

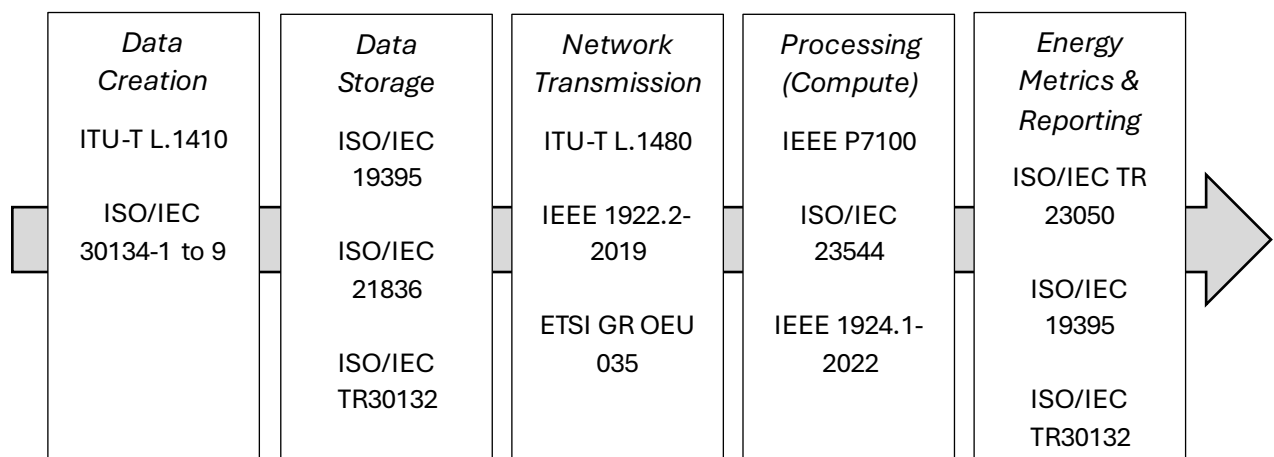
Standards for Digital Decarb

The key contributions of standards to the digital decarbonisation movement are as follows:

1. **Clarity and Comparability:** Standards eliminate ambiguity by defining consistent methodologies for measurement.
2. **Benchmarking:** Organisations can assess their performance relative to standardised benchmarks, driving improvements in energy efficiency.
3. **Lifecycle Accountability:** Standards account for energy consumption across data creation, storage, network transmission, and compute processes.
4. **Policy Development:** Policymakers gain reliable data to inform regulations and incentives for digital decarbonisation.
5. **Transparency:** Standardised reporting practices promote accountability among industry players.

Global standards provide clear methodologies for measuring, reporting, and managing energy consumption. Standards also facilitate benchmarking, enabling stakeholders to identify inefficiencies and implement targeted decarbonisation measures.

Standards identified (that explicitly measure energy usage) for digital decarbonisation are presented in the visual below across the five stages of the ICT energy value chain, comprising: Data Creation, Storage, Network Transmission, Processing (Compute), and Energy Metrics & Reporting.



Source: Jackson and Hodgkinson (2024), "Landscaping Review: Digital Decarbonisation and the Role of Global Standards in Measuring Data Energy Consumption" (Working Paper); see table 1 for a comprehensive review of key global standards for ICT and energy use.

The pathway to net zero by 2050 cannot be achieved without addressing the energy consumption of the digital ecosystem. Standards provide the necessary tools to measure, assess, and manage energy use in digital systems, offering clarity and consistency where ambiguity currently prevails. By adopting and expanding existing global standards, policymakers, businesses, and technology leaders can drive digital decarbonisation and contribute meaningfully to global climate goals.