Thermax Corporate Overview

10 March 2026

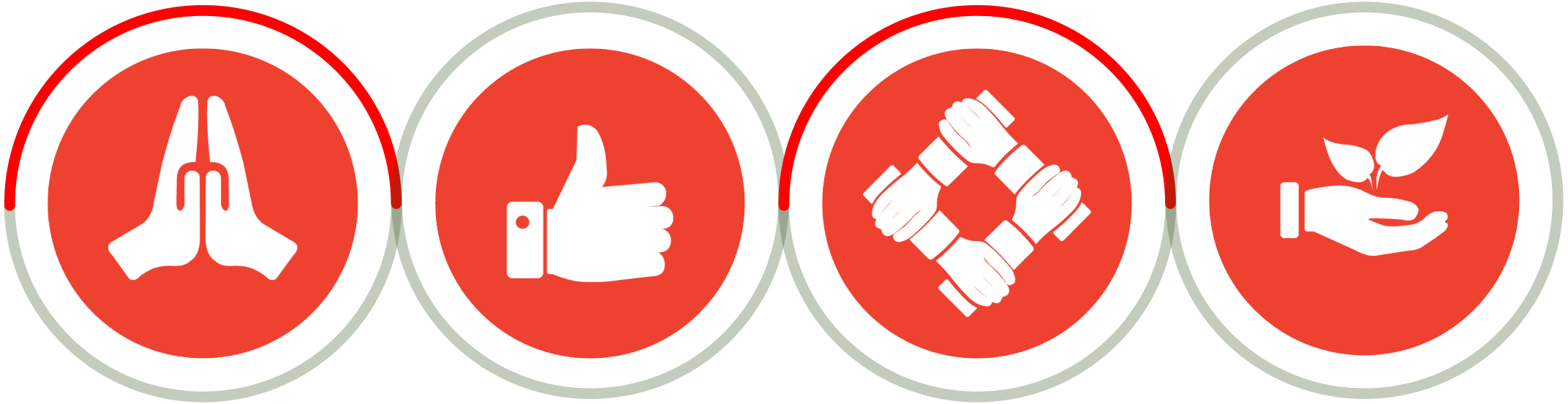
Conserving Resources, Preserving the Future.

Brand Promise:
Conserving Resources, Preserving the Future.

Our Vision:

To be a globally respected high performance organisation offering sustainable solutions in energy and the environment

Our Values



Respect

Commitment

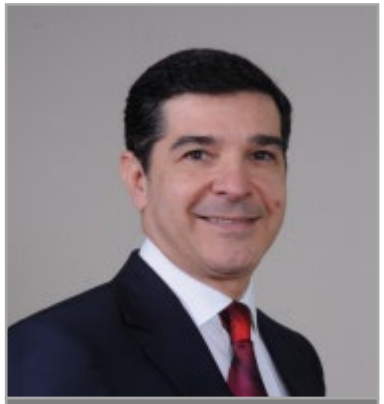
Honesty and Integrity

Concern for Society and the Environment

Board of Directors

Meher Pudumjee
Chairperson

Ashish Bhandari
MD & CEO



Pheroz Pudumjee
Promoter Director

Rajani Kesari
Independent Director

Dr. S. B. (Ravi) Pandit
Independent Director

Harsh Mariwala
Independent Director

Dr. Ravi Gopinath
Independent Director

Shyamak Tata
Independent Director

Parag Shah
Independent Director

Safety and Environment Oath

I will set excellent safety standards by adhering to safety norms, reporting hazards and taking prompt actions to prevent accidents.

I will do my share to preserve the planet's future by conserving resources and minimising carbon footprint through reduce, reuse and recycle.

Thermax Group at a Glance

7,854 Employees*, Globally

Installations in
90+ Countries

Sales and Service Presence in
30+ Countries

Revenue
Rs. 10,389 crore

16 Manufacturing Locations
(12 in India, 4 International)

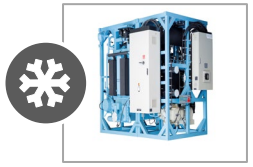
*FY 2024-25 data

* Includes permanent employees, FTCs, and permanent workers

Our Business Model

Power

Heating



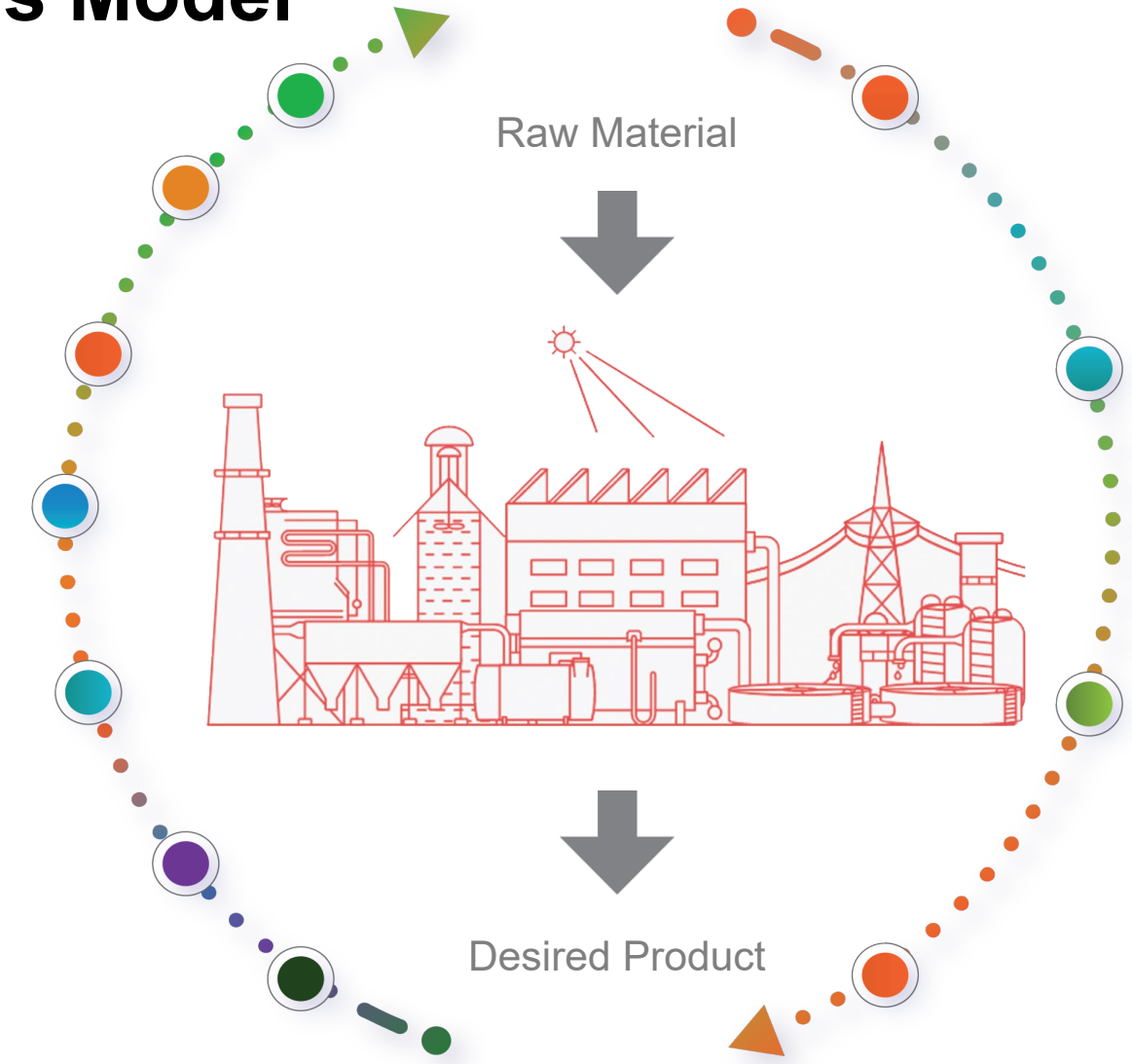
Cooling

Water Treatment

Chemicals

Build-Own-Operate-Maintain

Utilities



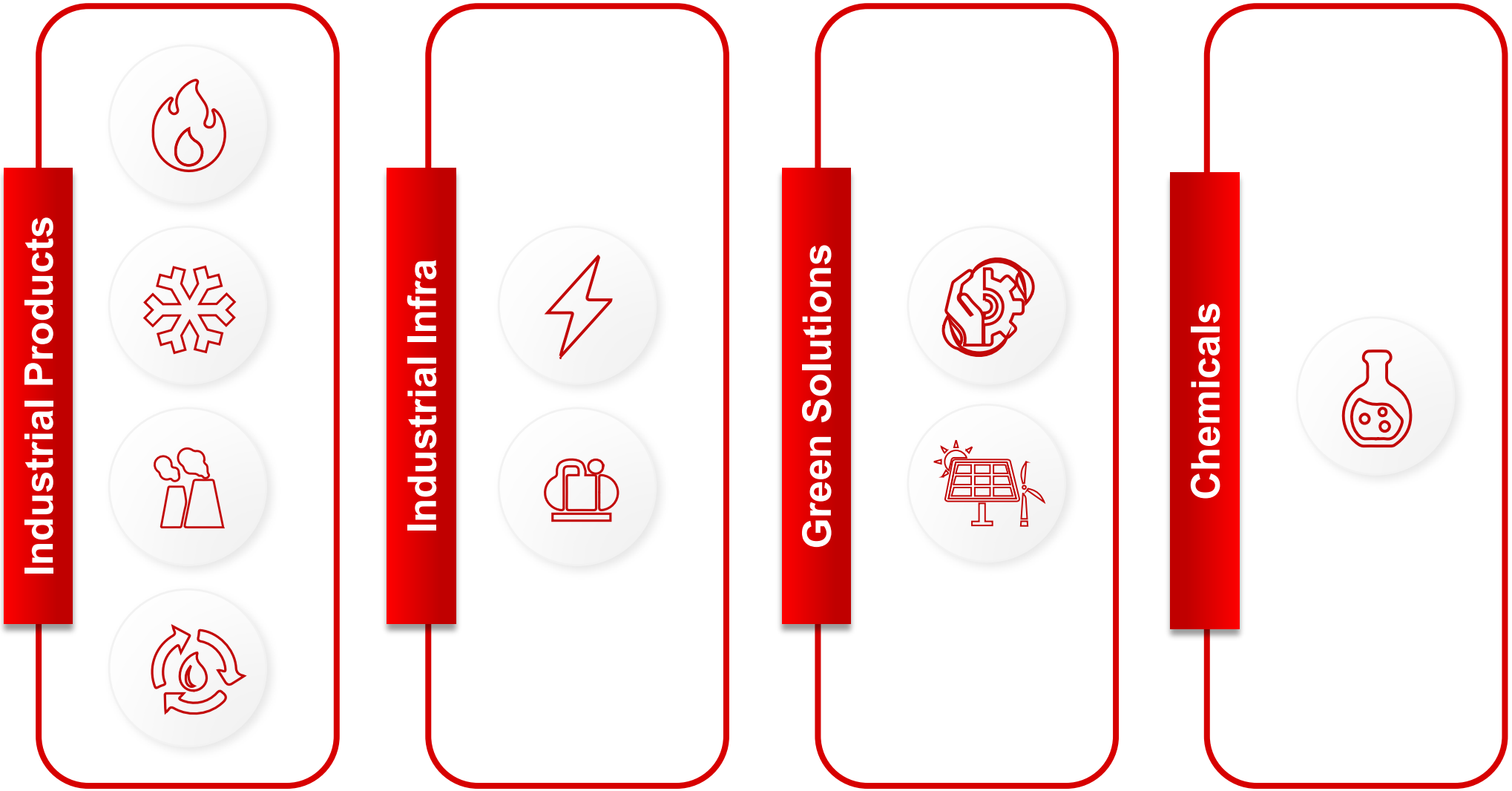
Waste

Trusted Partner in Energy Transition

As a company specialising in both energy and environment solutions, we play a critical role in facilitating the world's transition to more equitable and resilient energy systems. With our deep industry knowledge and expertise, we are uniquely positioned to provide solutions to our business partners and stakeholders, becoming their trusted partners in navigating their journey to a more sustainable and successful business future.

THERMAX

Our Business Segments



Our Business Segments

THERMAX

Industrial Products

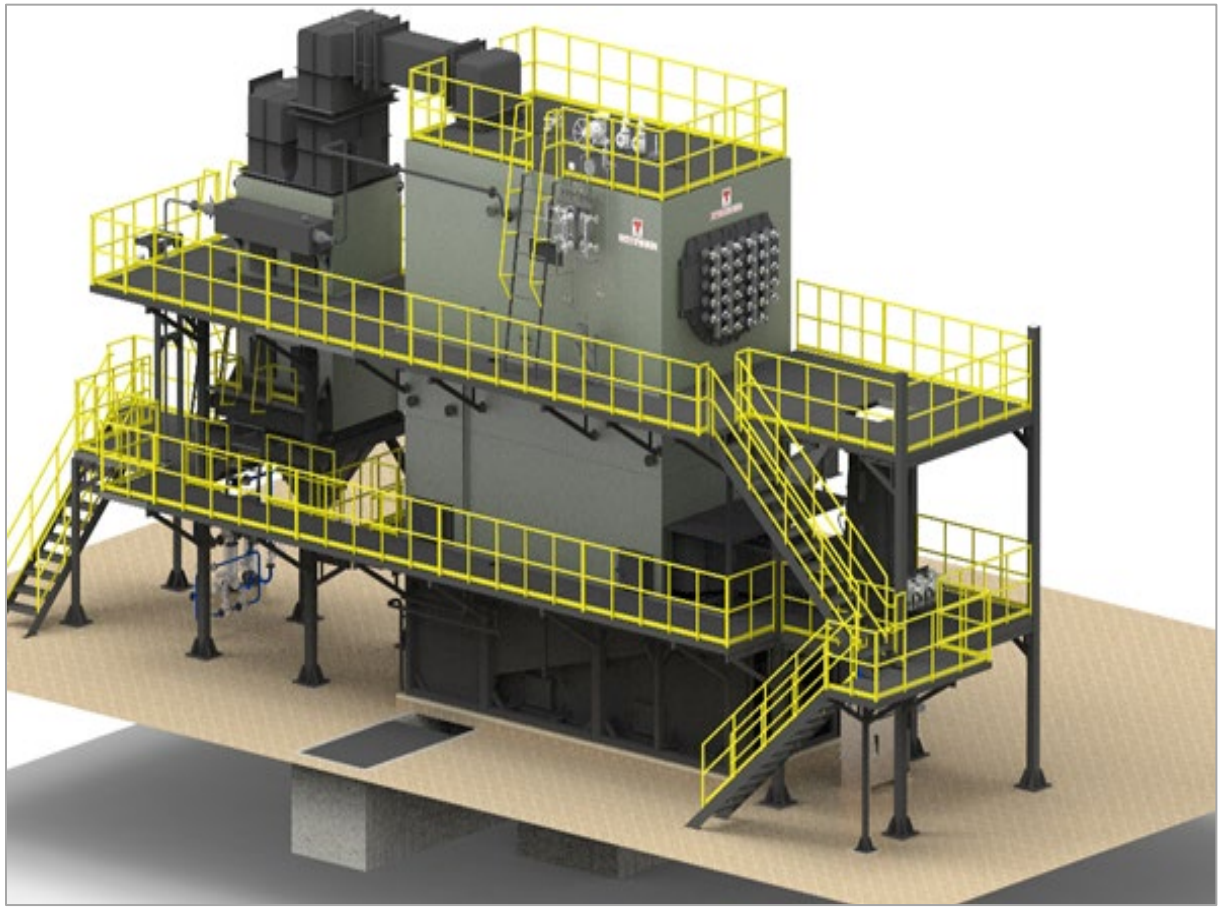
Industrial Infra

Green Solutions

Chemicals

Process Heating

Process Heating Solutions



Our Offerings

• Steam boilers • High pressure boilers • Thermal oil heaters	• Heat recovery systems • Hot air generators • Energy plants
• Biomass Centre of Excellence	• Thermax Serve – a dedicated services arm for Heating solutions

Why Thermax Heating Solutions?

- 55+ years of understanding of heating needs of the process industries
- Unmatched range of heating solutions
- Constant innovation to suit industry demands
- Consultative approach to offer energy-efficient and sustainable solutions
- Solutions include packaged modular boilers/heaters to customised turnkey solutions
- Specialised O&M services

Thermax tackles the stubble burning challenge with Universal BioGrate combustion technology

Case study

Case: Dynamic fuel costs and fuel availability are the major challenges faced by customers in transforming biomass waste into sustainable energy. Another crucial challenge especially in the northern region of India is that of stubble burning. A textile customer from Ludhiana, Punjab, sought a solution to harness excess biomass.

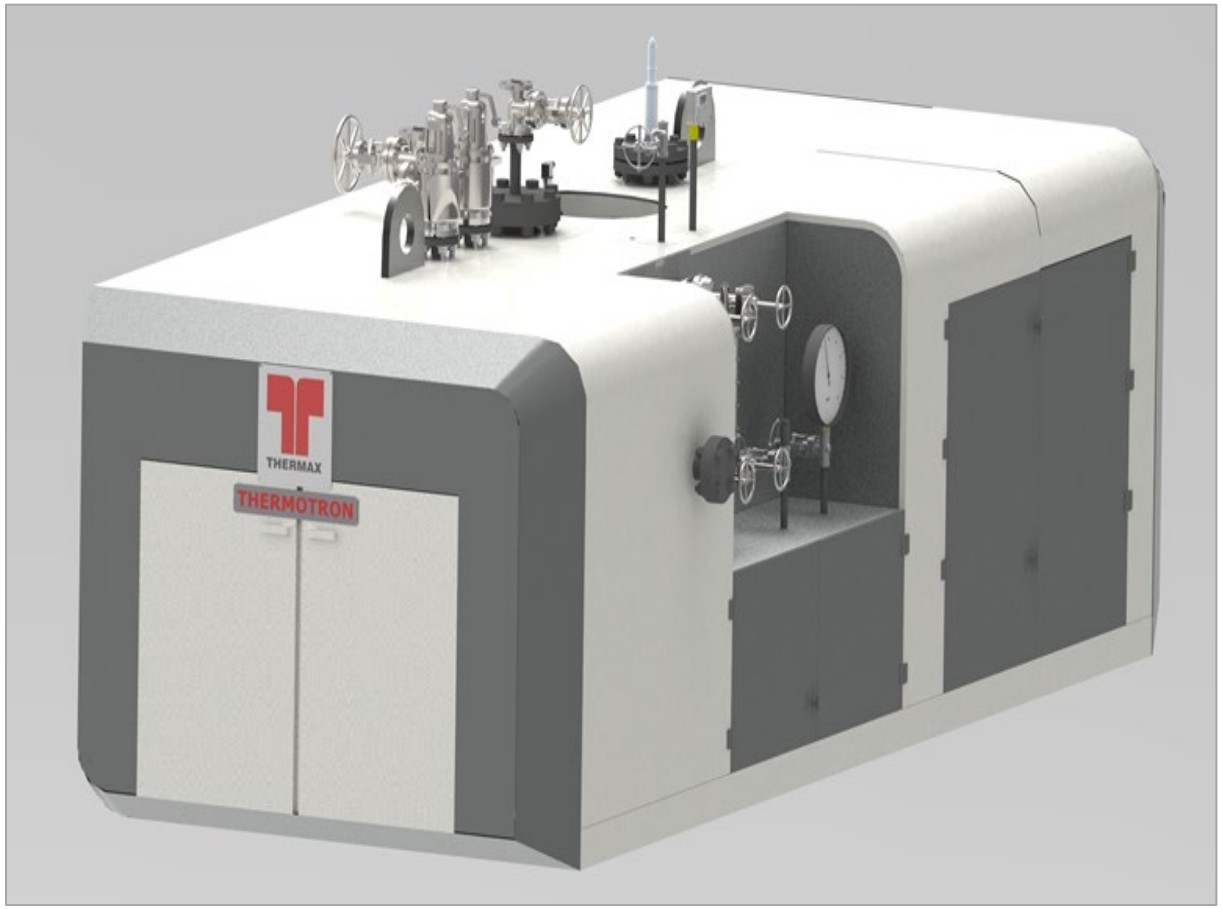
Solution: Thermax introduced the GreenPac boiler and GreenBloc heater, leveraging the Universal BioGrate combustion technology to overcome combustion challenges posed by rice straw as a fuel and combust it efficiently. The technology was offered to the textile customer that helped them to efficiently utilise rice straw for process heating.

Result:

- 35% cost savings on fuel compared to traditional options
- 19,283 tonnes per annum of CO_2e reduction at 100% load
- Significant reduction in harmful emissions and particulate matter

Thermax's heating solution ensures energy efficiency for a beverage company in Bhutan

Case study



Case: A beverage company in Bhutan required high-quality steam for their process. Due to sustainability commitments, limited space for boiler installation, and the need to improve cost efficiency compared to fossil fuel options, they sought an electric process heating solution.

Solution: Thermax recommended its plug-and-play 600 kg/hr electric heating solution, Thermotron, and successfully commissioned the system. This electric boiler provides 99% efficiency at both rated and part loads, delivering consistent high-quality steam to meet process demands.

Result:

- ~50% reduction in footprint
- Lower installation and operational costs
- Reduced carbon emissions
- Securing a repeat order from the customer highlights the exceptional performance of the boiler

Major Projects

An energy plant of 97 MW commissioned for a plywood major in Andhra Pradesh, India

Two units of Revomax deployed at an FMCG major in Assam, India

Three units of 14 TPH Shellmax boilers supplied to a tyre major in Tamil Nadu, India

2 X 8 TPH of Shellmax Global boilers deployed at a dairy major in Saudi Arabia

A 30 TPH Shellmax DL boiler provided to a petroleum company in Saudi Arabia

A 20 TPH CPRG boiler supplied to a dairy major in Tamil Nadu, India

Biomass Centre of Excellence

A one stop solution to biomass-based heating solutions

Introduction: With decades of expertise in biomass combustion and as an industry leader in process heating solutions, Thermax has introduced the Thermax Biomass Centre of Excellence. We provide the best biomass-based heating solutions to our customers with our wide experience in fuels, superlative biomass-based combustion technologies and continued efforts in research, innovation and development, aiding them in their energy transition journey.

Why Biomass Centre of Excellence?

- 55+ years of understanding of heating needs of the process industries
- 30+ years of biomass-based solutions expertise
- 18,000+ biomass-based heating installations
- Technologies to utilise 100+ biomass fuels
- Persistent research and innovation to meet ever-changing market demands

Biomass Centre of Excellence

Key Highlights

Research on Fuels	Innovation	Conversion Solutions	Customer Support	One Stop Solution
Identification of new biomasses, characterisation of fuel and selection of an appropriate conversion process	Continued research and innovation to meet the ever-changing market demands	Offering cutting-edge solutions for transitioning from fossil fuel systems to cost-effective, sustainable biomass systems	Assisting customers in utilisation of the most economic fuels based on regional availability	Serving as the ultimate destination for all biomass-based solutions

Thermax Serve

A one stop solution for all service needs

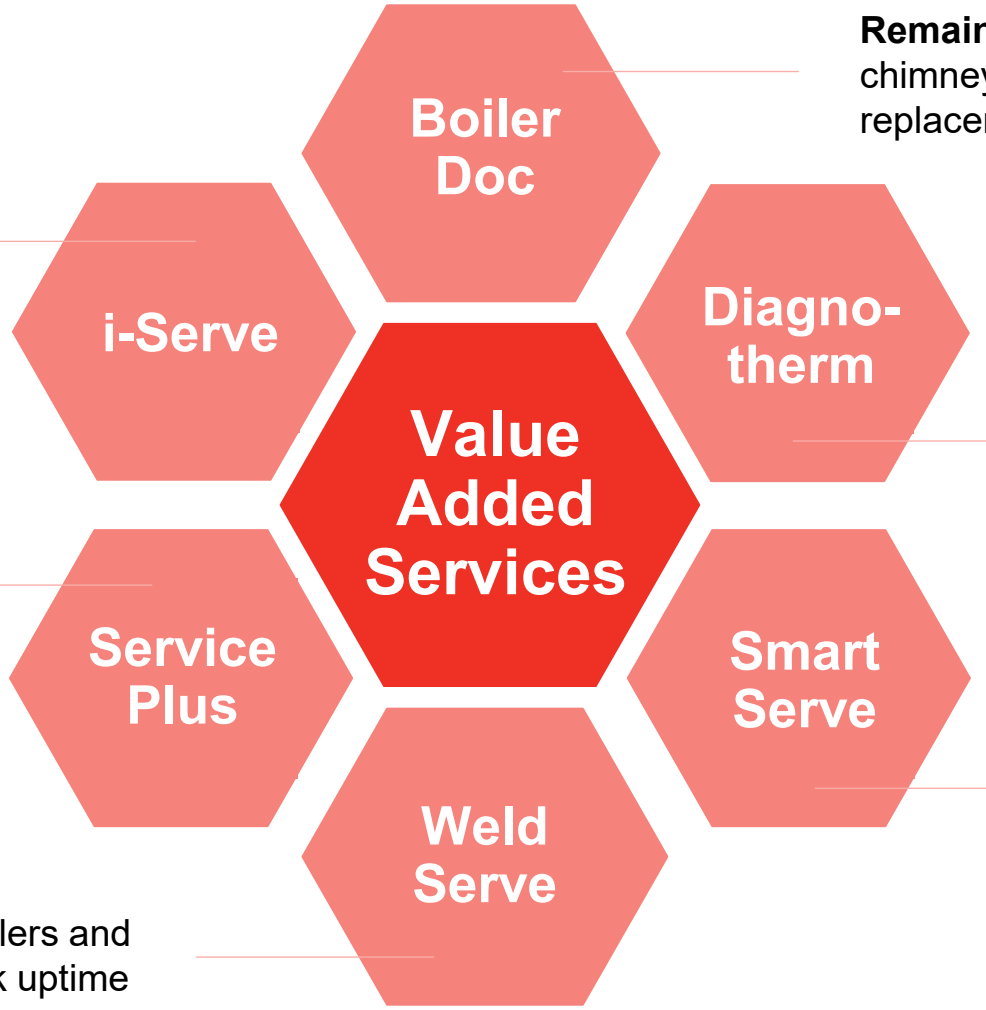
Introduction: Thermax Serve offers a range of comprehensive solutions designed to meet all service needs. Supported by a vast network of experienced professionals, Thermax Serve is dedicated to providing reliable and efficient service solutions, regardless of equipment's manufacturer. It includes retrofitting and revamping, value-added services, sourcing genuine Thermax spares, ensuring uninterrupted operation and optimal performance.

Why Thermax Serve?

- Fuel cost saving up to 15-20%
- Boiler efficiency improvement by 3-12%
- Boiler/process waste heat recovery by 10 - 15%
- Man-hours saving by 50 - 150%
- 50% improvement in reliability, uptime and safety
- 100% compliance with industry environment standards

Thermax Serve

Key Service Offerings



Remaining life assessment of boilers, heaters, chimney with recommendations on repair/ replacement of pressure parts

Hazardous and safety operation audit and analysis of boilers and heaters

Operational health checkup of boilers and heaters with equipment efficiency/ performance recommendations

End-to-end annual service contract for boilers and heaters

Breakdown troubleshooting of boilers to restore quick uptime

Welding repairs of boilers and heaters to restore quick uptime

Steam Engineering Solutions

Steam Engineering Solutions

Our Offerings

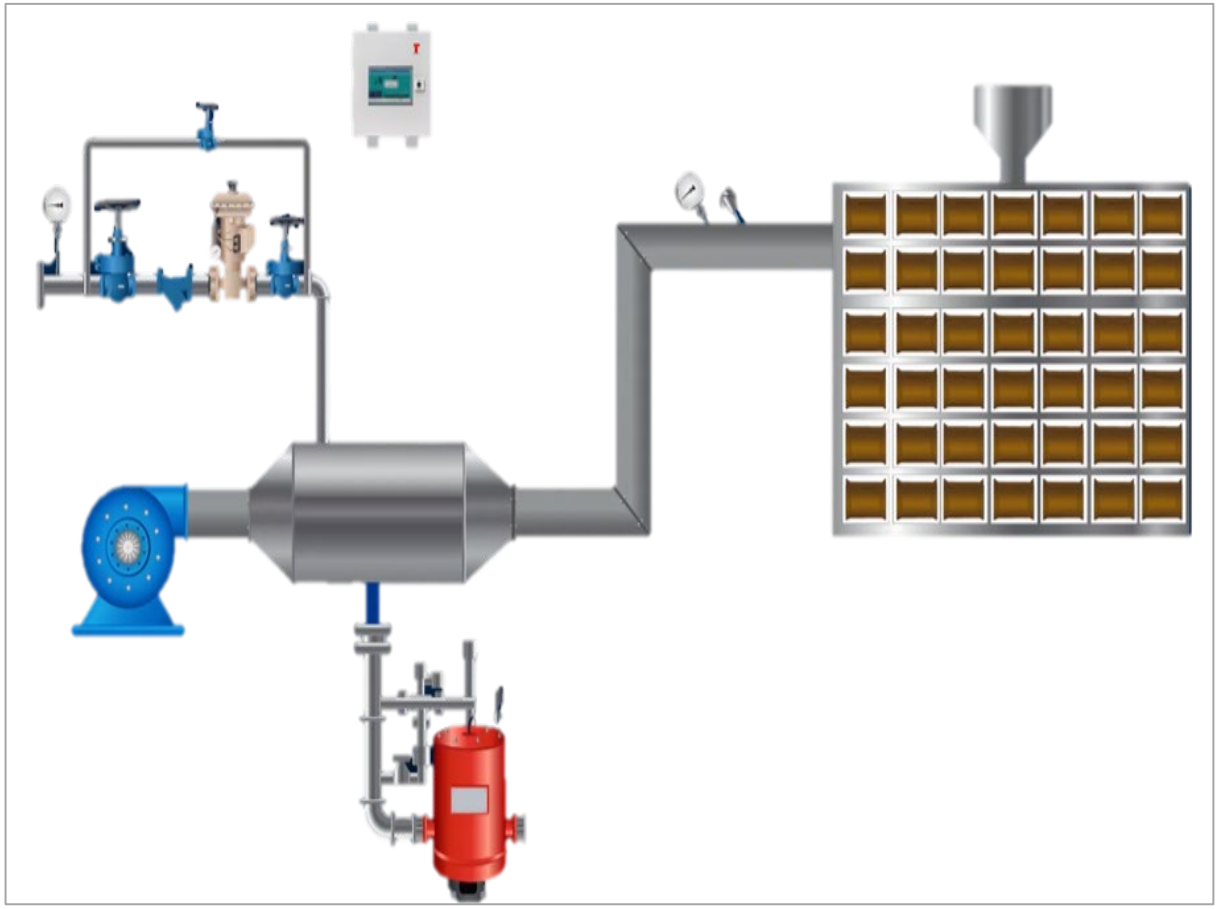
- Steam traps and modules
- Bellow seal valves
- Pressure reducing station and desuperheating systems
- Condensate recovery systems
- Instaheat – hot water generators
- Monitoring devices

Why Thermax Steam Engineering Solutions?

- New technology solutions
- Steam system services and audits
- Customised solutions to increase plant efficiency
- End-to-end utility piping consultancy
- Specialised services

Thermax's steam solution aids rice major in improving overall efficiency

Case study



Case: A major rice processing industry in Bihar, India, sought to enhance its rice drying process. This company processes large quantities of rice daily and aims to maximise efficiency, reduce waste, and maintain high-quality standards. To achieve these objectives, the company turned to Thermax.

Solution: Thermax supplied RiceMax – a rice drying automation system. The RiceMax model is known for its innovative design and superior performance in maintaining optimal drying conditions for rice, which is crucial for reducing breakage and improving overall product quality.

Result:

- Maintaining the process temperature accurately at the given set point
- Improved fuel efficiency
- The most significant improvements observed is the reduction in the percentage of broken rice
- Low maintenance and reduced manpower

Major Projects

95 TPH PRDSH with size 200 x 700 NB installed at a leading pharma company in Andhra Pradesh, India

Installed steam flow meters for a dairy major in Tamil Nadu, India

Instaheat – hot water generator installed for a pharma major in Gujarat, India

Instaheat – hot water generator installed for a customer in Uttar Pradesh, India

Highest skid-mounted pressure reducing & desuperheating station supplied to a steel major in Maharashtra, India

55 TPH condensate recovery pump (five plex) successfully installed for a leading pharma company in Andhra Pradesh, India

Cooling

Absorption Cooling and Heating Solutions

Our Offerings

- Absorption heat pumps
- Chiller-heaters
- Hybrid chillers
- Heat transformers
- Vapour absorption chillers

Why Thermax Absorption Cooling & Heating Solutions?

- Extensive product range fulfiling cooling and heating requirements from -40℃ to 170℃
- Global sales and service network
- Pioneer in waste heat recovery based solutions
- Advanced series flow technology
- Specialised services

SustainX Solutions

Innovative and sustainable green solutions

Our Offerings

Wet Cooling Solutions	Dry Cooling Solutions
• Adiabatic cooling towers • Closed loop cooling towers • Evaporative condensers	• Air cooled heat exchangers • Dry coolers • Industrial refrigeration chillers • Industrial electrical heat pumps

Why Thermax SustainX Solutions?

- Technologically advanced and reliable products
- Fully customised plug and play machines
- CTI certification on standard range of closed loop cooling towers
- Product designs ensure absolute work safety
- Specialised services

Thermax aids sustainable district heating in Germany

Case study

Case: In Hamburg, Germany, district heating demands were previously met using volatile fossil fuels. The city aimed to achieve decarbonisation and meet energy needs sustainably.

Solution: Thermax utilised its experience in waste heat recovery and installed three steam driven absorption heat pumps in the city's municipal recycling waste plant. These heat pumps efficiently captured waste heat to meet the district heating demands, eliminating the need for additional fuel and ensuring sustainable energy utilisation.

Result:

- Sustainably generated 3,50,000 MWh per annum of heat
- Reduced more than 1,00,000 tonnes of CO_2 emissions per annum, equivalent to planting 1.5 million trees
- Saved energy, meeting the heat requirements of 35,000 households
- The project received the prestigious German Renewables Award

Thermax's evaporative condensers help chemical major improve operational issues

Case study

Case: A chemical major in the western part of India was looking to improve the efficiency of its water and brine chillers and was also facing other operational issues.

Solution: Thermax proposed and replaced the existing condensers of water cooled chillers with Thermax's evaporative condensers.

Result:

- Lower condensing temperature resulted in lower compressor power and increased the compressor's cooling capacity
- Thermax's evaporative condensers had a lower pump and fan power as compared to the cooling tower's pump and fan power
- The solution helped the customer achieve a daily savings of about 250 units (kWh) per day for their water chiller and about 400 units (kWh) per day for their brine chiller

Major Projects

Installed a closed loop cooling tower of capacity 360 CMH at a beverages major in Saudi Arabia

Commissioned a dry cooler along with a vapour absorption chiller for a food processing major in Telangana, India

Three units of closed loop cooling towers installed at a steel major at Odisha, India

Commissioned an adiabatic dry cooler of 813 kW for a beverages major in Uttar Pradesh, India

Installed a CLCT for air compressor cooling at a leading steel major in Gujarat, India

Five evaporative condensers of 550 TR each installed for a dairy major in Maharashtra, India

Air Pollution Control

Air Pollution Control Solutions

Our Offerings

• Thermax Ne0 – Gas enrichment solutions • Bag filters/bag house • Electrostatic precipitators (ESP) • Combofilters	• Gaseous and particulate scrubbers • Flue gas desulphurisation systems (FGD) • Multi pollutant flue gas cleaning systems (FGCS)

Why Air Pollution Control (APC) Solutions?

- More than 40 years of experience in handling varied applications
- Concept to commissioning solutions for particulate and gaseous emission control
- Experience of over 20 years in retrofits, rebuilds and upgrades of any make APC equipment
- In-house innovation and manufacturing facility for developing best-in-class products
- Genuine spares and specialised services

Thermax delivers advanced flue gas cleaning system for a waste-to-energy facility in Gujarat, India

Case study

Case: A prominent municipal authority, operating a waste-to-energy facility in Gujarat, India, faced a crucial challenge of emissions from its waste-fired boiler that contained a complex mixture of pollutants, including particulate matter, HCl, sulphur dioxide (SO_2) and CO_2 and volatile organic compounds (VOCs). These emissions not only posed a threat to air quality but also raised compliance issues with environmental standards.

Solution: Thermax offered a tailored flue gas cleaning system (FGCS) for a 600 TPD municipal solid waste (MSW) fired boiler, designed to tackle the specific challenges posed by municipal waste-fired boiler emissions. The system integrated a gas condition tower, reactor duct followed by a bag filter unit, to effectively capture and neutralise various pollutants.

Result: By addressing a complex mix of hazardous pollutants, the FGCS not only improved environmental sustainability but also demonstrated the viability of advanced technologies in waste-to-energy facilities.

Major Projects

Commissioned a flue gas desulphurisation (FGD) system for a sugar refinery in Saudi Arabia

Commissioned a process exhaust system for solar PV cell and modules production lines for a power company in Tamil Nadu, India

Commissioned a pressure swing adsorption based biogas purification system for a 10 TPD bio-CNG plant in Uttar Pradesh, India

Commissioned a flue gas desulphurisation (FGD) system for a WHRB of a carbon black company in Goa, India

Commissioned a bag collector system for a carbon black manufacturing plant in Gujarat, India

Commissioned a flue gas cleaning system (FGCS) for a municipal solid waste-based waste-to-energy power plant in Delhi, India

Water and Waste Solutions

Water and Waste Solutions

Our Offerings

- Water treatment
- Wastewater treatment (sewage and effluent)
- Recycle and zero liquid discharge (ZLD)
- Desalination
- Waste incineration

Why Thermax Water and Waste Solutions?

- More than 25,000 installations for standard plants
- More than 600 installations for industrial plants
- 2 lakh m^3/hr water treated
- 1 lakh m^3/hr wastewater recycled
- End-to-end project management
- In-house manufacturing of MEE, MVR for ZLD applications
- Specialised services

Thermax's ZLD technology enables glass manufacturer reduce freshwater consumption

Case study

Case: India's leading manufacturer of float, coated and mirror glass products located in western region was discharging high amount of wastewater from the glass manufacturing process.

Solution: Thermax proposed a recycling and zero liquid discharge (ZLD) plant with a comprehensive O&M contract to eliminate wastewater discharge.

Thermax installed an 800 KLD of ETP recycle and ZLD which includes equalisation, clarification, membrane filtration, zero liquid discharge solution on a turnkey basis. The project was completed in 10 months.

Result: The consumption of freshwater was reduced by recycling 800 KLD of effluents.

Thermax's MVR system helps consumer goods manufacturer achieve sustainability goals

Case study

Case: Amid rising water scarcity and strict PCB regulations, a consumer goods manufacturer in Karnataka, India, sought a zero liquid discharge (ZLD) solution to meet its sustainability goals. Alongside the need to reuse process condensate, the company faced high effluent generation with metal particles from the electroplating process and varying TDS (total dissolved solids) and pH levels demanding a robust treatment approach.

Solution: Thermax designed a customised single-stage, 26 KLD mechanical vapour recompression (MVR) system with an agitated thin film dryer (ATFD) to address these challenges.

Result:

- Achieved 99% water recovery, reducing TDS to <100 ppm
- Ensured 100% ZLD compliance, effectively eliminating liquid waste
- Discharged salt in dry powder form with moisture content below 10%
- Delivered a compact, modular, and automated solution that aligns with sustainability goals while enhancing operational control

Major Projects

Commissioned a membrane bioreactor (MBR) based STP plant for an auto major located in Tamil Nadu, India

Commissioned a zero liquid discharge unit for a leading oil multinational in Karnataka, India

Installed a bioCask based STP for an engineering multinational in Maharashtra, India

Installed a water treatment plant at a fertiliser MNC located in Jordan

An effluent treatment plant installed for a dairy major in Maharashtra, India

Installed a 23 MLD seawater desalination plant for an FMCG major in Gujarat, India

Our Business Segments

Industrial Products

Industrial Infra

Green Solutions

Chemicals

TBWES

Large Boilers and Fired Heaters

TBWES Solutions

Our Offerings

- Solid fuel, agro waste, biomass fired boilers (up to 1000 TPH)
- Heat recovery boilers (up to 500 TPH)
- Waste to energy boilers (up to 300 TPH)
- Waste heat recovery units on gas turbine exhaust (up to 100 MW)
- Oil & gas fired boilers (up to 500 TPH)
- Fired heaters (up to 150 MM Kcal/hr)

Why TBWES Solutions?

- Three manufacturing and an assembly facility at Mundra port, Gujarat, for modularising huge packages
- Serving about 25 major industries
- Steam capacity up to 1,000 TPH
- Steam pressure/temperature up to 200 kg/cm² and 600℃
- 2,600+ global installation base in 55+ countries

TBWES ships largest packaged plug-and-play boilers in India for an African refinery

Case study

Case: Thermax Babcock & Wilcox Energy Solutions (TBWES) is capable of shipping large plug and play modules to meet customer requirements, reduce site work and ensure safety and quality from engineering to commissioning.

Solution: The shipment of 14 massive edifices for the largest refinery and petrochemical project in Africa is a testimony to this. The largest module weighed 1,450 tonnes and the tallest one was higher than an eight-storey building. Apart from setting a record in manufacturing the largest packaged plug and play boilers in India till date, TBWES also achieved a benchmark in modularisation.

Result:

- De-risking construction work and accelerating completion time
- Ensuring safety, precision and quality
- Bringing down 6-8 months of construction work at site to just 21 hours

TBWES undertakes relocation and upgrade of HRSGs for a refining major

Case study

Case: A refining major in India was looking to revive and relocate their idle assets to meet their steam and power requirement.

Solution: The TBWES team undertook the relocation and upgrade of two massive Frame 9E HRSGs (heat recovery steam generators) from the east coast (Andhra Pradesh) to the west coast (Gujarat) involving 5,000 MT of steel for the customer.

Result:

- Achieved a 75% reduction in tCO_2e emissions
- Secured a 40% reduction in capital costs
- Obtained a 50% reduction in project schedule time compared to a new boiler installation
- Maximised salvaging of existing materials with servicing/refurbishment based on condition and performance assessment

Major Projects

Supplied 2 X 357 TPH flue gas coolers in maximum modular form for a refinery project in Africa

Supplied 3 X 261 TPH waste heat recovery equipment for the largest phosphate plant in the world at Saudia Arabia

Supplied 40 TPH waste to energy boiler firing non-recyclable solid waste and refuse derived fuel for a leading paper mill in North India

Supplied 2 X 120 TPH biomass boilers for a leading sugar producing company in Indonesia

Supplied 4 X 400 TPH oil/gas fired plug and play D type boilers for a refinery project in Africa

Commissioned a 132 TPH supplementary fired HRSG behind frame 6B gas turbine for Petronas, Malaysia

Projects and Energy Solutions

Projects and Energy Solutions

Our EPC Offerings

- Cogen/trigen and captive power plants
- Waste heat recovery power plants
- Flue gas desulphurisation (FGD) & CCU plants
- Refinery and petrochemical units
- Biofuels (ethanol, DME and SAF)
- Coal and biomass gasification
- Coal to chemicals
- Biomass, waste to energy power plants (MSW, RDF and industrial waste)
- Submerged arc furnace plants

Why Thermax Projects and Energy Solutions?

- Pioneer in setting up captive power plants on EPC basis
- Installed base of more than 3,500 MW, spread over 160 projects
- Guaranteeing on-time delivery, high performance and least lifetime cost
- Projects in the Middle East, Southeast Asia and Africa
- 1,500 MW cumulative O&M experience

Thermax delivers a turnkey EPC project for a Middle East cement major

Case study

Case: A cement major based out of the Middle East needed 40 MW power for their plant needs. Considering the vast EPC experience and O&M capabilities, they chose Thermax as their preferred partner.

Solution: 1 X 40 MW X 2 nos. coal fired, 90 TPH CFBC boilers, condensing turbine, air cooled condenser, ensuring less water consumption were commissioned. The boilers are designed for multiple fuels including wood chips with compact design (South African coal, pet coke, reduced derived fuel and wood chips).

- A 200 TPH coal handling plant was erected and a conveyor belt of 1,200 metre was commissioned
- The 7,500+ MT erection was completed in 8-9 months with 1,000 MT of local fabrication and 600 km of E&I cabling
- A water treatment plant of 6.5 m^3/hr capacity was set up
- Bag filters to meet the norm of 15 mg/Nm^3 were also set up

Result: This EPC project was completed within 18.5 months of the timeframe, by the use of a bolted structure, preassembled structures and automation. Commissioned in 2019, the plant is being operated and maintained by Thermax.

Thermax successfully commissions FGD for a GOI's power plant

Case study

Case: A GOI's (Government of India) power company needed a flue gas desulphurisation (FGD) system for its 2 X 500 MW power plant. Despite fierce competition and a competitive bidding process, Thermax won the order.

Solution: Thermax provided the complete EPC of the FGD plant, including all services such as inland transportation, insurance, installation, testing, commissioning, and guarantee tests of system packages for units 1 & 2 (2 X 500 MW).

The FGD system was inaugurated by the Honourable Prime Minister of India. Commissioning trials for unit 1 began with the system, achieving a 94.25% SO_2 removal efficiency. A 200 TPH coal handling plant and conveyor were also erected.

Result: Gypsum production commenced on the first attempt, and notably, the boiler did not trip even once during the commissioning of FGD unit 1. This achievement is an important milestone in our ongoing commitment to cleaner and more sustainable solutions.

Major Projects

An 18 MW waste heat recovery power plant set up for a cement major in Rajasthan, India

A 300 MW independent power plant set up for a power generation company in Telangana, India

A 30 MW captive power plant installed for a cement company of a major conglomerate in Africa

100% rice husk fired independent power plant set up for an energy corporation in Philippines

Synchronised a 4.9 MW cogeneration plant for a leading API and specialty chemical manufacturer in Andhra Pradesh, India

A 50 MW gas based cogeneration plant set up for a chemical major in Maharashtra, India

Projects and Energy Solutions: O&M

Operations & Maintenance Offerings

- Power plants
- Flue gas desulphurisation plants
- Utility plants – boilers, chillers, WTP/ETP, compressors, oxygen and nitrogen plants etc.
- Maintenance & spares
- Value-added services
- Digital solutions

Expertise

- O&M experience of 1200+ MW from more than 100 plants
- 2,500+ O&M professionals
- 24×7 availability with high performance
- Efficiently running plants at part load
- Expertise in O&M for all equipment makes and technologies
- ISO 45001:2018 certified O&M sites

O&M Key Projects

O&M for a 135 MW captive power plant for a global conglomerate in Gujarat, India

O&M for a 90 MW captive power plant for an alumina refinery in Odisha, India

O&M for a 60 MW captive power plant for an oil and gas company in Rajasthan, India

O&M for a 54 MW waste heat recovery power plant for a cement major in Rajasthan, India

Utility O&M for a chemical giant in Andhra Pradesh, India

Utility O&M for a pharmaceutical company in Goa, India

Utility O&M for a brewery in Kenya, Africa

Utility O&M for a F&B major in Kenya, Africa

Our Business Segments

Industrial Products

Industrial Infra

Green Solutions

Chemicals

Thermax Onsite Energy Solutions Limited (TOESL)

(Build-Own-Operate Solutions)

Build-Own-Operate-Maintain Solutions

Our Utility Offerings

• Steam and heat • Hot water • Chilled water • Cogen power	• Treated/recycled water • Multi-utility (Above utilities + compressed air, CT, electric chiller, DG, etc.) • Biomass gasification

Why Thermax BOOM Solutions?

- Only OEM company to provide end-to-end green utility solutions
- An ISO 45001:2018 and ISO 14001:2015 certified company
- 14+ years of experience in green utility solutions
- 45+ installations across India, Indonesia and Sri Lanka
- 25+ large corporates & MNCs as customers
- 2,500+ tonnes/day biomass
- Fuel supply chain developed
- >1.3 M tonnes CO_2e reduction and 140+ M litres of treated water achieved
- 110+ utility assets owned and managed

TOESL installs first-of-its-kind configuration of biomass boiler and BoP for a pharma giant

Case study

Case: Thermax executed a 100% biomass-fired 30 tonnes per hour boiler plant for one of India's biggest pharma giants in Karnataka, India, under the build-own-operate model and operates it with severe space constraints.

Solution:

- TOESL deployed one of the largest saturated, hybrid water and smoke tube boiler with reciprocating grate to cater to the steam load of the customer
- Four field electrostatic precipitators (ESP) deployed to meet the emission limit of 30 mg/Nm^3, making it one of the largest ESPs supplied for a saturated boiler by Thermax
- With this project, TOESL installed a first-of-a-kind plant configuration with the fuel storage on the ground floor (G) and the boiler and accessories on the first floor (1), i.e. the 'G+1' scheme

Result: The biopharma major was able to shift from natural gas to biomass-based operations despite the space constraints in their plant. Through this model, the customer stands to save approx. Rs. 15 crore and achieve an estimated CO_2e reduction of over 30,000 tonnes annually against natural gas.

Thermax supplies biomass-based steam solution for a global food major in Gujarat, India

Case study

Case: Thermax supplied a biomass based steam to a multinational food major for their greenfield project in Gujarat, India. Steam was required for direct heating in noodles production and the MNC opted for agro-waste biomass fuels over natural gas.

Solution: Thermax provided state-of-the-art, multi-fuel combustion technology which is optimised, highly efficient and sustainable. Higher boiler uptime and performance was guaranteed through Danblast system, an ancillary equipment. Appropriate air pollution control equipment in accordance with the strict norms set by the Gujarat Pollution Control Board was also incorporated.

Result: A dedicated biomass fuel supply chain was developed, ensuring consistent quality at the right price.

- Complete capital expenditure of the utility plant was undertaken by TOESL, freeing the cash flow for core business of the customer
- Through this model, customer stands to achieve an estimated CO_2 reduction of over 16,000 tonnes annually

Major Projects

Supplied biomass based steam for a tyre major in Maharashtra, India

Installed a biomass-based cogen plant for an aluminum major in Karnataka, India

Facilitated biomass-based steam supply for a pharma major at Tamil Nadu, India

Facilitated a demineralisation water supply for a specialty chemical player in Gujarat, India

Commissioned a zero liquid discharge (ZLD) plant at a polyester company in Maharashtra, India

Supplied biomass-based steam for a textile firm in Maharashtra, India

First Energy Private Limited (FEPL)

Solutions in Renewable Energy

Renewable Energy Solutions

Our Offerings

- RE-power project developers
- Solar and wind hybrid farms and storage batteries
- Build and operate bespoke and flexible energy assets

Why Thermax Renewable Energy?

- Enabling energy transition through capex and opex-based models
- Energy manager for commercial and industrial processes
- Customised off-grid solutions to navigate your energy switch journey
- Long-term contracts backed with significant investments
- Higher capacity utilisation factor (CUF) and reliable green power
- Helping customers go from behind the meter to beyond the meter

Thermax's wind-solar hybrid project provides green energy to industrial customers in Gujarat, India

Case study

Case: Thermax caters to the renewable energy requirement of industrial customers in Gujarat, India.

Solution: Thermax's wholly-owned subsidiary, FEPL commissioned a wind–solar hybrid captive open-access farm in Gujarat, India with the below specifications:

- Spread over 123 acres
- Includes 50,000 solar modules and nine wind turbine generator units
- 45.80 MW generation capacity; 24.3 MW of wind energy and 21.50 MW of solar energy
- Efficient clean energy generation and distribution
- Optimises land utilisation

Result: The satisfied customer has signed another long-term agreement for a 116 MW bundled project (38 MW of solar power and 78 MW of wind power) in Tamil Nadu.

FEPL strengthens customer relations through repeat orders, fulfiling their energy requirements at different factory locations.

FEPL successfully commissions 16 MWp solar plant in Tamil Nadu, India, supporting green energy goals

Case study

Case: FEPL had undertaken the commissioning of a 16 MWp solar PV plant under open access at Mangudi village of Sivagangai district, Tamil Nadu, India, for exporting power via the 110/22 kv Manamadurai substation Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO). Midway during execution, a Supreme Court stay required relocating the project, delaying the timeline and creating logistical and community challenges, including land rights and local safety concerns.

Solution: The team quickly secured a new site in Pillur and Kovanur village, shifting the export to the 110/22 kv Idayamelur substation and adopting block-wise commissioning to manage weather delays. They tackled the Right of Way issue with local support and improved safety through regular inductions, toolbox talks, and community engagement.

Result: FEPL successfully completed the project with over 78,000 safe man-hours. The operational plant now supports regional energy needs and reduces carbon emissions, contributing to Tamil Nadu's renewable energy goals.

Major Projects

Commissioned a wind-solar hybrid project (24.3 MW wind and 27.5 MWp solar) for industrial customers in Gujarat, India

A 5.76 MW, largest single roof solar PV plant installed at one of the largest petrochemical complexes of Government of India's 'Navratna' company

A bundled project of 90 MWp solar and 39 MW wind commissioned in Tamil Nadu, India

Thermax Bioenergy Solutions Pvt. Ltd. (TBSPL)

Thermax Bioenergy Solutions

Our Offerings

- EPC and O&M solutions to generate bio-CNG from waste sources like agri residue, press mud and municipal solid waste.

Why Thermax Bio-CNG?

- One stop solution provider for bio-CNG projects
- Specialises in lifecycle management of state-of-the-art bio-CNG facilities
- Setting up bio-CNG plants for major Indian conglomerates
- Utilises a wide variety of feedstocks like agri residue, municipal solid waste, press mud (sugar industry waste)

Thermax sets industry benchmark with Punjab's 100% rice straw-based bio-CNG plant

Case study

Case: An agri customer in Punjab, India, wanted to setup a bio-CNG plant using only rice straw as the feedstock, which was sourced from local farmers.

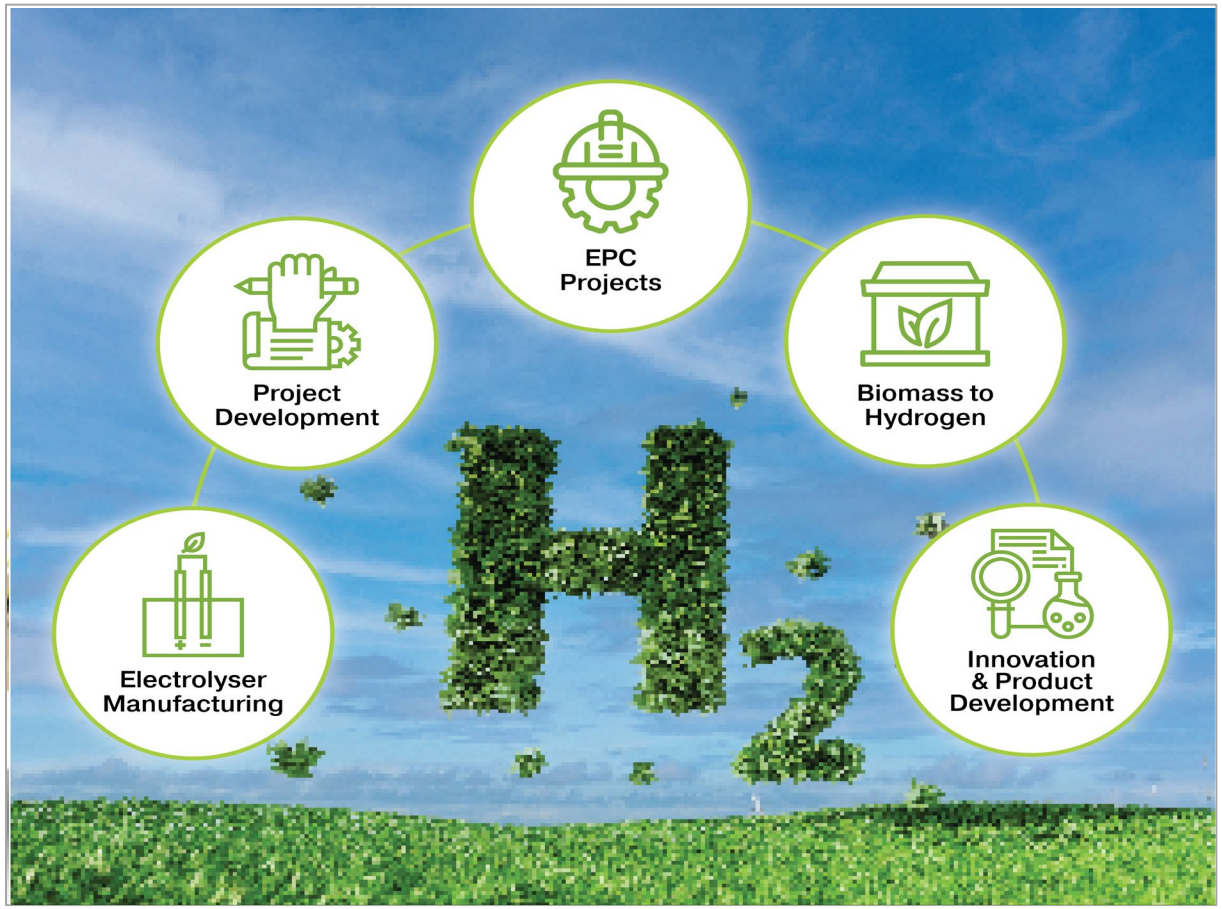
Solution: Thermax Bioenergy Solutions Pvt. Ltd. (TBSPL) used their EPC expertise and commissioned a bio-CNG plant at Dhuri, Punjab, using only rice straw as feedstock. Commercial operations began at the plant in December 2023. This is a first-of-its-kind bio-CNG plant globally which uses 100% rice straw as feedstock setting up an industry benchmark. The bio-CNG generated from the plant contains >96% methane showcasing its purity.

Result:

- More than 250 tonnes of bio-CNG dispatched from the Dhuri plant
- Reduced rice stubble burning in the region with reduction in air pollution levels
- Additional source of income for the farmers
- Digestate generated (by-product of the process) is an organic soil enhancer which helps to restore the carbon content in the soil, increasing soil fertility and eliminating the use of chemical fertilisers

Green Hydrogen Solutions

Thermax Green Hydrogen Solutions



Our Offerings

- Renewable power
- Electrolyser manufacturing
- Project development
- EPC projects
- Biomass to hydrogen

Why Thermax's Green Hydrogen Solutions?

- Enabling energy transition for hard to abate industries
- End-to-end control of complete value chain – in-house manufacturing of electrolysers, BoP components and RE supply
- Expertise of multiple hydrogen generation technologies to deliver best-fit solution
- Strong in-house process design & engineering capabilities
- Customised solutions with system level optimisation for utilities
- Long-term hydrogen delivery contracts for reliable supply

Our Business Segments

Industrial Products

Industrial Infra

Green Solutions

Chemicals

THERMAX

Chemicals

Thermax Chemical Solutions

Our Offerings

- Ion exchange resins
- Water and fuel treatment chemicals
- Oil field chemicals
- Construction chemicals (admixtures, grouts & anchors, protective coatings, waterproofing, flooring, sealants and adhesives)

Why Thermax Chemical Solutions?

- Broad product range
- Three world-class manufacturing units
- Advanced R&D and quality labs
- Timely technical support and custom solutions
- Global dealer and distribution network
- One-stop solution for water treatment and construction chemicals

Thermax enhances decolourisation efficiency for Thailand’s leading sugar refinery

Case study

Case: One of Thailand's largest sugar refineries was using acrylic strong base anion resin in the primary column and styrenic strong base anion resin in the secondary column for decolourising 60°C brix sugar melt. The plant operated continuously in a lead-lag mode, treating sugar melt with a colour level exceeding 600 ICUMSA. The goal was to achieve more efficient decolourisation and a lower colour level.

Solution: Thermax recommended replacing the existing acrylic-styrenic setup with styrenic-styrenic macroporous strong base anion resins.

Result: The new configuration led to significant cost savings and improved treated syrup volume, achieving a colour level of less than 150 ICUMSA.

Major Projects

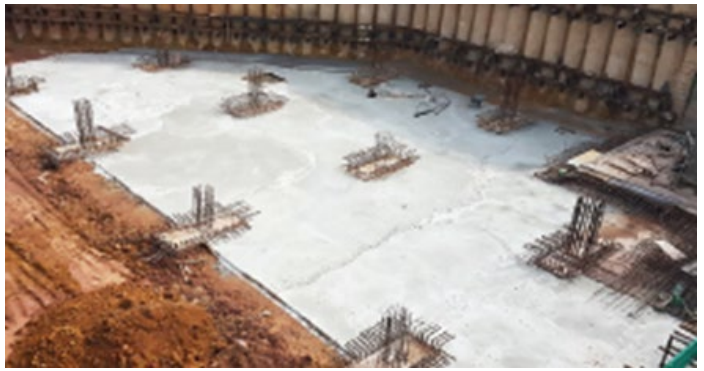
Supplied water treatment chemicals to one of India's largest steel conglomerates, reducing water consumption in their cooling towers

Resins supplied for demineralisation at Tonka Water, US

Supplied Neutrol® range of admixtures for an esteemed metro project in India

Manufactured a range of oil field chemicals for effectively handling crude oil with various characteristics in the oil and gas sector

Provided construction chemicals for the restoration of the iconic Udaipur palace in India

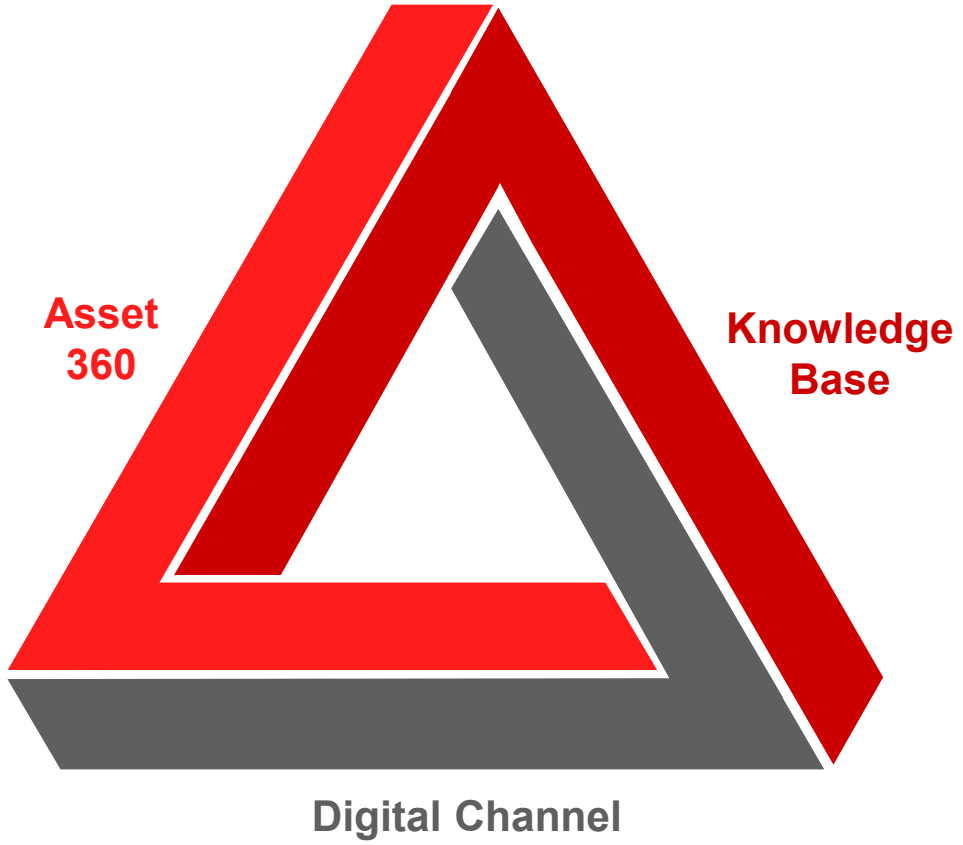


Deployed Maxshield® HDPE system to prevent water ingress amid limited execution space for basements

Digital Solutions

Thermax's Digital Solutions

Edge - A digital way for customers to connect with Thermax in addition to traditional methods



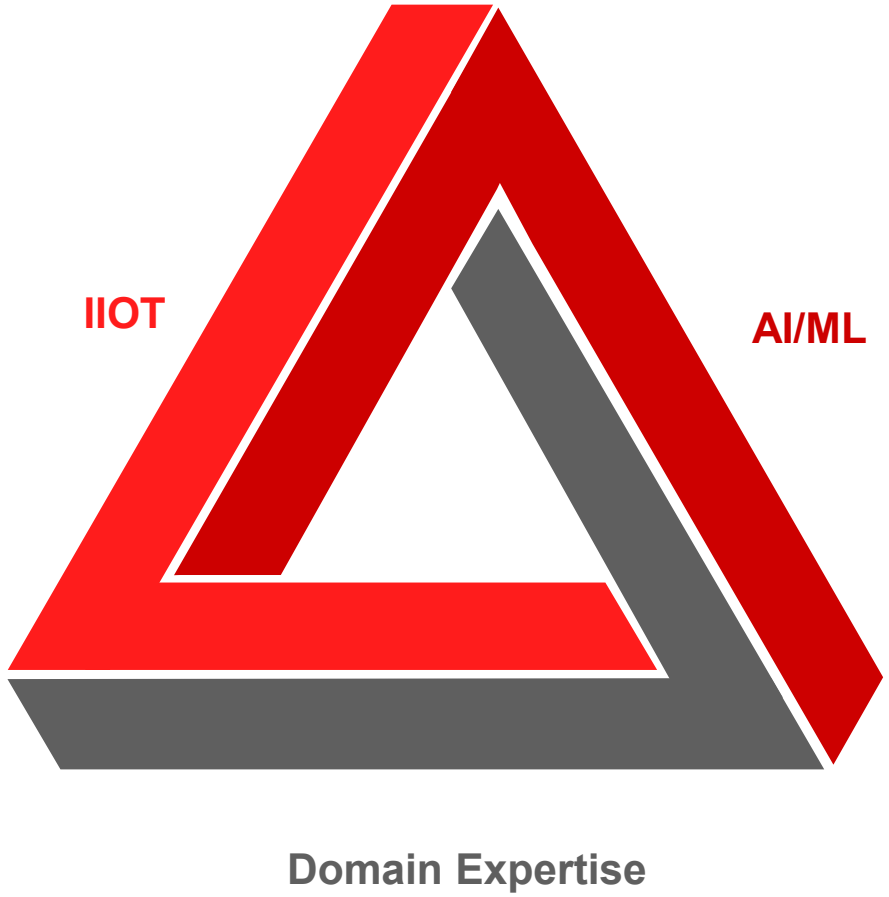
Key Features

- Asset 360° view with documents
- Real time order tracking
- Raise/track complaints/enquiries
- Easy connect and request call back
- WhatsApp bot
- Smart recommendations
- Knowledge centre

Value Drivers

Thermax's Digital Solutions

Edge Live - A net new functionality for asset performance enhancement using IIoT capability



Key Features

- Realtime asset monitoring
- Diagnostics & workflows
- Predictive incident manager
- Efficiency improvement insights
- Digital logbook & reports

Value Drivers

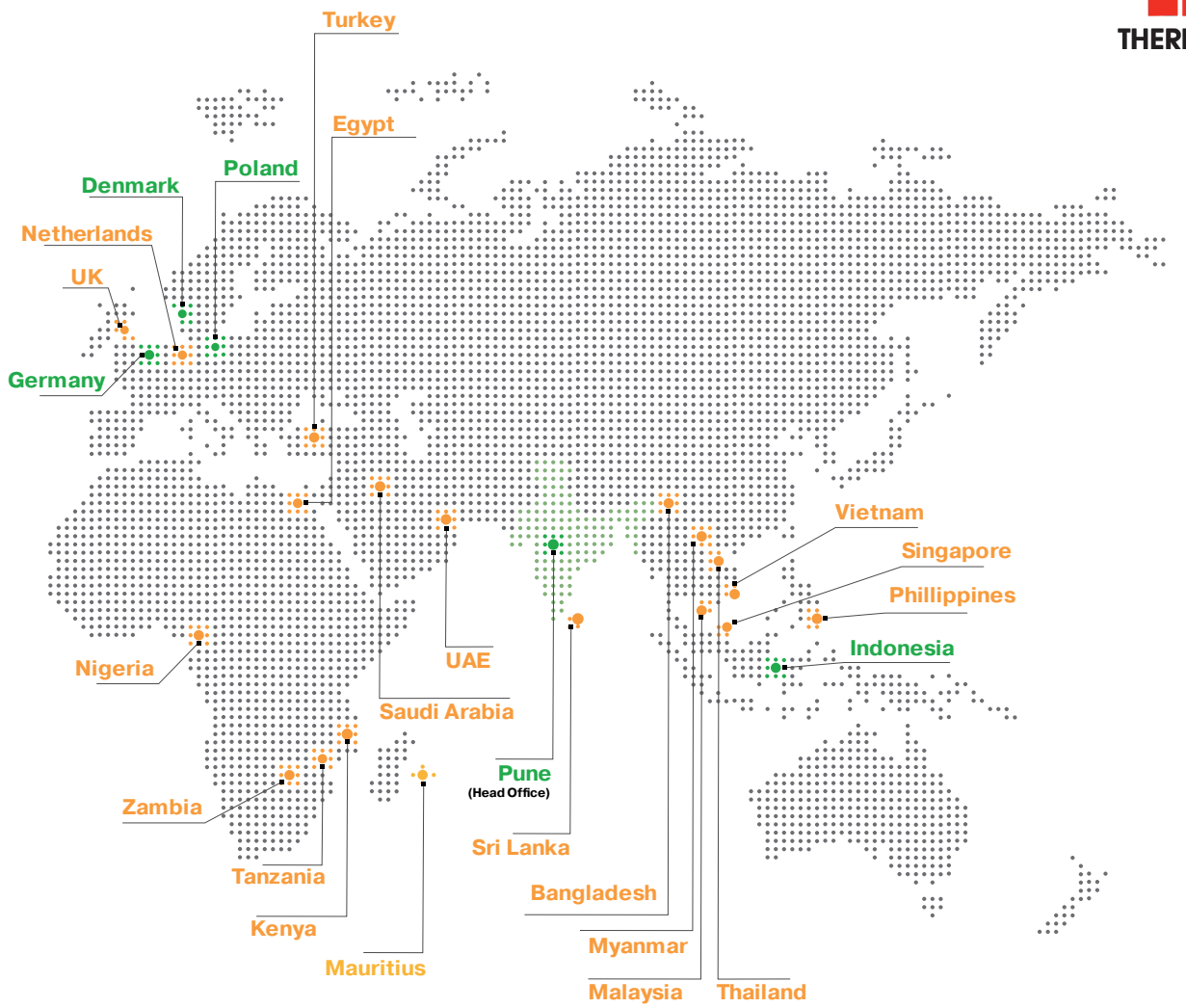
- Plant uptime & total cost of ownership
- Energy efficiency & transition
- Technology adoption & workforce empowerment

Global Network

Head office

India

- Manufacturing Units
- International Subsidiaries, Sales and Service



Manufacturing Footprint

India

Savli
(Gujarat)

Dahej
(Gujarat)

Paudh
(Maharashtra)

Solapur
(Maharashtra)

Mundra
(Gujarat)

Pune City
(Chinchwad, Bhosari - Maharashtra)

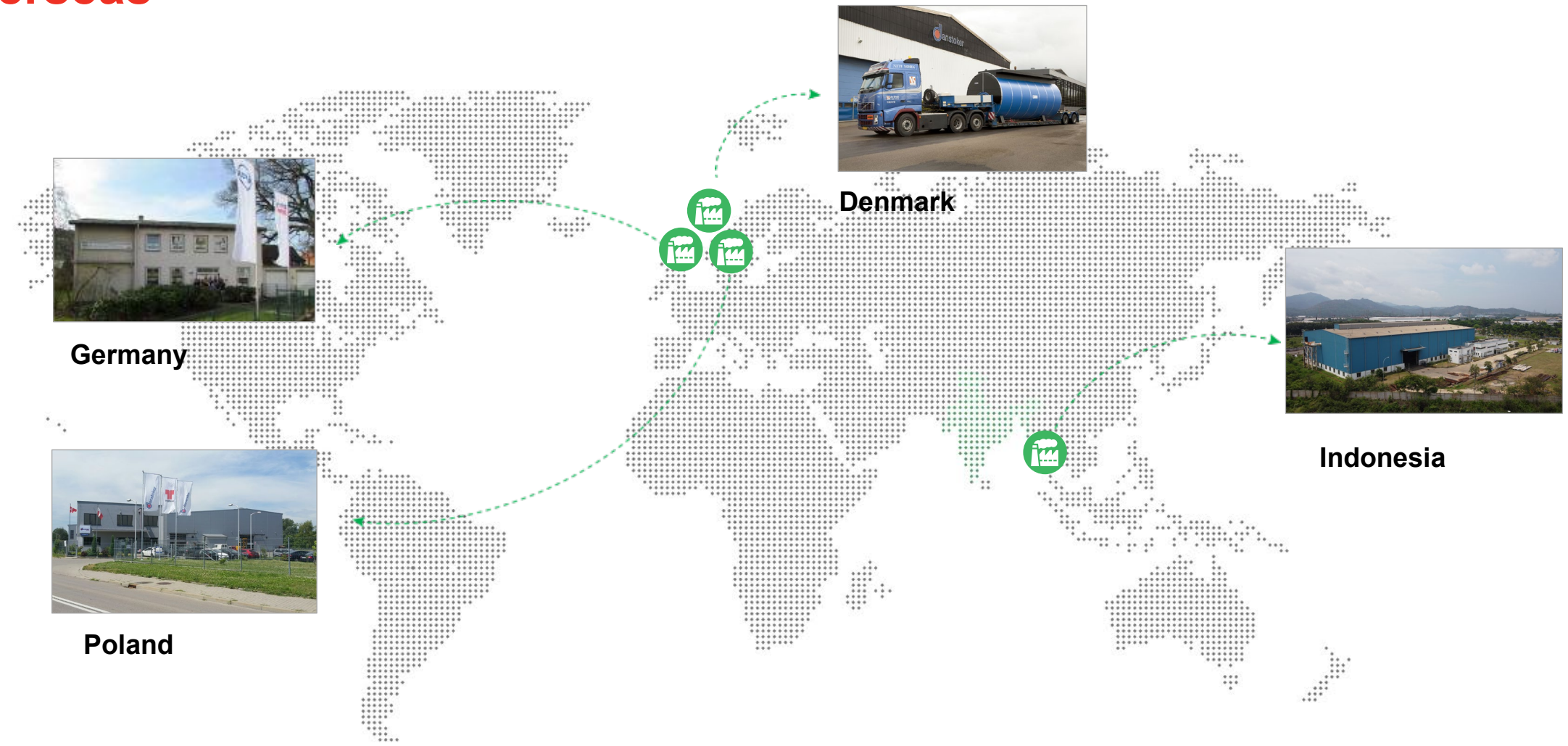
Jhagadia
(Gujarat)

Shirwal
(Maharashtra)

Sri City
(Andhra Pradesh)

Manufacturing Footprint

Overseas



Our Brands

THERMAX

A THERMAX GROUP COMPANY
THERMAX

TBWES - A THERMAX GROUP COMPANY
THERMAX

BIOENERGY SOLUTIONS - A THERMAX GROUP COMPANY
THERMAX

RIFOX

danstoker

FIRST ENERGY

THERMAX TSA
A THERMAX GROUP COMPANY

THERMAX
OUR FORMULATIONS
BUILDTECH PRODUCTS ™
YOUR SOLUTIONS
A THERMAX GROUP COMPANY

Reliable Support to Industries


Agriculture & Allied Industries


Automobiles & Auto Components


Aviation


Cement


Chemical


Commercial & Construction


Engineering and Capital Goods


Food & Beverages


FMCG


Healthcare


Hospitality


Infrastructure


IT & Data Centre


Medical Devices

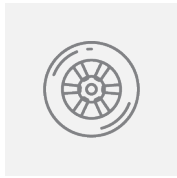

Metals

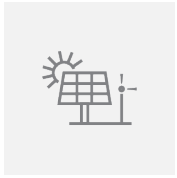

Oil & Gas

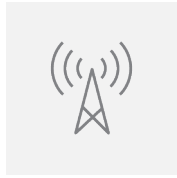

Paper & Pulp


Pharmaceutical


Power


Rubber


Renewable Energy


Telecommunication


Textiles


Wood

Research and Development

- 35-years of legacy in bringing innovation to India
- First thermic fluid heaters
- First fluidised bed combustors for boilers and thermic-fluid heaters
- Leadership in absorption cooling using Li-Br chemistry
- First fluidised bed aerobic bioreactor for wastewater treatment
- First pilot scale coal-to-methanol plant
- CDI water treatment development
- DRDO fuel cell development and manufacturing

*Includes filed and granted patents in India and other countries
*Includes filed and registered trademarks

Research & Development

R&D for breakthrough technologies in clean energy and environmental solutions

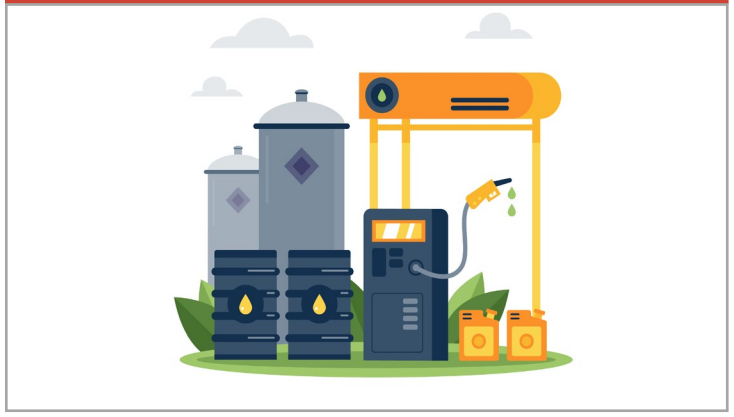
Carbon Capture and Utilisation Technologies

- Novel solvents for low-energy
- Solid state gas absorbers and purifiers
- CO_2 electrolysers
- CO_2 to low-carbon fuel
- Multiscale simulations
- Gen-AI for custom opex reduction

Green H_2 and Electrochemical Technologies

- SOEC electrolysers
- AEM electrolysers
- H_2 compression
- Coal-to-methanol/ DME
- Waste to SAF/gH_2/CBG
- Gen-AI for new design

Biofuels & Bioprocessing Technologies



- Biohydrogen
- Bio-waste to CNG
- Waste to fuel
- Waste to energy
- Sustainable aviation fuel

Technology Tie-Ups

THERMAX

Babcock & Wilcox Power Generation Group, Inc.
(Utility boiler technologies)

Kanadevia Inova Steinmüller
(Municipal Solid Waste (MSW) fired waste to energy solutions incorporating Steinmuller's well established grate and boiler technology)

EverEnviro
(Waste management technology)

Paques
(Effluent management technology)

Vebro Polymers
(Industrial flooring)

Marsulex Environment Technologies
(Wet and semi dry flue gas desulphurisation technologies)

Power Roll
(Low-cost and lightweight flexible solar film technology)

Ceres Power
(Green hydrogen production with advanced solid oxide electrolysis cell (SOEC) technology)

ExactSpace
(Industrial AI and data analytics)

Awards & Accolades

- Thermax received the prestigious IMD Global Family Business Award 2023 at the 32nd Family Business Network (FBN) Global Summit held in Paris, France
- Thermax won the Golden Peacock Award for ‘Excellence in Corporate Governance’ in 2023
- Thermax clinched the Best Governance Award in the GIGA category at the third edition of the Indian Family Business Awards 2023
- Thermax Foundation emerged as a winner among over 120 entries to bag the prestigious Act of Compassion Awards in the ‘Education and Skill Building’ category
- Thermax’s Heating and Chemical businesses achieved Level 3 (Operational Level) in the ‘Total Cost Maturity Model’ at the Confederation of Indian Industry’s Total Cost Management movement
- Thermax’s Projects and Energy Solutions team won the Gold Award at the 38th Convention of Quality Circle & Allied Concepts Competition organised by Quality Circle Forum of India (QCFI), which took place in Maharashtra, India

Corporate Social Responsibility

CSR activities under Thermax Foundation (TF)

- Thermax Foundation (TF) supports the Akanksha Foundation, a reputable NGO that runs municipal schools to provide quality education. Currently, TF funds two Akanksha schools.
- TF assists alumni from Akanksha, iTeach, and Teach For India (TFI) schools, ensuring their continued education after grade 10th through guidance, mentoring, college enrollment, and career advice.
- TF extends skill-building training for the youth in communities near Thermax plant and factory locations to enhance their employability in local companies.
- TF supports the FPO (Farmer Producing Organisation) Hortimax through the NGO Manavlok, promoting collaborative farming for the onion crop.
- As a signatory to Social Compact (SoCo), TF operates Worker Facilitation Centres (WFCs) with competent NGO partners to help migrant and informal sector workers access government schemes. One centre is run in partnership with Bajaj Auto CSR in Bhosari, Pune, and two others are located in Savli and Dahej, Gujarat.

THERMAX

PROFIT IS NOT ONLY A SET OF FIGURES, BUT OF VALUES.

ROHINTON D. AGA
CHAIRMAN, THERMAX
(1935 - 1996)

Conserving Resources,
Preserving the Future.

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