Document 6

# Questions for the 6th Round-Table for Studying Energy Situations
# ~Next-generation Technologies and Innovation for Decarbonization~

## Q1: Society and technology envisioned based on "carbon-free" trend (for All)

1) **While multiple innovative technologies have been proposed to realize carbon-free society, why did your company/state choose these specific technologies (Toyota: FCV, EV; AUS: CCS + hydrogen derived from brown coal)? What made you to think that they were promising? When do you think they will become practically applicable?**

2) **What are the requirements for a country, in your opinion, to realize carbon-free society through innovation (examples: infrastructure development, regulations, environment to accept social reform)?**

## Q2: Future "carbon-free" strategy (to each)

**<for State Government of Victoria>**

1) **Amid the global trend of decarbonization and divestment from fossil fuel, some say coal has a bleak future as a source of power compared to renewable energy. Meanwhile, the IEA baseline scenario (new policies scenario) predicts that coal will remain as the largest source of power in the Asia-Pacific region. As a coal exporting country, what is your thought about the future and potential of coal, and your prospect of its supply and demand in the Asia-Pacific region?**

2) **Regarding coal-fired power generation, taking into account the challenges of Japan's CCS, we are thinking that one possible path for us to take is to advance technologies to use hydrogen as a source of energy through utilization of brown coal from overseas (e.g., Australia) and CCS, after improving the efficiency of coal-fired power plants. What do you think of this idea as an exporting country of coal?**

3) **Taking into account 1) and 2) above, what is your future vision about the recent hydrogen derived brown coal supply chain project in Victoria? Please let us know along with your assessment on CCS projects in Australia.**

**<for Toyota Motor Corporation>**

1) **In the accelerating trend of electrification, what is your assessment on the technical features of EV and FCV, their challenges towards social implementation, and their potential and future possibilities based on them?**

   *** Challenges of EV: Battery cost, travel distance, charging time, resource procurement and recycling, etc.**

   *** Challenges of FCV: Hydrogen cost (developing industry groups), deployment of hydrogen stations, etc.**

   *** Common challenges: Automatic driving, material innovation (weight reduction)**

2) **Amid the rising trend to shift to EV in the world including China and India, along with the move to ban production of gasoline and diesel vehicles in the UK and France by 2040, how is your company going to respond to such a global trend? What is your analysis of competitors' actions?**