

# The Unified Energy Market Simulation Platform





PLEXOS<sup>®</sup> is a powerful simulation engine that provides analytics and decision-support to modellers, generators, and market analysts—offering flexible and precise simulations across electric, water, gas and renewable energy markets.

## What Does PLEXOS® Do?

It's easy to be overwhelmed with the volume of data available and rate of change the energy industry is currently experiencing.

That's why Energy Exemplar built the most powerful energy modelling engine on the market to provide analytics and decision-support to modelers, generators, and market analysts.

PLEXOS® gives you the power to unify all your data streams – in any granularity – into a single, unified energy modelling and forecasting platform. Its powerful simulation engine analyses zonal and nodal energy models ranging from long-term investment planning to medium-term operational planning and down to short-term, hourly, and intra-hourly market simulations.

While other simulation software only models energy markets separately, PLEXOS allows you to understand the market variations across the entire energy landscape. The result: a co-optimised, interdependent energy market simulation that enables you to uncover hidden value.

## Who Uses PLEXOS®?

PLEXOS is built to serve the entire energy industry ecosystem.

Trusted globally by governments, regulators, system operators, researchers, utilities, power producers, developers, retailers and traders, PLEXOS provides our customers greater ROI through deeper insights than any other platform on the market.



- IoT Data Analyst
- · Energy Market Analyst
- Mid office Planning Analyst



- Fuel Procurement
- Operator
- · Risk Manager



- · Generation Planner
- Transmission Planner
- Researchers



- Marketer
- Trader
- Consultant







# **How Does PLEXOS® Help?**

#### **OPTIMISE YOUR RESULTS**

Create a digital twin by replicating the properties and behaviors of physical power systems within a software environment. PLEXOS converts your inputs into a mathematical problem that finds the best course of action from a range of available options. By simply changing the inputs, you'll get another optimal course of action, and you can compare those newfound insights to choose a solution that provides the highest ROI.

Underneath it all, you'll feel confident using the industry-leading algorithms that allow you to experiment and interpret the results.

# **Benefits of Optimization:**

- Make more informed decisions
- Test the effects of different scenarios on the system
- Maximise your profitability
- Increase your productivity
- · Minimise your costs
- · Reduce your depreciation
- Reduce your amount of waste

#### A UNIQUELY UNIFIED APPROACH

PLEXOS is the only solution that unifies your market simulations across electric, water and gas energy systems. You can also perform long-term planning, Projected Assessment of System Adequacy (PASA), medium-term and short-term scheduling, with each phase automatically connected to the others.

# Benefits of a Unified Modelling Solution:

- Create one source of truth for the entire organization
- Maximise your profitability across multiple commodities
- · Reduce your IT costs and timelines
- Make decisions based on real-world scenarios
- Streamline your input/output processes and reduce errors
- Work more efficiently across teams by eliminating iterative planning
- Consolidate separate forecasting tools into one master hub



#### **MODEL YOUR WAY**

You can configure PLEXOS with a limitless collection of scenarios, customised constraints, conditional variables, physical elements, simulation horizons, durations of simulation period, phases in the integration and model resolution.

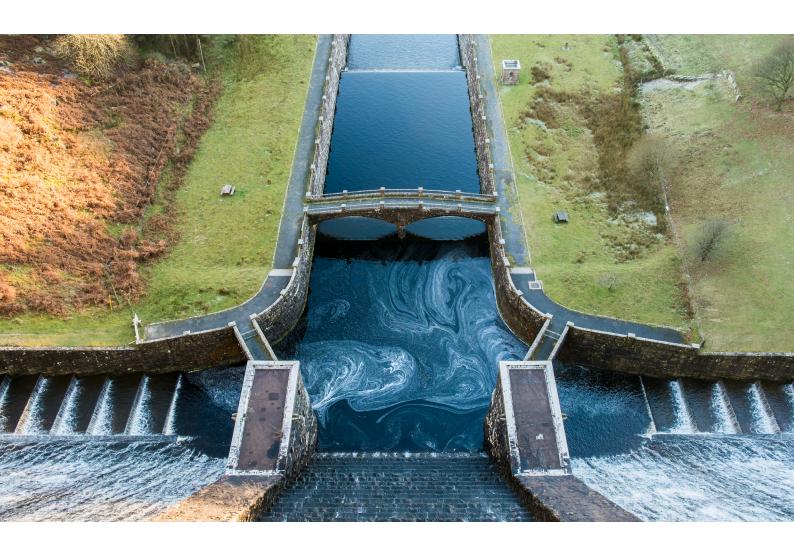
This data-driven flexibility creates a dynamic solving engine: it adapts to your data producing the right balance of detail and performance while giving you ultimate scalability and ultra-fine control.

PLEXOS is also completely transparent. If you want to see how the solution delivered the results, all equations, objective functions and constraints are open for you to review.

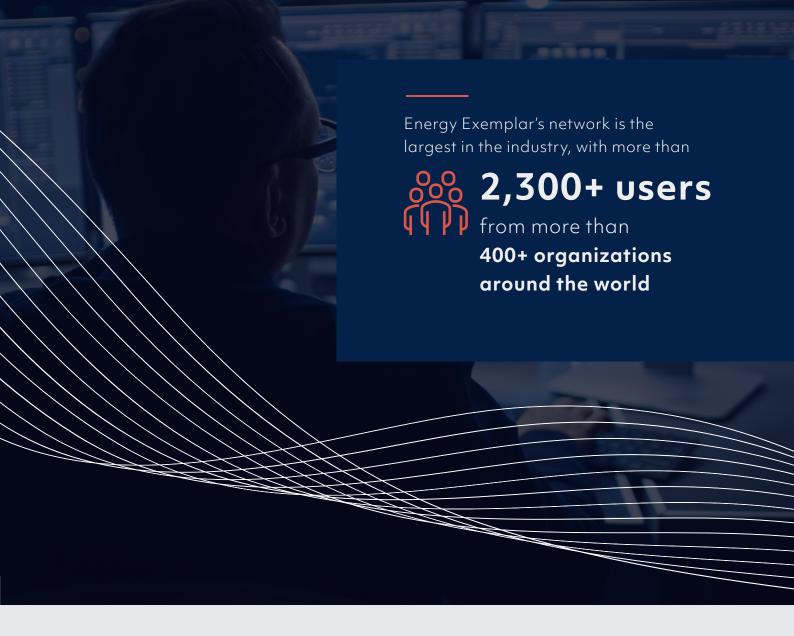
# Benefits of Customizable Flexibility:

- Run real-world studies for greater accuracy
- Analyse hundreds of scenarios for richer insights
- Co-optimise electricity, water and gas systems
- · Simulate competitive behaviors

- Calibrate your simulations to maximise accuracy versus speed
- · Demonstrate auditable results
- Complete control of constraints in your modelling runs.







#### JOIN A GROWING GLOBAL NETWORK

Energy Exemplar's network is the largest in the industry, with more than 2,300 users from 400 companies in 68 countries. Since 1999, we've shared expertise and best practices with our clients through forums, webinars, training and user group meetings.

It's through this network that we learn from you, and you also learn from each other.

We're committed to facilitating this network, expanding it and creating greater access to all the knowledge that is available across it.

# Benefits of the Global Community:

- Network with local, regional and global peers
- Collaborate with the PLEXOS user community
- · Participate in webinars and conferences
- Provide your input on the platform roadmap
- Get exposure to different approaches to solving problems
- Formalise your PLEXOS knowledge through learning and certification



# **How is PLEXOS® Supported?**

# WE DO MORE THAN PROVIDE A SOFTWARE SOLUTION

We're your end-to-end partner that works with you throughout your PLEXOS journey. Working with Energy Exemplar gives you the peace of mind that you will receive top level customer service from the largest team of industry experts in the industry.

#### SIMULATION-READY DATASETS

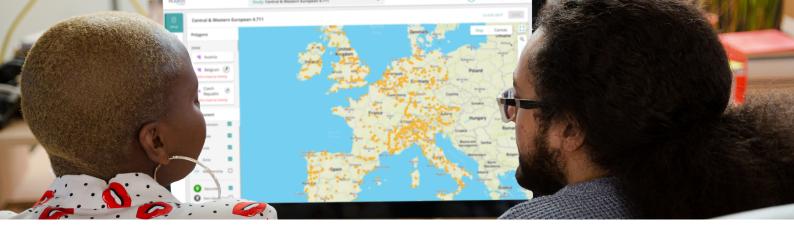
Jumpstart your modelling process with preconfigured datasets. Our dedicated Data Team stays current with the updates of market data, current market assumptions and emerging data sources so that you achieve faster start-up and save your time and resources for making impactful analyses.

#### Learn More

#### **Available Datasets include:**

# North America **EMEA APAC** - Nodal: WECC, ERCOT, EIC - Central and Western EU Zonal - Australis NEM Zonal: WECC, ERCOT, EIC - Eastern EU Zonal Australia WEM Southeast EU Zonal - Japan Latin America Nordics New Zealand Brazil Turkey **Philippines** Chilie West Africa Power Pool Singapore Columbia South Korea El Salvador Taiwan Mexico Peru





#### **IMPLEMENTATION**

Getting started doesn't need to be difficult or resource intensive. Whether you'd like a completely turn-key solution, a roadmap to do it yourself, or somewhere in-between, our experienced team will help you build a strong foundation for future modelling with confidence.

# **Expert Advice and Assistance**

- Database set-up and simulation settings
- · Legacy dataset formatting
- · Simulation performance tuning
- Full implementation

#### **TRAINING**

Training can take place at any time in your journey with us. Many customers begin their journey with some training as part of their proof of concept. Others choose training once they've gone through implementation. Training sessions are always available one-on-one, but we have other options as well.

Learn more about training opportunities.

#### **Additional Training Options**

- Online and self-paced through our learning management system
- Monthly training courses covering new features and industry trends
- Live Training and certification opportunites at our Energy Modelling and Simulation Summits

#### **ONGOING SUPPORT**

Regardless of time zone, our global support network of PLEXOS experts and developers are available to support your business

In addition, we invite all our customers to join our online community, which is a great support hub.

#### Join Our Online Community Portal Offers:

- Access to Online Learning Courses
- Submit and Monitor Support Progress and Responses
- Access the Knowledge Base
- Download Presentations from Other Users Around the World







Energy Exemplar is the industry leader in energy market simulation software. Our software suite, headlined by PLEXOS®, is trusted thousands users around the world for a wide range of applications, from short-term analysis to long-term planning studies. Integrated across electricity, gas, and water systems, the PLEXOS® platform provides exceptional decision insights to our customers.

energyexemplar.com

