

## **ENERGY SECTOR OVERVIEW**

- 5<sup>th</sup>largest installed power capacity in the world
- 3<sup>rd</sup> largest producer and 4<sup>th</sup>largest consumer of electricity in the world

# Renewable Energy (RE)

- RE Installed Capacity: 60.15GWout of the total 331.11GW (as of Oct 2017)
  - o Solar 14.8GW; Wind 32.7GW; Bio Power 8.3GW; Small Hydro 4.4GW
- Largest RE capacity expansion plan globally- 80% increase by 2022 from 2015
- Estimated RE potential of 1000+ GW
- Record capacity addition of 5+ GW for both solar and wind in 2016-17
- India has the world's 3<sup>rd</sup> largest installed capacity of concentrated solar power
- World's largest solar power plant (648MW)commissioned in record 8 months, in Tamil Nadu in Sept2016
- 4<sup>th</sup> largest wind energy generating nation after China, US, and Germany
- India ranked 2<sup>nd</sup>in EY'sRenewable Energy Attractiveness Index, surpassing US
- FDI inflows: USD 3.7Bn between April 2014 to Sept 2017

### **DEMAND DRIVERS FOR RENEWABLE ENERGY**

- Target of 175GW by 2022(Solar 100GW; Wind 60GW; Small Hydro 10GW; Bio 5GW)
- Vision of 24x7 affordable and environment-friendly Power for all by 2019
- Reduce the emissions intensity of GDP by 33% 35% by 2030 below the 2005 levels
- Increase share of non-fossil fuel in total capacity to ~40% by 2030 from 30% in 2015

## **GOVERNMENT SUPPORT FOR RENEWABLE ENERGY**

- 100% FDI allowed under automatic route
- Classified under 'white category' for easier environment clearances
- Green Energy Corridor project (\$6.5 Bn): to integrate RE into the national grid
- Clean Energy Fund: Cess on coal, lignite & peat doubled to INR 400/ton
- \$1.3 Bn allocated for setting up 50 Solar parks of 40GW by 2020
- \$750 Mn approved for Grid Connected Rooftops systems under NSM
- Solar Cities: Sanctions for 50 cities issued out of approved 60
- Provision of rooftop solar and 10% RE mandatory for development of smart cities
- Offshore wind farming: Untapped potential of 7600km coastline; new Offshore Wind Policy launched in 2016
- More RE components taxed at 5% under GST regime, few at 12-18%

#### **RECENT INVESTMENTS**

 Nov 2017: IFC invests \$15 Mn in CleanMax Solar, one of the largest rooftop solar developers in India

| • Nov 2017: II   | ndia and World Bank signed a \$98 Mn loan pactand a \$2 Mn grant         |
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| agreement  | to help India increase RE capacity, under the Shared Infrastructure for  |
| Solar Parks  | Project  |
|  | AccionaEnergia, the RE division of Spanish infrastructure group Acciona, |
| started operations at its 78MW Bannur wind farm in Karnataka |  |
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