INDUSTRY & INFRASTRUCTURE

The Industry & Infrastructure and its diverse range of environmentally friendly products support people’s daily lives in countless ways: air-conditioning systems in households and offices; forklifts in logistics; transportation systems and ships in the movement of people and things; and metals machinery, chemical plants, and a wide range of machinery in the industries and societies, help to make people’s lives and society happier and more fulfilling. In January 2018, we completed a structural reform that transformed all operations into business companies. In this new stage of growth, through our technologies and products, we will move forward social infrastructures and living environments to the future.

Operating Environment and Addressing Social Issues

Recently, achieving economic development while reducing environmental impact has become an increasingly important social issue. Environmental regulations are growing more stringent in various fields, prompting MHI Group to increase social contribution through its technologies and experience. For example, more stringent international emissions regulations on ship exhaust gas will go into effect in 2020. We forecast that demand for compliant equipment will rise in response. At the same time, needs are rising for turbochargers that help improve fuel consumption and reduce CO2 emissions in automobiles and for centrifugal chillers adapted for use with low-environmental-impact refrigerants.

At the same time, the rapid expansion of e-commerce has exacerbated labor shortages in the global logistics market and prompted the need to improve distribution efficiency.

In the medium and long term, we expect a greater demand for initiatives that respond to urban issues such as waste treatment, as well as the shift to electrification and automation in logistics and transportation systems.
**The Value We Deliver**

We offer a variety of value based on the principle of creating a society that helps people live happier and more fulfilled lives. We help prevent climate change with turbochargers that reduce CO₂ emissions by enabling engine downsizing and with centrifugal chillers with low-environmental-impact refrigerants. At the same time, we are offering more direct solutions to climate change through marine exhaust gas cleaning systems and CO₂ recovery plants with the highest processing capacity in the world. Additionally, we are strengthening our solutions business initiatives related to the logistics market, which is changing and growing remarkably. At the center of these initiatives is our AGF*. Through automated, unmanned, and labor-saving technologies such as the AGF, we respond to needs for safety, security, and increased efficiency. MHI will also mitigate traffic congestion and secure comfortable travel for people through transportation systems such as ITS* and APM. Furthermore, we will create environmentally friendly urban spaces with a variety of environmental systems, including waste-to-energy systems. We will also support industrial technology innovation with our metals machinery and machine tools. Through all of these products and solutions, we will contribute to the realization of sustainable societies.

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*AGF: Automated laser-Guided Forklift
*ITS: Intelligent Transport Systems
2018 Medium-Term Business Plan: Growth Strategies

After three years of portfolio management under our 2015 Medium-Term Business Plan, we have established a new structure that allows for the sustainable growth of each business. In the growing market for material handling equipment and thermal systems, we will invest proactively to expand sales and improve profitability. For turbochargers and engines, we will enhance profitability with advanced production systems and through technology differentiation. In the metals machinery, commercial ships, and engineering-related businesses*, we will promote structural reforms to secure earnings. Through resource sharing and better efficiency, our machinery systems, which are involved in a wide range of businesses, will function as a base for domain earnings. Meanwhile, we will aim to build a continuously stable profit structure in our machine tools business. Finally, our domain will provide a common base to enhance technical capabilities and innovation to properly execute each business’s strategies and maximize value.

*Chemical plants, transportation systems, and environmental systems

Activities Focused on the 2018 Medium-Term Business Plan and Beyond

- **Energy efficiency**
  - Industrial and logistics machinery and robotics
  - Synergies among businesses within I&I domain
    - Big data analysis, remote monitoring system development, etc.
    - Domains provide one-stop support for each business

- **Urban issues**
  - Logistics and transportation systems, waste treatment
  - Collaboration and alliances with customers and other companies
    - SL-Lab (Sophisticated Logistics Laboratory)
      - Create next-generation logistics with customers
      - (Design conceptualization approach)

 technologies:
 - Core technologies: technology sharing with cross-divisional projects/technology sharing with system tools
 - Project engineering: project engineering support/project engineering capability development
 - Digitalization: promotion team in Europe/data analysis/agile development/design conceptualization
As a Member of the Local Community

Mitsubishi Heavy Industries-Mahajak Air Conditioners Co., Ltd. (MACO), the base of our air conditioner business in Thailand, has been donating facilities to be used as schoolhouses or classrooms to local elementary schools since 1998. Since its establishment, MACO has been doing its part to improve economic development in Thailand through initiatives such as job creation, export expansion, and technology exchange. MACO also endeavors to be a good corporate citizen by directly contributing to the resolution of issues facing societies in Thailand; employees listen to requests and demands from local residents and MACO works to respond to them.

Moving forward, the company will continue cooperating with surrounding regions to raise the quality of people’s lives.