# Total renewable energy forecast

Why do you need Total Forecast?

The Total Forecasting service delivers country level forecasts of wind and solar power production as well as electricity load. The service utilize the ENFOR forecasts engines for SolarFor™, WindFor™ and LoadFor™ in special configuration in order to forecast production or demand for whole countries.

Solar Forecast
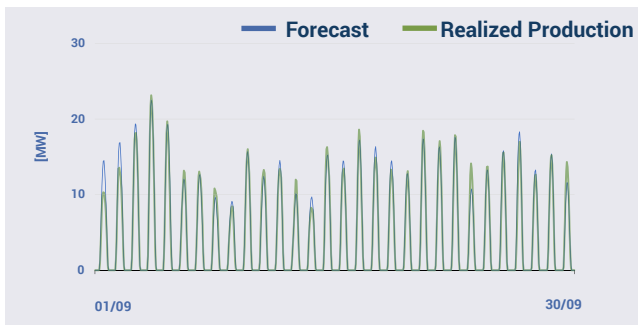
Wind Forecast
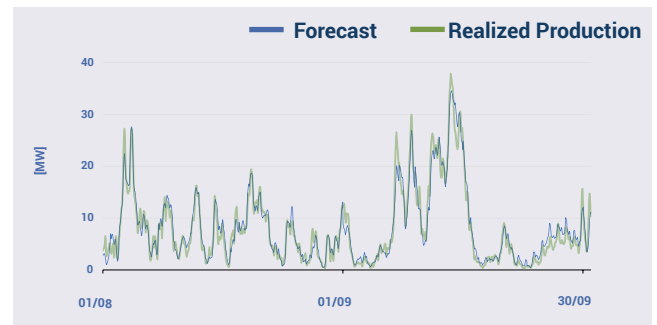
Key benefits

- Market leading wind and solar power forecast accuracy
- Long and proven operational track record
- Reliable, stable and with high availability above 99,9%
- Flexible, configurable and can be integrated with customer data to improve forecast accuracy
- Supports the traders in minimizing risk and optimizing their portfolio
- Delivered as a service with no maintenance for the customer

How does the Total Forecast work?

The forecast is based on a combination of our market leading wind, solar and electricity load forecasting solutions. Each of which utilizes a self-learning and self-calibrating software system that combines physical models and advanced machine learning. The self-learning and self-calibrating algorithms will continuously learn about the characteristics of the renewable energy production and electricity demand and will adapt to changing conditions, seasonal variations, and as the renewable energy assets ages. Therefore, the forecasts stay accurate over time without the need for manual configuration. To achieve this, the system utilizes the best from both worlds, artificial intelligence and electricity system domain knowledge, and combine both real-time and historical data on energy production and weather information to produce forecasts in the granularity required for the specific market. The system uses multiple weather forecast providers as input and automatically detects the optimal prioritization of the different weather forecasts for each region.

The result is one of the most accurate power forecasts available. The system can deliver power forecasts in almost any file format and can be integrated directly into the operational ITplatform of the client, such that data is delivered seamlessly to and from relevant systems. The forecast is supplied with various support, maintenance and license packages, and can be tailor-made to client specifications to provide a cost/performance ratio that fits the needs of the individual client.

Key features

- ✅ Forecast of total wind and solar power production and electricity load
- ✅ Forecast delivered on country level, per control area and per bidding zone
- ✅ Self-learning algorithms which continuously adapt and re-configure power forecasts Forecast horizons up to 15 days
- ✅ Time resolution in forecasts match the required time resolution of the specific market
- ✅ Updated hourly (Or more on request)
- ✅ Forecasting of uncertainty bands

- ✅ Scenario generation Integrates and utilizes multiple weather forecast providers
- ✅ Can be integrated with customer data for improved accuracy
- ✅ Configurable browser-based graphical user interface and reporting tool
- ✅ Data integration interfaces supporting numerous formats, file types and protocols
- ✅ Data integration interfaces based on FTP, SFTP or Web Services supporting numerous formats

About ENFOR

ENFOR provides forecasting and optimization solutions for the energy sector. Utilities, energy traders, transmission and distribution system operators use ENFOR solutions for forecasting of wind power, solar power, hydro power, electricity and heat demand as well as optimization of district heating systems. Based Denmark, and established in 2006 as a spin-off from the Technical University of Denmark, the company has a solid operational track record and successfully serve customers all over the world.

ENFOR))))
DELIVERING THE FUTURE

ENFOR A/S

Lyngsø Allé 3   +45 45 350 350
DK-2970 Hørsholm   www.enfor.dk
Denmark   contact@enfor.dk.

"The future is an unknown, but a somewhat predictable unknown. To look to the future we must first look back upon the past."

- Albert Einstein