Project to demonstrate a low-carbon hydrogen supply chain using fuel cells and the existing logistics network in Tomiya, Miyagi Prefecture (Tomiya City, Miyagi, Primary partner: Hitachi, Ltd.)

Project Overview and Supply Chain Image

| Overview | consumer use: (1) Low-carbon and low-cost transportation (2) Use of hydrogen in the hours from even (3) Building of a local production for local | on using the existing logistics net ening to night when solar power demand-type of hydrogen suppl drogen mixed-combustion power | generated electricity decreases y and demand structure generator to provide electricity for auxiliary |
|----------------|---|--|---|
| Municipalities | Tomiya City, Miyagi | Time Period | FY2017-FY2021 (Planned) |

| | Production | | Storage & Transportation | | | | Supply & Use | |
|--------------------|----------------------|--------------------------|--|--------|----------------------------|--|--|---|
| Supply Chain Image | Solar power plant | modu (auxil electi | Hydrogen storage facility (buffer tank) de electricity with aux ules of hydrogen prod iary modules of water rolysis system, pump, og unit etc.)*2 | uction | Metal hydride cassettes | | Metal hydride cassettes BDF (Bio fuel) ^{*1} | Pure hydrogen fuel cells (stores) Pure hydrogen fuel cells (households, childcare center) Hydrogen mixed power generator*2 |

*1 BDF and SVO are out of scope of this project

*2 Supplying electricity for auxiliary modules of hydrogen production by hydrogen mixed-combustion power generator has started in FY2020 (Source: Hitachi Ltd. project documents)