Confidential

Initiatives for a Circular Economy Society

June 19, 2025 Daikin Industries, Ltd.

Company Profile

AC Business

Chemicals Business

Environmental Initiatives

Management Strategy Plan

Initiatives for a Circular Economy Society

Key Words That Express Daikin

Founded in **1924**
100 Years of History

People-Centered Management

Global AC Leading Company

130+
Production Bases In the World

¥4 trillion
Overall Sales

100,000+
Employees

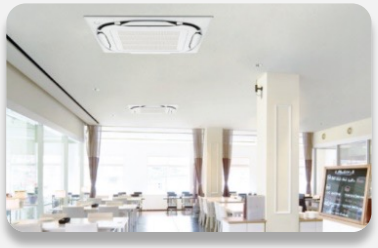
Business Development in **170+** Countries

83%
of Daikin Sales are from outside Japan

Business Overview

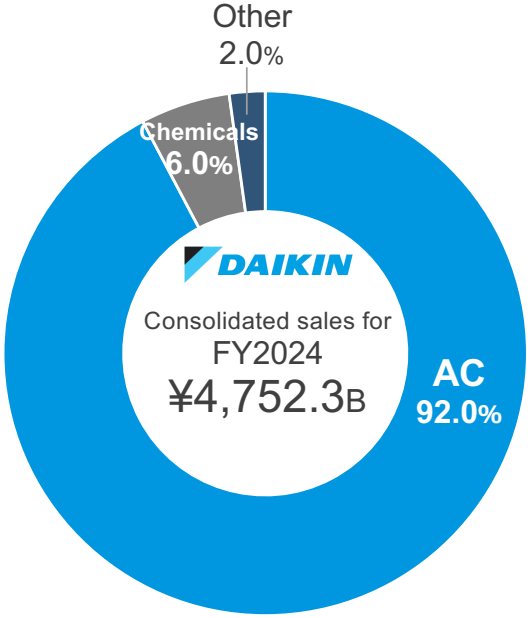
Air Conditioning

Residential



Commercial

After Sales Service



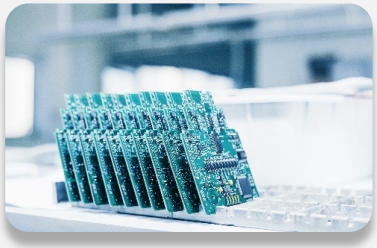
Other Businesses

Oil Hydraulic Equipment

Oxygen Concentrators

Chemicals

Refrigerant

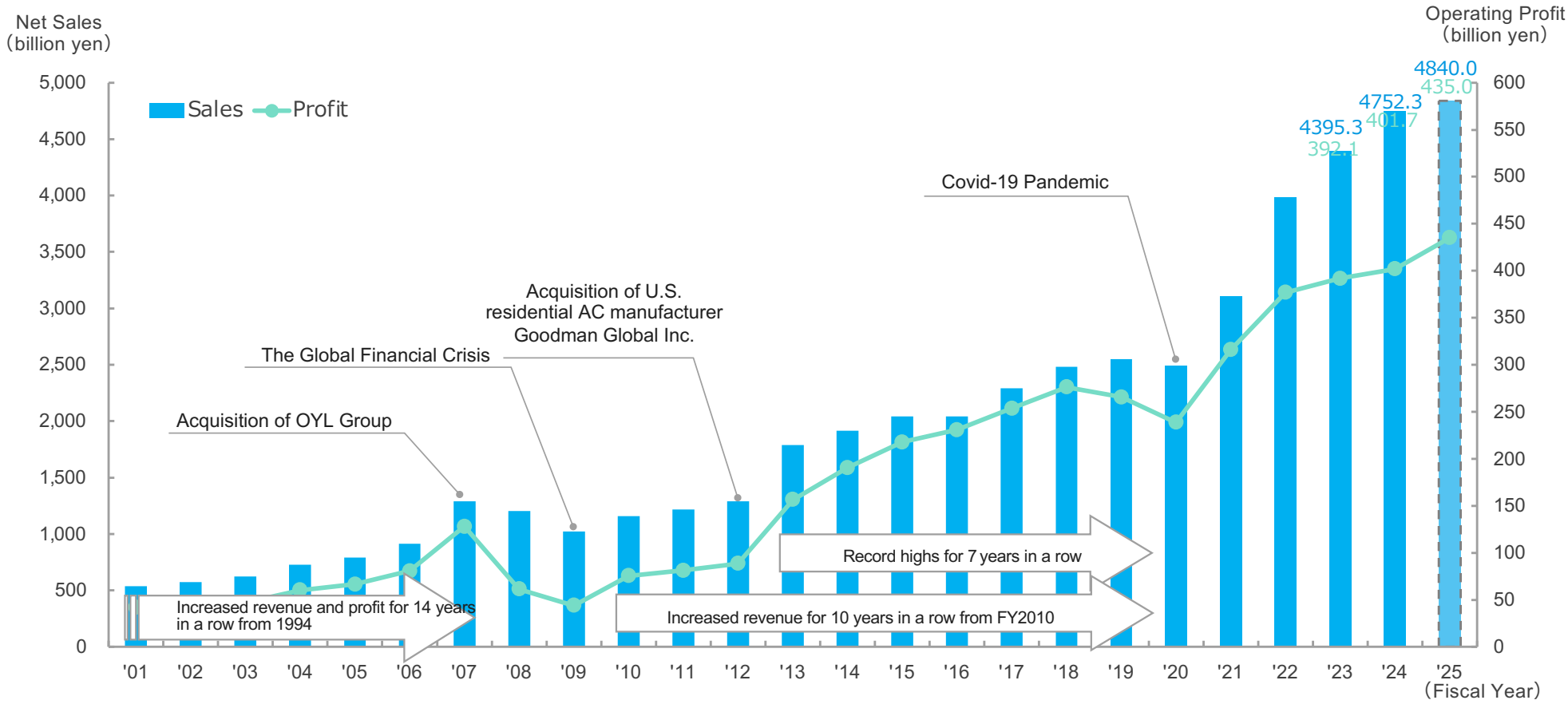


Semiconductor Applications

Automotive Applications

Financial Results

Expanding business mainly in overseas, revenue increased for 10 consecutive years from 2010 to 2019. Achieved 4 trillion yen in FY2023.



AC Business

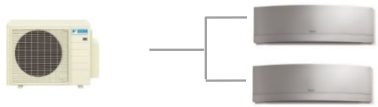
Daikin's AC Product Lineup

AC solutions are realized with an extensive lineup for all types of needs including those for energy-savings, the environment, ventilation, comfort, peace-of-mind, safety, and health.

Residential AC

Room Air Conditioners

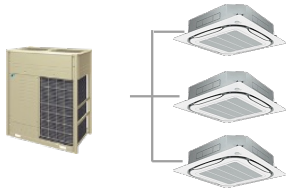
Housing/Multi-Split Air Conditioners



Unitary Air Conditioners

Control/Maintenance Systems

VRV Systems



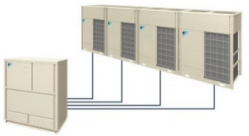
Ventilators

ACs for Facilities and Factories

Applied ACs

Centrifugal Chillers

Chillers



Air Handling Units

Fan Coil Units

Air Purifiers

Heating/ Water Heaters

ACs for Small Shops and Offices

Rooftops

Residential → **Commercial** → **Industrial**

Main Global Production Bases for Air Conditioning – Localization –

Production bases have been established worldwide at more than
90 locations* in 28 countries for localized production

*including bases for filters and refrigeration

Europe

Daikin Europe N.V. (Belgium;1972)
- Commercial ACs, Heating products

Daikin Industries Czech Republic (2003)
- Residential ACs

Daikin Applied Europe S.p.A. (Italy; acquired in 2007)
- Screw and Centrifugal Chillers

Daikin Turkey (2011)
- Residential ACs, Heaters

Daikin Manufacturing Germany(acquired in 2008)
- Heaters

Daikin Manufacturing Poland(2024)
- Heaters

India

Daikin Airconditioning India (2009)
- Residential and Commercial ACs

Asia

Daikin Industries (Thailand) (1990)
- Residential and Commercial ACs

Daikin Malaysia Sdn. Bhd. (Acquired in 2007)
- Residential ACs, Commercial ACs

Daikin Air Conditioning Vietnam (2018)
- Residential Acs

Daikin Industries Indonesia(2024)
- Residential Acs

Japan

Shiga Plant (Kusatsu, Shiga: 1970)
- Residential ACs

Sakai Plant (Sakai, Osaka: 1937)
- Commercial ACs

China

Daikin Air-Conditioning (Shanghai) (1995)
- Commercial ACs, Heat Exchangers, Air Cooled Chillers

Daikin Air-conditioning (Suzhou) (2011)
- Residential and Commercial ACs

McQuay (Wuhan; acquired in 2007)
- Water Cooled Chillers, Centrifugal Chillers

McQuay(Shenzhen; acquired in 2007)
- Air Cooled Chillers, Fan Coil Units

Daikin Air-Conditioning (Huizhou) (2024)
- Residential ACs

U.S.

Daikin Applied Americas INC.
(Staunton, VA; acquired in 2007)
- Large Screw Chillers, Centrifugal Chillers

Daikin Comfort Technologies North America, Inc
(Houston, TX; acquired in 2012)
- Residential Unitary Systems, Gas Furnaces, Commercial ACs

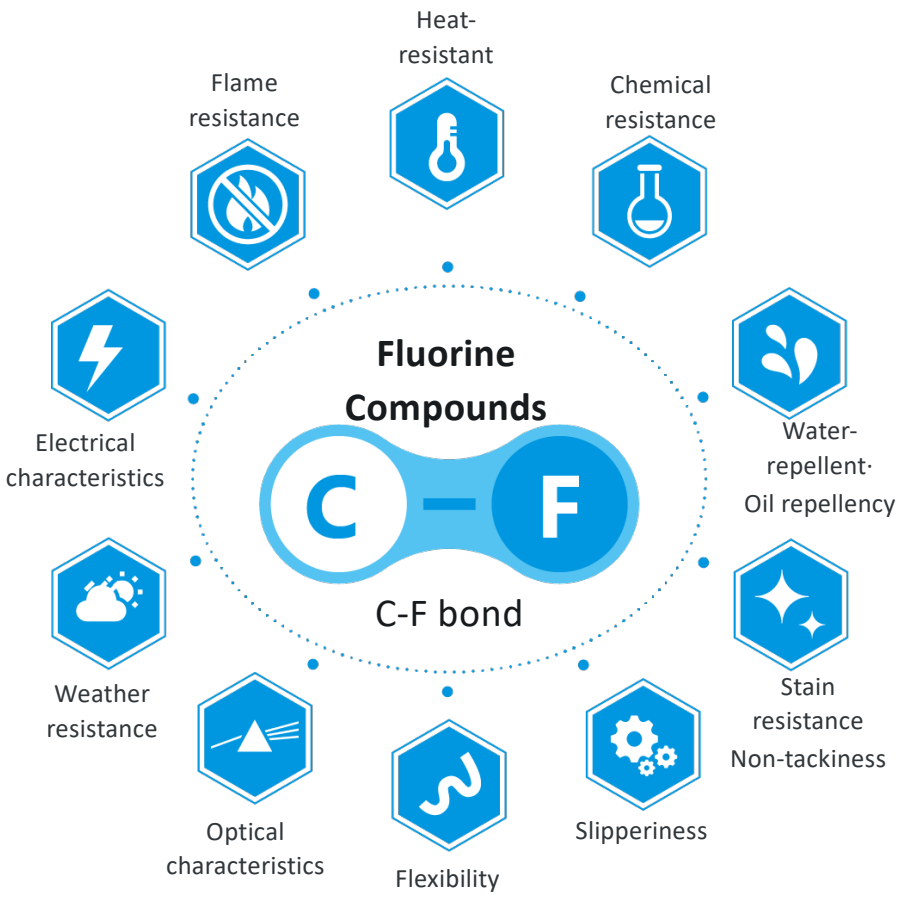
South America

Daikin Ar Condicionado Amazonas Ltda (2012)
- Residential and Commercial ACs

Chemical Business

Utilizing the diverse properties of fluorine in a wide range of fields

The diverse characteristics of fluorine



Product lineup

Resin/Rubber

Fluorine resin

Fluorine rubber

Fluorine resin
Fluorine rubber
Fluorine Resin Paint
Resin addition agents
Fluororesin Film

Surface Functional Materials

Surface Functional Materials

Water and oil-repellent

Antifouling coating agent
Waterproof and moisture-proof coating agent
Water and oil-repellent
Weather resistance paint resin
Release agent Fluorine oil

Specialty

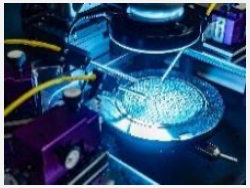
Refrigerant

Medical chemicals raw materials

Refrigerant
Fine Chemicals
Etching agent for conductors
Battery Materials
Optical Adhesives

Main fields and applications of fluorochemicals products

Conductor



Manufacturing equipment parts

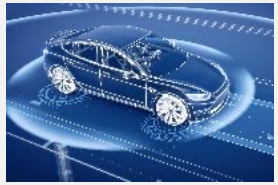
Chemical supply line

Etching Gas

Car

Fuel hose

Lithium-ion Battery



Automotive Sensors

Telecommunications

Touch panel anti-fouling

Communication cable

Printed wiring board

Energy

Lithium-ion Battery

Solar Cell

Wind-power generation

Architecture, Housing, and Lifestyle

Building and residential exteriors

Digital Home Appliances

kitchenware

Air conditioning refrigerants

Electric cooker

Clothing and carpets

Major global production bases for the chemical business

Europe

- **DAIKIN CHEMICAL FRANCE S.A.S (Lyon)**
  Fluorine rubber
- **Daikin Refrigerants Frankfurt GmbH (Frankfurt)**
  Refrigerant
- **DAIKIN COMPOUNDING ITALY S.p.A. (Brescia)**
  Compound Micro Powder
- **DAIKIN CHEMICAL NETHERLANDS B.V. (North Brabant)**
  Fluorine rubber

Japan

- **Yodogawa Plants (Settsu, Osaka)**
  Refrigerants, fluorosis, fluoro rubber
- **Kashima Plants**
  (Kamisu City, Ibaraki Prefecture)
  Fluorine resin
- **DAIKIN FINETECH, LTD.**
  (Nara Prefecture, Osaka Prefecture)
  Resin-processed products, conductor manufacturing equipment
- **KYOEI CHEMICAL INDUSTRIES,LTD Kasei**
  (Settsu City, Osaka Prefecture)
  Processing of resin, gypsum, and fluorite

US

- **DAIKIN AMERICA,INC. (Alabama)**
  Fluorochemicals
- **CRI-TECH,INC. (Massachusetts)**
  Compound
- **MDA MANUFACTURING,INC. (Alabama)**
  Resin intermediate raw materials

Asia

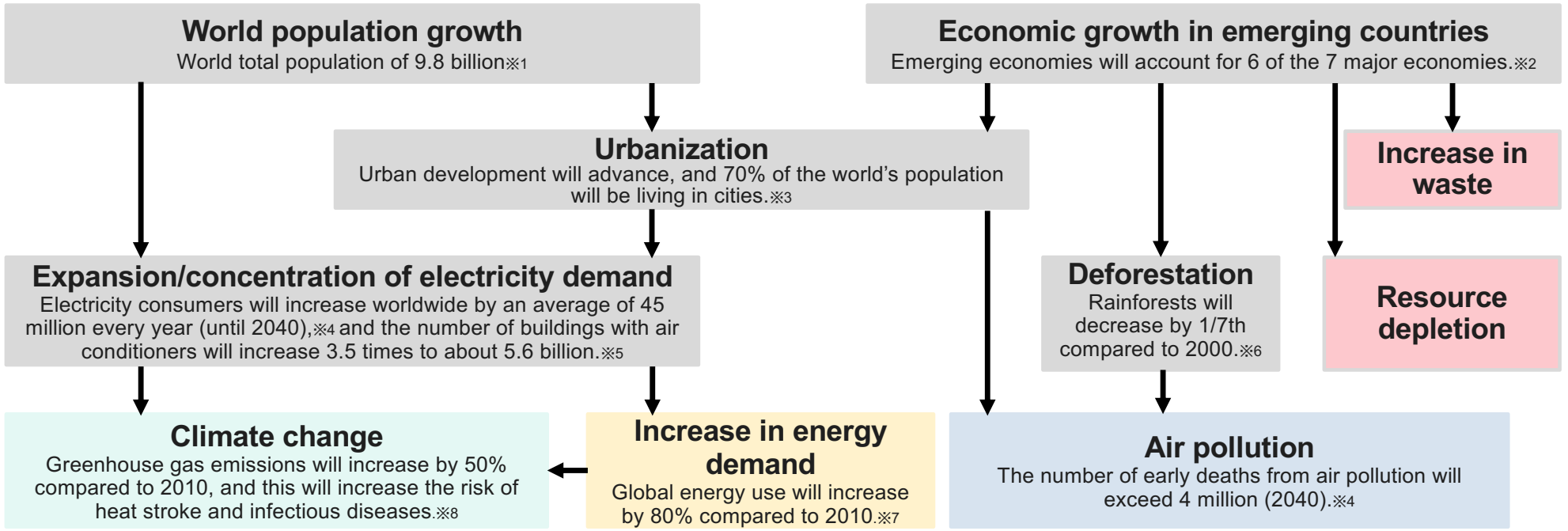
- **Daikin Advanced Materials Korea (Seoul)**
  Conductor dry etchant
- **Daikin fluorochemicals (China) Co., Ltd. (Changshu)**
  Refrigerants, fluorosis, fluoroelastomers
- **Daikoku Fluorine Coatings (Shanghai) Co., Ltd. (Shanghai)**
  Fluorine coatings
- **Daikin New Materials (Changshu) Co., Ltd. (Changshu)**
  Fluorochemicals Products
- **Daikane New Materials (Shanghai) Co., Ltd. (Shanghai)**
  Fluorine paint
- **Jiangxi Datang Chemical Co., Ltd. (Jiujiang)**
  Anhydrous hydrofluoric acid
- **Daikane Seiken Advanced Technology (Huizhou) Co., Ltd. (Huizhou)**
  Fluorine rubber

Environmental Initiatives

Long-Term Environmental Issues Surrounding Our Company

Environmental issues seen from scenarios in society

The world population is expected to reach 10 billion people in 2050. The populations of developing countries in Asia and Africa will continue to grow in the future and are concentrated near the equator. Over the next 30 years, 10 billion people will begin using air conditioners in search of a comfortable life.



※1 : United Nations「World Population Prospects : The 2017 Revision」
※2 : PwC report「The Workd in 2050」
※3 : United Nations「World Population Prospects : The 2018 Revision」
※4 : IEA「World Energy Outlook2017」
※5 : IEA「The Future of Cooling」
※6 : Center for Global Development「The Future of Forests : Emissions from Tropical Deforestation with and without a Carbon Price, 2016-2050」
※7 : OECD「Environmental Outlook to 2050」
※8 : WHO「Quantitative risk assessment of the effects of climate change on selected causes of death, 2030s and 2050s」

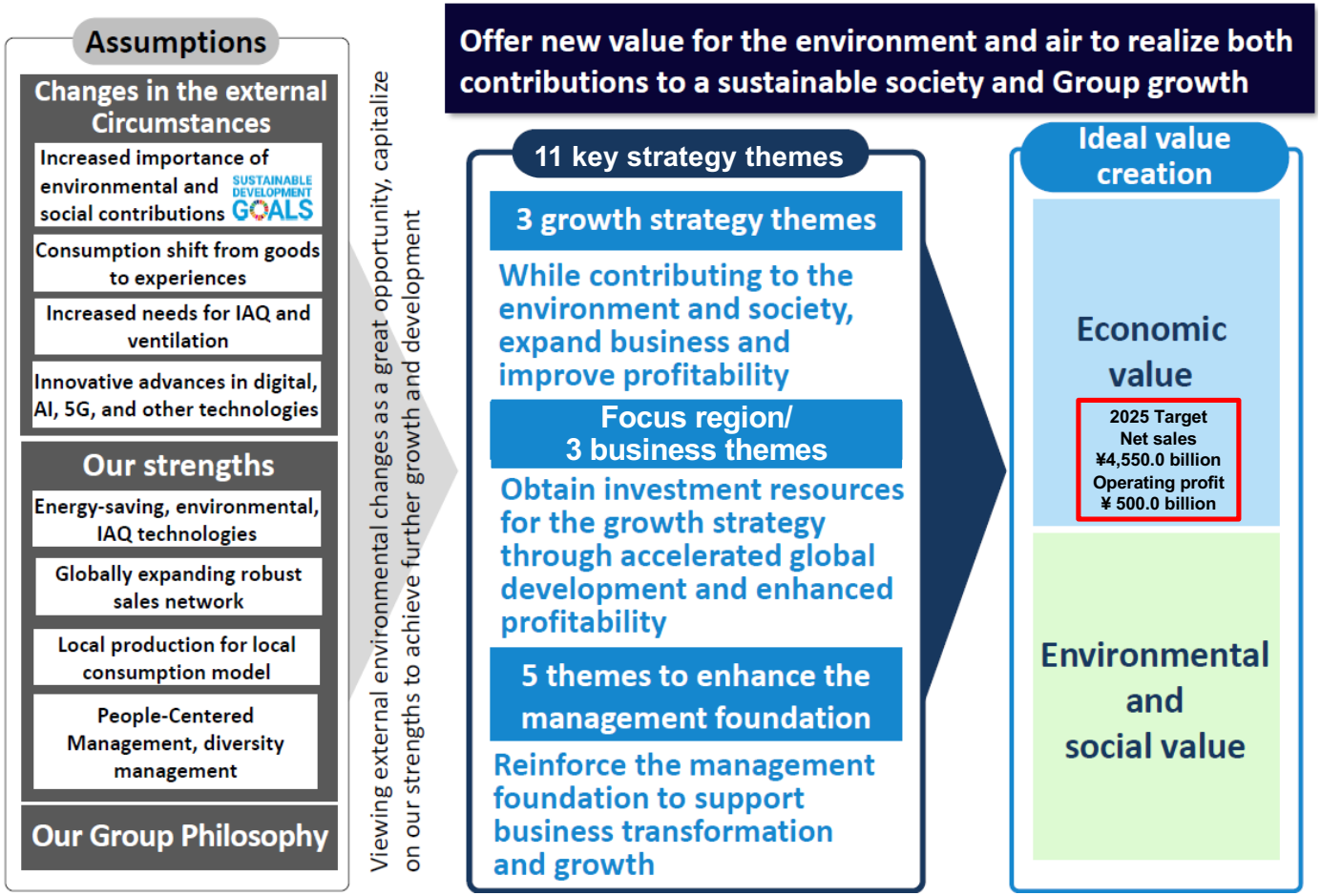
FUSION25

Strategic Management Plan

Overview of Strategic Management Plan “Fusion 25 Latter-Half 3-Year Plan (FY2023 – 2025)”

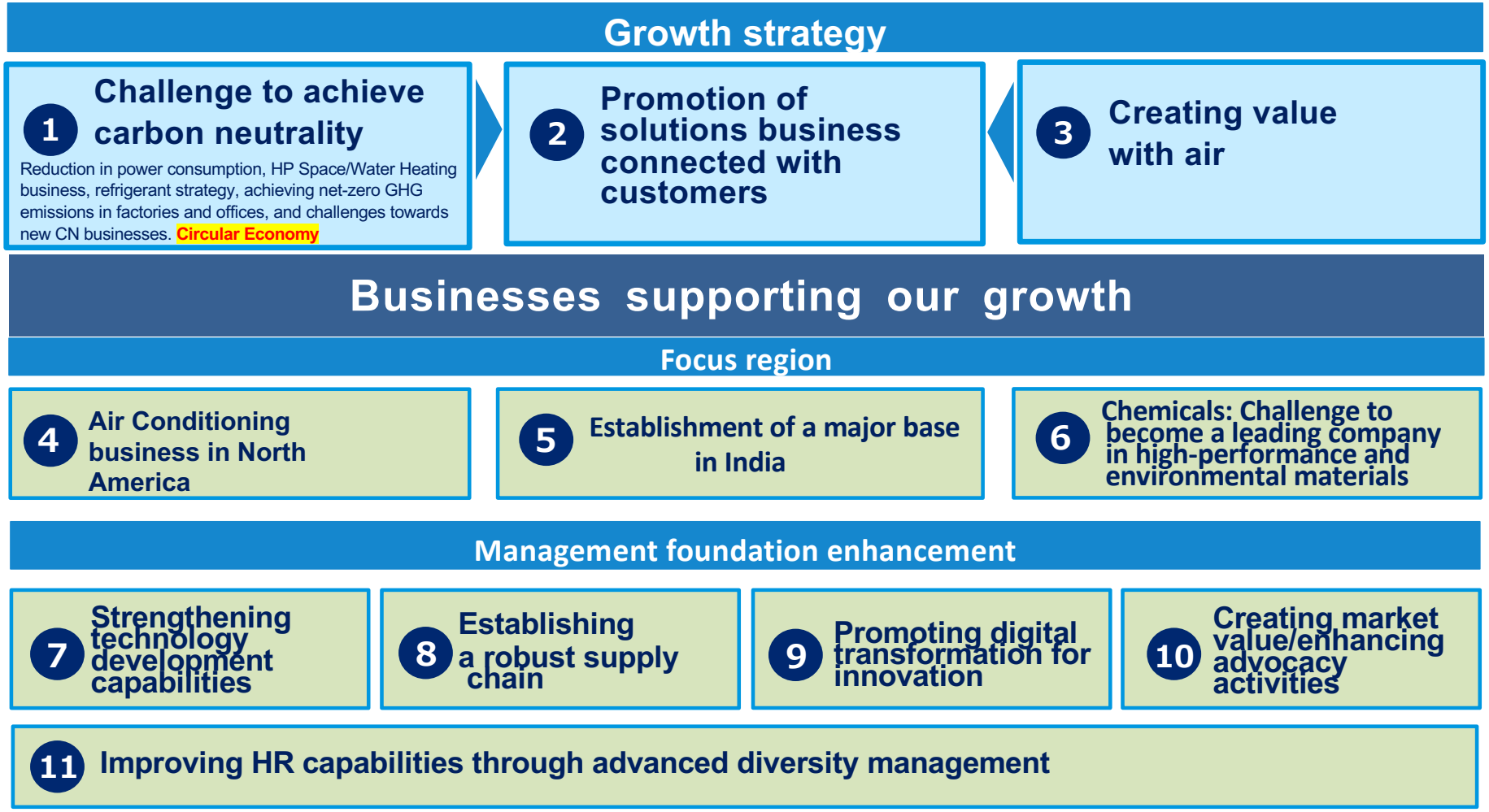
What’s Strategic Management Plan Fusion

- Formulation of strategic management plan every five years based on external business environment and assessment of the current situation.
- Indicate the direction for the Group’s growth in five years, and the key strategy as well as a three-year quantitative targets and implementation plan.
- Upon the elapse of two years from the start, establish a new quantitative target for the final year.



Position of Circular Economy within the 11 Key Strategy Themes of FUSION25

Position the circular economy initiatives within the growth strategy theme "Challenge to achieve carbon neutrality," currently being implemented (newly themed in the Latter-Half 3-Year Plan of FUSION25).



Initiatives for a Circular Economy

Initiatives for a Circular Economy

First, we will accelerate globally establishing a refrigerant eco-cycle (recovery, reclamation). For other materials that we use, we will make environmentally-conscious efforts such as using recycled material and improving durability.

○Establish refrigerant recovery/reclamation networks（Establish the refrigerant eco-cycle）

○Product design and service creation based on the premise of circularity.

・Using recycled plastics, horizontal recycling, reducing use of rare earth, etc.

Concept of a Circular Economy

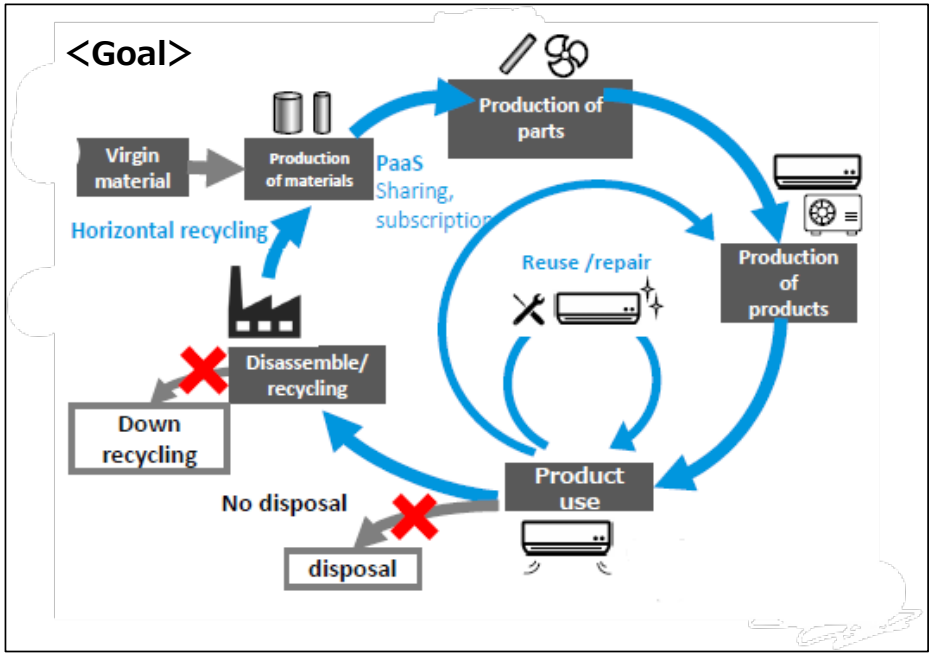
CE is a system of a circular society that generates economic value on the premise that products and raw materials are not disposed

<Efforts Necessary for Realization>

- Offer product design and services based on circularity
- Establish recovery network for circularity
- Enhance technology for horizontal recycling

*Recycling in the form of products after use becomes resources and is regenerated as the same product

Sources: Ministry of the Environment Annual Report on the Environment, the Sound Material-Cycle Society and Biodiversity in Japan (2021)
Keidanren Proposal for the Realization of a Circular Economy (2023)

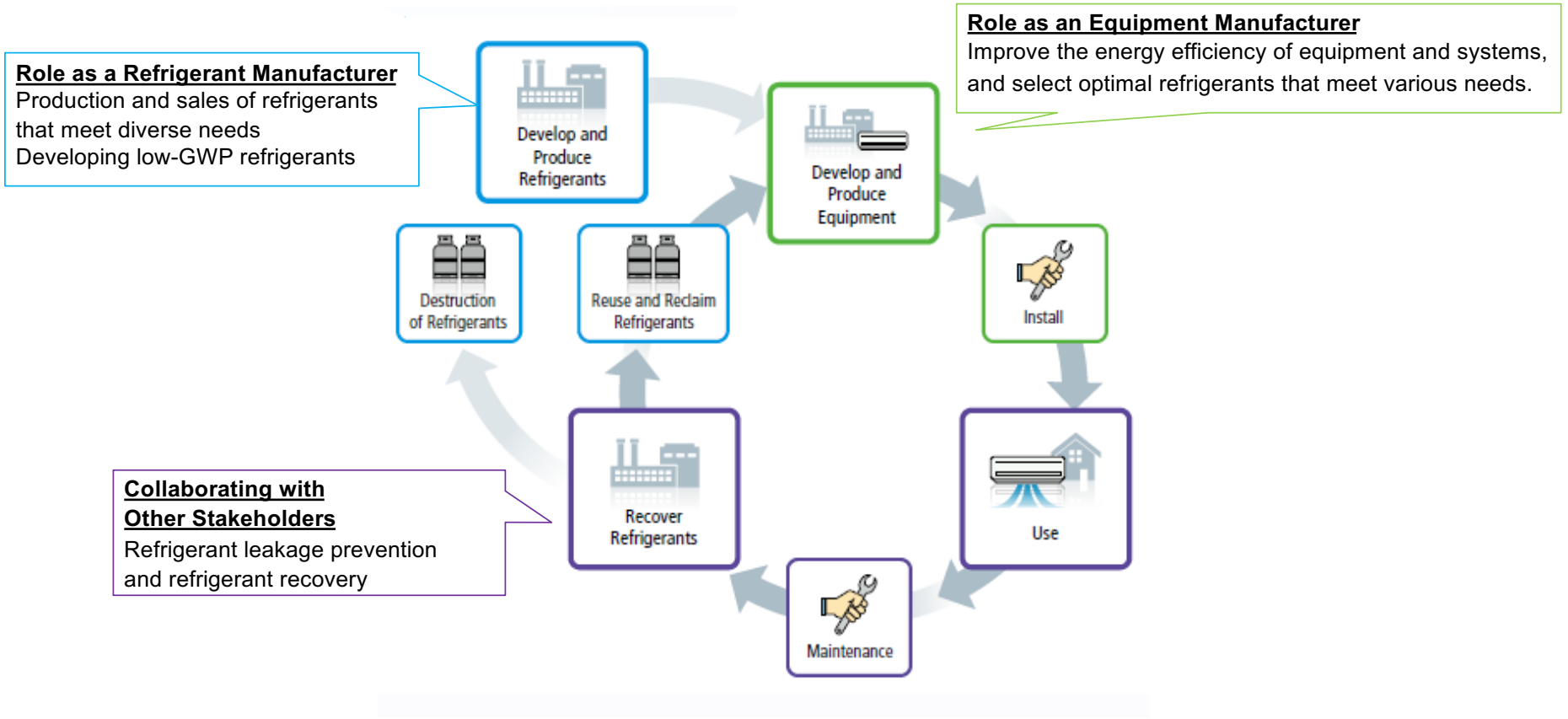


○Establish the Refrigerant Eco-cycle

Direction of Initiatives:

As part of **our social responsibility as a company that makes both equipment and refrigerants**, Daikin advocates for the **establishment of refrigerant eco-cycle (recovery, recycle, reclamation, and destruction)** at each base.

<Lifecycle of Refrigerants and Equipment and Daikin's Role>



○Establish the Refrigerant Eco-cycle

1）Initiatives for the Recovery, Recycle, and Reclamation of Refrigerants in Japan

- We have been working on **refrigerant recovery, recycle, and reclamation** since fiscal 2021, under **a promotion structure that integrates the chemicals and air conditioning divisions**. Aiming to increase refrigerant recovery, recycling, and reclamation rates across Japan, we initiated **a system for centralized management of data from recovery to destruction**. Additionally, **the operation of a new reclamation facility at the Yodogawa Plant commenced** in fiscal 2023.
- In addition, some recovered refrigerants are destroyed at our in-house destruction and treatment facilities, and **the resulting reclaimed fluorite is recycled as a raw material for refrigerants and fluorochemical products**.

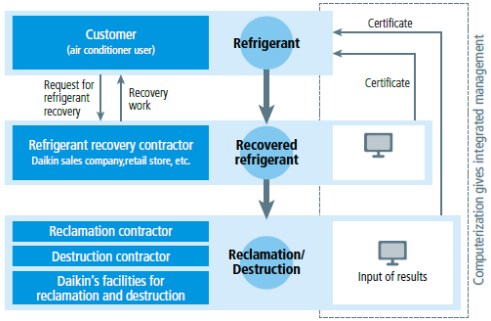
2）System for Recovery, Recycle, Reclamation and Destruction of Refrigerants in Europe

- In Europe, in response to the growing demand for the recovery, recycling, and reclamation of refrigerants due to F-gas regulations, **Daikin has established a system for recovering, reclaiming, and reusing refrigerants from used air conditioners in the market.**
- In Germany, a subsidiary of the Chemicals Division began operating a refrigerant reclamation and destruction plant in 2021. Utilizing this scheme, we have commenced sales of "**VRV L∞P by Daikin" air conditioners that use reclaimed refrigerant**.

3）Supporting the Recovery, Recycle, and Reclamation of Refrigerants in Emerging Countries

- In emerging countries, Daikin **cooperates with the Japanese government, national governments and other stakeholders** to create refrigerant recovery, recycle, reclamation and destruction schemes.
  - Since fiscal 2021, Daikin has been promoting the establishment of a refrigerant recovery system in Vietnam in collaboration with Marubeni Corporation, M-ZETTO, and GenbaNEXT Technologies Private Limited, as part of the Joint Crediting Mechanism (JCM) Financing Support Programme run by Japan's Ministry of the Environment. (A local demonstration of the system was held in January 2024.)

＜Fluorocarbon Recovery Network System＞



＜Reclamation Facility at the Yodogawa Plant＞

＜VRV Using Reclaimed Refrigerant＞

○Circular Product Design and Service Creation

Direction of Initiatives

Daikin strives to create **products and services** with the value people demand and that can be **used over a long period of time**. We **maximize the use of resources at all stages of the product life cycle, from design to repair and final disposal**.

1）Initiatives during Design and Development

①Making Smaller and Lighter Products

- To minimize the resources used in manufacturing air conditioners, **we set weight reduction targets for both the entire product and its components for each unit**.
- After downsizing and weight reduction, Daikin **establishes weight reduction targets for each product during development**, ensuring that the annual performance factor (APF) does not decrease to maintain energy efficiency.

②Switching to Materials with Relatively Smaller Environmental Impact

- The main materials used in air conditioners are metals such as iron, copper, and aluminum. Of these, copper faces the issue of over mining which leads to lower ore grade, while its demand is expected to increase as society strives to decarbonize. Daikin is working to **reduce the amount of copper it uses through the establishment of replacement technologies.**
- In addition, **the circular use of plastic resources** is also another major challenge. Daikin is **making efforts to use recycled materials and alternative materials in its products** as well as reduce the amount of plastic-derived packaging materials it uses.

③Reducing Rare Earth Usage

- Daikin is working to **reduce the amount of heavy rare earths added for high heat resistance**, in parallel with **reducing the use of rare earth-based magnets through motor design.**
- We are also **working to recycle rare earth magnets** in collaboration with third parties.

＜Main Results in Fiscal 2023＞

- Weight reduction by altering component layout in some indoor units (6.8% less than previous models) and using aluminum air heat exchangers (4% less than previous models).
- Development of technology to manufacture aluminum fins from aluminum scrap generated in plants
- Use of recycled plastic for the cover of the stop valve, some plastic parts in the indoor unit, and plastic parts of air purifiers.

○Circular Product Design and Service Creation

2）Creating a Circular-Type Services

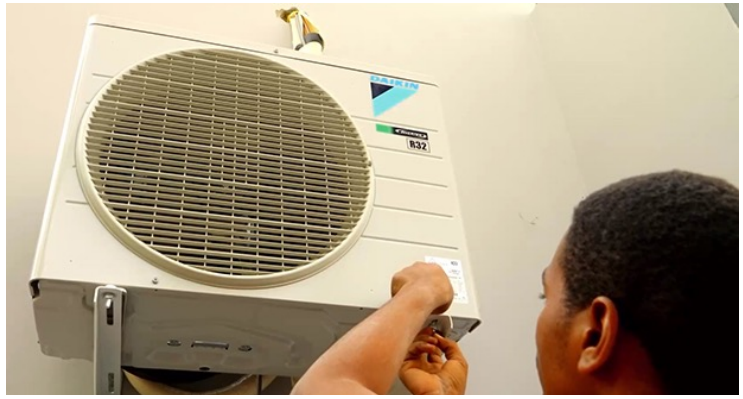
①Subscription-based Business

- Daikin operates **a subscription-based business** in Japan and Africa, focusing on **the direct recovery of air conditioners.**
- Energy management can reduce electricity consumption and greenhouse gas emissions**, while maintenance prevents refrigerant leaks.**

②Efforts to Recover and Recycle (Refurbish) Printed Circuit Boards at Daikin Sunrise Settsu

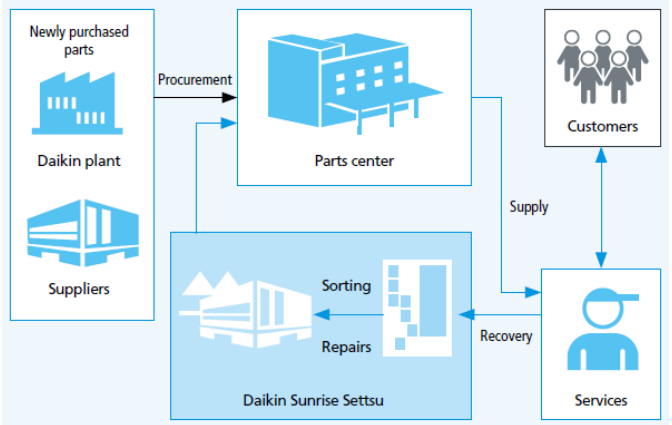
- Daikin has been involved in refurbishing printed circuit boards for more than 20 years, and **it has supplied over 100,000 refurbished printed circuit boards in the last 10 years.**
  - P-boards recovered at service facilities nationwide are first sent to our subsidiary Daikin Sunrise Settsu Co., Ltd., (a joint venture employing people with disabilities) where they are assessed as a good or defective product.
    After ensuring quality by replacing worn parts to improve product durability, refurbished printed circuit boards are utilized for service use.

<Subscription-based Business in Africa>



Delivering Comfort to Tanzania and Contributing to the Environment

<Circularity of Printed Circuit Boards>



Recovery and recycling process for printed circuit boards


DAIKIN