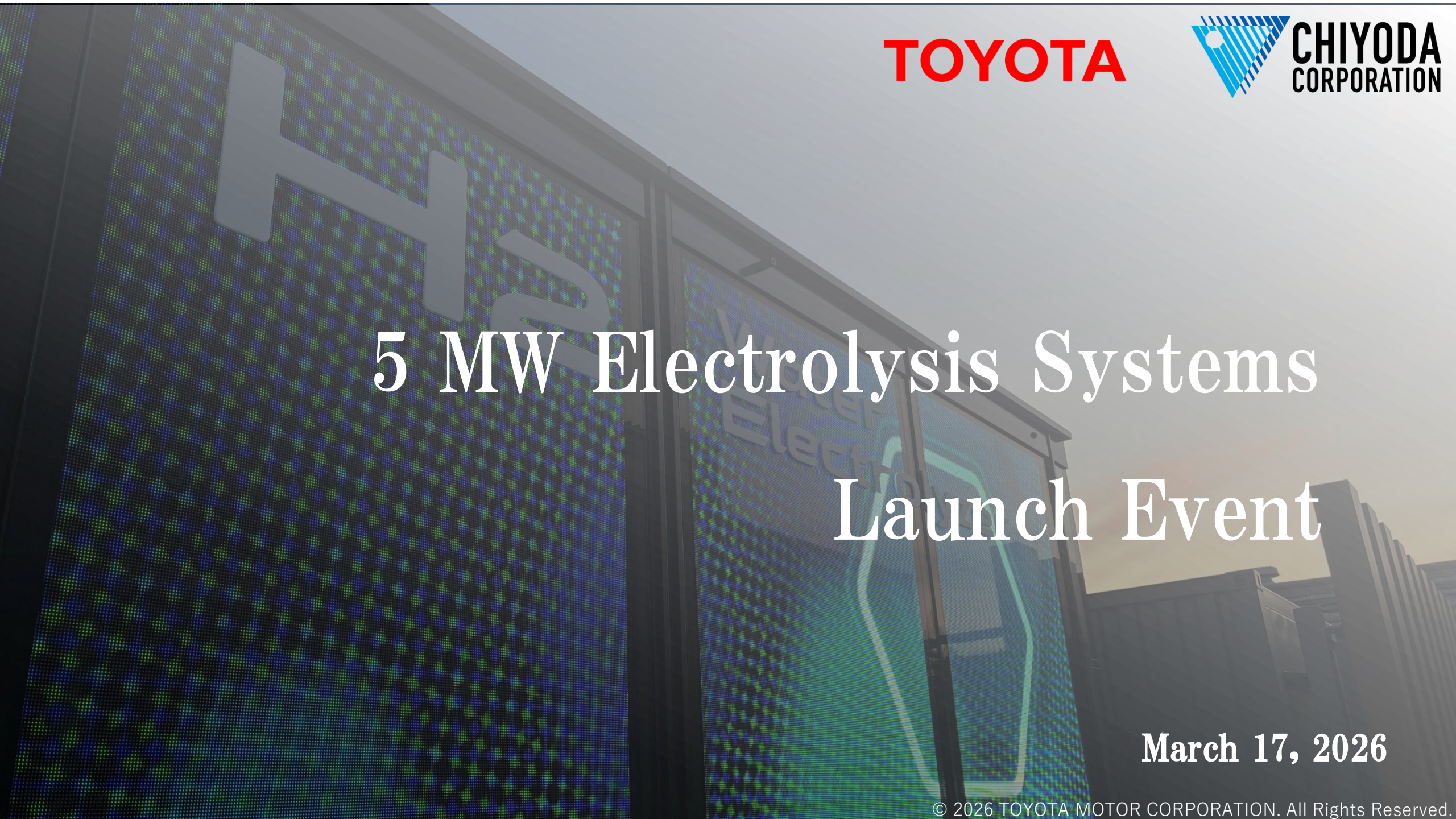


5 MW Electrolysis Systems Launch Event

March 17, 2026

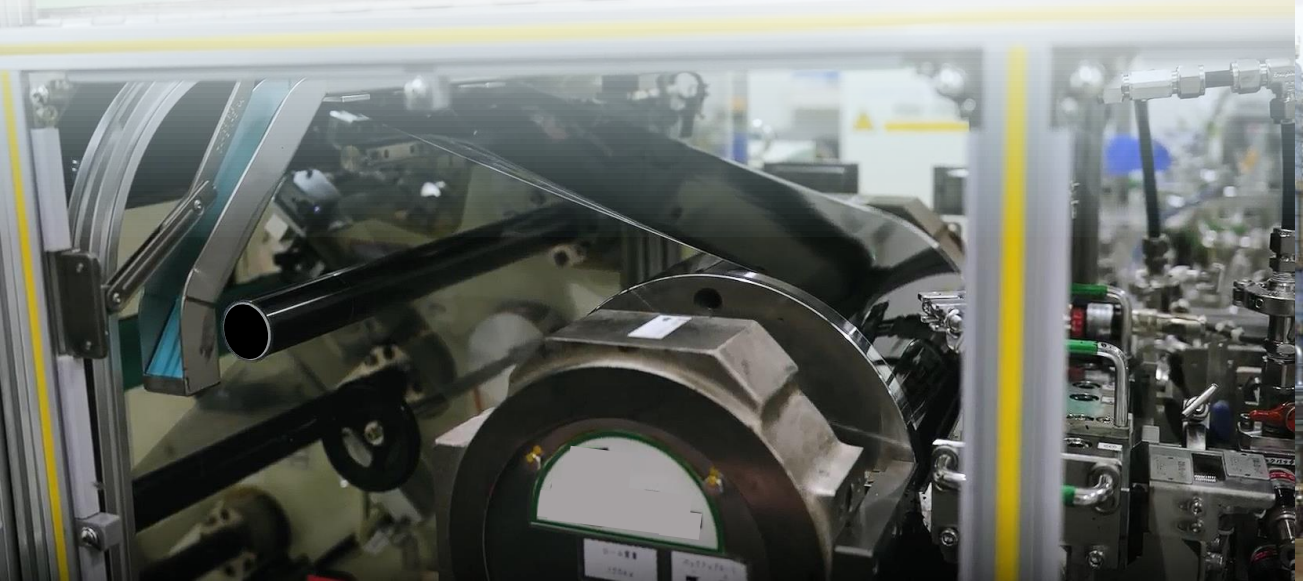
More Hydrogen

More Affordable

More Accessible

More Applicable

Industrial Products × Plant Engineering



TOYOTA

Taking Responsibility Through Action
Delivering Social Value with Automotive Technology

Launched a demonstration program at DENSO Fukushima in Spring 2023

CHIYODA CORPORATION

Enriching Society through Engineering Value

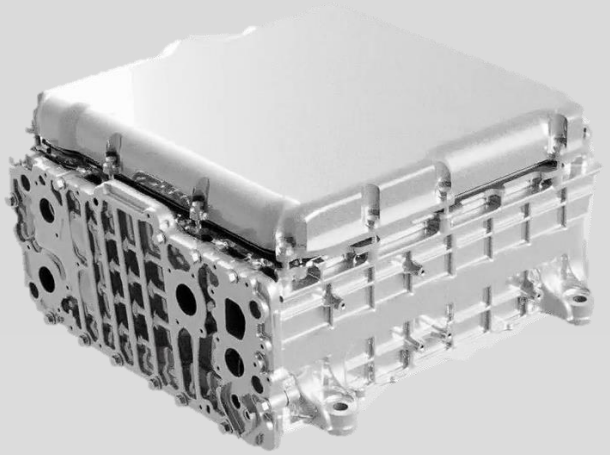
Connecting Regions and People Worldwide Through Energy Infrastructure

Building Plants Across 60+ Countries

写真提供：カタールガスオペレーティングカンパニーリミテッド　Courtesy of Qatargas Operating Company Limited

提供元: Bing

Leveraging Automotive Synergy



Achieves 12× higher hydrogen production at the same electrolyzer volume as the DENSO Fukushima system, enabled by automotive-grade components and standardized manufacturing.

Designed for Simplified Plant Operation

Optimal Control

Predictive & Preventive Maintenance

Operational Support System

Condition Monitoring

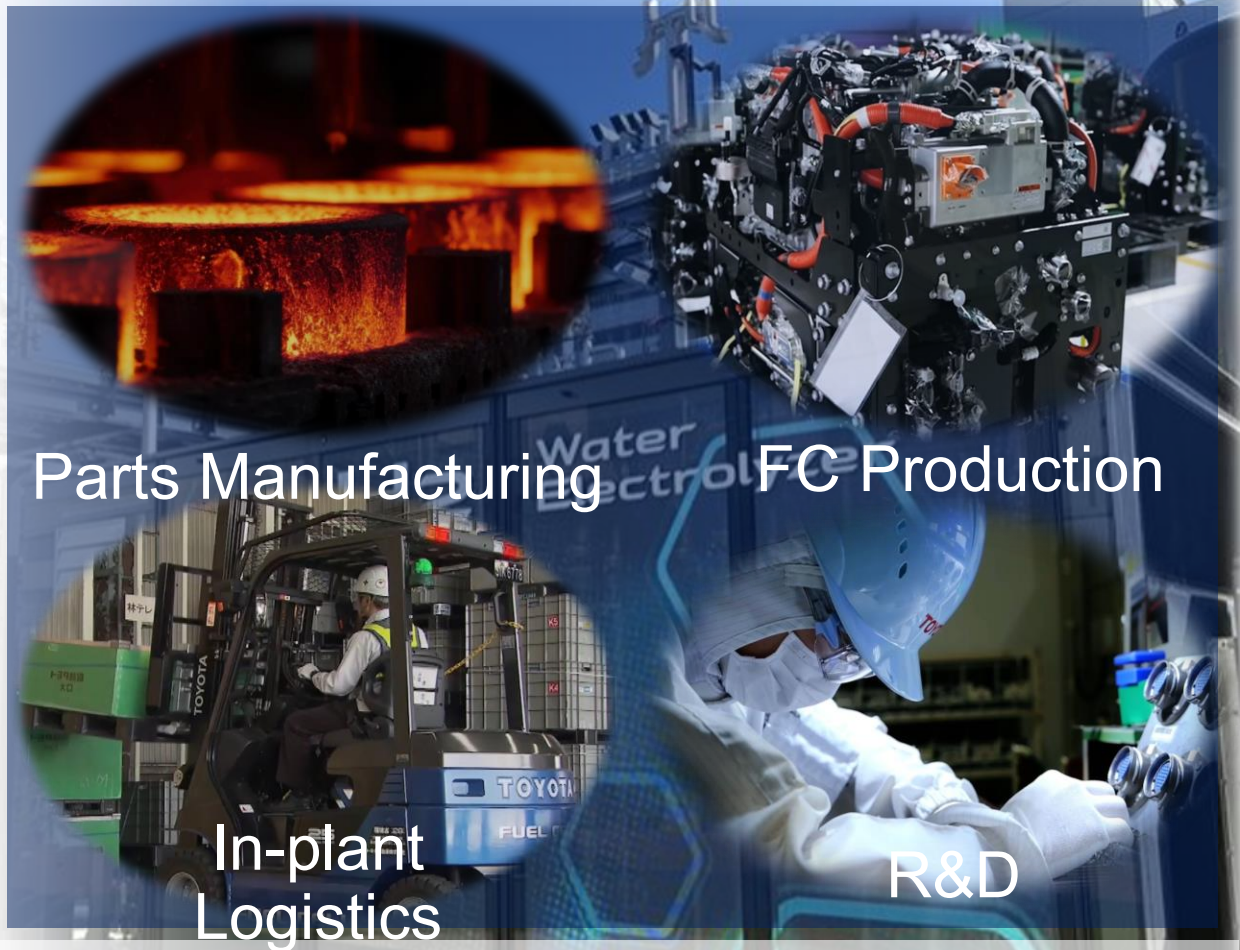
Achieves more than a 10% reduction in system-level operating costs and a 50% reduction in plant downtime.

Reality in Motion

Denso Fukushima		Toyota Honsha Plant	
Capacity	0.4 MW	Capacity	5.0 MW
H2 Production	8 kg/h	H2 Production	96 kg/h
Site Area	750 m²	Site Area	750 m²
Stack Replacement	-	Stack Replacement	50%↓
O&M	On-site	O&M	Remote

Scaling electrolysis systems to improve hydrogen accessibility and affordability

Reality in Motion: Production to End Use



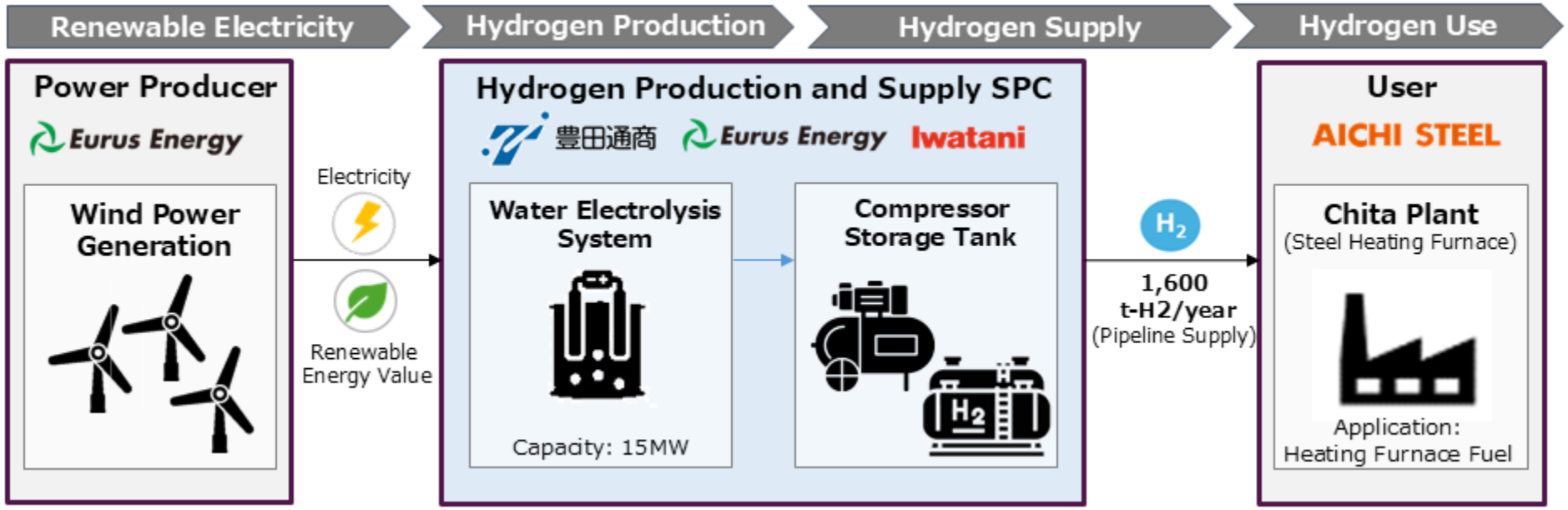
Exploring a wider range of hydrogen applications

The Next Challenge

TOYOTA

CHIYODA CORPORATION

2030: Launch of a 15-MW-Scale Water Electrolysis Project with Aichi Steel Corporation



Approved in 2025 under Japan's Hydrogen Society Promotion Act

Supporting Japan’s Growth Strategy and Making Hydrogen Part of Everyday Life