

streamSAVE+ Dialogue Meeting #05

Streamlining Energy Savings Calculations

Data centres & savings data: from potential to action

Date: 26 June 2025

Duration: 14.00 – 15.15 CEST

Online: <https://us06web.zoom.us/meeting/register/Pay3tqSHTPuwA9t3W1aA6A>

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 fifth dialogue meeting of streamSAVE Plus will discuss data about energy consumption and energy savings in data centres, the assessment of energy savings potential and calculation methods to monitor energy savings achieved in this sector. This will be illustrated with the findings of recent studies about international reviews and the case of France (and more specifically in the context of France's white certificates scheme).

Agenda

14:00 – 14:05	How data centres are addressed in streamSAVE+ Pedro Moura (ISR – Coimbra University, Portugal) and Matevž Pušnik (Jozef Stefan Institute, Slovenia)
14:05 – 14:20	Main findings from international reviews of energy efficiency in data centres and related policies Fiona Brocklehurst (Ballarat Consulting, UK)
14:20 – 14:25	Q&A
14:25 – 14:40	Potential for energy savings in data centres in France Nathan Chiantaretto (Max Dubois Consultant)
14:40 – 14:45	Q&A
14:45 – 14:55	Example of a new standardized calculation method about free cooling in data centres Nathan Chiantaretto (Max Dubois Consultant)
14:55 – 15:00	Q&A
15:00 – 15:10	Open discussion about energy efficiency in data centres and energy savings calculation
15:10 – 15:15	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

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).

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

Brocklehurst, F (2024). [Policy development on energy efficiency of data centres](#). Report for the 4E TCP (Technology Collaboration Programme on Energy Efficient End-Use Equipment) – EDNA (Efficient, Demand Flexible Networked Appliances Platform).

Brocklehurst, F (2022). [International review of energy efficiency in Data Centres](#). Report for IEA Energy in Buildings and Community TCP Building Energy Codes Working Group.

Hoberg, N. (2024). [Implementing the EED: Data centers and the German Energy Efficiency Act](#). Presentation at the Concerted Action EED.

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).

Kamiya, G., Bertoldi, P. (2024). [Energy Consumption in Data Centres and Broadband Communication Networks in the EU](#). Joint Research Centre report JRC135926

MDC (2024). [L'efficacité énergétique dans les datacenters](#) [Energy Efficiency in Data Centres]. Extract of the report by Max Dubois Consultant for ADEME, ATEE and France Datacenter.

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