

2nd International Conference onPETROLEUM ENGINEERING AND PETROCHEMICALS
&7th WORLD OIL AND GAS CONGRESS

May 22-23, 2019 | Dubai, UAE

Reduction of electricity load that is generated by nonrenewable sources, by utilization of hybrid solar and geothermal energy for electricity generation: A case study of Dholera, Gujarat**Bist Namrata and Sircar Anirbid**

Pandit Deendayal Petroleum University, India

We have been heavily dependent on fossil fuels for the energy requirements and this reliance has made our ecosystem unsustainable. This is also putting tremendous burden on oil and gas to fulfill our fuel needs. At Dholera, Gujarat, India; we have setup a pilot scale plant which utilizes Geothermal water for space heating and cooling. Now, we are designing an integrated setup with the solar energy where the solar collectors can be augmented with the existing system and the produced water (at approximately 180°C) can

be utilized to produce electricity. This electricity then can be utilized by the nearby areas and will reduce the load on the electricity department and hence the fossil fuel consumption for the generation of electricity can be reduced. This will be one of its kind setup in India. Utilizing projects like these can help load sharing of 50-50 percent by both nonrenewable and renewable energy sources.

namrata.bist@spt.pdpu.ac.in