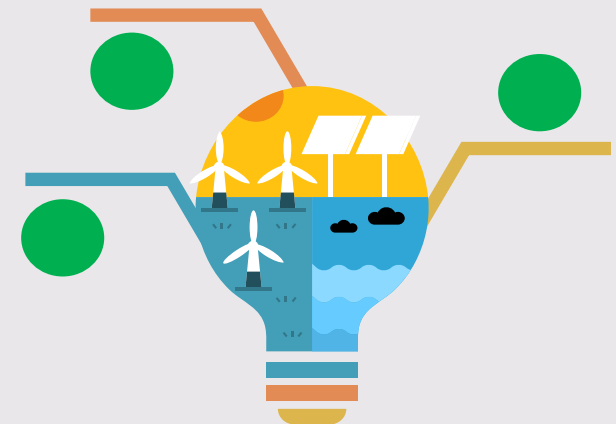
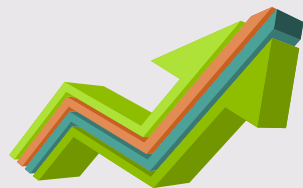


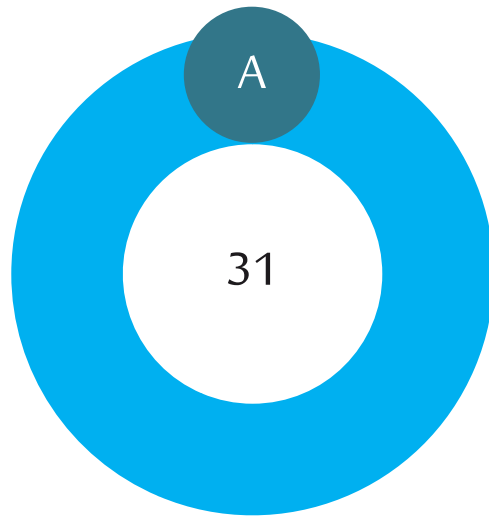
# Policy for Renovation, Modernisation, Uprating and Life Extension (RMU&LE) of hydroelectric projects in the state through private sector participation on Lease, Renovate, Operate and Transfer basis (LROT)

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Water Resources Department, Government of Maharashtra.*



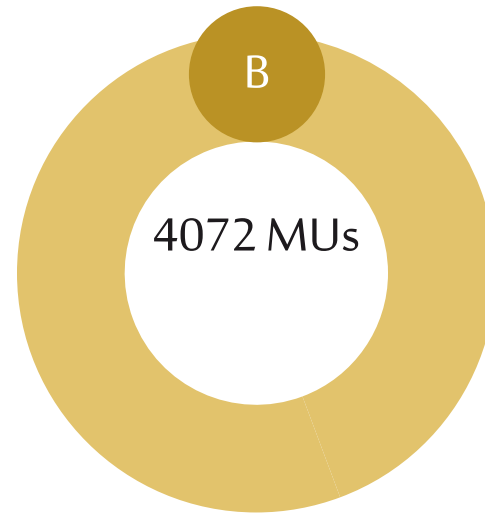
# Maharashtra Hydro Electric Project Status

31 completed projects have total designed generation 4072 MW & installed capacity 2588 MW, in operation  
from year 1962 to 2008



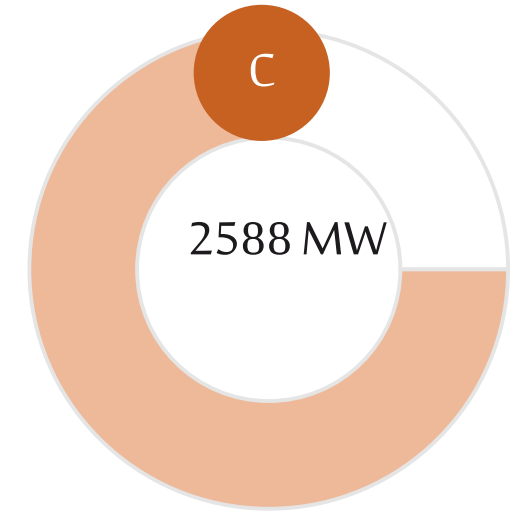
Number of Hydro  
Electric Project Completed

25 out of 31 projects are under operation of MHAJENCO & 6  
under WRD



Designed Generation (MUs)

31 projects have total designed generation 4072 MUs

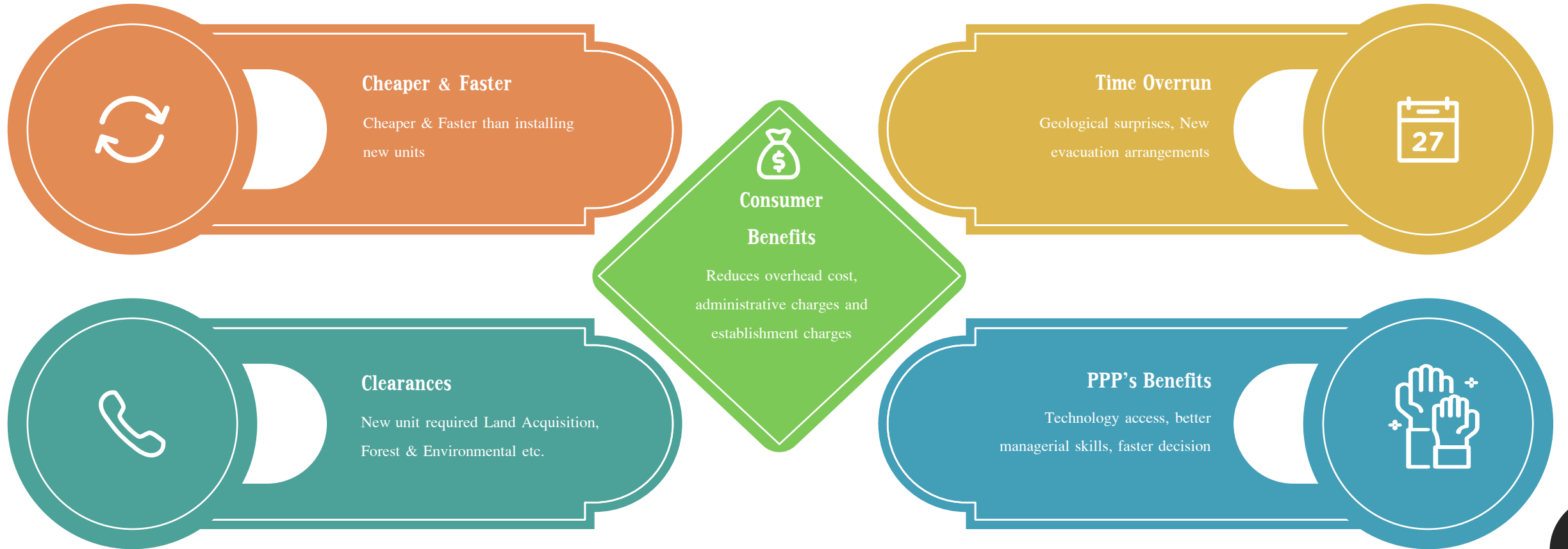


Installed Capacity

31 projects have total installed capacity 2588 MW

# Need for the Policy

Renovation, Modernisation, Uprating & Life Extension (RMU & LE) of old hydro-electric plants has been accorded high priority by the Government of India.



# Objectives of the Policy

Following objectives are intended to be achieved Renovation,

1

Life extension beyond normative life

2

Improving the performance

Upgrading the station capacity

3

Converting base load stations to peaking stations

4

5

Reducing maintenance & ensuring safety

6

Optimum utilization of land & infrastructure

Accelerating RMU & LE activities

7

Timely completion & revenue generation

8

# Relevant Legal Provisions

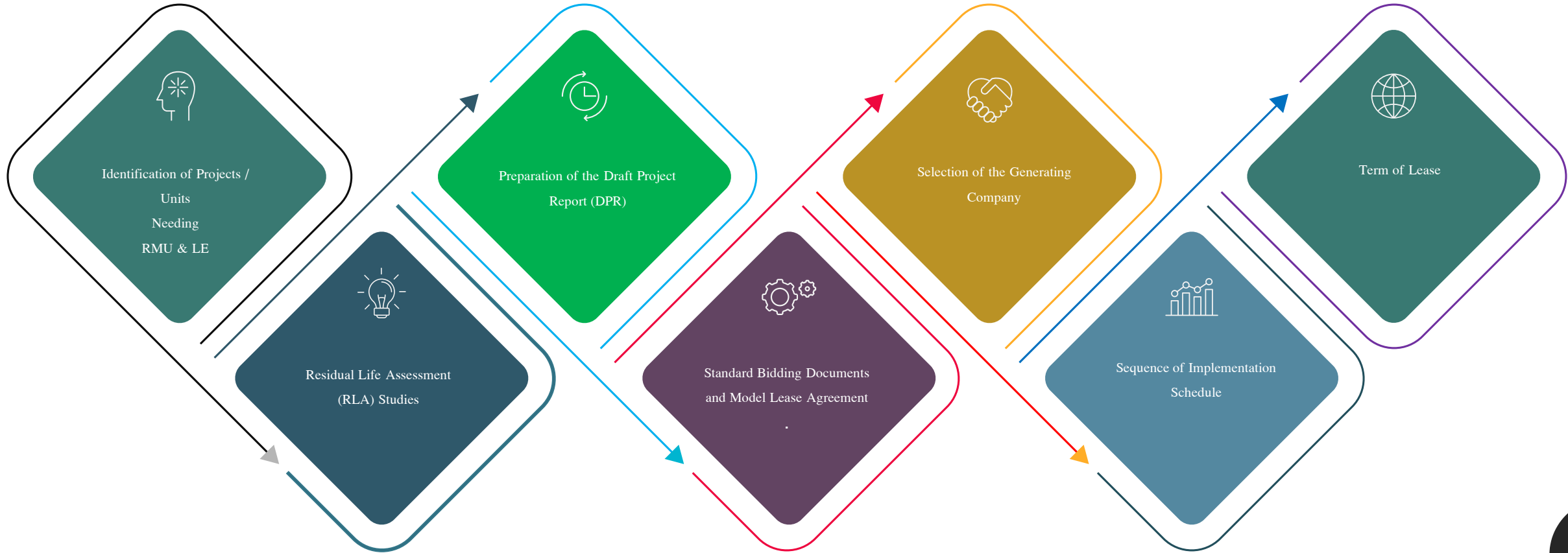
The State, by virtue of statutory provisions, being the owner of the hydroelectric projects in their jurisdiction



As per the provisions in Section 7 of the EA, 2003, provides that any generating company may establish, operate and maintain a generating station without obtaining a license under this Act, if it complies with the technical standards relating to connectivity with the grid referred to in clause (b) of the Section 73 of the Act.

The provisions in Section 8 (1) of the EA, 2003, read with the Central Government Notification No. SO 490(E) dated 28.01.2014, the hydroelectric schemes costing more than Rs. 1,000 Crores are required to be submitted to the Central Electricity Authority (CEA), for its concurrence.

# Implementation Framework



# Generation & Sale of Energy

## Generation

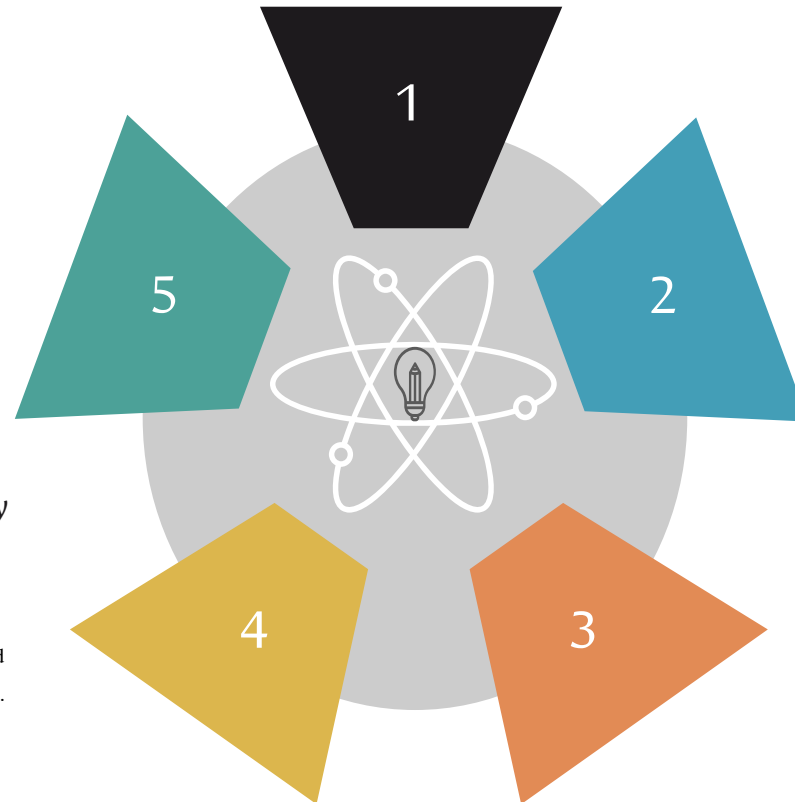
As per the provisions in EA, 2003, the Generating Company, during the Term of the Lease shall be entitled to operate and maintain the power plant without obtaining any licence

## Sale of Power

The Generating Company, will be required to approach the Commission, for determination of the tariff with necessary Petition under Section 62 of the Electricity Act, 2003, and Tariff Regulations notified by the Commission.

## Wheeling and Transmission Accessibility

Applicability of Wheeling and Transmission Charges and losses shall be governed by the prevailing Regulations and Orders of the Commission.



## Scheduling & Despatch Principles for Electricity

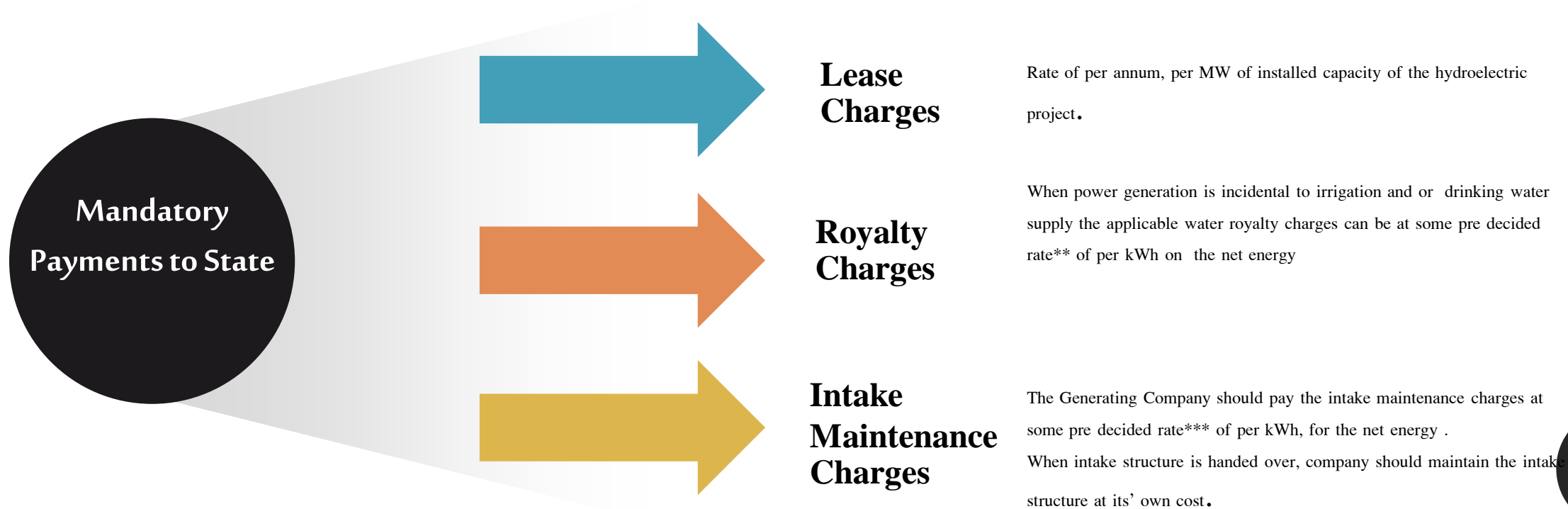
As per the provisions in the Section 33 of the EA, 2003, Generating Company shall comply with the directions of the State Load Despatch Centre (SLDC).

## Grid Interconnection and Evacuation Arrangement

Grid Interconnection and Evacuation Arrangement shall be governed by the prevailing Grid Code, Regulations and the Orders of the Commission and the relevant provisions in the Energy Purchase Agreements

# Mandatory Payments to State by Generating Company

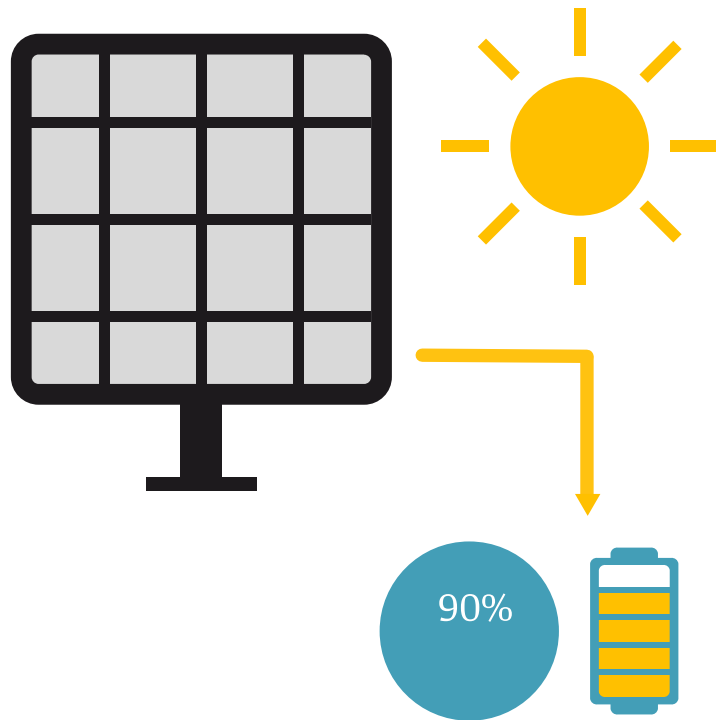
In addition to the payment of the Threshold Premium and the Upfront Premium the Generating Company will have to make the following mandatory payments annually to the respective State





# Co-Located Hydro-Solar Hybrid Projects

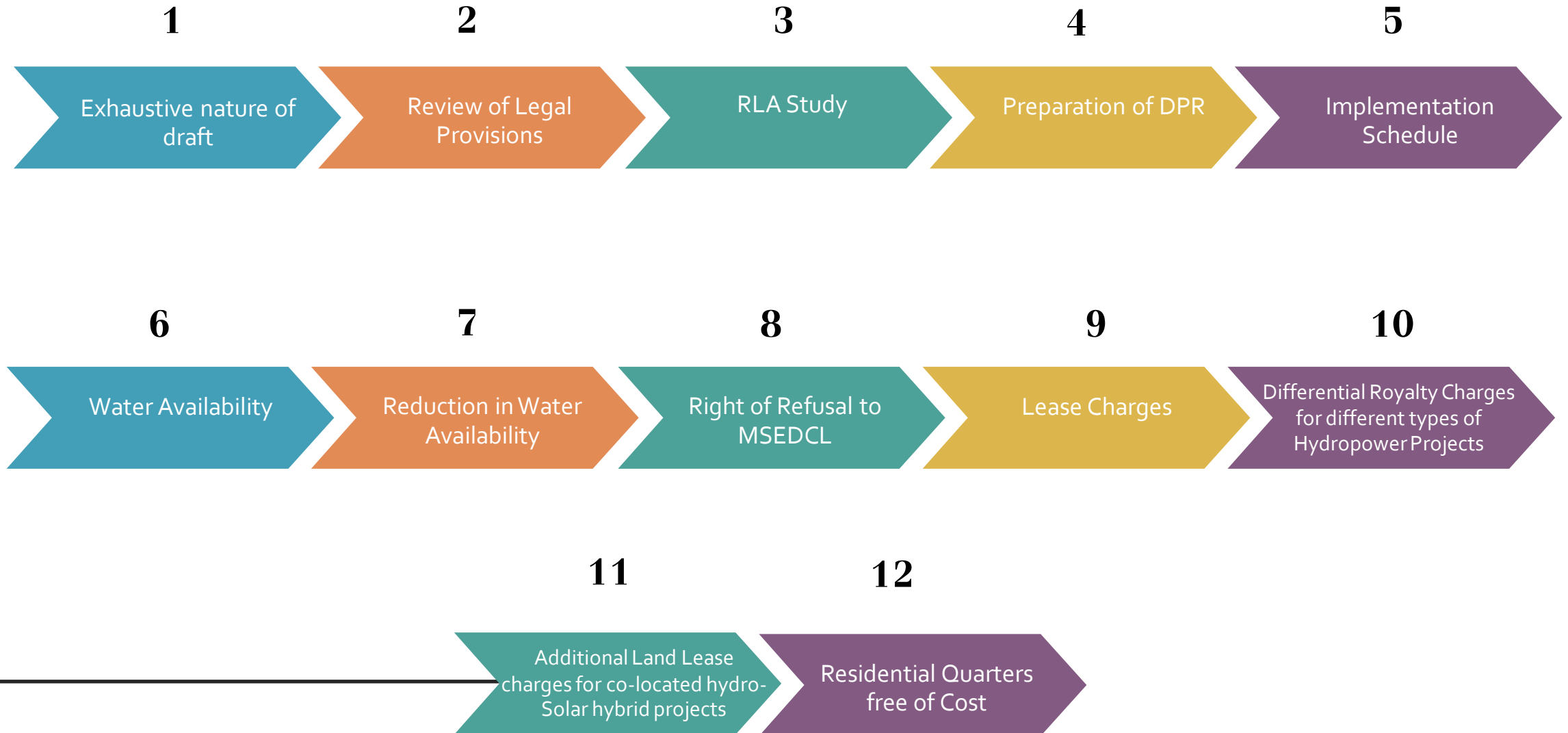
The Generating Company can opt to develop hydro-solar hybrid project to tap the solar potential of the land, handed over to it. Any additional land required for solar component, if available, on lease basis can be made available.



Solar installation on downstream slope of the dam, Roof top of project or use of the submergence of the dam for installation of floating solar panels .

Generation meters needs to be provided to each source of Renewable Energy as per CEA specifications

# Rationale Behind Important Provisions





# Conclusion:



## Life Extension

Undertaking timely RM&U & LE works, the existing generating plants can continue to operate for extended period of 20 to 25 years.



## PPP Model

Need of PPP model on LROT basis.



## policy guidelines

In the absence any policy guidelines for involving Private sector through PPP, the RMU&LE works have not been streamlined in the State yet.



## Private sector involvement

Attempt has been made through this paper to involve Private sector in RMU & LE work.