



#ICTCLIMATE

Climate and environmental strategy for the ICT sector

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LVV MINISTRY OF TRANSPORT
AND COMMUNICATIONS

Background

- The energy and material use of the ICT sector is gaining more attention. Data centers, communications networks and devices are needed to provide the services that modern societies rely upon
- Digitalisation is a major enabler of CO2 reductions in other sectors of society, such as heavy industry, transport and logistics, as well as construction and energy sector
- Important energy efficiency measures have been taken into use, but the constantly growing amount of processed and transferred data may undermine these efforts
- According to some estimates, more than a fifth of the world's total electricity consumption will be taken up by the ICT sector in 2030

Climate and environmental strategy for the ICT sector

- The Finnish Ministry of Transport and Communications has appointed a working group to prepare a climate and environmental strategy for the ICT sector in Finland
- The group has representatives from research institutes, ICT companies, public administration and non-governmental organizations
- The working group will issue two reports: a mid-term report will be published in June 2020 and the final report including recommendations for action in November 2020

Aalto University # ABB Oy # CSC – IT Center for Science Ltd
Digita Oy # DNA Oyj # Elisa # Energy Authority # Finnet Association
Finnish Broadcasting Company Yle # Finnish Energy
Finnish Federation for Communications and Teleinformatics FiCom
Helsinki Metropolitan Smart & Clean Foundation
Lappeenranta-Lahti University of Technology
Ministry of Economic Affairs and Employment # Ministry of Finance
Ministry of the Environment # Neogames Finland # Nokia Oyj
Oy IBM Finland Ab # Technology Industries of Finland
Telia # The Association of Finnish Local and Regional Authorities
The Consumers' Union of Finland # The Finnish Innovation Fund Sitra
The Finnish Software and E-business Association
The Finnish Transport and Communications Agency Traficom
TietoEVRY Corporation # VTT Technical Research Centre of Finland Ltd

Aim of the climate and environmental strategy

- The aim is to form a common view on the climate and environmental impacts of the sector in Finland and recommend measures to reduce harmful climate and environmental impacts
- The group will also assess the role of the ICT sector in the efforts to achieve Finland's climate and environmental targets
- Studies published and measures discussed in other countries and in the EU will be of great interest in the work

The strategy work

| Thematic group on infrastructure | Thematic group on applications |
|--|--|
| <ul style="list-style-type: none">• Assesses the energy and material consumption of data centers, networks and end-user devices• Proposes measures to reduce the negative environmental effects | <ul style="list-style-type: none">• Looks at environmental and climate impacts of the use of different services, including new technologies (artificial intelligence, block chains, robotics, internet of things)• Looks the potential of ICT to achieve emission reductions in other sectors |

- Two sectors, logistics and energy sector, will be studied closer to gain more information on the effects of ICT in reducing CO2 emissions

Climate and environmental strategy for the ICT sector

- Stakeholder events are arranged during the project to enable open discussion and to raise awareness
- First public event of this project in January 2020 was hosted by the Minister of Transport and Communications Timo Harakka
- The event showed that there is a great interest in Finland to discuss the role of ICT in climate and environmental work