

第6回エネルギー情勢懇談会 質問事項 ～地球温暖化～

Q1：再エネについて

⇒ドイツは日本に先駆けて FIT 制度を導入し、電源の再エネシフトを進めた「再エネ先進国」であり、日本は、再エネの主力電源化に向けて、ドイツの経験に大いに学ぶ必要あり。その観点から、

- 1) 再エネを促進する観点から導入した FIT 制度につき、支援制度からの自立化に向けて、今までどのような取り組みが行われ、また、今後、どのような取り組みが必要になってくると考えているか。
- 2) ドイツでは、再エネの供給地である北部と、電力の需要地である南部とを結ぶ南北送電線の整備が住民の反対もあり進んでいないという指摘があるが、南北送電線の整備を含めて、再エネ大量導入に伴う送電線の再構築に受けた現状をどう評価しているか。特に、北部で発電した再エネ電源が第三国経由で南部に送電されているという指摘につき、どう評価しているか。その上で、送電線の再構築に向け、どのような取り組みが今後必要になってくると考えているか。
- 3) 自然変動再エネ（太陽光・風力）は、その性格上、発電変動を調整するための火力発電を当面は必要とする一方、将来的には、再エネ電源と調整力を合わせてトータルでカーボンフリーを実現する観点から、蓄電池の整備が課題であると考えるが、現状の取り組み及び今後の見通しをどう評価しているか。
- 4) パリ協定に基づく温室効果ガス削減に向けて、現状、ドイツでは、石炭火力の依存度が高い（現状：電源構成比 40%超）ため、計画どおりに CO2 排出削減が進んでいないが、中長期的なカーボンフリー戦略につき、現状の取り組み及び今後の見通しをどう評価しているか。（例えば、英国では、5年ごとのカーボンバジェットを設定して排出削減に取り組んでいるが、他国の取り組みと比較した上で、ドイツの取組みの評価を伺いたい。）
- 5) (再エネの派生論点として、) 分散型電源の活用とマイクログリッドの可能性をどのように評価しているか。バイオマス電源やコージェネレーションを活用して自治体が地域密着で電力供給を行うシュタットベルケの競争力の源泉とエネルギー政策へのインパクトは何か。

Q2：運輸部門における電化の進展について

⇒運輸部門の電化の動きとして、近年、英仏や中国において、ガソリン・ディーゼル車の製造・販売禁止の方針や EV 導入規制が出されているが、ドイツについては、内燃機関の競争優位を踏まえて、EV の将来見込みのスタンスを示せないでいるという指摘もある。運輸部門の電化について、現状の取り組み及び今後の見通しをどう評価しているか。

Questions for the 6th Round-Table for Studying Energy Situations
~Global Warming~

Q1: Renewable energy

⇒ Germany is an “advanced renewable energy country” which introduced an FIT system ahead of Japan and has been promoting shifting of power sources to renewable energy. Japan needs to learn a lot from its experiences towards using renewable energy as the main power sources in the future. From that point of view:

- 1) Regarding the FIT system that was introduced to promote renewable energy, what kind of initiatives have been taken to date and what kind of initiatives may be required in the future to facilitate to be independent from relevant support schemes?
- 2) There is an indication stating that, in Germany, construction of north-south power transmission lines to connect the northern area as the supplier of renewable energy and the southern area as the consumer of electric power is stagnating partly due to objection from local residents. Including development of such north-south power transmission lines, what is your assessment on the current move towards re-establishing power grid associated with the large-scale introduction of renewable energy? In particular, what is your assessment in regard to a remark stating that renewable energy generated in the northern area is transmitted to the southern area via a third country? Taking that into account, what kind of initiatives would be required in the future, do you think, to re-establish power transmission lines?
- 3) Variable renewable energy (solar power, wind power) currently requires, by its nature, thermal power generation to accommodate generation fluctuations. On the other hand, deployment of battery systems may be required in the future, instead of thermal power generation, from the viewpoint of realizing carbon-free society as a total system of renewable energy and backup systems. Regarding that point, what are the initiatives currently in place and what is your future perspective?
- 4) Regarding the goal to reduce greenhouse gas emissions based on the Paris Agreement, reduction of CO₂ emissions is not currently progressing as planned in Germany due to the high reliance on coal-fired power generation (current share in energy mix: over 40%). As in a mid- to long-term carbon-free strategy, what are the initiatives currently in place and what is your future perspective? (For example, the UK is working on reduction of greenhouse gas emissions by setting five-yearly carbon budgets. Please give us your evaluation of Germany’s initiatives in comparison with those in other countries.)

- 5) (As topics derived from renewable energy,) what is your assessment on distributed power sources and potential of microgrids? What is the source of competitiveness of Stadtwerke where local governments provide community-oriented power supply services by utilizing biomass energy and cogeneration, and what are the impacts on energy policy?**

Q2: Progress of electrification in the transportation sector

⇒ As a trend toward electrification in the transportation sector, in recent years, the UK, France, and China have announced a policy to ban the production and sale of gasoline and diesel vehicles and regulations on introduction of EV. Meanwhile, it is said that Germany has not shown its stance on future prospect of EV, due to the competitive advantage of internal-combustion engines. Regarding electrification in the transportation sector, what is your evaluation on the initiatives currently in place and what is your future perspective?