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 transportati (2) Use of hydrogen in the hours from eve (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 elect	Hydrogen storage facility (buffer tank) de electricity with aux ules of hydrogen produ liary modules of water rolysis system, pump, ng unit etc.)*2	uction	Metal hydride cassettes Cassettes Cassettes Cassettes		Metal hydride cassettes	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)