Power Plant Tracker

LCOE and CAPEX optional module

LCOEs and CAPEX trends by technology, region and country.

Determine **technology maturity** and **competitiveness**. Weigh out **investment decisions** leveraging thousands of checked and updated data points.
Benchmark your projects.

Benefits:

- Determine which **technology** and which **country/region** it is best to invest in
- **Reliable and meaningful data**:

- country-level averages from ministries, energy agencies and associations
- **thousands of data points** from Power Plant Tracker, the most up-to-date power generation database

- No estimates, **only sound data**
- **Exclusive data and indicators** available in just a couple of clicks
- **Customisable parameters** (discount rates, load factors)
- Designed, processed, tested and checked by Enerdata experts
- Benchmark your own projects

Features:

- Countries covered : **G20 countries**, sorted by country(ies) or world region(s)
- Energies/technologies covered:

- Renewables for LCOE: Biomass, Geothermal, Hydropower, Solar CSP, Solar PV, Solar PV residential, Solar PV commercial & industrial, Solar PV large insdustrial, Wind off-shore, Wind on-shore
- Renewables and thermal for investments: Coal, Gas, Oil, Biomass, Hydro, Wind, Solar

- **Easy Excel query**
- Quarterly updates
- **Data export in .csv format** to integrate your own databases and models

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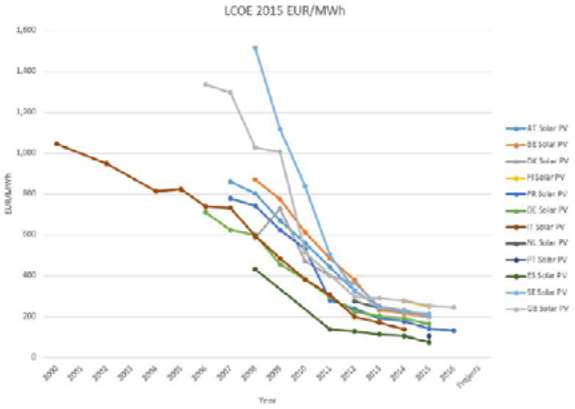
Levelized Costs of Electricity (LCOE):

Overview

LCOE represents the net value to the electricity supplier of a generating asset over its lifetime. The new P**ower Plant Tracker LCOE module** enables you to **benchmark your project** by **comparing the cost of electricity production of renewable energies** in all **G20 countries**, using either default calculation assumptions, or your own.

Methodology

Enerdata calculates LCOE through a formula taking into account the **initial investment costs**, decommissioning costs, **variable operating costs** (mainly fuel costs), **fixed operating costs** (wages, rentals...), as well as **power generation** (load factor), discount rate, and the asset lifetime.



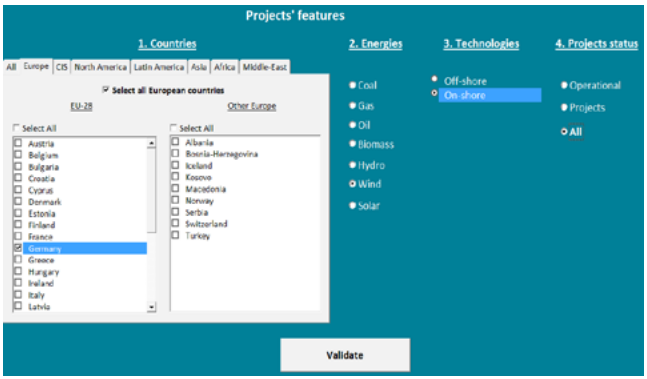
Data sources

Enerdata checks and aggregates **country-level averages** provided by the IEA, Renewable energies associations, government bodies, market operators or statistical agencies. In case no official statistics is available, we deduce country averages leveraging Power Plant Tracker information.
The **load factor** is calculated by dividing the average annual number of hours of production of any given energy by the theoretical number of hours in a year.
A default discount rate has been set, but can be customized by users.

CAPEX:

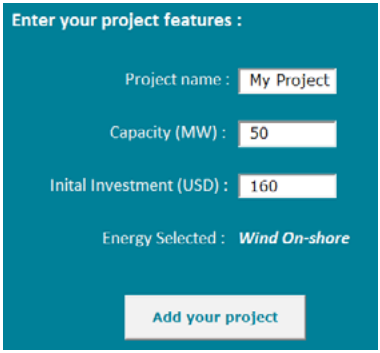
Overview

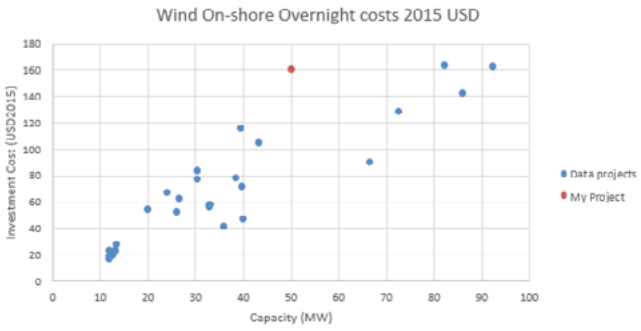
The **Power Plant Tracker CAPEX tool** provides a comparison on the **initial investment of power generating assets** for more than 5 200 projects worldwide, among which over 1 900 are still under development. It is expressed in USD2015/kW **to balance the effects of inflation** on earlier projects.



Methodology

Overnight costs are calculated by dividing the initial investment costs of the project (USD2015) by its generating capacity (MW). For projects commissioned prior to 2015, we apply deflation rates from the **U.S. Producer Price Index and Consumer Price Index** to both t**echnological and structural costs**.





Data sources

The information is derived from **Power Plant Tracker**, leveraging data from power utilities, statistical offices, energy regulators, ministries, network operators, as well as specialized and international press.

About Enerdata

Enerdata is an energy intelligence and consulting company.
Our experts will help you to tackle key energy and climate issues and make sound strategic and business decisions.
We provide research, solutions, consulting and training to key energy actors worldwide.

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Enerdata Clients Include:

Enerdata Information Services

Global Energy & CO_2 Data: Regularly updated global energy market database providing supply, demand & prices for all energy sources by sector and GHG emissions covering 186 countries from 1970 onwards.

Global Energy Research: More than 110 country reports. Daily news feed included.

EnerMonthly: Monthly update with detailed information regarding production, imports, exports and consumption for over 40 OECD and non OECD countries.

EnerFuture: Annual forecasts until 2040 for energy demand & prices for all energy sources & CO_2 emissions by sector. Power generation forecasts by fuel source are also included. Energy forecasts are based on the globally recognised POLES model.

EnerFuture MACCs: Assess climate policies, evaluate cost and efficiency, and simulate carbon markets with our CO_2 Marginal Abatement Cost Curves tool.

Odyssee: Unique database on energy consumption by end-use for 28+ EU members. Exclusive energy efficiency indicators.

EnerDemand: Analyse energy consumption and efficiency trends accross the world. Provide energy consumption data by sector and end-use, energy efficiency trends and their drivers.

Country Energy Demand Forecasts: Energy demand forecasts of oil, gas, coal and power consumption by country, by sector and by usages up to 2030.

Power Plant Tracker: Screen, monitor and analyse the development of power generation assets. Includes powerful embedded analytics. Provides exclusive insight on levelized costs of electricity and capital expenditure through the optional module: CAPEX & LCOE.

World Refinery Database: New and existing refineries monitoring.

World LNG Database: All key information and data about world LNG markets.

Key Energy News: Search by energy topic, energy source (electricity, natural gas, oil, CO_2 emissions, coal, biofuels and heat) or utility company (44 utilities included).

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