventory table for main fuels), which are on a product basis. The method of preparing each statistical table and their uses are as follows:

1. Statistical tables for industrial category (establishment basis)

(1) The statistical tables for industrial category show the consumption, etc., of fuels, electricity and steam by adding up the total for each energy category on an establishment basis (for the entire establishment), for each industrial category of the establishment. In other words, the consumption on an establishment basis stands for the total energy consumed by the whole establishment, and includes the energy used for manufacturing products other than those mentioned in the “Product” column of Table 1.

However, as some establishments surveyed have activities in more than one industrial category, duplication, if any, is subtracted from the national total and the sub-total at each Bureau of Economy, Trade and Industry, by showing it as “adjustment for duplication”.

(2) The consumption of energy shown in the industrial category

energy consumption table and in the fuel INPUT/OUTPUT table, is the total of what the establishment received from other establishments and the portion converted in-house from other fuels (for example, from coal to coal coke). Therefore, the converted portion is duplicated in the total fuel consumption (converted to crude petroleum).

However, the net consumption, not including the portion converted from other fuels, is shown in the total of the nine surveyed industries, and the sub-totals for three industrial categories (chemical; ceramics, clay and stone products; iron and steel). The net consumption is calculated by subtracting the generation, recovery and production of coal coke (including pitch coke), tar, coke oven gas, blast furnace gas, converter furnace gas, electrical furnace gas, and oxygen from the total fuel consumption (converted to energy).

2. Statistical tables by designated product (product basis)

(1) The statistical tables by designated product show the total energy consumed by the surveyed establishments for manufacturing the products mentioned in the “designated product” column of Table 1, added up for each energy category.

As a rule, the energy consumed for manufacturing products other than the designated products are shown as “other products”.

(2) These statistical tables are composed of three parts: the direct input energy table, prepared by simply adding up the figures in the column of “Consumption breakdown by division” of the questionnaire; the primary input fuel conversion table, prepared by adding up the primary input fuel consumption (the fuel consumed for “boilers” and “co-generation”) for the establishments which use these fuels after turning them into secondary energies, such as in-house generated steam or electricity; and the inventory table of main fuels, prepared on the basis of the latter sum and showing the inventory distributed to each designated product.

1) Direct input energy table (simple add-up table of questionnaire)

This table shows the totals of the fuels (except those used for boilers and co-generation), electricity and steam actually and directly used for manufacturing the said product, for each energy category. The relationship between this table and the INPUT/OUTPUT tables of fuels, electricity and steam are as follows: The categorized fuel consumption in the “total”

column of this table matches the “total” fuel consumption other than “for boilers and co-generation” of the fuel INPUT/OUTPUT table (but, in the iron and steel industry, the “total” including the fuels used “for boilers and co-generation”), and the electricity consumption matches the “total” electricity consumption in the electricity INPUT/OUTPUT table, and the steam consumption matches the steam consumption for “production process” in the steam INPUT/OUTPUT table (but steam consumption on the basis of the designated products is not surveyed in machinery industries). Therefore, the electricity consumption is the total of purchased electricity and private power generation minus the electricity sold, and the steam consumption is what is used for the production process.

2) Primary input fuel conversion table (prepared by adding up the primary input fuel consumption for “boilers” and “co-generation” of the establishments).

This table is prepared by converting the secondary energy (in-house generated steam and electricity, excluding hydroelectricity) used by the establishment for manufacturing the said product (not including the secondary energy sold to others) into the primary input of fuels (fuels for boilers and co-generation) for each energy category, and by converting the consumption of steam and electricity to the purchase (or receipt) and adding them up (electricity purchase includes the private generated hydroelectricity). The following methods are used for conversion at each establishment. For machinery industries, the conversion is made only for electricity consumption for each establishment.

① Calculation of primary input fuel consumption for “boilers and co-generation”

Steam use rate (SU)

= (Total steam generation – Steam shipment) / Total steam generation

Proportion of boiler steam used for production process (BSP)

= Steam used for production process / Total steam consumption

Proportion of co-generation steam used for production process (CSP)

= Steam used for production process / (Total steam consumption – Steam consumed for private power generation)

Proportion of steam used for manufacturing the said product (SG)

= Steam used for manufacturing the said product / Total steam consumption by Division

Rate of electricity used (EU)

= (Total private power generation – Electricity sold) / Total private power generation

Proportion of primary steam used for private power generation (ES)

= Primary steam used for private power generation / Total primary steam generated

Rate of electricity used for the said product (EG)

= Electricity used for the said product / Total electricity consumption of the Division

Ratio used for generating steam of co-generation fuel consumption (CS)

= Steam generated by co-generation × unit energy / (Steam generated by co-generation × unit energy + electricity generated by co-generation × unit energy)

Ratio used for generating electricity of co-generation fuel consumption (CE)

= Electricity generated by co-generation × unit energy / (Steam generated by co-generation × unit energy + electricity generated by co-generation × unit energy)

(A) Establishment with private thermal power generation or co-generation

a. Consumption of in-house generated steam (for production process) for the product (or division) converted to the primary input of fuels (I<sub>in</sub>) (for all industrial categories except machinery):

$I_{in} = (\text{Fuel consumption for boilers } (B_i) \times \text{BSP} + \text{Fuel consumption for co-generation } (C_i) \times \text{CS} \times \text{CSP}) \times \text{SU} \times \text{SG}$

b. Consumption of thermal or co-generation electricity for the product (or division) converted to the primary input of fuels (I'<sub>in</sub>)

$I'_{in} = (B_i \times \text{ES} \times \text{SU} + C_i \times \text{CE}) \times \text{EU} \times \text{EG}$

c. Primary input fuel consumption for the product = Direct input fuel consumption for the product + I<sub>in</sub> + I'<sub>in</sub>

d. Primary input fuel consumption for the product in machinery industries = Direct input fuel consumption for the product + (B<sub>i</sub> + C<sub>i</sub>) × EU × EG

(B) Establishment without private thermal power generation or co-generation

Primary input fuel consumption for the product = Direct input fuel consumption for the product + Bi × SU × SG

② Calculation of purchase-based electricity (purchased electricity + hydroelectricity)

Consumption of purchase-based electricity for the product = (purchased electricity + hydroelectricity × EU) × EG

③ Calculation of received steam

Consumption of received steam for the product = Received steam × SG

3) Breakdown of the fuel inventory into designated product

The fuel (including materials) inventory is surveyed on the basis of the establishment (i.e. for the establishment as a whole). However, in consideration of its relationship with the Current Survey of Production of the Ministry of Economy, Trade and Industry, the inventory was broken down by product according to the following method, by establishment and fuel category:

Fuel inventory for the product = Total fuel inventory (establishment basis) × Fuel consumption for the product (converted to primary input fuel consumption) / Total fuel consumption by product (converted to primary input fuel consumption)

III. The areas represented by each Bureau of Economy, Trade and Industry used in this monthly report:

Hokkaido Bureau of Economy, Trade and Industry: Hokkaido

Tohoku Bureau of Economy, Trade and Industry: Aomori, Iwate, Miyagi, Akita, Yamagata and Fukushima Prefectures

Kanto Bureau of Economy, Trade and Industry: Ibaraki, Tochigi, Gunma, Saitama, Chiba, Kanagawa, Niigata, Yamanashi, Nagano and Shizuoka Prefectures, and Tokyo

Chubu Bureau of Economy, Trade and Industry: Toyama, Ishikawa, Gifu, Aichi and Mie Prefectures

Kansai Bureau of Economy, Trade and Industry: Fukui, Shiga, Kyoto, Osaka, Hyogo, Nara and Wakayama Prefectures

Chugoku Bureau of Economy, Trade and Industry: Tottori, Shimane, Okayama, Hiroshima and Yamaguchi Prefectures

Shikoku Bureau of Economy, Trade and Industry: Tokushima, Kagawa, Ehime and Kochi Prefectures

Kyushu Bureau of Economy, Trade and Industry: Fukuoka, Saga,

Nagasaki, Kumamoto, Oita, Miyazaki, Kagoshima and Okinawa Prefectures

#### IV. Others

1. Abbreviations used in this monthly report are as follows:

0 : Less than unit after rounding

— : No results

… : Unknown

r : Revised

2. Figures may not exactly equal totals because of rounding.

3. In an itemized list, the figures may not add up exactly to the total because the calories are converted by survey item.

4. From January 2008, calorific value per unit has been revised. (Please refer to the calorific value per unit by different energy types shown in Table2. Energy categories, units and definitions)

5. When reprinting the statistics contained in this monthly report in other printed matter, the fact that they are based on the “Monthly Report of the Current Survey of Energy Consumption” must be clearly indicated.

#### V. Contact information

If there are any questions about the contents of this monthly report, please contact the following address.

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Table 1. Surveyed industries, designated products, and scope of survey

| Surveyed industry   | Products   | Scope of survey   |
|---|--|---|
| Pulp and paper industry   | Pulp<br>Paper<br>Paperboard  | All<br>Establishments with 50 or more employees<br>Establishments with 50 or more employees                   |
| Chemical industry (except chemical fiber industry)  | Petrochemical products<br>Ammonia and ammonia-derived products<br>Soda products  | All<br>All<br>All   |
| Chemical fiber industry   | Chemical fibers  | Establishments with 30 or more employees  |
| Petroleum products industry   | Petroleum products (except grease)   | All   |
| Ceramic, clay and stone products industry (except glass product industry, with the exception of sheet glass industry) | Cement<br>Sheet glass<br>Lime  | All<br>All<br>Establishments with 30 or more employees  |
| Glass product industry (except sheet glass industry)  | Glass products   | Establishments with 100 or more employees   |
| Iron and steel industry   | Pig iron, Ferro-alloys, Crude steel, Semi-finished steel, Steel forgings, Steel castings, Ordinary hot-rolled steel, Special hot-rolled steel, Cold-finished steel (except cold-finished steel bars, wires), Coated steel (except wires), Cold-rolled steel shapes, Steel pipes and tubes            | All   |
| Non-ferrous metals industry   | Copper<br>Lead<br>Zinc<br>Aluminum<br>Secondary aluminum ingots  | All<br>All<br>All<br>All<br>Establishments with 30 or more employees  |
| Machinery industry  | Civil engineering machinery, tractors<br>Metal working and metal processing machinery<br>Parts for electronic equipment<br>Electron tubes, semiconductors, ICs<br>Electronic computers and information terminals<br>Associated electronic equipment<br>Automobiles and parts (including motorcycles) | Establishments with 500 or more employees which are designated by the Minister of Economy, Trade and Industry |

Table 2. Energy categories, units and definitions

| Division                      | Categories                                   | Unit                | Energy per unit   | Definitions and remarks  |
|-------------------------------|--|---------------------|---|--|
| Petroleum-based fuels         | Crude petroleum                              | kl                  | 38.2MJ/l  | Only “Chemical industry” is surveyed.  |
|                               | NGL· condensate                              | kl                  | 35.3MJ/l  | Only “Chemical industry” is surveyed.NGL: Natural Gas Liquids.   |
|                               | Gasoline                                     | kl                  | 34.6MJ/l  | This is subdivided into industrial gasoline, automobile gasoline, etc., but industrial gasoline is excluded. Automobile gasoline does not include what is used for transportation outside the plant. |
|                               | Naphtha                                      | kl                  | 33.6MJ/l  | Also known as crude gasoline.  |
|                               | Oil produced by conversion                   | kl                  | 35.1MJ/l  | This refers to the oil used in the petrochemical plant to extract aromatic products (pure benzene, pure toluene, xylene, etc.).  |
|                               | Kerosene                                     | kl                  | 36.7MJ/l  |  |
|                               | Gas oil                                      | kl                  | 37.7MJ/l  | Does not include what is used for transportation outside the plant.  |
|                               | Heavy Fuel oil A                             | kl                  | 39.1MJ/l  |  |
|                               | Heavy Fuel oil B·C                           | kl                  | 41.9MJ/l  |  |
|                               | Hydrocarbon oil (by-product)                 | kl                  | 41.9MJ/l  | Petroleum-based oil (excludes crude petroleum — “B·C” heavy oil).  |
|                               | Liquefied petroleum gas (LPG)                | t                   | 50.8MJ/kg   |  |
|                               | Petroleum-based hydrocarbon gas (by-product) | 1000m <sup>3</sup>  | 44.9MJ/Nm <sup>3</sup>  | Petroleum-based gas other than liquefied petroleum gas (LPG).  |
|                               | Petroleum coke                               | t                   | 29.9MJ/kg   | Raw coke is included in petroleum coke.  |
|                               | Asphalt                                      | t                   | 40.9MJ/kg   | Asphalt (Straight asphalt ,etc. are included)  |
| Reproduction oil (Oil origin) | kl   | 40.2MJ/l            | Reproduction oil used as a fuel, from petroleum-based lubricant and grease etc. (Wasted oil is included ) |  |
| Non-petroleum-based fuels     | Coal-based fuels                             |                     |   |  |
|                               | Coal for making coke (material coal)         | t                   | 29.1MJ/kg   | Only “Iron and steel industry” is surveyed.  |
|                               | Coal   | t                   | 25.7MJ/kg   | Anthracite is included in coal.  |
|                               | Coal coke (including Pitch coke)             | t                   | 29.4MJ/kg   | Pitch coke is included in coal coke.   |
|                               | Tar  | t                   | 37.3MJ/kg   | Only “Iron and steel” and “Chemical industries “are surveyed.  |
|                               | Coke oven gas                                | 1000m <sup>3</sup>  | 21.1MJ/m <sup>3</sup>   |  |
|                               | Other fuels                                  |                     |   |  |
|                               | Blast furnace gas                            | 1000m <sup>3</sup>  | 3.41MJ/Nm <sup>3</sup>  |  |
|                               | Converter furnace gas                        | 1000m <sup>3</sup>  | 8.41MJ/Nm <sup>3</sup>  |  |
|                               | Electric furnace gas                         | 1000m <sup>3</sup>  | 8.41MJ/Nm <sup>3</sup>  |  |
|                               | Natural gas                                  | 1000m <sup>3</sup>  | 43.5MJ/Nm <sup>3</sup>  | Does not include gas extracted from coal mines.  |
|                               | Liquefied natural gas (LNG)                  | t                   | 54.6MJ/kg   | Includes liquefied natural gas (LNG) supplied by local gas company through special pipe.   |
|                               | Town gas (A) (Note 1)                        | 1000m <sup>3</sup>  |   | Gas supplied by local gas company. However, liquefied natural gas (LNG) supplied by special pipes is counted as liquefied natural gas (LNG).   |
|                               | Town gas (B) (Note 2)                        |                     |   |  |
|                               | Town gas (Note 3)                            |                     |   |  |
|                               | Black liquor                                 | Dry t               | 13.2MJ/dry kg   | Only “Pulp, paper and paperboard industry” is investigated.  |
|                               | Oxygen                                       | 1000Nm <sup>3</sup> | 7.12MJ/Nm <sup>3</sup>  | Only “Iron and steel industry” is surveyed.  |
| Waste material                | Dry t  | 16.3MJ/dry kg       | Only “Pulp, paper and paperboard industry” and “glass product industry” are investigated.                 |  |
| Used tires                    | t  | 33.2MJ/kg           | Discarded tires used as fuel, as are or cut into tips.  |  |
| Waste plastic                 | t  | 29.3MJ/kg           | Discarded plastic used as a fuel, molded by compression or crushing.                                      |  |
| R P F                         | t  | 29.3MJ/kg           | Discarded paper and plastic used as a fuel, by compression molding, pushing out molding.                  |  |
| Electricity                   |  | 1000kWh             | 3.60MJ/kWh  |  |
| Steam                         |  | t                   | 2.675MJ/kg  | “Machinery industry” is not surveyed.  |

Notes : 1. A simple total will be shown for Town gas (A).

2. The conversion rate for Town gas (B) is 41.1MJ/m<sup>3</sup>.

3. The energy conversion rate for Town gas is (10<sup>6</sup>kJ).

The energy per unit of town gas depends on the energy per unit at each establishment.



# 1. エネルギー消費量の推移

Trends of energy consumption

| 年・期・月      | 合計<br>Total                             |  | 燃料計<br>Crude petroleum<br>equivalent | Fuel total<br>Oil based fuels total     |  |                            |            |            |                               |          |         |
|------------|---|--|--------------------------------------|---|--|----------------------------|------------|------------|-------------------------------|----------|---------|
|            | (原油換算)<br>Crude petroleum<br>equivalent | うち指定生産品目分<br>Specified products<br>(原油換算)<br>Crude petroleum<br>equivalent |                                      | (原油換算)<br>Crude petroleum<br>equivalent | 石油系燃料計<br>Oil based fuels total<br>(原油換算)<br>Crude petroleum<br>equivalent | 原油                         | ガソリン       | ナフサ        | 改質生成油                         | 灯油       | 軽油      |
|            |   |  |                                      |   |  | (注1)<br>Crude<br>petroleum | Gasoline   | Naphtha    | Oil produced<br>by conversion | Kerosene | Gas oil |
| kl         |   | kl   | kl                                   | kl                                      | kl   | kl                         | kl         | kl         | kl                            | kl       |         |
| 平成 28 年    | 167,090,646                             | 159,368,201  | 154,253,674                          | 81,999,318                              | 138,291  | 57,776                     | 30,141,295 | 19,397,167 | 1,215,848                     | 318,276  |         |
| 29         | 168,954,249                             | 160,857,155  | 155,876,157                          | 84,003,116                              | 305,111  | 60,368                     | 31,500,945 | 19,689,000 | 1,137,856                     | 250,559  |         |
| 30         | 164,697,938                             | 156,348,784  | 151,472,826                          | 79,338,989                              | 251,906  | 58,557                     | 28,844,338 | 19,809,452 | 1,048,664                     | 228,869  |         |
| 平成 29 年度   | 168,276,919                             | 160,045,912  | 155,152,838                          | 83,059,210                              | 353,919  | 60,642                     | 30,883,128 | 19,599,922 | 1,161,646                     | 254,562  |         |
| 30         | 163,773,884                             | 155,413,941  | 150,615,641                          | 79,165,688                              | 122,299  | 58,017                     | 28,977,442 | 19,665,450 | 1,054,807                     | 232,990  |         |
| 30 年 4~ 6月 | 39,448,451                              | 37,581,680   | 36,248,195                           | 18,430,803                              | 20,384   | 13,829                     | 6,608,254  | 4,624,310  | 224,298                       | 53,220   |         |
| 7~ 9       | 41,044,820                              | 38,979,272   | 37,684,092                           | 19,689,376                              | 86,344   | 14,052                     | 6,857,128  | 5,071,267  | 333,140                       | 46,065   |         |
| 10~12      | 41,755,335                              | 39,627,526   | 38,377,452                           | 20,557,494                              | 7,831  | 15,417                     | 7,813,738  | 5,165,374  | 188,047                       | 67,834   |         |
| 31 年 1~ 3月 | 41,525,279                              | 39,225,463   | 38,305,902                           | 20,488,015                              | 7,740  | 14,719                     | 7,698,322  | 4,804,499  | 309,322                       | 65,871   |         |
| 4~ 6       | 39,446,530                              | 37,793,026   | 36,259,570                           | 19,039,087                              | 57,679   | 14,330                     | 7,463,883  | 4,163,475  | 278,433                       | 60,473   |         |
| 30 年 6月    | 12,400,444                              | 11,793,696   | 11,356,684                           | 5,462,655                               | 16,656   | 4,846                      | 1,904,718  | 1,292,098  | 102,878                       | 12,212   |         |
| 7          | 13,725,819                              | 12,968,960   | 12,593,628                           | 6,613,295                               | 70,389   | 4,908                      | 2,272,047  | 1,624,606  | 115,189                       | 13,792   |         |
| 8          | 14,089,999                              | 13,395,488   | 12,960,461                           | 6,790,893                               | 13,501   | 4,359                      | 2,408,426  | 1,713,133  | 106,533                       | 9,661    |         |
| 9          | 13,229,002                              | 12,614,824   | 12,130,003                           | 6,285,188                               | 2,454  | 4,785                      | 2,176,655  | 1,733,528  | 111,418                       | 22,612   |         |
| 10         | 13,571,394                              | 12,917,550   | 12,438,165                           | 6,539,691                               | 2,617  | 5,356                      | 2,567,631  | 1,603,749  | 59,694                        | 27,101   |         |
| 11         | 13,766,891                              | 13,129,136   | 12,660,538                           | 6,782,703                               | 2,562  | 5,316                      | 2,555,461  | 1,758,444  | 50,467                        | 24,832   |         |
| 12         | 14,417,050                              | 13,580,840   | 13,278,749                           | 7,235,100                               | 2,652  | 4,745                      | 2,690,646  | 1,803,181  | 77,886                        | 15,901   |         |
| 31 年 1月    | 14,321,231                              | 13,447,064   | 13,206,120                           | 7,237,532                               | 2,804  | 4,506                      | 2,730,209  | 1,695,568  | 105,133                       | 24,348   |         |
| 2          | 12,893,767                              | 12,162,165   | 11,877,249                           | 6,318,796                               | 2,427  | 5,014                      | 2,281,067  | 1,507,997  | 97,159                        | 23,522   |         |
| 3          | 14,310,281                              | 13,616,234   | 13,222,534                           | 6,931,687                               | 2,509  | 5,199                      | 2,687,046  | 1,600,934  | 107,030                       | 18,001   |         |
| 4          | 13,371,386                              | 12,787,383   | 12,313,379                           | 6,564,987                               | 2,390  | 4,844                      | 2,585,956  | 1,432,648  | 100,033                       | 16,621   |         |
| 1 年 5      | 13,242,160                              | 12,682,165   | 12,170,527                           | 6,417,417                               | 51,107   | 4,676                      | 2,451,794  | 1,433,373  | 90,593                        | 21,684   |         |
| 6          | 12,832,984                              | 12,323,478   | 11,775,664                           | 6,056,682                               | 4,182  | 4,810                      | 2,426,133  | 1,297,454  | 87,807                        | 22,168   |         |
| 7          | 13,577,713                              | 12,908,841   | 12,467,115                           | 6,456,068                               | 148  | 5,624                      | 2,499,057  | 1,431,121  | 113,787                       | 21,422   |         |
| 8          | 13,863,529                              | 13,134,246   | 12,776,577                           | 6,836,396                               | 87   | 4,076                      | 2,583,108  | 1,598,766  | 95,458                        | 16,415   |         |
| 前年同月比(%)   | ▲ 1.6                                   | ▲ 2.0  | ▲ 1.4                                | 0.7                                     | ▲ 99.4   | ▲ 6.5                      | 7.3        | ▲ 6.7      | ▲ 10.4                        | 69.9     |         |

| 年・期・月      | 燃料計(つづき) Fuel total (continued)             |                             |            |   |                              |                                  |                                  |                     |                   |             |
|------------|---|-----------------------------|------------|---|------------------------------|----------------------------------|----------------------------------|---------------------|-------------------|-------------|
|            | 非石油系燃料(つづき) Non-oil based fuels (continued) |                             |            |   |                              |                                  |                                  |                     |                   |             |
|            | 石炭<br>(注2)<br>Coal                          | 石炭コークス<br>(注3)<br>Coal Coke | タール<br>Tar | コークス炉<br>ガス<br>(注3)<br>Coke oven<br>gas | 高炉ガス<br>Blast<br>furnace gas | 転炉ガス<br>Converter<br>furnace gas | 電気炉ガス<br>Electric<br>furnace gas | 天然ガス<br>Natural gas | 液化天然<br>ガス<br>LNG | 都市ガス<br>(B) |
|            | t   | t                           | t          | 1000m³<br>1000m³                        | 1000m³<br>1000m³             | 1000m³<br>1000m³                 | 1000m³<br>1000m³                 | 1000m³              | t                 | 1000m³      |
| 平成 28 年    | 87,527,358                                  | 33,019,752                  | 511,908    | 11,397,724                              | 89,331,517                   | 5,481,496                        | 102,989                          | 673,462             | 1,589,217         | 5,662,032   |
| 29         | 87,021,860                                  | 31,744,040                  | 523,298    | 11,294,663                              | 88,583,982                   | 5,388,329                        | 89,946                           | 700,588             | 1,575,900         | 5,850,588   |
| 30         | 86,865,328                                  | 31,523,943                  | 541,230    | 11,310,144                              | 85,483,076                   | 5,307,080                        | 88,404                           | 727,546             | 1,581,310         | 5,968,932   |
| 平成 29 年度   | 87,031,612                                  | 31,714,612                  | 526,579    | 11,303,448                              | 87,929,501                   | 5,309,648                        | 89,170                           | 716,742             | 1,571,677         | 5,873,921   |
| 30         | 85,982,767                                  | 31,414,407                  | 540,024    | 11,311,976                              | 85,174,719                   | 5,244,792                        | 88,020                           | 720,370             | 1,563,118         | 5,984,789   |
| 30 年 4~ 6月 | 21,579,859                                  | 7,878,137                   | 137,387    | 2,827,572                               | 21,763,129                   | 1,377,598                        | 28,677                           | 171,701             | 384,662           | 1,438,679   |
| 7~ 9       | 21,799,774                                  | 7,921,756                   | 118,018    | 2,795,038                               | 21,050,403                   | 1,321,734                        | 13,819                           | 174,833             | 397,010           | 1,464,701   |
| 10~12      | 21,509,493                                  | 7,808,126                   | 140,877    | 2,870,088                               | 20,836,087                   | 1,307,512                        | 22,414                           | 180,624             | 392,099           | 1,500,983   |
| 31 年 1~ 3月 | 21,093,641                                  | 7,806,388                   | 143,742    | 2,819,278                               | 21,525,100                   | 1,237,948                        | 23,110                           | 193,212             | 389,347           | 1,580,426   |
| 4~ 6       | 20,913,802                                  | 8,048,167                   | 127,115    | 2,834,055                               | 21,763,836                   | 1,371,340                        | 27,052                           | 146,376             | 380,240           | 1,405,696   |
| 30 年 6月    | 7,136,714                                   | 2,565,958                   | 44,733     | 922,749                                 | 7,176,639                    | 431,483                          | 10,048                           | 53,184              | 132,775           | 483,835     |
| 7          | 7,262,043                                   | 2,587,435                   | 27,256     | 919,068                                 | 6,979,833                    | 451,245                          | 6,310                            | 58,719              | 135,077           | 508,134     |
| 8          | 7,500,679                                   | 2,737,968                   | 45,075     | 955,850                                 | 7,237,825                    | 445,975                          | 5,916                            | 58,260              | 132,615           | 473,884     |
| 9          | 7,037,052                                   | 2,596,353                   | 45,687     | 920,120                                 | 6,832,745                    | 424,514                          | 1,593                            | 57,854              | 129,318           | 482,683     |
| 10         | 7,182,300                                   | 2,631,158                   | 48,389     | 965,649                                 | 6,873,721                    | 413,072                          | 4,797                            | 54,278              | 113,741           | 507,098     |
| 11         | 7,038,138                                   | 2,575,348                   | 44,232     | 925,201                                 | 7,034,400                    | 459,445                          | 8,707                            | 60,306              | 135,331           | 499,022     |
| 12         | 7,289,055                                   | 2,601,620                   | 48,256     | 979,238                                 | 6,927,966                    | 434,995                          | 8,910                            | 66,040              | 143,027           | 494,863     |
| 31 年 1月    | 7,132,116                                   | 2,596,100                   | 49,957     | 979,414                                 | 7,156,437                    | 397,070                          | 8,760                            | 67,525              | 133,048           | 542,182     |
| 2          | 6,518,553                                   | 2,423,154                   | 46,487     | 865,557                                 | 6,665,297                    | 390,176                          | 7,231                            | 62,628              | 122,448           | 509,810     |
| 3          | 7,442,972                                   | 2,787,134                   | 47,298     | 974,307                                 | 7,703,366                    | 450,702                          | 7,119                            | 63,059              | 133,851           | 528,434     |
| 4          | 6,934,786                                   | 2,685,687                   | 45,869     | 943,678                                 | 7,178,477                    | 442,824                          | 7,192                            | 52,681              | 131,740           | 490,161     |
| 1 年 5      | 6,992,938                                   | 2,696,394                   | 43,037     | 962,153                                 | 7,376,405                    | 465,259                          | 10,255                           | 43,897              | 130,181           | 456,750     |
| 6          | 6,986,078                                   | 2,666,086                   | 38,209     | 928,224                                 | 7,208,954                    | 463,257                          | 9,605                            | 49,798              | 118,319           | 458,785     |
| 7          | 7,368,025                                   | 2,643,934                   | 21,221     | 940,993                                 | 7,201,397                    | 477,915                          | 6,414                            | 55,544              | 131,503           | 493,330     |
| 8          | 7,340,027                                   | 2,613,742                   | 36,731     | 947,127                                 | 7,124,056                    | 433,402                          | 3,983                            | 53,626              | 123,958           | 441,445     |
| 前年同月比(%)   | ▲ 2.1                                       | ▲ 4.5                       | ▲ 18.5     | ▲ 0.9                                   | ▲ 1.6                        | ▲ 2.8                            | ▲ 32.7                           | ▲ 8.0               | ▲ 6.5             | ▲ 6.8       |

注1. 原油にはNGL・コンデンセートを含む。  
 3. 石炭コークスにはピッチコークスを含む。

2. 石炭には、コークス製造用炭(原料炭)を含む。

|                         |                             |                                |                    |           |                    |                   |           |                                  | 非石油系燃料計  | Year, quarter<br>and Month |
|-------------------------|-----------------------------|--------------------------------|--------------------|-----------|--------------------|-------------------|-----------|----------------------------------|--|----------------------------|
| 重油計                     |                             |                                | 炭化水素油              | 液化石油ガス    | 石油系炭化              | オイルコークス           | アスファルト    | 再生油                              | Non-oil based fuels total<br>(原油換算)<br>Crude petroleum<br>equivalent |                            |
| Heavy fuel<br>oil total | A 重油<br>Heavy fuel<br>oil A | B・C重油<br>Heavy fuel<br>oil B・C | Hydrocarbon<br>oil | LPG       | Hydrocarbon<br>gas | Petroleum<br>Coke | Asphalt   | Reproduction oil<br>(Oil origin) |  |                            |
| kl                      | kl                          | kl                             | kl                 | t         | 1000m <sup>3</sup> | t                 | t         | kl                               | kl   |                            |
| 5,251,797               | 653,006                     | 4,598,791                      | 1,585,077          | 5,472,905 | 14,837,643         | 4,269,742         | 1,133,866 | 331,150                          | 120,089,295  | C.Y. 2016                  |
| 5,115,625               | 625,757                     | 4,489,868                      | 1,614,684          | 5,851,233 | 15,046,994         | 4,205,504         | 1,108,030 | 326,045                          | 118,915,174  | C.Y. 2017                  |
| 4,830,821               | 606,179                     | 4,224,642                      | 1,612,078          | 5,673,044 | 13,838,528         | 4,112,334         | 825,675   | 330,986                          | 118,696,733  | C.Y. 2018                  |
| 5,152,315               | 623,420                     | 4,528,895                      | 1,591,664          | 5,906,990 | 14,748,519         | 4,117,357         | 1,040,192 | 325,984                          | 118,899,177  | F.Y. 2017                  |
| 4,755,981               | 598,834                     | 4,157,147                      | 1,623,591          | 5,649,121 | 13,769,641         | 4,183,630         | 893,615   | 333,967                          | 117,939,989  | F.Y. 2018                  |
| 1,130,928               | 153,308                     | 977,620                        | 389,600            | 1,378,507 | 3,215,596          | 958,833           | 193,113   | 80,065                           | 29,547,563   | Q2 2018                    |
| 1,060,061               | 141,192                     | 918,869                        | 411,231            | 1,470,895 | 3,481,882          | 1,104,906         | 181,037   | 82,350                           | 29,637,873   | Q3                         |
| 1,258,496               | 144,849                     | 1,113,647                      | 419,371            | 1,362,877 | 3,540,381          | 1,074,107         | 187,297   | 88,803                           | 29,450,286   | Q4                         |
| 1,306,496               | 159,485                     | 1,147,011                      | 403,389            | 1,436,842 | 3,531,782          | 1,045,784         | 332,168   | 82,749                           | 29,304,268   | Q1 2019                    |
| 1,114,091               | 133,165                     | 980,926                        | 354,602            | 1,429,062 | 3,292,223          | 1,008,637         | 238,295   | 83,644                           | 29,026,492   | Q2                         |
| 360,444                 | 50,394                      | 310,050                        | 130,092            | 424,078   | 934,483            | 303,205           | 73,448    | 26,790                           | 9,748,966  | Jun. 2018                  |
| 376,122                 | 49,190                      | 326,932                        | 138,727            | 514,856   | 1,160,033          | 383,051           | 70,379    | 28,733                           | 9,797,248  | Jul.                       |
| 356,498                 | 44,525                      | 311,973                        | 134,715            | 505,515   | 1,232,141          | 371,179           | 78,893    | 26,379                           | 10,179,083   | Aug.                       |
| 327,441                 | 47,477                      | 279,964                        | 137,789            | 450,524   | 1,089,708          | 350,676           | 31,765    | 27,238                           | 9,661,543  | Sep.                       |
| 400,123                 | 48,148                      | 351,975                        | 132,576            | 432,003   | 1,113,023          | 360,090           | 23,629    | 29,507                           | 9,828,693  | Oct.                       |
| 402,558                 | 47,027                      | 355,531                        | 132,991            | 456,176   | 1,189,893          | 333,361           | 42,495    | 30,431                           | 9,676,218  | Nov.                       |
| 455,815                 | 49,674                      | 406,141                        | 153,804            | 474,698   | 1,237,465          | 380,656           | 121,173   | 28,865                           | 9,945,374  | Dec.                       |
| 443,609                 | 51,743                      | 391,866                        | 141,265            | 505,640   | 1,254,676          | 375,750           | 126,927   | 24,771                           | 9,871,210  | Jan. 2019                  |
| 421,518                 | 52,846                      | 368,672                        | 130,862            | 455,530   | 1,089,467          | 322,495           | 109,407   | 26,693                           | 9,092,721  | Feb.                       |
| 441,369                 | 54,896                      | 386,473                        | 131,262            | 475,672   | 1,187,639          | 347,539           | 95,834    | 31,285                           | 10,340,337   | Mar.                       |
| 408,053                 | 49,493                      | 358,560                        | 132,464            | 469,035   | 1,126,313          | 364,973           | 81,404    | 29,489                           | 9,672,050  | Apr.                       |
| 378,797                 | 41,592                      | 337,205                        | 113,579            | 493,380   | 1,120,045          | 317,226           | 78,535    | 24,549                           | 9,726,204  | May                        |
| 327,241                 | 42,080                      | 285,161                        | 108,559            | 466,647   | 1,045,865          | 326,438           | 78,356    | 29,606                           | 9,628,239  | Jun.                       |
| 331,233                 | 41,208                      | 290,025                        | 133,387            | 480,180   | 1,131,853          | 377,484           | 82,138    | 31,195                           | 9,984,836  | Jul.                       |
| 372,976                 | 38,078                      | 334,898                        | 142,453            | 508,399   | 1,204,058          | 357,253           | 104,149   | 26,689                           | 9,876,640  | Aug.                       |
| 4.6                     | ▲ 14.5                      | 7.3                            | 5.7                | 0.6       | ▲ 2.3              | ▲ 3.8             | 32.0      | 1.2                              | ▲ 3.0  | R・S                        |

|              |                     |                   |            |                  |                                | 電力          |                          | 蒸気          |                         | Year, quarter<br>and Month |
|--------------|---------------------|-------------------|------------|------------------|--------------------------------|-------------|--------------------------|-------------|-------------------------|----------------------------|
| 回収黒液         | 酸素                  | 廃材                | 廃タイヤ       | 廃プラスチック          | RPF                            | うち購入分       | うち受入分                    | うち購入分       | うち受入分                   |                            |
| Black liquor | Oxygen              | Waste<br>material | Used tires | Waste<br>plastic | Refuse Paper &<br>Plastic Fuel | Electricity | among those<br>purchased | Steam       | among those<br>accepted |                            |
| 絶乾(Dry) t    | 1000Nm <sup>3</sup> | 絶乾(Dry) t         | t          | t                | t                              | 1000kWh     | 1000kWh                  | t           | t                       |                            |
| 12,179,410   | 10,935,014          | 2,483,043         | 436,937    | 606,488          | 582,959                        | 185,330,676 | 105,452,343              | 518,548,663 | 40,510,732              | C.Y. 2016                  |
| 12,230,254   | 10,889,674          | 2,457,720         | 481,309    | 632,647          | 606,055                        | 186,834,533 | 107,835,238              | 519,213,083 | 40,965,719              | C.Y. 2017                  |
| 12,349,556   | 11,042,190          | 2,622,203         | 476,387    | 680,187          | 628,867                        | 186,357,933 | 109,597,196              | 514,961,893 | 40,754,603              | C.Y. 2018                  |
| 12,274,071   | 10,938,912          | 2,494,136         | 478,242    | 643,176          | 610,620                        | 186,816,111 | 108,354,641              | 519,943,120 | 40,953,909              | F.Y. 2017                  |
| 12,348,529   | 10,836,468          | 2,626,268         | 492,404    | 681,684          | 638,746                        | 185,984,397 | 109,198,233              | 514,498,452 | 40,339,341              | F.Y. 2018                  |
| 3,045,950    | 2,784,073           | 641,917           | 117,563    | 175,846          | 160,240                        | 45,374,173  | 26,789,159               | 123,757,019 | 9,343,717               | Q2 2018                    |
| 3,026,419    | 2,757,613           | 630,372           | 127,333    | 168,830          | 155,949                        | 47,714,324  | 28,123,195               | 128,918,304 | 9,927,778               | Q3                         |
| 3,095,614    | 2,720,271           | 669,350           | 113,314    | 175,318          | 160,040                        | 46,899,082  | 27,809,709               | 128,924,888 | 10,697,051              | Q4                         |
| 3,180,546    | 2,574,511           | 684,629           | 134,194    | 161,690          | 162,517                        | 45,996,818  | 26,476,170               | 132,898,241 | 10,370,795              | Q1 2019                    |
| 2,825,094    | 2,751,545           | 562,441           | 117,654    | 170,657          | 138,477                        | 44,968,113  | 26,960,288               | 121,070,147 | 8,957,716               | Q2                         |
| 988,000      | 909,507             | 227,717           | 44,191     | 61,563           | 56,703                         | 15,084,434  | 8,910,500                | 40,576,491  | 2,825,480               | Jun. 2018                  |
| 947,073      | 893,400             | 193,723           | 38,797     | 54,518           | 43,653                         | 16,029,486  | 9,515,681                | 43,476,443  | 3,287,199               | Jul.                       |
| 1,065,010    | 958,930             | 218,261           | 44,916     | 60,205           | 54,076                         | 16,230,039  | 9,469,869                | 44,354,437  | 3,341,263               | Aug.                       |
| 1,014,336    | 905,283             | 218,388           | 43,620     | 54,107           | 58,220                         | 15,454,799  | 9,137,645                | 41,087,424  | 3,299,316               | Sep.                       |
| 1,078,044    | 891,691             | 229,655           | 27,992     | 56,430           | 54,321                         | 15,711,965  | 9,421,988                | 41,543,293  | 3,436,484               | Oct.                       |
| 958,668      | 929,297             | 216,015           | 37,337     | 60,188           | 53,198                         | 15,344,714  | 9,095,372                | 42,333,557  | 3,531,758               | Nov.                       |
| 1,058,902    | 899,283             | 223,680           | 47,985     | 58,700           | 52,521                         | 15,842,403  | 9,292,349                | 45,048,038  | 3,728,809               | Dec.                       |
| 1,061,190    | 856,365             | 221,674           | 44,268     | 54,063           | 51,296                         | 15,614,388  | 9,080,179                | 45,755,550  | 3,746,813               | Jan. 2019                  |
| 974,815      | 791,465             | 211,046           | 43,737     | 52,914           | 51,757                         | 14,512,367  | 8,383,180                | 41,852,575  | 3,260,904               | Feb.                       |
| 1,144,541    | 926,681             | 251,909           | 46,189     | 54,713           | 59,464                         | 15,870,063  | 9,012,811                | 45,290,116  | 3,363,078               | Mar.                       |
| 953,341      | 903,097             | 182,169           | 35,795     | 55,192           | 45,956                         | 15,012,295  | 8,810,814                | 41,232,228  | 3,194,320               | Apr.                       |
| 973,786      | 926,472             | 175,659           | 41,633     | 59,685           | 48,469                         | 14,996,333  | 9,074,046                | 40,358,845  | 2,979,625               | May                        |
| 897,967      | 921,976             | 204,613           | 40,226     | 55,780           | 44,052                         | 14,959,485  | 9,075,428                | 39,479,074  | 2,783,771               | Jun.                       |
| 1,039,285    | 931,455             | 209,988           | 43,173     | 60,280           | 54,450                         | 15,866,560  | 9,166,310                | 43,767,393  | 3,400,724               | Jul.                       |
| 1,077,151    | 903,974             | 209,968           | 39,062     | 59,507           | 49,247                         | 15,772,817  | 9,029,799                | 44,586,423  | 3,279,068               | Aug.                       |
| 1.1          | ▲ 5.7               | ▲ 3.8             | ▲ 13.0     | ▲ 1.2            | ▲ 8.9                          | ▲ 2.8       | ▲ 4.6                    | 0.5         | ▲ 1.9                   | R・S                        |

Note 1. Crude petroleum includes NGL・condensate in liquid form.

2. Coal includes the coal for manufacturing coke (material coal).

3. Coal coke includes pitch coke.

## 2. 業種別統計

## Statistics by type kind of energy

## (1) 業種別エネルギー消費

## Energy consumption by industry

## 1) 固有単位表(事業所ベース)

## Table of original unit (establishment basis)

| 業種<br>Industry  | 合計<br>Total                                |   | 燃料計<br>(注1)<br>(原油換算)<br>Crude petroleum equivalent<br>kl | Fuel total                                 |                                     |                        |                      |   |                      |
|---|--|---|---|--|-------------------------------------|------------------------|----------------------|---|----------------------|
|   | (原油換算)<br>Crude petroleum equivalent<br>kl | うち指定生産品目分<br>Specified Products<br>(原油換算)<br>Crude petroleum equivalent<br>kl |   | 石油系燃料計                                     |                                     | Oil based fuels total  |                      |   |                      |
|   |  |   |   | (原油換算)<br>Crude petroleum equivalent<br>kl | 原油<br>(注2)<br>Crude petroleum<br>kl | ガソリン<br>Gasoline<br>kl | ナフサ<br>Naphtha<br>kl | 改質生成油<br>Oil produced by conversion<br>kl | 灯油<br>Kerosene<br>kl |
| <b>合計</b><br><b>Total</b>                               | 17,799,988                                 | 13,134,246  | 16,713,036  | 6,836,396                                  | 87                                  | 4,076                  | 2,583,108            | 1,598,766                                 | 95,458               |
| <b>重複事業所分補正量</b><br><b>Duplication adjustment</b>       | 377,126                                    | -   | 351,493   | 9,760                                      | -                                   | 75                     | -                    | -   | 1,336                |
| パルプ・紙・板紙工業<br>Pulp, paper, paperboard industry          | 1,018,590                                  | 910,978   | 976,379   | 81,615                                     | ...                                 | 6                      | -                    | -   | 702                  |
| 化学工業<br>Chemical industry                               | 6,894,238                                  | 5,525,967   | 6,569,080   | 5,239,661                                  | 87                                  | 17                     | 2,578,658            | 1,598,766                                 | 82,208               |
| 化学繊維工業<br>Chemical fibers industry                      | 183,349                                    | 48,901  | 157,435   | 33,184                                     | ...                                 | 6                      | -                    | -   | 235                  |
| 石油製品工業<br>Petroleum products industry                   | 1,257,469                                  | 1,062,182   | 1,214,000   | 1,180,389                                  | ...                                 | 18                     | 4,450                | -   | 1,997                |
| 窯業・土石製品工業<br>Ceramics, clay and stone products industry | 842,173                                    | 548,784   | 807,084   | 148,300                                    | ...                                 | 31                     | -                    | -   | 2,006                |
| ガラス製品工業<br>Glass products industry                      | 49,925                                     | 48,608  | 38,272  | 5,109                                      | ...                                 | -                      | -                    | -   | 6                    |
| 鉄鋼業<br>Iron and steel industry                          | 7,478,416                                  | 4,660,877   | 7,097,230   | 118,823                                    | ...                                 | 111                    | -                    | -   | 5,472                |
| 非鉄金属地金工業<br>Non-ferrous metals industry                 | 4,218,040                                  | 88,091  | 3,836,854   | 18,362                                     | ...                                 | 6                      | -                    | -   | 1,399                |
| 機械工業<br>Machinery industry                              | 364,864                                    | 253,251   | 161,977   | 20,713                                     | ...                                 | 3,956                  | -                    | -   | 2,769                |

## 2) 熱量単位表(事業所ベース)

## Table of energy unit (establishment basis)

|   |             |             |             |             |       |         |            |            |           |
|---|-------------|-------------|-------------|-------------|-------|---------|------------|------------|-----------|
| <b>合計</b><br><b>Total</b>                               | 688,859,568 | 508,295,312 | 646,794,512 | 264,568,557 | 3,071 | 141,030 | 86,792,429 | 56,116,687 | 3,503,309 |
| <b>重複事業所分補正量</b><br><b>Duplication adjustment</b>       | 14,594,778  | -           | 13,602,778  | 377,715     | -     | 2,595   | -          | -          | 49,031    |
| パルプ・紙・板紙工業<br>Pulp, paper, paperboard industry          | 39,419,424  | 35,254,863  | 37,785,883  | 3,158,514   | ...   | 208     | -          | -          | 25,763    |
| 化学工業<br>Chemical industry                               | 266,807,014 | 213,854,934 | 254,223,387 | 202,774,892 | 3,071 | 588     | 86,642,909 | 56,116,687 | 3,017,034 |
| 化学繊維工業<br>Chemical fibers industry                      | 240,642,558 | 1,892,464   | 228,058,931 | 1,284,204   | ...   | 208     | -          | -          | 8,625     |
| 石油製品工業<br>Petroleum products industry                   | 7,095,600   | 1,892,464   | 6,092,718   | 1,284,204   | ...   | 208     | -          | -          | 8,625     |
| 窯業・土石製品工業<br>Ceramics, clay and stone products industry | 48,664,061  | 41,106,445  | 46,981,818  | 45,681,040  | ...   | 623     | 149,520    | -          | 73,290    |
| 窯業・土石製品工業<br>Ceramics, clay and stone products industry | 32,592,105  | 21,237,955  | 31,234,164  | 5,739,217   | ...   | 1,073   | -          | -          | 73,620    |
| ガラス製品工業<br>Glass products industry                      | 32,592,105  | 1,881,115   | 1,481,127   | 197,720     | ...   | -       | -          | -          | 220       |
| 鉄鋼業<br>Iron and steel industry                          | 1,932,099   | 1,881,115   | 1,481,127   | 197,720     | ...   | -       | -          | -          | 220       |
| 鉄鋼業<br>Iron and steel industry                          | 289,414,701 | 180,375,948 | 274,662,790 | 4,598,467   | ...   | 3,841   | -          | -          | 200,822   |
| 非鉄金属地金工業<br>Non-ferrous metals industry                 | 163,238,171 | 2,890,768   | 148,486,260 | 710,622     | ...   | 208     | -          | -          | 51,343    |
| 機械工業<br>Machinery industry                              | 3,409,115   | 9,800,821   | 1,666,899   | 801,594     | ...   | 136,878 | -          | -          | 101,622   |

注 1. 合計、化学工業、窯業・土石製品工業、鉄鋼業については、ネットの数値を下段に表示した。

2. 原油にはNGL・コンデンセートを含む。

(令和1年8月)

| (石油系燃料 Oil based fuels) |                         |                     |                       |                    |         |                    |                   |         |                                     | (次頁へ続く)   |
|-------------------------|-------------------------|---------------------|-----------------------|--------------------|---------|--------------------|-------------------|---------|-------------------------------------|---|
| 軽油                      | 重油計                     | A重油                 | B・C重油                 | 炭化水素油              | 液化石油ガス  | 石油系炭化水素ガス          | オイル<br>コークス       | アスファルト  | 再生油<br>(石油由来)                       | 非石油系燃料 計  |
| Gas oil                 | Heavy Fuel oil<br>total | Heavy Fuel<br>oil A | Heavy Fuel<br>oil B・C | Hydrocarbon<br>oil | LPG     | Hydrocarbon<br>gas | Petroleum<br>Coke | Asphalt | Reproduction<br>oil<br>(Oil origin) | Non-oil based<br>fuels total<br>(原油換算)<br>Crude petroleum<br>equivalent |
| kl                      | kl                      | kl                  | kl                    | kl                 | t       | 1000m <sup>3</sup> | t                 | t       | kl                                  | kl  |
| 16,415                  | 372,976                 | 38,078              | 334,898               | 142,453            | 508,399 | 1,204,058          | 357,253           | 104,149 | 26,689                              | 9,876,640   |
| 453                     | 3,756                   | 522                 | 3,234                 | -                  | 451     | -                  | 4,354             | -       | -                                   | 341,733   |
| 313                     | 61,224                  | 5,140               | 56,084                | 2,307              | 2,029   | -                  | 11,530            | -       | 631                                 | 894,764   |
| 10,506                  | 101,192                 | 3,749               | 97,443                | 97,792             | 443,465 | 479,184            | 139,110           | -       | 1,712                               | 1,329,418   |
| 12                      | 13,061                  | 1,883               | 11,178                | 46                 | 241     | -                  | 24,039            | -       | -                                   | 124,251   |
| 484                     | 116,454                 | 1,346               | 115,108               | 12,249             | 33,407  | 724,871            | 51,739            | 104,149 | -                                   | 33,612  |
| 1,122                   | 38,907                  | 2,397               | 36,510                | 20,866             | 1,772   | -                  | 72,425            | -       | 21,615                              | 658,784   |
| 3                       | 4,238                   | 223                 | 4,015                 | -                  | 123     | -                  | -                 | -       | 353                                 | 33,163  |
| 2,006                   | 27,310                  | 13,435              | 13,875                | 6,083              | 21,527  | 3                  | 62,172            | -       | 99                                  | 6,978,406   |
| 334                     | 9,449                   | 5,530               | 3,919                 | 3,109              | 521     | -                  | 592               | -       | 2,279                               | 24,710  |
| 2,088                   | 4,897                   | 4,897               | -                     | 1                  | 5,765   | -                  | -                 | -       | -                                   | 141,264   |

単位 Unit: GJ

|         |            |           |            |           |            |            |            |           |           |             |
|---------|------------|-----------|------------|-----------|------------|------------|------------|-----------|-----------|-------------|
| 618,846 | 15,521,076 | 1,488,850 | 14,032,226 | 5,968,781 | 25,826,669 | 54,062,204 | 10,681,865 | 4,259,694 | 1,072,898 | 382,225,955 |
| 17,078  | 155,915    | 20,410    | 135,505    | -         | 22,911     | -          | 130,185    | -         | -         | 13,225,064  |
| 11,800  | 2,550,894  | 200,974   | 2,349,920  | 96,663    | 103,073    | -          | 344,747    | -         | 25,366    | 34,627,369  |
| 396,076 | 4,229,448  | 146,586   | 4,082,862  | 4,097,485 | 22,528,022 | 21,515,362 | 4,159,389  | -         | 68,822    | 51,448,495  |
| 452     | 541,984    | 73,625    | 468,358    | 1,927     | 12,243     | -          | 718,766    | -         | -         | 4,808,514   |
| 18,247  | 4,875,654  | 52,629    | 4,823,025  | 513,233   | 1,697,076  | 32,546,708 | 1,546,996  | 4,259,694 | -         | 1,300,778   |
| 42,299  | 1,623,492  | 93,723    | 1,529,769  | 874,285   | 90,018     | -          | 2,165,508  | -         | 868,923   | 25,494,946  |
| 113     | 176,948    | 8,719     | 168,229    | -         | 6,248      | -          | -          | -         | 14,191    | 1,283,407   |
| 75,626  | 1,106,671  | 525,309   | 581,363    | 254,878   | 1,093,572  | 135        | 1,858,943  | -         | 3,980     | 270,064,323 |
| 12,592  | 380,429    | 216,223   | 164,206    | 130,267   | 26,467     | -          | 17,701     | -         | 91,616    | 956,277     |
| 78,718  | 191,473    | 191,473   | -          | 42        | 292,862    | -          | -          | -         | -         | 5,466,911   |

Note 1. Net consumption is shown for Total and three industrial categories  
(Chemical; Ceramics, clay and stone products; Iron and steel).  
2. Crude petroleum includes NGL・condensate in liquid form.

(August, 2019)

## 1) 固有単位表(事業所ベース)

## Table of original unit (establishment basis)

| 業種<br>Industry  | 燃料計(つづき) Fuel total (continued)             |                                  |                 |   |  |  |  |   |                    |
|---|---|----------------------------------|-----------------|---|--|--|--|---|--------------------|
|   | 非石油系燃料(つづき) Non-oil based fuels (continued) |                                  |                 |   |  |  |  |   |                    |
|   | 石炭<br>(注3)<br>Coal<br>t                     | 石炭コークス<br>(注4)<br>Coal Coke<br>t | タール<br>Tar<br>t | コークス炉<br>ガス<br>Coke oven<br>gas<br>1000m <sup>3</sup> | 高炉ガス<br>Blast furnace<br>gas<br>1000m <sup>3</sup> | 転炉ガス<br>Converter<br>furnace gas<br>1000m <sup>3</sup> | 電気炉ガス<br>Electric<br>furnace gas<br>1000m <sup>3</sup> | 天然ガス<br>Natural gas<br>1000m <sup>3</sup> | 液化天然ガス<br>LNG<br>t |
| <b>合計</b><br><b>Total</b>                               | 7,340,027                                   | 2,613,742                        | 36,731          | 947,127   | 7,124,056  | 433,402  | 3,983  | 53,626                                    | 123,958            |
| <b>重複事業所分補正量</b><br><b>Duplication adjustment</b>       | 455,561                                     | 8,476                            | -               | -   | -  | -  | -  | 10,370                                    | 1,927              |
| パルプ・紙・板紙工業<br>Pulp, paper, paperboard industry          | 457,902                                     | 308                              | ...             | -   | -  | -  | -  | 6,712                                     | 7,760              |
| 化学工業<br>Chemical industry                               | 1,575,350                                   | 12,391                           | 27,669          | 113,749   | 106,128  | -  | -  | 36,247                                    | 58,670             |
| 化学繊維工業<br>Chemical fibers industry                      | 123,334                                     | -                                | ...             | -   | -  | -  | -  | -   | 923                |
| 石油製品工業<br>Petroleum products industry                   | 16,335                                      | -                                | ...             | -   | -  | -  | -  | 5,259                                     | 11,717             |
| 窯業・土石製品工業<br>Ceramics, clay and stone products industry | 861,459                                     | 18,155                           | ...             | 24,529  | 4,557  | 21,889   | 494  | 11,677                                    | 33                 |
| ガラス製品工業<br>Glass products industry                      | -   | -                                | ...             | -   | -  | -  | -  | -   | 6,252              |
| 鉄鋼業<br>Iron and steel industry                          | 4,756,876                                   | 2,575,860                        | 9,062           | 808,849   | 6,974,894  | 411,513  | 3,489  | 1,948                                     | 30,573             |
| 非鉄金属地金工業<br>Non-ferrous metals industry                 | 4,332                                       | 14,887                           | ...             | -   | 38,477   | -  | -  | 379                                       | 1,713              |
| 機械工業<br>Machinery industry                              | -   | 617                              | ...             | -   | -  | -  | -  | 1,774                                     | 8,244              |

## 2) 熱量単位表(事業所ベース)

## Table of energy unit (establishment basis)

|   |             |            |           |            |            |           |        |           |           |
|---|-------------|------------|-----------|------------|------------|-----------|--------|-----------|-----------|
| <b>合計</b><br><b>Total</b>                               | 200,251,302 | 76,844,015 | 1,370,066 | 19,984,380 | 24,293,031 | 3,644,911 | 33,497 | 2,332,731 | 6,768,107 |
| <b>重複事業所分補正量</b><br><b>Duplication adjustment</b>       | 11,707,918  | 249,194    | -         | -          | -          | -         | -      | 451,095   | 105,214   |
| パルプ・紙・板紙工業<br>Pulp, paper, paperboard industry          | 11,768,081  | 9,055      | ...       | -          | -          | -         | -      | 291,972   | 423,696   |
| 化学工業<br>Chemical industry                               | 40,486,495  | 364,295    | 1,032,054 | 2,400,104  | 361,896    | -         | -      | 1,576,745 | 3,203,382 |
| 化学繊維工業<br>Chemical fibers industry                      | 3,169,684   | -          | ...       | -          | -          | -         | -      | -         | 50,396    |
| 石油製品工業<br>Petroleum products industry                   | 419,810     | -          | ...       | -          | -          | -         | -      | 228,767   | 639,748   |
| 窯業・土石製品工業<br>Ceramics, clay and stone products industry | 22,139,496  | 533,757    | ...       | 517,562    | 15,539     | 184,086   | 4,155  | 507,950   | 1,802     |
| ガラス製品工業<br>Glass products industry                      | -           | -          | ...       | -          | -          | -         | -      | -         | 341,359   |
| 鉄鋼業<br>Iron and steel industry                          | 133,864,321 | 75,730,284 | 338,013   | 17,066,714 | 23,784,389 | 3,460,824 | 29,342 | 84,738    | 1,669,286 |
| 非鉄金属地金工業<br>Non-ferrous metals industry                 | 111,332     | 437,678    | ...       | -          | 131,207    | -         | -      | 16,487    | 93,530    |
| 機械工業<br>Machinery industry                              | -           | 18,140     | ...       | -          | -          | -         | -      | 77,169    | 450,122   |

注 3. 石炭にはコークス製造用炭(原料炭)を含む。

4. 石炭コークスにはピッチコークスを含む。

(令和1年8月)

| (非石油系燃料 Non-oil based fuels) |                      |                     |                      |                    |                          |                                    | 電力<br>Electricity | うち購入分<br>among those purchased | 蒸気<br>Steam | うち受入分<br>among those accepted |
|------------------------------|----------------------|---------------------|----------------------|--------------------|--------------------------|------------------------------------|-------------------|--------------------------------|-------------|-------------------------------|
| 都市ガス<br>(B)<br>Town gas      | 回収黒液<br>Black liquor | 酸素<br>Oxygen        | 廃材<br>Waste material | 廃タイヤ<br>Used tires | 廃プラスチック<br>Waste plastic | RPF<br>Refuse Paper & Plastic Fuel |                   |                                |             |                               |
| 1000m <sup>3</sup>           | 絶乾(Dry) t            | 1000Nm <sup>3</sup> | 絶乾(Dry) t            | t                  | t                        | t                                  | 1000kWh           | 1000kWh                        | t           | t                             |
| 441,445                      | 1,077,151            | 903,974             | 209,968              | 39,062             | 59,507                   | 49,247                             | 15,772,817        | 9,029,799                      | 44,586,423  | 3,279,068                     |
| 14,393                       | -                    | -                   | -                    | 2,217              | 1,587                    | -                                  | 1,075,250         | 219,349                        | 3,524,353   | 35,329                        |
| 60,626                       | 1,077,151            | ...                 | 208,439              | 18,414             | 3,898                    | 44,414                             | 2,198,916         | 398,485                        | 12,861,533  | 41,105                        |
| 31,299                       | ...                  | ...                 | -                    | 14,674             | 8,531                    | -                                  | 3,267,567         | 1,590,684                      | 13,477,006  | 2,444,996                     |
| 37,784                       | ...                  | ...                 | -                    | -                  | -                        | 1,212                              | 493,140           | 182,621                        | 1,821,382   | 129,139                       |
| 303                          | ...                  | ...                 | -                    | -                  | -                        | -                                  | 1,053,464         | 245,423                        | 7,655,980   | 298,587                       |
| 7,486                        | ...                  | ...                 | 78                   | 7,178              | 31,988                   | 3,621                              | 1,434,528         | 342,100                        | 4,690,900   | 6,932                         |
| 22,921                       | ...                  | ...                 | -                    | -                  | -                        | -                                  | 133,970           | 121,884                        | 12,162      | -                             |
| 171,635                      | ...                  | 903,974             | 1,451                | 1,013              | 16,677                   | -                                  | 5,346,701         | 3,829,614                      | 7,288,708   | 360,743                       |
| 4,040                        | ...                  | ...                 | -                    | -                  | -                        | -                                  | 475,692           | 357,303                        | 303,105     | 32,895                        |
| 119,744                      | ...                  | ...                 | -                    | -                  | -                        | -                                  | 2,444,089         | 2,181,034                      | ...         | ...                           |

単位 Unit: GJ

|            |            |           |           |           |           |           |            |            |             |           |
|------------|------------|-----------|-----------|-----------|-----------|-----------|------------|------------|-------------|-----------|
| 18,143,399 | 14,218,393 | 6,436,295 | 3,422,478 | 1,296,858 | 1,743,555 | 1,442,937 | 56,782,141 | 32,507,276 | 119,268,684 | 8,771,507 |
| 591,539    | -          | -         | -         | 73,604    | 46,499    | -         | 3,870,900  | 789,656    | 9,427,644   | 94,505    |
| 2,491,729  | 14,218,393 | ...       | 3,397,556 | 611,345   | 114,211   | 1,301,330 | 7,916,098  | 1,434,546  | 34,404,601  | 109,956   |
| 1,286,389  | ...        | ...       | -         | 487,177   | 249,958   | -         | 11,763,241 | 5,726,462  | 36,050,991  | 6,540,365 |
| 1,552,922  | ...        | ...       | -         | -         | -         | 35,512    | 1,775,304  | 657,436    | 4,872,197   | 345,447   |
| 12,453     | ...        | ...       | -         | -         | -         | -         | 3,792,470  | 883,523    | 20,479,747  | 798,720   |
| 307,675    | ...        | ...       | 1,271     | 238,310   | 937,248   | 106,095   | 5,164,301  | 1,231,560  | 12,548,158  | 18,543    |
| 942,048    | ...        | ...       | -         | -         | -         | -         | 482,292    | 438,782    | 32,533      | -         |
| 7,054,199  | ...        | 6,436,295 | 23,651    | 33,632    | 488,636   | -         | 19,248,124 | 13,786,610 | 19,497,294  | 964,988   |
| 166,044    | ...        | ...       | -         | -         | -         | -         | 1,712,491  | 1,286,291  | 810,806     | 87,994    |
| 4,921,480  | ...        | ...       | -         | -         | -         | -         | 8,798,720  | 7,851,722  | ...         | ...       |

Note 3. Coal includes the coal for making coke (material coal).

4. Coal coke includes pitch coke.

(August, 2019)

## (2) 燃料受払

## Fuel input/output

## 1) 燃料種別表(事業所ベースの9調査対象業種合計)

## Table by Fuel (establishment basis)

## ① 固有単位表

## Table of original unit

| 種 別                     | 単 位<br>Unit        | 受 入<br>Receipts | 発生・回収<br>又は生産<br>Generation,<br>recovery<br>and/or<br>production | 消 費          |                     |                                     |
|-------------------------|--------------------|-----------------|--|--------------|---------------------|-------------------------------------|
|                         |                    |                 |  | 合 計<br>Total | ボイラ用<br>for Boilers | コージェネ<br>レーション用<br>for Cogeneration |
| 合 計 ( 原 油 換 算 )         | kl                 | 12,330,726      | 3,948,424  | 16,713,036   | 2,769,704           | 432,453                             |
| ( ネット )                 | "                  |                 |  | 12,776,577   |                     |                                     |
| 石 油 系 燃 料 ( 原 油 換 算 )   | "                  | 5,092,448       | -  | 6,836,396    | 732,357             | 231,277                             |
| 原 ガ ナ 改 灯 軽 重           | "                  | 88              | ...  | 87           | 87                  | -                                   |
| ソ リ                     | "                  | 4,034           | ...  | 4,076        | ...                 | ...                                 |
| フ サ                     | "                  | 2,612,202       | ...  | 2,583,108    | -                   | 361                                 |
| 質 生 成                   | "                  | 1,608,864       | ...  | 1,598,766    | -                   | -                                   |
| 油 油                     | "                  | 93,755          | ...  | 95,458       | 1,387               | 3,152                               |
| 油 計                     | "                  | 19,570          | ...  | 16,415       | 3                   | 57                                  |
| 重 油                     | "                  | 253,096         | ...  | 372,976      | 207,626             | 10,378                              |
| A 重 油                   | "                  | 41,352          | ...  | 38,078       | 14,461              | 2,389                               |
| B・C 重 油                 | "                  | 211,744         | ...  | 334,898      | 193,165             | 7,989                               |
| 炭 化 水 素 油               | "                  | 53,787          | ...  | 142,453      | 72,793              | -                                   |
| 液 化 石 油 ガ ス             | t                  | 505,662         | ...  | 508,399      | 7,780               | 13,448                              |
| 石 油 系 炭 化 水 素 ガ ス       | 1000m <sup>3</sup> | 29,220          | ...  | 1,204,058    | 183,186             | 127,605                             |
| オ イ ル コ ー ク ス           | t                  | 257,185         | ...  | 357,253      | 187,721             | -                                   |
| ア ス フ ァ ル ト             | "                  | -               | ...  | 104,149      | 55,746              | 48,403                              |
| 再 生 油 ( 石 油 由 来 )       | kl                 | 26,948          | -  | 26,689       | 1,640               | -                                   |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl                 | 7,238,278       | 3,948,424  | 9,876,640    | 2,037,346           | 201,176                             |
| 石 炭                     | t                  | 7,358,149       | ...  | 7,340,027    | 1,595,168           | -                                   |
| 石 炭 コ ー ク ス ( 注 2 )     | "                  | 646,624         | 2,788,219  | 2,613,742    | -                   | -                                   |
| タ ー ク ー ル               | "                  | 20,787          | 80,152   | 36,731       | -                   | -                                   |
| コ ー ク ス 炉 ガ ス           | 1000m <sup>3</sup> | 163,405         | 1,187,438  | 947,127      | 122,624             | -                                   |
| 高 圧 炉 ガ ス               | "                  | 260,736         | 10,555,179   | 7,124,056    | 2,603,984           | 491                                 |
| 電 気 炉 ガ ス               | "                  | 26,686          | 590,514  | 433,402      | 149,653             | 30                                  |
| 天 然 気 炉 ガ ス             | "                  | 494             | 4,985  | 3,983        | 3,046               | -                                   |
| 液 化 天 然 気 ガ ス           | "                  | 43,537          | 5,582  | 53,626       | 18,961              | 13,387                              |
| 都 市 取 出 黒 炭 ( A )       | t                  | 139,686         | ...  | 123,958      | 17,854              | 29,686                              |
| 都 市 取 出 黒 炭 ( B )       | 1000m <sup>3</sup> | 406,739         | ...  | 406,739      | 69,152              | 125,699                             |
| 回 収 黒 炭 ( A )           | "                  | 441,455         | ...  | 441,445      | 75,007              | 135,776                             |
| 回 収 黒 炭 ( B )           | "                  | 1,077,475       | ...  | 1,077,151    | 1,077,151           | -                                   |
| 酸 素 材                   | 1000N <sup>m</sup> | 760,765         | 185,594  | 903,974      | -                   | -                                   |
| 酸 素 材                   | 絶乾(Dry)t           | 212,931         | -  | 209,968      | 208,927             | -                                   |
| 廢 材                     | t                  | 38,290          | -  | 39,062       | 33,088              | -                                   |
| 廢 材                     | "                  | 56,101          | 7,515  | 59,507       | 3,898               | -                                   |
| R P F                   | "                  | 47,564          | -  | 49,247       | 47,074              | -                                   |

## ② 熱量単位表

## Table of energy unit

| 種 別                     | 単 位 | 受 入         | 発生・回収       | 合 計         | ボイラ用        | コージェネ      |
|-------------------------|-----|-------------|-------------|-------------|-------------|------------|
| 合 計 ( 原 油 換 算 )         | GJ  | 477,199,094 | 152,803,993 | 646,794,512 | 107,187,532 | 16,735,928 |
| ( ネット )                 | "   |             |             | 494,453,526 |             |            |
| 石 油 系 燃 料 ( 原 油 換 算 )   | "   | 197,077,755 | -           | 264,568,557 | 28,342,225  | 8,950,412  |
| 原 ガ ナ 改 灯 軽 重           | "   | 3,106       | ...         | 3,071       | 3,071       | -          |
| ソ リ                     | "   | 139,576     | ...         | 141,030     | ...         | ...        |
| フ サ                     | "   | 87,769,987  | ...         | 86,792,429  | -           | 12,130     |
| 質 生 成                   | "   | 56,471,126  | ...         | 56,116,687  | -           | -          |
| 油 油                     | "   | 3,440,809   | ...         | 3,503,309   | 50,903      | 115,678    |
| 油 計                     | "   | 737,789     | ...         | 618,846     | 113         | 2,149      |
| 重 油                     | "   | 10,488,937  | ...         | 15,521,076  | 8,659,039   | 428,149    |
| A 重 油                   | "   | 1,616,863   | ...         | 1,488,850   | 565,425     | 93,410     |
| B・C 重 油                 | "   | 8,872,074   | ...         | 14,032,226  | 8,093,614   | 334,739    |
| 炭 化 水 素 油               | "   | 2,253,675   | ...         | 5,968,781   | 3,050,027   | -          |
| 液 化 石 油 ガ ス             | "   | 25,687,630  | ...         | 25,826,669  | 395,224     | 683,158    |
| 石 油 系 炭 化 水 素 ガ ス       | "   | 1,311,978   | ...         | 54,062,204  | 8,225,051   | 5,729,465  |
| オ イ ル コ ー ク ス           | "   | 7,689,832   | ...         | 10,681,865  | 5,612,858   | -          |
| ア ス フ ァ ル ト             | "   | -           | ...         | 4,259,694   | 2,280,011   | 1,979,683  |
| 再 生 油 ( 石 油 由 来 )       | "   | 1,083,310   | ...         | 1,072,898   | 65,928      | -          |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | "   | 280,121,339 | 152,803,993 | 382,225,955 | 78,845,307  | 7,785,517  |
| 石 炭                     | "   | 200,686,461 | ...         | 200,251,302 | 40,995,818  | -          |
| 石 炭 コ ー ク ス ( 注 2 )     | "   | 19,010,746  | 81,973,639  | 76,844,015  | -           | -          |
| タ ー ク ー ル               | "   | 775,355     | 2,989,670   | 1,370,066   | -           | -          |
| コ ー ク ス 炉 ガ ス           | "   | 3,447,846   | 25,054,942  | 19,984,380  | 2,587,366   | -          |
| 高 圧 炉 ガ ス               | "   | 889,110     | 35,993,160  | 24,293,031  | 8,879,585   | 1,674      |
| 電 気 炉 ガ ス               | "   | 224,429     | 4,966,223   | 3,644,911   | 1,258,582   | 252        |
| 天 然 気 炉 ガ ス             | "   | 4,155       | 41,924      | 33,497      | 25,617      | -          |
| 液 化 天 然 気 ガ ス           | "   | 1,893,860   | 242,817     | 2,332,731   | 824,804     | 582,335    |
| 都 市 取 出 黒 炭 ( A )       | "   | 7,626,856   | ...         | 6,768,107   | 974,828     | 1,620,856  |
| 都 市 取 出 黒 炭 ( B )       | "   | 18,143,818  | ...         | 18,143,399  | 3,082,803   | 5,580,400  |
| 回 収 黒 炭 ( A )           | "   | 14,222,670  | ...         | 14,218,393  | 14,218,393  | -          |
| 回 収 黒 炭 ( B )           | "   | 5,416,647   | 1,321,429   | 6,436,295   | ...         | -          |
| 廢 材                     | "   | 3,470,775   | -           | 3,422,478   | 3,405,510   | -          |
| 廢 材                     | "   | 1,271,228   | -           | 1,296,858   | 1,098,522   | -          |
| 廢 材                     | "   | 1,643,759   | 220,190     | 1,743,555   | 114,211     | -          |
| R P F                   | "   | 1,393,625   | -           | 1,442,937   | 1,379,268   | -          |

注1. 原油にはNGL・コンデンセートを含む。

2. 石炭には、コークス製造用炭(原料炭)を含む。

3. 石炭コークスにはピッチコークスを含む。

(令和1年8月)

| Consumption  |                     |                             |                    | 払出<br>Shipment    | 月末在庫<br>Inventory  | Fuels   |
|--|---------------------|-----------------------------|--------------------|-------------------|--------------------|---|
| ボイラ用及びコージェネレーション用以外に使用したもの<br>for purposes other than boilers and cogeneration |                     |                             |                    |                   |                    |   |
| 計<br>Total   | 原料用<br>as Materials | 直接加熱用<br>for Direct heating | その他用<br>for Others |                   |                    |   |
| <b>13,510,880</b>  | <b>7,559,405</b>    | <b>5,725,751</b>            | <b>225,724</b>     | <b>1,600,818</b>  | <b>9,852,401</b>   | <b>Total (Crude petroleum equivalent) (Net)</b>         |
| <b>5,872,762</b>   | <b>4,491,297</b>    | <b>1,276,945</b>            | <b>104,521</b>     | <b>88,151</b>     | <b>1,637,609</b>   | <b>Oil based fuels (Crude petroleum equivalent)</b>     |
| -  | -                   | -                           | -                  | 2,420             | 497                | Crude petroleum   |
| 4,076  | ...                 | 5                           | 4,071              | 5                 | 1,722              | Gasoline  |
| 2,582,747  | 2,581,186           | 1,378                       | 183                | 488               | 738,021            | Naphtha   |
| 1,598,766  | 1,598,766           | -                           | -                  | 10,633            | 3,823              | Oil produced by conversion                              |
| 90,919   | 78,245              | 10,084                      | 2,590              | 128               | 18,913             | Kerosene  |
| 16,355   | 10,171              | 687                         | 5,497              | 32                | 18,008             | Gas oils  |
| 154,972  | 42,452              | 103,195                     | 9,325              | 6,388             | 259,348            | Heavy Fuel oil total                                    |
| 21,228   | -                   | 17,237                      | 3,991              | 877               | 62,207             | Heavy Fuel oil A  |
| 133,744  | 42,452              | 85,958                      | 5,334              | 5,511             | 197,141            | Heavy Fuel oil B・C                                      |
| 69,660   | 33,116              | 35,944                      | 600                | 378               | 13,907             | Hydrocarbon oil   |
| 487,171  | 415,221             | 42,378                      | 29,572             | 43,370            | 101,384            | Liquefied petroleum gas                                 |
| 893,267  | 30,540              | 826,872                     | 35,855             | ...               | ...                | Hydrocarbon gas   |
| 169,532  | 69,660              | 99,194                      | 678                | 14,919            | 676,910            | Petroleum coke  |
| -  | -                   | -                           | -                  | -                 | -                  | Asphalt   |
| 25,049   | -                   | 23,592                      | 1,457              | -                 | 8,152              | Reproduction oil (Oil origin)                           |
| <b>7,638,117</b>   | <b>3,068,108</b>    | <b>4,448,806</b>            | <b>121,204</b>     | <b>1,512,667</b>  | <b>8,214,793</b>   | <b>Non-oil based fuels (Crude petroleum equivalent)</b> |
| 5,744,859  | 4,049,834           | 1,694,033                   | 992                | 404,629           | 9,260,405          | Coal  |
| 2,613,742  | 34,227              | 2,569,438                   | 10,077             | 759,151           | 2,023,325          | Coal coke   |
| 36,731   | 36,731              | -                           | -                  | 64,570            | 54,433             | Tar   |
| 824,503  | 625                 | 787,818                     | 36,060             | 387,099           | ...                | Coke oven gas   |
| 4,519,581  | -                   | 4,202,161                   | 317,420            | 3,582,655         | ...                | Blast furnace gas                                       |
| 283,719  | -                   | 259,613                     | 24,106             | 143,535           | ...                | Converter furnace gas                                   |
| 937  | -                   | 937                         | -                  | 1,496             | ...                | Electric furnaces gas                                   |
| 21,278   | 5,864               | 13,361                      | 2,053              | 880               | 12                 | Natural gas   |
| 76,418   | 19,797              | 53,093                      | 3,528              | 14,360            | 49,388             | Liquefied natural gas                                   |
| 211,888  | -                   | 181,138                     | 30,750             | ...               | ...                | Town gas(A)   |
| 230,662  | -                   | 197,038                     | 33,623             | ...               | ...                | Town gas(B)   |
| -  | -                   | -                           | -                  | -                 | 4,103              | Black liquor  |
| 903,974  | 7                   | 821,418                     | 82,549             | 29,451            | 1,360              | Oxygen  |
| 1,041  | -                   | 1,041                       | -                  | -                 | 45,428             | Waste material  |
| 5,974  | 1,013               | 4,909                       | 52                 | -                 | 17,055             | Used tires  |
| 55,609   | 17,608              | 35,629                      | 2,372              | 3,089             | 29,085             | Waste plastic   |
| 2,173  | -                   | 2,173                       | -                  | -                 | 13,266             | Refuse Paper & Plastic Fuel                             |
| <b>522,871,052</b>   | <b>292,548,952</b>  | <b>221,586,549</b>          | <b>8,735,550</b>   | <b>61,951,664</b> | <b>381,287,938</b> | <b>Total (Crude petroleum equivalent) (Net)</b>         |
| <b>227,275,920</b>   | <b>173,813,180</b>  | <b>49,417,771</b>           | <b>4,044,969</b>   | <b>3,411,432</b>  | <b>63,375,465</b>  | <b>Oil based fuels (Crude petroleum equivalent)</b>     |
| -  | -                   | -                           | -                  | 85,426            | 18,350             | Crude petroleum   |
| 141,030  | ...                 | 173                         | 140,857            | 173               | 59,581             | Gasoline  |
| 86,780,299   | 86,727,850          | 46,301                      | 6,149              | 16,397            | 24,797,506         | Naphtha   |
| 56,116,687   | 56,116,687          | -                           | -                  | 373,218           | 134,187            | Oil produced by conversion                              |
| 3,336,727  | 2,871,592           | 370,083                     | 95,053             | 4,698             | 694,107            | Kerosene  |
| 616,584  | 383,447             | 25,900                      | 207,237            | 1,206             | 678,902            | Gas oils  |
| 6,433,888  | 1,778,739           | 4,275,607                   | 379,543            | 265,202           | 10,692,502         | Heavy Fuel oil total                                    |
| 830,015  | -                   | 673,967                     | 156,048            | 34,291            | 2,432,294          | Heavy Fuel oil A  |
| 5,603,874  | 1,778,739           | 3,601,640                   | 223,495            | 230,911           | 8,260,208          | Heavy Fuel oil B・C                                      |
| 2,918,754  | 1,387,560           | 1,506,054                   | 25,140             | 15,838            | 582,703            | Hydrocarbon oil   |
| 24,748,287   | 21,093,227          | 2,152,802                   | 1,502,258          | 2,203,196         | 5,150,307          | Liquefied petroleum gas                                 |
| 40,107,688   | 1,371,246           | 37,126,553                  | 1,609,890          | ...               | ...                | Hydrocarbon gas   |
| 5,069,007  | 2,082,834           | 2,965,901                   | 20,272             | 446,078           | 20,239,609         | Petroleum coke  |
| -  | -                   | -                           | -                  | -                 | -                  | Asphalt   |
| 1,006,970  | -                   | 948,398                     | 58,571             | -                 | 327,710            | Reproduction oil (Oil origin)                           |
| <b>295,595,131</b>   | <b>118,735,772</b>  | <b>172,168,778</b>          | <b>4,690,581</b>   | <b>58,540,232</b> | <b>317,912,474</b> | <b>Non-oil based fuels (Crude petroleum equivalent)</b> |
| 159,255,485  | 114,460,648         | 44,769,342                  | 25,494             | 11,085,844        | 251,087,832        | Coal  |
| 76,844,015   | 1,006,274           | 75,541,477                  | 296,264            | 22,319,039        | 59,485,755         | Coal coke   |
| 1,370,066  | 1,370,066           | -                           | -                  | 2,408,461         | 2,030,351          | Tar   |
| 17,397,013   | 13,188              | 16,622,960                  | 760,866            | 8,167,789         | ...                | Coke oven gas   |
| 15,411,771   | -                   | 14,329,369                  | 1,082,402          | 12,216,854        | ...                | Blast furnace gas                                       |
| 2,386,077  | -                   | 2,183,345                   | 202,731            | 1,207,129         | ...                | Converter furnace gas                                   |
| 7,880  | -                   | 7,880                       | -                  | 12,581            | ...                | Electric furnaces gas                                   |
| 925,593  | 255,084             | 581,204                     | 89,306             | 38,280            | 522                | Natural gas   |
| 4,172,423  | 1,080,916           | 2,898,878                   | 192,629            | 784,056           | 2,696,585          | Liquefied natural gas                                   |
| 9,480,196  | -                   | 8,098,282                   | 1,381,914          | ...               | ...                | Town gas  |
| -  | -                   | -                           | -                  | -                 | 54,160             | Black liquor  |
| 6,436,295  | 50                  | 5,848,496                   | 587,749            | 209,691           | 9,683              | Oxygen  |
| 16,968   | -                   | 16,968                      | -                  | -                 | 740,476            | Waste material  |
| 198,337  | 33,632              | 162,979                     | 1,726              | -                 | 566,226            | Used tires  |
| 1,629,344  | 515,914             | 1,043,930                   | 69,500             | 90,508            | 852,191            | Waste plastic   |
| 63,669   | -                   | 63,669                      | -                  | -                 | 388,694            | Refuse Paper & Plastic Fuel                             |

Note 1. Crude petroleum includes NGL・condensate in liquid form.

2. Coal includes the coal for making coke (material coal).

3. Coal coke includes pitch coke.

(August, 2019)



2) 業種別表(事業所ベース)

Table for individual industry (establishment basis)

① パルプ・紙・板紙工業 Pulp, paper, paperboard industry

| 種 別                     | 単 位<br>Unit        | 受 入<br>Receipts | 消 費          |                     |                                     |
|-------------------------|--------------------|-----------------|--------------|---------------------|-------------------------------------|
|                         |                    |                 | 合 計<br>Total | ボイラ用<br>for Boilers | コージェネ<br>レーション用<br>for Cogeneration |
| 合 計 ( 原 油 換 算 )         | kl                 | 997,788         | 976,379      | 899,689             | 40,886                              |
| 石 油 系 燃 料 ( 原 油 換 算 )   | 〃                  | 80,135          | 81,615       | 52,107              | 96                                  |
| ガ ソ リ ン                 | 〃                  | 5               | 6            | ...                 | ...                                 |
| 灯 油                     | 〃                  | 589             | 702          | 284                 | -                                   |
| 軽 油                     | 〃                  | 326             | 313          | 3                   | 15                                  |
| 重 油 計                   | 〃                  | 58,174          | 61,224       | 40,018              | 81                                  |
| A 重 油                   | 〃                  | 5,516           | 5,140        | 4,670               | 81                                  |
| B・C 重 油                 | 〃                  | 52,658          | 56,084       | 35,348              | -                                   |
| 炭 化 水 素 油               | 〃                  | 3,247           | 2,307        | 1,259               | -                                   |
| 液 化 石 油 ガ ス             | t                  | 2,038           | 2,029        | 609                 | -                                   |
| オ イ ル コ ー ク ス           | 〃                  | 12,448          | 11,530       | 8,599               | -                                   |
| ア ス フ ァ ル ト             | 〃                  | -               | -            | -                   | -                                   |
| 再 生 油 ( 石 油 由 来 )       | kl                 | 829             | 631          | 38                  | -                                   |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl                 | 917,653         | 894,764      | 847,582             | 40,789                              |
| 石 炭                     | t                  | 491,332         | 457,902      | 457,902             | -                                   |
| 炭 コ ー ク ス               | 〃                  | -               | 308          | -                   | -                                   |
| 天 然 ガ ス                 | 1000m <sup>3</sup> | 6,712           | 6,712        | 1,140               | 5,154                               |
| 液 化 天 然 ガ ス             | t                  | 7,824           | 7,760        | 4,516               | 2,815                               |
| 都 市 ガ ス ( A )           | 1000m <sup>3</sup> | 56,008          | 56,008       | 24,997              | 26,978                              |
| 都 市 ガ ス ( B )           | 〃                  | 60,623          | 60,626       | 27,008              | 29,213                              |
| 回 収 黒 液 材               | 絶乾(Dry)t           | 1,077,475       | 1,077,151    | 1,077,151           | -                                   |
| 廃 タ イ ヤ                 | t                  | 211,402         | 208,439      | 207,476             | -                                   |
| 廃 プ ラ ス チ ッ ク           | t                  | 18,934          | 18,414       | 18,414              | -                                   |
| R P F                   | 〃                  | 3,885           | 3,898        | 3,898               | -                                   |
| R P F                   | 〃                  | 43,147          | 44,414       | 44,414              | -                                   |

② 化学繊維工業 Chemical fibers products industry

|                         |                    |         |         |         |        |
|-------------------------|--------------------|---------|---------|---------|--------|
| 合 計 ( 原 油 換 算 )         | kl                 | 127,105 | 157,435 | 114,743 | 32,212 |
| 石 油 系 燃 料 ( 原 油 換 算 )   | 〃                  | 17,130  | 33,184  | 28,822  | 530    |
| ガ ソ リ ン                 | 〃                  | 6       | 6       | ...     | ...    |
| 灯 油                     | 〃                  | 235     | 235     | 84      | -      |
| 軽 油                     | 〃                  | 12      | 12      | -       | 6      |
| 重 油 計                   | 〃                  | 13,004  | 13,061  | 9,377   | 519    |
| A 重 油                   | 〃                  | 2,611   | 1,883   | 910     | 519    |
| B・C 重 油                 | 〃                  | 10,393  | 11,178  | 8,467   | -      |
| 炭 化 水 素 油               | 〃                  | 46      | 46      | 46      | -      |
| 液 化 石 油 ガ ス             | t                  | 240     | 241     | 25      | -      |
| オ イ ル コ ー ク ス           | 〃                  | 3,411   | 24,039  | 24,039  | -      |
| ア ス フ ァ ル ト             | 〃                  | -       | -       | -       | -      |
| 再 生 油 ( 石 油 由 来 )       | kl                 | -       | -       | -       | -      |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl                 | 109,975 | 124,251 | 85,921  | 31,682 |
| 石 炭                     | t                  | 102,116 | 123,334 | 123,334 | -      |
| 液 化 天 然 ガ ス             | 〃                  | 907     | 923     | 644     | 201    |
| 都 市 ガ ス ( A )           | 1000m <sup>3</sup> | 34,834  | 34,834  | 2,050   | 27,126 |
| 都 市 ガ ス ( B )           | 〃                  | 37,785  | 37,784  | 2,063   | 29,565 |
| 廃 プ ラ ス チ ッ ク           | t                  | -       | -       | -       | -      |
| R P F                   | 〃                  | 995     | 1,212   | 1,212   | -      |

(令和1年8月)

| Consumption  |                             |                    | 払 出<br>Shipment | 月末在庫<br>Inventory | Fuels   |
|--|-----------------------------|--------------------|-----------------|-------------------|---|
| ボイラ用及びコージェネレーション用以外に使用したもの<br>for purposes other than boilers and cogeneration |                             |                    |                 |                   |   |
| 計<br>Total   | 直接加熱用<br>for Direct heating | その他用<br>for Others |                 |                   |   |
| 35,805   | 31,311                      | 4,493              | 15,451          | 533,220           | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |
| 29,412   | 25,833                      | 3,578              | 5,712           | 83,587            | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |
| 6  | ...                         | 6                  | -               | 2                 | Gasoline  |
| 418  | 328                         | 90                 | 56              | 989               | Kerosene  |
| 295  | 2                           | 293                | 14              | 22                | Gas oils  |
| 21,125   | 19,791                      | 1,334              | 5,227           | 67,076            | Heavy Fuel oil total  |
| 389  | 344                         | 45                 | 189             | 6,687             | Heavy Fuel oil A  |
| 20,736   | 19,447                      | 1,289              | 5,038           | 60,389            | Heavy Fuel oil B・C  |
| 1,048  | 1,042                       | 6                  | -               | 5,866             | Hydrocarbon oil   |
| 1,420  | 803                         | 617                | -               | 276               | Liquefied petroleum gas   |
| 2,931  | 2,301                       | 630                | -               | 3,851             | Petroleum coke  |
| -  | -                           | -                  | -               | -                 | Asphalt   |
| 593  | 152                         | 441                | -               | 769               | Reproduction oil (Oil origin)                                     |
| 6,393  | 5,478                       | 915                | 9,739           | 449,633           | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |
| -  | -                           | -                  | 14,665          | 614,947           | Coal  |
| 308  | -                           | 308                | -               | 790               | Coal coke   |
| 418  | 400                         | 18                 | -               | ...               | Natural gas   |
| 429  | 298                         | 131                | -               | 734               | Liquefied natural gas   |
| 4,033  | 3,621                       | 412                | ...             | ...               | Town gas(A)   |
| 4,405  | 3,957                       | 448                | ...             | ...               | Town gas(B)   |
| -  | -                           | -                  | -               | 4,103             | Black liquor  |
| 963  | 963                         | -                  | -               | 45,428            | Waste material  |
| -  | -                           | -                  | -               | 11,208            | Used tires  |
| -  | -                           | -                  | -               | 66                | Waste plastic   |
| -  | -                           | -                  | -               | 12,446            | Refuse Paper & Plastic Fuel                                       |
| 10,480   | 6,730                       | 3,750              | -               | 178,498           | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |
| 3,832  | 2,205                       | 1,627              | -               | 74,211            | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |
| 6  | ...                         | 6                  | -               | -                 | Gasoline  |
| 151  | 16                          | 135                | -               | 97                | Kerosene  |
| 6  | -                           | 6                  | -               | 8                 | Gas oils  |
| 3,165  | 1,886                       | 1,279              | -               | 26,520            | Heavy Fuel oil total  |
| 454  | 77                          | 377                | -               | 6,518             | Heavy Fuel oil A  |
| 2,711  | 1,809                       | 902                | -               | 20,002            | Heavy Fuel oil B・C  |
| -  | -                           | -                  | -               | -                 | Hydrocarbon oil   |
| 216  | 117                         | 99                 | -               | 97                | Liquefied petroleum gas   |
| -  | -                           | -                  | -               | 59,205            | Petroleum coke  |
| -  | -                           | -                  | -               | -                 | Asphalt   |
| -  | -                           | -                  | -               | -                 | Reproduction oil (Oil origin)                                     |
| 6,648  | 4,525                       | 2,123              | -               | 104,287           | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |
| -  | -                           | -                  | -               | 156,308           | Coal  |
| 78   | 78                          | -                  | -               | 254               | Liquefied natural gas   |
| 5,658  | 3,859                       | 1,799              | ...             | ...               | Town gas(A)   |
| 6,156  | 4,157                       | 1,999              | ...             | ...               | Town gas(B)   |
| -  | -                           | -                  | -               | -                 | Waste plastic   |
| -  | -                           | -                  | -               | 168               | Refuse Paper & Plastic Fuel                                       |

(August, 2019)

③ 石油製品工業

Petroleum products industry

| 種 別                     | 単 位<br>Unit        | 受 入<br>Receipts | 消 費          |                     |                                     |
|-------------------------|--------------------|-----------------|--------------|---------------------|-------------------------------------|
|                         |                    |                 | 合 計<br>Total | ボイラ用<br>for Boilers | コージェネ<br>レーション用<br>for Cogeneration |
| 合 計 ( 原 油 換 算 )         | kl                 | 16,853          | 1,214,000    | 377,224             | 175,894                             |
| 石 油 系 燃 料 ( 原 油 換 算 )   | "                  | -               | 1,180,389    | 364,682             | 171,869                             |
| ガ ソ リ ン                 | "                  | ...             | 18           | ...                 | ...                                 |
| ナ フ サ                   | "                  | ...             | 4,450        | -                   | 361                                 |
| 灯 油                     | "                  | ...             | 1,997        | 70                  | 1,903                               |
| 軽 油                     | "                  | ...             | 484          | -                   | -                                   |
| 重 油 計                   | "                  | ...             | 116,454      | 98,173              | 1,947                               |
| A 重 油                   | "                  | ...             | 1,346        | 545                 | 170                                 |
| B・C 重 油                 | "                  | ...             | 115,108      | 97,628              | 1,777                               |
| 炭 化 水 素 油               | "                  | ...             | 12,249       | 12,249              | -                                   |
| 液 化 石 油 ガ ス             | t                  | ...             | 33,407       | 250                 | 10,576                              |
| 石 油 系 炭 化 水 素 ガ ス       | 1000m <sup>3</sup> | ...             | 724,871      | 125,741             | 88,448                              |
| オ イ ル コ ー ク ス           | t                  | ...             | 51,739       | 51,739              | -                                   |
| ア ス フ ァ ル ト             | "                  | ...             | 104,149      | 55,746              | 48,403                              |
| 再 生 油 ( 石 油 由 来 )       | kl                 | -               | -            | -                   | -                                   |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl                 | 16,853          | 33,612       | 12,542              | 4,025                               |
| 石 炭                     | t                  | -               | 16,335       | 16,335              | -                                   |
| 天 然 ガ ス                 | 1000m <sup>3</sup> | -               | 5,259        | 637                 | -                                   |
| 液 化 天 然 ガ ス             | t                  | 11,717          | 11,717       | 471                 | 2,853                               |
| 都 市 ガ ス ( A )           | 1000m <sup>3</sup> | 277             | 277          | 270                 | -                                   |
| 都 市 ガ ス ( B )           | "                  | 303             | 303          | 295                 | -                                   |
| 廃 プ ラ ス チ ッ ク           | t                  | -               | -            | -                   | -                                   |
| R P F                   | "                  | -               | -            | -                   | -                                   |

④ ガラス製品工業

Glass products industry

| 種 別                     | 単 位<br>Unit        | 受 入<br>Receipts | 消 費          |                     |                                     |
|-------------------------|--------------------|-----------------|--------------|---------------------|-------------------------------------|
|                         |                    |                 | 合 計<br>Total | ボイラ用<br>for Boilers | コージェネ<br>レーション用<br>for Cogeneration |
| 合 計 ( 原 油 換 算 )         | kl                 | 38,552          | 38,272       | 422                 | 2,767                               |
| 石 油 系 燃 料 ( 原 油 換 算 )   | "                  | 5,371           | 5,109        | 3                   | 5                                   |
| ガ ソ リ ン                 | "                  | -               | -            | ...                 | ...                                 |
| 灯 油                     | "                  | 5               | 6            | 3                   | -                                   |
| 軽 油                     | "                  | 3               | 3            | -                   | -                                   |
| 重 油 計                   | "                  | 4,485           | 4,238        | -                   | 5                                   |
| A 重 油                   | "                  | 256             | 223          | -                   | 5                                   |
| B・C 重 油                 | "                  | 4,229           | 4,015        | -                   | -                                   |
| 液 化 石 油 ガ ス             | t                  | 125             | 123          | -                   | -                                   |
| ア ス フ ァ ル ト             | "                  | -               | -            | -                   | -                                   |
| 再 生 油 ( 石 油 由 来 )       | kl                 | 348             | 353          | -                   | -                                   |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl                 | 33,181          | 33,163       | 419                 | 2,762                               |
| 天 然 ガ ス                 | 1000m <sup>3</sup> | -               | -            | -                   | -                                   |
| 液 化 天 然 ガ ス             | t                  | 6,265           | 6,252        | 20                  | 395                                 |
| 都 市 ガ ス ( A )           | 1000m <sup>3</sup> | 21,128          | 21,128       | 338                 | 1,896                               |
| 都 市 ガ ス ( B )           | "                  | 22,921          | 22,921       | 368                 | 2,076                               |
| 廃 プ ラ ス チ ッ ク           | t                  | -               | -            | -                   | -                                   |
| R P F                   | "                  | -               | -            | -                   | -                                   |

(令和1年8月)

| Consumption  |                     |                             |                    | Fuels   |
|--|---------------------|-----------------------------|--------------------|---|
| ボイラ用及びコージェネレーション用以外に使用したもの<br>for purposes other than boilers and cogeneration |                     |                             |                    |   |
| 計<br>Total   | 原料用<br>as Materials | 直接加熱用<br>for Direct heating | その他用<br>for Others |   |
| 660,882  | 69,021              | 560,310                     | 31,551             | <b>Total<br/>(Crude petroleum equivalent)</b>               |
| 643,837  | 60,168              | 552,988                     | 30,681             | <b>Oil based fuels<br/>(Crude petroleum equivalent)</b>     |
| 18   | ...                 | ...                         | 18                 | Gasoline  |
| 4,089  | 2,711               | 1,378                       | -                  | Naphtha   |
| 24   | -                   | 9                           | 15                 | Kerosene  |
| 484  | -                   | 436                         | 48                 | Gas oils  |
| 16,334   | -                   | 15,471                      | 863                | Heavy Fuel oil total  |
| 631  | -                   | 528                         | 103                | Heavy Fuel oil A  |
| 15,703   | -                   | 14,943                      | 760                | Heavy Fuel oil B・C  |
| -  | -                   | -                           | -                  | Hydrocarbon oil   |
| 22,581   | 18,386              | 4,195                       | -                  | Liquefied petroleum gas                                     |
| 510,682  | 29,029              | 456,074                     | 25,579             | Hydrocarbon gas   |
| -  | -                   | -                           | -                  | Petroleum coke  |
| -  | -                   | -                           | -                  | Asphalt   |
| -  | -                   | -                           | -                  | Reproduction oil (Oil origin)                               |
| 17,045   | 8,853               | 7,322                       | 870                | <b>Non-oil based fuels<br/>(Crude petroleum equivalent)</b> |
| -  | -                   | -                           | -                  | Coal  |
| 4,622  | 1,190               | 3,218                       | 214                | Natural gas   |
| 8,393  | 5,327               | 2,626                       | 440                | Liquefied natural gas                                       |
| 7  | -                   | -                           | 7                  | Town gas(A)   |
| 8  | -                   | -                           | 8                  | Town gas(B)   |
| -  | -                   | -                           | -                  | Waste plastic   |
| -  | -                   | -                           | -                  | Refuse Paper & Plastic Fuel                                 |

| Consumption  |                             |                    | 払 出<br>Shipments | 月 末 在 庫<br>Inventory | Fuels   |
|--|-----------------------------|--------------------|------------------|----------------------|---|
| ボイラ用及びコージェネレーション用以外に使用したもの<br>for purposes other than boilers and cogeneration |                             |                    |                  |                      |   |
| 計<br>Total   | 直接加熱用<br>for Direct heating | その他用<br>for Others |                  |                      |   |
| 35,083   | 34,452                      | 631                | 18               | 4,845                | <b>Total<br/>(Crude petroleum equivalent)</b>               |
| 5,101  | 5,079                       | 22                 | 18               | 4,807                | <b>Oil based fuels<br/>(Crude petroleum equivalent)</b>     |
| -  | ...                         | -                  | -                | -                    | Gasoline  |
| 3  | 3                           | -                  | -                | 74                   | Kerosene  |
| 3  | 1                           | 2                  | -                | -                    | Gas oils  |
| 4,233  | 4,213                       | 20                 | 18               | 4,249                | Heavy Fuel oil total  |
| 218  | 198                         | 20                 | 18               | 966                  | Heavy Fuel oil A  |
| 4,015  | 4,015                       | -                  | -                | 3,283                | Heavy Fuel oil B・C  |
| 123  | 123                         | -                  | -                | 43                   | Liquefied petroleum gas                                     |
| -  | -                           | -                  | -                | -                    | Asphalt   |
| 353  | 353                         | -                  | -                | 144                  | Reproduction oil (Oil origin)                               |
| 29,982   | 29,373                      | 609                | -                | 38                   | <b>Non-oil based fuels<br/>(Crude petroleum equivalent)</b> |
| -  | -                           | -                  | -                | ...                  | Natural gas   |
| 5,837  | 5,837                       | -                  | -                | 27                   | Liquefied natural gas                                       |
| 18,894   | 18,371                      | 523                | ...              | ...                  | Town gas(A)   |
| 20,477   | 19,904                      | 573                | ...              | ...                  | Town gas(B)   |
| -  | -                           | -                  | -                | -                    | Waste plastic   |
| -  | -                           | -                  | -                | -                    | Refuse Paper & Plastic Fuel                                 |

(August, 2019)

⑤ 化学工業

Chemical products industry

| 種 別                   | 単 位<br>Unit        | 受 入<br>Receipts | 発生・回収<br>又は生産<br>Generation,<br>recovery<br>and/or<br>production | 消 費                    |                     |                                     |
|-----------------------|--------------------|-----------------|--|------------------------|---------------------|-------------------------------------|
|                       |                    |                 |  | 合 計<br>Total           | ボイラ用<br>for Boilers | コージェネ<br>レーション用<br>for Cogeneration |
| 合計（原油換算）（注1）<br>（ネット） | kl<br>"            | 5,873,022       | 686,177  | 6,569,080<br>5,892,996 | 687,440             | 101,371                             |
| 石油系燃料（原油換算）           | "                  | 4,718,751       | -  | 5,239,661              | 254,141             | 51,876                              |
| 原 油                   | "                  | -               | ...  | -                      | -                   | -                                   |
| N G L ・ コ ン デ ン セ ー ト | "                  | 88              | ...  | 87                     | 87                  | -                                   |
| ガ ソ ー リ ン             | "                  | 16              | ...  | 17                     | ...                 | ...                                 |
| ナ フ サ                 | "                  | 2,612,202       | ...  | 2,578,658              | -                   | -                                   |
| 改 質 生 成 油             | "                  | 1,608,864       | ...  | 1,598,766              | ...                 | ...                                 |
| 灯 油                   | "                  | 82,598          | ...  | 82,208                 | 51                  | 1,249                               |
| 軽 油                   | "                  | 14,115          | ...  | 10,506                 | -                   | -                                   |
| 重 油                   | "                  | 99,901          | ...  | 101,192                | 45,825              | 1,428                               |
| A 重 油                 | "                  | 4,354           | ...  | 3,749                  | 1,205               | 756                                 |
| B・C 重 油               | "                  | 95,547          | ...  | 97,443                 | 44,620              | 672                                 |
| 炭 化 水 素 油             | "                  | 19,330          | ...  | 97,792                 | 59,239              | -                                   |
| 液 化 石 油 ガ ス           | t                  | 475,670         | ...  | 443,465                | 3,159               | 2,872                               |
| 石油系炭化水素ガス（注2）         | 1000m <sup>3</sup> | 29,217          | ...  | 479,184                | 57,445              | 39,157                              |
| オ イ ル コ ー ク ス         | t                  | 143,114         | ...  | 139,110                | 87,871              | -                                   |
| ア ス フ ァ ル ト           | "                  | -               | ...  | -                      | -                   | -                                   |
| 再 生 油 （ 石 油 由 来 ）     | kl                 | 1,712           | -  | 1,712                  | 1,602               | -                                   |
| 非石油系燃料（原油換算）          | kl                 | 1,154,271       | 686,177  | 1,329,418              | 433,299             | 49,495                              |
| 石 炭                   | t                  | 1,406,132       | -  | 1,575,350              | 575,580             | -                                   |
| 石 炭 コ ー ク ス           | "                  | 13,628          | 683,698  | 12,391                 | ...                 | -                                   |
| タ ー ク ス               | "                  | 15,389          | 13,604   | 27,669                 | -                   | -                                   |
| コ ー ク ス 炉 ガ ス         | 1000m <sup>3</sup> | 6,108           | 263,332  | 113,749                | 3,660               | -                                   |
| 高 炉 ガ ス               | "                  | 106,128         | -  | 106,128                | -                   | -                                   |
| 転 炉 ガ ス               | "                  | -               | -  | -                      | -                   | -                                   |
| 天 然 ガ ス               | "                  | 31,422          | 5,582  | 36,247                 | 16,626              | 7,249                               |
| 液 化 天 然 ガ ス           | t                  | 71,132          | ...  | 58,670                 | 8,726               | 17,632                              |
| 都 市 ガ ス （ A ）         | 1000m <sup>3</sup> | 30,255          | ...  | 30,255                 | 4,772               | 15,537                              |
| 都 市 ガ ス （ B ）         | "                  | 31,304          | ...  | 31,299                 | 5,163               | 15,509                              |
| 廃 タ イ ヤ               | t                  | 13,172          | -  | 14,674                 | 14,674              | -                                   |
| 廃 プ ラ ス チ ック          | "                  | 3,163           | 5,044  | 8,531                  | -                   | -                                   |
| R P F                 | "                  | -               | -  | -                      | -                   | -                                   |

⑥ 窯業・土石製品工業

Ceramics, clay and stone products industry

|                       |                    |         |     |                    |         |       |
|-----------------------|--------------------|---------|-----|--------------------|---------|-------|
| 合計（原油換算）（注1）<br>（ネット） | kl<br>"            | 726,926 | -   | 807,084<br>807,084 | 341,841 | 5,176 |
| 石油系燃料（原油換算）           | "                  | 143,188 | -   | 148,300            | 12,886  | 1,296 |
| ガ ソ ー リ ン             | "                  | 31      | ... | 31                 | ...     | ...   |
| 灯 油                   | "                  | 2,068   | ... | 2,006              | 120     | -     |
| 軽 油                   | "                  | 1,133   | ... | 1,122              | -       | -     |
| 重 油                   | "                  | 38,326  | ... | 38,907             | 795     | 1,197 |
| A 重 油                 | "                  | 2,286   | ... | 2,397              | 601     | -     |
| B・C 重 油               | "                  | 36,040  | ... | 36,510             | 194     | 1,197 |
| 炭 化 水 素 油             | "                  | 21,120  | ... | 20,866             | -       | -     |
| 液 化 石 油 ガ ス           | t                  | 1,673   | ... | 1,772              | -       | -     |
| オ イ ル コ ー ク ス         | "                  | 66,550  | ... | 72,425             | 15,473  | -     |
| ア ス フ ァ ル ト           | "                  | -       | ... | -                  | -       | -     |
| 再 生 油 （ 石 油 由 来 ）     | kl                 | 21,455  | -   | 21,615             | -       | -     |
| 非石油系燃料（原油換算）          | kl                 | 583,737 | -   | 658,784            | 328,955 | 3,880 |
| 石 炭                   | t                  | 747,998 | ... | 861,459            | 479,346 | -     |
| 石 炭 コ ー ク ス           | "                  | 20,797  | -   | 18,155             | -       | -     |
| コ ー ク ス 炉 ガ ス         | 1000m <sup>3</sup> | 24,529  | -   | 24,529             | -       | -     |
| 高 炉 ガ ス               | "                  | 4,557   | -   | 4,557              | -       | -     |
| 転 炉 ガ ス               | "                  | 21,889  | -   | 21,889             | -       | -     |
| 電 気 炉 ガ ス             | "                  | 494     | -   | 494                | -       | -     |
| 天 然 ガ ス               | "                  | 11,677  | -   | 11,677             | 6,744   | 3,452 |
| 液 化 天 然 ガ ス           | t                  | 33      | -   | 33                 | -       | -     |
| 都 市 ガ ス （ A ）         | 1000m <sup>3</sup> | 6,872   | ... | 6,872              | 45      | -     |
| 都 市 ガ ス （ B ）         | "                  | 7,486   | ... | 7,486              | 48      | -     |
| 廃 材                   | 絶乾(Dry)t           | 78      | -   | 78                 | -       | -     |
| 廃 タ イ ヤ               | t                  | 7,119   | -   | 7,178              | 2,217   | -     |
| 廃 プ ラ ス チ ック          | "                  | 30,000  | -   | 31,988             | -       | -     |
| R P F                 | "                  | 3,422   | -   | 3,621              | 1,448   | -     |

注1. 合計（原油換算）の消費量は、原料消費などによって生産又は副次的に発生する燃料が含まれているため重複している。  
なお、合計欄の下段「（ネット）」表示の数値は、調査対象事業所内で他の燃料から転換して消費した分を排除したネット消費量である。

2. 石油系炭化水素ガスの原料消費量は、「アンモニア及びアンモニア誘導品」に使用されたもののみである。

（令和1年8月）

| Consumption   |                     |                             |                    | 払 出<br>Shipment | 月末在庫<br>Inventory | Fuels   |
|---|---------------------|-----------------------------|--------------------|-----------------|-------------------|---|
| ボイラ用及びコージェネレーション用以外に使用したもの<br>for purposes other than boiler and cogeneration |                     |                             |                    |                 |                   |   |
| 計<br>Total  | 原料用<br>as Materials | 直接加熱用<br>for Direct heating | その他用<br>for Others |                 |                   |   |
| 5,780,269   | 5,103,666           | 632,672                     | 43,931             | 646,699         | 2,868,166         | <b>Total (Crude petroleum equivalent)<br/>(Net)</b>         |
| 4,933,644   | 4,410,276           | 484,089                     | 39,279             | 68,829          | 1,013,105         | <b>Oil based fuels<br/>(Crude petroleum equivalent)</b>     |
| -   | -                   | -                           | -                  | -               | 278               | Crude petroleum   |
| -   | -                   | -                           | -                  | 2,420           | 219               | NGL・condensate  |
| 17  | ...                 | ...                         | 17                 | -               | 3                 | Gasoline  |
| 2,578,658   | 2,578,475           | -                           | 183                | 488             | 738,021           | Naphtha   |
| 1,598,766   | 1,598,766           | ...                         | ...                | 10,633          | 3,823             | Oil produced by conversion                                  |
| 80,908  | 78,245              | 2,312                       | 351                | -               | 8,595             | Kerosene  |
| 10,506  | 10,171              | -                           | 335                | -               | 16,327            | Gas oils  |
| 53,939  | 42,452              | 9,285                       | 2,202              | 77              | 57,214            | Heavy Fuel oil total  |
| 1,788   | -                   | 959                         | 829                | 77              | 7,532             | Heavy Fuel oil A  |
| 52,151  | 42,452              | 8,326                       | 1,373              | -               | 49,682            | Heavy Fuel oil B・C  |
| 38,553  | 27,033              | 11,447                      | 73                 | ...             | ...               | Hydrocarbon oil   |
| 437,434   | 396,835             | 22,250                      | 18,349             | 43,024          | 62,095            | Liquefied petroleum gas                                     |
| 382,582   | 1,511               | 370,795                     | 10,276             | ...             | ...               | Hydrocarbon gas   |
| 51,239  | 51,194              | -                           | 45                 | -               | 260,718           | Petroleum coke  |
| -   | -                   | -                           | -                  | -               | -                 | Asphalt   |
| 110   | -                   | 110                         | -                  | -               | -                 | Reproduction oil (Oil origin)                               |
| 846,624   | 693,390             | 148,582                     | 4,652              | 577,870         | 1,855,060         | <b>Non-oil based fuels<br/>(Crude petroleum equivalent)</b> |
| 999,770   | 947,058             | 52,394                      | 318                | 16,609          | 2,297,894         | Coal  |
| 12,391  | 8,937               | 3,454                       | -                  | 604,467         | 384,033           | Coal coke   |
| 27,669  | 27,669              | -                           | -                  | 4,305           | 36,447            | Tar   |
| 110,089   | 150                 | 109,306                     | 633                | 155,693         | ...               | Coke oven gas   |
| 106,128   | -                   | 106,128                     | -                  | -               | ...               | Blast furnace gas   |
| -   | -                   | -                           | -                  | -               | ...               | Converter furnace gas                                       |
| 12,372  | 4,674               | 5,981                       | 1,717              | 880             | ...               | Natural gas   |
| 32,312  | 14,470              | 17,827                      | 15                 | 12,480          | 194               | Liquefied natural gas                                       |
| 9,946   | ...                 | 8,073                       | 1,873              | ...             | ...               | Town gas(A)   |
| 10,627  | ...                 | 8,608                       | 2,019              | ...             | ...               | Town gas(B)   |
| -   | -                   | -                           | -                  | -               | 2,139             | Used tires  |
| 8,531   | 6,944               | 1,587                       | -                  | -               | 113               | Waste plastic   |
| -   | -                   | -                           | -                  | -               | -                 | Refuse Paper & Plastic Fuel                                 |
| 460,067   | 7,200               | 445,518                     | 7,349              | 2,214           | 849,906           | <b>Total (Crude petroleum equivalent)<br/>(Net)</b>         |
| 134,119   | 3,364               | 126,157                     | 4,598              | 2,197           | 210,516           | <b>Oil based fuels<br/>(Crude petroleum equivalent)</b>     |
| 31  | ...                 | ...                         | 31                 | -               | -                 | Gasoline  |
| 1,886   | -                   | 1,857                       | 29                 | -               | 1,252             | Kerosene  |
| 1,122   | -                   | 221                         | 901                | 7               | 103               | Gas oils  |
| 36,915  | -                   | 34,604                      | 2,311              | -               | 43,335            | Heavy Fuel oil total  |
| 1,796   | -                   | 1,330                       | 466                | -               | 4,801             | Heavy Fuel oil A  |
| 35,119  | -                   | 33,274                      | 1,845              | -               | 38,534            | Heavy Fuel oil B・C  |
| 20,866  | -                   | 20,866                      | -                  | 378             | 3,478             | Hydrocarbon oil   |
| 1,772   | -                   | 1,587                       | 185                | -               | 251               | Liquefied petroleum gas                                     |
| 56,952  | 4,354               | 52,595                      | 3                  | 2,305           | 198,281           | Petroleum coke  |
| -   | -                   | -                           | -                  | -               | -                 | Asphalt   |
| 21,615  | -                   | 20,699                      | 916                | -               | 5,168             | Reproduction oil (Oil origin)                               |
| 325,949   | 3,836               | 319,362                     | 2,751              | 17              | 639,390           | <b>Non-oil based fuels<br/>(Crude petroleum equivalent)</b> |
| 382,113   | 275                 | 381,164                     | 674                | 19              | 923,733           | Coal  |
| 18,155  | 4,809               | 13,346                      | -                  | 6               | 19,744            | Coal coke   |
| 24,529  | -                   | 24,529                      | -                  | -               | ...               | Coke oven gas   |
| 4,557   | -                   | 4,557                       | -                  | -               | ...               | Blast furnace gas   |
| 21,889  | -                   | 21,889                      | -                  | -               | ...               | Converter furnace gas                                       |
| 494   | -                   | 494                         | -                  | -               | ...               | Electric furnaces gas                                       |
| 1,481   | -                   | 1,481                       | -                  | -               | ...               | Natural gas   |
| 33  | -                   | 9                           | 24                 | -               | -                 | Liquefied natural gas                                       |
| 6,827   | ...                 | 4,879                       | 1,948              | ...             | ...               | Town gas(A)   |
| 7,438   | ...                 | 5,419                       | 2,019              | ...             | ...               | Town gas(B)   |
| 78  | -                   | 78                          | -                  | -               | -                 | Waste material  |
| 4,961   | -                   | 4,909                       | 52                 | -               | 3,162             | Used tires  |
| 31,988  | -                   | 31,881                      | 107                | -               | 10,236            | Waste plastic   |
| 2,173   | -                   | 2,173                       | -                  | -               | 652               | Refuse Paper & Plastic Fuel                                 |

Note 1. Because production or fuel occurring subsidiarity is included by consumption for raw materials, the total (crude petroleum equivalent) consumption repeats. In addition, it is the net consumption that removed the thing that the numerical value of the lower berth (net) indication of the total column switches it from other fuel in subjects of survey establishment and used.

2. The consumption for raw materials of the oil-based hydrocarbon gas is only a thing used for "ammonia and an ammonia derivative".

(August, 2019)

⑦ 鉄鋼業 Iron and Steel products industry

| 種 別           | 単 位<br>Unit         | 受 入<br>Receipts | 発生・回収<br>又は生産<br>Generation,<br>recovery<br>and/or<br>production | 消 費          |                     |  |
|---------------|---------------------|-----------------|--|--------------|---------------------|--|
|               |                     |                 |  | 合 計<br>Total | ボイラ用<br>for Boilers | コージェネ<br>レーション用<br>for<br>Cogeneration |
| 合計（原油換算）（注）   | kl                  | 4,598,702       | 3,262,246  | 7,097,230    | 604,788             | 12,246                                 |
| （ネット）         | 〃                   | -               | -  | 3,836,854    | -                   | -                                      |
| 石油系燃料（原油換算）   | 〃                   | 97,911          | -  | 118,823      | 14,998              | 4,787                                  |
| ガソリン          | 〃                   | 116             | …  | 111          | …                   | …                                      |
| 灯油            | 〃                   | 5,449           | …  | 5,472        | 130                 | -                                      |
| 軽油            | 〃                   | 2,035           | …  | 2,006        | -                   | -                                      |
| 重油計           | 〃                   | 27,911          | …  | 27,310       | 10,714              | 4,431                                  |
| A重油           | 〃                   | 15,726          | …  | 13,435       | 3,813               | 142                                    |
| B・C重油         | 〃                   | 12,185          | …  | 13,875       | 6,901               | 4,289                                  |
| 炭化水素油         | 〃                   | 6,907           | …  | 6,083        | -                   | -                                      |
| 液化石油ガス        | t                   | 20,066          | …  | 21,527       | 2,705               | -                                      |
| 石油系炭化水素ガス     | 1000m <sup>3</sup>  | 3               | …  | 3            | -                   | -                                      |
| オイルコークス       | t                   | 35,729          | …  | 62,172       | …                   | -                                      |
| アスファルト        | 〃                   | -               | …  | -            | -                   | -                                      |
| 再生油（石油由来）     | kl                  | 145             | -  | 99           | -                   | -                                      |
| 非石油系燃料（原油換算）  | kl                  | 4,500,791       | 3,262,246  | 6,978,406    | 589,790             | 7,459                                  |
| コークス製造用炭（原料炭） | t                   | 3,406,480       | …  | 3,415,473    | -                   | -                                      |
| 石炭            | 〃                   | 1,498,655       | …  | 1,341,403    | 345,573             | -                                      |
| 石炭コークス        | 〃                   | 609,660         | 2,104,521  | 2,575,860    | …                   | -                                      |
| ターナル          | 〃                   | 5,398           | 66,548   | 9,062        | -                   | -                                      |
| コークス炉ガス       | 1000m <sup>3</sup>  | 132,768         | 924,106  | 808,849      | 118,964             | -                                      |
| 高炉ガス          | 〃                   | 150,051         | 10,555,179   | 6,974,894    | 2,588,597           | 491                                    |
| 転炉ガス          | 〃                   | 4,797           | 590,514  | 411,513      | 149,653             | 30                                     |
| 電気炉ガス         | 〃                   | -               | 4,985  | 3,489        | 3,046               | -                                      |
| 天然ガス          | 〃                   | 1,942           | -  | 1,948        | 209                 | -                                      |
| 液化天然ガス        | t                   | 33,750          | …  | 30,573       | 2,634               | 2,236                                  |
| 都市ガス（A）       | 1000m <sup>3</sup>  | 157,399         | …  | 157,399      | 25,468              | 3,687                                  |
| 都市ガス（B）       | 〃                   | 171,641         | …  | 171,635      | 27,874              | 4,006                                  |
| 酸素            | 1000Nm <sup>3</sup> | 760,765         | 185,594  | 903,974      | …                   | -                                      |
| 廃材            | 絶乾(Dry)t            | 1,451           | -  | 1,451        | 1,451               | -                                      |
| 廃タイヤ          | t                   | 1,223           | -  | 1,013        | -                   | -                                      |
| 廃プラスチック       | 〃                   | 20,316          | 2,471  | 16,677       | -                   | -                                      |
| RPF           | 〃                   | -               | -  | -            | -                   | -                                      |

注. 合計(原油換算)の消費量は、原料用消費などによって生産又は副次的に発生する燃料が含まれているため重複している。  
なお、合計欄の下端「(ネット)」表示の数値は、調査対象事業所内で他の燃料から転換して消費した分を排除したネット消費量である。

(令和1年8月)

| Consumption   |                     |                                |                    | 払 出<br>Shipments | 月末在庫<br>Inventory | Fuels   |
|---|---------------------|--------------------------------|--------------------|------------------|-------------------|---|
| ボイラ用及びコージェネレーション用以外に使用したもの<br>for purposes other than boiler and cogeneration |                     |                                |                    |                  |                   |   |
| 計<br>Total  | 原料用<br>as Materials | 直接加熱用<br>for Direct<br>heating | その他用<br>for Others |                  |                   |   |
| 6,480,196   | 2,386,703           | 3,993,388                      | 100,105            | 936,436          | 5,779,332         | <b>Total (Crude petroleum equivalent)</b>                   |
| -   | -                   | -                              | -                  | -                | -                 | <b>(Net)</b>  |
| 99,038  | 20,853              | 64,151                         | 14,034             | 11,395           | 235,408           | <b>Oil based fuels<br/>(Crude petroleum equivalent)</b>     |
| 111   | ...                 | 5                              | 106                | 5                | 14                | Gasoline  |
| 5,342   | ...                 | 4,496                          | 846                | 72               | 3,499             | Kerosene  |
| 2,006   | ...                 | 17                             | 1,989              | 11               | 141               | Gas oils  |
| 12,165  | -                   | 11,523                         | 642                | 1,066            | 54,370            | Heavy Fuel oil total  |
| 9,480   | ...                 | 8,957                          | 523                | 593              | 25,086            | Heavy Fuel oil A  |
| 2,685   | -                   | 2,566                          | 119                | 473              | 29,284            | Heavy Fuel oil B・C  |
| 6,083   | 6,083               | -                              | -                  | -                | 3,396             | Hydrocarbon oil   |
| 18,822  | -                   | 10,791                         | 8,031              | 346              | 37,298            | Liquefied petroleum gas                                     |
| 3   | -                   | 3                              | -                  | ...              | ...               | Hydrocarbon gas   |
| 62,172  | 18,466              | 43,706                         | -                  | 12,614           | 157,532           | Petroleum coke  |
| -   | -                   | -                              | -                  | -                | -                 | Asphalt   |
| 99  | -                   | 99                             | -                  | -                | 522               | Reproduction oil (Oil origin)                               |
| 6,381,158   | 2,365,849           | 3,929,237                      | 86,071             | 925,042          | 5,543,924         | <b>Non-oil based fuels<br/>(Crude petroleum equivalent)</b> |
| 3,415,473   | 3,052,916           | 362,557                        | -                  | 202,023          | 3,851,595         | Coal for making coke (material coal)                        |
| 995,830   | 49,850              | 945,980                        | -                  | 171,313          | 1,985,577         | Coal  |
| 2,575,860   | 25,279              | 2,542,258                      | 8,323              | 154,678          | 1,618,217         | Coal coke   |
| 9,062   | 9,062               | -                              | -                  | 60,265           | 17,986            | Tar   |
| 689,885   | 475                 | 653,983                        | 35,427             | 231,406          | ...               | Coke oven gas   |
| 4,385,806   | -                   | 4,068,386                      | 317,420            | 3,582,655        | ...               | Blast furnace gas   |
| 261,830   | -                   | 237,724                        | 24,106             | 143,535          | ...               | Converter furnace gas                                       |
| 443   | -                   | 443                            | -                  | 1,496            | ...               | Electric furnaces gas                                       |
| 1,739   | -                   | 1,683                          | 56                 | -                | 12                | Natural gas   |
| 25,703  | -                   | 23,505                         | 2,198              | 1,880            | 47,761            | Liquefied natural gas                                       |
| 128,244   | ...                 | 122,082                        | 6,162              | ...              | ...               | Town gas(A)   |
| 139,755   | ...                 | 133,014                        | 6,741              | ...              | ...               | Town gas(B)   |
| 903,974   | 7                   | 821,418                        | 82,549             | 29,451           | 1,360             | Oxygen  |
| -   | -                   | -                              | -                  | -                | -                 | Waste material  |
| 1,013   | 1,013               | -                              | -                  | -                | 734               | Used tires  |
| 16,677  | 10,664              | 3,748                          | 2,265              | 3,089            | 18,783            | Waste plastic   |
| -   | -                   | -                              | -                  | -                | -                 | Refuse Paper & Plastic Fuel                                 |

Note Because production or fuel occurring subsidiarity is included by consumption for raw materials, the total (crude petroleum equivalent) consumption repeats. In addition, it is the net consumption that removed the thing that the numerical value of the lower berth (net) indication of the total column switches it from other fuel in subjects of survey establishment and used.

(August, 2019)



⑧ 非鉄金属地金工業 Non-ferrous metals products industry

| 種 別                     | 単 位<br>Unit | 受 入<br>Receipts | 消 費          |                     |                                 |
|-------------------------|-------------|-----------------|--------------|---------------------|---------------------------------|
|                         |             |                 | 合 計<br>Total | ボイラ用<br>for Boilers | コージェネレーション用<br>for Cogeneration |
| 合 計 ( 原 油 換 算 )         | kl          | 42,144          | 43,072       | 2,399               | 62                              |
| 石 油 系 燃 料 ( 原 油 換 算 )   | "           | 18,556          | 18,362       | 814                 | 62                              |
| ガ ソ リ ン                 | "           | 6               | 6            | ...                 | ...                             |
| 灯 油                     | "           | 1,388           | 1,399        | 162                 | -                               |
| 軽 油                     | "           | 319             | 334          | -                   | -                               |
| 重 油                     | "           | 9,469           | 9,449        | 641                 | 57                              |
| A 重 油                   | "           | 5,767           | 5,530        | 468                 | 3                               |
| B・C 重 油                 | "           | 3,702           | 3,919        | 173                 | 54                              |
| 炭 化 水 素 油               | "           | 3,136           | 3,109        | -                   | -                               |
| 液 化 石 油 ガ ス             | t           | 523             | 521          | -                   | -                               |
| オ イ ル コ ー ク ス           | "           | 586             | 592          | -                   | -                               |
| ア ス フ ェ ル ト             | "           | -               | -            | -                   | -                               |
| 再 生 油 ( 石 油 由 来 )       | kl          | 2,459           | 2,279        | -                   | -                               |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl          | 23,588          | 24,710       | 1,586               | -                               |
| 石 炭                     | t           | 11,173          | 4,332        | -                   | -                               |
| 石 炭                     | "           | 11,914          | 14,887       | -                   | -                               |
| コ ー ク ガ ス               | 1000m³      | -               | -            | -                   | -                               |
| 高 圧 ガ ス                 | "           | -               | 38,477       | 15,387              | -                               |
| 電 気 ガ ス                 | "           | -               | -            | -                   | -                               |
| 天 然 ガ ス                 | "           | 379             | 379          | -                   | -                               |
| 液 化 天 然 ガ ス             | t           | 1,701           | 1,713        | 126                 | -                               |
| 都 市 ガ ス ( A )           | 1000m³      | 3,854           | 3,854        | 45                  | -                               |
| 都 市 ガ ス ( B )           | "           | 4,041           | 4,040        | 49                  | -                               |
| 廃 プ ラ ス チ ック            | t           | -               | -            | -                   | -                               |
| 廃 プ ラ ス チ ック            | "           | -               | -            | -                   | -                               |
| R P F                   | "           | -               | -            | -                   | -                               |

⑨ 機械工業 Machinery products industry

| 種 別                     | 単 位<br>Unit | 受 入<br>Receipts | 消 費          |                     |                                 |
|-------------------------|-------------|-----------------|--------------|---------------------|---------------------------------|
|                         |             |                 | 合 計<br>Total | ボイラ用<br>for Boilers | コージェネレーション用<br>for Cogeneration |
| 合 計 ( 原 油 換 算 )         | kl          | 162,810         | 161,977      | 19,162              | 70,418                          |
| 石 油 系 燃 料 ( 原 油 換 算 )   | "           | 21,507          | 20,713       | 4,112               | 767                             |
| ガ ソ リ ン                 | "           | 3,928           | 3,956        | ...                 | ...                             |
| 灯 油                     | "           | 2,784           | 2,769        | 499                 | -                               |
| 軽 油                     | "           | 2,092           | 2,088        | -                   | 36                              |
| 重 油                     | "           | 5,674           | 4,897        | 2,261               | 724                             |
| A 重 油                   | "           | 5,674           | 4,897        | 2,261               | 724                             |
| B・C 重 油                 | "           | -               | -            | -                   | -                               |
| 炭 化 水 素 油               | "           | 1               | 1            | -                   | -                               |
| 液 化 石 油 ガ ス             | t           | 5,777           | 5,765        | 1,032               | -                               |
| 石 油 系 炭 化 水 素 ガ ス       | 1000m³      | -               | -            | -                   | -                               |
| オ イ ル コ ー ク ス           | t           | -               | -            | -                   | -                               |
| ア ス フ ェ ル ト             | "           | -               | -            | -                   | -                               |
| 再 生 油 ( 石 油 由 来 )       | kl          | -               | -            | -                   | -                               |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl          | 141,303         | 141,264      | 15,050              | 69,652                          |
| 石 炭                     | t           | -               | -            | -                   | -                               |
| 石 炭                     | "           | 592             | 617          | -                   | -                               |
| コ ー ク ガ ス               | 1000m³      | -               | -            | -                   | -                               |
| 高 圧 ガ ス                 | "           | -               | -            | -                   | -                               |
| 電 気 ガ ス                 | "           | -               | -            | -                   | -                               |
| 天 然 ガ ス                 | "           | 1,775           | 1,774        | 349                 | 984                             |
| 液 化 天 然 ガ ス             | t           | 8,284           | 8,244        | 825                 | 3,941                           |
| 都 市 ガ ス ( A )           | 1000m³      | 109,412         | 109,412      | 11,684              | 54,127                          |
| 都 市 ガ ス ( B )           | "           | 119,744         | 119,744      | 12,705              | 59,307                          |
| 廃 プ ラ ス チ ック            | t           | -               | -            | -                   | -                               |
| 廃 プ ラ ス チ ック            | "           | -               | -            | -                   | -                               |
| R P F                   | "           | -               | -            | -                   | -                               |

(令和1年8月)

| Consumption  |                             |                    | 月末在庫<br>Inventory | Fuel  |
|--|-----------------------------|--------------------|-------------------|---|
| ボイラ用及びコージェネレーション用以外に使用したもの<br>for purposes other than boilers and cogeneration |                             |                    |                   |   |
| 計<br>Total   | 直接加熱用<br>for Direct heating | その他用<br>for Others |                   |   |
| 40,612   | 37,530                      | 3,082              | 29,321            | <b>Total<br/>(Crude petroleum equivalent)</b>               |
| 17,487   | 15,814                      | 1,673              | 8,385             | <b>Oil based fuels<br/>(Crude petroleum equivalent)</b>     |
| 6  | ...                         | 6                  | 2                 | Gasoline  |
| 1,237  | 1,021                       | 216                | 477               | Kerosene  |
| 334  | 5                           | 329                | 15                | Gas oils  |
| 8,751  | 8,384                       | 367                | 4,731             | Heavy Fuel oil total  |
| 5,059  | 4,701                       | 358                | 2,651             | Heavy Fuel oil A  |
| 3,692  | 3,683                       | 9                  | 2,080             | Heavy Fuel oil B・C  |
| 3,109  | 2,589                       | 520                | 1,167             | Hydrocarbon oil   |
| 521  | 442                         | 79                 | 62                | Liquefied petroleum gas                                     |
| 592  | 592                         | -                  | 41                | Petroleum coke  |
| -  | -                           | -                  | -                 | Asphalt   |
| 2,279  | 2,179                       | 100                | 1,549             | Reproduction oil (Oil origin)                               |
| 23,124   | 21,716                      | 1,409              | 20,937            | <b>Non-oil based fuels<br/>(Crude petroleum equivalent)</b> |
| 4,332  | 4,332                       | -                  | 20,240            | Coal  |
| 14,887   | 13,441                      | 1,446              | 9,761             | Coal coke   |
| -  | -                           | -                  | ...               | Coke oven gas   |
| 23,090   | 23,090                      | -                  | ...               | Blast furnace gas   |
| -  | -                           | -                  | ...               | Electric furnaces gas                                       |
| 379  | 379                         | -                  | ...               | Natural gas   |
| 1,587  | 1,367                       | 220                | 57                | Liquefied natural gas                                       |
| 3,809  | 3,809                       | -                  | ...               | Town gas(A)   |
| 3,991  | 3,991                       | -                  | ...               | Town gas(B)   |
| -  | -                           | -                  | -                 | Used tires  |
| -  | -                           | -                  | -                 | Waste plastic   |
| -  | -                           | -                  | -                 | Refuse Paper & Plastic Fuel                                 |

| Consumption  |                             |                    | 月末在庫<br>Inventory | Fuel  |
|--|-----------------------------|--------------------|-------------------|---|
| ボイラ用及びコージェネレーション用以外に使用したもの<br>for purposes other than boilers and cogeneration |                             |                    |                   |   |
| 計<br>Total   | 直接加熱用<br>for Direct heating | その他用<br>for Others |                   |   |
| 72,397   | 37,950                      | 34,447             | 20,903            | <b>Total<br/>(Crude petroleum equivalent)</b>               |
| 15,834   | 4,910                       | 10,924             | 20,308            | <b>Oil based fuels<br/>(Crude petroleum equivalent)</b>     |
| 3,956  | ...                         | 3,956              | 1,709             | Gasoline  |
| 2,270  | 1,342                       | 928                | 4,967             | Kerosene  |
| 2,052  | 5                           | 2,047              | 1,429             | Gas oils  |
| 1,912  | 495                         | 1,417              | 10,875            | Heavy Fuel oil total  |
| 1,912  | 495                         | 1,417              | 10,729            | Heavy Fuel oil A  |
| -  | -                           | -                  | 146               | Heavy Fuel oil B・C  |
| 1  | -                           | 1                  | -                 | Hydrocarbon oil   |
| 4,733  | 2,386                       | 2,347              | 1,280             | Liquefied petroleum gas                                     |
| -  | -                           | -                  | ...               | Hydrocarbon gas   |
| -  | -                           | -                  | -                 | Petroleum coke  |
| -  | -                           | -                  | -                 | Asphalt   |
| -  | -                           | -                  | -                 | Reproduction oil (Oil origin)                               |
| 56,563   | 33,040                      | 23,522             | 594               | <b>Non-oil based fuels<br/>(Crude petroleum equivalent)</b> |
| -  | -                           | -                  | -                 | Coal  |
| 617  | 617                         | -                  | 112               | Coal coke   |
| -  | -                           | -                  | ...               | Coke oven gas   |
| -  | -                           | -                  | ...               | Blast furnace gas   |
| -  | -                           | -                  | ...               | Converter furnace gas                                       |
| 441  | 393                         | 48                 | ...               | Natural gas   |
| 3,478  | 2,801                       | 677                | 361               | Liquefied natural gas                                       |
| 43,601   | 24,304                      | 19,297             | ...               | Town gas(A)   |
| 47,731   | 26,533                      | 21,199             | ...               | Town gas(B)   |
| -  | -                           | -                  | -                 | Used tires  |
| -  | -                           | -                  | -                 | Waste plastic   |
| -  | -                           | -                  | -                 | Refuse Paper & Plastic Fuel                                 |

(August, 2019)

## (3) 電力受払 Electricity input and output

| 種 別            | 購 入 電 力 及 び 自 家 発 電 |                      |            |                |                            |
|----------------|---------------------|----------------------|------------|----------------|----------------------------|
|                | 計<br>Total          | 購入電力(買電)<br>Purchase | 自 家 発 電    |                |                            |
|                |                     |                      | 計<br>Total | 火 力<br>Thermal | コージェネレーション<br>Cogeneration |
| <b>合 計(注1)</b> | 18,606,503          | 9,029,799            | 9,576,704  | 7,123,893      | 1,522,038                  |
| 事業所重複分補正量      | 1,212,013           | 219,349              | 992,664    | 932,180        | 27,156                     |
| パルプ・紙・板紙工業     | 2,448,090           | 398,485              | 2,049,605  | 1,885,119      | 132,709                    |
| 化学工業           | 3,832,163           | 1,590,684            | 2,241,479  | 1,747,080      | 307,556                    |
| 化学繊維工業         | 555,924             | 182,621              | 373,303    | 274,705        | 97,103                     |
| 石油製品工業         | 1,861,588           | 245,423              | 1,616,165  | 917,981        | 675,844                    |
| 窯業・土石製品工業      | 1,685,894           | 342,100              | 1,343,794  | 1,229,351      | 15,934                     |
| ガラス製品工業        | 134,010             | 121,884              | 12,126     | -              | 8,731                      |
| 鉄鋼業(注2)        | 6,357,748           | 3,829,614            | 2,528,134  | 1,993,317      | 51,515                     |
| 非鉄金属地金工業       | 494,175             | 357,303              | 136,872    | 3,094          | 255                        |
| 機械工業           | 2,448,924           | 2,181,034            | 267,890    | 5,426          | 259,547                    |

注1. 業種を積み上げた「合計」は、本調査対象業種を兼業している事業所があるため重複排除を行っており、

この重複分は「事業所重複分補正量」として計上してある。

2. 鉄鋼業の下段の「(炉頂圧)」は炉頂圧発電で「その他発電」の内数である。

## (4) 蒸気受払 Steam input and output

| 種 別           | 受 入 及 び 蒸 気 発 生 Receipts and Product of Steam |                 |                    |                       |  |
|---------------|---|-----------------|--------------------|-----------------------|--|
|               | 計<br>Total                                    | 受 入<br>Receipts | 蒸 気 発 生 Generation |                       |  |
|               |   |                 | 計<br>Total         | 一次蒸気<br>Primary steam | 一次蒸気<br>Other than<br>コージェネレーション<br>Cogeneration |
| <b>合 計(注)</b> | 46,670,293                                    | 3,279,068       | 43,391,225         | 35,081,480            | 2,381,249  |
| 事業所重複分補正量     | 3,602,039                                     | 35,329          | 3,566,710          | 3,501,906             | 41,484   |
| パルプ・紙・板紙工業    | 12,927,200                                    | 41,105          | 12,886,095         | 12,575,972            | 256,663  |
| 化学工業          | 14,800,252                                    | 2,444,996       | 12,355,256         | 9,234,120             | 654,578  |
| 化学繊維工業        | 1,883,413                                     | 129,139         | 1,754,274          | 1,573,902             | 171,688  |
| 石油製品工業        | 8,016,406                                     | 298,587         | 7,717,819          | 5,696,677             | 1,279,055  |
| 窯業・土石製品工業     | 4,774,077                                     | 6,932           | 4,767,145          | 4,501,153             | 27,560   |
| ガラス製品工業       | 12,162  | -               | 12,162             | 5,139                 | 7,023  |
| 鉄鋼業           | 7,538,029                                     | 360,743         | 7,177,286          | 4,966,098             | 25,976   |
| 非鉄金属地金工業      | 320,793                                       | 32,895          | 287,898            | 30,325                | 190  |

注. 業種を積み上げた「合計」は、本調査対象業種を兼業している事業所があるため重複排除を行っており、

この重複分は「事業所重複分補正量」として計上してある。

(令和1年8月)

単位 Unit: 1000kWh

| Purchase and Generation by own power station |               | 消 費          | 販売電力(売電)  | Industry                                  |
|--|---------------|--------------|-----------|---|
| Generation by own power station              |               |              |           |   |
| 水 力  | そ の 他         | Consumptions | Shipment  |   |
| Hydraulic                                    | Other         |              |           |   |
| 218,409                                      | 712,364       | 15,772,817   | 2,833,686 | <b>Total</b>                              |
| 29,955                                       | 3,373         | 1,075,250    | 136,763   | <b>Duplication adjustment</b>             |
| 24,733                                       | 7,044         | 2,198,916    | 249,174   | Pulp,Paper,Paperboard industry            |
| 88,000                                       | 98,843        | 3,267,567    | 564,596   | Chemical products industry                |
| -  | 1,495         | 493,140      | 62,784    | Chemical fibers products industry         |
| ...  | 22,340        | 1,053,464    | 808,124   | Petroleum products industry               |
| 29,955                                       | 68,554        | 1,434,528    | 251,366   | Ceramics,clay and stone products industry |
| 3,386  | 9             | 133,970      | 40        | Glass products industry                   |
| 87   | 483,215       | 5,346,701    | 1,011,047 | Iron and steel products industry          |
|  | (炉頂圧) 270,148 |              |           |   |
| 102,203                                      | 31,320        | 475,692      | 18,483    | Non-ferrous metals products industry      |
| ...  | 2,917         | 2,444,089    | 4,835     | Machinery products industry               |

Note 1. Because there is an establishment running a type of industry simultaneously, "the total" that piled up a type of industry removes overlap, and this overlap share is included for "revision quantity for an overlap establishment".

2. The furnace top pressure to be written on the lower berth of the steel industry is a number among "other generation" by furnace top pressure generation.

単位 Unit: t

| 以外<br>primary steam | 消 費 Consumptions |                |                              |           | 払 出       | Industry                                  |
|---------------------|------------------|----------------|------------------------------|-----------|-----------|---|
|                     | 計                | 生産工工程用         | 自家発電用                        | その他用      |           |   |
| そ の 他<br>Other      | Total            | for Production | for Private Power generation | Other     | Shipment  |   |
| 5,928,496           | 44,586,423       | 20,316,417     | 21,450,899                   | 2,819,107 | 2,083,870 | <b>Total</b>                              |
| 23,320              | 3,524,353        | 968,328        | 2,555,513                    | 512       | 77,686    | <b>Duplication adjustment</b>             |
| 53,460              | 12,861,533       | 5,416,713      | 7,204,064                    | 240,756   | 65,667    | Pulp,Paper,Paperboard industry            |
| 2,466,558           | 13,477,006       | 8,137,899      | 4,751,608                    | 587,499   | 1,323,246 | Chemical products industry                |
| 8,684               | 1,821,382        | 894,891        | 879,722                      | 46,769    | 62,031    | Chemical fibers products industry         |
| 742,087             | 7,655,980        | 3,897,696      | 3,273,834                    | 484,450   | 360,426   | Petroleum products industry               |
| 238,432             | 4,690,900        | 801,893        | 3,843,820                    | 45,187    | 83,177    | Ceramics,clay and stone products industry |
| -                   | 12,162           | 10,884         | -                            | 1,278     | -         | Glass products industry                   |
| 2,185,212           | 7,288,708        | 2,004,763      | 4,023,774                    | 1,260,171 | 249,321   | Iron and steel products industry          |
| 257,383             | 303,105          | 120,006        | 29,590                       | 153,509   | 17,688    | Non-ferrous metals products industry      |

Note Because there is an establishment running a type of industry simultaneously, "the total" that piled up a type of industry removes overlap, and this overlap share is included for "revision quantity for an overlap establishment".

(August, 2019)

### 3. 指定生産品目別統計

### Statistic by Specified Products

#### (1) 指定生産品目別エネルギー消費

#### Energy Consumption by Specified Products

##### 1) 直接投入エネルギー表

##### Table of direct input energy

| 種 別                     | 単 位<br>Unit        | Pulp, paper, paperboard industry |                         |             |            |                  |   |                       | 化学繊維<br>工 業 |
|-------------------------|--------------------|----------------------------------|-------------------------|-------------|------------|------------------|---|-----------------------|-------------|
|                         |                    | パルプ・紙・<br>板紙工業                   | Pulp, paper, paperboard |             |            |                  | その他の紙<br>製 品<br>Other paper<br>products | その他の<br>製 品<br>Others |             |
|                         |                    |                                  | パルプ・紙・<br>板紙            | パルプ<br>Pulp | 紙<br>Paper | 板紙<br>Paperboard |   |                       |             |
| 合 計 ( 原 油 換 算 ) ( 注 1 ) | kl                 | 614,766                          | 604,784                 | 207,374     | 276,345    | 121,065          | 2,497                                   | 7,486                 | 118,209     |
| 石 油 系 燃 料 ( 原 油 換 算 )   | 〃                  | 29,412                           | 28,508                  | 25,204      | 3,144      | 160              | 710                                     | 194                   | 3,832       |
| ガ ソ リ ン                 | 〃                  | 6                                | 4                       | 2           | 2          | -                | -                                       | 2                     | 6           |
| ナ フ サ                   | 〃                  | -                                | -                       | -           | -          | -                | -                                       | -                     | -           |
| 灯 油                     | 〃                  | 418                              | 343                     | 16          | 320        | 7                | 59                                      | 16                    | 151         |
| 軽 油                     | 〃                  | 295                              | 264                     | 151         | 70         | 43               | 9                                       | 22                    | 6           |
| 重 油 計                   | 〃                  | 21,125                           | 20,385                  | 19,808      | 493        | 84               | 592                                     | 148                   | 3,165       |
| A 重 油                   | 〃                  | 389                              | 240                     | 23          | 137        | 80               | 1                                       | 148                   | 454         |
| B・C 重 油                 | 〃                  | 20,736                           | 20,145                  | 19,785      | 356        | 4                | 591                                     | -                     | 2,711       |
| 炭 化 水 素 油               | 〃                  | 1,048                            | 1,048                   | 1,048       | -          | -                | -                                       | -                     | -           |
| 液 化 石 油 ガ ス             | t                  | 1,420                            | 1,412                   | 9           | 1,390      | 13               | 3                                       | 5                     | 216         |
| 石 油 系 炭 化 水 素 ガ ス       | 1000m <sup>3</sup> | -                                | -                       | -           | -          | -                | -                                       | -                     | -           |
| オ イ ル コ ー ク ス           | t                  | 2,931                            | 2,931                   | 2,597       | 334        | -                | -                                       | -                     | -           |
| ア ス フ ェ ル ト             | 〃                  | -                                | -                       | -           | -          | -                | -                                       | -                     | -           |
| 再 生 油 ( 石 油 由 来 )       | kl                 | 593                              | 593                     | 426         | 158        | 9                | -                                       | -                     | -           |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl                 | 6,393                            | 6,192                   | 641         | 4,835      | 716              | 96                                      | 105                   | 6,648       |
| 石 炭                     | t                  | -                                | -                       | -           | -          | -                | -                                       | -                     | -           |
| 石 炭 コ ー ク ス             | 〃                  | 308                              | 308                     | 308         | -          | -                | -                                       | -                     | -           |
| 天 然 ガ ス                 | 1000m <sup>3</sup> | 418                              | 418                     | -           | 418        | -                | -                                       | -                     | -           |
| 液 化 天 然 ガ ス             | t                  | 429                              | 429                     | -           | 218        | 211              | -                                       | -                     | 78          |
| 都 市 ガ ス ( A )           | 1000m <sup>3</sup> | 4,033                            | 3,855                   | 1           | 3,499      | 355              | 83                                      | 95                    | 5,658       |
| 都 市 ガ ス ( B ) ( 注 2 )   | 〃                  | 4,404                            | 4,216                   | 1           | 3,821      | 394              | 90                                      | 99                    | 6,156       |
| 回 収 黒 液                 | 絶乾(Dry)t           | -                                | -                       | -           | -          | -                | -                                       | -                     | -           |
| 廃 材                     | 〃                  | 963                              | 963                     | 963         | -          | -                | -                                       | -                     | -           |
| 廃 タ イ ヤ                 | t                  | -                                | -                       | -           | -          | -                | -                                       | -                     | -           |
| 廃 プ ラ ス チ ッ ク           | 〃                  | -                                | -                       | -           | -          | -                | -                                       | -                     | -           |
| R P F                   | 〃                  | -                                | -                       | -           | -          | -                | -                                       | -                     | -           |
| 電 力                     | 1000kWh            | 2,198,916                        | 2,126,012               | 595,301     | 1,083,965  | 446,746          | 10,731                                  | 62,173                | 493,140     |
| 蒸 気                     | t                  | 5,416,713                        | 5,386,383               | 1,825,086   | 2,423,722  | 1,137,575        | 10,040                                  | 20,290                | 894,891     |

##### 2) 一次投入燃料換算表

##### Conversion table for primary input fuel

|                         |                    |           |           |         |         |         |       |        |         |
|-------------------------|--------------------|-----------|-----------|---------|---------|---------|-------|--------|---------|
| 合 計 ( 原 油 換 算 ) ( 注 1 ) | kl                 | 929,988   | 910,978   | 313,211 | 429,785 | 167,982 | 2,908 | 16,101 | 163,111 |
| 石 油 系 燃 料 ( 原 油 換 算 )   | 〃                  | 75,963    | 74,064    | 38,695  | 27,207  | 8,162   | 783   | 1,115  | 30,897  |
| ガ ソ リ ン                 | 〃                  | 6         | 4         | 2       | 2       | -       | -     | 2      | 6       |
| ナ フ サ                   | 〃                  | -         | -         | -       | -       | -       | -     | -      | -       |
| 灯 油                     | 〃                  | 665       | 584       | 32      | 353     | 199     | 60    | 20     | 235     |
| 軽 油                     | 〃                  | 311       | 267       | 151     | 70      | 46      | 9     | 35     | 12      |
| 重 油 計                   | 〃                  | 57,441    | 55,913    | 29,127  | 19,433  | 7,353   | 627   | 901    | 11,469  |
| A 重 油                   | 〃                  | 4,589     | 4,177     | 331     | 2,717   | 1,129   | 36    | 377    | 1,623   |
| B・C 重 油                 | 〃                  | 52,851    | 51,736    | 28,796  | 16,716  | 6,224   | 591   | 524    | 9,845   |
| 炭 化 水 素 油               | 〃                  | 2,238     | 2,142     | 1,501   | 641     | -       | -     | 96     | 41      |
| 液 化 石 油 ガ ス             | t                  | 1,868     | 1,832     | 9       | 1,810   | 13      | 31    | 5      | 241     |
| 石 油 系 炭 化 水 素 ガ ス       | 1000m <sup>3</sup> | -         | -         | -       | -       | -       | -     | -      | -       |
| オ イ ル コ ー ク ス           | t                  | 9,887     | 9,887     | 6,368   | 3,519   | -       | -     | -      | 23,294  |
| ア ス フ ェ ル ト             | 〃                  | -         | -         | -       | -       | -       | -     | -      | -       |
| 再 生 油 ( 石 油 由 来 )       | kl                 | 626       | 625       | 430     | 164     | 31      | -     | 1      | -       |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl                 | 812,079   | 796,982   | 269,219 | 379,361 | 148,402 | 1,200 | 13,898 | 106,299 |
| 石 炭                     | t                  | 406,981   | 406,285   | 134,003 | 191,970 | 80,312  | 254   | 442    | 109,418 |
| 石 炭 コ ー ク ス             | 〃                  | 308       | 308       | 308     | -       | -       | -     | -      | -       |
| 天 然 ガ ス                 | 1000m <sup>3</sup> | 6,540     | 6,540     | 1,782   | 4,605   | 153     | -     | -      | -       |
| 液 化 天 然 ガ ス             | t                  | 6,512     | 6,272     | -       | 1,127   | 5,145   | 240   | -      | 845     |
| 都 市 ガ ス ( A )           | 1000m <sup>3</sup> | 52,868    | 47,992    | 732     | 17,431  | 29,829  | 613   | 4,262  | 27,421  |
| 都 市 ガ ス ( B ) ( 注 2 )   | 〃                  | 57,180    | 51,892    | 802     | 18,712  | 32,378  | 641   | 4,648  | 29,686  |
| 回 収 黒 液                 | 絶乾(Dry)t           | 1,020,590 | 1,004,868 | 432,014 | 536,807 | 36,047  | -     | 15,722 | -       |
| 廃 材                     | 〃                  | 167,647   | 162,633   | 40,888  | 55,179  | 66,566  | 29    | 4,985  | -       |
| 廃 タ イ ヤ                 | t                  | 16,288    | 15,785    | 5,860   | 6,089   | 3,836   | -     | 504    | -       |
| 廃 プ ラ ス チ ッ ク           | 〃                  | 3,865     | 3,865     | 1,387   | 2,453   | 25      | -     | -      | -       |
| R P F                   | 〃                  | 37,898    | 36,875    | 8,570   | 15,612  | 12,693  | 0     | 1,022  | 1,212   |
| 電 力                     | 1000kWh            | 420,375   | 400,838   | 56,949  | 224,184 | 119,705 | 7,844 | 11,693 | 182,621 |
| 蒸 気                     | t                  | 41,105    | 38,281    | -       | 34,195  | 4,086   | 2,825 | -      | 129,139 |

注1. 原油換算値は38.2MJ/lである。

注2. 都市ガス(A)は単純集計値、都市ガス(B)は41.1MJ/m<sup>3</sup>換算値である。

(令和1年8月)

| Chemical fibers products industry |                            |                  | Petroleum products industry |                   |                  | Glass products industry |                |                  | Kind of energy  |
|-----------------------------------|----------------------------|------------------|-----------------------------|-------------------|------------------|-------------------------|----------------|------------------|---|
| 化学繊維<br>Chemical fibres           | その他の繊維製品<br>Other textiles | その他の製品<br>Others | 石油製品<br>工業                  | 石油製品<br>Petroleum | その他の製品<br>Others | ガラス製品<br>工業             | ガラス製品<br>Glass | その他の製品<br>Others |   |
| <b>39,925</b>                     | <b>712</b>                 | <b>77,573</b>    | <b>1,028,293</b>            | <b>1,017,653</b>  | <b>10,640</b>    | <b>48,298</b>           | <b>47,220</b>  | <b>1,078</b>     | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |
| <b>1,064</b>                      | <b>11</b>                  | <b>2,757</b>     | <b>643,837</b>              | <b>643,768</b>    | <b>69</b>        | <b>5,101</b>            | <b>5,041</b>   | <b>61</b>        | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |
| 1                                 | -                          | 5                | 18                          | 14                | 4                | -                       | -              | -                | Gasoline  |
| -                                 | -                          | -                | 4,089                       | 4,089             | -                | -                       | -              | -                | Naphtha   |
| 57                                | -                          | 94               | 24                          | 22                | 2                | 3                       | 1              | 2                | Kerosene  |
| 2                                 | -                          | 4                | 484                         | 453               | 31               | 3                       | 3              | -                | Gas oils  |
| 922                               | -                          | 2,243            | 16,334                      | 16,334            | -                | 4,233                   | 4,175          | 58               | Heavy Fuel oil total  |
| 17                                | -                          | 437              | 631                         | 631               | -                | 218                     | 160            | 58               | Heavy Fuel oil A  |
| 905                               | -                          | 1,806            | 15,703                      | 15,703            | -                | 4,015                   | 4,015          | -                | Heavy Fuel oil B・C  |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Hydrocarbon oil   |
| 8                                 | 8                          | 200              | 22,581                      | 22,581            | -                | 123                     | 123            | -                | Liquefied petroleum gas   |
| -                                 | -                          | -                | 510,682                     | 510,653           | 29               | -                       | -              | -                | Hydrocarbon gas   |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Petroleum coke  |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Asphalt   |
| -                                 | -                          | -                | -                           | -                 | -                | 353                     | 353            | -                | Reproduction oil (Oil origin)                                     |
| <b>573</b>                        | <b>15</b>                  | <b>6,060</b>     | <b>17,045</b>               | <b>17,045</b>     | <b>-</b>         | <b>29,982</b>           | <b>29,793</b>  | <b>189</b>       | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Coal  |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Coal coke   |
| -                                 | -                          | -                | 4,622                       | 4,622             | -                | -                       | -              | -                | Natural gas   |
| 78                                | -                          | -                | 8,393                       | 8,393             | -                | 5,837                   | 5,837          | -                | Liquefied natural gas   |
| 401                               | 13                         | 5,244            | 7                           | 7                 | -                | 18,894                  | 18,735         | 159              | Town gas(A)   |
| 436                               | 14                         | 5,706            | 8                           | 8                 | -                | 20,477                  | 20,299         | 177              | Town gas(B)   |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Black liquor  |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Waste material  |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Used tires  |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Waste plastic   |
| -                                 | -                          | -                | -                           | -                 | -                | -                       | -              | -                | Refuse Paper & Plastic Fuel                                       |
| <b>141,786</b>                    | <b>4,380</b>               | <b>346,974</b>   | <b>1,053,464</b>            | <b>947,456</b>    | <b>106,008</b>   | <b>133,970</b>          | <b>125,062</b> | <b>8,908</b>     | <b>Electricity</b>  |
| <b>363,101</b>                    | <b>4,035</b>               | <b>527,755</b>   | <b>3,897,696</b>            | <b>3,887,427</b>  | <b>10,269</b>    | <b>10,884</b>           | <b>10,884</b>  | <b>-</b>         | <b>Steam</b>  |

  

|                |              |                |                  |                  |               |                |                |              |   |
|----------------|--------------|----------------|------------------|------------------|---------------|----------------|----------------|--------------|---|
| <b>48,901</b>  | <b>868</b>   | <b>113,342</b> | <b>1,083,625</b> | <b>1,062,182</b> | <b>21,443</b> | <b>49,685</b>  | <b>48,608</b>  | <b>1,078</b> | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |
| <b>10,134</b>  | <b>276</b>   | <b>20,487</b>  | <b>1,012,717</b> | <b>994,168</b>   | <b>18,548</b> | <b>5,109</b>   | <b>5,049</b>   | <b>61</b>    | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |
| 1              | -            | 5              | 18               | 14               | 4             | -              | -              | -            | Gasoline  |
| -              | -            | -              | 4,319            | 4,287            | 32            | -              | -              | -            | Naphtha   |
| 57             | -            | 178            | 1,918            | 1,893            | 25            | 6              | 4              | 2            | Kerosene  |
| 2              | -            | 9              | 484              | 453              | 31            | 3              | 3              | -            | Gas oils  |
| 4,361          | 97           | 7,011          | 91,435           | 89,380           | 2,055         | 4,238          | 4,180          | 58           | Heavy Fuel oil total  |
| 623            | 77           | 923            | 1,280            | 1,240            | 40            | 223            | 165            | 58           | Heavy Fuel oil A  |
| 3,737          | 20           | 6,088          | 90,155           | 88,140           | 2,015         | 4,015          | 4,015          | -            | Heavy Fuel oil B・C  |
| 35             | -            | 6              | 10,068           | 10,068           | -             | -              | -              | -            | Hydrocarbon oil   |
| 8              | 8            | 225            | 30,072           | 29,403           | 669           | 123            | 123            | -            | Liquefied petroleum gas   |
| -              | -            | -              | 668,853          | 663,230          | 5,623         | -              | -              | -            | Hydrocarbon gas   |
| 6,926          | 214          | 16,153         | 28,315           | 26,875           | 1,439         | -              | -              | -            | Petroleum coke  |
| -              | -            | -              | 56,298           | 48,986           | 7,312         | -              | -              | -            | Asphalt   |
| -              | -            | -              | -                | -                | -             | 353            | 353            | -            | Reproduction oil (Oil origin)                                     |
| <b>23,125</b>  | <b>99</b>    | <b>83,075</b>  | <b>27,439</b>    | <b>26,547</b>    | <b>892</b>    | <b>32,927</b>  | <b>32,738</b>  | <b>189</b>   | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |
| 25,213         | -            | 84,205         | 8,823            | 7,634            | 1,189         | -              | -              | -            | Coal  |
| -              | -            | -              | -                | -                | -             | -              | -              | -            | Coal coke   |
| -              | -            | -              | 5,259            | 5,259            | -             | -              | -              | -            | Natural gas   |
| 626            | -            | 219            | 10,878           | 10,878           | -             | 6,120          | 6,120          | -            | Liquefied natural gas   |
| 4,083          | 87           | 23,251         | 277              | 189              | 88            | 21,086         | 20,927         | 159          | Town gas(A)   |
| 4,313          | 93           | 25,279         | 303              | 207              | 96            | 22,874         | 22,696         | 177          | Town gas(B)   |
| -              | -            | -              | -                | -                | -             | -              | -              | -            | Black liquor  |
| -              | -            | -              | -                | -                | -             | -              | -              | -            | Waste material  |
| -              | -            | -              | -                | -                | -             | -              | -              | -            | Used tires  |
| -              | -            | -              | -                | -                | -             | -              | -              | -            | Waste plastic   |
| 1,212          | -            | -              | -                | -                | -             | -              | -              | -            | Refuse Paper & Plastic Fuel                                       |
| <b>91,789</b>  | <b>3,482</b> | <b>87,350</b>  | <b>245,423</b>   | <b>229,921</b>   | <b>15,502</b> | <b>125,230</b> | <b>116,322</b> | <b>8,908</b> | <b>Electricity</b>  |
| <b>102,775</b> | <b>2,446</b> | <b>23,918</b>  | <b>298,587</b>   | <b>290,479</b>   | <b>8,108</b>  | <b>-</b>       | <b>-</b>       | <b>-</b>     | <b>Steam</b>  |

Note 1. Crude oil's conversion rate is 38.2MJ/L.

2. Figures of Town gas (A) are simple tot Conversion rate for town gas (B) is 41.1MJ/m<sup>3</sup>.

(August, 2019)

1) 直接投入エネルギー表

Table of direct input energy

| 種 別                   | 単 位<br>Unit | Chemical industry |                            |                     |   |           |
|-----------------------|-------------|-------------------|----------------------------|---------------------|---|-----------|
|                       |             | 化学工業              | Chemical products industry |                     |   |           |
|                       |             |                   | 化学工業製品                     | 石油化学製品              | Petrochemical products                  |           |
|                       |             |                   |                            | 原料用<br>as Materials | 動力・燃料用等<br>For driving<br>power, fuels. |           |
| 合 計 ( 原 油 換 算 )       | kl          | 6,646,731         | 5,562,470                  | 5,377,794           | 4,361,567                               | 1,016,226 |
| 石 油 系 燃 料 ( 原 油 換 算 ) | "           | 4,933,644         | 4,871,444                  | 4,834,785           | 4,358,956                               | 475,829   |
| 原 油                   | "           | -                 | -                          | -                   | -                                       | -         |
| NGL・コンデンセート           | "           | -                 | -                          | -                   | -                                       | -         |
| ガソリン                  | "           | 17                | 2                          | 2                   | ...                                     | 2         |
| ナフサ                   | "           | 2,578,658         | 2,568,778                  | 2,568,778           | 2,568,778                               | -         |
| 改質生成油                 | "           | 1,598,766         | 1,598,766                  | 1,598,766           | 1,598,766                               | ...       |
| 灯油                    | "           | 80,908            | 77,464                     | 77,464              | 77,277                                  | 187       |
| 軽油                    | "           | 10,506            | 10,154                     | 10,154              | 10,153                                  | 1         |
| 重油                    | "           | 53,939            | 44,899                     | 44,899              | 42,452                                  | 2,447     |
| A重油                   | "           | 1,788             | 662                        | 662                 | -                                       | 662       |
| B・C重油                 | "           | 52,151            | 44,237                     | 44,237              | 42,452                                  | 1,785     |
| 炭化水素油                 | "           | 38,553            | 33,794                     | 33,794              | 24,757                                  | 9,037     |
| 液化石油ガス                | t           | 437,434           | 419,077                    | 419,041             | 397,186                                 | 21,855    |
| 石油系炭化水素ガス             | 1000m³      | 382,582           | 379,460                    | 375,702             | 1,135                                   | 374,567   |
| オイルコークス               | t           | 51,239            | 41,779                     | 36                  | 36                                      | -         |
| アスファルト                | "           | -                 | -                          | -                   | -                                       | -         |
| 再生油(石油由来)             | kl          | 110               | -                          | -                   | -                                       | -         |
| 非石油系燃料(原油換算)          | kl          | 846,623           | 50,924                     | 20,586              | 2,611                                   | 17,975    |
| 石炭                    | t           | 999,770           | -                          | -                   | -                                       | -         |
| 石炭コークス                | "           | 12,391            | 2,689                      | -                   | ...                                     | -         |
| タール                   | "           | 27,669            | -                          | -                   | -                                       | -         |
| コークス炉ガス               | 1000m³      | 110,089           | 1,110                      | 157                 | 38                                      | 119       |
| 高転炉ガス                 | "           | 106,128           | -                          | -                   | -                                       | -         |
| 転炉ガス                  | "           | -                 | -                          | -                   | -                                       | -         |
| 天然ガス                  | "           | 12,372            | 3,613                      | 3,383               | -                                       | 3,383     |
| 液化天然ガス                | t           | 32,312            | 24,025                     | 9,177               | 1,836                                   | 7,341     |
| 都市ガス(A)               | 1000m³      | 9,946             | 5,716                      | 3,243               | ...                                     | 3,243     |
| 都市ガス(B)               | "           | 10,627            | 6,121                      | 3,531               | ...                                     | 3,531     |
| 廃プラスチック               | t           | -                 | -                          | -                   | -                                       | -         |
| 廃プラスチック               | "           | 8,531             | 5,044                      | -                   | -                                       | -         |
| RPF                   | "           | -                 | -                          | -                   | -                                       | -         |
| 電蒸                    | 力気          | 3,267,567         | 2,120,297                  | 1,189,931           | ...                                     | 1,189,931 |
| 蒸気                    | t           | 8,137,899         | 6,407,056                  | 5,956,639           | ...                                     | 5,956,639 |

2) 一次投入燃料換算表

Conversion table for primary input fuel

|                       |        |           |           |           |           |           |
|-----------------------|--------|-----------|-----------|-----------|-----------|-----------|
| 合 計 ( 原 油 換 算 )       | kl     | 6,715,853 | 5,525,967 | 5,287,198 | 4,361,567 | 925,631   |
| 石 油 系 燃 料 ( 原 油 換 算 ) | "      | 5,129,746 | 5,028,560 | 4,978,593 | 4,358,956 | 619,636   |
| 原 油                   | "      | -         | -         | -         | -         | -         |
| NGL・コンデンセート           | "      | 74        | 57        | -         | -         | -         |
| ガソリン                  | "      | 17        | 2         | 2         | -         | 2         |
| ナフサ                   | "      | 2,578,658 | 2,568,778 | 2,568,778 | 2,568,778 | -         |
| 改質生成油                 | "      | 1,598,766 | 1,598,766 | 1,598,766 | 1,598,766 | -         |
| 灯油                    | "      | 82,184    | 78,739    | 78,739    | 77,277    | 1,462     |
| 軽油                    | "      | 10,506    | 10,154    | 10,154    | 10,153    | 1         |
| 重油                    | "      | 84,107    | 67,896    | 65,512    | 42,452    | 23,060    |
| A重油                   | "      | 3,335     | 1,651     | 1,303     | -         | 1,303     |
| B・C重油                 | "      | 80,773    | 66,245    | 64,208    | 42,452    | 21,756    |
| 炭化水素ガス                | "      | 78,461    | 72,046    | 71,886    | 24,757    | 47,129    |
| 液化石油ガス                | t      | 440,507   | 422,119   | 422,068   | 397,186   | 24,882    |
| 石油系炭化水素ガス             | 1000m³ | 454,655   | 436,024   | 429,580   | 1,135     | 428,445   |
| オイルコークス               | t      | 89,740    | 65,502    | 14,194    | 36        | 14,158    |
| アスファルト                | "      | -         | -         | -         | -         | -         |
| 再生油(石油由来)             | kl     | 1,712     | 1,602     | 1,602     | -         | 1,602     |
| 非石油系燃料(原油換算)          | kl     | 1,262,687 | 255,969   | 114,888   | 2,611     | 112,277   |
| 石炭                    | t      | 1,492,976 | 221,067   | 70,370    | -         | 70,370    |
| 石炭コークス                | "      | 12,391    | 2,689     | -         | -         | -         |
| タール                   | "      | 27,669    | -         | -         | -         | -         |
| コークス炉ガス               | 1000m³ | 113,660   | 1,838     | 353       | 38        | 315       |
| 高転炉ガス                 | "      | 106,128   | -         | -         | -         | -         |
| 転炉ガス                  | "      | -         | -         | -         | -         | -         |
| 天然ガス                  | "      | 35,888    | 11,318    | 6,066     | -         | 6,066     |
| 液化天然ガス                | t      | 53,581    | 43,603    | 27,024    | 1,836     | 25,188    |
| 都市ガス(A)               | 1000m³ | 28,383    | 17,522    | 13,490    | -         | 13,490    |
| 都市ガス(B)               | "      | 29,285    | 17,591    | 13,329    | -         | 13,329    |
| 廃プラスチック               | t      | 12,042    | 10,931    | 10,330    | -         | 10,330    |
| 廃プラスチック               | "      | 8,531     | 5,044     | -         | -         | -         |
| RPF                   | "      | -         | -         | -         | -         | -         |
| 電蒸                    | 力気     | 1,659,989 | 1,111,682 | 655,609   | -         | 655,609   |
| 蒸気                    | t      | 2,444,996 | 1,996,866 | 1,920,259 | -         | 1,920,259 |

(令和1年8月)

| (化学工業製品 Chemicals products industry) |        |                                     |                     | ソーダ工業製品<br>Soda products | その他の製品<br>Others   | Kind of energy   |
|--------------------------------------|--------|-------------------------------------|---------------------|--------------------------|--|--|
| Ammonia and ammonia-derived products |        | 動力・燃料用等<br>For driving power, fuels | アンモニア及び<br>アンモニア誘導品 |                          |  |  |
| 原料用<br>as Materials                  |        |                                     |                     |                          |  |  |
| 87,579                               | 53,487 | 34,091                              |                     | 97,098                   | 1,084,261  | <b>Total</b><br>(Crude petroleum equivalent)           |
| 36,658                               | 32,251 | 4,407                               |                     | -                        | 62,201   | <b>Oil based fuels</b><br>(Crude petroleum equivalent) |
| -                                    | -      | -                                   | -                   | -                        | -  | Crude petroleum  |
| -                                    | -      | -                                   | -                   | -                        | -  | Natural gas liquids                                    |
| -                                    | ...    | -                                   | -                   | -                        | 15   | Gasoline   |
| -                                    | -      | -                                   | -                   | -                        | 9,880  | Naphtha  |
| -                                    | ...    | ...                                 | ...                 | ...                      | -  | Oil produced by conversion                             |
| -                                    | -      | -                                   | -                   | -                        | 3,444  | Kerosene   |
| -                                    | -      | -                                   | -                   | -                        | 352  | Gas oils   |
| -                                    | -      | -                                   | -                   | -                        | 9,040  | Heavy Fuel oil total                                   |
| -                                    | -      | -                                   | -                   | -                        | 1,126  | Heavy Fuel oil A                                       |
| -                                    | -      | -                                   | -                   | -                        | 7,914  | Heavy Fuel oil B・C                                     |
| -                                    | -      | -                                   | -                   | -                        | 4,759  | Hydrocarbon oil  |
| 36                                   | -      | 36                                  | -                   | -                        | 18,357   | Liquefied petroleum gas                                |
| 3,758                                | -      | 3,758                               | -                   | -                        | 3,122  | Hydrocarbon gas  |
| 41,743                               | 41,743 | -                                   | -                   | -                        | 9,460  | Petroleum coke   |
| -                                    | -      | -                                   | -                   | -                        | -  | Asphalt  |
| -                                    | -      | -                                   | -                   | -                        | 110  | Reproduction oil (Oil origin)                          |
| 28,003                               | 21,236 | 6,767                               | 2,336               | 795,699                  | <b>Non-oil based fuels</b><br>(Crude petroleum equivalent) |  |
| -                                    | -      | -                                   | -                   | -                        | 999,770  | Coal   |
| -                                    | ...    | -                                   | 2,689               | 9,702                    | 9,702  | Coal coke  |
| -                                    | -      | -                                   | -                   | 27,669                   | 27,669   | Tar  |
| 953                                  | -      | 953                                 | -                   | 108,979                  | 108,979  | Coke oven gas  |
| -                                    | -      | -                                   | -                   | 106,128                  | 106,128  | Blast furnace gas                                      |
| -                                    | -      | -                                   | -                   | -                        | -  | Converter furnace gas                                  |
| 136                                  | 136    | -                                   | 94                  | 8,759                    | 8,759  | Natural gas  |
| 14,732                               | 12,237 | 2,495                               | 116                 | 8,287                    | 8,287  | Liquefied natural gas                                  |
| 2,451                                | ...    | 2,451                               | 22                  | 4,230                    | 4,230  | Town gas(A)  |
| 2,568                                | ...    | 2,568                               | 22                  | 4,505                    | 4,505  | Town gas(B)  |
| -                                    | -      | -                                   | -                   | -                        | -  | Used tires   |
| 5,044                                | 5,044  | -                                   | -                   | 3,487                    | 3,487  | Waste plastic  |
| -                                    | -      | -                                   | -                   | -                        | -  | Refuse Paper & Plastic Fuel                            |
| 78,989                               | ...    | 78,989                              | 851,377             | 1,147,270                | <b>Electricity</b>   |  |
| 225,245                              | ...    | 225,245                             | 225,172             | 1,730,843                | <b>Steam</b>   |  |
| 90,707                               | 53,487 | 37,219                              | 148,063             | 1,189,886                | <b>Total</b><br>(Crude petroleum equivalent)               |  |
| 43,285                               | 32,251 | 11,034                              | 6,682               | 101,187                  | <b>Oil based fuels</b><br>(Crude petroleum equivalent)     |  |
| -                                    | -      | -                                   | -                   | -                        | -  | Crude petroleum  |
| -                                    | -      | -                                   | 57                  | 17                       | 17   | Natural gas liquids                                    |
| -                                    | -      | -                                   | -                   | 15                       | 15   | Gasoline   |
| -                                    | -      | -                                   | -                   | 9,880                    | 9,880  | Naphtha  |
| -                                    | -      | -                                   | -                   | -                        | -  | Oil produced by conversion                             |
| -                                    | -      | -                                   | 0                   | 3,445                    | 3,445  | Kerosene   |
| -                                    | -      | -                                   | -                   | 352                      | 352  | Gas oils   |
| 1,483                                | -      | 1,483                               | 901                 | 16,211                   | 16,211   | Heavy Fuel oil total                                   |
| 17                                   | -      | 17                                  | 330                 | 1,684                    | 1,684  | Heavy Fuel oil A                                       |
| 1,466                                | -      | 1,466                               | 571                 | 14,528                   | 14,528   | Heavy Fuel oil B・C                                     |
| 52                                   | -      | 52                                  | 108                 | 6,415                    | 6,415  | Hydrocarbon oil  |
| 36                                   | -      | 36                                  | 16                  | 18,388                   | 18,388   | Liquefied petroleum gas                                |
| 6,426                                | -      | 6,426                               | 18                  | 18,631                   | 18,631   | Hydrocarbon gas  |
| 44,164                               | 41,743 | 2,421                               | 7,144               | 24,238                   | 24,238   | Petroleum coke   |
| -                                    | -      | -                                   | -                   | -                        | -  | Asphalt  |
| -                                    | -      | -                                   | -                   | 110                      | 110  | Reproduction oil (Oil origin)                          |
| 39,865                               | 21,236 | 18,628                              | 101,217             | 1,006,718                | <b>Non-oil based fuels</b><br>(Crude petroleum equivalent) |  |
| 10,887                               | -      | 10,887                              | 139,810             | 1,271,909                | 1,271,909  | Coal   |
| -                                    | -      | -                                   | 2,689               | 9,702                    | 9,702  | Coal coke  |
| -                                    | -      | -                                   | -                   | 27,669                   | 27,669   | Tar  |
| 1,485                                | -      | 1,485                               | -                   | 111,822                  | 111,822  | Coke oven gas  |
| -                                    | -      | -                                   | -                   | 106,128                  | 106,128  | Blast furnace gas                                      |
| -                                    | -      | -                                   | -                   | -                        | -  | Converter furnace gas                                  |
| 3,046                                | 136    | 2,910                               | 2,206               | 24,570                   | 24,570   | Natural gas  |
| 15,429                               | 12,237 | 3,192                               | 1,150               | 9,978                    | 9,978  | Liquefied natural gas                                  |
| 2,529                                | -      | 2,529                               | 1,504               | 10,861                   | 10,861   | Town gas(A)  |
| 2,650                                | -      | 2,650                               | 1,611               | 11,694                   | 11,694   | Town gas(B)  |
| -                                    | -      | -                                   | 601                 | 1,111                    | 1,111  | Used tires   |
| 5,044                                | 5,044  | -                                   | -                   | 3,487                    | 3,487  | Waste plastic  |
| -                                    | -      | -                                   | -                   | -                        | -  | Refuse Paper & Plastic Fuel                            |
| 53,640                               | -      | 53,640                              | 402,433             | 548,307                  | <b>Electricity</b>   |  |
| 37,139                               | -      | 37,139                              | 39,468              | 448,130                  | <b>Steam</b>   |  |

(August, 2019)



1) 直接投入エネルギー表

Table of direct input energy

| 種別                  | 単位<br>Unit         | Ceramics, clay and stone products industry |                |                                   |                      |                    |
|---------------------|--------------------|--|----------------|-----------------------------------|----------------------|--------------------|
|                     |                    | 窯業・土石製品<br>工 業                             | 窯業・土石製品        | Ceramics, clay and stone products |                      |                    |
|                     |                    |  |                | セメント                              | 焼成用<br>For sintering | その他用<br>for Others |
| <b>合計（原油換算）</b>     | kl                 | <b>648,941</b>                             | <b>500,980</b> | <b>399,596</b>                    | <b>346,793</b>       | <b>52,803</b>      |
| <b>石油系燃料（原油換算）</b>  | 〃                  | <b>134,119</b>                             | <b>124,348</b> | <b>77,719</b>                     | <b>75,779</b>        | <b>1,940</b>       |
| ガソリン                | 〃                  | 31   | 23             | 16                                | ...                  | 16                 |
| 灯油                  | 〃                  | 1,886                                      | 777            | 111                               | 102                  | 9                  |
| 軽油                  | 〃                  | 1,122                                      | 590            | 481                               | 175                  | 306                |
| 重油計                 | 〃                  | 36,915                                     | 35,286         | 3,715                             | 2,364                | 1,351              |
| A重油                 | 〃                  | 1,796                                      | 1,482          | 868                               | 708                  | 160                |
| B・C重油               | 〃                  | 35,119                                     | 33,804         | 2,847                             | 1,656                | 1,191              |
| 炭化水素油               | 〃                  | 20,866                                     | 20,866         | 19,580                            | 19,459               | 121                |
| 液化石油ガス              | t                  | 1,772                                      | 436            | 1                                 | -                    | 1                  |
| オイルコークス             | 〃                  | 56,952                                     | 52,467         | 46,113                            | 46,113               | -                  |
| アスファルト              | 〃                  | -  | -              | -                                 | -                    | -                  |
| 再生油（石油由来）           | kl                 | 21,615                                     | 20,427         | 15,734                            | 15,700               | 34                 |
| <b>非石油系燃料（原油換算）</b> | kl                 | <b>325,950</b>                             | <b>319,028</b> | <b>273,182</b>                    | <b>271,014</b>       | <b>2,168</b>       |
| 石炭                  | t                  | 382,113                                    | 380,006        | 367,390                           | 366,717              | 673                |
| 石炭コークス              | 〃                  | 18,155                                     | 12,581         | -                                 | -                    | -                  |
| コークス炉ガス             | 1000m <sup>3</sup> | 24,529                                     | 24,529         | 93                                | -                    | 93                 |
| 高炉ガス                | 〃                  | 4,557                                      | 4,557          | 61                                | -                    | 61                 |
| 転炉ガス                | 〃                  | 21,889                                     | 21,889         | 2,680                             | -                    | 2,680              |
| 電気炉ガス               | 〃                  | 494  | 494            | -                                 | -                    | -                  |
| 天然ガス                | 〃                  | 1,481                                      | 1,481          | -                                 | -                    | -                  |
| 液化天然ガス              | t                  | 33   | 33             | -                                 | -                    | -                  |
| 都市ガス（A）             | 1000m <sup>3</sup> | 6,827                                      | 6,451          | 1,238                             | 378                  | 860                |
| 都市ガス（B）             | 〃                  | 7,439                                      | 7,063          | 1,315                             | 414                  | 901                |
| 廃材                  | 絶乾(Dry)t           | 78   | 78             | 78                                | 78                   | -                  |
| 廃タイヤ                | t                  | 4,961                                      | 4,961          | 4,961                             | 4,909                | 52                 |
| 廃プラスチック             | 〃                  | 31,988                                     | 30,813         | 30,162                            | 30,055               | 107                |
| R P F               | 〃                  | 2,173                                      | 2,173          | 59                                | 59                   | -                  |
| <b>電</b>            | <b>力</b> 1000kWh   | <b>1,434,528</b>                           | <b>599,480</b> | <b>520,134</b>                    | <b>...</b>           | <b>520,134</b>     |
| <b>蒸</b>            | <b>気</b> t         | <b>801,893</b>                             | <b>26,615</b>  | <b>4,495</b>                      | <b>...</b>           | <b>4,495</b>       |

2) 一次投入燃料換算表

Conversion table for primary input fuel

|                     |                    |                |                |                |                |                |
|---------------------|--------------------|----------------|----------------|----------------|----------------|----------------|
| <b>合計（原油換算）</b>     | kl                 | <b>786,976</b> | <b>548,784</b> | <b>447,964</b> | <b>346,793</b> | <b>101,171</b> |
| <b>石油系燃料（原油換算）</b>  | 〃                  | <b>147,430</b> | <b>137,184</b> | <b>89,755</b>  | <b>75,779</b>  | <b>13,976</b>  |
| ガソリン                | 〃                  | 31             | 23             | 16             | -              | 16             |
| 灯油                  | 〃                  | 2,006          | 897            | 111            | 102            | 9              |
| 軽油                  | 〃                  | 1,122          | 590            | 481            | 175            | 306            |
| 重油計                 | 〃                  | 38,167         | 36,162         | 3,927          | 2,364          | 1,563          |
| A重油                 | 〃                  | 2,344          | 2,029          | 926            | 708            | 218            |
| B・C重油               | 〃                  | 35,823         | 34,133         | 3,001          | 1,656          | 1,345          |
| 炭化水素油               | 〃                  | 20,866         | 20,866         | 19,580         | 19,459         | 121            |
| 液化石油ガス              | t                  | 1,772          | 436            | 1              | -              | 1              |
| オイルコークス             | 〃                  | 72,331         | 67,758         | 61,400         | 46,113         | 15,287         |
| アスファルト              | 〃                  | -              | -              | -              | -              | -              |
| 再生油（石油由来）           | kl                 | 21,615         | 20,427         | 15,734         | 15,700         | 34             |
| <b>非石油系燃料（原油換算）</b> | kl                 | <b>604,456</b> | <b>387,826</b> | <b>341,748</b> | <b>271,014</b> | <b>70,735</b>  |
| 石炭                  | t                  | 780,873        | 481,437        | 468,586        | 366,717        | 101,869        |
| 石炭コークス              | 〃                  | 18,155         | 12,581         | -              | -              | -              |
| コークス炉ガス             | 1000m <sup>3</sup> | 24,529         | 24,529         | 93             | -              | 93             |
| 高炉ガス                | 〃                  | 4,557          | 4,557          | 61             | -              | 61             |
| 転炉ガス                | 〃                  | 21,889         | 21,889         | 2,680          | -              | 2,680          |
| 電気炉ガス               | 〃                  | 494            | 494            | -              | -              | -              |
| 天然ガス                | 〃                  | 11,677         | 2,086          | 573            | -              | 573            |
| 液化天然ガス              | t                  | 33             | 33             | -              | -              | -              |
| 都市ガス（A）             | 1000m <sup>3</sup> | 6,861          | 6,485          | 1,238          | 378            | 860            |
| 都市ガス（B）             | 〃                  | 7,474          | 7,099          | 1,315          | 414            | 901            |
| 廃材                  | 絶乾(Dry)t           | 78             | 78             | 78             | 78             | -              |
| 廃タイヤ                | t                  | 6,824          | 5,104          | 5,100          | 4,909          | 191            |
| 廃プラスチック             | 〃                  | 31,988         | 30,813         | 30,162         | 30,055         | 107            |
| R P F               | 〃                  | 2,967          | 2,967          | 853            | 59             | 794            |
| <b>電</b>            | <b>力</b> 1000kWh   | <b>372,055</b> | <b>253,681</b> | <b>176,177</b> | <b>-</b>       | <b>176,177</b> |
| <b>蒸</b>            | <b>気</b> t         | <b>6,932</b>   | <b>2,542</b>   | <b>1,040</b>   | <b>-</b>       | <b>1,040</b>   |

(令和1年8月)

| (窯業・土石製品 Ceramics, clay and stone products) |                                    |               |                    | 石灰<br>Lime     | その他の製品<br>for Others  | Kind of energy |
|---|------------------------------------|---------------|--------------------|----------------|---|----------------|
| 板ガラス  | Sheet glass                        |               | その他用<br>for Others |                |   |                |
|   | 熔解窯用<br>For<br>dissolving furnaces |               |                    |                |   |                |
| <b>33,408</b>                               | <b>28,435</b>                      | <b>4,973</b>  | <b>67,976</b>      | <b>147,961</b> | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |                |
| <b>22,938</b>                               | <b>22,564</b>                      | <b>374</b>    | <b>23,691</b>      | <b>9,771</b>   | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |                |
| 2   | ...                                | 2             | 5                  | 8              | Gasoline  |                |
| -   | -                                  | -             | 666                | 1,109          | Kerosene  |                |
| 3   | -                                  | 3             | 106                | 532            | Gas oils  |                |
| 20,664                                      | 20,538                             | 126           | 10,907             | 1,629          | Heavy Fuel oil total  |                |
| 126   | -                                  | 126           | 488                | 314            | Heavy Fuel oil A  |                |
| 20,538                                      | 20,538                             | -             | 10,419             | 1,315          | Heavy Fuel oil B・C  |                |
| -   | -                                  | -             | 1,286              | -              | Hydrocarbon oil   |                |
| 434   | 250                                | 184           | 1                  | 1,336          | Liquefied petroleum gas   |                |
| -   | -                                  | -             | 6,354              | 4,485          | Petroleum coke  |                |
| -   | -                                  | -             | -                  | -              | Asphalt   |                |
| -   | -                                  | -             | 4,693              | 1,188          | Reproduction oil (Oil origin)                                     |                |
| <b>6,489</b>                                | <b>5,871</b>                       | <b>618</b>    | <b>39,357</b>      | <b>6,923</b>   | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |                |
| -   | -                                  | -             | 12,616             | 2,107          | Coal  |                |
| -   | -                                  | -             | 12,581             | 5,574          | Coal coke   |                |
| -   | -                                  | -             | 24,436             | -              | Coke oven gas   |                |
| -   | -                                  | -             | 4,496              | -              | Blast furnace gas   |                |
| -   | -                                  | -             | 19,209             | -              | Converter furnace gas   |                |
| -   | -                                  | -             | 494                | -              | Electric furnace gas  |                |
| 841   | 841                                | -             | 640                | -              | Natural gas   |                |
| 24  | -                                  | 24            | 9                  | -              | Liquefied natural gas   |                |
| 4,676                                       | 4,140                              | 536           | 537                | 376            | Town gas(A)   |                |
| 5,188                                       | 4,638                              | 550           | 560                | 376            | Town gas(B)   |                |
| -   | -                                  | -             | -                  | -              | Waste material  |                |
| -   | -                                  | -             | -                  | -              | Used tires  |                |
| -   | -                                  | -             | 651                | 1,175          | Waste plastic   |                |
| -   | -                                  | -             | 2,114              | -              | Refuse Paper & Plastic Fuel                                       |                |
| <b>36,366</b>                               | <b>...</b>                         | <b>36,366</b> | <b>42,980</b>      | <b>835,048</b> | <b>Electricity</b>  |                |
| <b>8,653</b>                                | <b>...</b>                         | <b>8,653</b>  | <b>13,467</b>      | <b>775,278</b> | <b>Steam</b>  |                |

  

|               |               |               |               |                |   |
|---------------|---------------|---------------|---------------|----------------|---|
| <b>32,921</b> | <b>28,436</b> | <b>4,486</b>  | <b>67,899</b> | <b>238,191</b> | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |
| <b>23,096</b> | <b>22,564</b> | <b>532</b>    | <b>24,333</b> | <b>10,246</b>  | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |
| 2             | -             | 2             | 5             | 8              | Gasoline  |
| -             | -             | -             | 786           | 1,109          | Kerosene  |
| 3             | -             | 3             | 106           | 532            | Gas oils  |
| 20,810        | 20,538        | 272           | 11,425        | 2,005          | Heavy Fuel oil total  |
| 127           | -             | 127           | 976           | 316            | Heavy Fuel oil A  |
| 20,683        | 20,538        | 145           | 10,449        | 1,689          | Heavy Fuel oil B・C  |
| -             | -             | -             | 1,286         | -              | Hydrocarbon oil   |
| 434           | 250           | 184           | 1             | 1,336          | Liquefied petroleum gas   |
| -             | -             | -             | 6,358         | 4,573          | Petroleum coke  |
| -             | -             | -             | -             | -              | Asphalt   |
| -             | -             | -             | 4,693         | 1,188          | Reproduction oil (Oil origin)                                     |
| <b>6,512</b>  | <b>5,871</b>  | <b>641</b>    | <b>39,566</b> | <b>216,630</b> | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |
| -             | -             | -             | 12,851        | 299,436        | Coal  |
| -             | -             | -             | 12,581        | 5,574          | Coal coke   |
| -             | -             | -             | 24,436        | -              | Coke oven gas   |
| -             | -             | -             | 4,496         | -              | Blast furnace gas   |
| -             | -             | -             | 19,209        | -              | Converter furnace gas   |
| -             | -             | -             | 494           | -              | Electric furnace gas  |
| 841           | 841           | -             | 672           | 9,592          | Natural gas   |
| 24            | -             | 24            | 9             | -              | Liquefied natural gas   |
| 4,696         | 4,140         | 556           | 551           | 376            | Town gas(A)   |
| 5,210         | 4,638         | 572           | 574           | 376            | Town gas(B)   |
| -             | -             | -             | -             | -              | Waste material  |
| -             | -             | -             | 4             | 1,720          | Used tires  |
| -             | -             | -             | 651           | 1,175          | Waste plastic   |
| -             | -             | -             | 2,114         | -              | Refuse Paper & Plastic Fuel                                       |
| <b>35,525</b> | <b>-</b>      | <b>35,525</b> | <b>41,979</b> | <b>118,373</b> | <b>Electricity</b>  |
| <b>121</b>    | <b>-</b>      | <b>121</b>    | <b>1,381</b>  | <b>4,390</b>   | <b>Steam</b>  |

(August, 2019)

1) 直接投入エネルギー表 Table of direct input energy

| 種 別                            | 単 位<br>Unit         | Iron and steel industry |                         |                         |                            |                        |                              |                  |                |  |
|--------------------------------|---------------------|-------------------------|-------------------------|-------------------------|----------------------------|------------------------|------------------------------|------------------|----------------|--|
|                                |                     | 鉄鋼業                     | Iron and steel products |                         |                            |                        |                              |                  | 製鋼用            | for Steelmaking<br>転 炉<br>LD<br>Converters |
|                                |                     |                         | 鉄鋼製品                    | 焼結鉄<br>for<br>Sintering | ペレット<br>for<br>Pelletizing | 鉄鉄用<br>for<br>pig iron | フェロアロイ<br>for<br>Ferro-alloy |                  |                |  |
| <b>合 計 ( 原 油 換 算 )</b>         | kl                  | <b>8,098,406</b>        | <b>5,469,195</b>        | <b>366,150</b>          | <b>11,152</b>              | <b>2,943,746</b>       | <b>65,855</b>                | <b>300,936</b>   | <b>187,109</b> |  |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | 〃                   | <b>118,823</b>          | <b>95,920</b>           | <b>155</b>              | <b>88</b>                  | <b>34,767</b>          | <b>2,563</b>                 | <b>10,427</b>    | <b>8,939</b>   |  |
| ガ ソ リ ン                        | 〃                   | 111                     | 51                      | -                       | -                          | -                      | -                            | -                | -              |  |
| 灯 油                            | 〃                   | 5,472                   | 5,341                   | -                       | -                          | -                      | 71                           | 528              | 14             |  |
| 軽 油                            | 〃                   | 2,006                   | 1,807                   | -                       | -                          | 5                      | 57                           | 138              | 137            |  |
| 重 油 計                          | 〃                   | 27,310                  | 27,161                  | -                       | 81                         | 95                     | 2,017                        | 1,473            | 586            |  |
| A 重 油                          | 〃                   | 13,435                  | 13,286                  | -                       | -                          | 83                     | 313                          | 1,329            | 586            |  |
| B・C 重 油                        | 〃                   | 13,875                  | 13,875                  | -                       | 81                         | 12                     | 1,704                        | 144              | -              |  |
| 炭 化 水 素 油                      | 〃                   | 6,083                   | -                       | -                       | -                          | -                      | -                            | -                | -              |  |
| 液 化 石 油 ガ ス                    | t                   | 21,527                  | 20,362                  | -                       | -                          | 800                    | 160                          | 6,292            | 6,247          |  |
| 石 油 系 炭 化 水 素 ガ ス              | 1000m <sup>3</sup>  | 3                       | 3                       | -                       | -                          | -                      | -                            | -                | -              |  |
| オ イ ル コ ー ク ス                  | t                   | 62,172                  | 43,708                  | 200                     | -                          | 43,508                 | -                            | -                | -              |  |
| ア ス フ ェ ル ト                    | 〃                   | -                       | -                       | -                       | -                          | -                      | -                            | -                | -              |  |
| 再 生 油 ( 石 油 由 来 )              | kl                  | 99                      | 99                      | -                       | -                          | -                      | 66                           | 33               | -              |  |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                  | <b>6,978,409</b>        | <b>4,426,049</b>        | <b>331,605</b>          | <b>9,699</b>               | <b>2,836,743</b>       | <b>45,966</b>                | <b>150,088</b>   | <b>122,019</b> |  |
| コークス製造用炭(原料炭)                  | t                   | 3,415,473               | 362,557                 | -                       | -                          | 362,557                | -                            | -                | -              |  |
| 石 炭                            | 〃                   | 1,341,403               | 1,341,403               | 87,150                  | 6,760                      | 820,846                | 41,616                       | 39,458           | 36,851         |  |
| 石 炭 コ ー ク ス                    | 〃                   | 2,575,860               | 2,561,729               | 341,443                 | 6,311                      | 2,164,093              | 22,305                       | 18,075           | 7,078          |  |
| タ ー ク ル                        | 〃                   | 9,062                   | -                       | -                       | -                          | -                      | -                            | -                | -              |  |
| コ ー ク ス 炉 ガ ス                  | 1000m <sup>3</sup>  | 808,849                 | 645,877                 | 22,728                  | 762                        | 85,095                 | 256                          | 31,199           | 29,846         |  |
| 高 炉 ガ ス                        | 〃                   | 6,974,894               | 5,588,432               | 8,589                   | -                          | 2,521,817              | 100                          | 352              | 296            |  |
| 転 炉 ガ ス                        | 〃                   | 411,513                 | 365,400                 | 1,231                   | -                          | 105,490                | 227                          | 2,343            | 2,227          |  |
| 電 気 炉 ガ ス                      | 〃                   | 3,489                   | 3,489                   | -                       | -                          | -                      | 443                          | -                | -              |  |
| 天 然 ガ ス                        | 〃                   | 1,948                   | 1,944                   | -                       | -                          | -                      | -                            | 251              | -              |  |
| 液 化 天 然 ガ ス                    | t                   | 30,573                  | 30,554                  | 1                       | -                          | 376                    | 169                          | 446              | -              |  |
| 都 市 ガ ス ( A )                  | 1000m <sup>3</sup>  | 157,399                 | 152,189                 | 782                     | -                          | 4,245                  | 37                           | 7,041            | 1,951          |  |
| 都 市 ガ ス ( B )                  | 〃                   | 171,638                 | 165,939                 | 868                     | -                          | 4,649                  | 40                           | 7,675            | 2,141          |  |
| 酸 素                            | 1000Nm <sup>3</sup> | 903,974                 | 903,781                 | ...                     | ...                        | 412,619                | 4,403                        | 446,983          | 390,308        |  |
| 廢 材                            | 絶乾(Dry)t            | 1,451                   | 1,451                   | -                       | -                          | -                      | -                            | -                | -              |  |
| 廢 タ イ ヤ                        | t                   | 1,013                   | 1,013                   | -                       | -                          | -                      | -                            | 1,013            | 1,013          |  |
| 廢 プ ラ ス チ ッ ク                  | 〃                   | 16,677                  | 3,303                   | -                       | -                          | 2,728                  | -                            | 575              | 575            |  |
| R P F                          | 〃                   | -                       | -                       | -                       | -                          | -                      | -                            | -                | -              |  |
| <b>電 力</b>                     | 1000kWh             | <b>5,346,701</b>        | <b>4,988,559</b>        | <b>360,082</b>          | <b>14,205</b>              | <b>460,476</b>         | <b>184,286</b>               | <b>1,294,820</b> | <b>409,330</b> |  |
| <b>蒸 気</b>                     | t                   | <b>7,288,708</b>        | <b>6,990,214</b>        | <b>12,940</b>           | <b>635</b>                 | <b>425,363</b>         | <b>2,654</b>                 | <b>288,947</b>   | <b>261,485</b> |  |

2) 一次投入燃料換算表 Conversion table for primary input fuel

|                                |                     |                  |                  |                |               |                  |                |                  |                |
|--------------------------------|---------------------|------------------|------------------|----------------|---------------|------------------|----------------|------------------|----------------|
| <b>合 計 ( 原 油 換 算 )</b>         | kl                  | <b>7,296,444</b> | <b>4,660,877</b> | <b>378,614</b> | <b>12,482</b> | <b>2,985,256</b> | <b>70,634</b>  | <b>327,714</b>   | <b>208,044</b> |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | 〃                   | <b>114,498</b>   | <b>91,062</b>    | <b>760</b>     | <b>113</b>    | <b>38,006</b>    | <b>7,092</b>   | <b>11,964</b>    | <b>10,402</b>  |
| ガ ソ リ ン                        | 〃                   | 111              | 51               | -              | -             | -                | -              | -                | -              |
| 灯 油                            | 〃                   | 5,460            | 5,327            | -              | -             | -                | 75             | 566              | 14             |
| 軽 油                            | 〃                   | 2,006            | 1,807            | -              | -             | 5                | 57             | 138              | 137            |
| 重 油 計                          | 〃                   | 23,559           | 23,251           | 397            | 81            | 2,381            | 6,172          | 2,527            | 1,602          |
| A 重 油                          | 〃                   | 11,110           | 10,927           | 1              | -             | 135              | 402            | 1,767            | 986            |
| B・C 重 油                        | 〃                   | 12,449           | 12,324           | 396            | 81            | 2,245            | 5,770          | 760              | 616            |
| 炭 化 水 素 油                      | 〃                   | 6,083            | -                | -              | -             | -                | -              | -                | -              |
| 液 化 石 油 ガ ス                    | t                   | 21,207           | 19,765           | 134            | 20            | 1,386            | 186            | 6,590            | 6,545          |
| 石 油 系 炭 化 水 素 ガ ス              | 1000m <sup>3</sup>  | 3                | 3                | -              | -             | -                | -              | -                | -              |
| オ イ ル コ ー ク ス                  | t                   | 62,172           | 43,708           | 200            | -             | 43,508           | -              | -                | -              |
| ア ス フ ェ ル ト                    | 〃                   | -                | -                | -              | -             | -                | -              | -                | -              |
| 再 生 油 ( 石 油 由 来 )              | kl                  | 99               | 99               | -              | -             | -                | 66             | 33               | -              |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                  | <b>6,800,762</b> | <b>4,215,485</b> | <b>354,850</b> | <b>12,299</b> | <b>2,914,826</b> | <b>49,816</b>  | <b>211,472</b>   | <b>173,280</b> |
| コークス製造用炭(原料炭)                  | t                   | 3,415,473        | 362,557          | -              | -             | 362,557          | -              | -                | -              |
| 石 炭                            | 〃                   | 1,198,218        | 1,182,545        | 92,629         | 7,868         | 843,959          | 43,064         | 71,636           | 58,847         |
| 石 炭 コ ー ク ス                    | 〃                   | 2,575,860        | 2,561,729        | 341,443        | 6,311         | 2,164,093        | 22,305         | 18,075           | 7,078          |
| タ ー ク ル                        | 〃                   | 9,062            | -                | -              | -             | -                | -              | -                | -              |
| コ ー ク ス 炉 ガ ス                  | 1000m <sup>3</sup>  | 783,124          | 610,116          | 30,676         | 1,327         | 105,165          | 993            | 43,723           | 42,186         |
| 高 炉 ガ ス                        | 〃                   | 6,400,605        | 4,855,290        | 148,677        | 16,740        | 3,030,832        | 21,974         | 287,973          | 286,014        |
| 転 炉 ガ ス                        | 〃                   | 367,506          | 315,018          | 9,045          | 256           | 121,899          | 562            | 15,027           | 14,376         |
| 電 気 炉 ガ ス                      | 〃                   | 3,489            | 2,675            | -              | -             | -                | 2,528          | -                | -              |
| 天 然 ガ ス                        | 〃                   | 1,948            | 1,944            | -              | -             | -                | -              | 251              | -              |
| 液 化 天 然 ガ ス                    | t                   | 29,947           | 29,807           | 61             | -             | 578              | 169            | 1,503            | 454            |
| 都 市 ガ ス ( A )                  | 1000m <sup>3</sup>  | 151,187          | 144,855          | 1,769          | 21            | 6,903            | 65             | 10,133           | 3,215          |
| 都 市 ガ ス ( B )                  | 〃                   | 164,901          | 157,973          | 1,949          | 24            | 7,558            | 71             | 11,062           | 3,525          |
| 酸 素                            | 1000Nm <sup>3</sup> | 903,974          | 903,781          | ...            | ...           | 412,619          | 4,403          | 446,983          | 390,308        |
| 廢 材                            | 絶乾(Dry)t            | 663              | 663              | -              | -             | -                | -              | -                | -              |
| 廢 タ イ ヤ                        | t                   | 1,013            | 1,013            | -              | -             | -                | -              | 1,013            | 1,013          |
| 廢 プ ラ ス チ ッ ク                  | 〃                   | 16,677           | 3,303            | -              | -             | 2,728            | -              | 575              | 575            |
| R P F                          | 〃                   | -                | -                | -              | -             | -                | -              | -                | -              |
| <b>電 力</b>                     | 1000kWh             | <b>3,829,676</b> | <b>3,574,178</b> | <b>244,615</b> | <b>504</b>    | <b>298,431</b>   | <b>146,039</b> | <b>1,101,195</b> | <b>243,719</b> |
| <b>蒸 気</b>                     | t                   | <b>360,743</b>   | <b>316,088</b>   | <b>3,595</b>   | <b>340</b>    | <b>67,451</b>    | <b>2,032</b>   | <b>26,821</b>    | <b>24,464</b>  |

(令和1年8月)

| (鉄鋼製品 Iron and steel products) |                              |                              |  |   |                        |                  | コークス<br>Coke   | その他の製品<br>Others                     | Kind of energy |
|--------------------------------|------------------------------|------------------------------|--|---|------------------------|------------------|----------------|--------------------------------------|----------------|
| 電気炉<br>Electric<br>furnaces    | 鍛鋼品<br>for<br>Steel forgings | 鋳鋼品<br>for<br>Steel castings | 圧延(冷間を含む)<br>及び鋼管用<br>Rolling(including<br>cold) and pipes | 発電・ボイラ・<br>コージェネ用<br>Power generation,<br>Boiler,cogeneration | その他の<br>鉄鋼製品<br>Others |                  |                |                                      |                |
| <b>113,827</b>                 | <b>14,057</b>                | <b>4,949</b>                 | <b>535,141</b>   | <b>957,731</b>  | <b>269,479</b>         | <b>2,590,177</b> | <b>39,034</b>  | <b>Total</b>                         |                |
| <b>1,488</b>                   | <b>2,075</b>                 | <b>2,230</b>                 | <b>12,664</b>  | <b>19,885</b>   | <b>11,067</b>          | <b>21,534</b>    | <b>1,369</b>   | <b>(Crude petroleum equivalent)</b>  |                |
| -                              | -                            | -                            | -  | -   | 51                     | -                | 60             | <b>Oil based fuels</b>               |                |
| 514                            | 719                          | 857                          | 2,094  | 112   | 960                    | 1                | 130            | <b>(Crude petroleum equivalent)</b>  |                |
| 1                              | 45                           | 10                           | 20   | -   | 1,532                  | 19               | 180            | Gasoline                             |                |
| 887                            | 1,203                        | 450                          | 4,244  | 15,305  | 2,293                  | -                | 149            | Kerosene                             |                |
| 743                            | 1,203                        | 446                          | 3,595  | 4,115   | 2,202                  | -                | 149            | Gas oils                             |                |
| 144                            | -                            | 4                            | 649  | 11,190  | 91                     | -                | -              | Heavy Fuel oil total                 |                |
| -                              | -                            | -                            | -  | -   | -                      | 6,083            | -              | Heavy Fuel oil A                     |                |
| 45                             | 102                          | 726                          | 4,815  | 2,671   | 4,796                  | 505              | 660            | Heavy Fuel oil B・C                   |                |
| -                              | -                            | -                            | 3  | -   | -                      | -                | -              | Hydrocarbon oil                      |                |
| -                              | -                            | -                            | -  | -   | -                      | 18,464           | -              | Liquefied petroleum gas              |                |
| -                              | -                            | -                            | -  | -   | -                      | -                | -              | Hydrocarbon gas                      |                |
| 33                             | -                            | -                            | -  | -   | -                      | -                | -              | Petroleum coke                       |                |
| <b>28,069</b>                  | <b>7,491</b>                 | <b>916</b>                   | <b>354,286</b>   | <b>620,394</b>  | <b>68,861</b>          | <b>2,539,930</b> | <b>12,431</b>  | Asphalt                              |                |
| -                              | -                            | -                            | -  | -   | -                      | -                | -              | Reproduction oil (Oil origin)        |                |
| 2,607                          | -                            | -                            | -  | -   | -                      | 3,052,916        | -              | <b>Non-oil based fuels</b>           |                |
| 10,997                         | -                            | 3                            | -  | 345,573   | -                      | -                | -              | <b>(Crude petroleum equivalent)</b>  |                |
| -                              | -                            | -                            | -  | -   | 9,499                  | 13,887           | 244            | Coal for making coke (material coal) |                |
| 1,353                          | 1,082                        | 95                           | 352,193  | 129,056   | 23,411                 | 156,733          | 6,239          | Coal                                 |                |
| 56                             | 317                          | -                            | 150,119  | 2,747,912   | 159,226                | 1,386,183        | 279            | Coal coke                            |                |
| 116                            | 656                          | -                            | 92,149   | 154,090   | 9,214                  | 31,147           | 14,966         | Tar                                  |                |
| -                              | -                            | -                            | -  | 3,046   | -                      | -                | -              | Coke oven gas                        |                |
| 251                            | 120                          | -                            | 1,158  | 209   | 206                    | -                | 4              | Blast furnace gas                    |                |
| 446                            | 1,294                        | 153                          | 20,410   | 4,452   | 3,253                  | -                | 19             | Converter furnace gas                |                |
| 5,090                          | 4,051                        | 506                          | 83,709   | 32,025  | 19,793                 | 475              | 4,735          | Electric furnace gas                 |                |
| 5,534                          | 4,435                        | 554                          | 91,088   | 34,969  | 21,661                 | 520              | 5,179          | Natural gas                          |                |
| 56,675                         | 326                          | 316                          | 11,832   | ...   | 27,302                 | ...              | 193            | Liquefied natural gas                |                |
| -                              | -                            | -                            | -  | 1,451   | -                      | -                | -              | Town gas(A)                          |                |
| -                              | -                            | -                            | -  | -   | -                      | -                | -              | Town gas(B)                          |                |
| -                              | -                            | -                            | -  | -   | -                      | -                | -              | Oxygen                               |                |
| -                              | -                            | -                            | -  | -   | -                      | -                | -              | Waste material                       |                |
| -                              | -                            | -                            | -  | -   | -                      | -                | -              | Used Tires                           |                |
| -                              | -                            | -                            | -  | -   | -                      | 13,374           | -              | Waste plastic                        |                |
| -                              | -                            | -                            | -  | -   | -                      | -                | -              | Refuse Paper & Plastic Fuel          |                |
| <b>885,490</b>                 | <b>47,199</b>                | <b>18,802</b>                | <b>1,455,377</b>   | <b>141,793</b>  | <b>1,011,519</b>       | <b>170,272</b>   | <b>187,870</b> | <b>Electricity</b>                   |                |
| <b>27,462</b>                  | <b>1,455</b>                 | <b>770</b>                   | <b>474,623</b>   | <b>4,401,839</b>  | <b>1,380,988</b>       | <b>186,259</b>   | <b>112,235</b> | <b>Steam</b>                         |                |

  

|                |               |               |                  |     |                |                  |                |                                      |
|----------------|---------------|---------------|------------------|-----|----------------|------------------|----------------|--------------------------------------|
| <b>119,670</b> | <b>14,159</b> | <b>4,956</b>  | <b>584,606</b>   | -   | <b>282,457</b> | <b>2,586,923</b> | <b>48,644</b>  | <b>Total</b>                         |
| <b>1,563</b>   | <b>2,075</b>  | <b>2,231</b>  | <b>14,942</b>    | -   | <b>13,877</b>  | <b>21,656</b>    | <b>1,781</b>   | <b>(Crude petroleum equivalent)</b>  |
| -              | -             | -             | -                | -   | 51             | -                | 60             | <b>Oil based fuels</b>               |
| 552            | 719           | 857           | 2,097            | -   | 1,013          | 1                | 132            | <b>(Crude petroleum equivalent)</b>  |
| 1              | 45            | 10            | 20               | -   | 1,532          | 19               | 180            | Gasoline                             |
| 925            | 1,203         | 451           | 5,766            | -   | 4,273          | 30               | 278            | Kerosene                             |
| 781            | 1,203         | 447           | 4,159            | -   | 2,813          | 1                | 182            | Gas oils                             |
| 144            | -             | 4             | 1,607            | -   | 1,461          | 29               | 96             | Heavy Fuel oil total                 |
| -              | -             | -             | -                | -   | -              | 6,083            | -              | Heavy Fuel oil A                     |
| 45             | 102           | 726           | 5,324            | -   | 5,299          | 573              | 868            | Heavy Fuel oil B・C                   |
| -              | -             | -             | 3                | -   | -              | -                | -              | Hydrocarbon oil                      |
| -              | -             | -             | -                | -   | -              | 18,464           | -              | Hydrocarbon gas                      |
| -              | -             | -             | -                | -   | -              | -                | -              | Petroleum coke                       |
| -              | -             | -             | -                | -   | -              | -                | -              | Asphalt                              |
| 33             | -             | -             | -                | -   | -              | -                | -              | Reproduction oil (Oil origin)        |
| <b>38,192</b>  | <b>7,700</b>  | <b>933</b>    | <b>473,010</b>   | -   | <b>190,578</b> | <b>2,552,472</b> | <b>32,805</b>  | <b>Non-oil based fuels</b>           |
| -              | -             | -             | -                | -   | -              | 3,052,916        | -              | <b>(Crude petroleum equivalent)</b>  |
| 12,789         | 2             | -             | 64,030           | -   | 59,358         | 2,161            | 13,512         | Coal for making coke (material coal) |
| 10,997         | -             | 3             | -                | -   | 9,499          | 13,887           | 244            | Coal                                 |
| -              | -             | -             | -                | -   | -              | 9,062            | -              | Coal coke                            |
| 1,537          | 1,117         | 95            | 375,042          | -   | 51,978         | 162,120          | 10,888         | Tar                                  |
| 1,959          | 379           | -             | 653,589          | -   | 695,125        | 1,459,173        | 86,142         | Coke oven gas                        |
| 651            | 656           | -             | 125,265          | -   | 42,309         | 35,472           | 17,015         | Blast furnace gas                    |
| -              | -             | -             | -                | -   | 146            | -                | 814            | Converter furnace gas                |
| 251            | 120           | -             | 1,321            | -   | 252            | -                | 4              | Electric furnace gas                 |
| 1,049          | 1,424         | 153           | 21,657           | -   | 4,262          | 65               | 75             | Natural gas                          |
| 6,918          | 4,051         | 522           | 92,422           | -   | 28,969         | 1,083            | 5,249          | Liquefied natural gas                |
| 7,536          | 4,435         | 570           | 100,613          | -   | 31,692         | 1,185            | 5,743          | Town gas(A)                          |
| 56,675         | 326           | 316           | 11,832           | ... | 27,302         | ...              | 193            | Town gas(B)                          |
| -              | -             | -             | 303              | -   | 360            | -                | -              | Oxygen                               |
| -              | -             | -             | -                | -   | -              | -                | -              | Waste material                       |
| -              | -             | -             | -                | -   | -              | -                | -              | Used Tires                           |
| -              | -             | -             | -                | -   | -              | 13,374           | -              | Waste plastic                        |
| -              | -             | -             | -                | -   | -              | -                | -              | Refuse Paper & Plastic Fuel          |
| <b>857,476</b> | <b>46,426</b> | <b>18,736</b> | <b>1,004,341</b> | -   | <b>713,892</b> | <b>126,552</b>   | <b>128,946</b> | <b>Electricity</b>                   |
| <b>2,157</b>   | <b>940</b>    | <b>701</b>    | <b>46,680</b>    | -   | <b>167,729</b> | <b>14,814</b>    | <b>29,841</b>  | <b>Steam</b>                         |

(August, 2019)

1) 直接投入エネルギー表 Table of direct input energy

| 種別            | 単位<br>Unit         | Non-ferrous metal products industry |         |                    |                                      |                                 |        |                                      |                                 |
|---------------|--------------------|-------------------------------------|---------|--------------------|--------------------------------------|---------------------------------|--------|--------------------------------------|---------------------------------|
|               |                    | 非鉄金属<br>地金工業                        | 非鉄金属地金  | Non-ferrous metals |                                      |                                 | 鉛      | Lead                                 |                                 |
|               |                    |                                     |         | 銅                  | 溶錬工程<br>Fusing and<br>mixing process | 電解工程<br>Electrolytic<br>process |        | 溶錬工程<br>Fusing and<br>mixing process | 電解工程<br>Electrolytic<br>process |
| 合計 (原油換算)     | kl                 | 93,157                              | 80,975  | 28,768             | 22,335                               | 6,433                           | 7,081  | 6,481                                | 600                             |
| 石油系燃料 (原油換算)  | "                  | 17,487                              | 15,218  | 5,831              | 5,831                                | -                               | 517    | 259                                  | 258                             |
| ガソリン          | "                  | 6                                   | 6       | -                  | -                                    | -                               | -      | -                                    | -                               |
| 灯油            | "                  | 1,237                               | 276     | 40                 | 40                                   | -                               | -      | -                                    | -                               |
| 軽油            | "                  | 334                                 | 87      | 6                  | 6                                    | -                               | -      | -                                    | -                               |
| 重油計           | "                  | 8,751                               | 8,277   | 4,214              | 4,214                                | -                               | 394    | 140                                  | 254                             |
| A重油           | "                  | 5,059                               | 4,594   | 1,792              | 1,792                                | -                               | 394    | 140                                  | 254                             |
| B・C重油         | "                  | 3,692                               | 3,683   | 2,422              | 2,422                                | -                               | -      | -                                    | -                               |
| 炭化水素油         | "                  | 3,109                               | 2,589   | 453                | 453                                  | -                               | -      | -                                    | -                               |
| 液化石油ガス        | t                  | 521                                 | 464     | 343                | 343                                  | -                               | 1      | -                                    | 1                               |
| オイルコークス       | "                  | 592                                 | 592     | 535                | 535                                  | -                               | 57     | 57                                   | -                               |
| アスファルト        | "                  | -                                   | -       | -                  | -                                    | -                               | -      | -                                    | -                               |
| 再生油 (石油由来)    | kl                 | 2,279                               | 2,279   | -                  | -                                    | -                               | 71     | 71                                   | -                               |
| 非石油系燃料 (原油換算) | kl                 | 23,124                              | 22,656  | 3,287              | 3,287                                | -                               | 5,332  | 5,332                                | -                               |
| 石炭            | t                  | 4,332                               | 4,332   | 4,137              | 4,137                                | -                               | 183    | 183                                  | -                               |
| 石炭コークス        | "                  | 14,887                              | 14,676  | 302                | 302                                  | -                               | 6,006  | 6,006                                | -                               |
| コークス炉ガス       | 1000m <sup>3</sup> | -                                   | -       | -                  | -                                    | -                               | -      | -                                    | -                               |
| 高炉ガス          | "                  | 23,090                              | 23,090  | -                  | -                                    | -                               | 6,661  | 6,661                                | -                               |
| 電気炉ガス         | "                  | -                                   | -       | -                  | -                                    | -                               | -      | -                                    | -                               |
| 天然ガス          | "                  | 379                                 | 379     | -                  | -                                    | -                               | -      | -                                    | -                               |
| 液化天然ガス        | t                  | 1,587                               | 1,587   | 220                | 220                                  | -                               | 43     | 43                                   | -                               |
| 都市ガス (A)      | 1000m <sup>3</sup> | 3,809                               | 3,544   | -                  | -                                    | -                               | -      | -                                    | -                               |
| 都市ガス (B)      | "                  | 3,991                               | 3,701   | -                  | -                                    | -                               | -      | -                                    | -                               |
| 廃タイヤ          | t                  | -                                   | -       | -                  | -                                    | -                               | -      | -                                    | -                               |
| 廃プラスチック       | "                  | -                                   | -       | -                  | -                                    | -                               | -      | -                                    | -                               |
| R P F         | "                  | -                                   | -       | -                  | -                                    | -                               | -      | -                                    | -                               |
| 電蒸            | 力気<br>1000kWh<br>t | 475,692                             | 392,043 | 153,384            | 97,959                               | 55,425                          | 11,791 | 8,166                                | 3,625                           |
|               |                    | 120,006                             | 95,947  | 77,857             | 59,384                               | 18,473                          | 1,950  | 1,887                                | 63                              |

2) 一次投入燃料換算表 Conversion table for primary input fuel

|               |                    |         |         |         |        |        |        |       |       |
|---------------|--------------------|---------|---------|---------|--------|--------|--------|-------|-------|
| 合計 (原油換算)     | kl                 | 86,237  | 74,697  | 22,316  | 17,296 | 5,020  | 7,139  | 6,538 | 601   |
| 石油系燃料 (原油換算)  | "                  | 18,285  | 15,847  | 6,196   | 6,011  | 185    | 548    | 287   | 261   |
| ガソリン          | "                  | 6       | 6       | -       | -      | -      | -      | -     | -     |
| 灯油            | "                  | 1,399   | 438     | 202     | 40     | 162    | -      | -     | -     |
| 軽油            | "                  | 334     | 87      | 6       | 6      | -      | -      | -     | -     |
| 重油計           | "                  | 9,374   | 8,734   | 4,410   | 4,381  | 29     | 425    | 168   | 257   |
| A重油           | "                  | 5,478   | 4,858   | 1,796   | 1,795  | 1      | 425    | 168   | 257   |
| B・C重油         | "                  | 3,895   | 3,876   | 2,614   | 2,586  | 28     | -      | -     | -     |
| 炭化水素油         | "                  | 3,109   | 2,589   | 453     | 453    | -      | -      | -     | -     |
| 液化石油ガス        | t                  | 521     | 464     | 343     | 343    | -      | 1      | -     | 1     |
| オイルコークス       | "                  | 592     | 592     | 535     | 535    | -      | 57     | 57    | -     |
| アスファルト        | "                  | -       | -       | -       | -      | -      | -      | -     | -     |
| 再生油 (石油由来)    | kl                 | 2,279   | 2,279   | -       | -      | -      | 71     | 71    | -     |
| 非石油系燃料 (原油換算) | kl                 | 24,444  | 23,527  | 3,287   | 3,287  | -      | 5,549  | 5,549 | -     |
| 石炭            | t                  | 4,332   | 4,332   | 4,137   | 4,137  | -      | 183    | 183   | -     |
| 石炭コークス        | "                  | 14,887  | 14,676  | 302     | 302    | -      | 6,006  | 6,006 | -     |
| コークス炉ガス       | 1000m <sup>3</sup> | -       | -       | -       | -      | -      | -      | -     | -     |
| 高炉ガス          | "                  | 35,811  | 31,828  | -       | -      | -      | 8,837  | 8,837 | -     |
| 電気炉ガス         | "                  | -       | -       | -       | -      | -      | -      | -     | -     |
| 天然ガス          | "                  | 379     | 379     | -       | -      | -      | -      | -     | -     |
| 液化天然ガス        | t                  | 1,691   | 1,659   | 220     | 220    | -      | 61     | 61    | -     |
| 都市ガス (A)      | 1000m <sup>3</sup> | 3,854   | 3,544   | -       | -      | -      | -      | -     | -     |
| 都市ガス (B)      | "                  | 4,040   | 3,701   | -       | -      | -      | -      | -     | -     |
| 廃タイヤ          | t                  | -       | -       | -       | -      | -      | -      | -     | -     |
| 廃プラスチック       | "                  | -       | -       | -       | -      | -      | -      | -     | -     |
| R P F         | "                  | -       | -       | -       | -      | -      | -      | -     | -     |
| 電蒸            | 力気<br>1000kWh<br>t | 443,267 | 367,357 | 132,978 | 84,214 | 48,764 | 11,002 | 7,377 | 3,625 |
|               |                    | 32,895  | 16,649  | 6,887   | 2,373  | 4,314  | 276    | 233   | 44    |

(令和1年8月)

| (非鉄金属地金 Non-ferrous metals) |                              |                           |                    |  |   |                  | Kind of energy  |
|-----------------------------|------------------------------|---------------------------|--------------------|--|---|------------------|---|
| 亜鉛                          | Zinc                         |                           | アルミニウム<br>Aluminum | アルミニウム<br>二次地金<br>Secondary<br>aluminum ingots | その他の<br>非鉄金属<br>Other Non-ferrous<br>metals | その他の製品<br>Others |   |
|                             | 電気亜鉛<br>Electrolytic<br>zinc | 蒸留亜鉛<br>Distilled<br>zinc |                    |  |   |                  |   |
| <b>22,658</b>               | <b>14,245</b>                | <b>8,414</b>              | <b>10,372</b>      | <b>10,189</b>                                  | <b>1,908</b>                                | <b>12,182</b>    | <b>Total<br/>(Crude petroleum equivalent)</b>               |
| <b>578</b>                  | <b>323</b>                   | <b>254</b>                | <b>1,321</b>       | <b>6,565</b>                                   | <b>406</b>                                  | <b>2,269</b>     | <b>Oil based fuels<br/>(Crude petroleum equivalent)</b>     |
| 2                           | 2                            | -                         | 4                  | -  | -   | -                | Gasoline  |
| 5                           | 5                            | -                         | 97                 | 128  | 6   | 961              | Kerosene  |
| 6                           | 6                            | -                         | 10                 | 65   | -   | 247              | Gas oils  |
| 335                         | 295                          | 40                        | 1,099              | 2,096  | 139   | 474              | Heavy Fuel oil total  |
| 191                         | 151                          | 40                        | 201                | 1,877  | 139   | 465              | Heavy Fuel oil A  |
| 144                         | 144                          | -                         | 898                | 219  | -   | 9                | Heavy Fuel oil B・C  |
| -                           | -                            | -                         | -                  | 2,136  | -   | 520              | Hydrocarbon oil   |
| 2                           | 2                            | -                         | 31                 | 87   | -   | 57               | Liquefied petroleum gas                                     |
| -                           | -                            | -                         | -                  | -  | -   | -                | Petroleum coke  |
| -                           | -                            | -                         | -                  | -  | -   | -                | Asphalt   |
| 206                         | -                            | 206                       | -                  | 1,752  | 250   | -                | Reproduction oil (Oil origin)                               |
| <b>8,783</b>                | <b>1,353</b>                 | <b>7,430</b>              | <b>2,436</b>       | <b>2,609</b>                                   | <b>209</b>                                  | <b>468</b>       | <b>Non-oil based fuels<br/>(Crude petroleum equivalent)</b> |
| -                           | -                            | -                         | -                  | -  | 12  | -                | Coal  |
| 8,342                       | 800                          | 7,542                     | -                  | -  | 26  | 211              | Coal coke   |
| -                           | -                            | -                         | -                  | -  | -   | -                | Coke oven gas   |
| 16,429                      | 700                          | 15,729                    | -                  | -  | -   | -                | Blast furnace gas   |
| -                           | -                            | -                         | -                  | -  | -   | -                | Electric furnace gas  |
| -                           | -                            | -                         | 379                | -  | -   | -                | Natural gas   |
| 663                         | 440                          | 223                       | 133                | 405  | 123   | -                | Liquefied natural gas                                       |
| 53                          | 53                           | -                         | 1,548              | 1,937  | 6   | 265              | Town gas(A)   |
| 59                          | 59                           | -                         | 1,716              | 1,919  | 7   | 290              | Town gas(B)   |
| -                           | -                            | -                         | -                  | -  | -   | -                | Used tires  |
| -                           | -                            | -                         | -                  | -  | -   | -                | Waste plastic   |
| -                           | -                            | -                         | -                  | -  | -   | -                | Refuse Paper & Plastic Fuel                                 |
| <b>138,266</b>              | <b>134,152</b>               | <b>4,114</b>              | <b>70,937</b>      | <b>10,907</b>                                  | <b>6,758</b>                                | <b>83,649</b>    | <b>Electricity</b>  |
| <b>6,299</b>                | <b>1,286</b>                 | <b>5,013</b>              | <b>228</b>         | <b>-</b>                                       | <b>9,613</b>                                | <b>24,059</b>    | <b>Steam</b>  |
| <b>22,774</b>               | <b>14,212</b>                | <b>8,562</b>              | <b>10,382</b>      | <b>10,189</b>                                  | <b>1,897</b>                                | <b>11,540</b>    | <b>Total<br/>(Crude petroleum equivalent)</b>               |
| <b>761</b>                  | <b>426</b>                   | <b>335</b>                | <b>1,321</b>       | <b>6,565</b>                                   | <b>455</b>                                  | <b>2,438</b>     | <b>Oil based fuels<br/>(Crude petroleum equivalent)</b>     |
| 2                           | 2                            | -                         | 4                  | -  | -   | -                | Gasoline  |
| 5                           | 5                            | -                         | 97                 | 128  | 6   | 961              | Kerosene  |
| 6                           | 6                            | -                         | 10                 | 65   | -   | 247              | Gas oils  |
| 516                         | 397                          | 120                       | 1,099              | 2,096  | 188   | 640              | Heavy Fuel oil total  |
| 372                         | 253                          | 120                       | 201                | 1,877  | 187   | 621              | Heavy Fuel oil A  |
| 144                         | 144                          | -                         | 898                | 219  | 1   | 19               | Heavy Fuel oil B・C  |
| -                           | -                            | -                         | -                  | 2,136  | -   | 520              | Hydrocarbon oil   |
| 2                           | 2                            | -                         | 31                 | 87   | -   | 57               | Liquefied petroleum gas                                     |
| -                           | -                            | -                         | -                  | -  | -   | -                | Petroleum coke  |
| -                           | -                            | -                         | -                  | -  | -   | -                | Asphalt   |
| 206                         | -                            | 206                       | -                  | 1,752  | 250   | -                | Reproduction oil (Oil origin)                               |
| <b>9,413</b>                | <b>1,358</b>                 | <b>8,055</b>              | <b>2,436</b>       | <b>2,610</b>                                   | <b>233</b>                                  | <b>918</b>       | <b>Non-oil based fuels<br/>(Crude petroleum equivalent)</b> |
| -                           | -                            | -                         | -                  | -  | 12  | -                | Coal  |
| 8,342                       | 800                          | 7,542                     | -                  | -  | 26  | 211              | Coal coke   |
| -                           | -                            | -                         | -                  | -  | -   | -                | Coke oven gas   |
| 22,748                      | 745                          | 22,003                    | -                  | -  | 244   | 3,984            | Blast furnace gas   |
| -                           | -                            | -                         | -                  | -  | -   | -                | Electric furnace gas  |
| -                           | -                            | -                         | 379                | -  | -   | -                | Natural gas   |
| 715                         | 440                          | 274                       | 133                | 405  | 125   | 33               | Liquefied natural gas                                       |
| 53                          | 53                           | -                         | 1,548              | 1,937  | 6   | 310              | Town gas(A)   |
| 59                          | 59                           | -                         | 1,716              | 1,919  | 7   | 339              | Town gas(B)   |
| -                           | -                            | -                         | -                  | -  | -   | -                | Used tires  |
| -                           | -                            | -                         | -                  | -  | -   | -                | Waste plastic   |
| -                           | -                            | -                         | -                  | -  | -   | -                | Refuse Paper & Plastic Fuel                                 |
| <b>135,448</b>              | <b>133,603</b>               | <b>1,845</b>              | <b>70,937</b>      | <b>10,907</b>                                  | <b>6,085</b>                                | <b>75,910</b>    | <b>Electricity</b>  |
| <b>-</b>                    | <b>-</b>                     | <b>-</b>                  | <b>376</b>         | <b>-</b>                                       | <b>9,310</b>                                | <b>16,246</b>    | <b>Steam</b>  |

(August, 2019)

1) 直接投入エネルギー表 Table of direct input energy

| 種 別                            | 単位<br>Unit         | Machinery products industry |                    |  |  |   |
|--------------------------------|--------------------|-----------------------------|--------------------|--|--|---|
|                                |                    | 機械工業                        | Machinery products |  |  |   |
|                                |                    |                             | 機械器具製品             | 土木建設機械<br>Civil engineering<br>machinery | 金属工作機械及び<br>金属加工機械<br>Metal working machinery<br>and metal processing<br>machinery | 電子部品<br>Parts for electronic<br>equipment |
| <b>合 計 ( 原 油 換 算 )</b>         | kl                 | <b>299,754</b>              | <b>211,205</b>     | <b>3,604</b>                             | <b>6,043</b>   | <b>22,293</b>                             |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | 〃                  | <b>15,834</b>               | <b>9,524</b>       | <b>429</b>                               | <b>998</b>   | <b>169</b>                                |
| ガ ソ リ ン                        | 〃                  | 3,956                       | 2,245              | -  | 2  | -   |
| 灯 油                            | 〃                  | 2,270                       | 1,141              | 11                                       | 157  | 81  |
| 軽 油                            | 〃                  | 2,052                       | 506                | 209                                      | 3  | 4   |
| 重 油 計                          | 〃                  | 1,912                       | 1,334              | -  | 780  | 41  |
| A 重 油                          | 〃                  | 1,912                       | 1,334              | -  | 780  | 41  |
| B・C 重 油                        | 〃                  | -                           | -                  | -  | -  | -   |
| 炭 化 水 素 油                      | 〃                  | 1                           | -                  | -  | -  | -   |
| 液 化 石 油 ガ ス                    | t                  | 4,733                       | 3,500              | 164                                      | 43   | 36  |
| 石 油 系 炭 化 水 素 ガ ス              | 1000m <sup>3</sup> | -                           | -                  | -  | -  | -   |
| オ イ ル コ ー ク ス                  | t                  | -                           | -                  | -  | -  | -   |
| ア ス フ ァ ル ト                    | 〃                  | -                           | -                  | -  | -  | -   |
| 再 生 油 ( 石 油 由 来 )              | kl                 | -                           | -                  | -  | -  | -   |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                 | <b>56,563</b>               | <b>30,350</b>      | <b>882</b>                               | <b>655</b>   | <b>678</b>                                |
| 石 炭                            | t                  | -                           | -                  | -  | -  | -   |
| 石 炭 コ ー ク ス                    | 〃                  | 617                         | 617                | -  | -  | -   |
| コ ー ク ス 炉 ガ ス                  | 1000m <sup>3</sup> | -                           | -                  | -  | -  | -   |
| 高 炉 ガ ス                        | 〃                  | -                           | -                  | -  | -  | -   |
| 転 炉 ガ ス                        | 〃                  | -                           | -                  | -  | -  | -   |
| 天 然 ガ ス                        | 〃                  | 441                         | 441                | -  | -  | -   |
| 液 化 天 然 ガ ス                    | t                  | 3,478                       | 1,088              | -  | 130  | 3   |
| 都 市 ガ ス ( A )                  | 1000m <sup>3</sup> | 43,601                      | 24,015             | 757                                      | 404  | 576                                       |
| 都 市 ガ ス ( B )                  | 〃                  | 47,731                      | 26,225             | 831                                      | 444  | 634                                       |
| 廃 タ イ ヤ                        | t                  | -                           | -                  | -  | -  | -   |
| 廃 プ ラ ス チ ッ ク                  | 〃                  | -                           | -                  | -  | -  | -   |
| R P F                          | 〃                  | -                           | -                  | -  | -  | -   |
| <b>電</b>                       | <b>力</b> 1000kWh   | <b>2,444,089</b>            | <b>1,841,804</b>   | <b>24,644</b>                            | <b>47,189</b>  | <b>230,542</b>                            |

2) 一次投入燃料換算表 Conversion table for primary input fuel

|                                |                    |                  |                  |               |               |                |
|--------------------------------|--------------------|------------------|------------------|---------------|---------------|----------------|
| <b>合 計 ( 原 油 換 算 )</b>         | kl                 | <b>350,224</b>   | <b>253,251</b>   | <b>3,735</b>  | <b>6,681</b>  | <b>27,992</b>  |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | 〃                  | <b>18,471</b>    | <b>11,948</b>    | <b>508</b>    | <b>1,267</b>  | <b>509</b>     |
| ガ ソ リ ン                        | 〃                  | 3,956            | 2,245            | -             | 2             | -              |
| 灯 油                            | 〃                  | 2,316            | 1,181            | 11            | 189           | 81             |
| 軽 油                            | 〃                  | 2,088            | 538              | 209           | 3             | 6              |
| 重 油 計                          | 〃                  | 3,985            | 3,211            | 53            | 1,016         | 53             |
| A 重 油                          | 〃                  | 3,985            | 3,211            | 53            | 1,016         | 53             |
| B・C 重 油                        | 〃                  | -                | -                | -             | -             | -              |
| 炭 化 水 素 油                      | 〃                  | 1                | -                | -             | -             | -              |
| 液 化 石 油 ガ ス                    | t                  | 5,087            | 3,848            | 183           | 43            | 284            |
| 石 油 系 炭 化 水 素 ガ ス              | 1000m <sup>3</sup> | -                | -                | -             | -             | -              |
| オ イ ル コ ー ク ス                  | t                  | -                | -                | -             | -             | -              |
| ア ス フ ァ ル ト                    | 〃                  | -                | -                | -             | -             | -              |
| 再 生 油 ( 石 油 由 来 )              | kl                 | -                | -                | -             | -             | -              |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                 | <b>128,865</b>   | <b>90,300</b>    | <b>1,053</b>  | <b>1,336</b>  | <b>8,378</b>   |
| 石 炭                            | t                  | -                | -                | -             | -             | -              |
| 石 炭 コ ー ク ス                    | 〃                  | 617              | 617              | -             | -             | -              |
| コ ー ク ス 炉 ガ ス                  | 1000m <sup>3</sup> | -                | -                | -             | -             | -              |
| 高 炉 ガ ス                        | 〃                  | -                | -                | -             | -             | -              |
| 転 炉 ガ ス                        | 〃                  | -                | -                | -             | -             | -              |
| 天 然 ガ ス                        | 〃                  | 1,528            | 1,524            | -             | -             | -              |
| 液 化 天 然 ガ ス                    | t                  | 7,612            | 4,321            | -             | 198           | 180            |
| 都 市 ガ ス ( A )                  | 1000m <sup>3</sup> | 99,722           | 70,627           | 903           | 907           | 6,978          |
| 都 市 ガ ス ( B )                  | 〃                  | 109,169          | 77,232           | 991           | 995           | 7,650          |
| 廃 タ イ ヤ                        | t                  | -                | -                | -             | -             | -              |
| 廃 プ ラ ス チ ッ ク                  | 〃                  | -                | -                | -             | -             | -              |
| R P F                          | 〃                  | -                | -                | -             | -             | -              |
| <b>電</b>                       | <b>力</b> 1000kWh   | <b>2,181,034</b> | <b>1,623,284</b> | <b>23,378</b> | <b>43,842</b> | <b>205,381</b> |

(令和1年8月)

| (機械器具製品 Machinery products)   |  |  | その他の製品<br>Others | Kind of energy  |
|---|--|--|------------------|---|
| 電子管・半導体素子<br>・集積回路<br>Electron tubes,<br>semiconductors,<br>integrated circuits | 電子計算機及び情報<br>端末、電子応用装置<br>Computers and information<br>terminals, associated<br>electronic equipment | 自動車及び部品<br>(二輪自動車を含む)<br>Automobiles<br>(including motorcycles)<br>and parts |                  |   |
| <b>60,809</b>   | <b>4,666</b>   | <b>113,790</b>   | <b>88,549</b>    | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |
| <b>472</b>  | <b>33</b>  | <b>7,422</b>   | <b>6,310</b>     | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |
| 2   | -  | 2,241  | 1,711            | Gasoline  |
| -   | -  | 892  | 1,129            | Kerosene  |
| -   | 6  | 284  | 1,546            | Gas oils  |
| 91  | -  | 422  | 578              | Heavy Fuel oil total  |
| 91  | -  | 422  | 578              | Heavy Fuel oil A  |
| -   | -  | -  | -                | Heavy Fuel oil B・C  |
| -   | -  | -  | 1                | Hydrocarbon oil   |
| 288   | 21   | 2,948  | 1,233            | Liquefied petroleum gas   |
| -   | -  | -  | -                | Hydrocarbon gas   |
| -   | -  | -  | -                | Petroleum coke  |
| -   | -  | -  | -                | Asphalt   |
| -   | -  | -  | -                | Reproduction oil (Oil origin)                                     |
| <b>1,218</b>  | <b>206</b>   | <b>26,711</b>  | <b>26,212</b>    | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |
| -   | -  | -  | -                | Coal  |
| -   | -  | 617  | -                | Coal coke   |
| -   | -  | -  | -                | Coke oven gas   |
| -   | -  | -  | -                | Blast furnace gas   |
| -   | -  | -  | -                | Converter furnace gas   |
| 5   | -  | 436  | -                | Natural gas   |
| -   | -  | 955  | 2,390            | Liquefied natural gas   |
| 1,035   | 176  | 21,067   | 19,586           | Town gas(A)   |
| 1,142   | 194  | 22,980   | 21,507           | Town gas(B)   |
| -   | -  | -  | -                | Used tires  |
| -   | -  | -  | -                | Waste plastic   |
| -   | -  | -  | -                | Refuse Paper & Plastic Fuel                                       |
| <b>635,531</b>  | <b>47,581</b>  | <b>856,317</b>   | <b>602,285</b>   | <b>Electricity</b>  |
| <b>71,842</b>   | <b>4,674</b>   | <b>138,326</b>   | <b>96,972</b>    | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |
| <b>560</b>  | <b>33</b>  | <b>9,071</b>   | <b>6,524</b>     | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |
| 2   | -  | 2,241  | 1,711            | Gasoline  |
| 8   | -  | 892  | 1,135            | Kerosene  |
| -   | 6  | 314  | 1,550            | Gas oils  |
| 171   | -  | 1,919  | 773              | Heavy Fuel oil total  |
| 171   | -  | 1,919  | 773              | Heavy Fuel oil A  |
| -   | -  | -  | -                | Heavy Fuel oil B・C  |
| -   | -  | -  | 1                | Hydrocarbon oil   |
| 288   | 21   | 3,030  | 1,239            | Liquefied petroleum gas   |
| -   | -  | -  | -                | Hydrocarbon gas   |
| -   | -  | -  | -                | Petroleum coke  |
| -   | -  | -  | -                | Asphalt   |
| -   | -  | -  | -                | Reproduction oil (Oil origin)                                     |
| <b>17,717</b>   | <b>228</b>   | <b>61,588</b>  | <b>38,565</b>    | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |
| -   | -  | -  | -                | Coal  |
| -   | -  | 617  | -                | Coal coke   |
| -   | -  | -  | -                | Coke oven gas   |
| -   | -  | -  | -                | Blast furnace gas   |
| -   | -  | -  | -                | Converter furnace gas   |
| 5   | -  | 1,519  | 4                | Natural gas   |
| -   | -  | 3,943  | 3,291            | Liquefied natural gas   |
| 15,170  | 195  | 46,475   | 29,096           | Town gas(A)   |
| 16,677  | 215  | 50,704   | 31,937           | Town gas(B)   |
| -   | -  | -  | -                | Used tires  |
| -   | -  | -  | -                | Waste plastic   |
| -   | -  | -  | -                | Refuse Paper & Plastic Fuel                                       |
| <b>575,826</b>  | <b>47,442</b>  | <b>727,415</b>   | <b>557,750</b>   | <b>Electricity</b>  |

(August, 2019)



(2) 指定生産品目別燃料在庫 Fuel inventory, broken down by designated product

| 指 定 生 産 品 目<br>Specified Products                                      | 原 油(注1)<br>Crude<br>petroleum<br>kl | ガソリン<br>Gasoline<br>kl | ナフサ<br>Naphtha<br>kl | 改質生成油<br>Oil produced by<br>conversion<br>kl | 灯 油<br>Kerosene<br>kl |
|--|-------------------------------------|------------------------|----------------------|--|-----------------------|
| <b>化 学 工 業</b><br>Chemical products industry                           |                                     |                        |                      |  |                       |
| 石 油 化 学 製 品<br>Petro-chemicals   | -                                   | -                      | 732,902              | 3,823  | 6,115                 |
| アンモニア及びアンモニア誘導品<br>Ammonia and ammonia-derived products                | -                                   | -                      | -                    | -  | -                     |
| ソ ー ダ 工 業 製 品<br>soda products   | 86                                  | -                      | -                    | -  | 2                     |
| <b>窯 業 ・ 土 石 製 品 工 業</b><br>Ceramics, clay and stone products industry |                                     |                        |                      |  |                       |
| セ メ ン ト<br>Cement  | ...                                 | -                      | -                    | -  | 44                    |
| 板 ガ ラ ス<br>Sheet Glass   | ...                                 | -                      | -                    | -  | -                     |
| 石 灰<br>Lime  | ...                                 | -                      | -                    | -  | 299                   |
| <b>非 鉄 金 属 地 金 工 業</b><br>Non-ferrous metals products industry         |                                     |                        |                      |  |                       |
| 銅<br>Copper  | ...                                 | -                      | -                    | -  | 96                    |
| 鉛<br>Lead  | ...                                 | -                      | -                    | -  | -                     |
| 亜 鉛<br>Zinc  | ...                                 | 1                      | -                    | -  | -                     |
| ア ル ミ ニ ウ ム<br>Aluminum  | ...                                 | 1                      | -                    | -  | 199                   |
| ア ル ミ ニ ウ ム 二 次 地 金<br>Secondary aluminum ingots                       | ...                                 | -                      | -                    | -  | 103                   |

注1. 原油にはNGL・コンデンセートを含む。  
 2. 石炭コークスにはピッチコークスを含む。

(令和1年8月)

| 軽油<br>Gas oil<br>kl | A重油<br>Heavy Fuel<br>oil A<br>kl | B・C重油<br>Heavy Fuel<br>oil B・C<br>kl | 液化石油ガス<br>LPG<br>t | オイルコークス<br>Petroleum<br>Coke<br>t | 石炭<br>Coal<br>t | 石炭コークス(注2)<br>Coal Coke<br>t |
|---------------------|----------------------------------|--------------------------------------|--------------------|-----------------------------------|-----------------|------------------------------|
| 16,308              | 1,314                            | 14,263                               | 46,933             | 40,263                            | 53,231          | -                            |
| -                   | 118                              | 1,760                                | 605                | 56,002                            | 19,207          | -                            |
| -                   | 734                              | 1,337                                | 14                 | 32,465                            | 230,953         | 1,267                        |
| 12                  | 1,601                            | 11,586                               | -                  | 189,310                           | 529,603         | -                            |
| -                   | 60                               | 15,919                               | 83                 | -                                 | -               | -                            |
| 25                  | 1,304                            | 5,482                                | -                  | 1,958                             | 18,045          | 10,542                       |
| -                   | 831                              | 1,716                                | 39                 | -                                 | 20,047          | 45                           |
| -                   | 276                              | -                                    | -                  | 41                                | 43              | 3,365                        |
| 1                   | 347                              | 90                                   | 2                  | -                                 | -               | 6,289                        |
| 1                   | 155                              | 191                                  | 7                  | -                                 | -               | -                            |
| 8                   | 352                              | 70                                   | 8                  | -                                 | -               | -                            |

Note 1. Crude oil includes NGL・condensate in liquid form.

2. Coal coke includes pitch coke.

(August, 2019)

4. 地域別統計 Regional statistics  
 経済産業局別業種別エネルギー消費

Energy consumption in each region of the  
 Bureau of Economy, Trade and Industry, by industry

1) 北海道経済産業局管内 Hokkaido Bureau of Economy, Trade and Industry

| 種 別                            | 単 位                | 合 計              | 重複事業所分<br>補 正 量           | パルプ・紙・<br>板 紙 工 業          | 化 学 工 業           | 化 学 繊 維<br>工 業  |
|--------------------------------|--------------------|------------------|---------------------------|----------------------------|-------------------|-----------------|
|                                | Unit               | Total            | Duplication<br>adjustment | Pulp, paper,<br>paperboard | Chemical industry | Chemical fibers |
| <b>合 計 ( 原 油 換 算 )</b>         | kl                 | <b>525,540</b>   | -                         | <b>159,323</b>             | <b>7,620</b>      | -               |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | "                  | <b>80,795</b>    | -                         | <b>18,221</b>              | <b>6,891</b>      | -               |
| 原 ガ ソ リ ン                      | "                  | 87               | -                         | ...                        | 87                | ...             |
| ナ フ サ                          | "                  | 2                | -                         | -                          | -                 | -               |
| 改 質 生 成 油                      | "                  | -                | -                         | -                          | -                 | -               |
| 灯 油                            | "                  | 91               | -                         | 85                         | -                 | -               |
| 軽 油                            | "                  | 83               | -                         | -                          | -                 | -               |
| A 重 油                          | "                  | 4,019            | -                         | 21                         | 56                | -               |
| B・C 重 油                        | "                  | 21,552           | -                         | 15,263                     | -                 | -               |
| 炭 化 水 素 油                      | "                  | 243              | -                         | 243                        | -                 | -               |
| 液 化 石 油 ガ ス                    | t                  | 6,366            | -                         | 263                        | 5,146             | -               |
| 石 油 系 炭 化 水 素 ガ ス              | 1000m <sup>3</sup> | 33,684           | -                         | -                          | -                 | -               |
| オ イ ル コ ー ク ス                  | t                  | 6,480            | -                         | 909                        | -                 | -               |
| ア ス フ ァ ル ト                    | "                  | -                | -                         | -                          | -                 | -               |
| 再 生 油 ( 石 油 由 来 )              | kl                 | 429              | -                         | 273                        | -                 | -               |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                 | <b>424,315</b>   | -                         | <b>135,269</b>             | -                 | -               |
| 石 炭 コ ー ク ス                    | t                  | 356,698          | -                         | 117,289                    | -                 | -               |
| コ ー ク ス 炉 ガ ス                  | 1000m <sup>3</sup> | 77,015           | -                         | 308                        | -                 | -               |
| 高 炉 ガ ス                        | "                  | 32,567           | -                         | -                          | -                 | -               |
| 液 化 天 然 ガ ス                    | "                  | 304,753          | -                         | -                          | -                 | -               |
| 都 市 ガ ス ( B )                  | t                  | 2,271            | -                         | 95                         | -                 | -               |
| 回 収 黒 液                        | 1000m <sup>3</sup> | 50               | -                         | -                          | -                 | -               |
| 廃 プ ラ ス チ ッ ク                  | 絶乾(Dry)t           | 143,965          | -                         | 143,965                    | ...               | ...             |
| R P F                          | t                  | 4,776            | -                         | 127                        | -                 | -               |
|                                | "                  | 1,011            | -                         | 1,011                      | -                 | -               |
| <b>電 力</b>                     | 1000kWh            | <b>535,920</b>   | -                         | <b>294,018</b>             | <b>6,737</b>      | -               |
| う ち 購 入 分                      | "                  | 137,704          | -                         | 40,324                     | 6,737             | -               |
| <b>蒸 気</b>                     | t                  | <b>3,054,803</b> | -                         | <b>1,724,609</b>           | <b>5,119</b>      | -               |
| う ち 受 入 分                      | "                  | 80,126           | -                         | -                          | 1,480             | -               |

2) 東北経済産業局管内 Tohoku Bureau of Economy, Trade and Industry

|                                |                    |                  |   |                  |                |              |
|--------------------------------|--------------------|------------------|---|------------------|----------------|--------------|
| <b>合 計 ( 原 油 換 算 )</b>         | kl                 | <b>449,610</b>   | - | <b>163,142</b>   | <b>96,244</b>  | <b>173</b>   |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | "                  | <b>149,332</b>   | - | <b>5,386</b>     | <b>83,366</b>  | -            |
| 原 ガ ソ リ ン                      | "                  | -                | - | ...              | -              | ...          |
| ナ フ サ                          | "                  | 4                | - | -                | -              | -            |
| 改 質 生 成 油                      | "                  | -                | - | -                | -              | -            |
| 灯 油                            | "                  | 70,935           | - | -                | 70,935         | -            |
| 軽 油                            | "                  | 1,041            | - | -                | -              | -            |
| A 重 油                          | "                  | 268              | - | 4                | -              | -            |
| B・C 重 油                        | "                  | 4,247            | - | 798              | 223            | -            |
| 炭 化 水 素 油                      | "                  | 9,260            | - | 3,277            | -              | -            |
| 液 化 石 油 ガ ス                    | "                  | 1,124            | - | 90               | -              | -            |
| 石 油 系 炭 化 水 素 ガ ス              | t                  | 14,607           | - | 199              | 12,533         | -            |
| オ イ ル コ ー ク ス                  | 1000m <sup>3</sup> | 37,444           | - | -                | 2,028          | -            |
| ア ス フ ァ ル ト                    | t                  | 5,897            | - | 662              | -              | -            |
| 再 生 油 ( 石 油 由 来 )              | "                  | -                | - | -                | -              | -            |
|                                | kl                 | 999              | - | 152              | -              | -            |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                 | <b>260,649</b>   | - | <b>154,545</b>   | <b>9,921</b>   | -            |
| 石 炭 コ ー ク ス                    | t                  | 210,562          | - | 94,035           | 14,018         | -            |
| コ ー ク ス 炉 ガ ス                  | "                  | 11,897           | - | -                | -              | -            |
| 高 炉 ガ ス                        | 1000m <sup>3</sup> | -                | - | -                | -              | -            |
| 液 化 天 然 ガ ス                    | "                  | 38,477           | - | -                | -              | -            |
| 都 市 ガ ス ( B )                  | t                  | 5,609            | - | -                | 434            | -            |
| 回 収 黒 液                        | 1000m <sup>3</sup> | 956              | - | -                | -              | -            |
| 廃 プ ラ ス チ ッ ク                  | 絶乾(Dry)t           | 183,988          | - | 183,988          | ...            | ...          |
| R P F                          | t                  | 4,597            | - | 179              | -              | -            |
|                                | "                  | 9,507            | - | 9,481            | -              | -            |
| <b>電 力</b>                     | 1000kWh            | <b>830,380</b>   | - | <b>341,723</b>   | <b>40,861</b>  | <b>970</b>   |
| う ち 購 入 分                      | "                  | 391,886          | - | 34,516           | 18,216         | 970          |
| <b>蒸 気</b>                     | t                  | <b>2,639,518</b> | - | <b>2,068,408</b> | <b>157,765</b> | <b>1,197</b> |
| う ち 受 入 分                      | "                  | 33,427           | - | -                | 18,263         | 1,197        |

(令和1年8月)

| 石油製品<br>工業         | 窯業・土石<br>製品工業                        | ガラス製品<br>工業    | 鉄鋼業            | 非鉄金属<br>地金工業       | 機械工業          | Kind of energy  |
|--------------------|--------------------------------------|----------------|----------------|--------------------|---------------|---|
| Petroleum products | Ceramics, clay and<br>stone products | Glass products | Iron and steel | Non-ferrous metals | Machinery     |   |
| <b>44,862</b>      | <b>43,535</b>                        | -              | <b>266,676</b> | -                  | <b>3,525</b>  | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |
| <b>44,862</b>      | <b>1,624</b>                         | -              | <b>9,142</b>   | -                  | <b>55</b>     | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |
| ...                | ...                                  | ...            | ...            | ...                | ...           | Crude petroleum   |
| -                  | 2                                    | -              | -              | -                  | -             | Gasoline  |
| -                  | -                                    | -              | -              | -                  | -             | Naphtha   |
| -                  | -                                    | -              | -              | -                  | -             | Oil produced by conversion  |
| -                  | -                                    | -              | 6              | -                  | -             | Kerosene  |
| 1                  | 7                                    | -              | 75             | -                  | -             | Gas oils  |
| -                  | 420                                  | -              | 3,522          | -                  | -             | Heavy Fuel oil A  |
| 5,339              | 950                                  | -              | -              | -                  | -             | Heavy Fuel oil B・C  |
| -                  | -                                    | -              | -              | -                  | -             | Hydrocarbon oil   |
| 33,684             | -                                    | -              | 915            | -                  | 42            | Liquefied petroleum gas   |
| -                  | -                                    | -              | -              | -                  | -             | Hydrocarbon gas   |
| -                  | -                                    | -              | 5,571          | -                  | -             | Petroleum coke  |
| -                  | -                                    | -              | -              | -                  | -             | Asphalt   |
| -                  | 156                                  | -              | -              | -                  | -             | Reproduction oil (Oil origin)                                     |
| -                  | <b>40,251</b>                        | -              | <b>246,022</b> | -                  | <b>2,774</b>  | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |
| -                  | 55,925                               | -              | 183,484        | -                  | -             | Coal  |
| -                  | -                                    | -              | 76,707         | -                  | -             | Coal coke   |
| -                  | 182                                  | -              | 32,385         | -                  | -             | Coke oven gas   |
| -                  | -                                    | -              | 304,753        | -                  | -             | Blast furnace gas   |
| -                  | -                                    | -              | 248            | -                  | 1,928         | Liquefied natural gas   |
| -                  | -                                    | -              | -              | -                  | 50            | Town gas(B)   |
| ...                | ...                                  | ...            | ...            | ...                | ...           | Black liquor  |
| -                  | 3,806                                | -              | 843            | -                  | -             | Waste plastic   |
| -                  | -                                    | -              | -              | -                  | -             | Refuse Paper & Plastic Fuel                                       |
| <b>36,391</b>      | <b>54,694</b>                        | -              | <b>128,992</b> | -                  | <b>15,088</b> | <b>Electricity</b>  |
| -                  | 17,803                               | -              | 65,358         | -                  | 7,482         | among those purchased   |
| <b>199,841</b>     | <b>154,020</b>                       | -              | <b>971,214</b> | -                  | <b>...</b>    | <b>Steam</b>  |
| -                  | 64                                   | -              | 78,582         | -                  | ...           | among those accepted  |
| <b>44,006</b>      | <b>34,494</b>                        | <b>1,623</b>   | <b>71,902</b>  | <b>29,336</b>      | <b>8,689</b>  | <b>Total</b><br><b>(Crude petroleum equivalent)</b>               |
| <b>44,005</b>      | <b>5,111</b>                         | <b>195</b>     | <b>7,822</b>   | <b>2,457</b>       | <b>990</b>    | <b>Oil based fuels</b><br><b>(Crude petroleum equivalent)</b>     |
| ...                | ...                                  | ...            | ...            | ...                | ...           | Crude petroleum   |
| -                  | -                                    | -              | -              | -                  | 4             | Gasoline  |
| -                  | -                                    | -              | -              | -                  | -             | Naphtha   |
| -                  | -                                    | -              | -              | -                  | -             | Oil produced by conversion  |
| -                  | 2                                    | 3              | 222            | 169                | 645           | Kerosene  |
| -                  | 123                                  | 1              | 13             | 126                | 1             | Gas oils  |
| 3                  | 106                                  | 187            | 1,771          | 868                | 291           | Heavy Fuel oil A  |
| 858                | 12                                   | -              | 5,059          | 54                 | -             | Heavy Fuel oil B・C  |
| -                  | 495                                  | -              | -              | 539                | -             | Hydrocarbon oil   |
| 1,511              | -                                    | 2              | 253            | 48                 | 61            | Liquefied petroleum gas   |
| 35,416             | -                                    | -              | -              | -                  | -             | Hydrocarbon gas   |
| -                  | 5,178                                | -              | -              | 57                 | -             | Petroleum coke  |
| -                  | -                                    | -              | -              | -                  | -             | Asphalt   |
| -                  | 320                                  | -              | -              | 527                | -             | Reproduction oil (Oil origin)                                     |
| -                  | <b>26,394</b>                        | <b>308</b>     | <b>51,206</b>  | <b>15,801</b>      | <b>2,474</b>  | <b>Non-oil based fuels</b><br><b>(Crude petroleum equivalent)</b> |
| -                  | 32,858                               | -              | 65,796         | 3,855              | -             | Coal  |
| -                  | -                                    | -              | 1,112          | 10,785             | -             | Coal coke   |
| -                  | -                                    | -              | -              | -                  | -             | Coke oven gas   |
| -                  | -                                    | -              | -              | 38,477             | -             | Blast furnace gas   |
| -                  | -                                    | 218            | 3,782          | 1,175              | -             | Liquefied natural gas   |
| -                  | -                                    | -              | -              | -                  | 956           | Town gas(B)   |
| ...                | ...                                  | ...            | ...            | ...                | ...           | Black liquor  |
| -                  | 4,418                                | -              | -              | -                  | -             | Waste plastic   |
| -                  | 26                                   | -              | -              | -                  | -             | Refuse Paper & Plastic Fuel                                       |
| <b>34,777</b>      | <b>39,655</b>                        | <b>12,000</b>  | <b>178,243</b> | <b>120,640</b>     | <b>61,511</b> | <b>Electricity</b>  |
| 3                  | 32,139                               | 8,654          | 138,405        | 102,811            | 56,172        | among those purchased   |
| <b>220,741</b>     | <b>35,762</b>                        | -              | <b>9,313</b>   | <b>146,332</b>     | <b>...</b>    | <b>Steam</b>  |
| -                  | -                                    | -              | -              | 13,967             | ...           | among those accepted  |

(August, 2019)

3) 関東経済産業局管内

Kanto Bureau of Economy, Trade and Industry

| 種 別                     | 単 位<br>Unit        | 合 計<br>Total | 重複事業所分<br>補 正 量<br>Duplication<br>adjustment | パルプ・紙・<br>板紙工業<br>Pulp, paper,<br>paperboard | 化学工業<br>Chemical industry | 化学繊維<br>工 業<br>Chemical fibers |
|-------------------------|--------------------|--------------|--|--|---------------------------|--------------------------------|
| 合 計 ( 原 油 換 算 )         | kl                 | 5,832,572    | 36,760                                       | 187,298                                      | 2,707,370                 | 12,354                         |
| 石 油 系 燃 料 ( 原 油 換 算 )   | "                  | 2,996,047    | 4,310  | 12,678                                       | 2,463,518                 | 233                            |
| 原 ガ ソ リ 油               | "                  | -            | -  | ...  | -                         | ...                            |
| ナ フ サ                   | "                  | 1,107        | 6  | 1  | 8                         | 3                              |
| 改 質 生 成 油               | "                  | 1,414,998    | -  | -  | 1,414,308                 | -                              |
| 灯 質 生 成 油               | "                  | 486,795      | -  | -  | 486,795                   | -                              |
| 軽 油                     | "                  | 26,859       | 48   | 250  | 24,645                    | -                              |
| A 重 油                   | "                  | 12,660       | 295  | 30   | 10,450                    | -                              |
| B ・ C 重 油               | "                  | 5,150        | 319  | 1,443  | 76                        | -                              |
| 炭 化 水 素 油               | "                  | 79,245       | 256  | 9,862  | 11,771                    | 98                             |
| 液 化 石 油 ガ ス             | t                  | 59,649       | -  | -  | 40,803                    | -                              |
| 石 油 系 炭 化 水 素 ガ ス       | 1000m <sup>3</sup> | 284,254      | 6  | 183  | 258,402                   | 95                             |
| オ イ ル コ ー ク ス           | t                  | 559,130      | -  | -  | 276,345                   | -                              |
| ア ス フ ェ ル ト             | "                  | 64,504       | 4,354  | -  | 54,275                    | -                              |
| 再 生 油 ( 石 油 由 来 )       | kl                 | 48,403       | -  | -  | -                         | -                              |
|                         |                    | 8,479        | -  | 34   | 1,712                     | -                              |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl                 | 2,492,915    | 22,852                                       | 160,052                                      | 101,148                   | 11,864                         |
| 石 炭 コ ー ク ス             | t                  | 1,562,067    | 11,370                                       | 20,050                                       | 11,370                    | -                              |
| コ ー ク ス 炉 ガ ス           | 1000m <sup>3</sup> | 736,350      | 4,798  | -  | 4,798                     | -                              |
| 高 炉 ガ ス                 | "                  | 267,879      | -  | -  | 3,587                     | -                              |
| 液 化 天 然 ガ ス             | t                  | 2,094,901    | -  | -  | -                         | -                              |
| 都 市 ガ ス ( B )           | 1000m <sup>3</sup> | 23,875       | -  | 4,530  | 13,742                    | -                              |
| 回 収 黒 液                 | 絶乾(Dry)t           | 162,120      | -  | 39,522                                       | 16,394                    | 11,171                         |
| 廃 プ ラ ス チ ッ ク           | t                  | 133,300      | -  | 133,300                                      | ...                       | ...                            |
| R P F                   | "                  | 23,483       | -  | -  | 5,044                     | -                              |
|                         | "                  | 20,231       | -  | 16,798                                       | -                         | -                              |
| 電 力                     | 1000kWh            | 4,205,555    | 117,302                                      | 438,830                                      | 1,100,953                 | 29,958                         |
| う ち 購 入 分               | "                  | 2,572,382    | 62,710                                       | 144,639                                      | 721,090                   | 2,755                          |
| 蒸 気                     | t                  | 11,590,064   | 124,245                                      | 2,030,106                                    | 4,263,074                 | 58,439                         |
| う ち 受 入 分               | "                  | 1,343,575    | 14,152                                       | 14,941                                       | 1,034,468                 | -                              |

4) 中部経済産業局管内

Chubu Bureau of Economy, Trade and Industry

|                         |                    |           |        |           |           |        |
|-------------------------|--------------------|-----------|--------|-----------|-----------|--------|
| 合 計 ( 原 油 換 算 )         | kl                 | 1,878,384 | 7,763  | 128,381   | 616,562   | 15,230 |
| 石 油 系 燃 料 ( 原 油 換 算 )   | "                  | 796,663   | 72     | 16,177    | 539,770   | 3,791  |
| 原 ガ ソ リ 油               | "                  | -         | -      | ...       | -         | ...    |
| ナ フ サ                   | "                  | 1,619     | 7      | 1         | -         | -      |
| 改 質 生 成 油               | "                  | 197,799   | -      | -         | 197,799   | -      |
| 灯 質 生 成 油               | "                  | 243,422   | -      | -         | 243,422   | -      |
| 軽 油                     | "                  | 3,869     | 49     | 20        | 12        | 192    |
| A 重 油                   | "                  | 970       | 5      | 45        | 5         | 6      |
| B ・ C 重 油               | "                  | 5,256     | 14     | 568       | 274       | 416    |
| 炭 化 水 素 油               | "                  | 45,689    | -      | 8,956     | 3,833     | 465    |
| 液 化 石 油 ガ ス             | t                  | 22,856    | -      | 1,974     | 15,457    | 46     |
| 石 油 系 炭 化 水 素 ガ ス       | 1000m <sup>3</sup> | 48,259    | -      | 104       | 37,899    | 57     |
| オ イ ル コ ー ク ス           | t                  | 138,933   | -      | -         | 40,467    | -      |
| ア ス フ ェ ル ト             | "                  | 59,706    | -      | 4,619     | 38,031    | 3,307  |
| 再 生 油 ( 石 油 由 来 )       | kl                 | 36,877    | -      | -         | -         | -      |
|                         |                    | 8,593     | -      | -         | -         | -      |
| 非 石 油 系 燃 料 ( 原 油 換 算 ) | kl                 | 903,100   | 6,060  | 105,300   | 51,554    | 5,088  |
| 石 炭 コ ー ク ス             | t                  | 490,722   | -      | 7,522     | 40,106    | -      |
| コ ー ク ス 炉 ガ ス           | 1000m <sup>3</sup> | 222,583   | -      | -         | -         | -      |
| 高 炉 ガ ス                 | "                  | 77,969    | -      | -         | -         | -      |
| 液 化 天 然 ガ ス             | t                  | 877,032   | -      | -         | -         | -      |
| 都 市 ガ ス ( B )           | 1000m <sup>3</sup> | 27,623    | -      | 1,756     | 17,382    | 159    |
| 回 収 黒 液                 | 絶乾(Dry)t           | 95,714    | 5,707  | 1,551     | 374       | 4,580  |
| 廃 プ ラ ス チ ッ ク           | t                  | 182,260   | -      | 182,260   | ...       | ...    |
| R P F                   | "                  | 6,981     | -      | 3,501     | -         | -      |
|                         | "                  | 9,239     | -      | 9,081     | -         | -      |
| 電 力                     | 1000kWh            | 2,588,565 | 19,941 | 258,690   | 284,896   | 70,389 |
| う ち 購 入 分               | "                  | 1,707,230 | 17,526 | 59,889    | 113,932   | 55,024 |
| 蒸 気                     | t                  | 5,062,845 | -      | 1,429,818 | 1,188,632 | 89,723 |
| う ち 受 入 分               | "                  | 250,592   | -      | 17,298    | 202,595   | 17,827 |

(令和1年8月)

| 石油製品<br>工業         | 窯業・土石<br>製品工業                        | ガラス製品<br>工業    | 鉄鋼業              | 非鉄金属<br>地金工業       | 機械工業             | Kind of energy   |
|--------------------|--------------------------------------|----------------|------------------|--------------------|------------------|--|
| Petroleum products | Ceramics, clay and<br>stone products | Glass products | Iron and steel   | Non-ferrous metals | Machinery        |  |
| <b>504,416</b>     | <b>131,404</b>                       | <b>13,638</b>  | <b>2,218,889</b> | <b>14,914</b>      | <b>79,049</b>    | <b>Total</b><br>(Crude petroleum equivalent)               |
| <b>465,606</b>     | <b>29,851</b>                        | <b>1,937</b>   | <b>16,745</b>    | <b>2,531</b>       | <b>7,257</b>     | <b>Oil based fuels</b><br>(Crude petroleum equivalent)     |
| ...                | ...                                  | ...            | ...              | ...                | ...              | Crude petroleum  |
| 3                  | 9                                    | -              | 46               | 6                  | 1,037            | Gasoline   |
| 690                | -                                    | -              | -                | -                  | -                | Naphtha  |
| -                  | -                                    | -              | -                | -                  | -                | Oil produced by conversion                                 |
| 55                 | 219                                  | -              | 704              | 48                 | 986              | Kerosene   |
| 26                 | 757                                  | 2              | 376              | 51                 | 1,263            | Gas oils   |
| 896                | 334                                  | 7              | 1,032            | 789                | 892              | Heavy Fuel oil A   |
| 42,825             | 12,631                               | 1,640          | 347              | 327                | -                | Heavy Fuel oil B・C   |
| 12,249             | 3,570                                | -              | 2,566            | 461                | -                | Hydrocarbon oil  |
| 19,162             | 107                                  | 116            | 3,686            | 23                 | 2,486            | Liquefied petroleum gas                                    |
| 282,782            | -                                    | -              | 3                | -                  | -                | Hydrocarbon gas  |
| -                  | 6,000                                | -              | 8,583            | -                  | -                | Petroleum coke   |
| 48,403             | -                                    | -              | -                | -                  | -                | Asphalt  |
| -                  | 6,011                                | -              | -                | 722                | -                | Reproduction oil (Oil origin)                              |
| <b>6,233</b>       | <b>87,937</b>                        | <b>9,583</b>   | <b>2,107,369</b> | <b>1,939</b>       | <b>29,643</b>    | <b>Non-oil based fuels</b><br>(Crude petroleum equivalent) |
| -                  | 75,844                               | -              | 1,466,173        | -                  | -                | Coal   |
| -                  | 9,040                                | -              | 726,117          | 800                | 393              | Coal coke  |
| -                  | 9,698                                | -              | 254,594          | -                  | -                | Coke oven gas  |
| -                  | -                                    | -              | 2,094,901        | -                  | -                | Blast furnace gas  |
| -                  | 24                                   | 2,386          | 930              | 65                 | 2,198            | Liquefied natural gas                                      |
| 303                | 1,555                                | 5,854          | 61,844           | 766                | 24,711           | Town gas(B)  |
| ...                | ...                                  | ...            | ...              | ...                | ...              | Black liquor   |
| -                  | 10,110                               | -              | 8,329            | -                  | -                | Waste plastic  |
| -                  | 3,433                                | -              | -                | -                  | -                | Refuse Paper & Plastic Fuel                                |
| <b>437,340</b>     | <b>228,391</b>                       | <b>25,641</b>  | <b>1,441,163</b> | <b>110,068</b>     | <b>510,513</b>   | <b>Electricity</b>   |
| 144,143            | 116,326                              | 22,770         | 998,090          | 32,174             | 453,105          | among those purchased                                      |
| <b>2,876,913</b>   | <b>368,459</b>                       | <b>2,250</b>   | <b>2,110,822</b> | <b>4,246</b>       | <b>...</b>       | <b>Steam</b>   |
| 277,314            | 121                                  | -              | 27,923           | 2,960              | ...              | among those accepted                                       |
| <b>202,224</b>     | <b>51,242</b>                        | <b>5,020</b>   | <b>704,270</b>   | <b>10,410</b>      | <b>152,808</b>   | <b>Total</b><br>(Crude petroleum equivalent)               |
| <b>182,930</b>     | <b>28,844</b>                        | <b>1,177</b>   | <b>15,208</b>    | <b>3,195</b>       | <b>5,643</b>     | <b>Oil based fuels</b><br>(Crude petroleum equivalent)     |
| ...                | ...                                  | ...            | ...              | ...                | ...              | Crude petroleum  |
| 2                  | 4                                    | -              | 5                | -                  | 1,614            | Gasoline   |
| -                  | -                                    | -              | -                | -                  | -                | Naphtha  |
| -                  | -                                    | -              | -                | -                  | -                | Oil produced by conversion                                 |
| -                  | 478                                  | 3              | 3,083            | 3                  | 127              | Kerosene   |
| 15                 | 77                                   | -              | 442              | 39                 | 346              | Gas oils   |
| 267                | 116                                  | 9              | 1,151            | 350                | 2,119            | Heavy Fuel oil A   |
| 21,319             | 9,396                                | 737            | 268              | 715                | -                | Heavy Fuel oil B・C   |
| -                  | 4,243                                | -              | -                | 1,136              | -                | Hydrocarbon oil  |
| 4,836              | -                                    | -              | 4,062            | 81                 | 1,220            | Liquefied petroleum gas                                    |
| 98,466             | -                                    | -              | -                | -                  | -                | Hydrocarbon gas  |
| -                  | 7,194                                | -              | 6,555            | -                  | -                | Petroleum coke   |
| 36,877             | -                                    | -              | -                | -                  | -                | Asphalt  |
| -                  | 7,576                                | 353            | -                | 664                | -                | Reproduction oil (Oil origin)                              |
| <b>16,984</b>      | <b>18,420</b>                        | <b>2,836</b>   | <b>644,372</b>   | <b>2,438</b>       | <b>62,168</b>    | <b>Non-oil based fuels</b><br>(Crude petroleum equivalent) |
| 16,335             | 11,168                               | -              | 415,591          | -                  | -                | Coal   |
| -                  | 1,136                                | -              | 220,651          | 796                | -                | Coal coke  |
| -                  | 3,996                                | -              | 73,973           | -                  | -                | Coke oven gas  |
| -                  | -                                    | -              | 877,032          | -                  | -                | Blast furnace gas  |
| 4,349              | -                                    | 437            | 3,286            | -                  | 254              | Liquefied natural gas                                      |
| -                  | 5,003                                | 2,090          | 27,897           | 1,726              | 58,200           | Town gas(B)  |
| ...                | ...                                  | ...            | ...              | ...                | ...              | Black liquor   |
| -                  | 1,794                                | -              | 1,686            | -                  | -                | Waste plastic  |
| -                  | 158                                  | -              | -                | -                  | -                | Refuse Paper & Plastic Fuel                                |
| <b>195,458</b>     | <b>60,228</b>                        | <b>10,874</b>  | <b>667,340</b>   | <b>35,286</b>      | <b>1,025,345</b> | <b>Electricity</b>   |
| 16,461             | 42,707                               | 10,831         | 479,190          | 33,001             | 913,721          | among those purchased                                      |
| <b>1,786,610</b>   | <b>63,842</b>                        | <b>447</b>     | <b>503,773</b>   | <b>-</b>           | <b>...</b>       | <b>Steam</b>   |
| 11,262             | 80                                   | -              | 1,530            | -                  | ...              | among those accepted                                       |

(August, 2019)

5) 近畿経済産業局管内

Kansai Bureau of Economy, Trade and Industry

| 種 別                            | 単 位<br>Unit        | 合 計<br>Total     | 重複事業所分<br>補 正 量<br>Duplication<br>adjustment | パルプ・紙・<br>板紙工業<br>Pulp, paper,<br>paperboard | 化学工業<br>Chemical industry | 化学繊維<br>工 業<br>Chemical fibers |
|--------------------------------|--------------------|------------------|--|--|---------------------------|--------------------------------|
| <b>合 計 ( 原 油 換 算 )</b>         | kl                 | <b>2,138,772</b> | <b>35,020</b>                                | <b>30,835</b>                                | <b>753,197</b>            | <b>64,088</b>                  |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | "                  | <b>639,286</b>   | <b>98</b>                                    | <b>154</b>                                   | <b>463,361</b>            | <b>1,436</b>                   |
| 原 ガ ソ リ 油                      | "                  | -                | -  | ...  | -                         | ...                            |
| ナ フ サ                          | "                  | 408              | 1  | -  | 8                         | 2                              |
| 改 質 生 成 油                      | "                  | 145,499          | -  | -  | 145,118                   | -                              |
| 灯 油                            | "                  | 228,281          | -  | -  | 228,281                   | -                              |
| 軽 油                            | "                  | 2,024            | -  | 1  | 171                       | 1                              |
| A 重 油                          | "                  | 1,063            | 86   | 12   | 27                        | 6                              |
| B・C 重 油                        | "                  | 2,344            | 11   | 128  | 11                        | 856                            |
| 炭 化 水 素 油                      | "                  | 67,116           | -  | -  | 54,018                    | 517                            |
| 液 化 石 油 ガ ス                    | t                  | 14,706           | -  | -  | 4,376                     | -                              |
| 石 油 系 炭 化 水 素 ガ ス              | 1000m <sup>3</sup> | 43,989           | 2  | 5  | 37,992                    | 2                              |
| オ イ ル コ ー ク ス                  | t                  | 123,649          | -  | -  | 14,671                    | -                              |
| ア ス フ ァ ル ト                    | "                  | 11,384           | -  | -  | -                         | -                              |
| 再 生 油 ( 石 油 由 来 )              | kl                 | -                | -  | -  | -                         | -                              |
|                                |                    | 1,582            | -  | 5  | -                         | -                              |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                 | <b>1,378,930</b> | <b>26,252</b>                                | <b>28,323</b>                                | <b>264,893</b>            | <b>53,874</b>                  |
| 石 炭 コ ー ク ス                    | t                  | 990,201          | 22,888                                       | 6,695  | 313,336                   | 49,970                         |
| コ ー ク ス 炉 ガ ス                  | 1000m <sup>3</sup> | 349,281          | -  | -  | -                         | -                              |
| 高 炉 ガ ス                        | "                  | 144,356          | -  | -  | 17,567                    | -                              |
| 液 化 天 然 ガ ス                    | t                  | 1,189,877        | -  | -  | 106,128                   | -                              |
| 都 市 ガ ス ( B )                  | t                  | 31,338           | 1,927  | -  | 16,433                    | 510                            |
| 回 収 黒 液                        | 1000m <sup>3</sup> | 134,929          | 7,847  | 18,068                                       | 13,840                    | 17,940                         |
| 廃 プ ラ ス チ ッ ク                  | 絶乾(Dry)t           | -                | -  | -  | ...                       | ...                            |
| R P F                          | t                  | 259              | -  | -  | -                         | -                              |
|                                | "                  | 1,889            | -  | 673  | -                         | 1,212                          |
| <b>電 力</b>                     | 1000kWh            | <b>1,925,163</b> | <b>143,364</b>                               | <b>74,348</b>                                | <b>258,753</b>            | <b>204,979</b>                 |
| う ち 購 入 分                      | "                  | 1,053,909        | 93,198                                       | 25,350                                       | 174,999                   | 76,130                         |
| <b>蒸 気</b>                     | t                  | <b>4,000,625</b> | <b>209,114</b>                               | <b>316,124</b>                               | <b>926,201</b>            | <b>626,556</b>                 |
| う ち 受 入 分                      | "                  | 325,701          | -  | -  | 125,346                   | 24,538                         |

6) 中国経済産業局管内

Chugoku Bureau of Economy, Trade and Industry

|                                |                    |                   |                  |                  |                  |                |
|--------------------------------|--------------------|-------------------|------------------|------------------|------------------|----------------|
| <b>合 計 ( 原 油 換 算 )</b>         | kl                 | <b>3,973,388</b>  | <b>296,675</b>   | <b>93,448</b>    | <b>1,497,849</b> | <b>52,244</b>  |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | "                  | <b>1,397,408</b>  | <b>5,032</b>     | <b>13,042</b>    | <b>1,095,385</b> | <b>19,457</b>  |
| 原 ガ ソ リ 油                      | "                  | -                 | -                | ...              | -                | ...            |
| ナ フ サ                          | "                  | 79                | 61               | -                | 1                | 1              |
| 改 質 生 成 油                      | "                  | 562,444           | -                | -                | 559,065          | -              |
| 灯 油                            | "                  | 301,116           | -                | -                | 301,116          | -              |
| 軽 油                            | "                  | 56,840            | 989              | 78               | 55,246           | 42             |
| A 重 油                          | "                  | 621               | 64               | 12               | 5                | -              |
| B・C 重 油                        | "                  | 9,071             | 178              | 216              | 610              | 611            |
| 炭 化 水 素 油                      | "                  | 71,996            | 2,978            | 8,404            | 14,830           | 5,600          |
| 液 化 石 油 ガ ス                    | t                  | 34,285            | -                | -                | 29,976           | -              |
| 石 油 系 炭 化 水 素 ガ ス              | 1000m <sup>3</sup> | 63,085            | 437              | -                | 54,177           | 87             |
| オ イ ル コ ー ク ス                  | t                  | 235,025           | -                | -                | 113,772          | -              |
| ア ス フ ァ ル ト                    | "                  | 131,021           | -                | 4,710            | 41,743           | 16,337         |
| 再 生 油 ( 石 油 由 来 )              | kl                 | -                 | -                | -                | -                | -              |
|                                |                    | 436               | -                | -                | -                | -              |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                 | <b>2,388,600</b>  | <b>286,568</b>   | <b>77,600</b>    | <b>346,858</b>   | <b>30,143</b>  |
| 石 炭 コ ー ク ス                    | t                  | 1,841,402         | 421,303          | 16,697           | 475,524          | 40,577         |
| コ ー ク ス 炉 ガ ス                  | 1000m <sup>3</sup> | 791,108           | 3,678            | -                | 3,454            | -              |
| 高 炉 ガ ス                        | "                  | 197,160           | -                | -                | 1,249            | -              |
| 液 化 天 然 ガ ス                    | t                  | 1,789,925         | -                | -                | -                | -              |
| 都 市 ガ ス ( B )                  | 1000m <sup>3</sup> | 15,145            | -                | 191              | 9,405            | 254            |
| 回 収 黒 液                        | 絶乾(Dry)t           | 37,353            | 839              | 1,209            | 665              | 2,672          |
| 廃 プ ラ ス チ ッ ク                  | t                  | 172,372           | -                | 172,372          | ...              | ...            |
| R P F                          | t                  | 2,972             | 1,587            | -                | 1,587            | -              |
|                                | "                  | 783               | -                | 783              | -                | -              |
| <b>電 力</b>                     | 1000kWh            | <b>3,179,990</b>  | <b>787,542</b>   | <b>195,444</b>   | <b>1,189,230</b> | <b>97,315</b>  |
| う ち 購 入 分                      | "                  | 1,622,837         | 38,814           | 30,163           | 251,875          | 15,159         |
| <b>蒸 気</b>                     | t                  | <b>10,626,667</b> | <b>3,190,994</b> | <b>1,308,900</b> | <b>5,718,739</b> | <b>618,337</b> |
| う ち 受 入 分                      | "                  | 526,870           | 21,177           | -                | 465,499          | 17,847         |

(令和1年8月)

| 石油製品<br>工業         | 窯業・土石<br>製品工業                        | ガラス製品<br>工業    | 鉄鋼業              | 非鉄金属<br>地金工業       | 機械工業           | Kind of energy                      |
|--------------------|--------------------------------------|----------------|------------------|--------------------|----------------|-------------------------------------|
| Petroleum products | Ceramics, clay and<br>stone products | Glass products | Iron and steel   | Non-ferrous metals | Machinery      |                                     |
| <b>145,461</b>     | <b>61,689</b>                        | <b>28,301</b>  | <b>1,044,618</b> | <b>3,491</b>       | <b>42,111</b>  | <b>Total</b>                        |
| <b>138,228</b>     | <b>23,891</b>                        | <b>1,773</b>   | <b>7,937</b>     | <b>782</b>         | <b>1,823</b>   | <b>(Crude petroleum equivalent)</b> |
| ...                | ...                                  | ...            | ...              | ...                | ...            | <b>Oil based fuels</b>              |
| 10                 | 4                                    | -              | -                | -                  | 385            | <b>(Crude petroleum equivalent)</b> |
| 381                | -                                    | -              | -                | -                  | -              | Crude petroleum                     |
| -                  | -                                    | -              | -                | -                  | -              | Gasoline                            |
| 1,527              | 47                                   | -              | 105              | 7                  | 165            | Naphtha                             |
| 442                | 14                                   | -              | 276              | 28                 | 344            | Oil produced by conversion          |
| 63                 | 278                                  | -              | 97               | 630                | 292            | Kerosene                            |
| 5,012              | 5,774                                | 1,638          | 157              | -                  | -              | Gas oils                            |
| -                  | 10,330                               | -              | -                | -                  | -              | Heavy Fuel oil A                    |
| 3,110              | 328                                  | -              | 2,021            | 6                  | 527            | Heavy Fuel oil B・C                  |
| 108,978            | -                                    | -              | -                | -                  | -              | Hydrocarbon oil                     |
| -                  | 5,414                                | -              | 5,970            | -                  | -              | Liquefied petroleum gas             |
| -                  | -                                    | -              | -                | -                  | -              | Hydrocarbon gas                     |
| -                  | 1,443                                | -              | 34               | 100                | -              | Petroleum coke                      |
| <b>4,674</b>       | <b>35,442</b>                        | <b>20,436</b>  | <b>974,551</b>   | <b>2,061</b>       | <b>20,928</b>  | Asphalt                             |
| -                  | 45,892                               | -              | 597,196          | -                  | -              | Reproduction oil (Oil origin)       |
| -                  | 1,109                                | -              | 348,172          | -                  | -              | <b>Non-oil based fuels</b>          |
| -                  | 3,295                                | -              | 123,494          | -                  | -              | <b>(Crude petroleum equivalent)</b> |
| -                  | 4,156                                | -              | 1,079,593        | -                  | -              | Coal                                |
| 3,313              | -                                    | 3,211          | 7,343            | 340                | 2,115          | Coal coke                           |
| -                  | 549                                  | 14,977         | 59,017           | 1,489              | 16,896         | Coke oven gas                       |
| ...                | ...                                  | ...            | ...              | ...                | ...            | Blast furnace gas                   |
| -                  | 259                                  | -              | -                | -                  | -              | Liquefied natural gas               |
| -                  | 4                                    | -              | -                | -                  | -              | Town gas(B)                         |
| <b>113,275</b>     | <b>65,463</b>                        | <b>71,309</b>  | <b>1,032,385</b> | <b>6,968</b>       | <b>241,047</b> | Black liquor                        |
| 26,343             | 25,325                               | 65,483         | 538,433          | 6,913              | 208,131        | Waste plastic                       |
| <b>687,836</b>     | <b>310,533</b>                       | <b>9,465</b>   | <b>1,332,363</b> | <b>661</b>         | <b>...</b>     | Refuse Paper & Plastic Fuel         |
| 1,567              | 15                                   | -              | 174,235          | -                  | ...            | <b>Electricity</b>                  |
|                    |                                      |                |                  |                    |                | among those purchased               |
|                    |                                      |                |                  |                    |                | <b>Steam</b>                        |
|                    |                                      |                |                  |                    |                | among those accepted                |
| <b>233,789</b>     | <b>338,524</b>                       | <b>91</b>      | <b>2,004,806</b> | <b>10,128</b>      | <b>39,186</b>  | <b>Total</b>                        |
| <b>223,521</b>     | <b>11,966</b>                        | <b>-</b>       | <b>34,574</b>    | <b>2,212</b>       | <b>2,284</b>   | <b>(Crude petroleum equivalent)</b> |
| ...                | ...                                  | ...            | ...              | ...                | ...            | <b>Oil based fuels</b>              |
| 3                  | -                                    | -              | 60               | -                  | 75             | <b>(Crude petroleum equivalent)</b> |
| 3,379              | -                                    | -              | -                | -                  | -              | Crude petroleum                     |
| -                  | -                                    | -              | -                | -                  | -              | Gasoline                            |
| 38                 | 1,091                                | -              | 892              | 196                | 246            | Naphtha                             |
| -                  | 47                                   | -              | 417              | 85                 | 119            | Oil produced by conversion          |
| 60                 | 664                                  | -              | 5,084            | 1,140              | 864            | Kerosene                            |
| 33,751             | 4,337                                | -              | 7,323            | 729                | -              | Gas oils                            |
| -                  | 791                                  | -              | 3,517            | -                  | 1              | Heavy Fuel oil A                    |
| 2,509              | 304                                  | -              | 5,686            | 2                  | 757            | Heavy Fuel oil B・C                  |
| 121,253            | -                                    | -              | -                | -                  | -              | Hydrocarbon oil                     |
| 51,739             | 4,932                                | -              | 11,560           | -                  | -              | Liquefied petroleum gas             |
| -                  | -                                    | -              | -                | -                  | -              | Hydrocarbon gas                     |
| -                  | 436                                  | -              | -                | -                  | -              | Petroleum coke                      |
| <b>5,721</b>       | <b>321,823</b>                       | <b>-</b>       | <b>1,876,786</b> | <b>1,735</b>       | <b>14,504</b>  | Asphalt                             |
| -                  | 463,013                              | -              | 1,266,894        | -                  | -              | Reproduction oil (Oil origin)       |
| -                  | 6,392                                | -              | 782,515          | 2,201              | 224            | <b>Non-oil based fuels</b>          |
| -                  | 3,568                                | -              | 192,343          | -                  | -              | <b>(Crude petroleum equivalent)</b> |
| -                  | 401                                  | -              | 1,789,524        | -                  | -              | Coal                                |
| 4,055              | 9                                    | -              | 1,042            | -                  | 189            | Coal coke                           |
| -                  | 379                                  | -              | 20,460           | 59                 | 12,747         | Coke oven gas                       |
| ...                | ...                                  | ...            | ...              | ...                | ...            | Blast furnace gas                   |
| -                  | 1,587                                | -              | 1,385            | -                  | -              | Liquefied natural gas               |
| -                  | -                                    | -              | -                | -                  | -              | Town gas(B)                         |
| <b>180,455</b>     | <b>788,506</b>                       | <b>980</b>     | <b>1,161,763</b> | <b>68,456</b>      | <b>285,383</b> | Black liquor                        |
| 42,604             | 47,668                               | 980            | 967,564          | 64,862             | 240,776        | Waste plastic                       |
| <b>1,380,991</b>   | <b>3,071,140</b>                     | <b>-</b>       | <b>1,686,482</b> | <b>33,072</b>      | <b>...</b>     | Refuse Paper & Plastic Fuel         |
| 8,444              | 4,360                                | -              | 49,773           | 2,124              | ...            | <b>Electricity</b>                  |
|                    |                                      |                |                  |                    |                | among those purchased               |
|                    |                                      |                |                  |                    |                | <b>Steam</b>                        |
|                    |                                      |                |                  |                    |                | among those accepted                |

(August, 2019)



7) 四国経済産業局管内

Shikoku Bureau of Economy, Trade and Industry

| 種 別                            | 単 位<br>Unit        | 合 計<br>Total     | 重複事業所分<br>補 正 量<br>Duplication<br>adjustment | パルプ・紙・<br>板紙工業<br>Pulp, paper,<br>paperboard | 化学工業<br>Chemical industry | 化学繊維<br>工 業<br>Chemical fibers |
|--------------------------------|--------------------|------------------|--|--|---------------------------|--------------------------------|
| <b>合 計 ( 原 油 換 算 )</b>         | kl                 | <b>849,472</b>   | -  | <b>183,077</b>                               | <b>542,872</b>            | <b>32,527</b>                  |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | "                  | <b>232,485</b>   | -  | <b>9,687</b>                                 | <b>178,062</b>            | <b>8,009</b>                   |
| 原 ガ ソ リ 油                      | "                  | -                | -  | ...  | -                         | ...                            |
| ナ フ サ                          | "                  | 15               | -  | 4  | -                         | -                              |
| 改 質 生 成 油                      | "                  | 416              | -  | -  | 416                       | -                              |
| 灯 油                            | "                  | 149,948          | -  | -  | 149,948                   | -                              |
| 軽 油                            | "                  | 2,875            | -  | 11   | 1,413                     | -                              |
| A 重 油                          | "                  | 290              | -  | 209  | -                         | -                              |
| B ・ C 重 油                      | "                  | 4,045            | -  | 1,798  | 13                        | -                              |
| 炭 化 水 素 油                      | "                  | 22,390           | -  | 5,371  | 8,880                     | 4,261                          |
| 液 化 石 油 ガ ス                    | t                  | 2,719            | -  | -  | 776                       | -                              |
| 石 油 系 炭 化 水 素 ガ ス              | 1000m <sup>3</sup> | 7,860            | -  | 1,275  | 3,799                     | -                              |
| オ イ ル コ ー ク ス                  | t                  | 35,945           | -  | -  | 18,098                    | -                              |
| ア ス フ ァ ル ト                    | "                  | 12,186           | -  | -  | 5,061                     | 4,395                          |
| 再 生 油 ( 石 油 由 来 )              | kl                 | -                | -  | -  | -                         | -                              |
|                                |                    | 379              | -  | 158  | -                         | -                              |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                 | <b>563,496</b>   | -  | <b>169,469</b>                               | <b>332,517</b>            | <b>23,282</b>                  |
| 石 炭 コ ー ク ス                    | t                  | 659,388          | -  | 156,196                                      | 420,486                   | 32,787                         |
| コ ー ク ス 炉 ガ ス                  | 1000m <sup>3</sup> | 7,657            | -  | -  | 4,139                     | -                              |
| 高 炉 ガ ス                        | "                  | 54,635           | -  | -  | 54,635                    | -                              |
| 液 化 天 然 ガ ス                    | t                  | -                | -  | -  | -                         | -                              |
| 都 市 ガ ス ( B )                  | 1000m <sup>3</sup> | 2,498            | -  | 1,188  | 224                       | -                              |
| 回 収 黒 液                        | 絶乾(Dry)t           | 1,570            | -  | 149  | -                         | 1,421                          |
| 廃 プ ラ ス チ ッ ク                  | t                  | 161,145          | -  | 161,145                                      | ...                       | ...                            |
| R P F                          | "                  | 91               | -  | 91   | -                         | -                              |
|                                | "                  | 6,587            | -  | 6,587  | -                         | -                              |
| <b>電 力</b>                     | 1000kWh            | <b>932,440</b>   | -  | <b>427,743</b>                               | <b>198,433</b>            | <b>70,019</b>                  |
| う ち 購 入 分                      | "                  | 398,248          | -  | 35,562                                       | 187,430                   | 13,073                         |
| <b>蒸 気</b>                     | t                  | <b>4,138,793</b> | -  | <b>2,943,167</b>                             | <b>315,870</b>            | <b>359,676</b>                 |
| う ち 受 入 分                      | "                  | 237,922          | -  | 8,866  | 214,936                   | 276                            |

8) 九州経済産業局管内(含沖縄)

Kyushu (Okinawa) Bureau of Economy, Trade and Industry

|                                |                    |                  |              |                  |                |               |
|--------------------------------|--------------------|------------------|--------------|------------------|----------------|---------------|
| <b>合 計 ( 原 油 換 算 )</b>         | kl                 | <b>2,152,250</b> | <b>908</b>   | <b>73,085</b>    | <b>672,524</b> | <b>6,734</b>  |
| <b>石 油 系 燃 料 ( 原 油 換 算 )</b>   | "                  | <b>544,381</b>   | <b>248</b>   | <b>6,271</b>     | <b>409,308</b> | <b>257</b>    |
| 原 ガ ソ リ 油                      | "                  | -                | -            | ...              | -              | ...           |
| ナ フ サ                          | "                  | 842              | -            | -                | -              | -             |
| 改 質 生 成 油                      | "                  | 261,952          | -            | -                | 261,952        | -             |
| 灯 油                            | "                  | 118,269          | -            | -                | 118,269        | -             |
| 軽 油                            | "                  | 1,859            | 250          | 257              | 721            | -             |
| A 重 油                          | "                  | 460              | 3            | 1                | 19             | -             |
| B ・ C 重 油                      | "                  | 3,946            | -            | 168              | 2,486          | -             |
| 炭 化 水 素 油                      | "                  | 17,650           | -            | 4,951            | 4,111          | 237           |
| 液 化 石 油 ガ ス                    | t                  | 6,871            | -            | -                | 6,404          | -             |
| 石 油 系 炭 化 水 素 ガ ス              | 1000m <sup>3</sup> | 39,979           | 6            | -                | 33,517         | -             |
| オ イ ル コ ー ク ス                  | t                  | 40,248           | -            | -                | 13,803         | -             |
| ア ス フ ァ ル ト                    | "                  | 66,075           | -            | 630              | -              | -             |
| 再 生 油 ( 石 油 由 来 )              | kl                 | 18,869           | -            | -                | -              | -             |
|                                |                    | 5,792            | -            | 9                | -              | -             |
| <b>非 石 油 系 燃 料 ( 原 油 換 算 )</b> | kl                 | <b>1,464,635</b> | -            | <b>64,206</b>    | <b>222,527</b> | -             |
| 石 炭 コ ー ク ス                    | t                  | 1,228,987        | -            | 39,418           | 300,510        | -             |
| コ ー ク ス 炉 ガ ス                  | 1000m <sup>3</sup> | 417,851          | -            | -                | -              | -             |
| 高 炉 ガ ス                        | "                  | 172,561          | -            | -                | 36,711         | -             |
| 液 化 天 然 ガ ス                    | t                  | 829,091          | -            | -                | -              | -             |
| 都 市 ガ ス ( B )                  | 1000m <sup>3</sup> | 15,599           | -            | -                | 1,050          | -             |
| 回 収 黒 液                        | 絶乾(Dry)t           | 8,754            | -            | 127              | 26             | -             |
| 廃 プ ラ ス チ ッ ク                  | t                  | 100,121          | -            | 100,121          | ...            | ...           |
| R P F                          | "                  | 16,348           | -            | -                | 1,900          | -             |
|                                | "                  | -                | -            | -                | -              | -             |
| <b>電 力</b>                     | 1000kWh            | <b>1,574,804</b> | <b>7,101</b> | <b>168,120</b>   | <b>187,704</b> | <b>19,510</b> |
| う ち 購 入 分                      | "                  | 1,145,603        | 7,101        | 28,042           | 116,405        | 19,510        |
| <b>蒸 気</b>                     | t                  | <b>3,473,108</b> | -            | <b>1,040,401</b> | <b>901,606</b> | <b>67,454</b> |
| う ち 受 入 分                      | "                  | 480,855          | -            | -                | 382,409        | 67,454        |

(令和1年8月)

| 石油製品<br>工業         | 窯業・土石<br>製品工業                        | ガラス製品<br>工業    | 鉄鋼業              | 非鉄金属<br>地金工業       | 機械工業           | Kind of energy                      |
|--------------------|--------------------------------------|----------------|------------------|--------------------|----------------|-------------------------------------|
| Petroleum products | Ceramics, clay and<br>stone products | Glass products | Iron and steel   | Non-ferrous metals | Machinery      |                                     |
| <b>24,877</b>      | <b>38,440</b>                        | -              | <b>8,070</b>     | <b>13,795</b>      | <b>5,814</b>   | <b>Total</b>                        |
| <b>24,876</b>      | <b>4,792</b>                         | -              | <b>2,145</b>     | <b>4,685</b>       | <b>228</b>     | <b>(Crude petroleum equivalent)</b> |
| ...                | ...                                  | ...            | ...              | ...                | ...            | <b>Oil based fuels</b>              |
| -                  | 9                                    | -              | -                | -                  | 2              | <b>(Crude petroleum equivalent)</b> |
| -                  | -                                    | -              | -                | -                  | -              | Crude petroleum                     |
| -                  | -                                    | -              | -                | -                  | -              | 2 Gasoline                          |
| -                  | -                                    | -              | -                | -                  | -              | - Naphtha                           |
| 377                | 99                                   | -              | 48               | 920                | 7              | - Oil produced by conversion        |
| -                  | 75                                   | -              | 1                | 5                  | -              | 7 Kerosene                          |
| -                  | 352                                  | -              | 46               | 1,703              | 133            | - Gas oils                          |
| 2,054              | 806                                  | -              | 225              | 793                | -              | 133 Heavy Fuel oil A                |
| -                  | 970                                  | -              | -                | 973                | -              | - Heavy Fuel oil B・C                |
| 1,210              | -                                    | -              | 1,378            | 133                | 65             | - Hydrocarbon oil                   |
| 17,847             | -                                    | -              | -                | -                  | -              | 65 Liquefied petroleum gas          |
| -                  | 2,730                                | -              | -                | -                  | -              | - Hydrocarbon gas                   |
| -                  | -                                    | -              | -                | -                  | -              | - Petroleum coke                    |
| -                  | 221                                  | -              | -                | -                  | -              | - Asphalt                           |
| -                  | -                                    | -              | -                | -                  | -              | - Reproduction oil (Oil origin)     |
| -                  | <b>33,357</b>                        | -              | <b>3,061</b>     | <b>537</b>         | <b>1,271</b>   | <b>Non-oil based fuels</b>          |
| -                  | 49,442                               | -              | -                | 477                | -              | <b>(Crude petroleum equivalent)</b> |
| -                  | 424                                  | -              | 2,804            | 290                | -              | - Coal                              |
| -                  | -                                    | -              | -                | -                  | -              | - Coal coke                         |
| -                  | -                                    | -              | -                | -                  | -              | - Coke oven gas                     |
| -                  | -                                    | -              | -                | -                  | -              | - Blast furnace gas                 |
| -                  | -                                    | -              | 185              | -                  | 901            | 901 Liquefied natural gas           |
| ...                | ...                                  | ...            | ...              | ...                | ...            | - Town gas(B)                       |
| -                  | -                                    | -              | -                | -                  | -              | ...                                 |
| -                  | -                                    | -              | -                | -                  | -              | ...                                 |
| -                  | -                                    | -              | -                | -                  | -              | ...                                 |
| <b>24,491</b>      | <b>41,173</b>                        | -              | <b>32,659</b>    | <b>91,428</b>      | <b>46,494</b>  | <b>Electricity</b>                  |
| 12                 | 3,126                                | -              | 30,782           | 81,882             | 46,381         | among those purchased               |
| <b>147,100</b>     | <b>304,060</b>                       | -              | <b>14,518</b>    | <b>54,402</b>      | ...            | <b>Steam</b>                        |
| -                  | -                                    | -              | -                | 13,844             | ...            | among those accepted                |
| <b>57,836</b>      | <b>142,845</b>                       | <b>1,252</b>   | <b>1,159,184</b> | <b>6,017</b>       | <b>33,682</b>  | <b>Total</b>                        |
| <b>56,361</b>      | <b>42,222</b>                        | <b>27</b>      | <b>25,250</b>    | <b>2,501</b>       | <b>2,433</b>   | <b>(Crude petroleum equivalent)</b> |
| ...                | ...                                  | ...            | ...              | ...                | ...            | <b>Oil based fuels</b>              |
| -                  | 3                                    | -              | -                | -                  | 839            | <b>(Crude petroleum equivalent)</b> |
| -                  | -                                    | -              | -                | -                  | -              | Crude petroleum                     |
| -                  | -                                    | -              | -                | -                  | -              | 839 Gasoline                        |
| -                  | -                                    | -              | -                | -                  | -              | - Naphtha                           |
| -                  | 70                                   | -              | 412              | 56                 | 593            | - Oil produced by conversion        |
| -                  | 22                                   | -              | 406              | -                  | 15             | 593 Kerosene                        |
| 57                 | 127                                  | 20             | 732              | 50                 | 306            | - Gas oils                          |
| 3,950              | 2,604                                | -              | 496              | 1,301              | -              | 306 Heavy Fuel oil A                |
| -                  | 467                                  | -              | -                | -                  | -              | - Heavy Fuel oil B・C                |
| 1,069              | 1,033                                | 5              | 3,526            | 228                | 607            | - Hydrocarbon oil                   |
| 26,445             | -                                    | -              | -                | -                  | -              | 607 Liquefied petroleum gas         |
| -                  | 40,977                               | -              | 23,933           | 535                | -              | - Hydrocarbon gas                   |
| 18,869             | -                                    | -              | -                | -                  | -              | - Petroleum coke                    |
| -                  | 5,452                                | -              | 65               | 266                | -              | - Asphalt                           |
| -                  | -                                    | -              | -                | -                  | -              | - Reproduction oil (Oil origin)     |
| -                  | <b>95,161</b>                        | -              | <b>1,075,039</b> | <b>199</b>         | <b>7,503</b>   | <b>Non-oil based fuels</b>          |
| -                  | 127,317                              | -              | 761,742          | -                  | -              | <b>(Crude petroleum equivalent)</b> |
| -                  | 54                                   | -              | 417,782          | 15                 | -              | - Coal                              |
| -                  | 3,790                                | -              | 132,060          | -                  | -              | - Coal coke                         |
| -                  | -                                    | -              | 829,091          | -                  | -              | - Coke oven gas                     |
| -                  | -                                    | -              | 13,757           | 133                | 659            | - Blast furnace gas                 |
| -                  | -                                    | -              | 2,417            | -                  | 6,184          | 659 Liquefied natural gas           |
| ...                | ...                                  | ...            | ...              | ...                | ...            | 6,184 Town gas(B)                   |
| -                  | 10,014                               | -              | 4,434            | -                  | -              | ...                                 |
| -                  | -                                    | -              | -                | -                  | -              | ...                                 |
| -                  | -                                    | -              | -                | -                  | -              | ...                                 |
| <b>31,277</b>      | <b>156,418</b>                       | <b>13,166</b>  | <b>704,156</b>   | <b>42,846</b>      | <b>258,708</b> | <b>Electricity</b>                  |
| 15,857             | 57,006                               | 13,166         | 611,792          | 35,660             | 255,266        | among those purchased               |
| <b>355,948</b>     | <b>383,084</b>                       | -              | <b>660,223</b>   | <b>64,392</b>      | ...            | <b>Steam</b>                        |
| -                  | 2,292                                | -              | 28,700           | -                  | ...            | among those accepted                |

(August, 2019)

**リサイクル適性 (A)**

この印刷物は、印刷用の紙へ  
リサイクルできます。