

Fit for 55

Energy performance and waste heat utilisation in data centres (EED recast, Articles 26 and 12)

Nikolaos Kontinakis, European Commission, DG.ENER.B2 CA EED plenary meeting, 23/10/2025

Priorities of the new Commission

Competitiveness Compass:

- 1. Closing the innovation gap
- 2. A joint strategy for decarbonisation & competitiveness
- Clean Industrial Deal &
 Action Plan for Affordable Energy
- 3. Increasing security & reducing excessive dependencies



AEAP: lowering energy costs

2025

Action 1
Making electricity bills more affordable

More efficient network charges

Reduced taxes & levies

Increased retail competition

Action 2

Action 2

Bring down costs of electricity supply

Long-term electricity supply contracts

Reduced permitting times

Grid expansion & modernisation

Boosting flexibility

Action 4

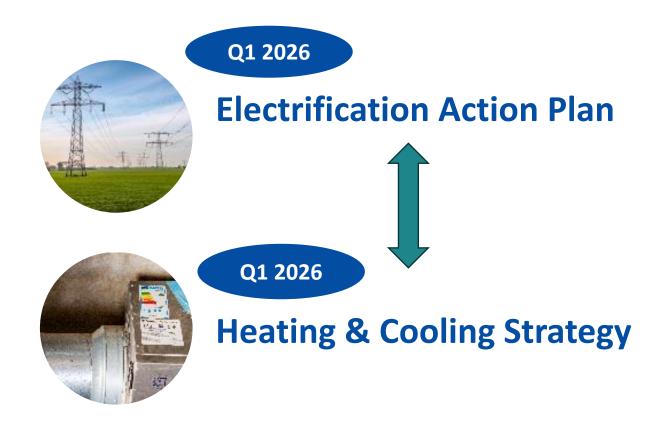
Energy efficiency – delivering energy savings

An energy efficiency market of European dimension

Give consumers access to more efficiency appliances & products



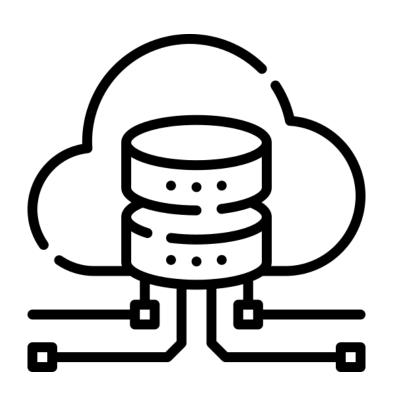
AEAP: two upcoming strategies to deliver better system integration





Delegated Regulation 2024/1364 on data centres

Operators of data centres on EU territory with an installed IT power demand of at least 500kW to communicate to the European database annually:





Information in Annex I



Key performance indicator in Annex II

Then, the Commission will:

- Calculate the data centre sustainability indicators in Annex III
- Make public the data described in Annex IV



Article 25: Heating and cooling assessment and plans

Cost-benefit analysis to facilitate the identification of the most resource-efficient and cost-efficient solutions to meeting heating and cooling needs



Regional and local authorities to prepare local heating and cooling plans at least in municipalities with a total population higher than **45.000**

If potential for high-efficiency cogeneration / efficient district heating and cooling from waste heat, Member States to take adequate measures for such infrastructure to be developed

Encourage development of installations for waste heat, high-efficiency cogeneration and use of heating and cooling from waste heat and renewable energy sources





Article 12(5) of the EED recast

- The Commission, if applicable, to propose...
- Rating / labelling scheme
 - Would act as a "push" for greener digital operations and services, where these are offered to the market or are publicly owned
- Minimum performance standards(?)
 - Could help in the sustainable development of the digital sector, while promoting the deeper integration of data centres and the energy system





Article 26: Efficient district heating and cooling

The first "minimum performance standard" for data centres in EU?

Paragraph 6:

Member States shall ensure that data centres with a total rated energy input exceeding 1 MW utilise the waste heat or other waste heat recovery applications unless they can show that it is not technically or economically feasible ...



Where we are

- In June 2025, Commissioner Joergensen pledged a "new impetus for energy efficiency", a 10-point action plan that includes:
 - A "Data centre energy efficiency package" (Q1 2026). The package will include a Delegated Regulation establishing a rating scheme for data centres in Europe
 - A "Heating and Cooling Strategy" (Q1 2026). The strategy will include system integration and energy efficiency actions helping to unlock 11% of EU heat demand from waste heat recovery
 - Preparing the ground for "Energy efficiency tripartite contracts" one of which could concern waste heat reuse, with one area of implementation heat reuse from data centres to district heating networks





Assessment of the energy performance and sustainability of data centres in the EU

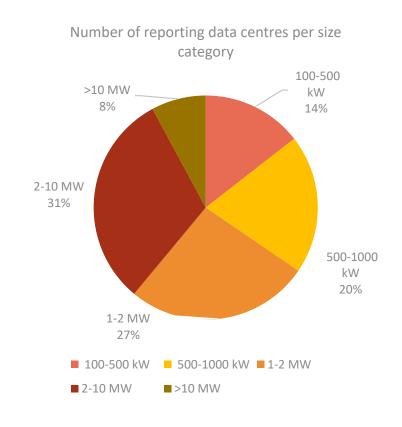
- Published in July 2025
- Assesses data centre energy efficiency and sustainability, and the reporting scheme itself
- Provides all data described in Annex IV of the Delegated Regulation 2024/1364
- A second technical report (October 2025)
 will conclude the project
- https://op.europa.eu/s/z8Jg





A snapshot of the scope

- The project team
 estimated that there
 are 2161 data centres
 in EU under the
 reporting obligation.
- 770 data centres
 (~36%) reported in the
 first year

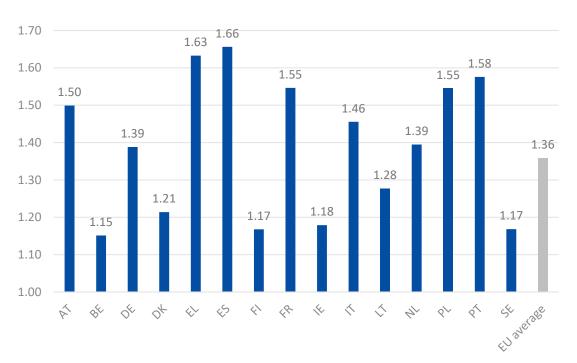


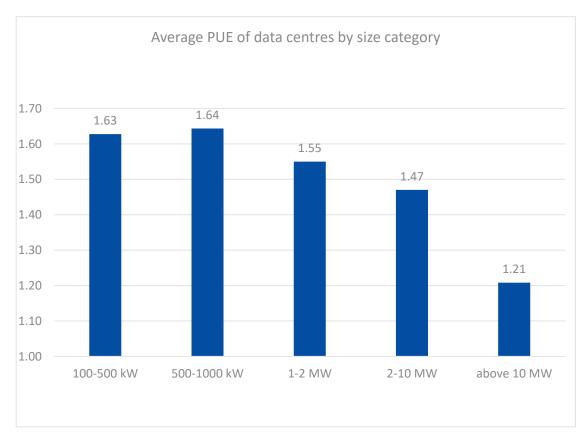
- Total energy consumption of the reporting data centres: ~14000 GWh
- That corresponds to ~0.5% of the total EU electricity consumption



Energy efficiency (PUE, n=681)

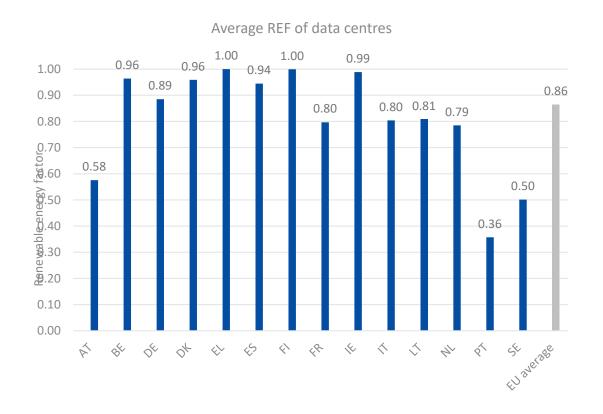


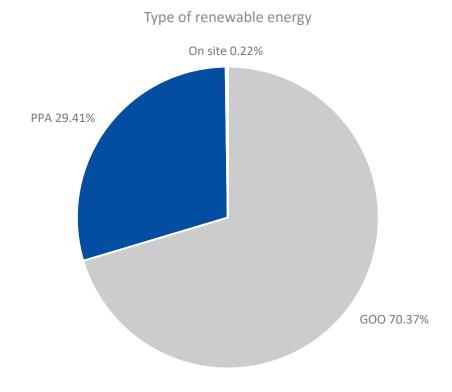






Use of renewables (REF, n=584)

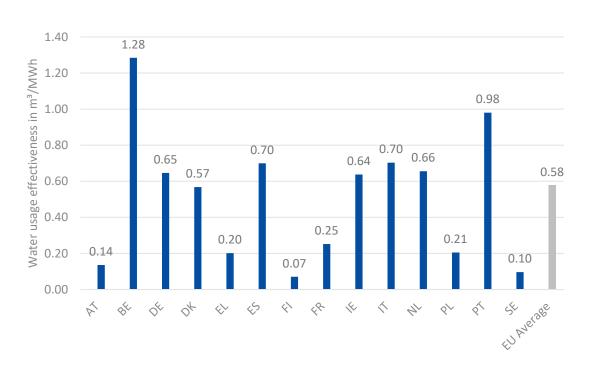




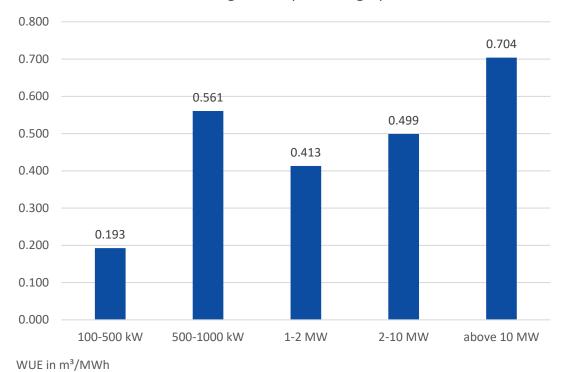


Water efficiency (WUE, n=458)





Average WUE by size category



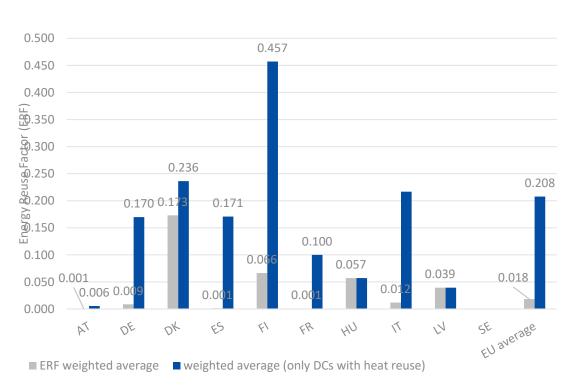


Commission

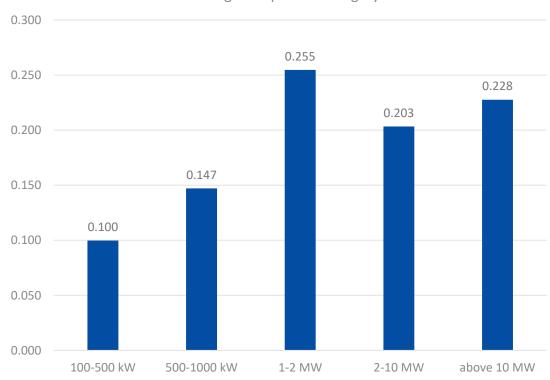


Heat reuse (ERF, n=67)





Average ERF per size category





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

- Published in October 2025
- Assesses next steps to promote the energy performance and sustainability of data centres in EU
- Proposes a rating scheme for data centres
- Proposes minimum performance standards for data centres
- Discusses a pathway towards "climate neutral" data centres
- https://op.europa.eu/s/z9Cc





Next steps

- Data centres
 - A report assessing the second year's (2025) reported data and trends will be prepared by the Commission by the end of the year.
 - The Delegated Regulation establishing a rating scheme for data centres will be put to public consultation by the end of the year.
- Heating and cooling strategy
 - Stakeholder (hybrid) event on the Heating and Cooling Strategy on 7 November
 - Dedicated thematic workshop on waste heat recovery early December





Thank you!

