streamSAVE+ Dialogue Meeting #09

Streamlining Energy Savings Calculations

Energy performance and savings in data centres

Date: Thursday 22 January 2026 **Duration:** 11.00 – 12.15 CET
Registration link: Meeting Registration - Zoom **Online**

MEETING AGENDA

Background and objectives

Data centres are one of the sectors with the biggest growth in energy demand. The impact assessment (SWD(2021) 623 final) of the new Energy Efficiency Directive (EED, (EU)2023/1791) estimated that the energy consumption of data centres was about 77 TWh in 2018 (i.e. 2.7% of the EU electricity demand), representing an increase by 42% vs. 2010. The assessment expected an increase by 28% by 2030 (about 98 TWh, i.e. 3.2% of the EU electricity demand) (based on Montevecchi et al. 2020).

The sector has already made large energy efficiency improvements that partly compensated this growth until now. However, the rise of AI applications accelerates the increase in electricity demand. +12% per year over the last five years in the electricity consumption from data centres worldwide, according to the IEA.

This growing energy demand from data centres has been identified among key challenges to be addressed in the new EED, that introduced a new Article 12, focused on data centres. It requires Member States to monitor the energy performance of data centres with a power demand of 500 kW or more, and set the legal basis for possible minimum performance standards for data centres.

This nineth dialogue meeting of streamSAVE+ will complement the dialogue meeting done in June 2025 on this topic, by presenting the new streamSAVE+ methodologies for calculating energy savings in data centres. Findings from the latest assessment of the energy performance and sustainability of data centres in the EU will put the topic into perspective, both in terms of data issues and trends.

Agenda

11:00 – 11:05	Quick updates about streamSAVE+ **| Jiří Karásek** (SEVEn)
11:05 – 11:20	The streamSAVE+ methodology about savings calculation for IT equipment and systems in data centres **| Pedro Moura** (ISR – Coimbra University, Portugal)
11:20 – 11:25	Q&A

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11:25 – 11:40	The streamSAVE+ methodology about savings calculation for cooling of data centres | **Matevž Pušnik** (Jozef Stefan Institute, Slovenia)
11:40 – 11:45	Q&A
11:45 – 12:00	Main findings from the Assessment of the energy performance and sustainability of data centres in the EU | **Simon Hinterholzer** (Borderstep Institute)
12:00 – 12:10	Q&A and open discussion about energy performance of data centres, data issues and energy savings calculations
12:10 – 12:15	Wrap-up and next steps

Discussions will be under Chatham House Rule: the minutes will not mention any name or country. All discussion points included in the minutes will be anonymized.

Dialogue meeting moderated by Jean-Sébastien Broc (IEECP).

Further readings

New streamSAVE+ methodologies (see chapters 3 and 4 about data centres): https://streamsaveplus.eu/storage/app/media/uploaded-files/d22-extended-guidance-for-standardized-savings-methodologies-indicative-values.pdf

Acton, M., Booth, J., Paci, D. (2025). 2025 Best Practice Guidelines for the EU Code of Conduct on Data Centre Energy Efficiency. Joint Research Centre report JRC141521.

Brocklehurst, F. (2024). Public Data on Data Centre Energy Use. Report for the 4E TCP (Technology Collaboration Programme on Energy Efficient End-Use Equipment) – EDNA (Efficient, Demand Flexible Networked Appliances Platform).

Heatubun, D., Dragan, I., Bolchi, M., Hinterholzer, S., Hintemann, R., Marx, N. O., & Furda, P. (2025). Assessment of the energy performance and sustainability of data centres in EU. First technical report to the European Commission, July 2025.

Hinterholzer, S., Lopes Bautista, P., Marx, N., Furda, P., Bolchi, M., Dragan, I., Beucker, S., Heatubun, D., Hintemann, R. (2025). Assessment of next steps to promote the energy performance and sustainability of data centres in EU, including the establishment of an EU-wide rating scheme. Second technical report to the European Commission, October 2025.

Kamiya, G., Coroamă, V.C. (2025). Data Centre Energy Use: Critical Review of Models and Results. Report for the 4E TCP (Technology Collaboration Programme on Energy Efficient End-Use Equipment) – EDNA (Efficient, Demand Flexible Networked Appliances Platform).

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Montevecchi, F., Stickler, T., Hintemann, R., Hinterholzer, S. (2020). Energy-efficient Cloud Computing Technologies and Policies for an Eco-friendly Cloud Market. Final Study Report by Austria's Environment Agency and Borderstep Institute for the European Commission.

Yilmaz, C. (2023). Achieving Sustainable Digitalization: Strategies for Energy Savings in Data Centres. Presentation at the final dialogue meeting of streamSAVE.

Information and links on energy performance of data centres on the European Commission's website: https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficiency-targets-directive-and-rules/energy-efficiency-directive_en#energy-performance-of-data-centres

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