

The logo for the Radio Spectrum Policy Group (RSPG) features the acronym 'RSPG' in a bold, orange, sans-serif font. The letters are contained within a white, rounded rectangular shape that has a subtle gradient and a slight shadow, giving it a three-dimensional appearance. The background of the slide is a horizontal band with a red and orange flame-like pattern at the top, transitioning to a blue and white wavy pattern below.

RSPG

RADIO
SPECTRUM
POLICY GROUP

RSPG subgroup on Climate Change

**Co-Chairs
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The RSPG supports the fight against climate change. Therefore, in its Work Programme for the years 2020 and beyond the RSPG established a work item to focus on spectrum policy aspects which are closely related to the efforts of ensuring climate-neutrality.

RSPG addressed the following questions to the subgroup:

What are the climate change related aspects within spectrum management?

How can spectrum management help to combat climate change?

What concrete actions at EU-level can RSPG recommend?

RSPG SG Climate Change

Deliverables:

- Report June 2021 ([Document RSPG21-026](#))
- Opinion November 2021 ([Document RSPG21-041](#))

The Report gathers information related to those issues and accompanies the Opinion that sets out possible options in radio spectrum policy in order to help combat climate change.

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The Report is divided into four chapters:

- Chapter 1: Tackling the climate impact of the wireless sector.
- Chapter 2: How wireless communications can help other sectors reduce their climate impact.
- Chapter 3: Spectrum usages relevant for monitoring climate change or gathering climate-related data.
- Chapter 4: The legal basis and spectrum management instruments for combatting climate change.

Two Annexes complement the information presented by introducing some background material on standardisation and work in standards development bodies regarding energy efficiency, circular economy and e-waste.

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Chapter 1: Tackling the climate impact of the wireless sector

The impact of the ICT sector in general on the climate

Tackling the impact of emissions from operations

- i) Operating equipment with greener electricity
- ii) Decreasing consumption through using energy efficient equipment

Chapter 2: How wireless communications can help other sectors reduce their climate impact.

Smart

Energy, Grid, City, Home, Meters, Vehicles (road ITS), Agriculture

Industry 4.0

Public transport

including Urban Rail ITS and Railways (GSM-R /FRMCS)

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Chapter 2: How wireless communications can help other sectors reduce their climate impact.

Concluding remarks on reducing the climate impact of sectors

Digitalisation, data use and smart technologies using (fixed and) wireless infrastructure could lead both to resource efficiency gains and GHG reductions in a wide array of areas such as logistics, energy, housing, manufacturing, agriculture, etc.

However;

The use of (fixed and) wireless electronic communication and other radio based services is itself associated with energy consumption during use as well as GHG emissions associated with energy and materials used throughout the life cycle of a product.

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Aspects about which Opinion points are expressed

- Methodologies to assess the impact of ECS wireless technologies on climate change
- Use of environmentally friendly energy sources and self-regulation
- Harmonised spectrum for purposes related to combatting climate change
- Further considerations on ensuring spectrum is made available to support initiatives to combat climate change
- Spectrum used in weather forecasting, monitoring climate change and gathering long-term climate related data
- Concerns regarding effective functioning of existing 5.6 GHz meteorological climate monitoring systems
- Wireless ECS: Spectrum management actions and the EECC framework

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Opinion points expressed

- European Commission with Member States to promote **the development of methodologies** to assess the **impact of ECS wireless technologies** (including the impact of frequency bands) **on climate change** with the involvement of ECS stakeholders and, where appropriate, ETSI.
- European Commission, and where appropriate the Member States, determine **whether ECS Network operators should be required to report on their emissions and the actions** they are taking to achieve the Union's environmental targets. Any necessary assessments (in line with recommendation above should be made as regards the measurement methodologies to obtain reported data.
- take energy efficiency and other climate related aspects into account when funding research
- use environmentally friendly energy sources
- MS to initiate national climate and environmental strategies

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Opinion points expressed

- Member States should recognise that monitoring of climate change, collecting data for weather forecasting or gathering climate-related data are important tools to provide evidence related to combatting climate change and facilitate the response to its consequences
- bands used for gathering climate-related data by passive sensing require particular protection, as recognised by international regulation.
- Members States should cooperate actively in order to assess and solve interference to systems used to gather climate-related data in order to implement corrective actions,
- On 5.6 GHz meteorological radars, RSPG welcomes the initiative to analyse various options identified at this stage. There is a need to establish a set of concrete actions in order to reverse the current trend