



# Session 1

**Digitalisation for the environment and climate: How can digitalisation contribute to improving energy efficiency in key sectors and in SMEs in particular?**

**Rapporteur: Andrijana Gavrilovic**

Panellists at the session discussed raising the prices of polluting production inputs. The speakers emphasised that digital technology has a powerful role as an enabler that can have a positive impact on the planet. They noted a lack of effective action to ensure that sufficient incentives to employ innovative technologies are available. This prompted a discussion on the types of incentives, including those mandated by policy, voluntary measures, and market-driven incentives.

Action-oriented frameworks are necessary to reduce businesses' environmental footprint. Such frameworks can be voluntary or policy mandated. The specific roles of different stakeholders were also discussed.

The session called for embedding the cost of an unsustainable future into how we think about any given action. Prices are key: Pollution-generating production needs to become much more expensive through taxes, and the G7 should see this as a key obligation. Panellists strongly agreed that more action-oriented frameworks are needed and underlined the importance of inclusive policymaking. However, on voluntary measures vs regulatory measures, speakers had different views, ranging from voluntary measures giving innovation opportunities to businesses, to the fact that policy can be restrictive and can hinder innovation, to calling for a more structured and organised approach to policy.

# Session 2

**Greening the digital transformation: How can we reduce the environmental footprint of the production, use, and disposal of digital technologies?**

**Rapporteur: Pavlina Ittelson**

The impact of digital devices and the underpinning infrastructure is assessed by evaluating greenhouse gas emissions and energy consumption. However, this does not provide a complete picture of all environmental effects. The impacts on the environment need to be considered more comprehensively – to include impacts such as water pollution and the use of critical minerals.

The participants brought up the lack of harmonised data and methodologies to evaluate the current state and future developments of the impact of digital technologies on the environment. Specifically, in artificial intelligence (AI), the challenges were demonstrated on the example of how to balance the effectiveness of AI and its negative impacts on the environment caused by increased energy consumption. There is a need to raise awareness about sustainability by design. The indirect impacts of digital technologies on the environment must be cross sectoral. Specifically, the impacts of digital technologies on human behaviour were discussed, and the need for interdisciplinary research and cooperation.

The participants agreed on the need to urgently address the environmental impacts of digitalisation. Conversations on the interactions of digital technologies and the environment are still in their early stages, and face a lack of data to properly evaluate these impacts and develop effective evidence based solutions. There is a need for multistakeholder standard setting through policies, and technical standard-setting by international bodies, to achieve an overarching system of guidelines for the reduction of resource consumption and implementation of a circular economy.

Each of the participants contributed to the call to action:

1. We must involve and motivate youth and engage developers of digital technologies to consider, implement, and contribute to a reduction in negative climate effects by digital technologies to enable reduction of energy consumption.
2. We must debate global responsibilities on digital technologies and resources and their associated risks. The outcomes of these debates should be used to formulate political statements and solutions.
3. Governments need to develop new disciplines and thinking across silos to combine engineering and the physical sciences, the social sciences, and public policy development to address multiple perspectives of digitalisation. This endeavour needs proper financing.
4. There is a need for strong, overarching climate and energy policies that drive the use of these technologies in ways that actually reduce emissions to achieve mid-century NetZero goals.

## Session 3

**Data governance: Learning from good practices and examples in key sectors**

**Rapporteur: Tereza Horejsova**

Data and its governance was the focus of this session, exploring good practices and discussing the benefits and power of data for society. Examples of exactly this convenience of data, such as how the city of Winnipeg developed a data-powered platform aligning several indicators with the sustainable development goals (spilling over to 40 cities worldwide developing similar

platforms), were highlighted by the speakers. An example from Mexico, where the lack of trust between big telecommunications operators and regulators was partially overcome, despite awkward beginnings, by the mapping of rooftop availability, was also noted. Another example described a multistakeholder platform reimagining the future of mobility – connecting various mobility providers and their data with other sources such as weather information – ultimately bringing an improved experience to citizens. National statistical institutes also have their own learning journeys. Italy's national institute explained its use of data for cost reduction purposes. The UK's institute explained how data sharing enabled going beyond the basic figures of patients suffering from COVID-19, with more nuanced data on geographic and socio-economic indicators, ultimately helping the government understand the situation and better target vaccination campaigns.

Challenges in data governance were not left out during discussions. The speakers talked about issues of interoperability, data sharing, quality of data, availability of data (especially from private sources), and related legal challenges. They focused on the problems of the current data narrative, which is not oriented to understanding the issue of data for the public good.

The session resonated in several clear directions:

- The power of data still needs to be unlocked.
- There is a need for commonly accepted standards on the use of data.
- Data providers need to progress in their willingness to share data.
- There is a need for a change of mindset in how we approach data and how it can be used for the benefit of society. We need a change of narrative and a more interconnected holistic approach to data practices.
- Intermediary organisations have a role to play and can help overcome some roadblocks among stakeholders.
- Work needs to be done to develop the capacity to work with data.
- The role of governments is absolutely central – regulation does not have to be seen as a constraint but rather as an enabler. Governments need to create a friendly environment for the new economy.
- There is a role for multinational groups to play in this regard.
- *Added by the moderator:* To move forward in developing concrete solutions that enable data free flow with trust, G7 countries could explore fostering experimentation spaces for innovative technical and regulatory models, such as through cross-border sandboxes for data.

## Session 4

**Data free flow with trust: Status quo and perspectives**

**Rapporteur: Stephanie Borg Psaila**

This session first looked at the nature of data, with agreement on two main points: The first, that free flow and free access to data are essential. It is a prerequisite for competition, and in turn, for innovation. The second is that data's true potential hasn't been fully tapped; there are many more possibilities waiting to be harnessed.

Speakers then looked at ways of building trust in data flows and of doing that as quickly as possible. The discussions built on the work and experiences of the EU (its data strategy includes several legal instruments – some in effect, others in draft stages) and the OECD (whose work predates the era of big data; it now focuses on finding commonalities among governments), those of Gaia X (it brings users and industry together around the shared value of transparency, and emphasises the fact that users should remain in control of their data), the Software Alliance (BSA) (emphasising sector-specific use of data, for instance, in agriculture, health, etc.), and the Fintech Association of Japan (drawing parallels with the fintech's experience in capital markets).

The key outcomes were:

1. We need to identify common – rather than divergent – values that are indispensable for data flows. These include privacy, security, transparency, and accountability, while keeping national security aspects in mind.
2. We need appropriate legal frameworks and government policies to access and deal with data – If not identical (because harmonisation is hard to achieve) – at least interoperable.
3. When it comes to personal data, the data owner should remain in control of that data. Here, data trustees can help since they can manage users' data under specific rules and instructions, carrying out the users' intentions.