Climate Neutral Data Center Pact
– Self Regulatory Initiative –

Data centre operators and trade associations are committed to the European Green Deal, achieving the ambitious greenhouse gas reductions of the climate law, and leveraging technology and digitalization to achieve the goal of making Europe climate neutral by 2050. To ensure data centres are an integral part of the sustainable future of Europe, data centre operators and trade associations agree to take the following actions to make data centres climate neutral by 2030.

Energy Efficiency: Data centres and server rooms in Europe shall meet a high standard for energy efficiency, which will be demonstrated through aggressive power use effectiveness (PUE) targets.

- By January 1, 2025 new data centres operating at full capacity in cool climates will meet an annual PUE target of 1.3, and 1.4 for new data centres operating at full capacity in warm climates.
- Existing data centres will achieve these same targets by January 1, 2030.
- These targets apply to all data centres larger than 50KW of maximum IT power demand.
- In recognition of the European Commission's interest in creating a new efficiency metric, trade associations will work with the appropriate agencies or organizations toward the creation of a new data centre efficiency metric. Once defined, trade associations will consider setting a 2030 goal based on this metric.

Clean Energy: Data centres will match their electricity supply through the purchase of clean energy.

- Data centre electricity demand will be matched by 75% renewable energy or hourly carbon-free energy by December 31, 2025 and 100% by December 31, 2030.
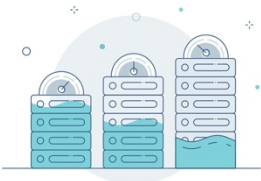
Water: Data centres will conserve water and set ambitious water conservation targets.

- By 2022, data centre operators will set an annual target for water usage effectiveness (WUE), or another water conservation metric, which will be met by new data centres by 2025, and by existing data centres by 2030.
- The water metric target may vary depending on the data centre design specification.

Circular Economy: The reuse, repair and recycling of servers, electrical equipment and other related electrical components is a priority for data centre operators.

- Data centres will set a high bar for circular economy practices and will assess for reuse, repair, or recycling 100% of their used server equipment.
- Data centre operators will increase the quantity of server materials repaired or reused and will create a target percentage for repair and reuse by 2025.

Circular Energy System: The reuse of data centre heat presents an opportunity for energy conservation that can fit specific circumstances. Data centre operators will explore possibilities to interconnect with district heating systems and other users of heat to determine if opportunities to feed captured heat from new data centres into nearby systems are practical, environmentally sound and cost effective.

Governance: Beginning January 1, 2021 representatives from the data centre trade associations and companies that have signed the initiative, and the European Commission will meet twice annually to review the status of this initiative.

By no later than July 1, 2023, signatories will certify adherence. The initial period of measurement will cover January 1, 2022 through December 31, 2022. Following the first certification, adherence will be reported every four years.

Cloud Infrastructure Providers in Europe (CISPE) and the European Data Centre Association (EUDCA) will make the text of this initiative and the list of signatories publicly available on their respective websites or through a dedicated site. All trade association signatories, except for CISPE and EUDCA, will publish the initiative on their websites.

Appendix: Definitions, Metrics and Key Terms

Energy Efficiency
- Power Usage Effectiveness (PUE) is measured annually using ISO/IEC 30134-2:2016 or EN 50600-4-2
- For data centres and server rooms with a planned IT capacity at or below 2MW, energy consumed for office space, ancillary building space, and general usage may be excluded from PUE calculations.
- Cool climates are those that are at or below a cooling degree day measurement of 49.99 based on annual data in 2019 for the NUTS 2 Region compiled by Eurostat.
- Warm climates are those that are at or above a cooling degree day measurement of 50.00 based on annual data in 2019 for the NUTS 2 Region compiled by Eurostat.
- Full Capacity – A data centre is at full capacity 24 months after it becomes operational. A data centre operator may exempt up to 10 percent of their data centres that have been operational for 24 months from being considered at full capacity if such data centres are using less than a minimum of 75% of the power capacity, based on the power measured at the power meter(s) representing the critical load over a rolling 90-day period, when compared to the planned data centre design critical load capacity.
- New data centres will refer to data centres that have commenced construction after January 1, 2025

Clean Energy
- Renewable is defined as technologies identified as renewable under Directive 2009/28/EC and carbon-free energy means any type of electricity generation from wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas, biogases, nuclear power, and carbon capture and storage.
- Renewable energy is measured based on the Renewable Energy Factor defined by CSN EN 50600-4-3; or a company may also measure renewable energy or carbon-free energy based on a publicly available methodology; or a company may measure renewable energy or carbon-free energy based on a published third party methodology, such as Green-e, RE100 or the Greenhouse Gas Protocol.
- Renewable energy can be measured at the facility, country, or company portfolio level within the Member States of the European Union.

Water
- Water Usage Effectiveness is measured using The Green Grid metric WP#35

Application
- All aspects of this initiative will be met by data centre operators unless otherwise stated.
- Data centre operators will outline their own data centre footprint and how each facility within that footprint meets the requirements as part of their own certification. The data centre operator is the entity that manages or owns the facility for the purposes of meeting the requirements for energy efficiency, water, and circular energy systems. Responsibility for clean energy will be met by the entity that pays for the electric energy supply, unless a customer of that facility accounts for all or a portion of that electricity as part of their own publicly declared clean energy goal. Responsibility for the circular economy will be met by the owner of the eligible equipment.
- Nothing included in this initiative will apply to data centres located in European overseas countries and territories.