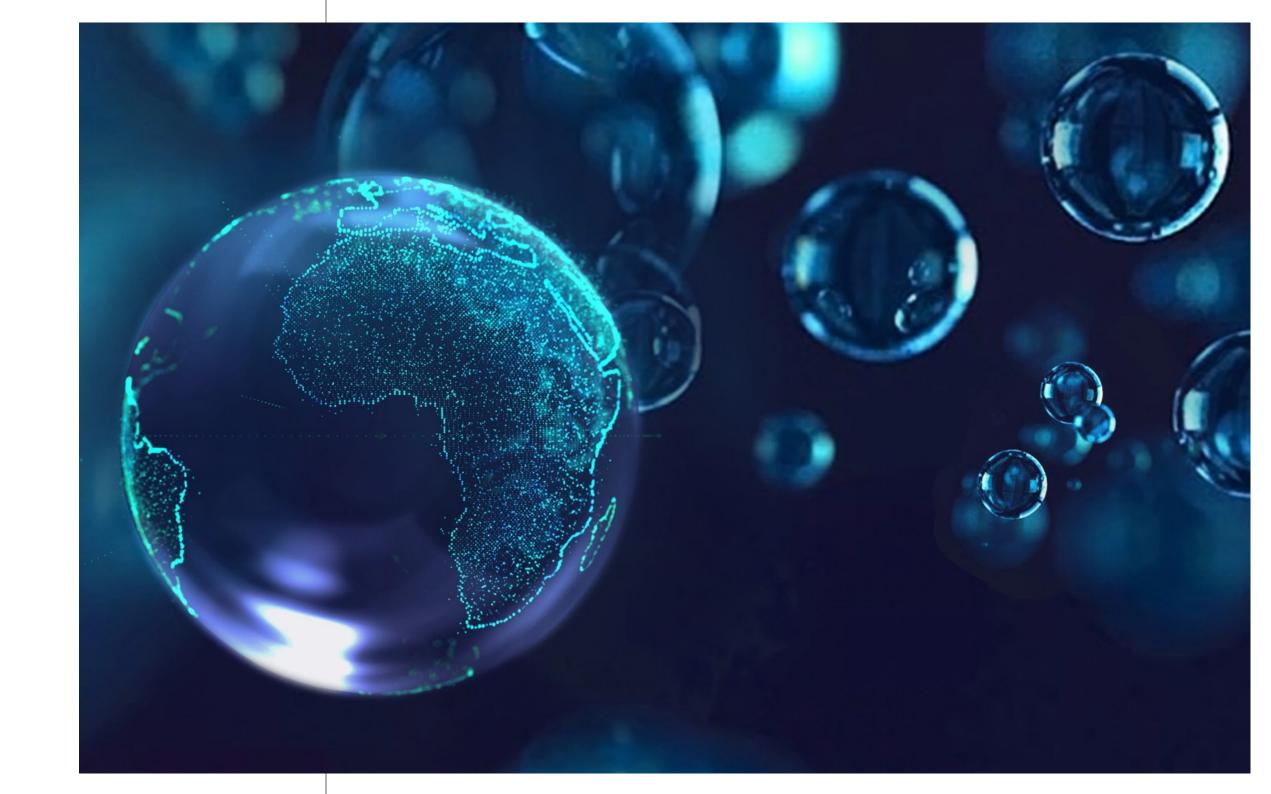


# WHAT WE DO

Mitsubishi Power, the power solutions brand of Mitsubishi Heavy Industries, Ltd. (MHI) is a world leader in power generation and energy storage solutions – effectively designing, manufacturing, building, servicing, and optimizing power systems for people and the planet.

Building on more than a century of innovative engineering and distinctive service, Mitsubishi Power is collaborating with customers, governments, utilities, and industry leaders to drive decarbonization agendas while addressing the energy challenges of today and tomorrow, to be able to create a future that works for both people and the planet.



## **OUR OPERATIONS IN KUWAIT**

Our expansion into Kuwait was synonymous with the establishment of the state in 1970. Throughout the past 50 years, Mitsubishi Power has provided advanced, reliable, and innovative energy solutions and services to enable major power rehabilitation across the MENA region and specifically in Kuwait.

As an instrumental power supplier for the country's energy sector, Mitsubishi Power provides almost half (43%) of Kuwait's power supply.

Our technologies are installed in many major power plants, including the 2.4GW Doha West, 2.4GW Sabiya, and the 2.5GW Az-Zour South 0.5GW Shuaiba South B. The company engaged in commissioning the Doha West Power Station in 1980 and continues to maintain the plant's life extension to this day.

Mitsubishi Power consistently works on optimizing the performance of power-generating facilities such as the Az-Zour South Power Plant, which was first commissioned in 1986, and the Sabiya power plant which has paved the way to provide an impeccable and seamless operation in the country.



The company also focuses on the rehabilitation and improvement of power units across the country. For Doha West Power Station, Mitsubishi Power rehabilitated eight steam turbines and generators throughout 2015 to 2019, and for Sabiya Power Station, we recently completed the required outage, major overhaul, and control system upgrades successfully.

In 2020, Mitsubishi Power was awarded a contract from Kuwait National Petroleum Company (KNPC) to rehabilitate and upgrade six boilers in unit 29 of Mina Al-Ahmadi refinery in Kuwait. The restoration includes improving the combustion system (implementing low-NOx burners), extending the lifetime (by upgrading pressure parts), and enhancing auxiliary systems to enable a higher availability and operational flexibility of the unit.

### WE WORK WITH KEY ENERGY STAKEHOLDERS IN KUWAIT INCLUDING:









### IN THE WORKS

Mitsubishi Power is currently working on new EPC/IWPP CCGT projects and various rehabilitation projects for steam turbines and boilers for Ministry of Electricity and Water of Kuwait



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"Our presence in Kuwait is a testament to our profound commitment towards the country and supporting our valued partners, as we work together to usher the country into the next phase of sustainable power generation. To meet the fast-changing demands of today's power generation industry, Mitsubishi Power has provided cutting-edge technologies and services to upgrade major plant rehabilitation and overhaul power plants in Kuwait for the Ministry of Electricity and Water, powered major installations in the 0&G industry and supplied a majority share of Kuwait's installed power capacity. Looking to the future, Mitsubishi Power aims to play a vital role in further shaping and diversifying Kuwait's energy landscape, keeping pace with the regional and global energy transition. We will also seek to respond to the region's robust power demand by proposing highly advanced power systems, thereby contributing to further economic development, while also easing environmental burdens."

## KHALED SALEM

President, Mitsubishi Power Middle East & Africa (MEA)

# MITSUBISHI POWER PROJECTS IN KUWAIT



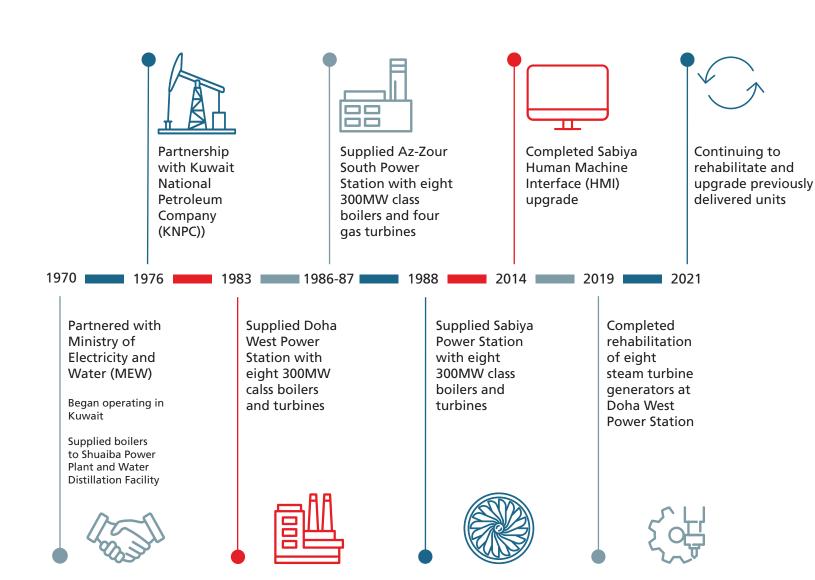
**MANHOURS** 



**♦**) 7.85 GW

AND 43% TOTAL POWER CAPACITY AND SHARE IN KUWAIT USING PRIME MOVER INSTALLED BY MITSUBISHI POWER





## **OUR TOTAL ENERGY SOLUTIONS**

From pioneering the world's largest, most efficient, and most reliable gas turbines, to hydrogen powered GTs, energy storage, and carbon utilization technologies, total energy management solutions, and power infrastructure digitalization, Mitsubishi Power is making significant investments to create a sustainable future. With a 100+ year track record of excellence in the energy industry, Mitsubishi Power develops the world's most innovative clean power solutions and digital offerings for customers, empowering them at every stage of their energy transition journeys, affordably and reliably.

### **PRODUCTS**





Gas Turbines



Control Systems



Steam Power



Steam Turbines



Fuel Cells





Geothermal

Generators

**Boilers** 



Others

# **SERVICES**



Gas Turbines





Boilers



Generators



Air Quality Control System (AQCS)



Long Term Service Agreement



Support of Operation and Maintenance



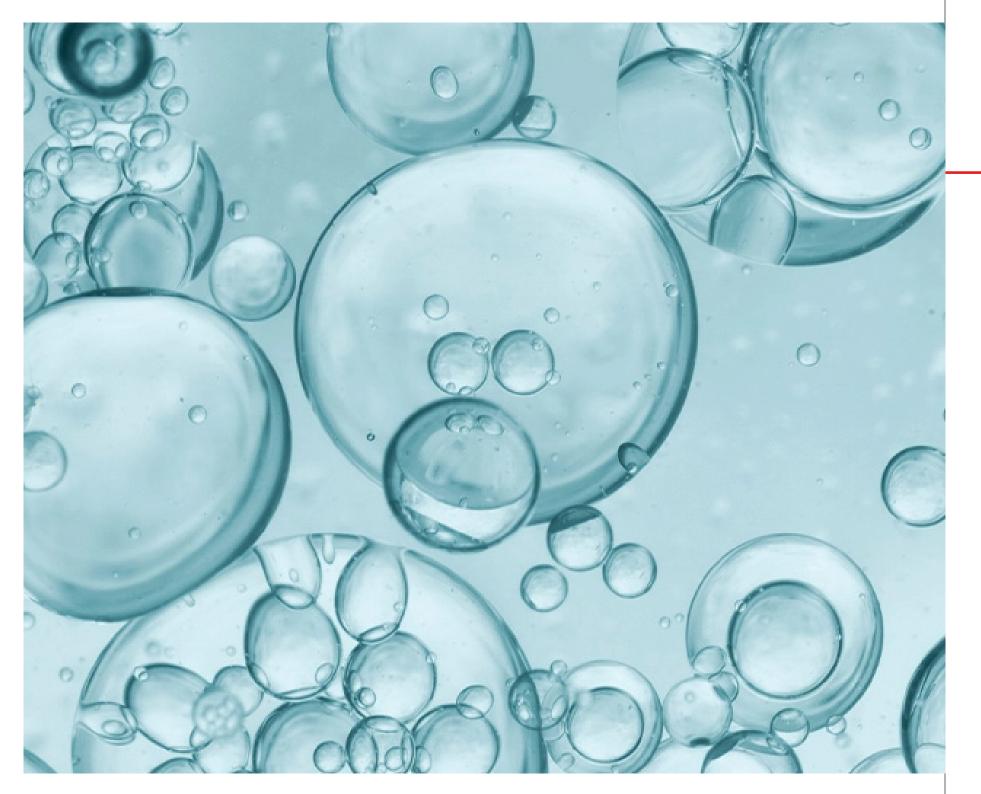
Training



Comprehensive Maintenance



Intelligent Solutions TOMONI®



# DECARBONIZING GAS TURBINES: OUR HYDROGEN EXPERTISE

Mitsubishi Power has long pioneered hydrogen fuel combustion technologies, and our recent large-scale and ambitious projects demonstrate our commitment and accumulated expertise in this field.

Commercializing hydrogen is now a global priority, to scale its use. Mitsubishi Power, along with Mitsubishi Heavy Industries (MHI) are fast-tracking this process through projects such as the recently announced Takasago Hydrogen Park, the world's first center for the validation of hydrogen-related technologies, from hydrogen production to power generation, which will support the commercialization of small and large frame gas turbines.

Mitsubishi Power is building a value chain for hydrogen, from production to use, through further integration and advancement of the existing energy infrastructure and hydrogen-related technologies. By further developing this approach and linking it with many different types of hydrogen-centric industries, MHI aims to establish a hydrogen ecosystem that will accelerate its commercialization through verification at the Takasago Hydrogen Park.

## **OUR NET-ZERO JOURNEY**

Mitsubishi Heavy Industries have set two ambitious new targets to realizing a carbon neutral society. MHI Group is aiming to remove all carbon dioxide emissions from its own operations by 2040 – cutting emission by half by 2030 (compared to 2014). MHI Group is also adopting a new goal to achieve Net Zero emissions through its entire value chain by 2040. These targets include the reduction in emissions attributed to our customers' use of our products and services, and the reduction contribution from MHI's Carbon dioxide Capture, Utilization and Storage (CCUS) business.

Net zero is a social and scientific imperative and highly achievable. Mitsubishi Power sees five interdependent factors that pave the way to net-zero and on this journey, and must ensure that decarbonization solutions are accessible, reliable, and affordable, across industries and geographies – as a company, as an industry and as a society.

### ✓ PARTNERSHIP AND COLLABORATION

The need to collaborate in unprecedented ways to develop technologies and business models that enable sustainable growth.

#### JOBS AND SKILLS

Net-zero will be achieved with the people who can deliver it, so jobs and skills will be crucial. There is a need to create a culture of continuous learning, enabling talent to evolve and thrive with rapidly changing technologies.

## / TECHNOLOGY AND INFRASTRUCTURE

The need for scale and the acceleration of a broad range of existing and new decarbonizing technologies.

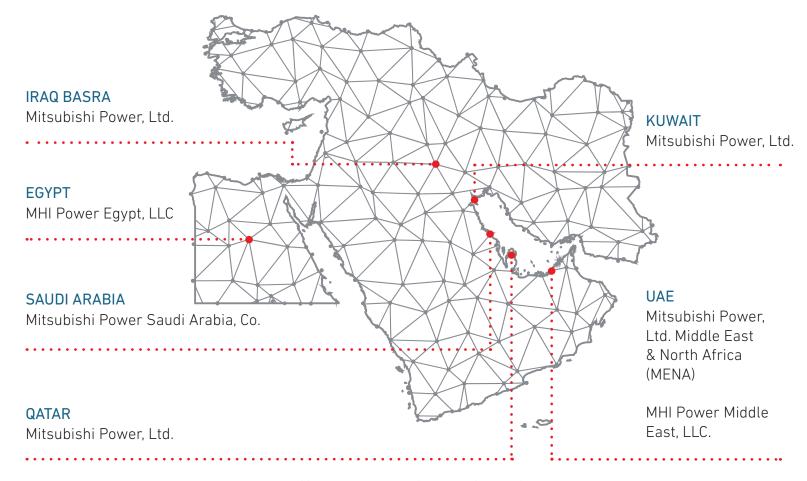
#### POLICY AND REGULATIONS

This will play a pivotal role in incentivizing the shift to low or zero carbon technologies. There is a need to globally align regulations that support ambitious yet pragmatic net-zero goals and mitigate any imbalance across the world.

### FINANCE

Lastly, the transition needs to be financed and needs to be backed by viable business cases. There is still work that needs to be done to explore new viable financial models for low-carbon solutions to reduce risk and accelerate adoption.

## **OUR MIDDLE EAST PRESENCE**



For more information, please visit <a href="https://power.mhi.com/regions/mena/">https://power.mhi.com/regions/mena/</a>



