



# *Introduction —*

Niterrra Co., Ltd., a global leader in internal combustion engine components, holding world-leading shares in spark plugs and oxygen sensors, as well as industrial ceramics, is actively accelerating its business expansion across e-mobility, semiconductors, and environmental & energy sectors.

The company is seeking partnerships in next-generation fuels and CO2 capture.



# *Challenge Statement*

Our Challenges are as follows:

1. Next-generation fuel production
2. Solutions for CO<sub>2</sub> transportation and storage

Through this program, we aim to engage with startup partners and co-develop tangible collaborative projects.

## Collaboration Needs

### 1. Next-generation fuel production

*We seek innovative solutions for synthetic fuel refining processes from H<sub>2</sub> and CO<sub>2</sub> (or CO) feedstock. The scope covers both primary and secondary synthesis stages, with a particular focus on low-energy solutions that address challenges in Fischer-Tropsch synthesis through catalyst improvements or other technological innovations.*

### 2. Solutions for CO<sub>2</sub> transportation and storage

We seek energy-efficient, cost-effective CO<sub>2</sub> transport and storage solutions as alternatives to liquefaction.

Innovations that enhance economic viability by reducing energy consumption and optimizing logistics are especially welcomed.

We anticipate synergies between your technology or solution and our assets, which are based on ceramic and/or organic material technologies, as well as our manufacturing capabilities.



# Niterra

日本特殊陶業

## Challenge Statement

### Business Opportunities

1. Market and business expansion
  - Potential for technology introduction to Niterra and expansion into the Japanese market
  - Opportunities for further deployment in global markets, including sales through Niterra's customer network
2. Facility access and technical validation
  - Access to Niterra's production equipment and manufacturing facilities
  - Opportunities for technical evaluation and PoC
3. Strategic partnership and investment
  - Possibility of joint development projects
  - Potential for financial collaboration, including equity investment and M&A

### Assets/Support

Various customer networks, technology platforms, production equipment, and manufacturing facilities.

**Next: Message from Challenge Owner** 

**Hiroshi Inagaki**

Electric system Architect & Value planning  
Senior Specialist  
Platform Development Center  
Niterra Co., Ltd.

**Message from Challenge Owner**

As a company committed to driving innovation, we are looking for startups with innovative technologies and ideas that align with our collaboration needs. Through joint efforts, we hope to create impactful solutions by leveraging our industry expertise and your entrepreneurial drive and creativity.

Join us in our mission to build a brighter and more sustainable future.