



Introduction —

Over the past 170 years since our founding, IHI has grown into a diversified industrial company engaged in aerospace, energy systems, infrastructure, and advanced machinery.

Today, IHI operates across four core business domains:

- Resources, Energy & Environment
- Social Infrastructure
- Industrial Systems & General-Purpose Machinery
- Aero Engine, Space & Defense

From roads, buildings and transportation systems used in daily life, to cutting edge technologies and products used in various fields, we aim to continue contributing to society through the growth of our businesses.

Next: Challenge Statement 

IHI *Challenge Statement*

Our Challenges are as follows:

1. Long-term energy storage
2. Extraction and separation of carbon from CO₂ generated by fossil fuel combustion

Through this program, we aim to identify and support startups with strong commercialization potential, while fostering collaboration toward proof-of-concept projects and market deployment.

IHI Challenge Statement

Collaboration Needs

1. *Long-term energy storage solutions:*

We are seeking multi-month energy storage solutions for surplus renewable energy, beyond hydrogen-based chemical products.

Our target technologies include liquid air energy storage (LAES) systems and gravity-based energy storage solutions capable of storing energy for months.

2. *Technologies for the extraction and separation of carbon from CO₂ emissions generated by fossil fuel combustion:*

We are seeking technologies that utilize chemical reactions during boiler combustion processes to separate CO₂ and extract carbon in solid form.

IHI Challenge Statement

Business Opportunities

1. Market and business expansion:
 - Potential for technology deployment with IHI Corporation and entry into the Japanese power market
2. Research and development support
 - Capability to conduct demonstration testing, from lab-scale validation to full-scale pilot demonstrations.
3. Strategic partnership and investment
 - Possibility of joint development projects with IHI

Assets/Support

Access to various customer networks, laboratories, and demonstration fields.

Next: Message from Challenge Owner 

IHI Challenge Statement

IHI

Fumiya Oura

Manager
Business Administration Dept.
IHI Corporation

Message from Challenge Owner

While the path toward decarbonisation presents both opportunities and uncertainties, we continue to explore practical technologies and business models that can deliver real impact.

We value open collaboration with startups and partners who help building a more sustainable future.