

Second quarter financial results briefing topics

Overseas business strategy

- (1) Industrial gas business in India**
- (2) Overseas engineering business in North America**
- (3) High-power UPS (uninterruptible power supply) business**

November 8, 2019



Business strategy 1: Industrial gas business in India

To establish a strong position in India's industrial gas market: About 12% share

(Air separation gas production capability)

Acquisition of business from Praxair India

- Date of business acquisition: July 2019 (included in the scope of consolidation from the 2nd quarter of fiscal 2019)
- Scale of business: Sales of about ₹7.9 billion/year (in the year ended December 31, 2018)
- Company-owned facilities: 3 on-site ASUs for steel plants (in Jamshedpur)
2 cylinder-filling stations (in Parbangla and Asansol)
- Main supply destination: Tata Steel Ltd.

Acquisition of business from Linde India

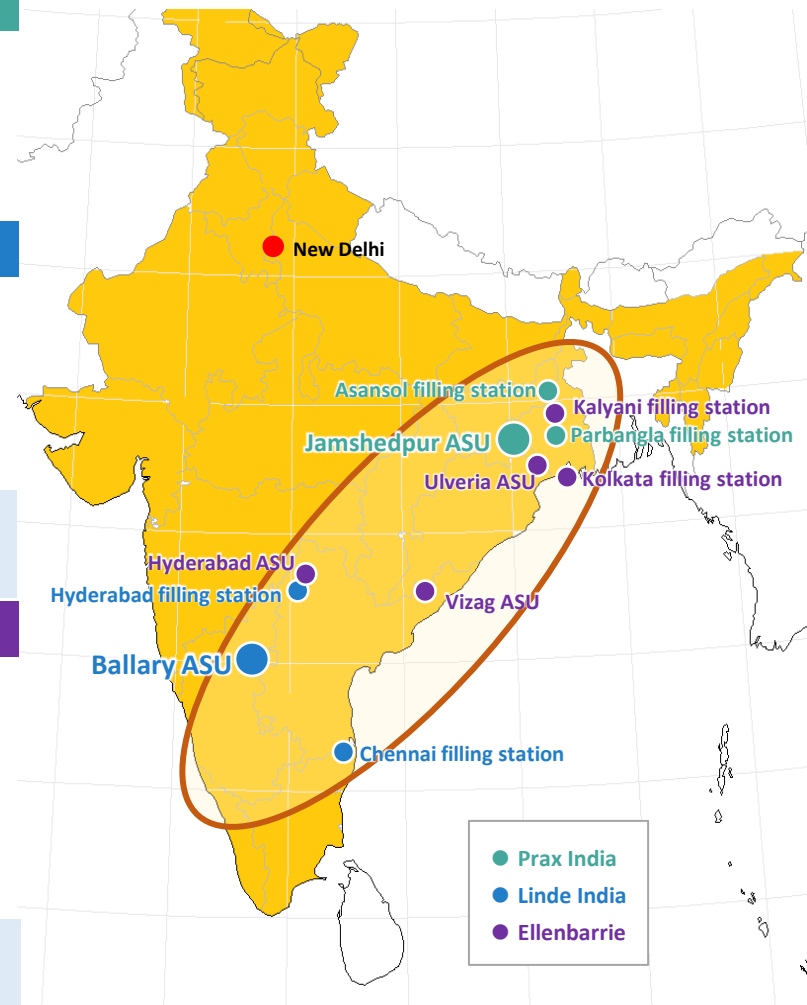
- Date of business acquisition: December 2019 (schedule)
- Scale of business: Sales of about ₹5.7 billion/year (in the year ended December 31, 2018)
- Company-owned facilities: 1 on-site ASU for steel plants (in Bellary)
2 cylinder-filling stations (in Hyderabad and Chennai)
- Main supply destination: JSW Steel Ltd.

Establishment of an "upstream business" through the acquisition of on-site supply bases and liquefied gas production bases

Ellenbarrie Industrial Gases Ltd.

- Established in: 1973 ※ Made into AWI's subsidiary in 2013 (equity stake of 51%)
- Scale of business: Sales of about ₹2.6 billion/year (in the year ended March 31, 2019)
- Company-owned facilities: 3 ASUs (in Ulveria, Vizag and Hyderabad)
5 cylinder-filling stations (above-listed 3 hubs with ASUs + Kolkata and Kalyani)
- Business outline: Gas lorry/cylinder supply business in eastern and southeastern India

Expansion of a "downstream business" through lorry and cylinder supply



Business strategy 1: Industrial gas business in India

Growth strategy in India's industrial gas market where high economic growth continues

1 Response to growing industrial gas demand associated with expanded steel production

- Take advantage of AWI's extensive operation know-how for steel plants accumulated in Japan
 - ▶▶ **Promote maximized efficiency to reduce production energy consumption rate**
- Build a trust relationship with customers who are leading blast furnace manufacturers
 - ▶▶ **Capture further business opportunities such as construction of additional and new plants**

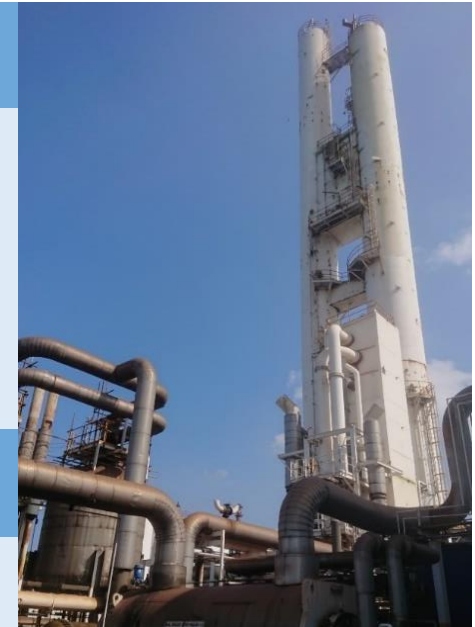
2 Acquisition of new projects for on-site supply service from small- and medium-sized plants

- Allows AWI to implement the business through the acquisition of back-up and maintenance functions

※ The above-mentioned growth strategies 1 and 2 will be implemented based on the plant engineering technology (large- to small-sized cryogenic air separation plants) which was acquired after AWI made SAC (Shinko Air Water Cryoplant, Ltd.) into a wholly-owned subsidiary.

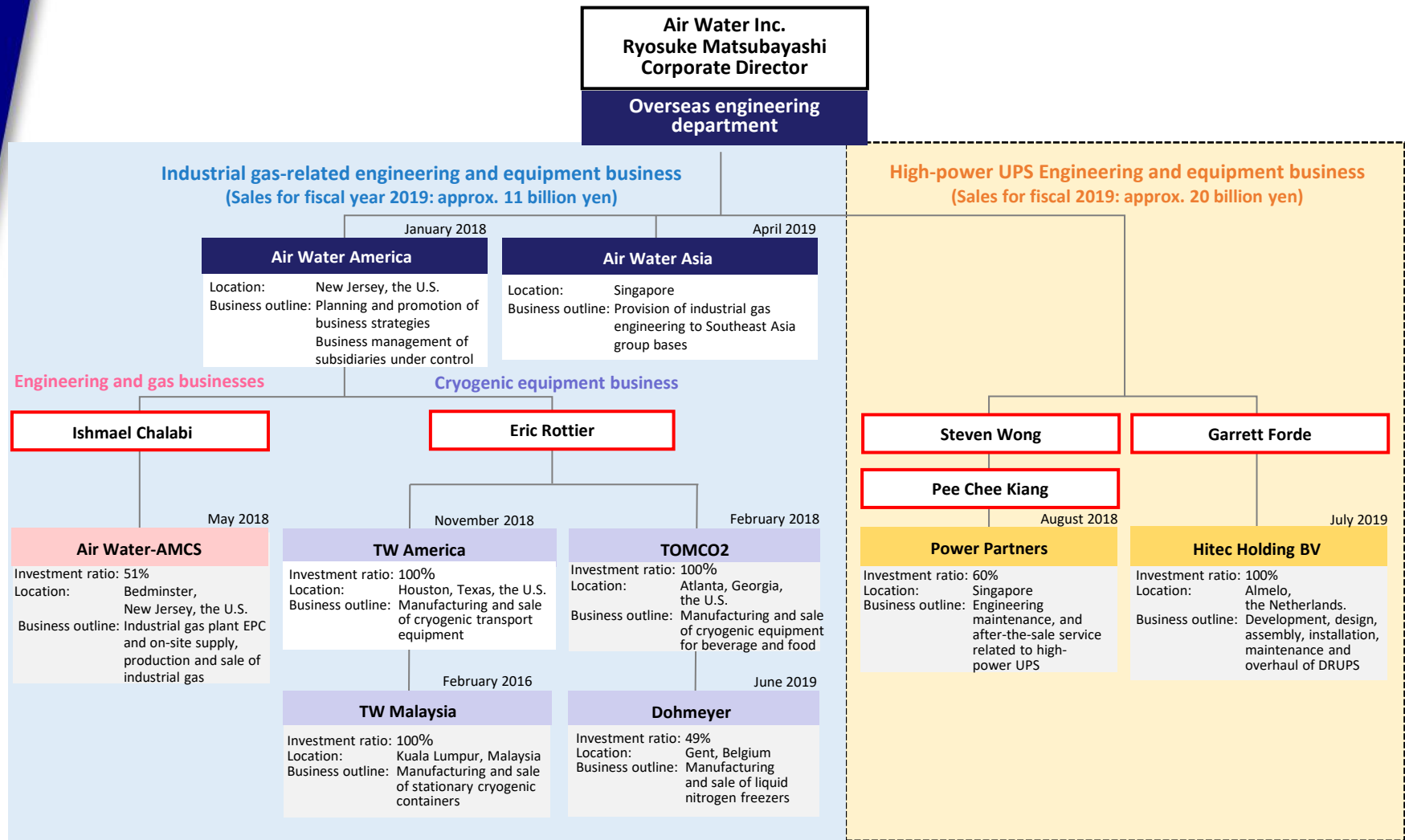
3 Expansion of the lorry and cylinder supply business through synergies created with Ellenbarrie Industrial Gases Ltd.

- Expansion of business in eastern India (where steel industries are concentrated)
- Advances to southern India (where auto and electronics industries are concentrated)
- Acquisition of the argon supplier allows AWI to implement sales expansion



Business strategy 2: Overseas engineering (North America)

[Structure of overseas engineering business]



Business strategy 2: Overseas engineering (North America)

Establish an industrial gas-related engineering and equipment business base, with an eye toward deploying industrial gas supply business in North America

Industrial gas market in the U.S.

- Market size: Approx. 2.3 trillion yen
- Demand is also buoyant in sectors of food including beverages and bio-science
- About 85% of the US industrial gas market is monopolized by major companies
- About 750 dealers exist in the region

▶▶ **Increase the recognition of Air Water Group**
Establish a partnership with dealers

Engineering and cryogenic equipment areas

Engineering and gas businesses

- Air Water-AMCS



Cryogenic air separator

Cryogenic equipment business

- TW America



Cryogenic transport container

- TOMCO2



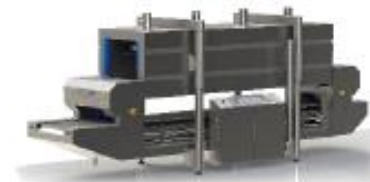
Carbonic acid trailer

- TW Malaysia



Stationary cryogenic containers

- Dohmeyer



Liquid nitrogen freezer

Business strategy 3: High-power UPS (Uninterruptible power supply) business

Entry into the high-power UPS system business

To promote the commercialization of “utility solutions” that are crucial to customers’ BCPs (business continuity plans) and aim to become the world’s top in the field of high-power UPS systems and peripherals.

What are dynamic rotary uninterruptible power supply systems? (DRUPS) ※

※Dynamic Rotary Uninterruptible Power Supply

- An uninterruptible power supply (UPS) suitable for high-power band over an output of 1,500 kVA.
- Introduced at data centers, large semiconductor and pharmaceutical factories and critical infrastructure such as airports.
- An important device to prevent facilities and products from damage caused by voltage drop and blackout and maintain stable operations.

Hitec Holding B.V. (Hitec)

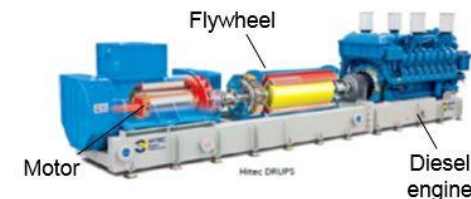
- Date of stock acquisition: July 2019 (to be included in the scope of consolidation from 3Q FY2019)
- Sales: 12.6 billion yen (in the year ended December 31, 2018)
- Head office: The Netherlands
- Overhaul service hubs: The Netherlands, the U.S., Taiwan
- Business bases: 9 locations worldwide
- Sales regions: 40% in EMEA, 6% in North America, 17% in China and Taiwan, 37% in APAC



EMEA: Europe, Middle East and Africa
APAC: Asia Pacific

Power Partners Private Limited (Power Partners)

- Date of stock acquisition: August 2018 (included in the scope of consolidation from April 2018)
- Sales: 3.9 billion yen (in the year ended December 31, 2018)
- Head office: Singapore



DRUPS:Hitec

Business strategy 3: High-power UPS (Uninterruptible power supply) business



[Growth strategies]

1 Global market for high-power UPS is about 160 billion yen, and is expected to continue to grow over 6%.

- To aim for the global No. 1 by effectively utilizing the worldwide network of our business partner hubs
- To accelerate global expansion of the business by reducing equipment procurement costs, etc. through integrated operation of Hitec and PP.

2 To create group synergies between industrial gas business for electronics applications and Air Water Safety Service, Inc.

- To target semiconductor manufacturers which are customers of our industrial gas business.
- To create synergies between businesses by combining the business of Air Water Safety Service Inc. which has a high domestic share in nitrogen extinguishers for data centers.

3 To cultivate the Japanese market by utilizing the group's hubs

- To increase the market share of DRUPS through a maintenance system that utilizes our group's engineering hubs.

Meeting society's needs with nature's blessings.



AIR WATER

The forecasts, future prospects, business plans, etc. presented in this document were prepared based on the judgement of our company from information currently available and involve various uncertainties. Therefore, the reader should note that actual business performance may differ from the projections made herein due to changes in various factors, such as economic conditions.