Global, Regional & Country-level Energy and Emissions Forecasts through 2040 – Including Non-OECD Countries

Based on the globally recognised POLES Model, EnerFuture is used by energy companies, consultancies & governments for strategic planning and policy evaluation.

EnerFuture provides annual projections through 2040, offering clear insight into future energy demand, prices and GHG emissions by energy source or by sector, at the country and regional levels.

EnerFuture brings a consistent set of data on the factors that will impact and shape the future of energy, including energy markets, macro-economy, and long-term climate policies. Use EnerFuture to anticipate evolutions in your environment and build the appropriate business strategies.

Why Subscribe?

• Annual energy demand, prices & emissions projections through 2040
• Historical data through 2017 – the latest available figures
• Detailed projections for all energy sources
• Insightful analyses of the evolution of international oil, gas and coal prices
• Forecasts categorized by sector
• Global, regional or country views
• Three contrasted energy and climate scenarios
• Consistency in global forecasts by means of regional balances
• Interactive, user-friendly interface
• Annual data and scenario updates
Features Overview:
- Global coverage (65+ countries/aggregates) (See final page for detailed list)
- Annual historical data through 2017
- Annual projections of the global energy market through 2040
- Analysis of the evolution of international oil, gas and coal prices
- Demand and price forecasts by sector and energy source
- GHG emissions forecasts by sector
- Country snapshots and ranking
- Power mix forecasts (capacities and production by technology) in five-year steps
- Three detailed scenarios offering contrasting views on technology development, low-carbon energy sources and fossil fuel supply
- Demand, CO₂ and REN indicators
- Macroeconomic drivers
- Data export in .csv format to integrate with your own databases and models

Enerdata - EnerFuture

EnerFuture Scenarios
Updated annually to take into account recent events

Ener-Base
- Lack of support for GHG emission mitigation, affecting the entire energy system over a long period.
- Energy demand increases globally, driven by economic and population growth.
- Technological advances and fuel diversification (namely a moderate renewable expansion) slightly curtail the impact on emissions.
- +5°C to +6°C temp. increase

Ener-Blue
- Based on the successful achievement of the 2030 NDCs announced in the 2015 Paris agreement and since revised.
- Sustained growth in emerging countries is a powerful driver of global energy demand, but NDCs play a key role in controlling the pace of growth.
- +3°C to +4°C temp. increase

Ener-Green
- More stringent climate policies than currently in place
- Countries fulfill NDCs and regularly revise emissions goals
- Ambitious climate trajectories specific to each region, built using a new methodology incorporate effort-sharing regulations.
- Significant improvements in energy efficiency & renewables
- +1.5°C to +2°C temp. increase

Outputs:

Energies/Emissions: oil, gas, coal, electricity, biomass and GHG emissions (6 Kyoto gases)

Demand: Total demand and demand by sector

Power: Production and capacities by energy type: fossil energies, nuclear, renewables (wind, solar, etc.)

Sector: Power production, industry, transport and residential/services/agriculture

Prices: International energy price evolutions
The POLES Model

Prospective Outlook on Long-term Energy Systems

The POLES Model is an internationally recognized techno-economic model. The simulation occurs on a year-to-year basis, with endogenous projection of energy prices. It provides a complete accounting of energy demand/supply of numerous energy vectors, associated technologies and greenhouse gases emissions, and enables the customization and modeling of possible carbon constraints levels, energy resources or technological assumptions.

Features of POLES

- **Disaggregation** into 15 energy demand sectors
- Energy supply: Identification of key market suppliers for oil and gas
- Oil and gas sectors: Discoveries and reserves for 87 producers
- International trade: Flows of energy products for oil and natural gas
- About 40 energy generation technologies:
  - Nearly 30 power generation technologies (incl. conventional, new and renewable)
  - More than 10 hydrogen production technologies
- GHG Emissions and Abatement Costs (by region, country & sector; sub-sector decomposition for CO₂)
- Assessment of the impacts of climate change policies on energy systems
- **Endogenous** international energy prices and markets

Optional Module: Marginal Abatement Cost Curves (MACCs)

Our supplementary module, GHG Marginal Abatement Cost Curves (MACCs), reveals the potential for emissions reductions across economic sectors, and respective costs to reach targets. Please contact us for more information.
About Enerdata

Enerdata is an energy intelligence and consulting company. Our experts 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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- Good Year
- Orano

Consultancies and Financial Institutions
- Arthur D Little
- Swiss Re
- Bank of America
- Merrill Lynch
- Accenture
- PwC
- EY

International Organizations and Government Bodies
- Asian Development Bank
- World Energy Council
- GECF
- Jicable

Research Centres and Universities
- Boston University
- Energy Foundation Institute
- University of Wisconsin
- Kapsarc
- Fraunhofer Institute

Geographic Coverage

EUROPE
Austria
Belgium
Bulgaria
Croatia
Czech Republic
Denmark
Finland
France
Germany
Greece
Hungary
Ireland
Italy
The Netherlands
Norway
Poland
Portugal
Romania
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom
Baltic States
Europe
European Union
Baltic States (Estonia, Latvia and Lithuania)

AMERICAS
Canada
United States
Mexico
Brazil
Argentina
Chile
North America
Latin America
Central America
Mexico and the Caribbean
Central America and the Caribbean
South America
excluding Brazil, Argentina, and Chile
Includes Colombia, Venezuela, Ecuador, Peru, Bolivia, Suriname, Guyana, Paraguay, Uruguay

ASIA
India
China
Indonesia
Japan
South Korea
Malaysia
Thailand
Vietnam
Asia aggregates:
Asia
South Asia (excluding India)
Rest of Southeast Asia

PACIFIC
Australia
Pacific (aggregate)
OECD Asia and Pacific (aggregate)

CIS
Russia
Ukraine
CIS aggregates:
CIS
Other CIS (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Uzbekistan)

AFRICA
Algeria-Libya
Egypt
Morocco-Tunisia
South Africa
Africa aggregates:
Africa
Northern Africa
Sub-Saharan Africa
(excluding South Africa)
MIDDLE EAST
AGGREGATES
Middle-East
Gulf Countries
Mediterranean (excl. Gulf countries)

*Note: Price Forecast unavailable