

## Third International Conference on Fuel Ammonia

September 29, 2023

# Ammonia cracking technology development project funded by NEDO



Enhancing planetary health

Masahiro AIKA

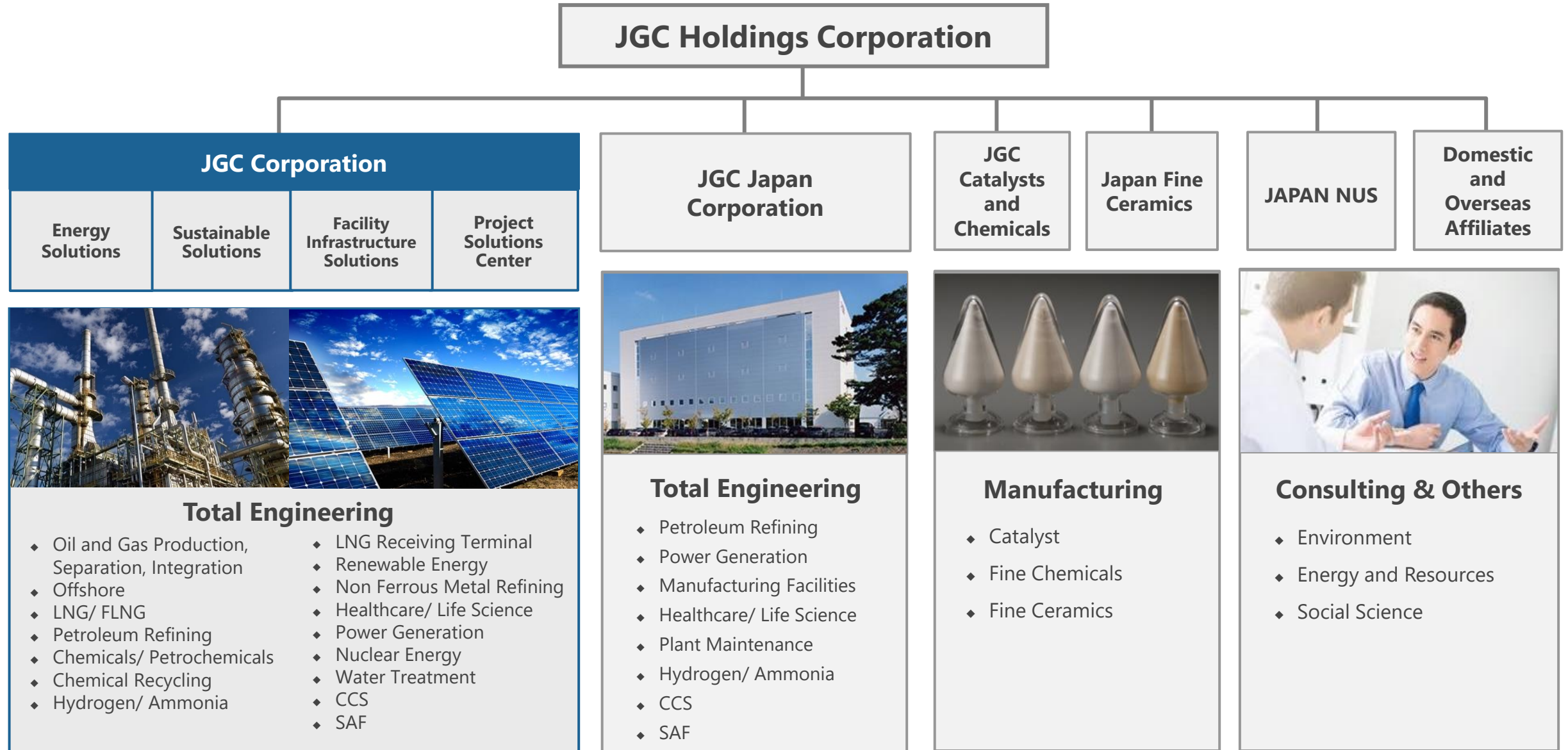
Senior Executive Officer,

Technology Commercialization Officer,

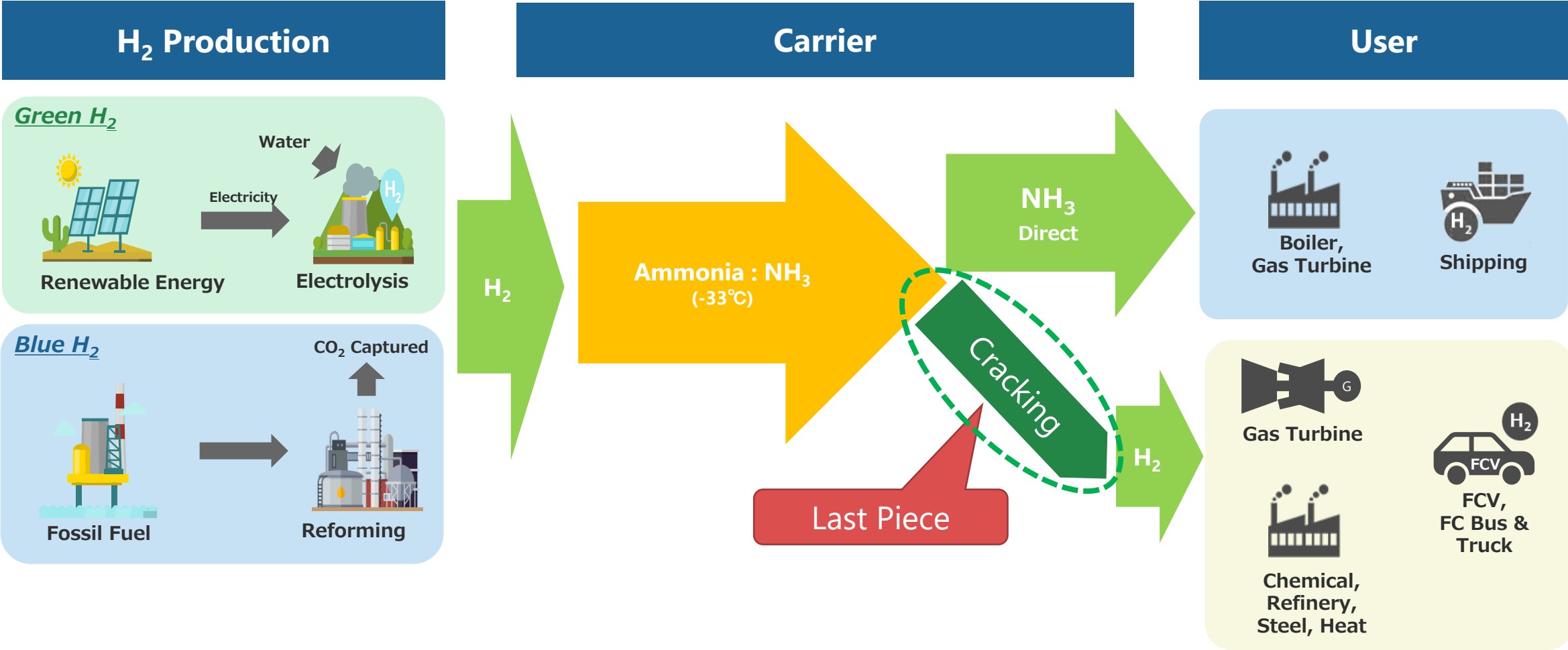
General Manager, Sustainable Co-Creation Office,

**JGC HOLDINGS CORPORATION**

# JGC Group Structure



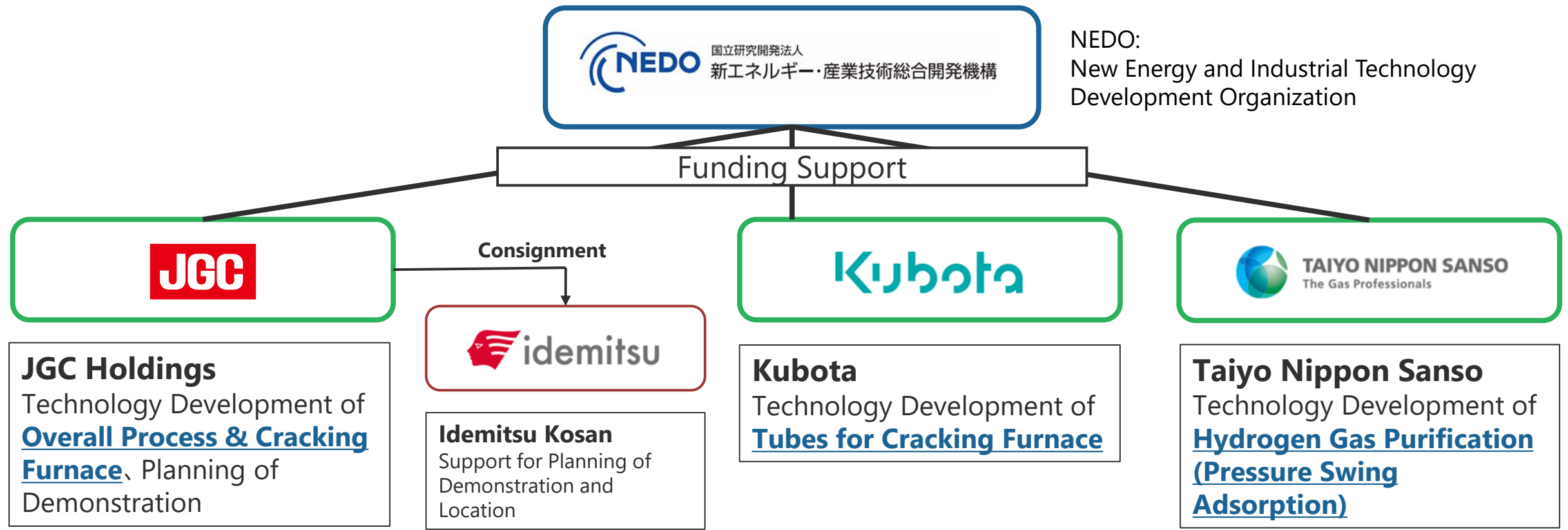
# Background of the Project



Ammonia cracking technology is the last remaining piece of development.  
Cracking technology can deliver carbon neutral energy to various users.

# “Research and development of large-scale external thermal ammonia decomposition hydrogen production technology” project funded by NEDO

## ◆ Organization of NEDO Funding Ammonia Cracking Technology Development Project



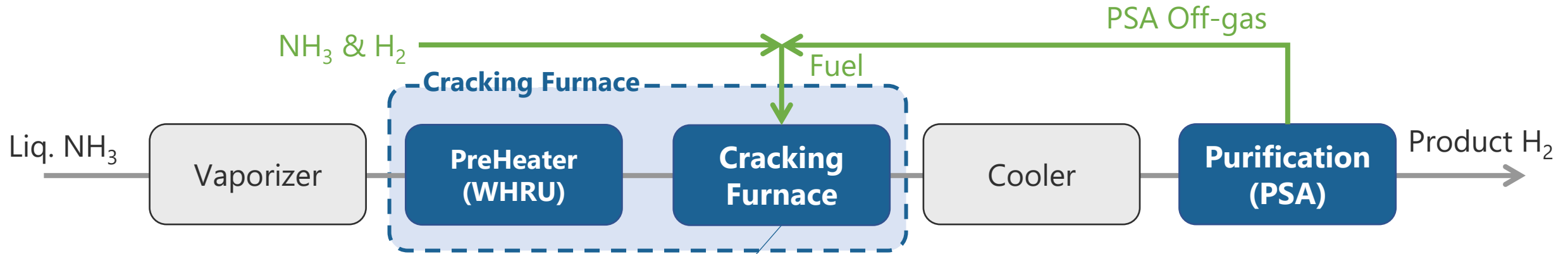
## ◆ Period of NEDO Funding Ammonia Cracking Technology Development Project

**Fiscal Year 2023 ~ 2024**

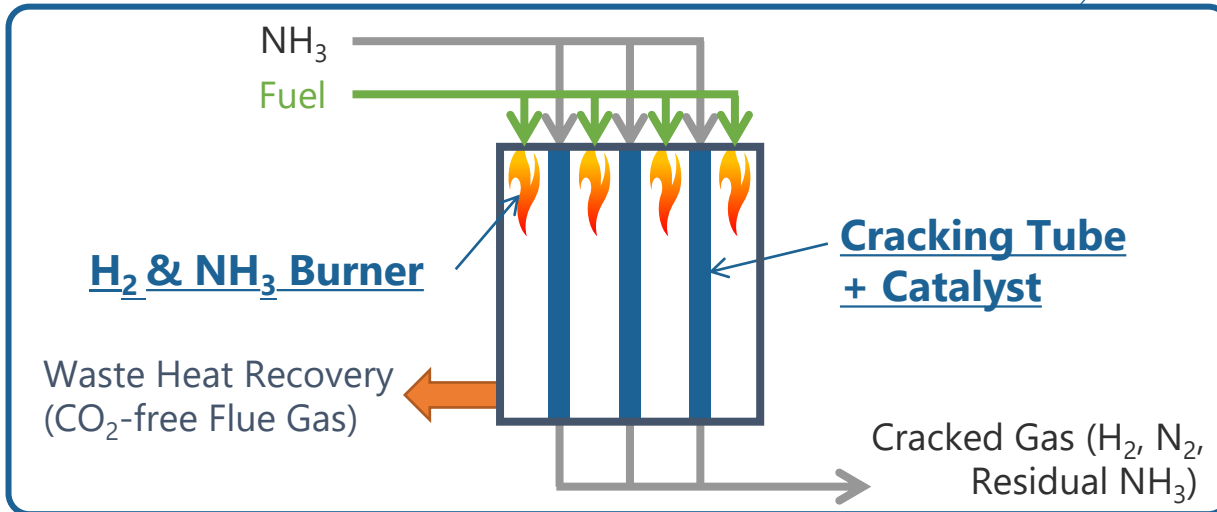
# “Research and development of large-scale external thermal ammonia decomposition hydrogen production technology” project funded by NEDO

## ◆ Block Flow Diagram for Fired Tubular Ammonia Cracking and Hydrogen Production

... large-scale, high-efficient, and zero-emission cracking system



## ◆ Concept of Cracking Furnace



## (Reference) Steam Methane Reformer



<https://www.jgc.com/en/news/assets/pdf/20230706e.pdf>

# THANK YOU FOR YOUR KIND ATTENTION



**JGC HOLDINGS CORPORATION**  
**Sustainability Co-Creation Office**

**Masahiro AIKA**  
[aika.masahiro@jgc.com](mailto:aika.masahiro@jgc.com)

**We accelerate the realization of carbon neutral society by completing and commercializing immature technologies through collaborative creation with partners.**

