

Webinar on “Financing Geothermal in India”

Date: Monday, May 23rd, 2022, 3:00 PM – 4:30 PM (IST) / 11:30 AM – 13:00 PM (CEST)

Geothermal energy is a type of renewable energy taken from the Earth’s core. It is the heat derived within the sub-surface of the earth. Water and/or steam carry the geothermal energy to the Earth’s surface. This energy is harnessed mainly through

- i. Geothermal power plants - use heat from deep inside the Earth (temperature exceeding 150⁰C) to generate steam to generate electricity
- ii. Geothermal direct use –direct use of hot water (temperature between 30⁰C to 150⁰C) from the ground without the need for any specialized equipment
- iii. Geothermal heat pumps – use heat close to the Earth's surface (temperature between 5⁰C to 30⁰C) to heat water or provide heating/cooling for buildings

Under the European Union (EU) – India Clean Energy and Climate Partnership (www.cecp-eu.in), which was agreed at the EU-India Summit in 2016 and confirmed in 2017, 2020 and 2021, the EU Delegation to India is developing the “EU-India Financing Investment in Clean Energy Platform (FICEP)”. The objective of FICEP is to encourage investment in the field of energy efficiency and renewable energy systems in India and the EU. FICEP is expected to act as a catalyst for investments and is intended to inform and connect various actors in the energy sector, including initiators and innovators, project promoters and entrepreneurs, project developers and the European and Indian financing community.

One of the focus areas of FICEP (at initial stage) is energy efficiency in buildings and industries. Geothermal or Ground Source Heat Pump (GSHP) technology is selected as the technology of interest. GSHP is an efficient space cooling and heating technology for buildings. It uses a type of heat pump to transfer heat to or from the ground, taking advantage of the relative constancy of temperatures of the earth throughout the year. Thermal transfer fluid, a mixture of water and antifreeze, flows around a loop of pipe which is buried within the ground. The fluid absorbs from or releases in the ground the heat for heat exchange into the heat pump. This in turn lowers or raises the temperature of the water used to cool or heat the space.

The ‘Best Practice Manual for Investment in Ground Source Heat Pumps’, as part of the building energy efficiency intervention under FICEP, brings across the best practices that should be adopted by investors and borrowers for availing finances for ground source heat pumps (GSHPs) in India.

Agenda

Time (IST)	Time (CEST)	Discussion Topic	Speakers
3:00 – 3:05 PM	11:30 – 11:35 AM	Introduction and welcome of participants	Mr. Edwin Koekkoek , Counsellor, Energy and Climate Action, EU Delegation to India
3:05 – 3:15 PM	11:35 – 11:45 AM	Introduction to geothermal energy and its applications	Ms. Sneha Subudhi Senior Associate, PwC India
3:15 – 3:25 PM	11:45 – 11:55 AM	Introduction to status of geothermal technologies in Europe, market trends, recent advances, and the policy environment	Mr. Thomas Garabetian , Senior Policy Advisor, European Geothermal Energy Council
3:25 – 3:35 PM	11:55 – 12:05 PM	Overview of geothermal energy in India, technologies in focus and their current status	Mr. Jagdeep Singh , Director, Rosemex Ecotech
Session 1: Introduction and discussion on the ‘Best practices manual for investment in GSHP in India’			



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3:35 – 3:55 PM	12:05 – 12:25 PM	- Introduction to the best practice manual for Ground Source Heat Pumps - Various challenges and barriers prevalent in the GSHP sector in India and how the best practice manual addresses these challenges	Mr. Rushikesh Bhadra, Senior Manager, PwC India
3:55 - 4:20 PM	12:25 – 12:50 PM	Stakeholder consultation on the manual (2 industry experts and 2 financial institutions)	Moderated by Mr. Rajeev Ralhan
4:20 – 4:30 PM	12:50 – 13:00 PM	Closing remarks and Vote of thanks	Mr. Rajeev Ralhan, Executive Director, PwC India