

## CASE **Study**

In 2013, ACTPL meets the challenging requirement of cooling towers for India's first operational smart city in Ahmedabad for total chiller load of 10000 TR with ACTPL CTI certified cooling towers having largest single cell capacity of 2500 TR + [1705 CMH /cell] in India.





## Innovation and cooling **DISTRICT COOLING SYSTEM**

Gift City is the India's first smart city which is cooled by DCS system with ACTPL cooling towers. By using DCS system, carbon footprints is reduced to 30 % by centralized production using less energy than traditional cooling systems. By using CTI certified cooling towers in counter flow type configuration with single cell module [2500 TR per module], provides additional benefits in terms of thermal performance, chiller side energy savings & space saving etc.

## CTI Certified Cooling Tower Guaranteed Performance

CTI certification [CTI STD 201] is a wholesome guarantee for thermal performance of a cooling tower. Additionally, the cooling tower is rejecting the chiller heat silently by using FRP fan blades with aerodynamic profile which provides high volume of air with low power consumption.

## Energy saving **Practices**

- Integration of electronics like VFDs will give savings on hourly basis as per load variation by controlling the outlet temp. of CT.
- CT flow requirements shall be optimised and monitored to save pumping energy, cooling load and CT losses.
- Louvers and Drift eliminators shall be such that offers minimum pressure drop.