

CIMC ENRIC 中集安瑞科

(stock code: 3899.HK)

Advanced intelligent manufacturer in
clean energy industry

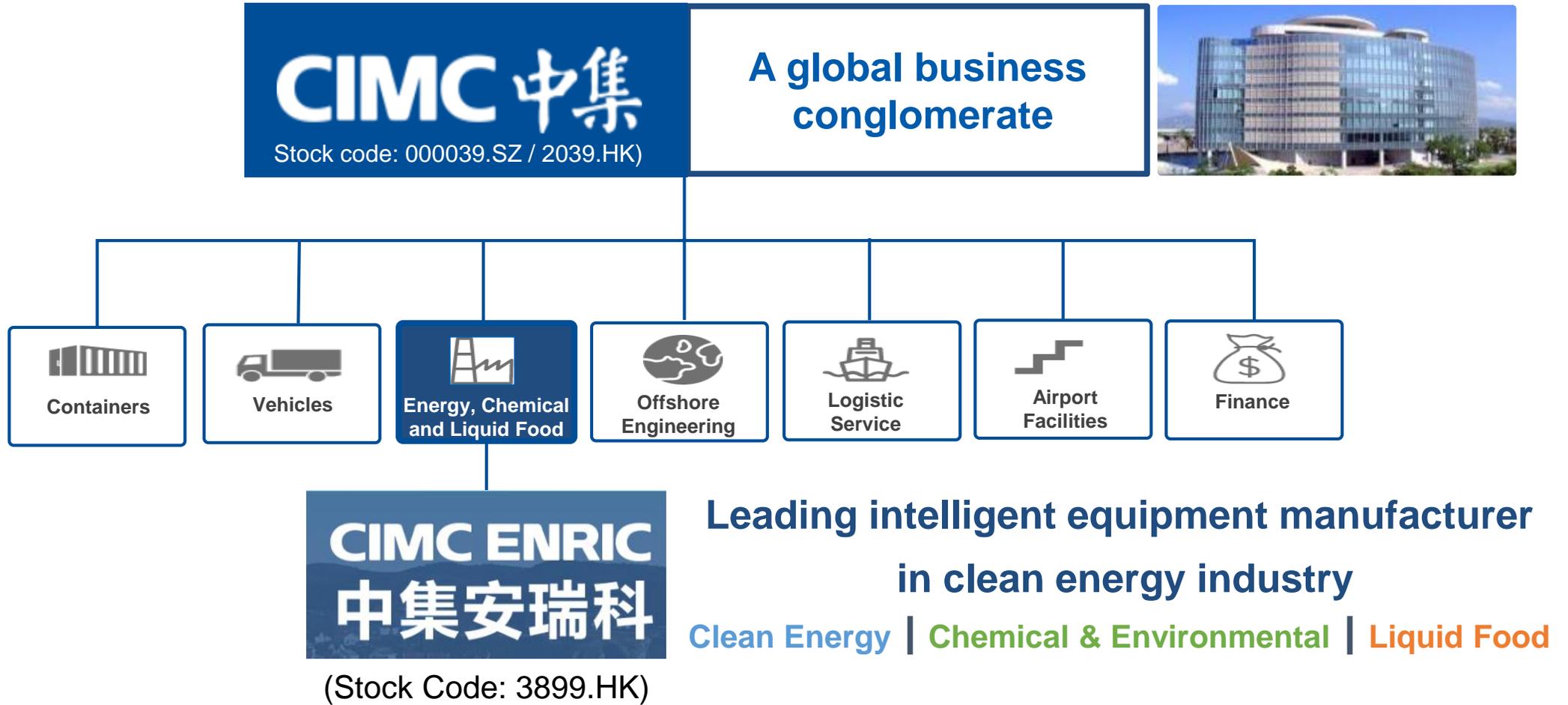


01

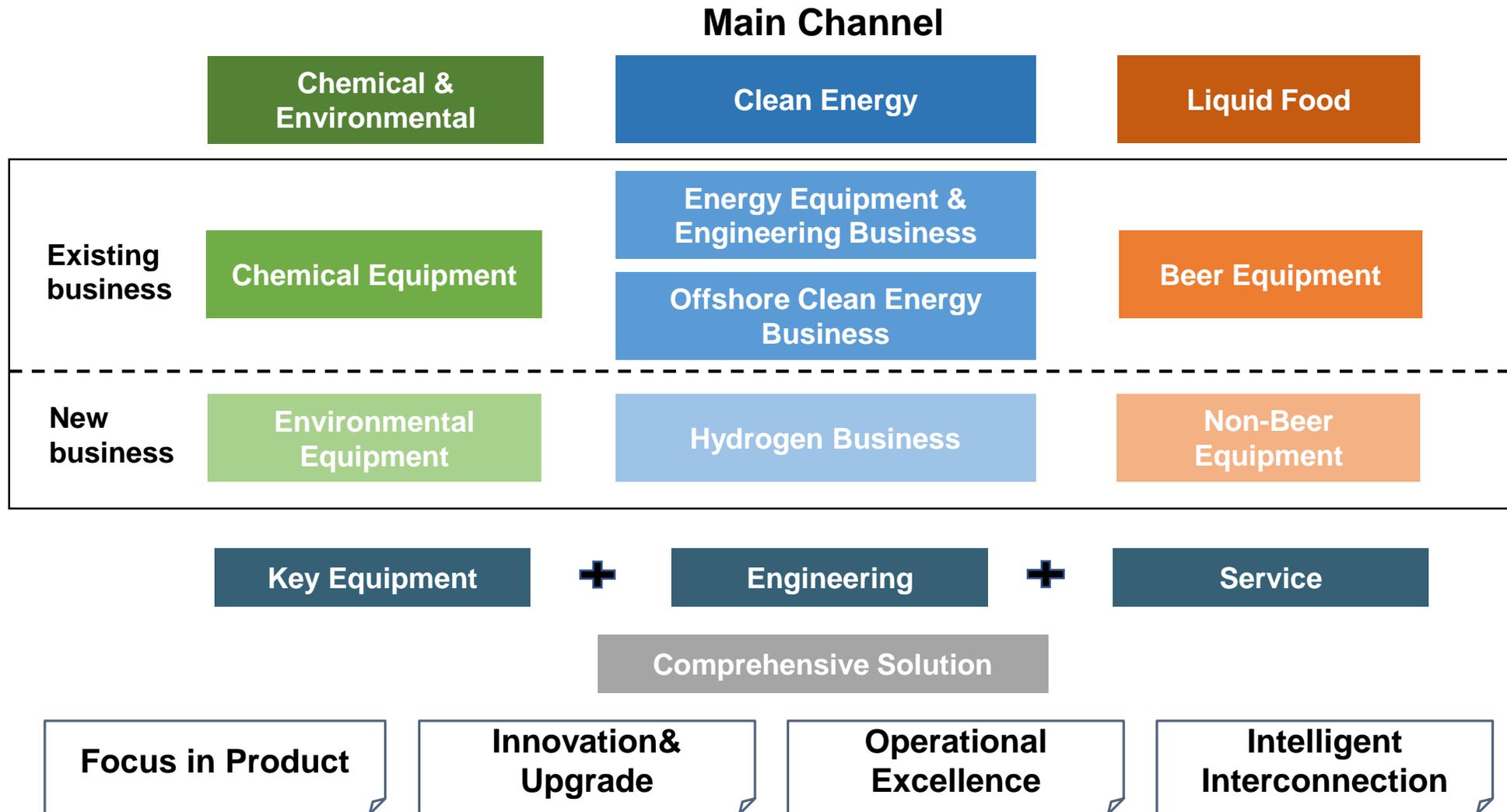
About Us



About CIMC ENRIC



Strategic Layout of Three Major Segments



Make energy cleaner, make the environment more sustainable, and make life better!

02

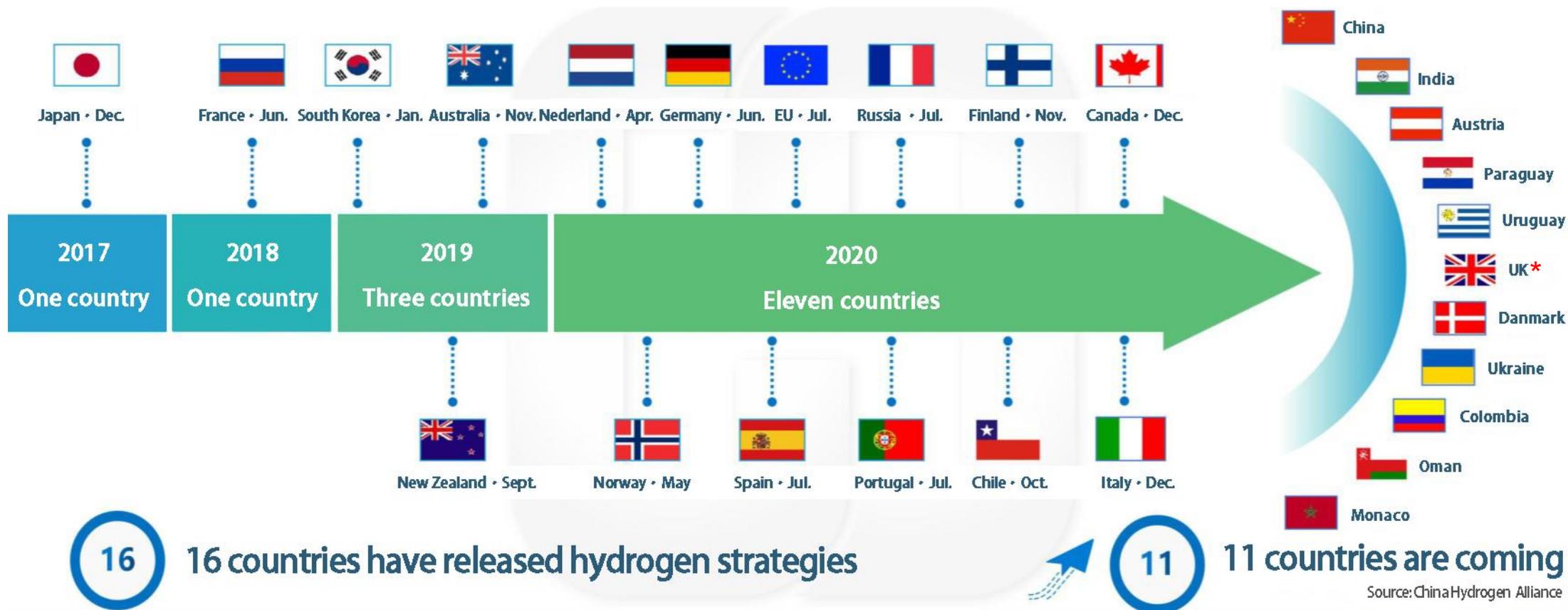
Business Overview



Hydrogen Business

The Global H2 Industry is Gathering Strong Momentum

Hydrogen is enjoying unprecedented momentum worldwide. 16 of 27 countries that account for 52% of the global GDP have developed comprehensive national hydrogen strategies, and 11 countries are going to introduce national hydrogen strategies.

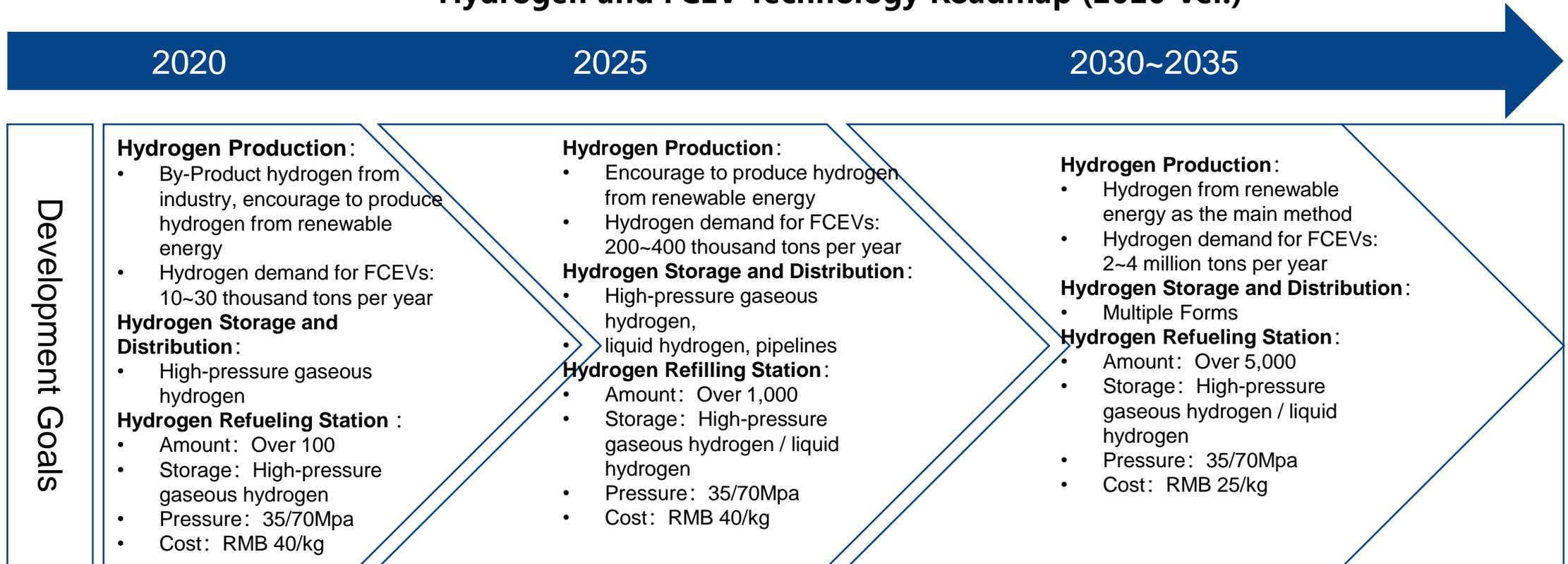


Source: Source: "Low-Carbon and Clean Hydrogen Supply System under the Carbon Neutral Strategy" released by China Hydrogen Alliance
 *The UK government has launched its first-ever hydrogen strategy on 17 August.

Development Goals for Industry in China

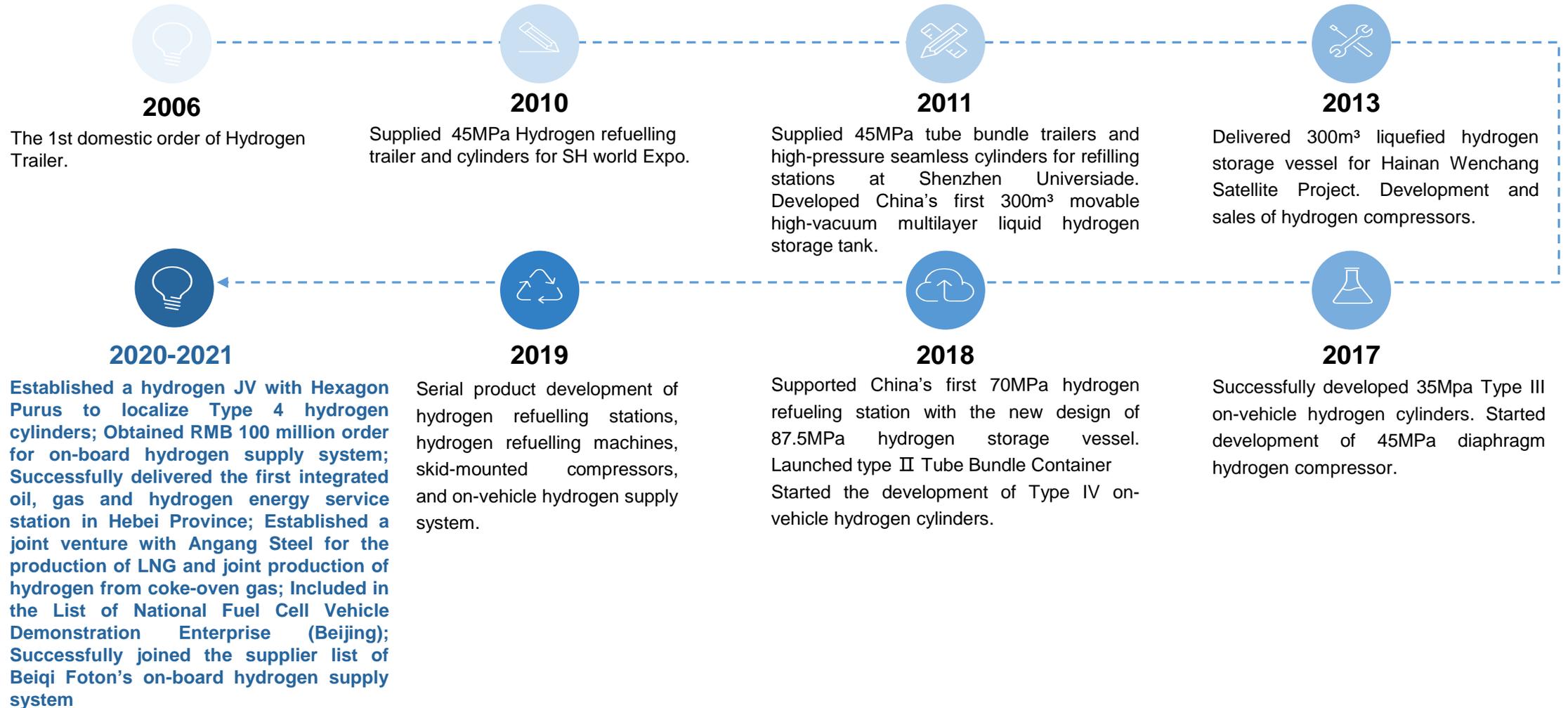
“Energy-saving and New Energy Vehicle Technology Roadmap 2.0” estimated that hydrogen FCEV and refueling stations will reach 100,000 and 1,000 units by 2025, respectively.

Hydrogen and FCEV Technology Roadmap (2020 Ver.)



Source: 2021 China FCEV Conference report "New Energy Vehicle Innovation and Development to Facilitate Carbon Neutrality ", by Ouyang Minggao

Company's Development Path of H2 Business



H2 Storage Equipment



Hydrogen Storage Cascades in Hydrogen Refueling Station



55 MPa stationary hydrogen vessels exported to Plug Power in the U.S.

Hydrogen Storage

- The working pressure is 45MPa, and the design pressure is 50MPa. The standard product is consisted of 9 vessels with the water volume of 9m³.
- Has Provided more than 30 hydrogen vessels of 45MPa for domestic hydrogen refueling stations, and more than 200 hydrogen vessels of 45MPa have been exported to hydrogen refueling stations in the United States, Canada and South Korea.
- In 2017, the first domestic 70MPa hydrogen refueling station project of the National 863 Project successfully passed the acceptance test, and the 87.5MPa hydrogen vessels got the domestic first-mover advantage.
- ASME standard 103 MPa fixed hydrogen storage vessel was successfully developed and ready to be launched on the market in 2021.

H2 Distribution Equipment

Comparison of parameters between type I hydrogen tube trailer and type II hydrogen tube trailer										
Product Category	Working Pressure (MPa)	Outside Diameter (mm)	Minimum Wall Thickness (mm)	Length (mm)	Water Volume per tube (m ³)	Tubes	Tubes Weight (Kg)	Water Volume (m ³)	Hydrogen Capacity (Kg)	GVM Rating (Kg)
11-tube Type I Hydrogen Tube Trailer	20	559	16.5	10470	2.135	11	32400	23.49	347	32747
7-tube Type I Hydrogen Tube Trailer	20	715	21.12	10975	3.71	7	33950	26	382	34363
12-tube Type II Glass Fiber Composite Hydrogen Tube Trailer	20	591	7.4+12.78	11580	2.585	12	29600	31.02	456	30058
12-tube Type II Carbo Fiber Composite Hydrogen Tube Trailer	20	715	9.5+7.1	11580	4.2	8	26712	33.6	495	27207

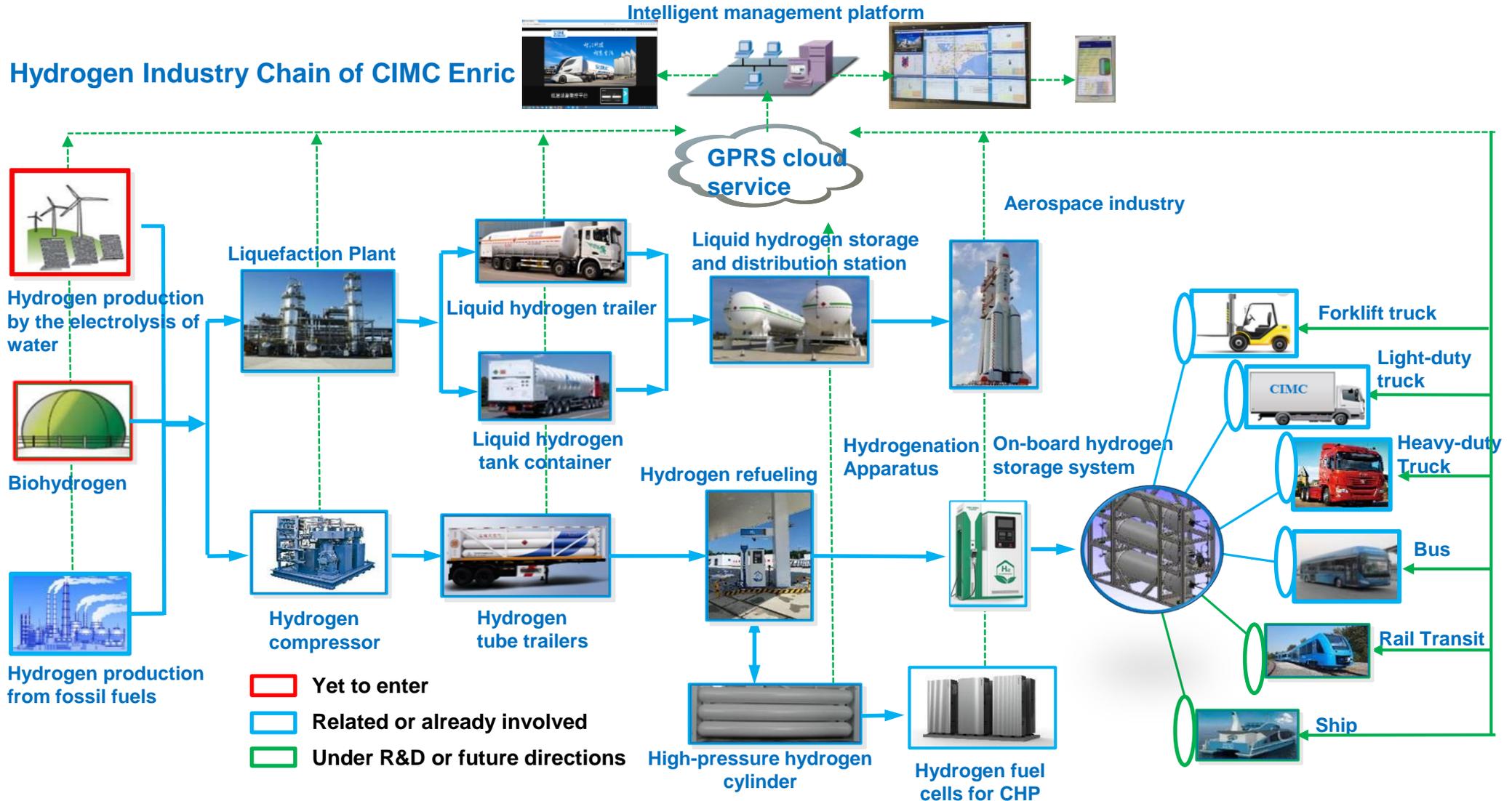


H2 Refueling Station One-stop Solution



Safety engineering **HAZOP** analysis Online **H2 inspection and testing** tech.
Data communication and interaction between refueling station and FCV **H2 Loading rate optimization**
Digitalization, SaaS, remote monitoring & testing

H2 Business Layout of CIMC Enric



Snapshot of Joint Venture Agreement

CIMC ENRIC



CIMC • HEXAGON

中集 • 合斯康

a hydrogen venture

A Balanced Ownership Structure

CIMC Enric

Angang Steel

Entered into a joint venture (“JV”) agreement to construct and operate the project of production of liquefied natural gas (“LNG”) and joint production of hydrogen from coke-oven gas (“COG”) (“the Project”, entering the upstream of the clean energy industry chain and build an end-to-end demonstrative industry ecology of resources+ storage & distribution + downstream applications.

A Balanced Ownership Structure

CIMC Enric

Hexagon Purus

A system JV

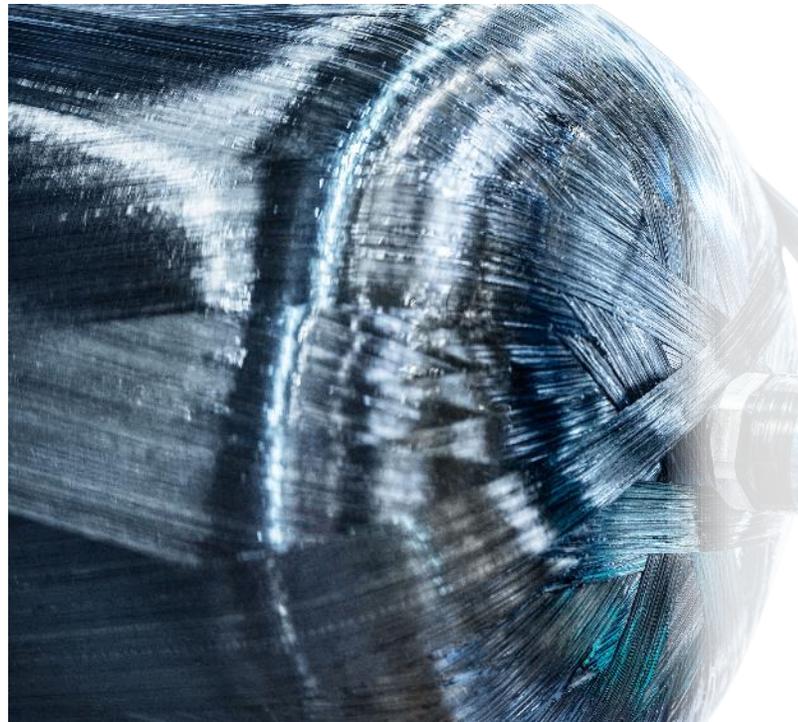
For system production & overall external sales

A cylinder JV

For cylinder production

Localization of world advancing Type 4 cylinder

State-of-the art Type 4 technology



NON-CORROSIVE:

Polymer liner is corrosion free



GOOD FATIGUE STRENGTH:

High-strength carbon fibre construction reduces impact damage and fatigue



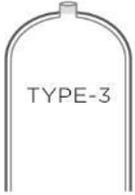
LEAK-FREE:

Precision-machined valve interface to ensure leak free operations



LIGHTWEIGHT:

Reduces vehicles mass and enhances handling and driveability

Cylinder technologies	 All carbon full wrap metallic liner	 Fiberglass/carbon full wrap, plastic liner
Description	Fiber composite cylinder with aluminum lining	Fiber composite cylinder with plastic lining
Total cost of ownership		 Lower
Storage density		 Higher
Mobility applications		

Type 4 cylinders - safer, lighter, higher density, lower cost

Source: Company, third-party consulta

Application Advantages of Type IV Cylinders



Application Advantages of Type IV Cylinders



Major Trend of On-vehicle H2 Storage

OEM	Product Model	Travelling Distance	Storage Technology
Toyota	Mirai	650km	High Pressure
Hyundai	NEXO SUV	595km	High Pressure
Honda	Clarity	700km	High Pressure
Nikola	ONE Series	1200km	High Pressure
Maxus	MAXUS G20	550km	High Pressure
General Motors	HydroGen	400km	Liquid Hydrogen



- High pressure cylinders have been the major trend of on-vehicle hydrogen storage that other technology has not yet been put into commercial use in large scale.

Advantages of Type IV Cylinders for Passenger Cars

- There are nearly 200,000 cars with reliable experience in installing Type IV cylinders in Europe.
- The hydrogen vehicles manufactured by Volkswagen and Opel have applied Type IV cylinders.
- Due to the restrictions of oil-powered cars in Europe, the application of Type IV cylinders will grow rapidly in Europe.
- The installation of steel cylinder under the car will cause severe corrosion.



Advantages of Type IV Cylinders for Buses

- Type IV cylinders account for 70% of the market share on hydrogen buses in Europe, and more than 90% of hydrogen buses in North America use Type IV cylinders.
- Due to the light weight of Type IV cylinders, the roof of hydrogen bus can be loaded with 1200 to 2000 liters of compressed gas.
- The application of Type IV cylinders can reduce fuel consumption by 70% compared with Type III cylinders.
- The volume of the Type IV cylinders can reach 375 liters, which reduces the complexity and cost of the entire system.



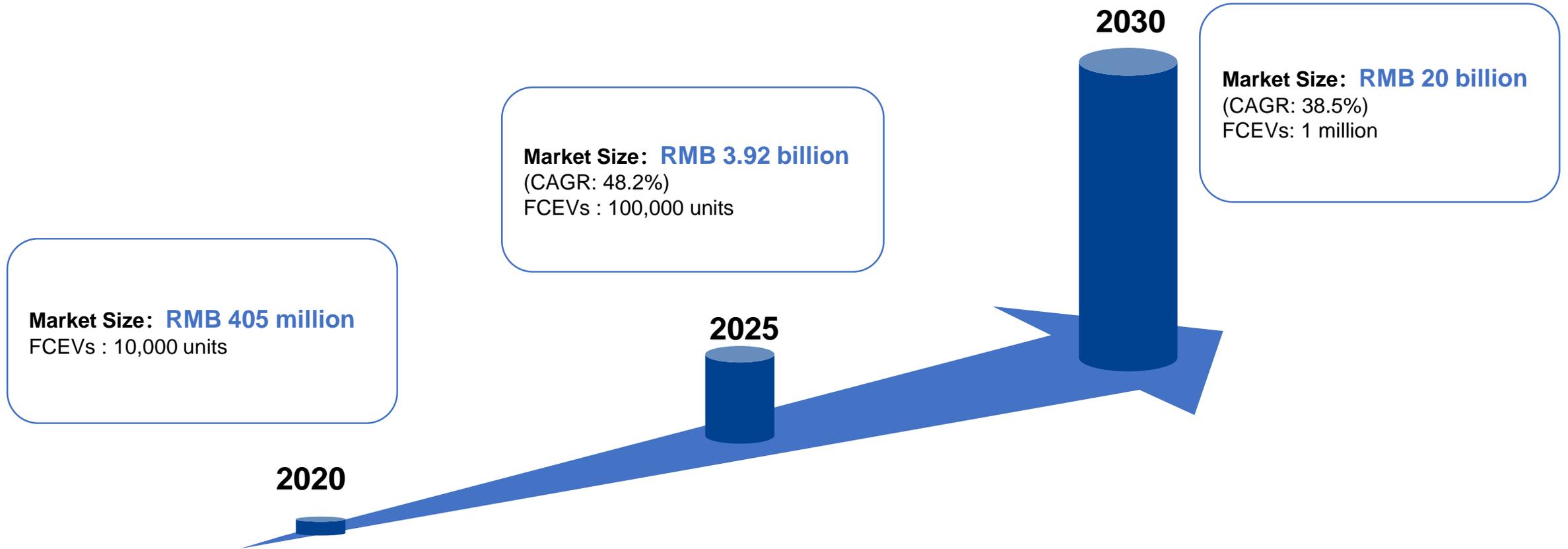
Type IV Cylinders for Heavy-duty Trucks and Special Vehicles

- The application of Type IV cylinders in the Nordic hydrogen heavy-duty truck market leads other European countries, while more than 90% of hydrogen heavy-duty trucks in North America use Type IV cylinders;
- Type IV on-vehicle hydrogen supply system supports 1,000-kilometer cruising range.
- Due to its light weight and cost advantages, the Type IV cylinder can be installed on both sides of the truck and behind the cockpit to maximize the transportation volume.
- Support installation on both sides of the car body to increase impact resistance
- Only need to perform system tightening and pressure test every 36 months



Market Prospects

Promising market size of on-vehicle high-pressure hydrogen cylinders in China



- System costs are not calculated and included
- Source: Trend Bank

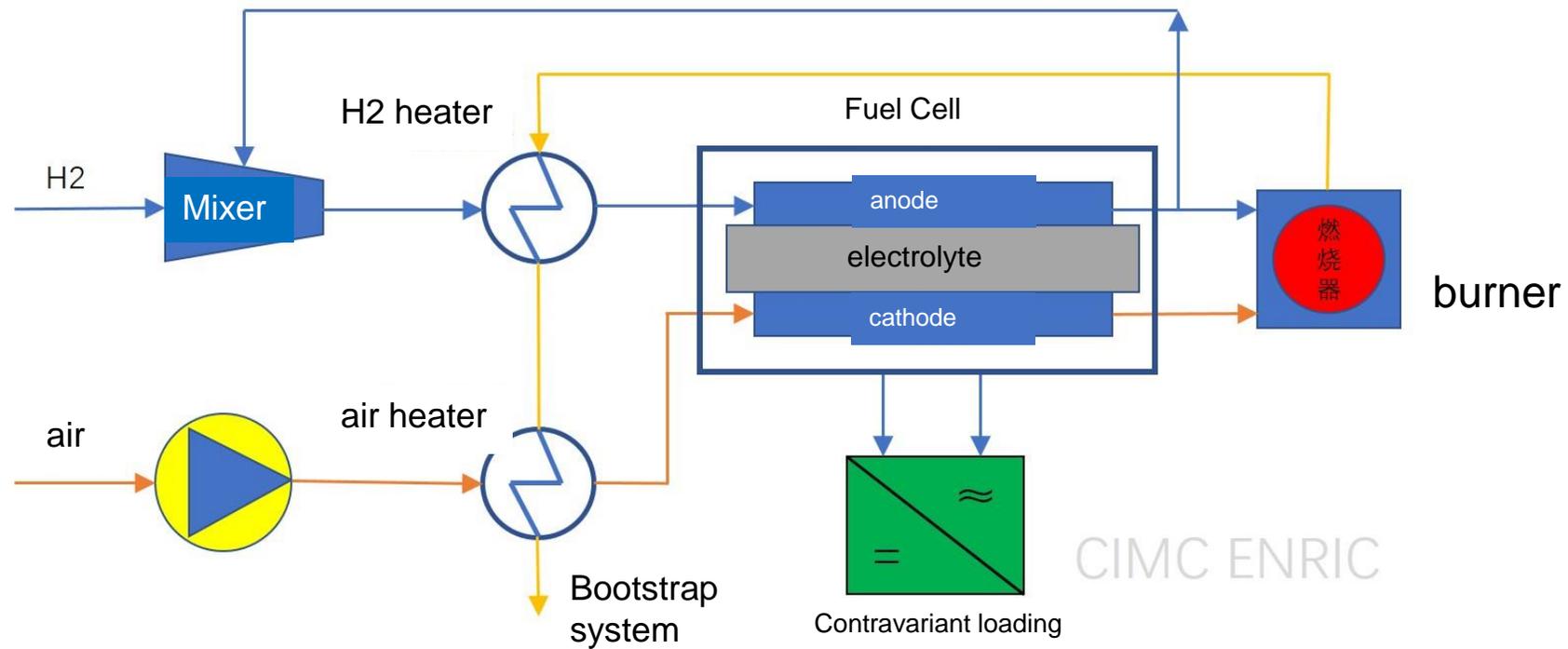
Liquid H2 R&D

Significant progress achieved in a series of topics in the field of hydrogen equipment and application.

At present, the research and development of commercial liquid hydrogen storage and distribution equipment has been carried out, including materials, welding, structure, insulation plan, process and safety configuration, while the preparation of corporate standards and overall product plan design have been completed, as well as passing the technical compliance review. Progress has been made in stages.



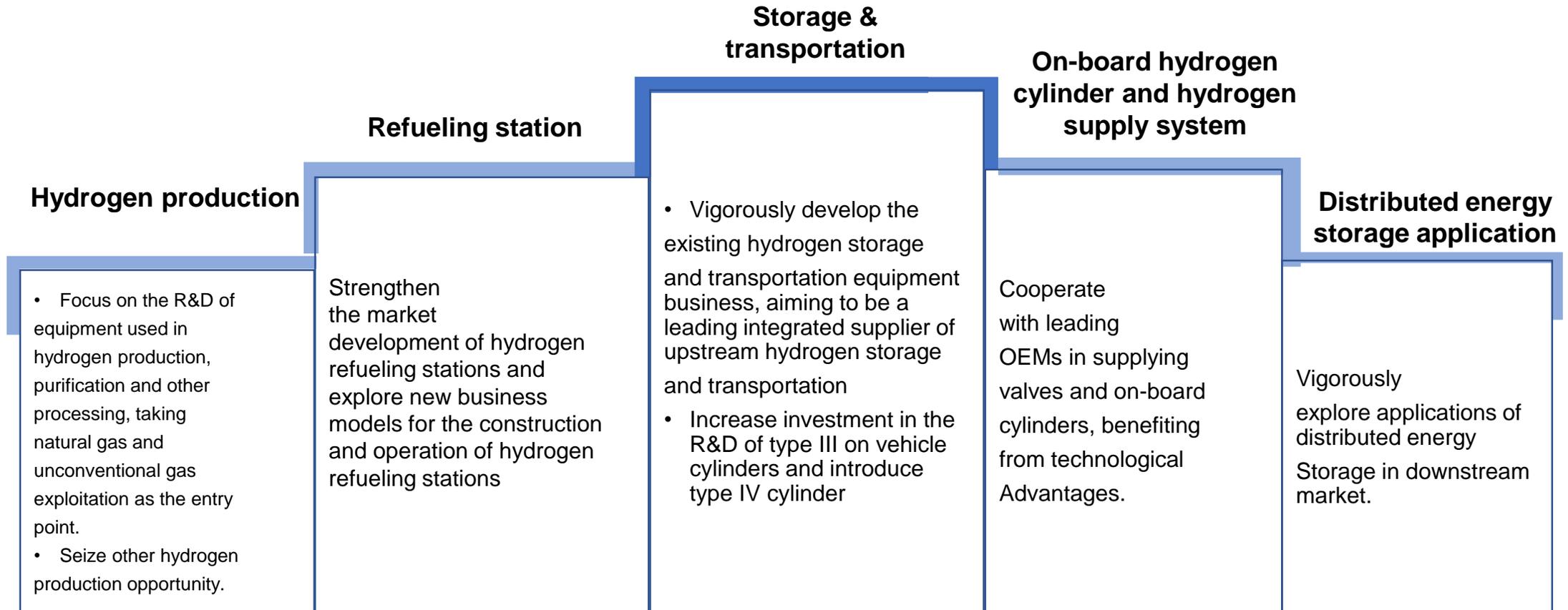
Distributed H2 Solutions for Building Heating/Refrigeration



H2 Business Roadmap

To be an industry leader of key hydrogen equipment manufacturing
Implement champion product strategy

Actively participate in the new mode of cooperative operation



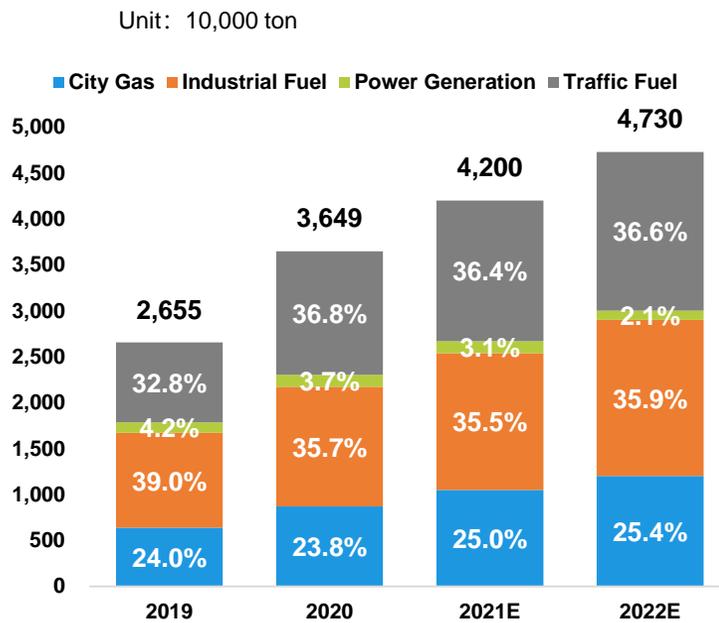
Clean Energy Business



Natural Gas Consumption Growth

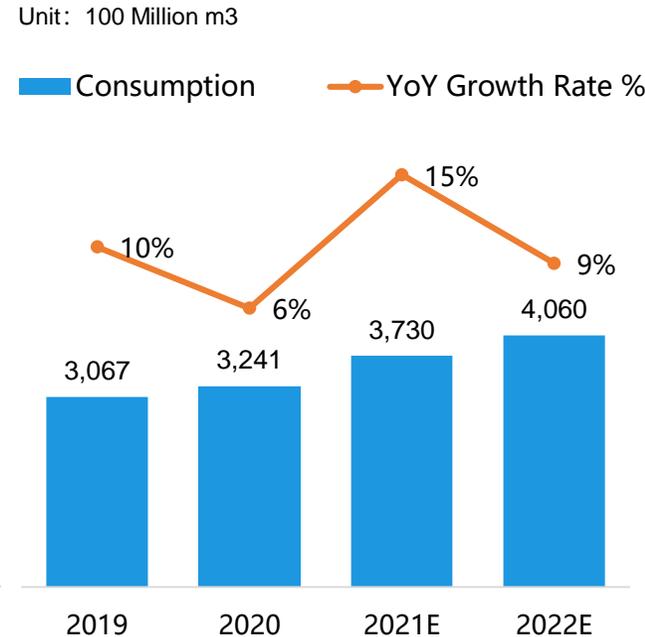
- It is estimated that the annual apparent consumption of natural gas in 2021 will be about 373 billion cubic meters, up by 15% YoY.
- LNG prices are unusual in 2021, with a sharp rise in prices during off-season, reaching a 5-year high YoY. According to the NDRC data, the actual average receiving price of LNG in 1H 2021 was about RMB 4,005.94/ton.
- It is estimated that the average receiving price of LNG in 2H 2021 will be about RMB 6,000-7,000/ton, and the consumption of LNG in 2021 is expected to increase by 15% YoY.

Forecast on China's LNG Consumption, 2021-2022

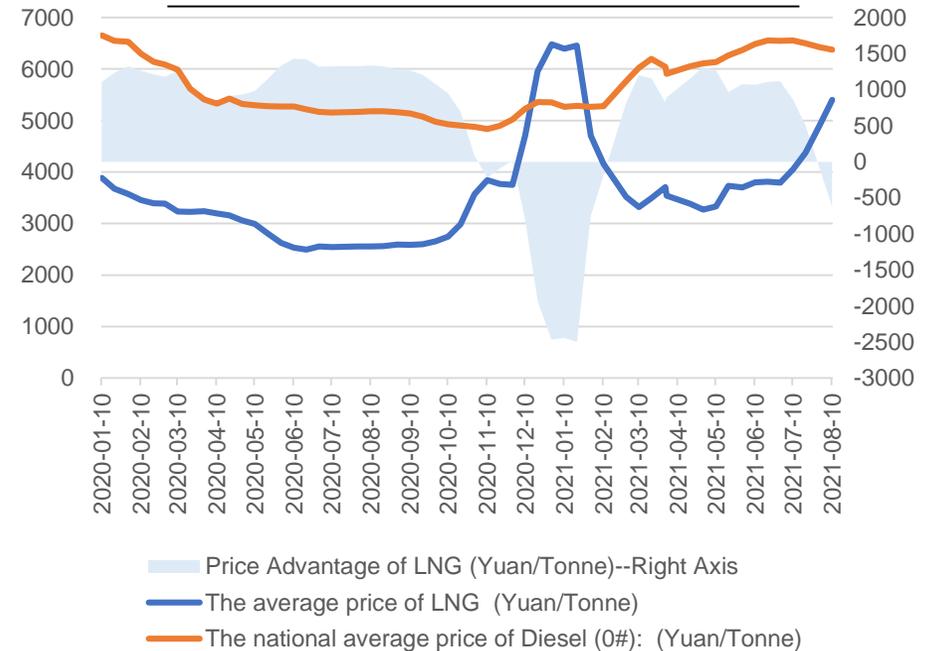


Source: wind, NDRC, LESSBETTER

Forecast on China's Natural Gas Consumption, 2021-2022



Price Gap between LNG and Diesel



Offshore & Onshore Clean Energy Industry Chain

- The business layout covers both offshore and onshore
- Full industry chain from upstream, midstream to downstream to tap the trend of wide application of clean energy.

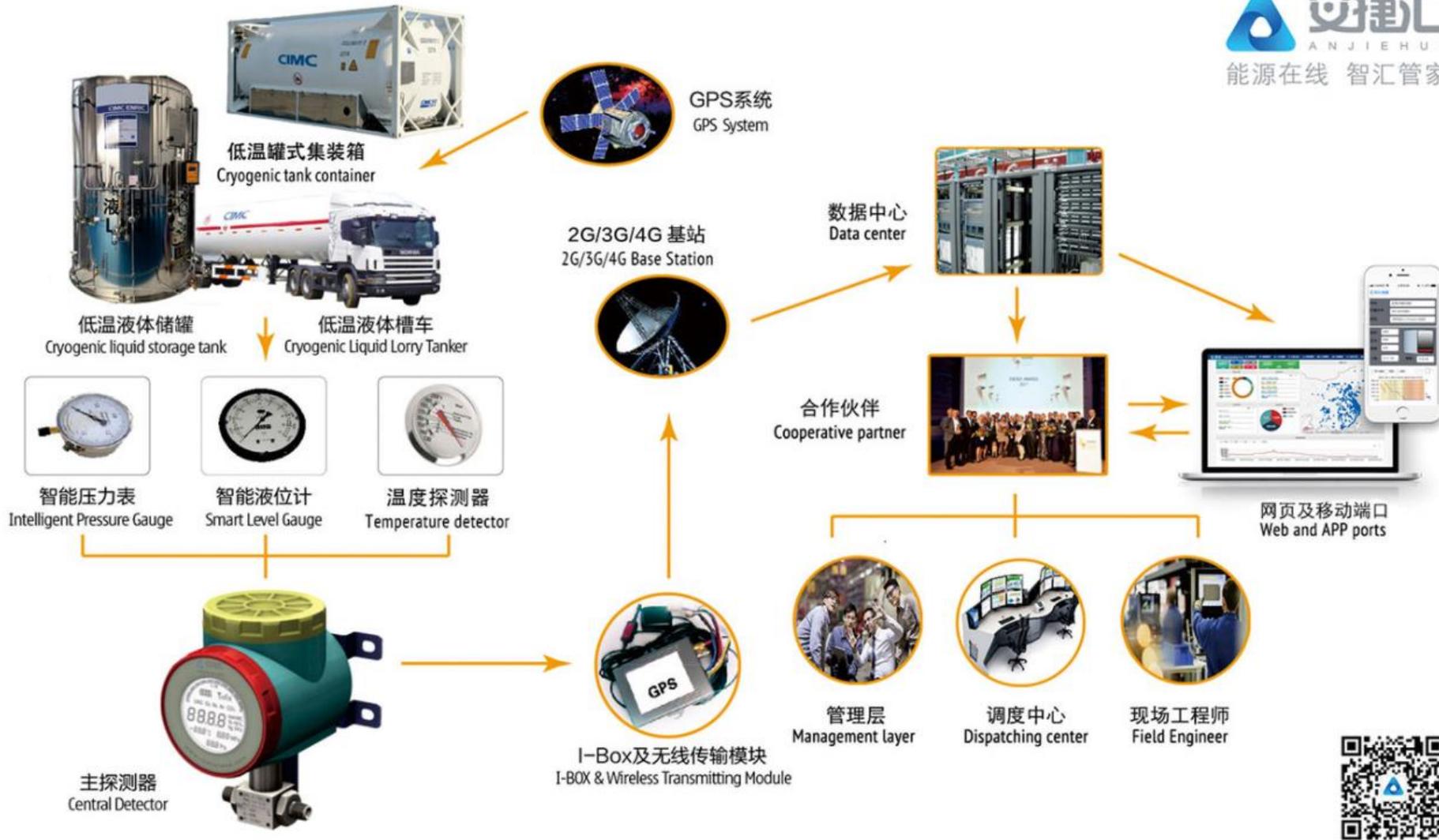
Offshore Clean Energy Industry Chain



Onshore Clean Energy Industry Chain



Internet of Things — Anjiehui Add on Intelligence Feature



Chemical & Environmental Business



Business Review for 1H 2021

Continue adhering to the development of "manufacturing + service + intelligence", take the chemical industrial park as a breakthrough in domestic market to achieve good performance and enhance customer loyalty.



Tank Container Manufacturing

The prices of chemicals and derivatives increased significantly, the export market was stable, and the orders on hand and new orders of this segment increased significantly.



After-sales Service

Relying on the layout of the national chemical industrial park, actively expand the construction of the domestic after-sales service network. The segment established a subsidiary named CIMC Saiwei Technology Service Co., Ltd. on 2 March 2021 to further standardize after-sales service operation and management and control system. CIMC Burg Service (博格) in Europe has been in stable operation for about 8 years, laying a good foundation for our global network.



Intelligent IoT Platform

The the electric heating system independently developed by the Group successfully adopted by the leading MDI enterprise. Meanwhile, the Group develops a comprehensive solution integrating with software and hardware to promote the intelligentization of tank containers, and lay out a solid foundation for smart logistics.

Liquid Food Business

The image shows a large, modern industrial facility, likely a brewery or distillery. The interior is dominated by several large, cylindrical stainless steel tanks with conical bottoms, arranged in a row. The ceiling is a complex structure of dark metal beams and large glass panels, allowing natural light to illuminate the space. The walls are also made of glass, providing a view of a green, hilly landscape outside. The overall atmosphere is clean, bright, and industrial.

- Global leader :
 - Turn-key project for beer
 - Tune-key project for liquor
- Other non-beer project
- Bio-pharmaceuticals
- Fine chemical engineering

Develop Comprehensive Capability of Liquid Food

Currently, around 87.9% of the Segment's revenue is from the beer industry, and the rest 12.1% from the non-beer industry.



Develop Comprehensive Capability of Liquid Food with Global Brand Advantage



Beer business

We focus on expanding beer opportunities in the American market, while actively expand the Chinese craft beer market brought by the trend of consumption upgrades.



Baijiu business

Focusing on the needs of top baijiu customers, we will grasp good opportunity to acquire high-quality assets to enter into baijiu equipment and engineering market which worth 100 billion RMB, and we target to reach 30% of the market within 5 years.



Other non-beer business

Cultivating capabilities of turnkey project and expand other non-beer businesses such as juice, dairy, and pharmaceuticals, while entering into hard soda market.

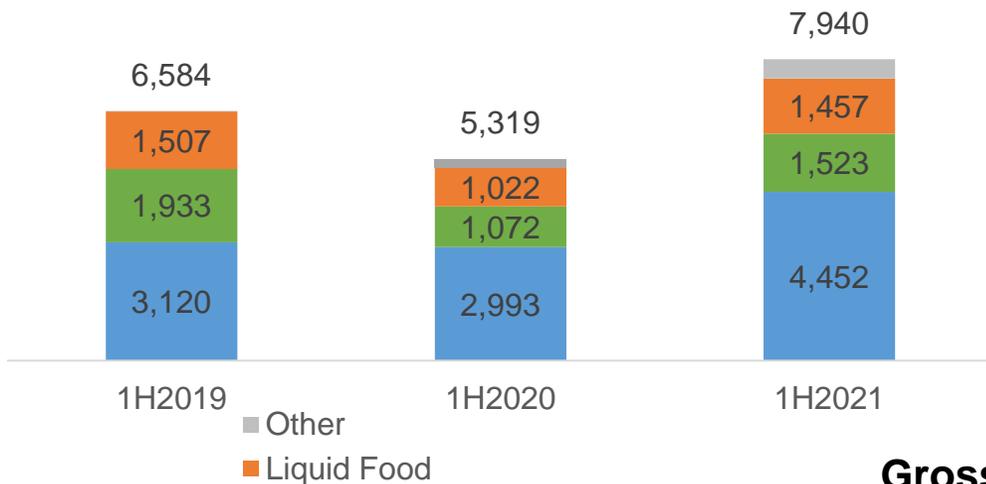
03

Financial Summary

Financial Highlights

Revenue increased by 49.4% YoY

Unit: RMB Million

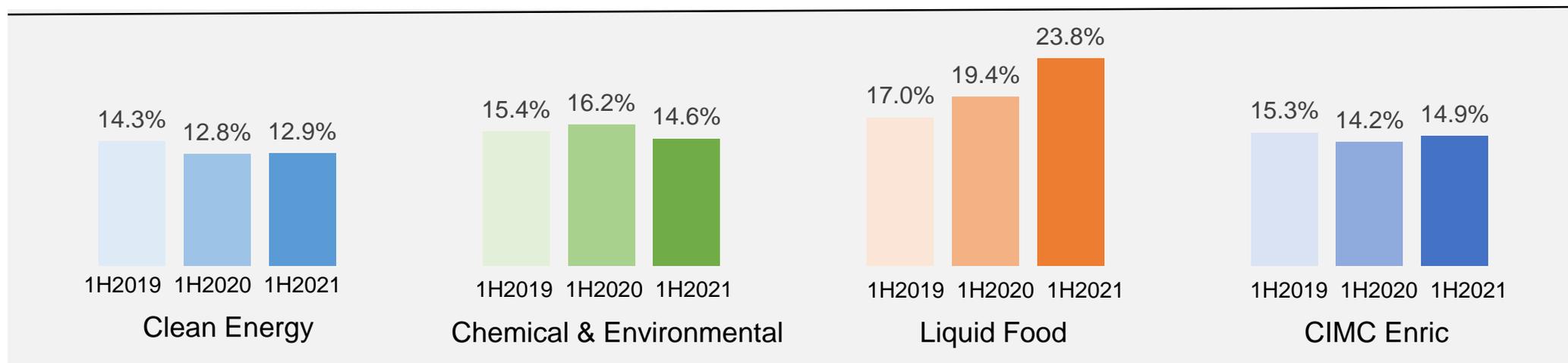


Net Profit Attributable to Shareholders rose by 77.5% YoY

Unit: RMB Million

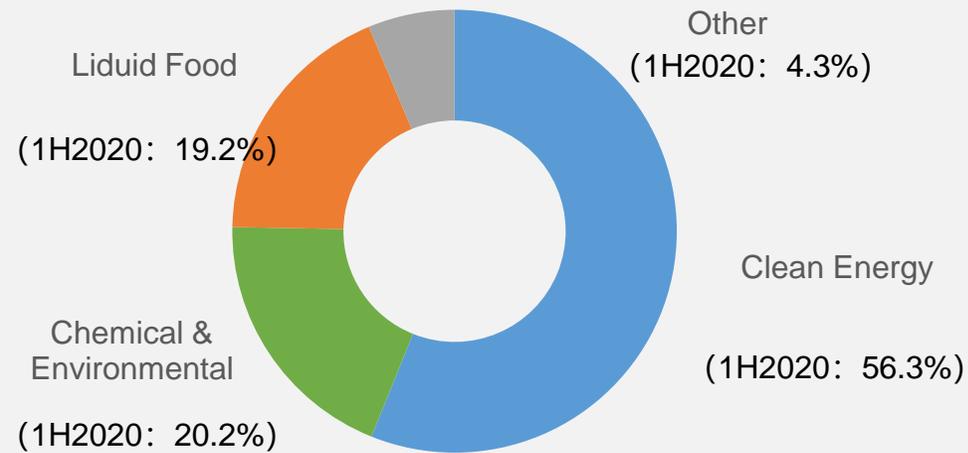


Gross Profit Margin

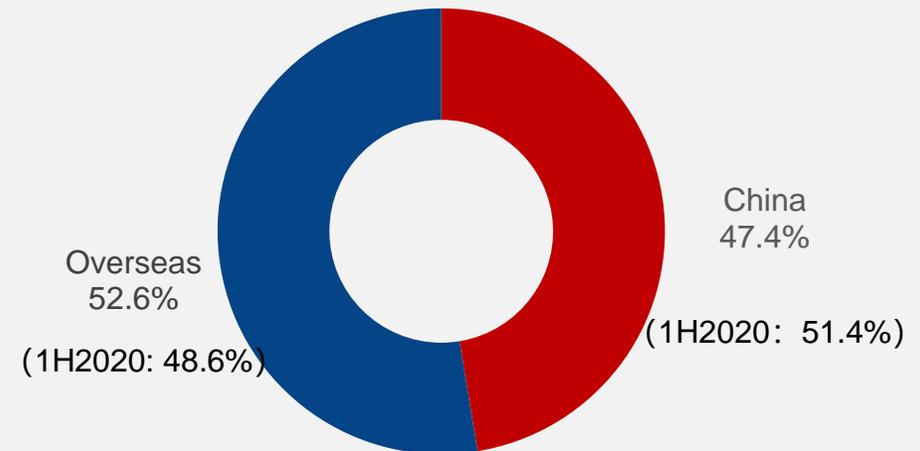


Revenue Structure

Revenue Breakdown by Segment

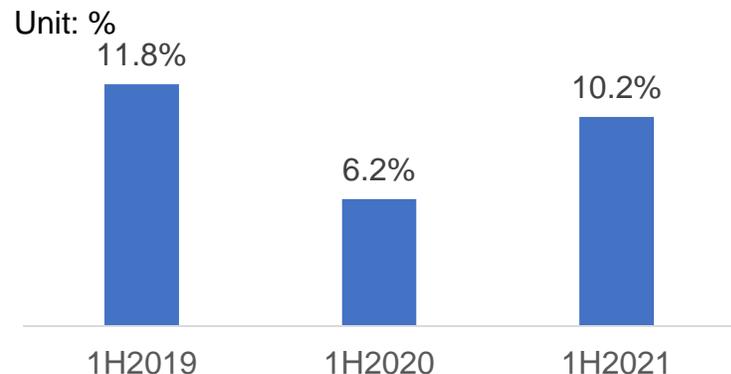


Revenue Breakdown by Geographic Location

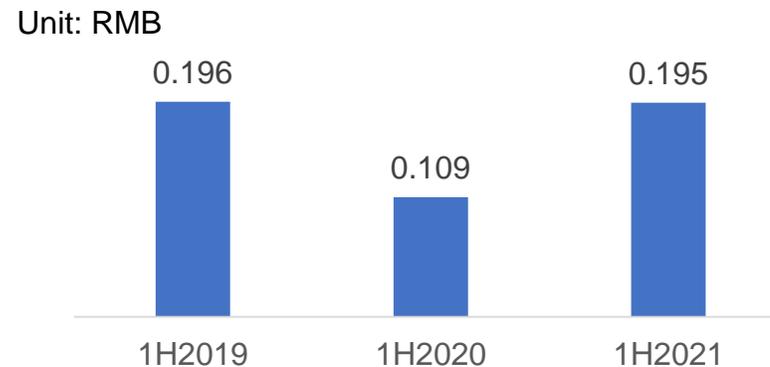


Key Financial Indicators

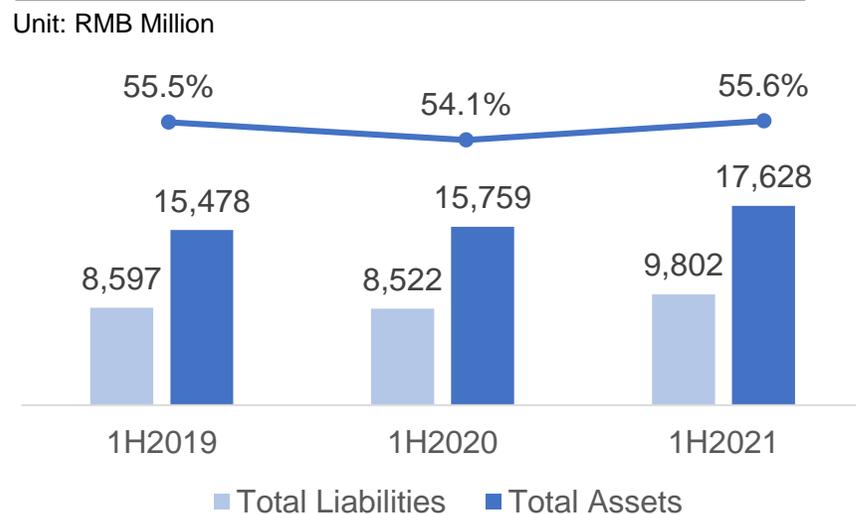
Annualized Return on Equity



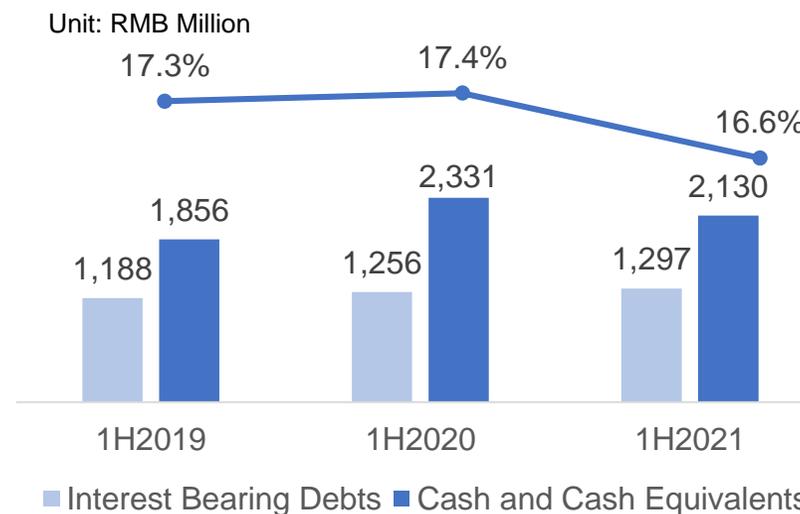
Basic Earnings per Share rose by 78.9% YoY



Asset-liability Structure Remained Stable



Gearing Ratio was Generally Stable



Vision

To be a respected world-leading enterprise in
Clean energy, chemical and environmental, and liquid food industries.

To provide high-quality and reliable smart equipment and services to customers,
generate sound returns for shareholders and staff, and create sustainable value to
the society.

Mission

The Fourteenth Five-Year Plan will further promote clean energy consumption.

1

'Dual circulation' strategy is expected to help reducing market volatility.

2

Strategical layout in the hydrogen energy industry chain, which shall be one of the future driver.

3

Intelligent monitoring system to build up the internet of clean energy equipment and create value for clients.

4

Appendix - Company History

2004-2006

- CIMC Enric was established in 2004 and became one of the leading specialised gas equipment manufacturers and an integrated business solutions provider in the gas energy industry in China. The company was listed on the GEM board in 2005 and transferred to the main board since 2006 (stock code: 3899.HK).

2007

- **CIMC Group acquired Enric Energy Equipment Holdings (HK 3899) Ltd officially.**

2008

- Acquired 80% equity of Jingmen Hongtu Special Aircraft Manufacturing Co., Ltd and **entered into the realm of CNG, LNG and LPG storage and transportation equipment.**

2009

- The company completed its businesses reconstruction and was renamed as CIMC Enric Holdings Limited.
- Involved in the beer fermentation tank business of Holvrieka and started its own business of large-scale storage tanks in Nantong. **The liquid Food segment begins to take shape.**

2011

- Acquired Nanjing Yangzi Petrochemical Design Engineering Company Ltd, developing **capabilities in the realm of energy and chemical storage and engineering.**

2012

- Acquired the core assets of the Germany Ziemann Group—the world's leading provider of brewery turnkey solutions and workshop technologies for saccharification. The acquisition allows CIMC ENRIC to **promote its competitiveness in the liquid food equipment business.**

2013

- CIMC Enric Holdings Limited was included in Hang Seng Index Constituent Stocks.
- Produced **First LNG Railway Tank Container of China**, filling the gap of LNG railway transport in China and hitting a new record of world plateau railway transportation.

2014-2015

- Acquired Sichuan Jinke Cryogenic Engineering Co., Ltd. and Liaoning Hashenleng Gas Liquefaction Plant Co., Ltd., entering in the field of natural gas liquefaction.
- **Bought out Dutch BURG SERVICE B.V., expanding tank container business into European markets.**

2016

- Acquired UK's renowned Briggs Group Ltd., diversify into liquid food processing equipment for **brewing, distilling, pharmaceutical, yeast and bio-fuel industries.**

2017

- Took over Sinopacific Offshore Engineering and complement company's existing businesses with **marine and onshore natural gas equipment and engineering capabilities.**
- Introduced **Anjiehui IoT platform**, adding value to clients.

Company History

2018

- Authorized by Extraordinary General Meeting of Shareholders, the company implemented its **first restricted share award scheme in the company's history.**

2019

- Acquired Canadian brewing machine maker Diversified Metal Engineering in a bid to expand presence in North America, achieving company's ambition of **becoming a world-leading equipment and engineering service provider in the craft beer business.**
- The production and sales volume of tank containers has been ranked first in the world for 16 consecutive years. CIMC Enric has delivered more than 250,000 units of tank containers to the market.

2020

- Acquired Scottish copper still equipment manufacturer **McMillan (Coppersmiths & Fabricators) Ltd.**, which strengthens company's distilling portfolio and will help **winning more turnkey projects in the distilled spirits industry.**
- Acquired Lindenau Full Tank Service GmbH, further strengthening CIMC ENRIC's presence in Europe, and it will **provide and reinforce timely and efficient for CIMC ENRIC's network and after-sales-service capabilities**, particularly in the field of energy & chemical logistic Equipment.
- Signed a strategic cooperation Letter of Intent with **Hexagon of Norway** to actively **introduce the world's leading Type 4 hydrogen storage transportation equipment technology.**

Disclaimer & Confidentiality

CIMC Enric Holdings Limited (the “Company”) makes no representation as to the accuracy and correctness, and has conducted no independent verification, of the content of this presentation. The Company accepts no responsibility for any loss howsoever arising from in reliance upon any information or omission herein and expressly disclaims any liability whatsoever arising therefrom. This presentation does not constitute an offer or invitation to buy or sell any assets or securities of the Company. The Company has made no authorization and representation in relation thereto.

The content of this presentation is strictly confidential and is the property of the Company. Upon receipt of this presentation, you are deemed to have agreed to abide by the confidentiality agreement. You may not circulate or duplicate any content herein to or for any other person, nor disclose any part or the whole of this document to any person; otherwise you will be subject to legal liability.

Thank You

Tel: (852) 2528 9386

Fax: (852) 2865 9877

Email: ir@enric.com.hk

Address:

CIMC R&D Center, No.2 Gangwan Avenue, Shekou Industrial Zone, Shenzhen,
Guangdong, The PRC

Unit 908, 9/F., Fairmont House, 8 Cotton Tree Drive, Central, Hong Kong

IR portal: <http://www.irasia.com/listco/hk/enric>

Website: <http://www.enricgroup.com>

