ATW TECHNOLOGY INC.
Institutional investor conference

Agenda

1 Company Profile

2 Outlook of Business

3 Financial Statements

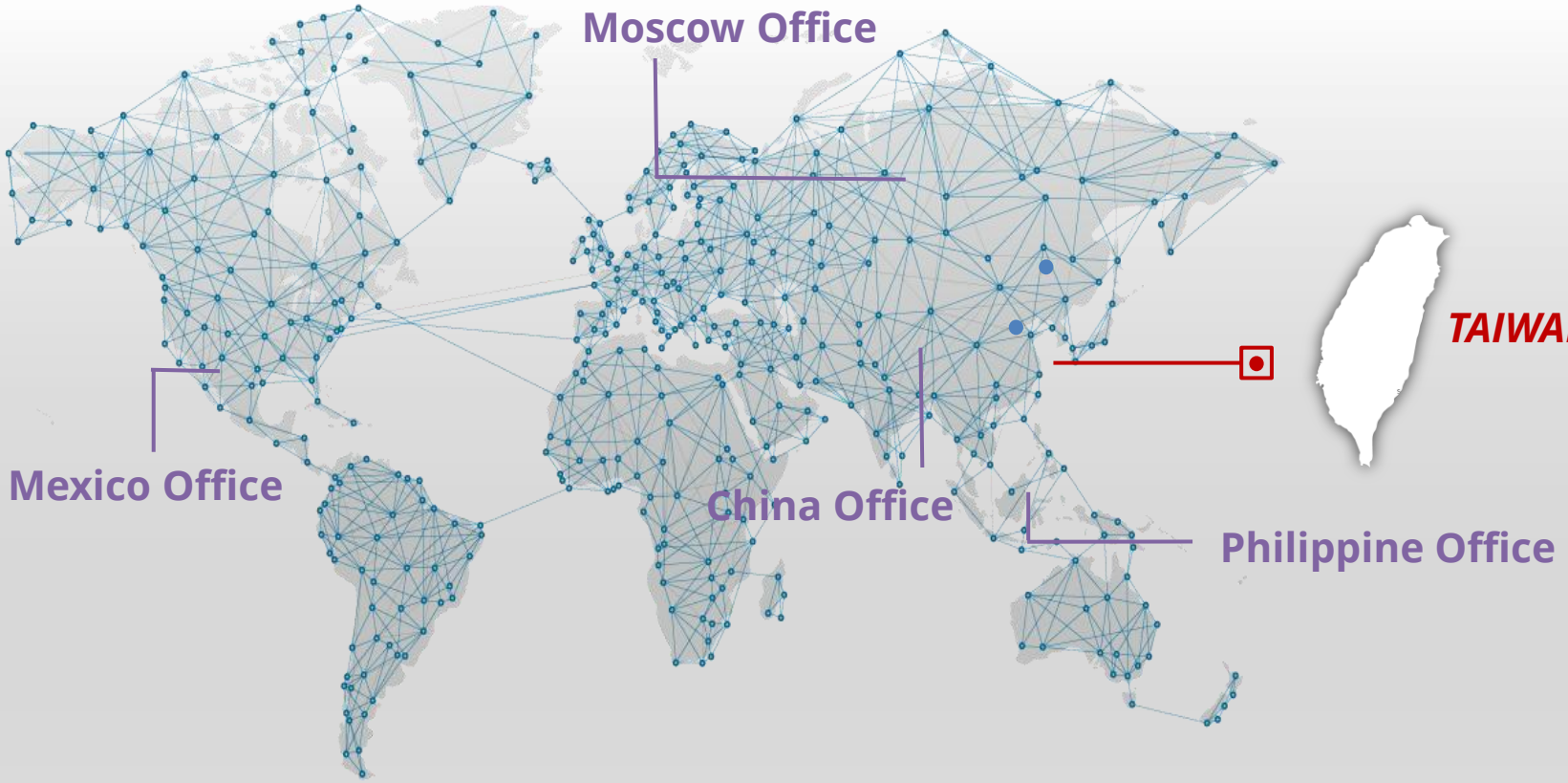
4 Outlook of Future

5 Q&A

A Glance at ATW Tech.

1986	2004	638M$ (NTD)	232M$ (NTD)	~100 Nov.2025	5
FOUNDED	IPO	CAPITAL	REVENUE(Jan 1~Oct 31 2025)	EMPLOYEE	BRANCH

Global Sites



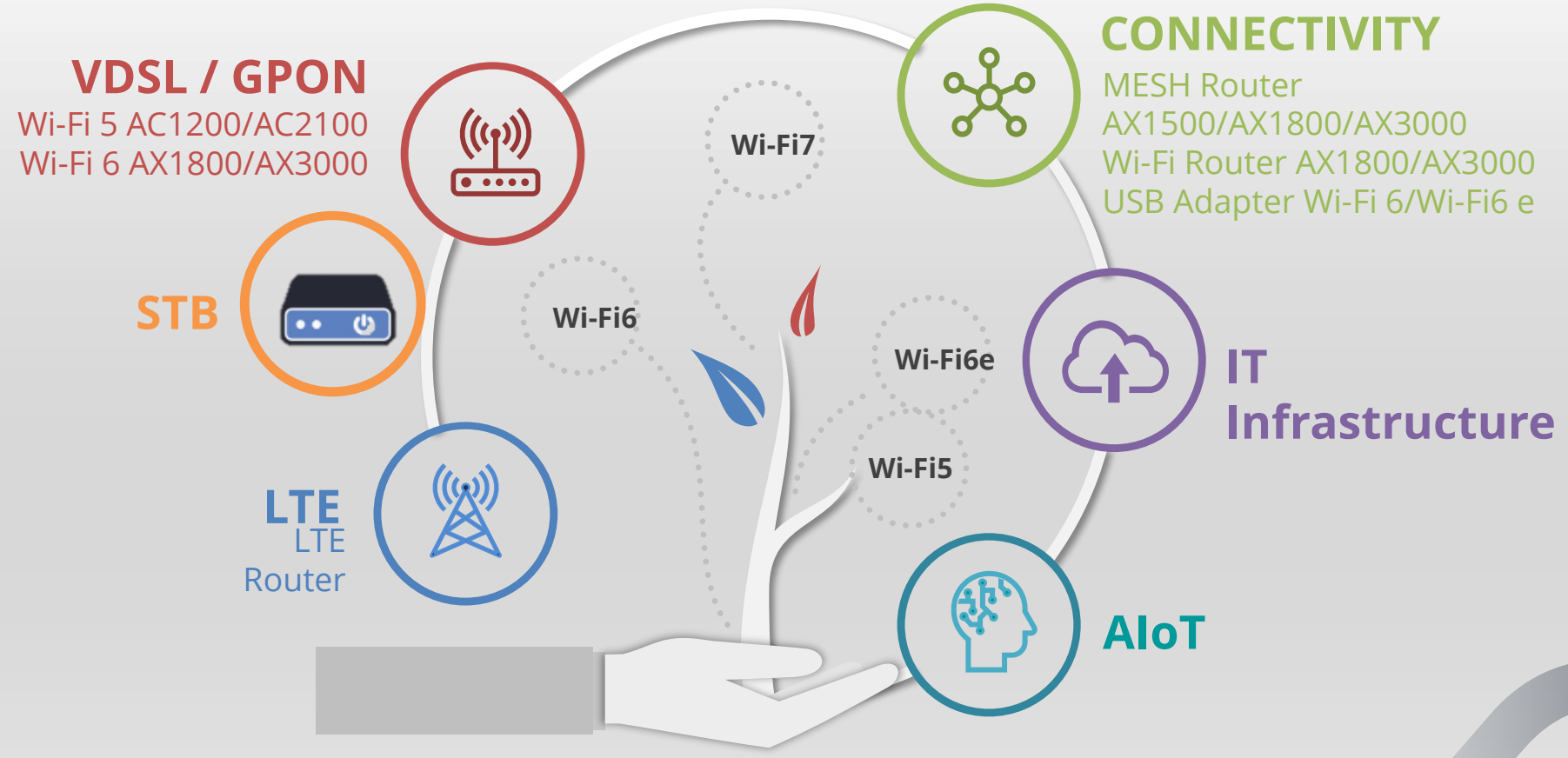
4 Oversea sales offices

Covering *3* Regions

2 R&D centers

50+ Engineers

What We Do


VDSL / GPON
Wi-Fi 5 AC1200/AC2100
Wi-Fi 6 AX1800/AX3000
STB
LTE
LTE
Router
Wi-Fi7
Wi-Fi6
Wi-Fi6e
Wi-Fi5
CONNECTIVITY
MESH Router
AX1500/AX1800/AX3000
Wi-Fi Router AX1800/AX3000
USB Adapter Wi-Fi 6/Wi-Fi6 e
IT
Infrastructure
AIoT

Business Development Milestone

2020~2022

Breakthrough

Single Customer
代工轉直攻

2023~2024

Global Expanding

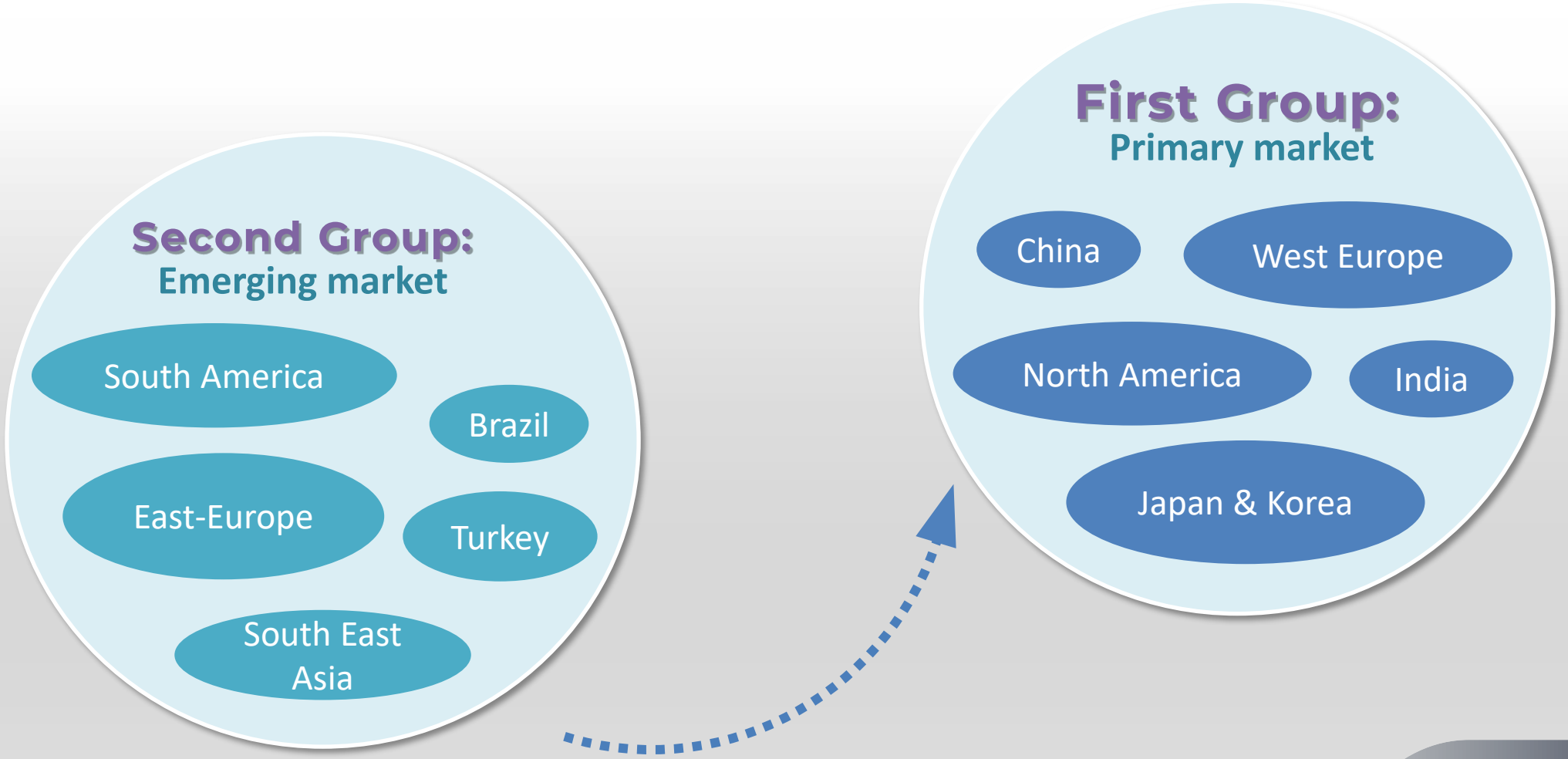
Multiple Customers
單一客戶到多客戶

2025-

Expanding & Transformation

Multiple Customers
Multiple Solutions
New Business
單產品到多產品線
新市場、多客戶

Outlook of Business after 2026



Advantage of ATW

Understand customer needs/Provide solutions/Build good customer relationships

-Go-direct to work with telecommunications operators
-Flexible customization services
-Provide Turnkey local production services

Rich R&D experience

-30+ years in Network field/15+ years in IOT field.
-Hardware and Software design capability.
-Telecom Laboratory Accreditation Capabilities.
-On time software maintenance service.

Pragmatic and flexible management

- Light asset strategy, outsourcing management
- Cost control

2025 Q1~Q3 Income Statement

In NTD thousands	2025Q1~Q3		2024Q1~Q3		YoY Change
Net Sales	222,674	100%	156,556	100%	42.23%
Cost of Goods Sold	(169,733)	(76)%	(105,049)	(67)%	61.58%
Gross Profit	52,941	24%	51,507	33%	2.78%
Operating Expenses	(96,684)	(43)%	(84,873)	(54)%	13.92%
Operating Loss	(43,743)	(19)%	(33,366)	(21)%	31.10%
Non-operating Income & Expenses	(11,102)	(5)%	47,254	30%	-123.49%
Income Before Tax	(54,845)	(24)%	13,888	9%	-494.91%
Income Tax Benefit	528	-	-	-	-
Net Income	(54,317)	(24)%	13,888	9%	-491.11%
EPS After Tax(NTD$1)	(0.86)		0.21		

Balance Sheet

In NTD thousands	2025.9.30		2024.12.31	
Cash and cash equivalents	319,719	23%	435,261	27%
Financial assets at FVTPL - current	104,277	7%	21,152	2%
Accounts receivable, net	157,083	11%	185,645	11%
Inventory, net	10,914	1%	24,181	1%
Financial assets at FVTOCI - non-current	212,724	15%	338,151	21%
Property, plant and equipment	77,629	5%	83,093	5%
Investment property - net	345,281	25%	357,295	22%
Intangible assets	18,571	1%	19,116	1%
Total assets	1,404,603	100%	1,624,801	100%
short-term borrowings	30,000	2%	-	-
Long-term borrowings	14,000	1%	19,250	1%
Total liabilities	193,710	14%	210,039	13%
Total equity	1,210,893	86%	1,414,762	87%

Outlook of future: Introduction to hydrogen energy business

- ATW Hydrogen Technology – Research & Development Status
- Global hydrogen storage technology vs. ATW's advantages and disadvantages analysis report
- Global hydrogen storage market application analysis

ATW Hydrogen Technology – R&D Status-1

- **Successfully achieved 5.3–6.2 wt% hydrogen absorption in optimized Mg alloy + catalytic systems.**
- Demonstrated reversible absorption and desorption at **375 °C and 3.5 MPa**.
- Improved kinetics: most hydrogen uptake occurred within **10–20 minutes** for optimized batches.

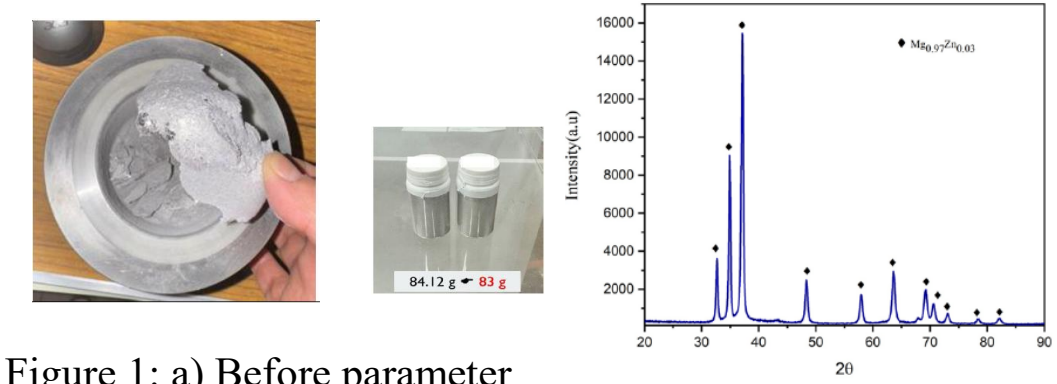


Figure 1: a) Before parameter optimization, b) After parameter optimization

Figure 3: XRD scan for Mg alloy

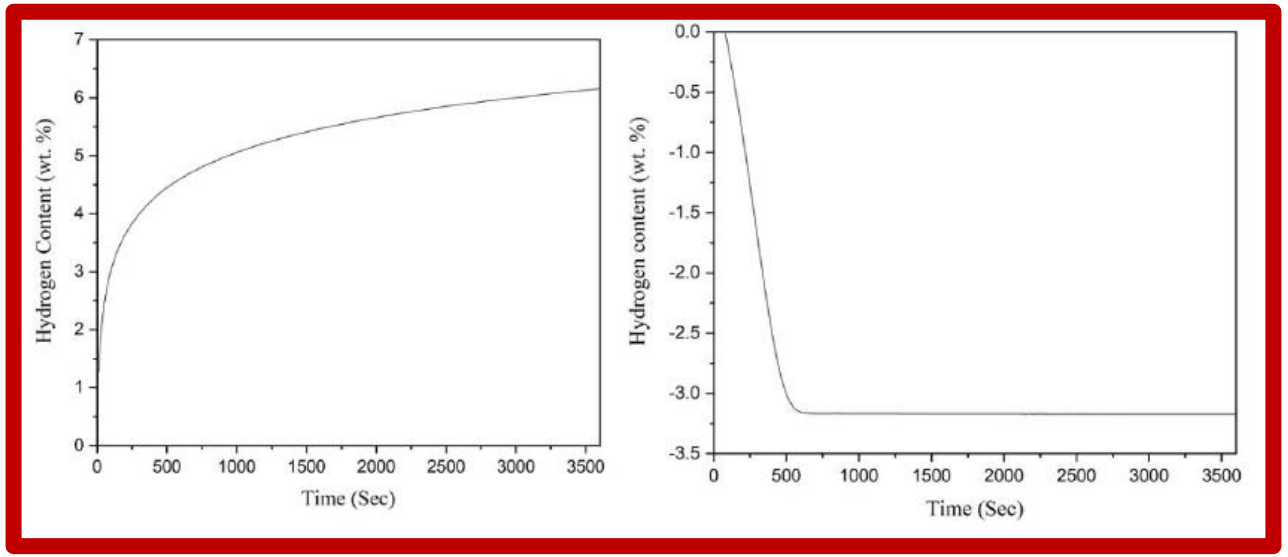


Figure 2: Hydrogen storage performance for optimized sample

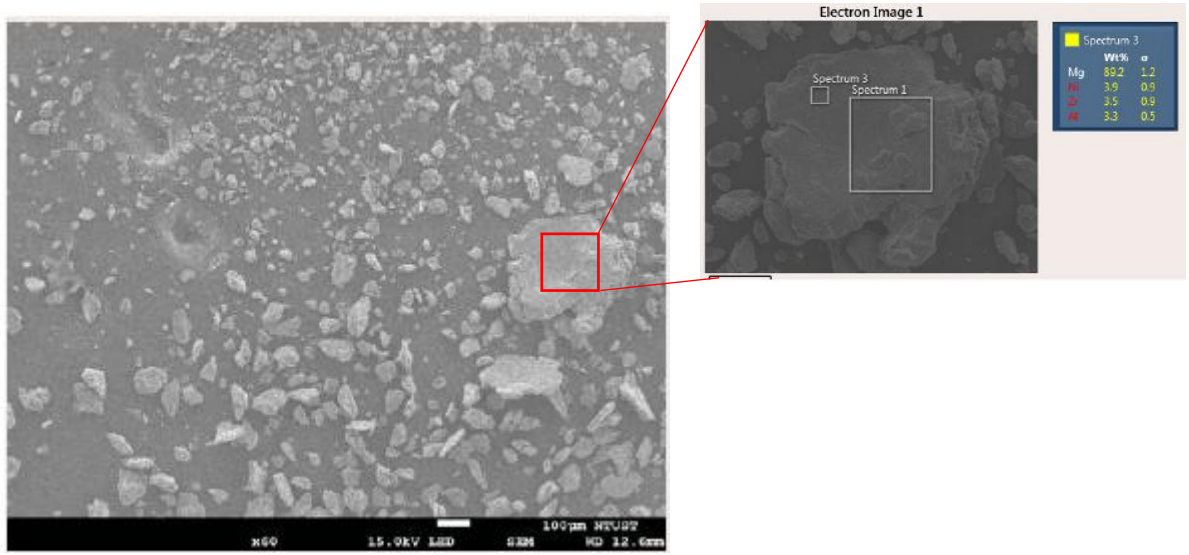


Figure 4: SEM and elemental composition mapping for Mg alloy

ATW Hydrogen Technology – R&D Status-2

Small Hydrogen Storage Tank Prototype (4 kg Mg)

✓ First generation prototype ✓ Second Generation Prototype

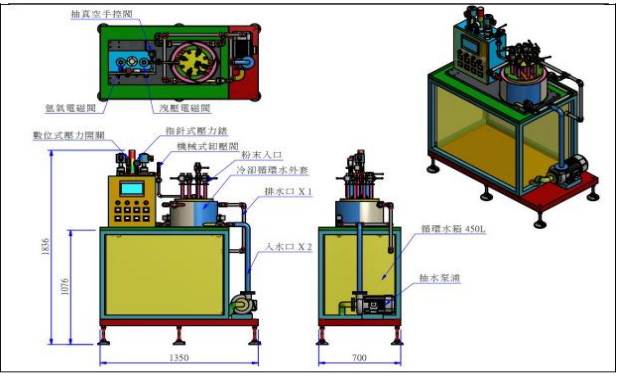


Figure 5: 4Kg prototype development

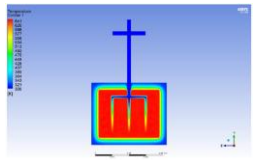


Figure 6: Fluid flow hydrogen supplying simulation

- The 4 kg prototype completed hydrogen absorption tests，with a storage capacity of 5.5 wt.%，reached the U.S. DOE 2025 hydrogen storage target（5.5wt.%），and approaching the 2030 ultimate target of 6.5wt.%。Resource :https://www.hydrogen.energy.gov/docs/hydrogenprogramlibraries/pdfs/progress17/iv_0_stetson_2017.pdf?sfvrsn=2723dda0_1&utm_source=chatgpt.com)

✓ third Gen. Prototype

✓ 2025台灣創新科技博覽會發明競賽 銀牌獎 (10.18)

✓ awarded Silver Metal Award 🥈 in "the 2025 Taiwan Innotech Expo: Invention Competition Oct. 18th

ATW Hydrogen Technology – R&D Status-3

666 kg Large Storage Tank Results (stores 40 kg H_2, powers 1 MW)

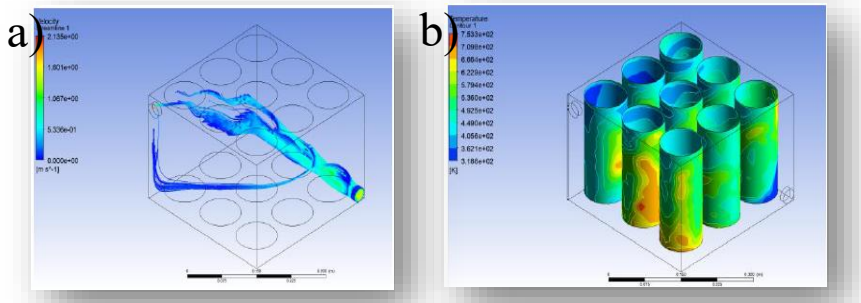


Figure 7: Simulation of a) One inlet-outlet flow stream and b) Temperature distribution for a big reactor

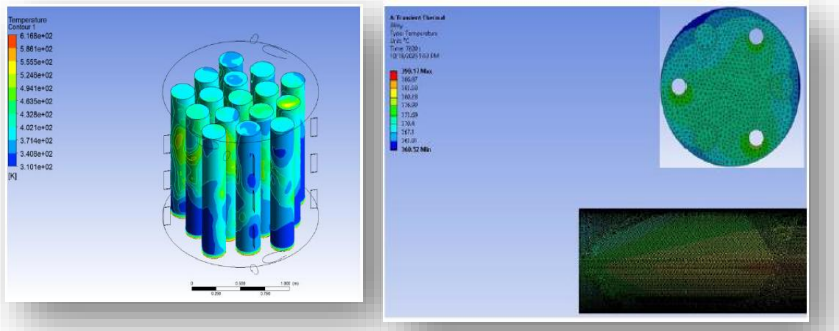
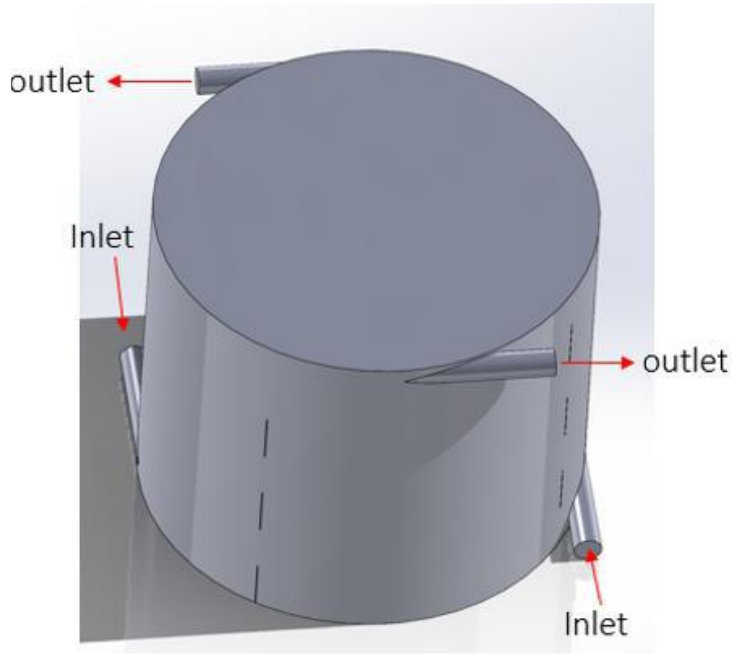
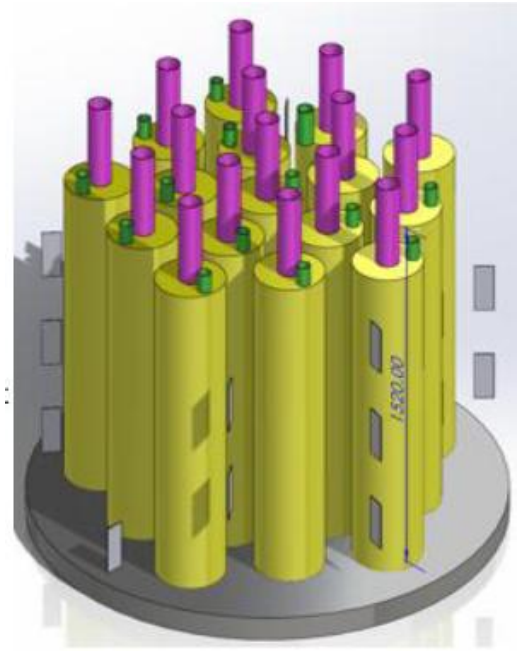


Figure 8: a) Cooling system design, b) heat distribution analysis for a big storage tank





Design output:

- Internal cooling coil area ≈ **2.5 m²**.
- External jacket heat-transfer area ≈ **4.5 m²**
- A 24-compartment design with three diffusers per compartment.

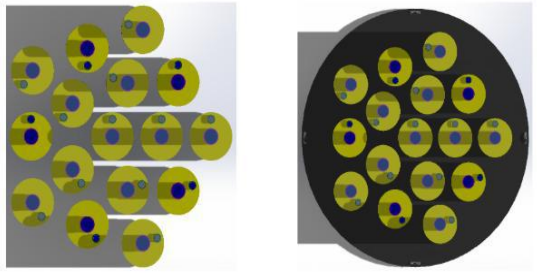
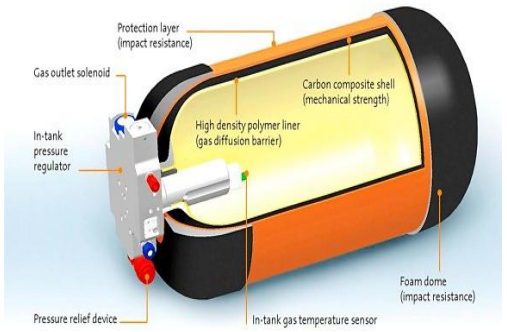


Figure 9: big reactor design

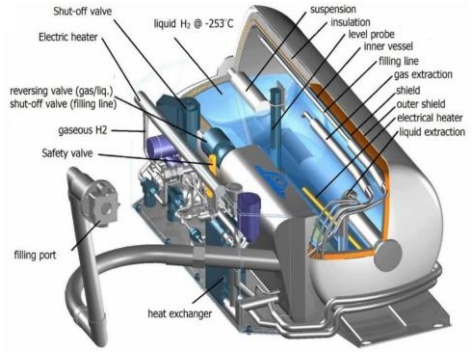
Manufacturing of one compartment of a big reactor has started

Global Hydrogen Storage Technologies vs. ATW – Advantages and Disadvantages analysis report -1

Comparison of Different Storage Techniques

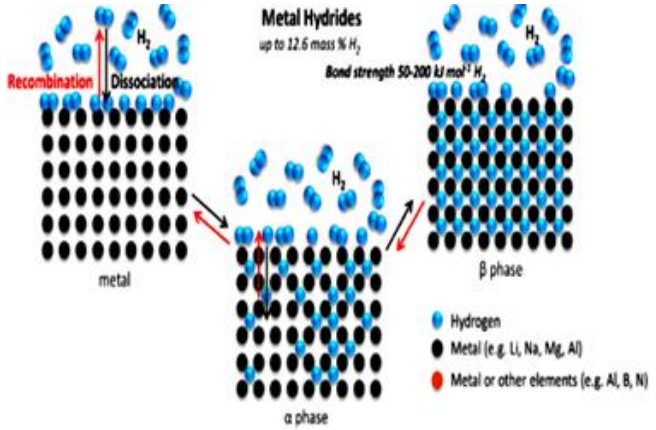


Compressed hydrogen gas

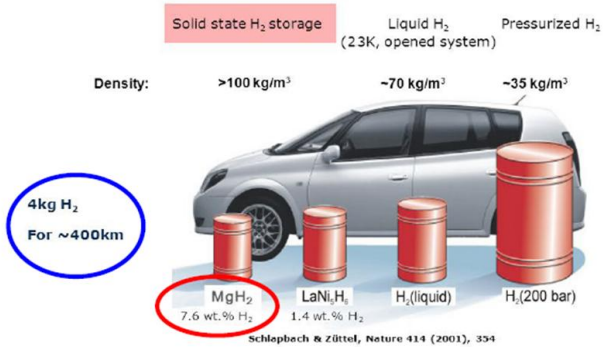


Cryogenic liquid hydrogen

storage system	**Volumetric hydrogen capacity (kg H_2 m^{-3})**	Drawbacks
(1) Compressed hydrogen gas (80 MPa)	~40	Safety issues due to very high pressure; compression cost; large pressure drop in use; tank failure risk
(2) Cryogenic liquid hydrogen	~71	Large thermal losses; insulation requirements; liquefaction cost
(3) Solid metal hydrides	**80–160**	None



Solid metal hydrides

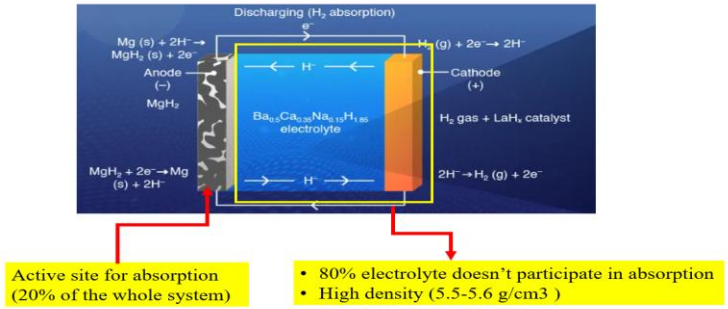


resource：https://doi.org/10.1016/j.matchemphys.2024.129710

Global Hydrogen Storage Technologies vs. ATW report -2

Global Hydrogen Storage Technologies vs. ATW Solid-State Storage Systems

（1）Japanese solid-state battery (hydride-ion battery):



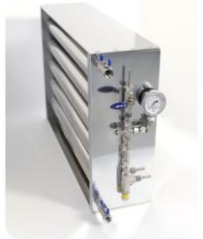
resource：https://www.isct.ac.jp/en/news/okmktjxyrvdc

Metric	Our Mg Solid-State Storage	Japanese Solid-State Battery
Theoretical gravimetric capacity (MgH_2)	~7.6 wt%	7.6 wt%
Practical gravimetric capacity	~6 wt% (nearly 100% active)	~1.5 wt% (20% active MgH_2 only)
Volumetric hydrogen capacity	~100–110 g H_2/L (close to MgH_2 intrinsic)	<25 g H_2/L (diluted by dense electrolyte)

(2)South korea Hydrolux

1 kg hydrogen storage system

https://www.hydrolux.co.kr/zh



1kg Hydrogen Storage Module

Alloy / Product	H_2 Storage Capacity (wt%)	Pressure / Temp Conditions / Notes
HL1.85	~ 1.85 wt%	Plateau pressure ~17 atm, ambient temp (~20 °C)
HL2.0	~ 2.0 wt%	Lower plateau pressure option
HL2.5 / HL2.8 / HL3.3	~ 2.5 to 3.3 wt%	Various pressure & alloy types (e.g. BCC structure for higher capacity)

Table 1. Global Hydrogen Storage Technologies vs. ATW Solid-State Mg Storage Systems

Attribute	**Global Commercial Systems**	**ATW Mg System**
Active fraction	20–90% (varies)	≈100% (all active)
Gravimetric H_2 capacity	2–5 wt%	**6–7 wt% potential**
Safety	High	High
Best Applications	Logistics / Stationary energy	**Logistic, Stationary energy, Industrial energy supply, power buffering**
Commercial Maturity	Already deployed (Asia/EU)	Prototype

Global hydrogen storage market application analysis -1

Key Material Classes & Mechanisms

Material class	Mechanism	Key characteristics	Status
Metal hydrides (e.g., MgH_2, $NaAlH_4$)	Chemical absorption	High volumetric density, high safety, reversible; heat needed for H_2 release	Advanced R&D / niche commercial
Complex hydrides (e.g., alanates, borohydrides)	Chemical absorption	Very high theoretical capacity, but thermodynamic and kinetic challenges	Mainly lab-scale R&D
Adsorbents (e.g., MOFs, activated carbon)	Physical adsorption	Fast kinetics, low operating temperature; often requires cryogenic temperature or moderate pressure	R&D / early prototyping
Chemical hydrides (e.g., ammonia borane)	Irreversible chemical absorption	High gravimetric capacity, but regeneration of spent fuel is complex	Lab-scale R&D

https://doi.org/10.1016/j.ijhydene.2024.11.459

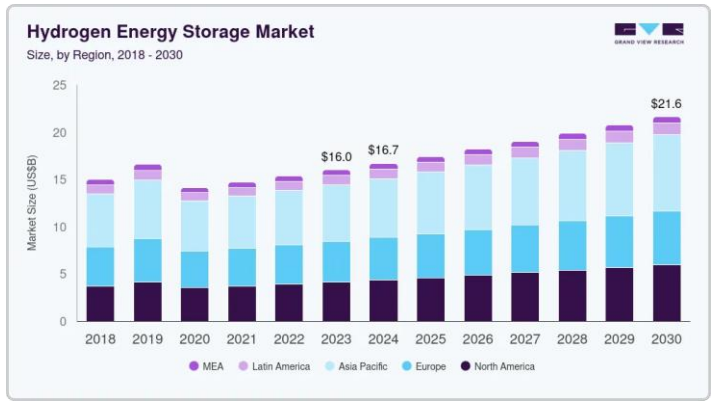
Applications

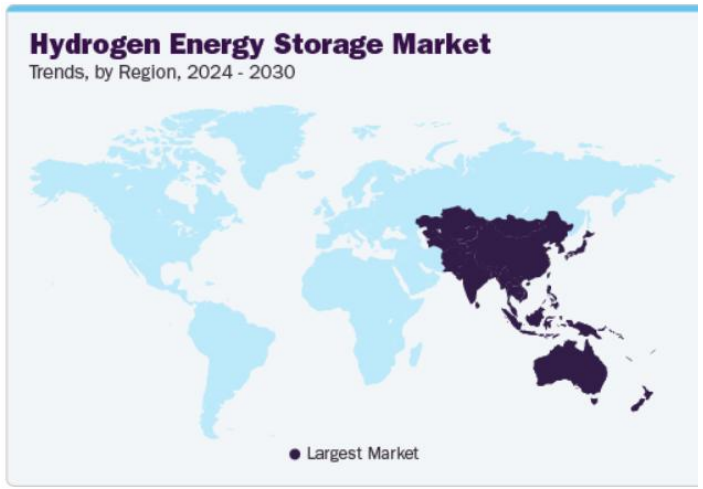
1. Mobility (Aviation, Marine, Specialized Vehicles)
2. Stationary & Backup Power
3. Material Handling & Indoor Logistics
4. Portable Electronics & Micro-Energy

Portable hydrogen storage energy system

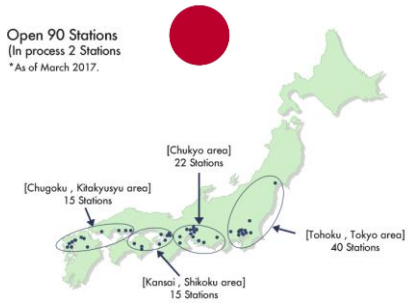
Global hydrogen storage market application analysis -2

Global Hydrogen Storage Markets





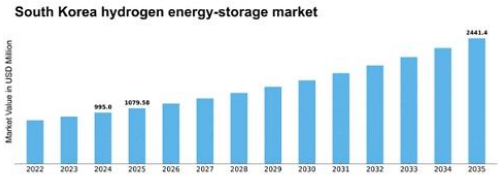
Resource：https://www.grandviewresearch.com/industry-analysis/hydrogen-generation-market



Market Size & Forecast (total economic value of all hydrogen storage-related products and services sold in Japan)

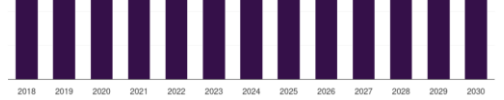
- 2023 Market Size: USD 813.2 Million
- CAGR (2024-2030): 4.5%
- 2030 Projected Market Size: USD 1,141
- Asia Pacific: Largest market Asia Pacific: Largest market in 2023

Resource：Japan Hydrogen Energy Storage Market Size & Outlook, 2030



Year	Market Size (USD Million)
2024	995.0
2035	2,441.4

Resource：https://www.marketresearchfuture.com/reports/south-korea-hydrogen-energy-storage-market-55480



Year	Market Size
2025	USD 12.3 billion
2031	USD 31.8 billion
CAGR	17.1%

Leading Players in China

- Linde, Air Liquide, Air Products
- Nel ASA, Plug Power, Hydrogenics (Cummins)
- Siemens Energy, Chart Industries
- Toshiba Energy Systems

Resource：
https://doi.org/10.1016/j.uncres.2023.07.001

- **Asia-Pacific leads global demand and market revenue(20.2 BN)**, supported by strong hydrogen strategies in China, Japan, and South Korea.
- Global trade and consumption data show **China 33%. the U.S.(15%), and Europe (20.6%)** as dominant players across the hydrogen value chain.
- **Innovation in storage technologies** (compressed, liquid, solid-state) and proven pilot deployments in transport/industry demonstrate real-world readiness.

The upstream, midstream and downstream of the industry

Upstream - hydrogen production：Hydrogen source1. Green hydrogen(For example, quality energy, solar photovoltaics, wind power, and hydropower)
2. Gray hydrogen(For example, the petrochemical process captures hydrogen after production)
Midstream - hydrogen storage： Save the category 1. High-pressure hydrogen (Pressure 350-700 kg)
2. Liquid hydrogen(-253 degrees)
3. Solid hydrogen (Normal temperature and pressure)
ATW is focusing on the research and development of solid-state hydrogen storage technology
Features: Solid hydrogen storage can be carried out at room temperature and pressure, with large reserves and low transportation costs
Downstream - power generation(fuel cell)

Industrial Applications

Industries with high power demand：Such as semiconductors, AI computing power industry, data centers, long-distance transportation (ships, large trucks). Backup power supply in multi-family housing communities and backup power supply in countries (regions) with high electricity prices.

Type of Demand：1.Fixed factory type: such as UPS and power station, etc
2. Mobile power generation devices

Bottleneck in the hydrogen energy industry

1.The unit hydrogen storage capacity is insufficient, resulting in high power generation costs
2.There are not enough hydrogen refueling stations, and the demand cannot be popularized

Advantage of ATW

1. Solid-state hydrogen storage can be carried out at room temperature and pressure, with large reserves and low transportation costs, giving it a competitive advantage in power generation costs.
2. Solid-state hydrogen storage barrels have good mobility, and can be quickly transported to the local area regardless of any area, generating power at any time, such as during typhoon season, allowing the original power outage area to quickly resume power generation.

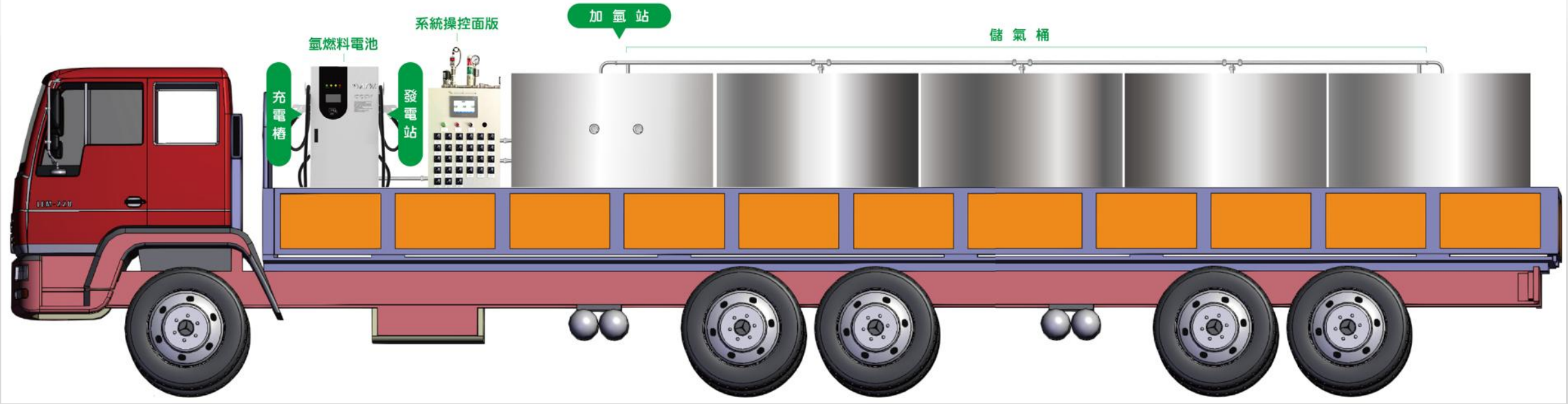
Business model

1. Hydrogen storage tank requirements:In foreign countries that mainly rely on hydropower, the hydrogen generated during the power generation process can be stored in hydrogen storage barrels and can be used to generate electricity with fuel cells or sell green hydrogen.
   For many industries with high electricity demand at home and abroad, the company can deploy hydrogen storage tank dealers to expand customer reach and sell hydrogen storage barrels as electricity reserves.

2.Integration of upstream, midstream and downstream of hydrogen energy:With hydrogen storage barrels as the main body and complete fuel cell solutions, it is customized for potential customers to improve their electricity needs.

常瑅科技股份有限公司
ATW TECHNOLOGY INC.

移動式發電站 | 移動式充電樁 | 移動式加氫站



Thank You