







Media release

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Arcom and Arcep, in tandem with ADEME, publish an unprecedented study on the environmental impact of audiovisual media consumption in France in 2022, and up to 2030

The environmental impact of French people's audiovisual media consumption has been assessed for the first time in an unprecedented study conducted by Arcom and Arcep, in collaboration with ADEME, and in accordance with the "Climate and Resilience" Law¹.

Carried out with support from the firm I Care by BearingPoint, the study assesses the environmental impact of consuming audiovisual mass media in 2022, taking all of the component parts into account: hardware (user devices), networks (fixed broadband and superfast broadband, digital terrestrial and satellite) and data centres. It covers the main systems used to access audiovisual media: linear and time-shifted TV and radio, video on demand, audio and video streaming, and video sharing platforms.

The studied audiovisual media use accounts for 2.9% of power consumption in France, or 13 TWh, and 0.9% of the country's carbon footprint. Audiovisual media consumption represents 5.6 million tonnes of CO₂ equivalent, or around one third of digital technology's carbon footprint in France, as calculated in the Arcep-ADEME study².

Devices, and TVs in particular, are the chief contributors to the environmental impact of audiovisual media consumption, and account for the lion's share of every type of environmental impact (between 72% and 90% depending on the indicator: carbon footprint, consumption of mineral and metal resources, final energy consumption), followed by networks (between 9% and 26%) and data centres (between 1% and 3%).

Fixed and mobile networks represent close to 95% of the carbon footprint of the networks used to consume audiovisual media, due to the dominance of video on demand (VOD) and linear TV over IPTV. The remaining 5% correspond to digital terrestrial TV (DTT) and radio (FM, DAB+) networks.

¹ Article 15 of the Law of 22 August 2021, aka the "Climate and Resilience" Law

² DTT, FM and DAB+ networks were not included in the scope of the first <u>ADEME-Arcep study on digital technology's impact on the environment, in 2020, 2030 and 2050.</u>









The impact of audiovisual mass media consumption depends above all on the device being used. Linear (i.e. live) TV, which represents 70% of video viewing, is watched primarily on televisions and therefore has the greatest impact on the environment (70% of video consumption's carbon footprint) primarily because of the large footprint caused by devices' manufacturing stage.

The study also reveals that advertising can increase the carbon footprint of video content viewing by up to 25%, especially when programmatic advertising mechanisms are used (video sharing platforms, catch-up TV, etc.).

If no steps are taken to limit the growing environmental impact of audiovisual media consumption, its carbon footprint could increase by 30% between now and 2030. A combination of ecodesign and sustainability measures could, on the contrary, reduce it by a third.

The ecodesign of devices and extending their lifespan thus represent major levers for reducing the carbon footprint of audiovisual media consumption. Sustainability measures (e.g. reducing video resolution, especially on mobile networks) would help reduce the impact of video on demand.

The study identifies several key courses of action:

- Increase devices' durability and repairability to extend their life, and develop a culture of refurbishment;
- Encourage the ecodesign of audiovisual services to decrease the resources used over the digital service's life cycle (e.g. by using tailored codecs and open source software);
- Promote a culture of digital sustainability by proposing energy-saving settings (notably image and sound quality) and by limiting strategies to capture and keep users' attention (e.g. by banning autoplay and limiting automated data extraction for advertising purposes);
- Make information on the environmental impact of audiovisual media consumption available to users, to raise awareness of environmental issues.

To be effective, these courses of action require the involvement of every stakeholder (service providers, equipment suppliers, consumers...) so that everyone can do their part to reduce the environmental footprint of audiovisual media consumption.









Associated documents

- infographics
- **Executive Summary**
- Complete report

ABOUT ARCOM:

Arcom is an independent administrative authority that guarantees freedom of communication in France. Its responsibilities include ensuring access to a pluralistic audiovisual offer that respects rights and freedoms, protecting creative works and helping in the fight against illegal and problematic content on the internet.

ABOUT ARCEP:

The Regulatory Authority for Electronic Communications, Postal Affairs and Print Media Distribution (Arcep), a neutral and expert arbitrator with the status of independent administrative authority (IAA), is the architect and guardian of internet, fixed and mobile communications, postal networks and press distribution in France.

ABOUT ADEME:

At ADEME – France's National Agency for the Ecological Transition – we are firmly committed to fighting global warming and resource depletion. We work to mobilise citizens, economic stakeholders and local players on every front, providing them with the means to transition to a resource-efficient, low-carbon, fairer and more harmonious society. We advise, facilitate and assist in financing a great many projects in every area – energy, the circular economy, food, mobility, air quality, adapting to climate change, land use... – from research to solutions sharing. We lend our expertise and forecasting abilities to public policymaking at every level. ADEME is a public establishment, under the joint authority of the Ministry for the Ecological Transition and the Ministry for Higher Education, Research and Innovation.





