

Hydroelectric Power for Eco-Friendly Development

Himachal Pradesh to be a Hydropower Hub

(Ministry of Power)

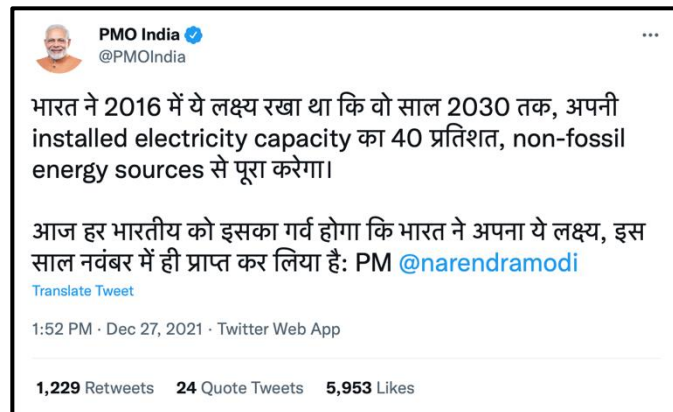
April 21, 2022

“People of Himachal Pradesh have converted challenges into opportunities.”

- [Prime Minister Narendra Modi](#)

Introductionⁱ

Hydropower, or hydroelectric power, is **one of the oldest and largest sources of renewable energy**, which uses the natural flow of moving water to generate electricity. Hydropower relies on the endless, constantly recharging system of the water cycle to produce electricity, using a fuel—water—that is not reduced or eliminated in the process.



Hydro power development is the key engine to the economic growth of the State of Himachal Pradesh, as it makes a direct and significant contribution to economy in terms **of revenue generation, employment opportunities and enhancing the quality of life.**

Government of India’s [ease of living model is environmentally conscious](#) and also helps protect the environment. In this context, four Hydro-power projects worth over [Rs 11,000 crore were unveiled in Mandi, Himachal Pradesh by Prime Minister Narendra Modi on December 27, 2021,](#)ⁱⁱ reflecting India’s commitment to eco-friendly development.

Projects Unveiled in Himalayan Region

1. Sawra-Kuddu Hydro Power Project

Features

- First such dam in [Asia in the shape of a piano](#), constructed on river Pabbar in Shimla district
- The 111 MW Hydro Electric Project (HEP) has been built at a cost of around [Rs 2081.60 crore.](#)
- The Sawra-Kuddu HEP would generate [386 Million units of electricity per annum.](#)

- Himachal will earn around [150 crore rupees every year with electricity generated](#) from this dam.

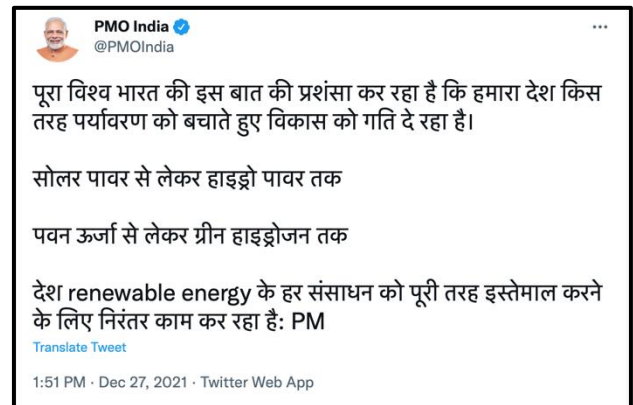
2. [Luhri Stage- I HEP \(210 MW\) projects](#)

Features

- It has a capacity of 210 MW
- Constructed on river Satluj
- Location: Near Nirath Village, Distt. Shimla and Kullu (HP).
- Total Project Cost: Rs 1810.56 Crore
- Tariff: Rs 4.06/kWh
- Electricity Generation: 758 MU
- Expenditure incurred: Rs 553 Crore (30.55% of total cost) as on 21.12.21.

Benefits to the State

- Employment generation: 20 lakh man-days
- Free power value: Rs 1047 Crore during initial project life of 40 years.
- 100 units of electricity per month for 10 years to each Project Affected Families.
- Development of roads, bridges, healthcare and other local infrastructure.



Benefits to the Nation

- Addition of 758 MU of renewable energy to the grid.
- Important role in balancing the grid over intermittent nature of Solar & Wind power.
- Reduction in CO₂ emissions by 6.1 lakh tons annuallyⁱⁱⁱ.

3. [Dhulasidh Hydro Power Project](#)

Features

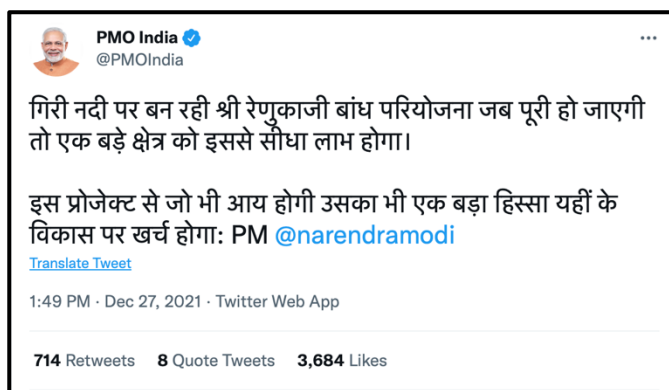
- It has a capacity of 66 MW and has been constructed on river Beas
- Location: Dhulasidh, Distt. Hamirpur (HP)
- Total Project Cost: Rs 687.97 Crore
- Tariff: Rs 4.46/kWh
- Surface Power house with two units of 33 MW each.
- Electricity Generation: 304 MU

Benefits to the State

- Employment generation: Eight lakh man-days.
- Free power value: Rs 461 Crore during initial project life of 40 years.
- 100 units of electricity per month for 10 years to each Project Affected Families.
- Development of roads, bridges, healthcare and other local infrastructure.

Benefits to the Nation

- Addition of 304 MU of renewable energy to the grid.
- Important role in balancing the grid over intermittent nature of Solar & Wind power.
- Reduction in CO₂ emissions by 2.4 lakh tons annually^{iv}



4. Renukaji Dam project

- The [40 MW project will be built at a cost of around Rs 7000 crore](#) on the [river Giri in district Sirmaur](#). It will prove to be immensely beneficial for Delhi, which will be able to receive around [500 million cubic metre](#) water supply per year.
- An agreement for implementation of Renukaji Dam Project had been signed [amongst the Basin States, and Ministry of Jal Shakti, Government of India, on 11.01.2019](#).
- Government of India has so far [released Rs. 457.57 crore for Renukaji](#) project for payment of enhanced compensation for land acquisition. Further, Himachal Pradesh has contributed an amount of Rs.70.49 crore for the project so far.

The total Hydro Potential of Himachal Pradesh is approximately [25,000 MW](#) at present. Accelerating the pace of Hydro Power Generation has given an impetus for the State's Economic growth. The idea is to provide adequate power at an economical cost while ensuring reliability and quality of supply. The power generated from the above projects would help in providing grid stability and improving the power supply position, besides adding valuable renewable energy to the grid.

References

- <https://www.narendramodi.in/text-of-prime-minister-narendra-modis-address-at-launching-of-various-development-projects-in-himachal-pradesh-559174>
- PIB Press Release on [“Hydro-power projects launched today reflect India’s commitment to eco-friendly development”](#) dated December 27, 2021
- [http://www.himachalpr.gov.in/\(S\(lpj1aqyzzchyrjbskrusotm\)\)/OnePressRelease.aspx?Language=1&ID=24785](http://www.himachalpr.gov.in/(S(lpj1aqyzzchyrjbskrusotm))/OnePressRelease.aspx?Language=1&ID=24785)
- <http://tamizha.net/sawra-kuddu-dam/>
- PIB Press Release on [Projects reflect PM’s focus on utilizing untapped hydropower potential of the region](#) dated December 26, 2021.
- PIB Press Release on [Supply of Water to Delhi and Other States](#) dated December 13, 2021.

Twitter Links

- https://twitter.com/PIB_India/status/1475380593521160194?s=20&t=UKQkIS5lZkSwKbeuInbv9Q
- <https://twitter.com/PMOIndia/status/1475378734525923333?s=20&t=mK5duMMTQp78zRSNnmYOhg>
- <https://twitter.com/airnewsalerts/status/1475287929664815108?s=20&t=UKQkIS5lZkSwKbeuInbv9Q>

- <https://twitter.com/airnewsalerts/status/1475368017143992321?s=20&t=UKQkIS5lZkSwKbeuInbv9Q>

Further Reading

- <https://indianexpress.com/article/cities/chandigarh/renuka-ji-dam-project-construction-to-begin-in-december-2022-7726307/>

AG/ HP/ RC/ RN/ IJ

ⁱ<https://www.energy.gov/eere/water/hydropower-basics>

ⁱⁱ<https://pib.gov.in/PressReleasePage.aspx?PRID=1785492>

ⁱⁱⁱ[http://www.himachalpr.gov.in/\(S\(lpj1aqyzzchyrvjbskrusotm\)\)/OnePressRelease.aspx?Language=1&ID=24785](http://www.himachalpr.gov.in/(S(lpj1aqyzzchyrvjbskrusotm))/OnePressRelease.aspx?Language=1&ID=24785)

^{iv}[http://www.himachalpr.gov.in/\(S\(lpj1aqyzzchyrvjbskrusotm\)\)/OnePressRelease.aspx?Language=1&ID=24785](http://www.himachalpr.gov.in/(S(lpj1aqyzzchyrvjbskrusotm))/OnePressRelease.aspx?Language=1&ID=24785)