The Coordinated Plan on Artificial Intelligence (AI) review 2021 focus area ‘Bring AI into play for climate and environment’ includes actions aiming at advancing greener AI. These actions notably include supporting research on reducing the energy consumption of AI (for example research on less data-intensive and energy-consuming frugal AI models) through the Horizon Europe programme; and developing low-power processors for AI applications through Horizon Europe and the institutionalised European Partnership on Key Digital Technologies. The Commission and Member States will also explore effective ways to define key performance indicators for AI’s environmental impact, including energy use. In the future, such indicators could be helpful to signal the sustainability of AI systems.

The proposal for a Regulation on Ecodesign for Sustainable Products (to replace the Ecodesign Directive) provides a framework to set performance and information requirements on their sustainability. The proposal currently does not aim to regulate energy consumption of an AI-system’s software. It can however regulate energy efficiency of the hardware on which software runs, such as enterprise servers and data storage products, computers and small servers. The Commission is working on a review of Ecodesign requirements (and potentially a new energy label) for smartphones and tablets as well as for computers. The Commission has also put forward initiatives to achieve climate-neutral, highly energy-efficient and sustainable data centres by 2030.