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Swiss Study on Digitization & Environment: Need for Action at the International Level

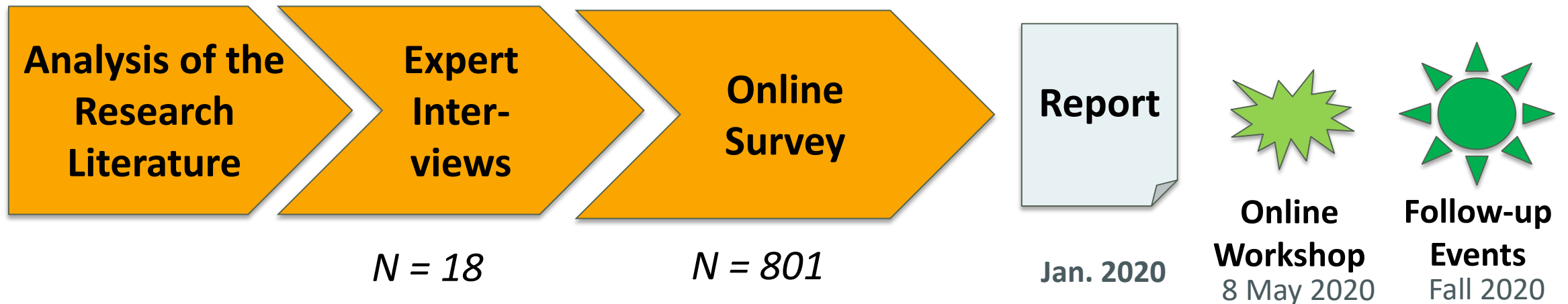
Input Presentation, EuroDIG, Greening Internet Governance, 12 June 2020

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Swiss Study on Digitization and the Environment

- ▶ Mandated by the **Federal Office for the Environment**
- ▶ Carried out by the **Bern University of Applied Sciences**
- ▶ Research Questions: **Digitization & Environment – What are the Opportunities, Risks and Need for Action?**



English Summary of the Study: [Digitization and the Environment: Opportunities, Risks and Need for Action](#)

Three Levels of Impact of Digitization on the Environment

1

Direct Impact of the use of new or different devices

2

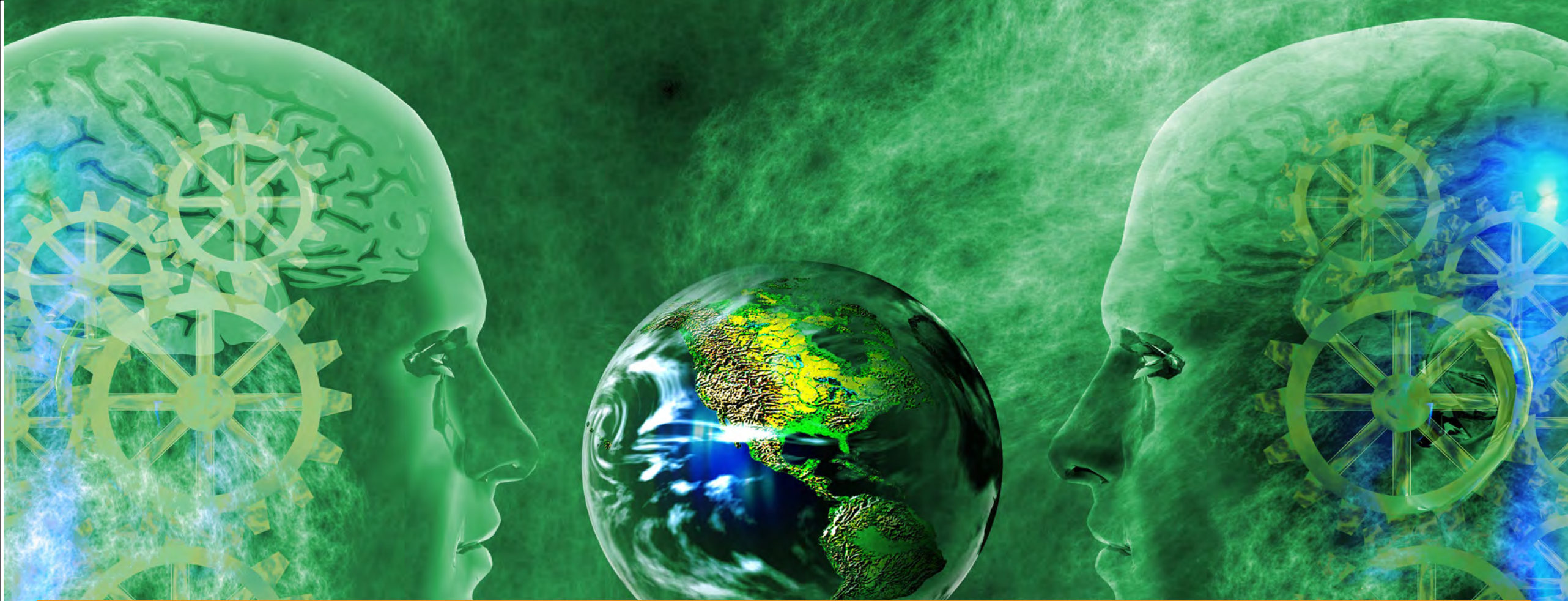
Improved ecological efficiency thanks to the use of ICT

3

Feedback of first and second order effects with social behavior,
so-called **“Rebound Effects”** (e.g. increased demand)

So far, digitisation has had a **negative net effect** on the environment due to rebound effects. A reversal of this trend requires concerted action.

Köhler & Erdmann 2004; Hilty et al. 2006; Hilty & Bieser 2017



We are facing **global challenges** in the environmental sector that require not only national but also **international cooperation**; there is a need to catch up here. In addition, civil society's opportunities to participate in environmental policy issues at the international level have so far been insufficient.

Areas Requiring International Coordination

Areas where international coordination is most needed:

- ▶ **Measures to promote a circular economy**
(recycling; increasing the lifespan of electronic products)
- ▶ **Sharing of environmental data**
(shared data, open data, standards for data exchange)

Areas that would also benefit from international coordination:

- ▶ **Incentives to reduce environmentally harmful consumption**
- ▶ **Promoting the use of efficiency-enhancing digital applications**
- ▶ **Transparency regarding environmental costs and provenance of materials**
- ▶ **Improving data protection through technical measures**