

enercast web service for scientific research projects

Scientists in the renewable energy sphere can benefit from access to enercast's performance data*. By combining this with their own tools, this solid data can be used to calculate scenarios important to their research projects - reliably, effectively and quickly.



Benefits

- Scientists receive around 5,000 gigabytes (as of 2014) of reliable data
- Data can be accessed quickly and easily processed
- Efficient access allows scientists to work freely with the data



Challenge

enercast offers its clients highly specialised products which are optimised for usage. For direct marketers and other companies in the energy industry, enercast's specialists can see very clearly what the customer needs from experience and the market situation. For this purpose, enercast will individually develop and adapt a package for the client.

In the area of scientific research by universities and research institutions, the situation is different. On the one hand, the scientists cannot usually define specifically what needs to be done at the beginning of their research. On the other, the result is not clear from the outset. Therefore the requirements for data and analysis change throughout the course of the research. Especially in the field of renewable energy and energy systems technology, scientists need free access to reliable performance data.

Solution

For research by Fraunhofer IWES in Kassel, Dr Reinhard Mackensen uses enercast's technology. The enercast web service was developed for this purpose, allowing scientists and other users, to use enercast's data remotely from their own systems. All historical performance data* and weather information is available on the client's own system via the interface and can be use for research at a reasonable price. This flexible, high-performance access to data facilitates scientific work. Scientists will not be slowed down by slow or incorrect data or complex queries from numerous sources. They can therefore extract the required information without any delays.

Benefits

enercast grants research institutions access to the data at a low cost because the company has a strong interest in the progress of scientific research into the essential theme of renewable energy and that enercast's systems can be used to help.

Scientists cannot work with estimates, but require reliable data in large quantities that can be quickly accessed and processed. With the enercast web service, Fraunhofer IWES is able to freely access the Big Data records* (around 5,000 gigabytes as of 2014) and link them to tools such as MATLAB. This efficient access allows scientists to work freely with the data, and to provide reliable algorithms without complex queries, for example renewable energy supply scenarios. "With the enercast web service it is possible for us to intensively use enercast's functionality with our own tools. As a result, our scientists are afforded free rein for their findings," says Dr Reinhard Mackensen, Head of Energy Computer Science and Information Systems at Fraunhofer IWES.

(* exclusively performance data that has been released by clients for this purpose)

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Dr.-Ing. Reinhard Mackensen Head of Energy Computer Science and Information Systems at Fraunhofer IWES

Client | Fraunhofer IWES

The Fraunhofer Institute for Wind Energy and Energy System Technology IWES, with around 260 employees, is a facility of the Fraunhofer Society for the Advancement of Applied Research (FhG). The research includes the full wind energy spectrum and the integration of renewable energies in supply structures. The study of decentralized power grids and smart grids, as well as the development of efficient wind turbines are the focal points of the Institute.







Services



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convincing



With its forecasting services fort he energy sector, enercast GmbH is one of the 365 "Selected Landmark 2012".



The WRG (Wirtschaftsförderung Region Göttingen) conferred Enercast GmbH with the Innovation Award 2011. Enercast GmbH came in third in the services category.



The web service enercast placed third for the Innovation-IT Award 2011 in the category industry software which is awarded by the Initiative Mittelstand.

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