

Energy Brainpool
The independent energy market experts

ENERGY BRAINPOOL

THE ENERGY MARKET EXPERTS

Energy Brainpool is the independent energy market expert with focus on electricity and energy trading in Europe. Our expertise includes **analysis**, forecasting and modelling of energy markets and prices, scientific and practice-oriented studies, **individual consulting** as well as **training** for the energy sector.

For 15 years, we have been combining substantial knowledge and competence with practical experience in the area of controllable and fluctuating power.

Our aim is to combine our expertise in the fields of analysis, consultancy and training in individual solutions to set the course for future business success.

OUR PHILOSOPHY

We see ourselves as a partner for our customers and provide services based on the following fundamental values:

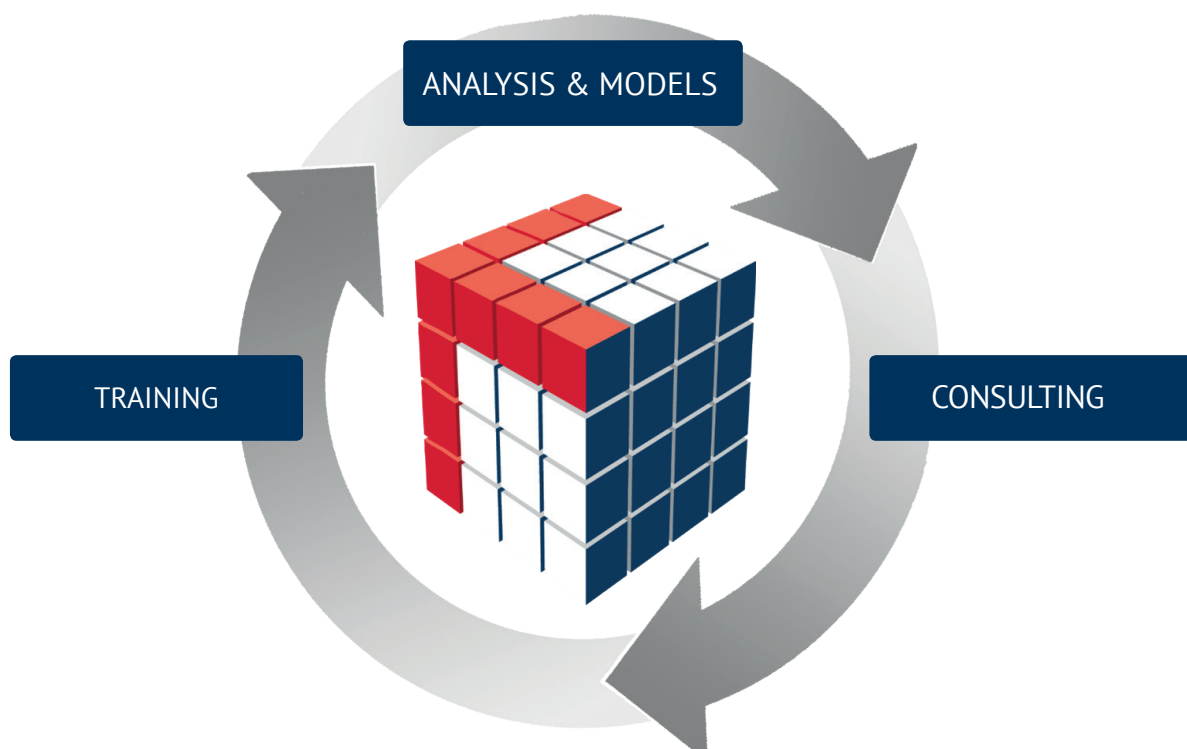
- Neutrality
- Independence
- Trust
- Quality
- Reliability
- Professionalism

OUR APPROACH

In a rapidly changing environment, we are working together with our customers to meet the challenges of the energy sector. Our customers benefit from our business profile and our expertise in the core competencies of analysis, consultancy and training.

With our comprehensive service concept, we are able to support our customers in the field of politics, national and business economics, strategy as well as organisation. We accompany our customers throughout all phases of the solution process – from scientific analysis, developing the ideal strategy and required tools to the practical realization as well as staff and management training.

SOLUTIONS FOR THE ENERGY MARKET OF THE FUTURE



GENERATION / TRADE / SALES

Due to the liberalisation and the Energiewende, Germany's energy turnaround, the European energy market is in a constant process of change. As a result, regulatory, strategic and operational transformations are leading to new challenges and opportunities.

Challenge

- How can sales margins be optimised and customer loyalty increased?
- How can revenues from energy generation and trade increase while reducing the costs of energy procurement?
- How can opportunities be exploited and risks be minimised at the same time?
- How to successfully adapt to changes brought about through the Energiewende?

Our solution

Working together with our customers, we analyse their market potential, costs and revenue options, developing the right solutions and tools to

- support our customers in market entry from strategy to realisation,
- optimise procurement,
- manage portfolios and optimise trading strategies,
- manage risk and
- use chart analysis and trade signal systems.

Case Study

Customer

A German retail electricity supplier

Challenge

The long-term downward trend in electricity prices until mid-2016 has led many electricity suppliers to pursue a one-sided procurement strategy (short strategy). This short strategy, which calls for increased procurement until shortly before delivery, carries considerable risks in the rising electricity market.

Approach

The procurement strategy was adapted to the customer's risk perception and expansion strategy as well as to the current price trend. For this purpose, a risk and procurement manual was developed and a procurement strategy was implemented on the basis of the technical analyses.

Our customers' opinions

"The constant change taking place in the liberalised and increasingly decentralised energy market poses multiple challenges to municipal utilities. This also includes the on-going assessment of power plants and contracts. Energy Brainpool supports BSIENERGY with individually customised seminars, workshops and electricity price forecasts."

Sales and Portfolio Management
BSIENERGY

ENERGY SERVICES

In an increasingly decentralised energy supply system, additional intelligent services gain importance as a source of revenue and a tool for customer retention. These new business fields, however, are still emerging and are highly complex in their realisation.

Challenge

- How to take advantage of the trend towards prosuming?
- What are the energy services of the future?
- How to use synergies through cooperation and collaborations?
- How can promising business models be successfully implemented today?

Our solution

- Together with our customers we observe the market environment and upcoming developments, evaluate technologies and determine the strengths of our customers. We accompany and support our customers in the implementation of these business models.
- We identify optimisation potential, find the right partners and support our customers with the latest moderation and coaching methods, helping them on their way to successful cooperation and mergers.

INVESTMENT AND FINANCING

Asset evaluation in the energy sector is influenced by multiple aspects.

Challenge

- How do regulatory changes influence risk assessment and return?
- How do energy markets develop and what does this mean for financing?
- What revenues can be expected on European energy markets in the long run?

Our solution

- We analyse and evaluate the latest regulatory developments and investigate their effects on energy prices and the value of power plants.
- We model long-term price developments as a decision-making basis for investments, asset and contract assessment and conduct sensitivity analysis based on customers' market perception.
- In trainings and workshops, we train energy sector stakeholders with regard to current developments.

Our customers' opinions

“Current developments within the European market for renewables make it necessary to understand national markets in their complexity and consider potential revenues for investment decisions. That's why we put our trust in price scenarios and return analyses of Energy Brainpool.“

Thomas Staudinger, Geschäftsführer, re:cap global investors ag

RENEWABLE ENERGIES

With the expansion of renewable energies, the transformation of the European energy market is moving forward. The conception of the future market design raises various issues:

Challenge

- How can remuneration systems be developed in line with market requirements while taking all market players into consideration?
- What does this mean for the various price components, for example the EEG- surcharge?
- What do successful business models for renewable energies look like?

Our solution

- We conduct studies on behalf of the transmission grid operators to calculate the EEG surcharge.
- We provide individual consulting, studies and electricity price scenarios for the energy market of the future.
- We develop, optimise and provide consulting on successful business models based on our expertise in generation technology, market and price mechanisms as well as regulatory framework conditions.

Case Study

Customer

BayWa r.e. Solar Projects GmbH

Challenge

Current developments on the European market for renewable energies make it necessary to understand national markets, consider potential revenues in the development and financing of projects and develop successful future business models.

Solution approach

Using the energy market model Power2Sim, Energy Brainpool supports BayWa r.e. Solar Projects with individually customised workshops as well as long-term electricity price scenarios and revenue analyses.

POLITICAL PLAYERS

The ongoing transformation of the market calls for fundamental political decisions that will guarantee system stability.

Challenge

- How should the electricity market be designed?
- How can security of supply, investment incentives and the right degree of regulation be achieved?
- How can regulatory changes be harmonised with the economic interests of individual market players?

Our solution

- We assist in the regulatory decision-making processes in energy policy by means of scientific and practice-oriented analyses and studies.
- We model individual scenarios for energy price development and evaluate the economic consequences for the stakeholders involved.
- We support political stakeholders such as associations, organisations and government ministries by moderating in the decision-making and positioning processes.

Case Study

Customer

Association of electricity generators

Challenge

The revenues of the members of the association depend increasingly on the market prices plus financial subsidies run out across Europe. What are the effects of increasing European CO₂ levies? Which electricity consumers will use the electricity when? What role can Power Purchase Agreements play?

Approach

From our electricity price analyses, we generate resilient revenue expectations and quantify opportunities and risks. In the studies, we convey key statements to the energy industry in a concise and easy-to-understand manner. The experts at Energy Brainpool agree on individual premises in workshops, calculate extensive results and filter out the central statements for you. We compress the energy-economic complexity for the transfer of knowledge in presentations, lectures and studies. Thus, these central statements are made accessible to interested laymen.

SELECTED STUDIES

Effect of a CO₂ tax in the electricity market

Study commissioned by the German Renewable Energy Association e. V., November 2017

Flexibility requirements and options for Europe's future electricity system

Study commissioned by EUGINE, September 2017

Cold dark doldrum

Study commissioned by Greenpeace Energy eG, June 2017

Energy revolution in the Chinese electricity sector: state of the art in 2016

Study commissioned by the China National Renewable Energy Center and Agora Energiewende, June 2017

Contribution of thermal waste treatment plants to the energy transition

Study commissioned by ITAD e. V., February 2017

OUR PRODUCTS AND SERVICES

Analysis

- Fundamental energy market model **Power2Sim** for modelling electricity prices until 2050
- Spot price forecast for the day-ahead auction at EPEX Spot SE
- Scientific studies on the energy market design, the development of electricity prices and price components as well as influences of renewable energies
- Individual electricity price scenarios until 2050
- Trend forecast of the load curve for the optimisation of power plant scheduling

Individual consulting approaches

- Trade strategies, risk, portfolio and procurement management
- Development and optimization of marketing strategies and business models
- Electricity trade and marketing

Training

- Open and in-house seminars, workshops, management trainings on current topics of the energy sector
- E-learning courses on the basics of electricity, energy and gas industry as well as power plant technology
- Practice-oriented simulation games for energy trade

SELECTED REFERENCES



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