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REM 2016

Oct 18, 2016

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India: Pathways for low carbon future

Reduce Energy Consumpt'n by 3% annually

Reduce Building Energy Intensity

-  Efficient Lighting ~50% reduction
-  Smart HVAC ~20% reduction
-  Building Intelligence ~30% reduction

CO2 Emissions Reduction

Low Carbon Electricity

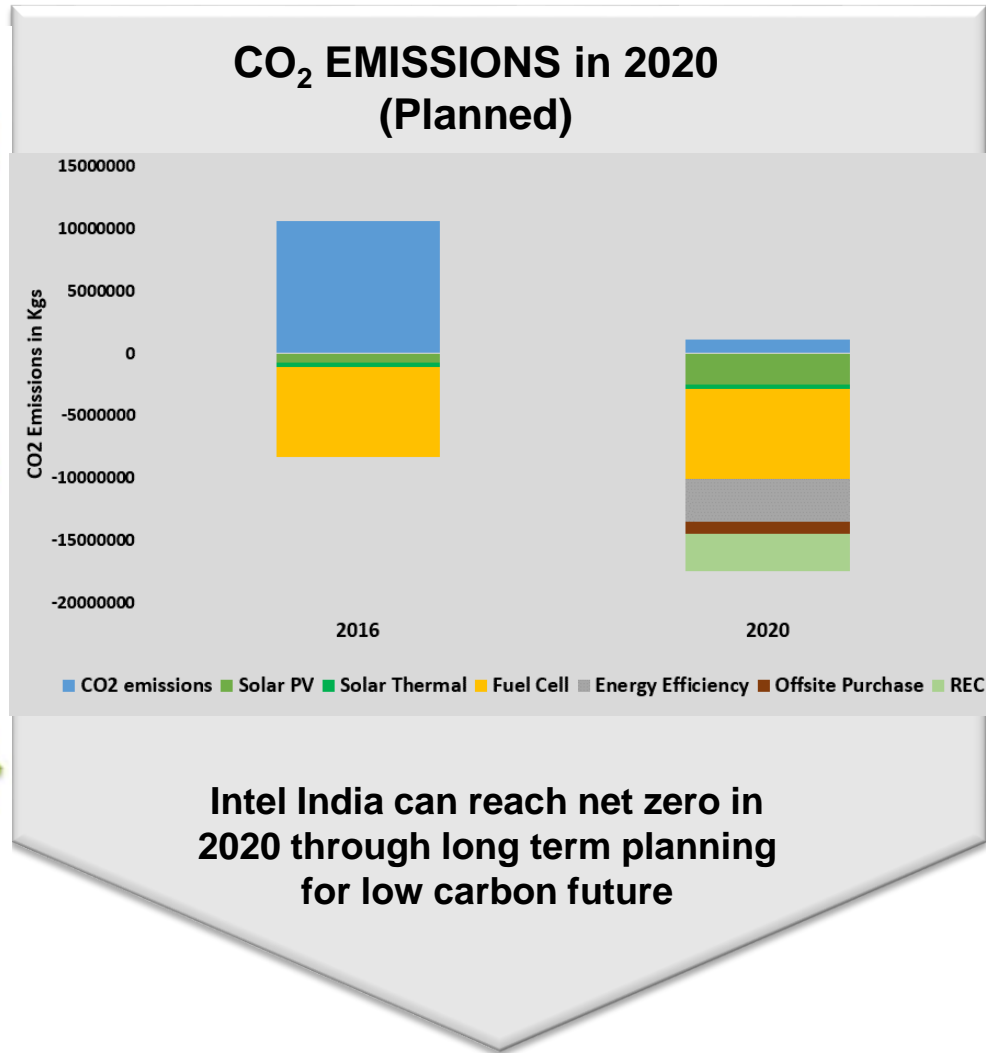
-  300kW Solar Thermal
-  500kW Solar PV Rooftop
-  2500kW Solid Oxide Fuel Cell

Green Power Purchase

Offset Carbon Footprint

-  Offsite Solar/Wind Purchase
-  Renewable Energy Certificate Purchase

I-REC



Bangalore India

2.5 MW Fuel Cell



- Primary electric source to critical loads; supplies about 75% of consumption
- Cleaner energy to datacenter/labs
- Decreased carbon ~65% < grid supply
- Improved Power Reliability/Quality
- Replace Diesel backup needs

Solar PV 500 kW



- Covers 70% of buildings roof
- Synchronized with grid and DG to reduce peak/diesel usage during power outage
- 1st/largest rooftop PPA when executed in the city

Solar Thermal 300 kW



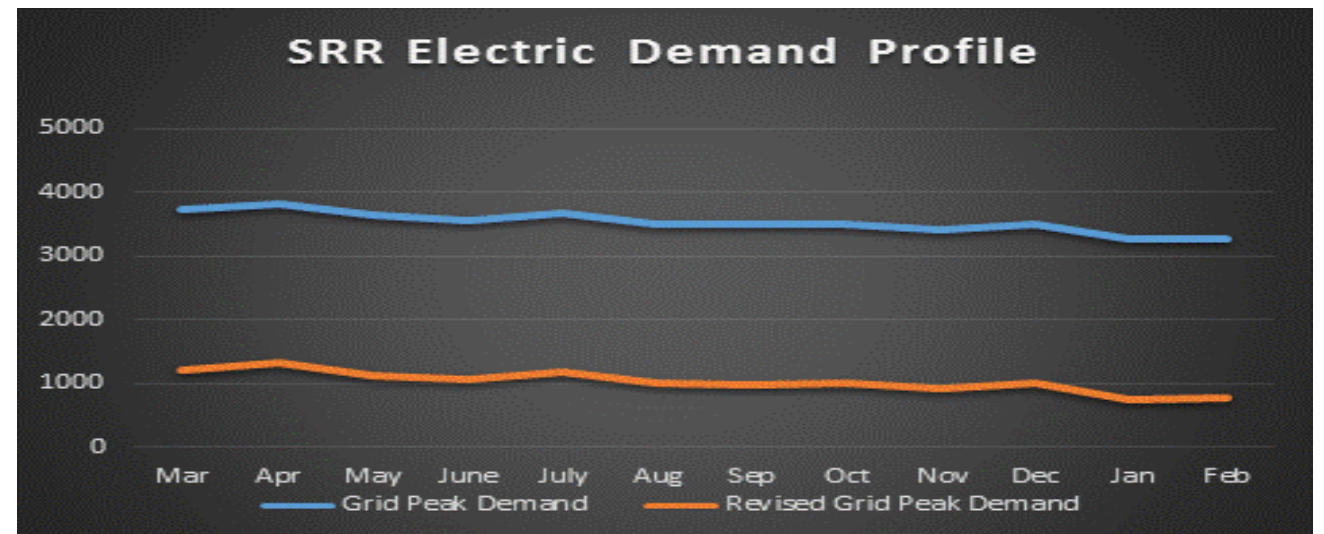
- Designed to supply 100% of domestic hot water to campuses
- ~300kW installed/upgrading
- One of the largest solar thermal installation in the city

Intel Corporation India

2.5 MW SRR 1/2 Fuel Cell: First Installation in



Carbon cut by over 60%



Intel Confidential

Bangalore India

Other Renewable Projects complete or process to reduce carbon footprint

45 kW Solar Adsorption Cooling

- Country's largest hot water fired cooling system under construction to replace electrical driven cooling systems for the kitchen building

Offsite Wind/Solar Purchase

- 2MW solar/wind third party purchase in process

Onsite Solar PV

- 200 kW PV capacity on parking/warehouse roof planned
- 1.5MW rooftop potential identified as part of site expansion plan in future

Solar lighting Poles

- 10 solar off grid lighting poles installation ongoing

Renewable Energy Certificates: Certification process available but developing

China Initiatives

Solar Thermal System

- 130 kW solar thermal system coupled with air-sourced heat pump to replace gas usage in boiler for domestic heating

Solar PV

- 250 kW roof top solar PV sourcing in progress

Ground Source Heat Pump

- 100 kW space conditioning under evaluation to replace conventional heating/cooling system for cafeteria

Free cooling

- Evaporative cooling to reduce chiller operations during winter

Green Power Purchase: Mechanism development in process. IREC or other possible