

Business Plan Summary

Subsidies for Global South Future-Oriented Co-Creation Project (Ukrainian Reconstruction Support/Strengthening Cooperation with CEE Nations) in the FY2024 Supplementary Budget

Project Title	Romania / Feasibility Study and Demonstration Project for Hydrogen Supply Chain – Centrifugal Hydrogen Compressor for Onshore Hydrogen Gas Transportation		
Company Name	Kawasaki Heavy Industries, Ltd	Company Size	SME / Non-SME
Project Type	Feasibility Study + Demonstration Project / Demonstration Project		
Project Sector	①Information and Communications / ②Energy / ③Transportation / ④Urban Infrastructure / ⑤Medical Care / ⑥Nursing and Healthcare / ⑦Agriculture and Food / ⑧Waste Management / ⑨Digital Platform / ⑩Other		
Project Size	Total Project Expenses : 3,572 Million JPY / Total Expenses Eligible for Subsidization : 3,572 Million JPY / Subsidy Application : 1,786 Million JPY		

Project Summary

【Post-Commercialization Business Model】

【Objective】

- To demonstrate that a centrifugal hydrogen compressor for onshore hydrogen gas transportation is technically and economically suited to the needs of Central and Eastern Europe, in anticipation of building a hydrogen supply chain expected to stabilize the energy mix in Romania, Ukraine, and surrounding countries.

【Project implementation contents and methods】

- Targeting ROMGAZ (Upstream/H₂ production) and TRANSGAZ (Midstream/onshore H₂ transportation) as potential customers supporting the upstream and midstream sectors of the hydrogen supply chain, we will explore the feasibility of demonstrating Kawasaki's centrifugal hydrogen compressor (hereafter referred to as KM Comp-H₂), assuming its introduction for the establishment of an international hydrogen supply chain in Romania and surrounding countries.

【Main technologies/services】

- Supply of the centrifugal hydrogen compressor “KM Comp-H₂,” currently under development with the GI Fund from NEDO.
- It features uniqueness and innovation in aspects such as impeller material, high pressure ratio, and intercooling, making it unmatched and resistant to imitation by competitors.

【Schedule】

- Planned duration: 3 years from grant approval

Contribution to Ukrainian Reconstruction

- Ukraine will require energy for its future reconstruction and, as a prospective member of the EU, will also be expected to pursue decarbonization efforts. As energy supplies from Russia are likely to be disrupted, stabilizing Ukraine’s energy supply and contributing to its decarbonization can be achieved by realizing the potential of a hydrogen supply chain in neighboring Romania, a gas-producing country.

Onshore Hydrogen Transport Model Image