

December 12, 2022

Iwatani Corporation

Toyota Tsusho Corporation

JGC Holdings Corporation

Basic agreement signed to explore joint undertaking of hydrogen production business using waste plastic gasification facilities in the Nagoya Port area, Aichi Prefecture

Three companies—Iwatani Corporation (“Iwatani” hereinafter; President: Hiroshi Majima), Toyota Tsusho Corporation (“Toyota Tsusho” hereinafter; President & CEO: Ichiro Kashitani), and JGC Holdings Corporation (“JGC Holdings” hereinafter; Chairman and CEO: Masayuki Sato)—have signed a basic agreement to explore a joint business in the Nagoya Port area, Aichi Prefecture, concerning low carbon hydrogen production using waste plastic gasification facilities.

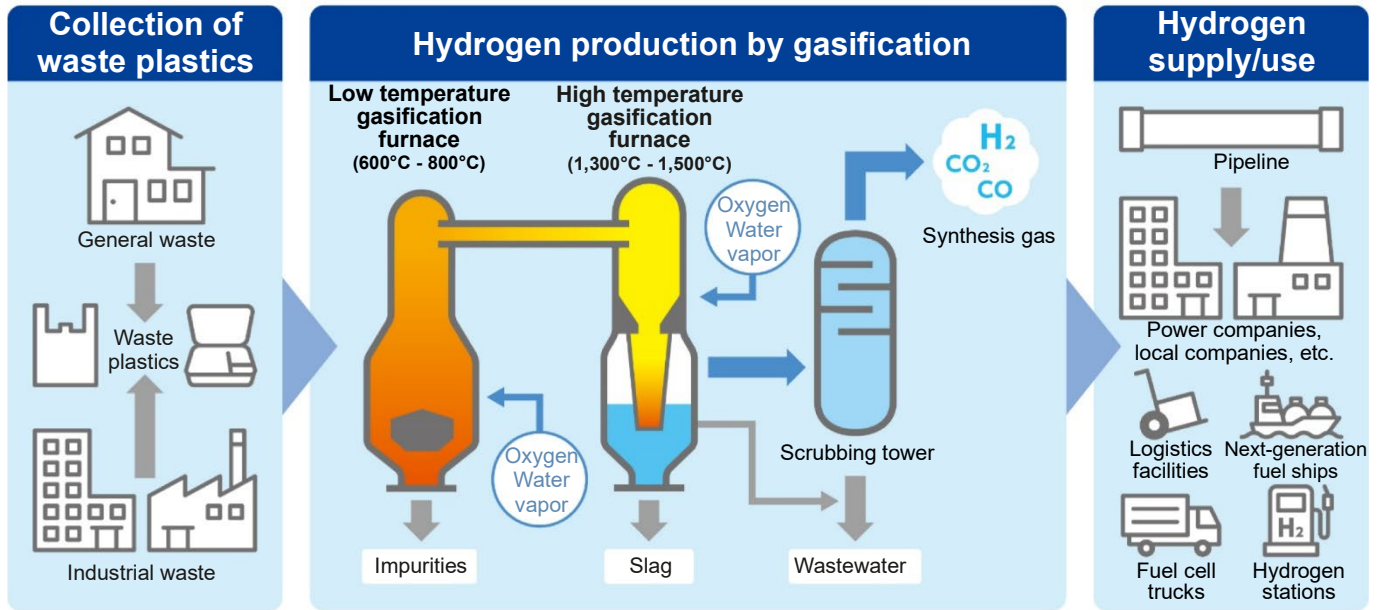
Studies for this business have already begun, following selection in December 2021 as a commissioned project of the New Energy and Industrial Technology Development Organization (NEDO): Technology Development Project for Building a Hydrogen-based Society/Technology Development for Hydrogen Utilization in the Community/Study of Potential for Hydrogen Production and Utilization. Study results showed the Chubu Region has high potential with respect to waste plastic collection and hydrogen production and utilization; thus, the three companies have agreed to explore the joint undertaking of a low carbon hydrogen production business. With the conclusion of this basic agreement, the three companies will soon begin basic design work, with the goal of launching hydrogen production by the mid-2020s.

Utilization of waste plastics will enable stable and inexpensive supply of hydrogen to move us closer to a carbon-neutral society; promote hydrogen use in areas such as power plants, which face a pressing need to reduce CO₂ emissions, various mobility services, and port facilities; and contribute to factory decarbonization. Through this joint business, the three companies will promote the utilization of hydrogen in various fields to move closer to a hydrogen energy-based society while contributing to a carbon-neutral society and promoting resource recycling.

- Start of hydrogen production: Mid-2020s (target)
- Hydrogen production capacity: 11,000 t/year (volume of waste plastics collected: 80,000 t/year)
- Carbon reductions achieved in hydrogen production: 85% reductions* in GHG emissions compared to hydrogen produced from natural gas

*Based on results of study on the possibility of building the locally produced and locally consumed hydrogen supply chain in California by producing hydrogen from waste plastic undertaken in February 2022 by JGC Holdings and Iwatani Corporation of America as a NEDO-commissioned project

<Supply chain model>



【Past press release】

[“Study toward the development of a regional low carbon hydrogen model based on waste plastic gasification recycling in urban areas” selected by NEDO as a commissioned project \(iwatani.co.jp\)](http://www.iwatani.co.jp)