



# **TRIGENERATION-AN ENERGY-EFFICIENT** APPROACH **TO COOLING BUILDINGS**

As costs of electrical power, heating, and air conditioning for buildings and industrial complexes become increasingly progressive, trigeneration (Combined Heating Power and Cooling) is an efficient way for energy optimisation in buildings. By harnessing the excess heat, steam or other gases that would otherwise be lost, absorption machines increase the overall efficiency of power generation in buildings. Catering to heating and cooling demands simultaneously or as required, absorption machines maximise the plant efficiency and economic benefits.

## **Our solutions find application in**

- District Cooling & Heating
- Commercial Buildings
- Educational Institutions
- Data Centers
- Airports

## **Benefits:**



Reduced fuel and energy costs



Improved efficiency due to engine heat recovery



Significant reduction in greenhouse gas emissions

Lower electrical usage

during peak demand

## Our offerings for the industry are

Hot water driven absorption chiller

**Exhaust driven absorption** chiller -heater



Heat Recovery from gas engines/turbines/ fuel cells

**Multienergy absorption** chiller heater

Offers chilled water

up to -1°C



**Steam-driven** absorption chiller



Absorption **Heat Pump** 









#### Runs on multiple heat sources



Hot water up to 90°C (194° F)

### Why Thermax's Solutions?

- Low steam consumption
- No vibrating parts
- Low maintenance
- No harmful refrigerants
- No requirement for LiBr/DM Water top-up
- Crystallization-free design
- 24x7 IIoT-based chiller monitoring