Climate Neutral Data Center Pact

Audit Preparation for compliance with the Self-Regulatory Initiative and alignment with the EU Taxonomy Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021

8.1. Data processing, hosting and related activities

A document prepared by:

Move Forward with Confidence

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28-02-2023

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This document and the referenced Appendix may be subject to updates in later revisions

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1. INTRODUCTION

The primary purpose of this Auditing Framework is to provide the verification body with a description of the evidence required in order assess and verify alignment with the EU Taxonomy Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021, Annex 1 and 2, Section 8.1. Data processing, hosting and related activities as applied to the Owner/Operator of the Data Center facilities.

In addition, and as part of the evidence gathering to verify compliance with the Taxonomy, this document will also outline the required systems and procedures for measurement, recording and reporting of data and also the KPIs (Key Performance Indicators) of operational sustainability. As illustrated in the Table of Correspondences (Appendix 2), the same Taxonomy processes and evidence can also be applied for verification of the Targets within the CNDCP Self-regulatory Initiative (SRI). By leveraging the process and evidence gathering required to verify compliance with the Taxonomy, this Auditing Framework will enable Owner and/or Operator of the Data Center facilities to report against the CNDCP Key Performance Indicators for operational sustainability. This secondary purpose of the Auditing Framework optimizes (it prevents duplication and recognizes existing relevant certifications) the cost involved verify their alignment with the Targets of the CNDCP Self-regulatory Initiative (SRI)

To offer a comprehensive overview of existing certification requirements and avoid duplication when Owner and/or Operators of the Data Center facilities use and are already certified against multiple standards, the Table of Correspondences included in this Auditing Framework provides an analysis and mapping of corresponding between European (CEN-CENLEC) and International (ISO/EIC) standards, when two equivalent standards exist and achieve the same or similar purpose. The Table of Correspondences will be completed in the future by reference to American ASHRAE ANSI/ISA Standards which might be required by Owner and/or Operators of the Data Center with a global footprint.

1.1 Commission Delegation Regulation (EU) 2021/2139, Section 8.1, Technical screening criteria

The Taxonomy Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021, Annex 1 and 2, 8.1. Data processing, hosting and related activities technical screening criterion states "The activity has implemented all relevant practices listed as 'expected practices' in the most recent version of the European Code of Conduct on Data Centre Energy Efficiency, or in CEN-CENELEC document CLC TR50600-99-1 'Data Center facilities and infrastructures - Part 99-1: Recommended practices for energy management', however, the technical screening criteria also states that "Alternative best practices from the European Code of Conduct on Data Centre Energy Efficiency or other equivalent sources may be identified as direct replacements if they result in similar energy savings.

The implementation of the latest edition of the JRC Code of Conduct for Data Center Efficiency 2021 Best Practices Guidelines and/or equivalent (Standards based) compliance shall be verified by an independent third-party and audited at least every three years

Further information related to the European Commission Taxonomy Compass for Data processing, hosting and related activities can be found on the link below

weblink: https://ec.europa.eu/sustainable-finance-taxonomy/activities/activity/84/view

1.2 The CNDCP basis of Compliance to the Self-Regulatory Initiative (SRI) targets

The basis of Compliance to the targets adopted by the Climate Neutral Data Center Pact (CNDCP) is the ability to calculate and report against those targets using internal business processes or recognised EN, ISO or other international methodologies.

1. Energy Efficiency

2. Clean Energy

3. Water Conservation

4. Circular Economy

5. Circular Energy System

The CNDCP expects that application of international standards and practices in European legislation will allow for the reporting of targets. Furthermore, most compliance verification should be able to draw upon existing compliance work to avoid redundancy and/or conflict. Details on the on the Self-Regulatory Initiative are provided in **Appendix 3 – Climate Neutral Data Center Pact SRI Definitions, Metrics and Key Terms**
Note: For further information on the CNDCP governance and latest revision of the Self-Regulatory Initiative please refer to CNDCP website: https://www.climateneutraldatacentre.net/self-regulatory-initiative/

1.3 The CNDCP basis of alignment to the Taxonomy Regulation

The basis of alignment to the Taxonomy Commission Delegated Regulation (EU) 2021/2139, Annex 1 and 2,

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Section 8.1, to be embraced by the Climate Neutral Data Center Pact (CNDCP) is standards-based approach in line with the standards referenced within the best practices from the European Code of Conduct on Data Centre Energy Efficiency and other equivalent sources identified within the Taxonomy Regulation as direct replacements which result in similar energy savings.

6. Energy Management

7. Environmental Management

8. Asset Management

9. Lifecycle Assessment

10. Monitoring & Reporting

The applied metrics should be aligned with the latest International ISO/IEC Standards or European CEN/CENELEC/ETSI Standards, (See **Appendix 2. Applicable Standards & KPIs)**, covering the following ISO/IEC 30134 Series and EN5600-4 Series Key Performance Indicators (KPIs):

➢ **PUE**: Power Usage Effectiveness

➢ **REF**: Renewable Energy Factor

➢ **ITEEsv:** IT Equipment Efficiency for servers

➢ **ITEUsv:** IT Equipment Utilization for servers

➢ **ERF**: Energy Reuse Factor

➢ **CER:** Cooling Efficiency Ratio

➢ **CUE:** Carbon Usage Effectiveness

➢ **WUE**: Water Usage Effectiveness

1.4 Shared and segregated responsibilities

With respect to shared and segregated responsibilities for alignment with the Taxonomy Regulation and compliance to the SRI for Colocation Data Centers, Service Providers and Cloud Operator type facilities where responsibilities are shared and segregated between owners and operators of data centres and its tenants. Owner and/or Operators (Hosts) whom require to have their economic activities classified as environmentally sustainable in order to receive "Green Funding" for their activities, would need to prove compliance in collaboration with and with the support of the facility IT Equipment owners and/or operators. This would work in reverse in cases where the Tenant wants to receive the green funding.

Note: It is important to note that under the Taxonomy Regulation auditing and verification of the entire Data Center in line with the technical screening criteria laid out in the delegated act, requires collaboration between the Host and its Tenants for the purpose of achieving compliance. Responsibilities for compliance to requirements of the Taxonomy Regulation and the EU CNDCP should therefore be clearly identified and duly segregated.

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2. VERIFICATION PROCESS

The verification process is structured to evaluate whether the Data Center Owner and/or Operators facility is aligned with the screening criteria of Taxonomy Regulation. The audit involves a review of the organization's policies, procedures, processes and reporting to determine whether they are in alignment with the referenced standards and Key performance Indicators (KPIs) and meeting the targets of the Climate Neutral Data Center Pact, Self-Regulatory Initiative.

The verification process will usually involve a combination of site based and remote desk-based activities. The steps can be delivered consecutively or as a number of stages but will vary depending on the complexity and preparedness of the client. The specific details for the verification process will be defined in the agreement between the Data Center Owner/Operator and the Verification Body.

2.1 Scheduling

Although this procedure specifies verifiers whom are competent to perform the verification, competency should be reviewed when the contract is accepted as availability of personnel may have changed. The scheduling team should check the verifier's qualified codes recorded in competency system against the code that is related to the client prior to assigning the verifier. This is to guarantee that the assigned verifier is competent to conduct the scope of work. The scheduling team should also check that the lead verifier has no conflict of interest for this specific client and scope of work and that any scheme specific verifier rotation requirements are adhered to (see Appendix 1 for specific requirements) The scheduling team will inform the client via email of the assigned verification team once the audit date has been confirmed by the client and scheduled in the verifier's calendar.

2.2 Initial Analysis (Evidence gathering)

The lead verifier should develop the evidence gathering plan and contact the Data Center Owner and/or Operator to request evidence and documentation that will be required for review in the initial analysis (see example list Appendix 1). Any changes to the evidence gathering plan by the verification team should be approved by the lead verifier. All evidence reviewed in the verification process should be clearly referenced in the evidence log.

The initial analysis shall be undertaken by the lead verifier. This is initially undertaken as a remote desk-based activity through document review and, were required, remote interview (phone or VOIP). However, for more complex engagements it may be more appropriate to undertake this analysis at the DC Owner and/or Operators facility. The lead verifier will seek to gather the required information to get an overall understanding of the facility to enable an effective analysis to be undertaken.

The initial analysis will consider the following three elements:

a) **Data Capture:**
Evidence of data capture including, recording start dates, identification of points of measurement and calculation methods (including formulas where applicable) in accordance with the criteria. The captured data should be held on the relevant databases, administered and managed in line with Company Energy Management Plan, ISO/IEC 50001 or equivalent standards.
Note: Measurement methods, duration and frequency should be according to EN 50600-4 Series or ISO/IEC 30134 Series wherein the Standardized KPI should be used

b) **Monitoring**:
Details on the nature, scale and complexity of the facility and equipment being monitored, data storage and evidence supporting the accuracy of the monitoring and measurement equipment.
Note: Reporting should be according to EN 50600-4 Series or ISO/IEC 30134 Series wherein the Standardized KPI should be used

c) **Reporting:**
Internal Control & Assurance – The organization environment; the controls in place to ensure data is collected in accordance with the relevant criteria; and the process for internal reviews of reported data. There are several specific requirements for project and product verification
Note: Reporting should be according to EN 50600-4 Series or ISO/IEC 30134 Series

2.3 Risk Analysis

The Risk Analysis shall be undertaken by the lead verifier based upon the evidence collected during the initial Analysis. The aim of this procedure is data completeness, identifying any potential gaps, missing data or information which may hinder the verification process. The Risk Analysis shall enable effective verification activities to be designed and planned to minimize verification risk.

The risk analysis shall include identification of inherent risks, control risks and detection risks. In evaluating the

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risk, each source stream shall be considered as well as the adequacy of the management systems, data flow activities and control systems. There are a number of specific requirements for project and product verification which are outlined in this document.

The Risk Analysis shall be documented and shall be re-visited and updated throughout the audit in response to relevant findings. The supporting documents are internal workpapers that should not be shared with a verification client, as this could compromise the independence and impartiality of the verification by allowing the client access to the detailed audit sampling plan and assessment of risks.

2.4 Verification Plan

Based on the output of the Risk Assessment, the Lead verifier shall identify the review activities which can be conducted remotely (desk based) and which activities requires on-site visits to facilities. The lead verifier should prepare or approve a Verification Plan which should include the activities to be undertaken by the named individuals of the verification team to test the reported data and its compliance with the agreed criteria. The Verification Plan should include:

a) Results of the risk assessment and efficiencies in collecting evidence;

b) Details on number, type and size of sites and/or facilities associated with the organization

c) Site and/or facilities and/or records related to,
   - Energy Efficiency
   - Clean Energy
   - Water Conservation
   - Circular Economy
   - Circular Energy
   - Energy Management Plan
   - Environmental Management Plan
   - Asset Management Plan
   - Lifecycle Assessment Reports
   - Monitoring & Reporting Records
   - Data Capture
   - Monitoring points

d) Calibration Certificates for monitoring equipment

e) Review of existing equipment utilization to ensure that all areas of optimization, consolidation and aggregation are identified prior to new material investment, with one of the most important elements being IT equipment.

f) Evidence to be reviewed (evidence gathering plan).

g) Records of any risks identified through the risk assessment indicating the need to visit specific item

h) Results of prior verifications or validations, if any.

The plan should be designed to minimize audit risk and achieve the agreed level of assurance. Where relevant the plan should be amended in response to any updates in the risk assessment.

The verification planning shall also be documented by completing the relevant sections, including the following,

- Risk Analysis and Verification Plan (This identifies the verification activities to be undertaken and the nature of the activity)

- Audit Criteria Checklist (This sets out the specifics of the audit criteria against which the assertion/s will be assessed.

The appropriate check list will be selected as part of the verification plan based upon the client specific details established in the initial analysis/ risk analysis.

a) A summary of the Verification Plan (also referred to as a verification programme or terms of reference) should

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be communicated to the responsible party (client). This programme is documented and should include the following scope and objectives

- Identification of the verification team and their roles on the team
- Client/ responsible party contact
- Schedule of verification activities
- Level of assurance
- Verification criteria
- Indicative list of required evidence documents
- Schedule for site visits including dates, times and required attendees (where applicable)

The verifier shall perform a site or facility visit under any of the following circumstances:

- an initial verification;
- a subsequent verification for which the verifier does not have knowledge of the prior verification activities and results;
- a verification where there has been a change of ownership of a site or facility
- when misstatements are identified during the verification that indicate a need to visit a site or facility;
- material changes in scope or boundary of reporting;
- significant changes in the data management involving the specific site or facility.

The verifier may determine that the circumstances specified in a) through f) above do not require a site or facility visit based on the results of the risk assessment and evidence-gathering plan, and considering the results of any prior verification to the same site or facility.

If a verifier determines that a site or facilities visit are not necessary, the verifier shall justify and document the rationale for the decision.

The verifier shall evaluate whether the data, measured, values, results and reports reviewed are appropriate and comply with the compliance criteria.
The verifier shall assess:

- The validity of the recorded data
- The appropriateness of the calculation methodology used;
- The period, frequency and accuracy of the monitoring activities
- The quality and content of the Reports.

The verifier shall develop validation evidence-gathering procedures that test the effectiveness of the control measures in place. The verifier shall develop his/her own estimate or range to evaluate the responsible party's results.

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3. APPENDIX

Appendix 1 – Evidence Request List

Below is an example evidence request list to send to data center owners and/or operator (usually by email) to allow for the completion of the initial strategic analysis (prior to the site visit) and additional documents that will be further required to be included in the "evidence pack" as evidence to be reviewed during the site visit or remote desk review.

Initial documents from Strategic Analysis
- Annual Reports
- Energy Management Plan
- Environmental Management Plan
- Asset Management Plan
- Lifecycle Assessment Report
- Recorded Evidence of reuse, repair and recycling of servers, electrical equipment and other related electrical components
- Data Monitoring points and Recording evidence
- Calibration Certificates for monitoring equipment
- Records of any modifications or Plant Upgrades
- Process improvement reports
- Relevant correspondence with Certification Bodies
- Previous year verification report (if any)

Evidence Pack Requirements:
Note that this is a general list of evidence items that may apply to any of the relevant Data Centers, it is not exhaustive and the lead verifier should use their knowledge to add items as relevant to the verification in hand.

Information relating to previous Periodic Verifications, including Verification Opinion, Outstanding Issues; Improvement items, Baseline Data Forms, Allocations, etc.	
A copy of the method(s), formulas used to calculate energy efficiency, water consumption and clean energy usage. The site/facilities should maintain an adequate alternative monitoring method for use in the event of equipment failure	
Procedures for data collection, handling, transfer, and error checking, where available	
Process descriptions and/or diagrams providing an overview of the installation's activities from the initial input stage (e.g. energy and water consumption) to the final consumption stage, showing energy and/or water flows, sources and location of meters, manual and automatic interfaces etc.	

Calibration and maintenance records for all metering and other measurement and/ or analytical devices	
Meter readings and/or calculations/justifications for any other energy and/or water flows into and out of the facility	
Details of any downtime or meter and/or instrument failures and how these were dealt with	
Description of the Data Management System, with cross-reference to Process descriptions and diagrams	
Explanations of and justification for all emission, oxidation or conversion factors used in calculations, and any other assumptions made	
Aggregated figures on an annual, monthly or weekly basis relating to each SRI source requirement	
Uncertainty Analysis and associated input information	
Operational instructions (e.g. manufacturer's handbook) for all monitoring, measurement and/or analytical equipment	
Recorded Evidence of reuse, repair and recycling of servers, electrical equipment and other related electrical components	
Records of any previous internal or external verification activities	
Documentation relating to any changes to the sources, fuels, factors, activities, data management system, QA/QC procedures or organizational structure (including changes to personnel)	
Signed self-declaration or management representation that reported data is faithful representation	

Appendix 2 – Applicable Standards

No.	Description	International ISO/IEC Standards	European CEN/CENELEC/ETSI Standards	American ASHRAE ANSI/ISA Standards
1	**Energy Efficiency**			
1.2	Energy Efficiency (PUE)	ISO/IEC 30134-2 (PUE)	EN 50600-4-2 (PUE)	
1.3	Energy Efficiency (CER)	Cooling Effectiveness Ratio (CER), according ISO/IEC DIS 30134-7	Cooling Effectiveness Ratio (CER), according to EN 50600-4-7	
1.4	Energy Efficiency (ITEEsv)	ISO/IEC 30134-4 (ITEEsv) metrics & also IEC 62040-5	EN 50600-4-4 (ITEEsv) ETSI - EN 303 470 Environmental Engineering (EE); Energy Efficiency measurement methodology	
1.5	Energy Efficiency	IT Equipment Energy Efficiency for Servers	EU Eco Design Directive and Lot 9	EPA ENERGY STAR
1.6	Energy Efficiency (ITEUsv)	ISO/IEC 30134-5 ISO/IEC 21836 Information Technology — Data Centres — Server Energy Effectiveness Metric	EN 50600-4-5 IT Equipment Energy Utilization for Servers (ITEUsv)	
1.7	Energy Efficiency (UPS)	ISO/IEC 62040 Uninterruptible Power Systems (UPS)		
1.8	Energy Efficiency (SEE) Optional	ISO/IEC 21836 - Information Technology - Data Centres Server Energy Effectiveness Metric (SEE)		
2.	**Clean/Renewable Energy**			
2.2	Clean Energy (REF)	ISO/IEC 30134-3 (REF)	EN 50600-4-3 (REF) or CLC/TR 50600-99-1 and CLC/TR 50600-99-2 or ETSI EN 305 200-3-1	
3	**Water Conservation**			
3.1	Water Conservation (WUE, SRI Targets)	ISO/IEC 30134-9: Water Usage Effectiveness (WUE with SRI calculation factors)		
3.2	Water Conservation (WUE)	ISO/IEC 30134-9: Water Usage Effectiveness (WUE)		
4	**Circular Economy**			
4.1	Circular Economy	ISO 14040 and ISO 14044 following a product's impact from cradle to grave	CLC/TR 50600-99-2: Environmental Sustainability	
5	**Circular Energy System**			
5.1	Circular Energy System (ERF)	ISO/IEC 30134-6 (ERF)	EN 50600-4-6 (ERF)	
6	**Energy Management**			
6.1	Energy Management	ISO 50001 Energy Management Systems		
7	**Environmental Management**			
7.1	Environmental Management	ISO 14001 Environmental Management		
7.2	Environmental Sustainability		CLC/TR 50600-99-2: Environmental Sustainability	

No.	Description	International ISO/IEC Standards	European CEN/CENELEC/ETSI Standards	American ASHRAE ANSI/ISA Standards
8	**Asset Management**			
8.1	Asset Management Plan for IT Equipment, Mechanical & Electrical Assets	ISO 55000 Asset Management		
8.2	Asset Management Plant (Air quality for equipment)	ISO 16890-1 Air filters for General Ventilation ISO 14644-8 Cleanrooms and associated controlled environments		ANSI/ISA 71.04-2013
9	**Lifecycle Assessment**			
9.1	Lifecycle Assessment - Principles & Framework	ISO14040 Environmental Management - Lifecycle Assessment - Principles & Framework ISO14044 - Lifecycle Assessment	ETSI ES 203 199 Methodology for environmental Life Cycle Assessment (LCA) of Information and Communication Technology (ICT)	
9.2	Lifecycle Assessment - Monitor, Report and Verify Greenhouse Gas Emission	ISO/IEC 14064 - Monitor, Report and Verify Greenhouse Gas Emissions ISO/IEC 14065		
9.3	Carbon Usage Effectiveness (CUE)	ISO/IEC FDIS 30134-8 (CUE), or ISO 14067 or ISO 14064-1	ETSI standard ES 203199	
10	**Monitoring & Reporting**			
10.1	Monitoring & Reporting (Energy Use and Environmental Reporting)	ISO/IEC 30134 Series (Parts 1 to 9) These Standardised KPIs include PUE, pPUE, REF, ITEESV, ITEUSV, ERF, CER, CUE, WUE.	EN50600 Series (Parts 1 to 9) These Standardised KPIs include PUE, pPUE, REF, ITEESV, ITEUSV, ERF, CER, CUE, WUE.	
10.2	Recording & Reporting Sustainable energy usage	ISO/IEC 30134-3 Renewable Energy Factor (REF)	EN 50600-4-3 (REF) CLC/TR 50600-99-1 and CLC/TR 50600-99-2	
10.3	Recording & Monitoring Air Quality	ISO 16890-1 Air filters ISO 14644-8 Controlled environments		ANSI/ISA 71.04-2013
10.4	Reporting IT Equipment Energy Utilization for Servers (ITEUsv)	ISO/IEC 30134-5 (ITEUsv)	EN 50600-4-5 (ITEUsv)	
10.5	Monitor, Report and Verify Greenhouse Gas Emission	ISO/IEC 14064 - Monitor, Report and Verify Greenhouse Gas Emissions ISO/IEC 14065 General principles and requirements for bodies validating and verifying environmental information		

NOTE: Further references to the applicable Standards can be found in the CNDCP Auditing Framework & Regulation Compliance Mapping document

Appendix 3 – Climate Neutral Data Center Pact (CNDCP) Self-Regulatory Initiative (SRI)

Data center 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 center operators and trade associations agree to take the following actions to make data centers climate neutral by 2030.

1. **Energy Efficiency**
   Data centers 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 centers operating at full capacity in cool climates will meet an annual PUE target of 1.3, and 1.4 for new data centers operating at full capacity in warm climates.
● Existing data centers will achieve these same targets by January 1, 2030.
● These targets apply to all data centers 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 center efficiency metric. Once defined, trade associations will consider setting a 2030 goal based on this metric.

2. **Clean Energy**
   Data centers will match their electricity supply through the purchase of clean energy.
● Data center electricity demand will be matched by 75% renewable energy or hourly carbon-free energy by December 31, 2025 and 100% by December 31, 2030.

3. **Water**
   Data centers at full capacity will meet a high standard for water conservation, demonstrated through the application of a location and source sensitive water usage effectiveness (WUE) target.
   ● By January 1, 2025 new data centers at full capacity in cool climates that use potable water will be designed to meet a maximum WUE of 0.4 L/kWh in areas with water stress.
   ● The limit for WUE can be modified based on climate, stress and water type to encourage the use of sustainable water sources for cooling.
   ● By December 31, 2040, existing data centers that replace a cooling system will meet the WUE target applied to new data centers.

4. **Circular Economy**
   The reuse, repair and recycling of servers, electrical equipment andother related electrical components is a priority for data center operators.
● Data centers will set a high bar for circular economy practices and will assess for reuse, repair, or recycling 100% of their used server equipment.
● Data center operators will increase the quantity of server materials repaired or reused and will create a target percentage for repair and reuse by 2025.

5. **Circular Energy System**
   The reuse of data center heat presents an opportunity for energy conservation that can fit specific circumstances. Data center 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 centers into nearby systems are practical, environmentally sound and cost effective.

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 centers 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 center is at full capacity 24 months after it becomes operational. A data center operator may exempt up to 10 percent of their data centers that have been operational for 24 months from being considered at full capacity if such data centers 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 center design critical load capacity.
- New data centers will refer to data centers 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
- New data centers will refer to data centers that have commenced construction after January 1, 2025
- WUE will be measured using the category 1 site value, per ISO/IEC 30134-9:2022 standard
- The WUE limit may be modified based on the formula: 0.4 L/kWH x Climate x Stress x Water Type = WUE limit
- Climate factor is 1.0 for cold climates and 1.1 for hot climates.
  o 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.
  o 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.
- Stress factor multiples are 5 for Low; 4 for Low Medium; 2.5 for Medium High; and 1 for High Stress areas.
  o Water stress is defined by the European Environment Agency Water Exploitation Index for river basin districts (1990-2015); based on the listed water exploitation index for a given location. Low is 10 or lower; Low Medium is 11-20; Medium High is 21-40; High is 40 or greater
- Water type factor multiples are 1 for Potable and Fresh water; 3 for Grey Water; 6 for Black, Brackish, or Sea water.
  o Potable water is free from contamination that is safe to drink or to use for food and beverage preparation and personal hygiene, in adherence to ISO/IEC 30134-9:2022
  o Freshwater is water having a low concentration of dissolved solids, in adherence to ISO 14046:2016
  o Greywater is wastewater with a low pollution level, no fecal matter, and reuse potential, in adherence to ISO 12056-1:2000
  o Blackwater is wastewater with significant pollution level without reuse potential, or recycled blackwater that has gone through tertiary treatment, in adherence to ISO 12056-1:2000
  o Seawater or brackish is water with significant salinity, in adherence to ISO 14046:2016

- A data center is at full capacity 24 months after it becomes operational. A data center operator may exempt up to 10 percent of their data centers that have been operational for 24 months from being considered at full capacity if such data centers 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 center design critical load capacity.
- An operator that cannot replace the cooling system of a data center with a less water intensive design because of space constraints, permitting constraints, or other reasonable constraints may replace a cooling system with

similar technologies while seeking to make modifications that conserve water to the greatest extent possible.

Application
- All aspects of this initiative will be met by data center operators unless otherwise stated.
- Data center operators will outline their own data center footprint and how each facility within that footprint meets the requirements as part of their own certification. The data center 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 cleanenergy 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 centers located in European overseas countries and territories.