September 10, 2012
Japan Blue Energy Co., Ltd.
Daiwa Lease Co., Ltd.
Toyota Tsusho Corporation
Mitsui Chemicals, Inc.

Start of Verification Tests for Bio-Hydrogen Production from Sewage Sludge

～Sustainable society through Hydrogen Innovation Town～

Japan Blue Energy Co., Ltd. (“JBEC”) with its head office in Tokyo, Japan (Naoki Dowaki, CEO), Daiwa Lease Co., Ltd., Toyota Tsusho Corporation, and Mitsui Chemicals, Inc., which form the Business Research Group of Hydrogen Innovation Town (“HIT Business Research Group”), announced commencement of verification tests for a new technology using sewage sludge to produce hydrogen. (Daiwa House Industry Co., Ltd. and Toyota Motor Corporation are participating in the group as observer members)

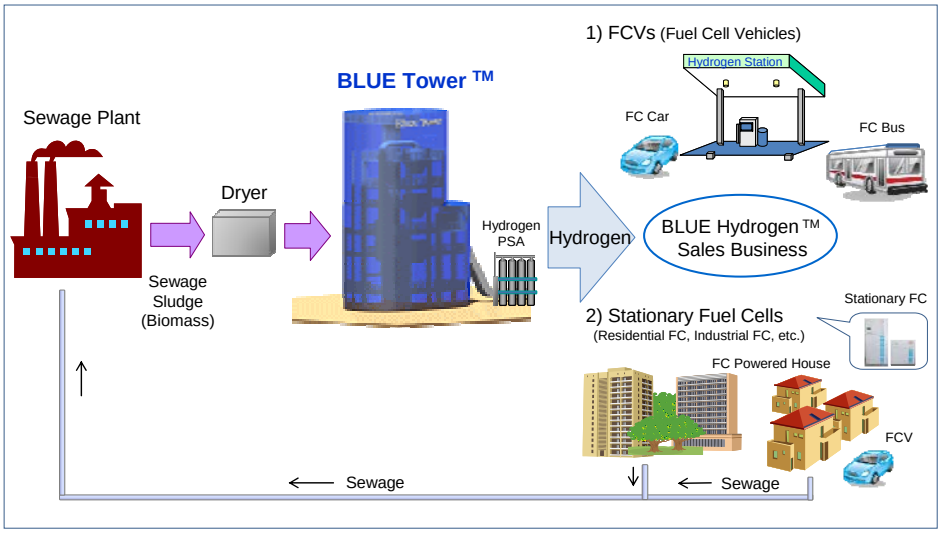
1. HIT Business Research Group

The HIT Business Research Group targets conversion of biomass (disposed sewage sludge) into hydrogen, as a substitute for fossil fuels, utilizing JBEC’s proprietary biomass gas BLUE Tower technology.

The introduction of BLUE Tower™ technology to sewage treatment plants around the country will facilitate supply of hydrogen to fuel cell vehicles (FCV) and stationary fuel cells (FC), which are forecasted to increase significantly in the future, thereby contributing to actualization of a “Hydrogen Innovation Town” (sustainable society and urban development based on a low carbon economy).

As a cooperative operation, the HIT Business Research Group will adopt expertise, human resources, and networks of participating companies for licensing, plant design and construction, logistics, and distribution of BLUE Hydrogen™ technology.

HIT Business Diagram



2. Production of Hydrogen from Sewage Sludge

The HIT Business Research Group has commenced verification tests using sewage sludge to generate bio-hydrogen at JBEC's BLUE Tower™ new technology plant located at its development center in Izumo City, Shimane Prefecture.

Past small scale tests have shown that the BLUE Tower™ technology is successful in converting sewage sludge into gas with high hydrogen concentration, thereby confirming the potential of sewage sludge as a raw material of bio-hydrogen.

Through test runs at the verification plant, methodology and production of bio-hydrogen will be substantiated and followed by studies for a commercial scale bio-hydrogen production plant and a model business structure.

Reference BLUE Tower™ Technology

One of the main features of the BLUE Tower™ is its use of alumina balls as a heat carrier.

In the pyrolyzer, biomass material (woodchips, sewage sludge, etc.) is brought into contact with high temperature alumina balls to generate biogases such as methane.

Biogas is further heated by alumina balls and steam, and converted to gas with higher concentrations of hydrogen.

Circulation of the alumina balls is highly efficient in heating core components and also effective in preventing and making controllable common plant equipment problems such as blockage caused by tar.