

Newsletter 2025 / 1

Dear Readers

We wish you a healthy, happy and sunny New Year with a lot of satisfaction!

A lot has happened at Edisun since our last newsletter.

The Valencia region, where our two Requena solar plants with a total of 12 MWp are located, was hit by an extreme storm, and the unspeakable suffering with many deaths and major infrastructure damage still moves us today. Fortunately, no employees nor relatives of Edisun's suppliers were harmed. Thanks to their great commitment, the solar plants were ready for use again after a short time.

On a positive note, we can report that the large "Fuencarral" solar project with a capacity of 941 MWp in the Madrid metropolitan area received all relevant permits at the end of November 2024; among other things, the administrative building permit, which is also known as AAC. Discussions with a consortium of banks on project financing are now in full swing. The first thing we focus on is securing financing until the start of construction, i.e., payments for lease as well as land rights, official fees, bonds and the first pre-orders.

The Board of Directors has also decided not only to focus the "Fuencarral" solar project on feeding solar power into the power grid, but also to seize the business opportunity to offer renewable energy for data centers. This should enable higher profitable sales. We will go into more detail about the motivations and their effects in this issue.

2024 has clearly shown us that global warming is progressing unabated as a result of the higher greenhouse effects and that severe weather conditions with natural disasters are occurring more and more frequently on the one hand and will not pass without a trace for Edisun. On the other hand, this is precisely reason and proof enough for us that Edisun is on the right path to do something about it.

We wish you a good read

Dr. René Cotting CFO (mandated) and Head Investor Relations Edisun Power Europe AG

The ad hoc reporting of the Edisun Power Group is available on the website at: https://www.edisunpower.com/en/home-en/investors-en/reporting

Receipt of official building permit for "Fuencarral" and additional AI business opportunity

The large-scale solar project "Fuencarral" (941 MWp), consisting of the three large-scale projects Pradillos (390 MWp), Fuencarral (291 MWp) and Loeches (260 MWp) and their grid connection infrastructure, received the official building permit (AAC) in November 2024 after more than four years of development. The achievement of this significant milestone is extremely satisfying for all parties involved.



Figure 1: Large-scale plant "Fuencarral" (941 MWp) and status of permits

As explained in the last newsletter, the major project is located near the Spanish capital Madrid; a region with the highest energy consumption in Spain. The necessary rights for the construction and feeding of the solar power into the Spanish electricity grid were acquired by Smartenergy at the end of 2023 and have since been further developed by the latter on behalf of Edisun. At the end of December 2024, the Board of Directors of Edisun has now acquired further Special Purpose Vehicles (SPVs) from Smartenergy and commissioned them to additionally secure the rights to purchase (in addition to feed-in) electricity, land rights for the industrial use of data centers and security deposits (bonds). Thus, in addition to the normal sale of electricity, additional business opportunities have been created: The sale of renewable electricity for the operation of artificial intelligence (AI). In doing so, Edisun wants to benefit from the additional demand for electricity as a result of the use of AI applications and from the tightening regulations in Europe for the lowest-emission operation of data centers (European Energy Efficiency Directive EED) (see ad-hoc publicity of December 23, 2024).

Enabling AI with renewable energy

Al has become an indispensable part of our everyday lives: Whether it's facial recognition for unlocking our mobile phones, Deepl for translating texts, Google Maps for route planning or intelligent assistants such as ChatGPT and Adobe Firefly/DALL-E for creative image generation. But what only few people recognize is that these applications consume enormous amounts of electricity. Energy that, if not produced with renewable energy, further fuels CO2 emissions and thus global warming.

Al systems are real energy guzzlers. Training and deploying Al tools require large data centers that are used to store, process, and distribute data for applications such as websites, cloud computing and Al services. Servers are the main consumers of electricity, followed by cooling and storage systems. According to a new study by EPRI, a single query to the Al chatbot ChatGPT consumes 2.9 watt hours, a Google search query so far only 0.3 watt hours and new queries that also generate images or videos a multiple of that.

With the boom in generative AI applications, the electricity consumption of all data centers in the U.S. has more than doubled from 2020 to today to over 150 TWh/year, which is about 2.5 times the electricity consumption of Switzerland.



Figure 2: Enabling renewable electricity for large data centers (Cotting, R., image created with AI DALL-E3)

Although the global electricity demand of data centers is currently still relatively low at 3%, according to the International Energy Agency (IEA), it is growing with the rapid development and use of artificial intelligence. In Ireland, data centres already account for over 20% of electricity consumption. The IEA's global conference on "Energy and Al" at the beginning of December 2024 highlighted that renewable energies are clearly to be preferred in the planning, approval and investment in the infrastructure of data centres and power grids. Al also has the potential to accelerate innovations, especially in the field of clean energy technologies and new methods for training and testing Al systems. Although this can slow down the increase in electricity consumption somewhat, it cannot completely prevent it.

Behind this large demand for electricity are local challenges, as data centers are built on a large scale and lead to a significant load on local power grids. If operations and backup systems are supplied with emission-intensive power sources, the goals of the energy transition can hardly be achieved. In view of this concern, but also due to sharply tightening regulations in Europe, operators of large data centers are actively committed to the procurement of low-emission electricity sources from renewable energies.

The significance for Edisun's large-scale project "Fuencarral"

Data center operators need access to the power grid. However, they currently only receive this in Spain if they also have a renewable feed-in point (50% nominal power). The reason is understandable: the large, expected demand for electricity from additional data centers could destabilize the power grid and lead to 'blackouts'. The responsible ministry MITECO has therefore pulled the emergency brake and instructed the operators of data centers to use renewable energies and to develop reference points (consumption) at their connection points (feed-in). As a result of the boom in AI applications, there is currently a shortage of connection points for getting power to data centers in the Madrid region. These can only be obtained through uncertain, lengthy and complex tenders.

This is the real "game changer" for Edisun: The large-scale "Fuencarral" plant shall additionally be designed for new data centers in the Madrid region. To this end, Edisun has now committed Smartenergy to carry out the necessary development work to secure the electricity supply points (362 MWn) as well as to adapt the use and secure further land requirements. In addition to the direct sale of renewable electricity into the power grid, the large-scale plant shall also sell a large part of it to operate data centers. Due to the co-location of the feed-in and consumption points, this will enable the installation of a large data center on corresponding nearby areas. According to a bank financing the project, significantly higher revenues are to be expected.

Investor search and risk minimization

The large-scale "Fuencarral" plant already received the very important grid access, granted connection rights, environmental permit (DIA), administrative permit (AAP) and now also the official building permit (AAC). Thus, the value of the large-scale plant is substantial. The acquisition of the SPVs to enable the "Renewable Energy for Artificial Intelligence" orientation, as described above, was partially paid with the proceeds from the sale of the Italian project portfolio of around 159 MWp to Smartenergy. At the same time, Edisun has started a process to attract infrastructure funds, private equity and/or owners and operators of data centers to invest in the large-scale plant. Discussions with banks on project development and construction financing are underway. In the interest of Edisun shareholders, Smartenergy has agreed to buy back the large-scale "Fuencarral" plant if its financing is not achieved in time. We will keep you up to date.

Sources:

https://www.iea.org/events/global-conference-on-energy-and-ai#overview

https://www.iea.org/topics/artificial-intelligence

European Commission: 2024 Best Practice Guidelines for the EU Code of Conduct on Data Centre Energy Efficiency EPRI: Powering Intelligence, Analyzing Artificial Intelligence and Data Center Energy Consumption, 2024 White Paper Patiño M.A.: Grandes grupos libran una batalla de 80.000 millones por los ,data centers', Expansión Nacional 18. Nov 2024

On our own behalf

We were able to successfully introduce a new accounting system (ERP) for Edisun Power Europe AG and Edisun Power Schweiz AG, i.e., two weeks ahead of schedule and under budget. We have replaced the Navision ERP, which is no longer supported by Microsoft, with Business Central. It was implemented with the help of our long-standing partner Aproda and Smartenergy's accounting and IT team. The picture shows the project team that gave the successful GO-LIVE on a weekend in November.



Figure 3: Project team for the new ERP implementation of Edisun

Agenda

Publication Annual Results 2024 Zurich, 28 March 2025: <u>www.edisunpower.com > investors > reporting</u>

Edisun Power Annual General Meeting 2025 (at the METROPOL in Zurich) on May 2, 2025