CUSTOMER STORY

Sustainability in data centers

Photo: AUDI AG

Services
- Data Center Strategy
- Data Center Planning & Relocation

User experience
- Increased employee satisfaction

Business impact
- Improved sustainability
- Sustainable solution
- Standardisation
- Cost reduction
- Strengthening competitive advantages
- Ensuring compliance and governance
- Increase in customer satisfaction

As part of an internal assessment, Computacenter is supporting AUDI AG in developing a strategy for increased energy efficiency and sustainability in data centers

Objective

AUDI AG has commissioned a new data center in Ingolstadt. From the outset, they ensured the infrastructure's energy efficiency and sustainability met the high requirements of Audi's 'Mission:Zero' environmental programme. The next step was to carry out a precise site assessment, which aimed to develop a long-term data center strategy and further improve sustainability.

Solution

Computacenter was commissioned to carry out the project. The data center maturity model of the CLC/TS 50600-5-1 sub-standard for determining the maturity level of energy efficiency and sustainability of data centers served as the basis. Together with its partner Data Center Excellence GmbH, Computacenter assessed all elements of the data center infrastructure and compiled the results in a final report.

Results

Thanks to the structured approach along the maturity model, AUDI AG has received a detailed and transparent report on the energy efficiency and sustainability of its new data center. This means that the car manufacturer is not only excellently prepared for possible external certification, but also has valid data that will be incorporated into its data center strategy. This will enable Audi to drive forward further innovations to increase sustainability in a targeted manner.

Objective

Determining the current situation to identify potential for improvement

After a construction period of around five years, AUDI AG has put a new data center into operation at the incampus Technology Park in Ingolstadt. Right from the start, energy efficiency and sustainability were the top priorities in the planning and installation, in addition to maximum availability and the highest level of reliability, in order to meet the high requirements of Audi's 'Mission:Zero' environmental programme.

"Audi is aiming for carbon-neutral production at all of its sites by 2025," explains Stephan Asang, Executive Account Manager at Computacenter, "and the environmental footprint of the data centers naturally plays a key role in this." The use of state-of-the-art technologies, an innovative concept for waste heat utilisation, and an energy supply with green electricity ensure sustainable operation of the 800 or so server and data cabinets at the new site. With the aim of developing a long-term data center strategy and further improving sustainability, the next step was to carry out a precise assessment based on a generally recognised standard. An internal sustainability audit was planned, the aim of which was to achieve greater transparency and identify potential for improvement using comparable and verifiable key figures.

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>
> **Stephan Asang,**
> **Executive Account Manager,**
> **Computacenter**

Solution

Support from competent partners: Computacenter and Data Center Excellence

AUDI AG relied on the support of its long-standing IT partner Computacenter to carry out the audit. Thanks to its extensive experience in the planning, upgrading and energy-efficient refurbishment of data centers and its high level of consulting expertise in the field of sustainable IT, the service provider was ideally positioned for the project. Computacenter's expertise was complemented by extensive knowledge in the application of the EN 50600 standard, which is divided into various subject areas and provides a holistic approach to the planning, construction and operation of data centers.

Audi also benefited from Computacenter's close partnership and collaboration with Data Center Excellence GmbH. The company supports its customers in the certification of data centers in accordance with the EN 50600 standard and was involved in the planning and implementation of the Audi project so that the car manufacturer had access to a selected team of experts.

EN 50600: Conducting an audit based on an international standard

"The project team at Audi also decided to use the data center standard EN 50600 as the basis for the planned audit," reports Rico Ueberschär, Senior Consultant Dynamic Data Center at Computacenter. The CLC/TS 50600-5-1 part of the standard was used, which describes a data center maturity model that makes it possible to determine the maturity level of the energy efficiency and sustainability of data centers. The team used this model to assess all elements of the data center infrastructure - from the building, including energy supply and climate control, to the hardware and software used, right through to management and reporting. Following the maturity assessment, the results were analysed and compiled in a report.

> Computacenter and Data Center Excellence have prepared Audi for a possible external certification. Above all, however, the audit has provided Audi with valid data on the basis of which the company can drive forward innovations to increase sustainability in its data center in a targeted manner.
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> **Ulf Schade,**
> **Unit Director Data Center Solution Sales & Development, Computacenter**

"It was an advantage that our partner Data Center Excellence is actively involved in the standardisation committees," emphasises Ueberschär. "This enabled us to offer our customer the opportunity to use a revised, but not yet published, edition of the standard as the basis for the project." AUDI AG followed a suitable recommendation so that the audit met the latest criteria and requirements.

Results

Strategy development based on valid data

Thanks to the structured approach based on the maturity model of the CLC/TS 50600-5-1 sub-standard, AUDI AG received a detailed and transparent report on the energy efficiency and sustainability of its new data center. Based on comparable and verifiable data, the current maturity level was determined and potential improvements identified.

"In this way, Computacenter and Data Center Excellence have prepared Audi for possible external certification," says Ulf Schade, Unit Director Data Center Solution Sales & Development at Computacenter, summarising the project result. "Above all, however, Audi now has valid data on the basis of which the company can drive forward innovations to increase sustainability in its data center in a targeted manner."

The results of the audit will be incorporated into the Ingolstadt-based company's data center strategy, but can also be used beyond the site as a basis for AUDI AG's sustainability report for the entire Group. Finally, the methodology and implementation of the audit can serve as a blueprint for developing sustainability certificates for data centers throughout the Volkswagen Group.

AUDI AG

AUDI AG, a wholly owned subsidiary of the Volkswagen Group, stands for the brand slogan 'Vorsprung durch Technik'. Outstanding quality, visionary design and innovative technology have made Audi a leading manufacturer of high-quality vehicles. AUDI AG employs around 87,000 people worldwide and has 19 production sites in twelve countries. In 2022 alone, the manufacturer delivered more than 1.6 million vehicles.

Further information

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