



## KEY INVESTMENT OPPORTUNITIES

### SOLAR ENERGY

- Uttar Pradesh has 22,830 MW of untapped solar energy.
- This enormous energy can be utilized through:
  - Solar Parks - Mini grid - Solar rooftops
- Grid connected rooftop solar photovoltaic power plant at all the public institutions such as government owned or aided hospitals, research institutions, educational institutions, hostels & training institutions, libraries, establishments of Indian railways, in the State.

#### A. Mini-Grid Solar Power Plants

- 16 solar mini grid projects have been commissioned in the State by fund.
- Government of India is providing a subsidy of 30% of the project cost.
- Only 63 Mini Grid Solar power plants have been installed in various districts by private developers.
- Total installed capacity of these plants is only 4.9 MW, covering only 90 villages and benefitting 15,800 households.

#### B. Solar pumps for irrigation

- As of now, only 15,000 Solar Pumping systems have been deployed for irrigation purpose.
- 10,000 Solar Pumping systems of various capacity 2 H.P, 3 H.P and 5 H.P are under construction.
- State Government is providing a subsidy of 45 % on total cost.
- Ministry of New and Renewable Energy will further fund 20- 25 % depending on capacity of pump.
- Value added solar energy production.
- At decentralized level solar energy can be utilized through:
  - Solar Water Pump - Solar Street Lighting - Solar RD Plants
- Setting up Solar Hydroelectric power plants.
- Other opportunities include—
  - Manufacturing of PV cells - Solar Energy Research & Development



## **BIOMASS ENERGY**

### **A. Bagasse based co-generation**

- More than 1,800 MW capacity power generation projects installed in 64 private sugar mills.
- There is wide scope of installing power generation plants in sugar-mill belts of UP such as Shahjahanpur, Bareilly, Sitapur, etc.

### **B. Non-Bagasse (agro-residues, rice husk) power projects**

- Rice Husk based (Grid Interactive) – 4 projects of total capacity 46.50 MW are installed at Mathura, Ghazipur, Gorakhpur and Kanpur.
- Power generation projects of 201 MW have been installed for captive consumption in paper mills, rice mills, cold storage, etc.
- More plants can be set up at Varanasi, Moradabad, Meerut, Gorakhpur, Pilibhit, etc.

## **WASTE TO ENERGY**

- Presently, 33 projects of 108 MW capacity power projects are operational in the State based on industrial effluents installed for captive use.
- These projects get a subsidy from Government of India of INR 50.0 Lakhs/MW limited to max of INR 5.0 Cr per project.
- With rapidly growing industrial activity in the State, there is wide scope of producing power from industrial waste.
- Agricultural waste to energy is another crucial sector in the state seeking investment in the benefit of public health and environment.
- Municipal Waste to Energy – Being the most populous state of India, and with growing urbanisation, waste management is a major grievance area for Uttar Pradesh. Power from municipal waste offers wide scope for investment towards the cause of Swachh Bharat.

