

**COVER  
STORY**



# Technologies Underpinning Japan's Development

The MHI Group has supported the growth and development of Japan with advanced technologies and a broad range of products during its era of modernization, reconstruction following World War II, and period of high economic growth. Our business domains extend across land, sea, air, and space. As our expansion has mirrored that of the Japanese economy, growth has slowed since the 1980s, but since the late 2000s we have been promoting globalization and management reforms to put ourselves on a new growth trajectory.

This cover story describes our efforts to create value in the past, present, and into the future.

## Expanded Business Domains

Over the 130 years since we began operations as a shipbuilder, we have expanded our business domains substantially. Currently, we operate in four domains: Energy & Environment, Commercial Aviation & Transportation Systems, Integrated Defense & Space Systems, and Machinery, Equipment & Infrastructure.

Our domains have also grown geographically. In addition to exports, in recent years we have strengthened our overseas base operations, procurement, and production systems. At the same time, we have stepped up our alliances and mergers with, and acquisitions of, overseas companies, to the extent that overseas sales now account for more than 50% of the total.

**Establishment-  
Pre-WWII**

### Helping Japan along the Path to Becoming a Modern Nation

The history of MHI begins with our 1884 start of a full-fledged shipbuilding business in Nagasaki. After that point, we made rapid progress as we pursued the advances taking place in Europe and the United States. In addition to shipbuilding, we drove our growth by building automobiles, aircraft, turbines, and internal-combustion engines. Later, we also turned our world-leading technologies to the manufacture of products to meet military demand, such as battleships and fighters.



Nagasaki Shipyard & Machinery Works (1884)

**Post-WWII—  
High-Growth Period**

**A Key Player in  
Turning Japan into  
a Nation of Abundance**

Post-war, in 1950, in line with the GHQ's policy of dissolving large industrial groups (*zaibatsu*), MHI was divided into three independent and competing companies. In addition to providing such heavy equipment as tankers and gas turbines, we supported Japan's reconstruction across a broad range of product fields, including motor scooters and air conditioners.

The three companies integrated in 1964, and we played a role in Japan's rapid economic growth through the development and production of such social infrastructure as power plants and bridges as well as container carriers, monorail systems, and other transportation equipment.



Tower parking garage (1963)

**Slowing Japanese  
Economic Growth**

**Stagnating Growth as the  
Japanese Economy Slows**

The 1973 oil crisis marked the end of Japan's rapid economic growth and had a major impact on MHI's business, particularly in shipbuilding. After that point, we established an industrial machinery business and enjoyed steady expansion until Japan again entered a period of slow growth following the bursting of its economic bubble. During that period, we succeeded in launching rockets and expanded our business domains to include aerospace. Although we continued to hone our leading-edge technologies, annual net sales remained around the ¥3 trillion level for approximately 30 years.



Successful launch of the first H-I launch vehicle (1986)

**Toward an Era of  
Sustainability  
and Diversity**

**Pursuit of New Growth by  
Becoming a Global Company**

Although growth in Japan has leveled off, the economies of overseas emerging countries have been expanding rapidly, pushing up demand for infrastructure development. Also, amid a growing sense of crisis about climate change and the depletion of natural resources, environmental protection has become a consistent theme worldwide. For MHI, which has supplied diverse infrastructure over many years and pursued environmentally friendly technologies since the oil crisis, this situation has presented new opportunities for growth, and we are pursuing the path to becoming a global company.



A "J-Series" gas turbine achieved the world's highest turbine inlet temperature, 1,600°C, during verification testing. (2011)

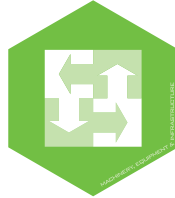
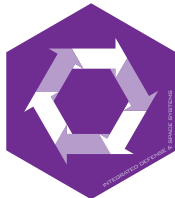
**Energy & Environment**

Our Energy & Environment operations offer optimal solutions in the energy-related fields of thermal power, nuclear power, and renewable energy, in such environmental areas as water and flue gas treatment, and for chemical plants and other industrial infrastructure elements.



**Integrated Defense &  
Space Systems**

In Integrated Defense & Space Systems, we provide integrated land, sea, air, and space defense systems, including naval ships, defense aircraft, launch vehicles, and special vehicles, as well as space-related services.



**Commercial Aviation &  
Transportation Systems**

In Commercial Aviation & Transportation Systems we deliver advanced land, sea, and air transportation systems, including commercial aircraft and ships, and transit networks, all offering superior safety, guaranteed quality, and reliability.

**Machinery, Equipment &  
Infrastructure**

Our operations in Machinery, Equipment & Infrastructure provide a wide range of products that form the foundation of industrial development, such as machine tools, material handling equipment, and air-conditioning and refrigeration systems.