

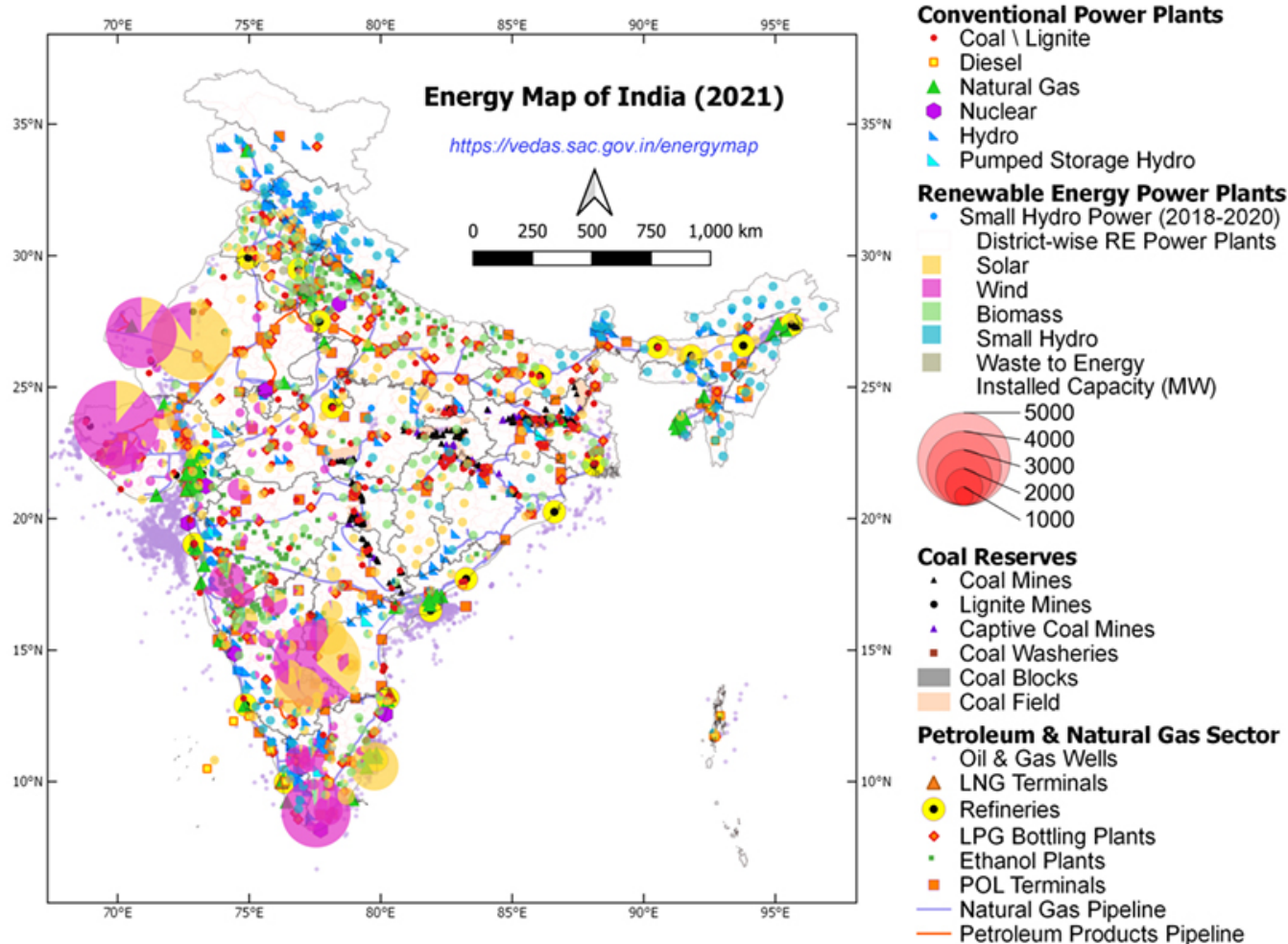


Geospatial Energy Map of India

Why in News

Recently, **NITI Aayog** launched a comprehensive **Geographic Information System (GIS)**-based **Geospatial Energy Map of India**.

- Earlier in July 2021, the Association of Geospatial Industries released a report titled "**Potential of Geospatial Technologies for the Water Sector in India**".



Key Points

- **About:**
 - It is developed by the **NITI Aayog** in collaboration with **Indian Space Research Organisation (ISRO)** with the support of **Energy Ministries**.

- It **provides a holistic picture of all energy resources** of the country.
- It **enables visualisation of energy installations** such as **conventional power plants, oil and gas wells, petroleum refineries, coal fields** and **coal blocks, district-wise data on renewable energy** power plants and **renewable energy** resource potential through 27 thematic layers.

▪ **Geographic Information System:**

- A GIS is a **computer system for capturing, storing, checking, and displaying data** related to positions on Earth's surface.
- It **can show many different kinds of data on one map**, such as streets, buildings, and vegetation.
 - It **enables people to more easily see, analyze, and understand** patterns and relationships.

▪ **Significance:**

◦ **Aims to Identify Sources of Energy:**

- It attempts to **identify and locate all primary and secondary sources of energy** and their transportation/transmission networks to provide a comprehensive view of energy production and distribution in a country.

◦ **Integrate Scattered Data:**

- It is **aimed at integrating energy data scattered** across multiple organizations and to present it in a consolidated, visually appealing graphical manner.

◦ **Advancements in Web-GIS Technology:**

- It leverages the **latest advancements in web-GIS technology** and open-source software to make it interactive and user friendly.

◦ **Helpful in making Investment Decisions:**

- It will be useful in **planning and making investment decisions**.
- It will also aid in **disaster management** using available energy assets.

Geospatial Mapping

- It is a **type of spatial analysis technique** that typically employs software capable of rendering maps, processing spatial data, and applying analytical methods to terrestrial or geographic datasets, including the use of geographic information systems.
- It is **different from traditional mapping**, as geospatial mapping provides us with computerized data that can be used to create a custom map designed for your needs.

[Source: PIB](#)