

Session-IV: Stationary and Telecom Application

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Diversified energy leads to the integration going beyond industries

- Diversified energy resources and energy system integration leads to integration which goes beyond industries.
- Development of "hydrogen society" will be one of the key which creates new industries.

Integration

- Distributed Energy Supply
- Concentrated Energy Supply
 - Electrification
 - Storage

Lifeline Integration

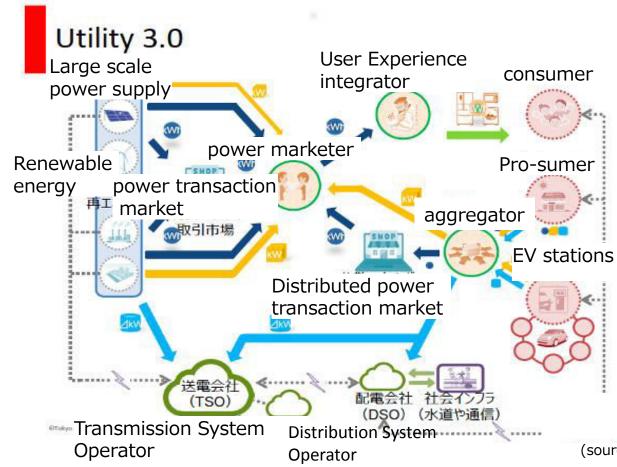
- Telecommunication
 - EVs/FCVs
 - Distribution

Digital Integration

- Technological edge
- Intellectual property

Shifting from "possession" to "user experience"

- Dramatic increase of Hydrogen Fuel cells lead to development of distributed power generation.
- IoT will be a key factor that shift from providing products to user experience.
- Distributed energy supply requires high-level dynamic telecommunications.



Reduction of System Loading (Demand response)

- Load to regulated power supply such as thermal power generation increases with a increase
 of renewable energy as typified by "Duck Curve" in California in the United States.
- It is possible to reduce load to regulated power supply by applying production and use of hydrogen as a kind of demand response as a adjusting power.
- Storage battery technology and digital technology will facilitate the integrate transportation system and energy system and require telecommunication technology.

Duck Curve (California)

Absorption of load change by hydrogen (image)

