



Iwatani Corporation Green Bond Framework

November 2021

1. Introduction

Since its foundation in 1930, Iwatani Corporation (hereafter “Iwatani”) has provided wide range of products and services such as energy, industrial gas, materials, and foods for our lives and industries, based on its corporate philosophy, “Become a person needed by society, as those needed by society can prosper.” What underlies this is our wish to contribute to society by creating new value needed by society for the future. This is the major driving force for our business.

2. Initiatives for Reduction of Environmental Impact

Since 1941, we have regarded hydrogen as the ultimate clean source of energy, and have consistently engaged in initiatives to encourage the widespread use of hydrogen energy. Under the corporate slogan, released in 1970 at the 40th anniversary of our founding, “Creation of a more comfortable space on the Earth is what Iwatani wishes and strives for,” we aim to solve the social issue of environmental concerns by creating a carbon free society enabled by the use of hydrogen.

With the aim of creating a hydrogen energy-based society at an early stage, we are engaging in activities that promote the use of hydrogen globally, through our participation as co-representative member of “Japan Hydrogen Association,” also, through our participation as steering member of “the Hydrogen Council”, a global initiative of energy-related companies,.

To stimulate new demand of hydrogen, we are developing hydrogen refueling stations with the aim of the widespread distribution of Fuel Cell Vehicles (FCVs). We are also expanding the development of hydrogen refueling stations into California in the United States, where the distribution of FCVs is ahead of any other region, with a view toward the future manufacturing of liquid hydrogen in California.

Regarding carbon-free hydrogen, we are involved in a project for the transportation and storage of large quantities of liquid hydrogen from Australia, and a green hydrogen production project of “the Fukushima Plan for a New Energy Society,” using power generated by renewable energy. We also participate in the project for commercialize liquid green hydrogen production with electrical generating company and iron ore production company in Australia, respectively. In Japan, we also have started the validation for the implementation of hydrogen production business, such as the liquid hydrogen production

from brown coal in Hokkaido, with the aim of building hydrogen energy-based society.

< Japan Hydrogen Association >

We, as one of three co-representative members, established “Japan Hydrogen Association” with 88 private companies in 2020. In August 2021, the number of the association reached 253. With the members, we will promote the creation of hydrogen supply chains and global collaboration in the field of hydrogen energy, for creating demand and expanding hydrogen market with cross industry collaboration.

< Hydrogen Council>

The Hydrogen Council is composed of 129* leading global companies from the energy, transportation and manufacturing industries. It aims to achieve shared goals by formulating recommended strategies for hydrogen use and effective action plans in cooperation with policymakers, hydrogen users (usually business enterprises), international organizations and citizens' groups in various countries. As a member of the Hydrogen Council, Iwatani also shares a global vision for hydrogen, and is investing its energies into expanding the use of hydrogen in Japan. * As of September, 2021

<Japan H2 Mobility, LLC (JHyM)>

JHyM was established in 2018 for the operation of hydrogen refueling stations aimed primarily at FCVs (Fuel Cell Vehicles), and to encourage the widespread adoption of FCVs. Currently, a total of 26* Japanese companies including Iwatani—along with various automotive, energy and finance related companies—have participated in the initiative. Iwatani is addressing the construction and operation of hydrogen refueling stations as well as the standardization of equipment and systems in a bid to help increase and enhance hydrogen refueling stations. *As of September, 2021

<Creating Demand for Hydrogen Energy>

Iwatani is engaged in the development of hydrogen refueling stations throughout Japan, as supply infrastructure to support the utilization of hydrogen as a fuel, with the aim of creating a hydrogen energy-based society, as represented by the widespread adoption of Fuel Cell Vehicles (FCVs), at an early stage. In 2019, we opened Iwatani Hydrogen Refueling Station in Osaka International Airport, in 2020 we opened Iwatani Hydrogen Refueling Station in Tokyo Kasai and Iwatani Hydrogen Refueling Station in Tokyo International Airport, and in August 2021 we newly opened seven hydrogen refueling stations such as Iwatani Hydrogen Refueling Station in Sendai Airport. We are also developing hydrogen

refueling stations in Hamura-city in Tokyo, and Wakayama-city. When all the developing hydrogen refueling stations has completed, the total hydrogen refueling stations will be at 53 locations. In 2019, we also began operating four hydrogen refueling stations in the United States. Our development plan is totally 83 locations in Japan and 23 locations in the United States by fiscal year 2023.

We are also developing hydrogen refueling station specifications to match location conditions, such as by developing stations conjoined to convenience stores and mobile refueling stations, and reducing construction costs by producing major pieces of equipment as integrated units. In 2018, we introduced the highest level of advanced hydrogen research equipment in Japan at the Iwatani R&D Center, and are working to further enhance our safety technology and engineering capabilities.

We have also begun work on our "hydrogen ship" concept for Expo 2025 Osaka Kansai. In this project, we will construct a ship driven by a hydrogen powered motor that will carry between 50 and 100 people. The vessel will carry passengers between the Expo 2025 venue, Yumeshima, an artificial island in Osaka Bay, and the spots in Kansai Area. We believe that this is an ideal opportunity to display the possibilities of hydrogen energy.

<CO₂-free Hydrogen Energy Supply-chain Technology Research Association (HySTRA)>
The CO₂-free Hydrogen Energy Supply-chain Technology Research Association (HySTRA) was established in 2016 by Iwatani, Kawasaki Heavy Industries, Ltd., Shell Japan Limited and Electric Power Development Co., Ltd. (J-POWER). HySTRA is engaged in efforts to demonstrate technologies for the production of hydrogen by on-site gasification of brown coal (low-grade coal, an untapped resource) in Australia, along with hydrogen liquefaction and mass-transportation of liquefied hydrogen. The association aims to commercialize CO₂-free hydrogen, which does not produce any CO₂ emissions, even during its manufacture or transportation. Iwatani is responsible for the operation and evaluation of liquefied hydrogen loading terminals.

<The Fukushima Plan for a New Energy Society>

Iwatani is a participant in the Fukushima Plan for a New Energy Society, which is being spearheaded by the Japanese government and Fukushima Prefecture. The plan aims to demonstrate technologies to convert electrical power generated using solar power generation into hydrogen, and to store it and utilize it in local communities. In 2018, Iwatani—working together with the New Energy and Industrial Technology Development Organization (NEDO), Toshiba Energy Systems & Solutions Corporation, and Tohoku Electric Power Co., Inc.—constructed the Fukushima Hydrogen Energy Research Field

(FH2R), which is capable of 10,000kW class hydrogen production utilizing solar power generation. From end of February 2020, we started production of hydrogen and demonstrative operation. In September 2020, the member company increased to be 5 including Tohoku Electric Power Network Co., Inc. and Asahi Kasei Corporation, and we started to work for practical application of power generation by fuel cells and hydrogen supply for FCV and fuel cell bus.

3. Green Bond Framework

Iwatani Corporation has established the Green Bond Framework for funding projects that will realize CO₂ free society by utilizing hydrogen.

This Green Bond Framework is in alignment with the Green Bond Principles 2021 and the Green Bond Guidelines 2020, published by ICMA and the Ministry of Environment of Japan respectively, and follows the four core pillars as described below.

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

3.1 Use of Proceeds

An amount equal to the total proceeds of the green bonds that Iwatani issues will be allocated to finance new investments or refinance existing investments in eligible projects. For existing investments, the use of proceeds is restricted to refinance investments whose expenditures were made within five years prior to issuance of the green bond.

<Eligible Projects>

- Capital investment and costs related to hydrogen supply facility development and construction for fueling low-carbon transport which is equipped with fuel cell or using hydrogen as fuel, including FCV, truck, bus, forklift, ship.
- ICMA Green Bond Principle category: Clean Transportation



3.2 Process for Project Evaluation and Selection

Each responsible business department develops business plan of the candidate eligible projects, the review committee consisted of members from the Corporate Planning and Coordination Department and the Accounting Department makes pre-consideration, and the Board of Directors, which is our supreme decision-making body on operational execution, will make final approval for development and construction of eligible hydrogen supply facility for low-carbon transport. Based on the final approval, the Accounting Department screens the projects to meet the eligible criteria through discussion and verification of the candidate project with the each responsible business department, and the Director in charge of accounting makes final decision for selection and allocation.

We will confirm that the following measures are taken for all the eligible candidate projects in order to reduce environmental and social risks.

- Compliance with environmental laws and regulations required by the national government or the local government where the project is to be implemented.
- Compliance with safety procedure laws and regulations for hydrogen handling and construction/operation of hydrogen supply facilities by the national government or the local government where the project is to be implemented.
- Providing adequate explanations to local residents when conducting business.

3.3 Management of Proceeds

The Accounting Department will allocate to eligible projects and manage proceeds of the green bonds. The Accounting Department will track and manage the proceeds periodically using the internal management system until maturity, to ensure the amount equal to the proceeds of the green bonds is allocated to one or more of the eligible projects.

Until the proceeds of the green bonds are allocated in full to eligible projects or in case of occurring unallocated proceeds from project divestiture or other reason, the unallocated proceeds will be held in cash or cash equivalent, and we intend to complete the allocation within 2 years after issuance of the green bonds.

3.4 Reporting

We will report on the status of allocation to eligible projects and effects on the environment and social impact annually on our website or Corporate Report.

3.4.1 Allocation Reporting

Until the proceeds from the green bonds are allocated in full, we will annually disclose the following indicators in relation to the status of allocation of the proceeds to eligible projects to the extent practicably feasible.

- Allocated amounts to eligible projects and unallocated amount
- Expected timing of allocation in case there remain unallocated proceeds
- The ratio of finance for new investments and refinance

The initial allocation report will be published within one year after issuance of the green bonds. Once the proceeds are allocated in full and in the event of any major changes in allocation, reporting will be disclosed on a timely basis.

3.4.2 Impact Reporting

We commit to report on the following environmental and social impact indicators related to eligible projects on annual basis until the redemption of the Green Bond.

- Overview of the installed hydrogen supply facility
- Total hydrogen supply capacity of constructed all hydrogen supply facilities