

European Green Digital Coalition Pilot Project delivers methodologies to measure the enabling impact of digital solutions on the climate

Brussels, 25 April 2024 - *The European Green Digital Coalition (EGDC) releases science-based methodologies and guidelines to assess the reduction and avoidance of greenhouse gas (GHG) emissions by ICT solutions across sectors. This collaborative effort, validated by an Independent Advisory Board and involving key industrial actors, represents a milestone in driving sustainability and digital innovation across sectors, advancing Europe's twin transition towards climate neutrality and digital leadership.*

Three years after its launch in March 2021 by Commissioner Breton and the CEOs of leading ICT companies, the EGDC has successfully fulfilled its commitments to develop science-based methods to estimate the net environmental impact of real-life digital solutions across sectors, by looking at both the positive contribution and the direct footprint of a given digital solution.¹ These methodologies are meant for adoption by a wide range of industrial and societal actors who intend to use or evaluate ICT as a tool to improve a given environmental footprint.

To support the EGDC in this endeavour, the EU-funded European Parliament Pilot Project, led by the Global Enabling Sustainability Initiative (GeSI), brought together key ICT Associations including the European DIGITAL SME Alliance, DIGITALEUROPE, ETNO, and the GSMA. These associations have collectively operated as the EGDC Secretariat, working with expert organisations the Carbon Trust, Deloitte, and Sustainable ICT for the development of methodologies. This collaborative process involved active engagement with the 37 EGDC Coalition members, 14 Supporting Partners and the European Commission, seeking guidance from an Independent Advisory Board and aligning with standardisation bodies²

A framework of methods, tools and guidelines to quantify and optimise the positive impact of digitalisation on climate

At the core of the EGDC publications lies the **Net Carbon Impact Assessment Methodology for ICT Solutions**, which provides requirements for a comparison of a scenario with and without ICT solutions in a given implementation context. The methodology enables quantification of both the positive contribution and the direct footprint of a given ICT solution in CO₂e. It is complemented by sector-specific methodologies that illustrate the practical application of each requirement for six key industrial sectors: energy, construction/buildings, smart cities, agriculture, transport and manufacturing.

Real-life **Case Studies**, drawn from ICT solutions provided by Coalition members and stakeholders, helped refine these methodologies. These range from cloud-based tools for energy management in buildings, to 5G-enabled manufacturing and agriculture, as well as smart energy and smart city

¹ DECLARATION of the European Green Digital Coalition Members "In support of the Green and Digital Transformation of the EU" https://www.greendigitalcoalition.eu/assets/uploads/2022/02/EGDC-declaration-to-sign_v2.pdf

² The EGDC methodology builds upon existing standards: ITU-T L.1480 - *Enabling the Net Zero transition: Assessing how the use of information and communication technology solutions impact greenhouse gas emissions of other sectors* and WBCSD *Guidance on Avoided Emissions*

platforms. Data from the case studies were utilised to develop calculators measuring the net environmental impact of these solutions, offering practical examples of the EGDC methodologies within the six key sectors. These case studies also shed light on critical considerations such as data availability and quality when applying the methodology.

In addition to methodologies, sector-specific **Deployment Guidelines** have been formulated to enhance sectors' understanding of ICT solution deployment, providing guidance on optimising their positive impact on climate and minimising negative consequences.

Driving the global transition towards a sustainable and digitally empowered future

By providing consistent and comparable methods for assessments of ICT solutions' impact, the EGDC empowers stakeholders globally to make informed decisions. The methodologies and guidelines can be leveraged by a broad spectrum of decision-makers, ranging from companies to local authorities and financial institutions, driving the development and deployment of digital solutions that can deliver a net positive impact on the climate.

Looking ahead, the EGDC is committed to promoting these methods and guidelines as well as their adoption, creating a vibrant market for digital innovation that benefits people, environment, and economy, as well as the financial community. In the upcoming phase, the Coalition will deepen cross-sectoral dialogue and expand support services to stakeholders across the EU economy, including SMEs, the finance sector, and public authorities.

"The green and digital transitions have been a priority of this Commission. We worked closely with the stakeholders to move this twin transition forward. The European Green Digital Coalition is an excellent example in this regard, as it delivered a standardised method to assess how digital solutions can curb greenhouse gas emissions. This methodology is a valuable tool to boost decarbonisation of climate critical sectors."

Roberto Viola, Director General at DG CONNECT, European Commission

"With the climate emergency accelerating, we cannot afford to ignore the power of digital solutions in slashing emissions. However, digitalisation will only help if it is adopted in the right way and if negative impacts are adequately taken into account. The EGDC's novel methodologies are the result of a unique collaboration among industry, scientists and experts. As such, the EGDC now offers credible, science-based and practical methodologies to inform ESG decisions across our societies and economies".

Luis Neves, GeSI CEO, Coordinator of the EGDC Pilot Project