

Achieving digital sustainability

Milestones and publications

2019



2020

ENVIRONMENTAL DATA COLLECTION

MARCH
Arcep begins a 1st information-gathering campaign on telecoms' (networks, devices) environmental footprint.

Digital represents
3 to 4%
of global greenhouse gas emissions¹

BEREC

BRIEF ON THE DIGITAL CARBON FOOTPRINT

OCTOBER
Arcep publishes a brief as part of its work on "Future networks".

EUROPE

MARCH
Arcep co-chairs the BEREC (Body of European Regulators for Electronic Communications) "Sustainability" working group devoted to examining telecom networks' environmental footprint and devising solutions for curbing it.

WORK DOCUMENT ON THE PARIS ACCORD AND CLIMATE EMERGENCY

MAI
Public and independent administrative authorities publish their thoughts on their role in and data-driven regulation tools for tackling environmental challenges.

1. According to the Shift Project report, *Lean ICT : Towards digital sobriety*, March 2019, and the GreenIT.fr study, *The environmental footprint of the digital world*, September 2019.

ANNUAL REPORT ON THE STATE OF THE INTERNET IN FRANCE

JUNE
Arcep devotes a chapter to the digital sector's impact on the environment.



CNNUM² ROADMAP ON THE ENVIRONMENT AND DIGITAL TECHNOLOGY

JULY
This report contains 50 proposals, drafted in concert with more than 50 stakeholders, including Arcep.

ADEME & ARCEP MISSION STATEMENT

AUGUST
The Government entrusted the two organisations with a joint task: to identify and assess the different factors that make it possible to quantify the digital environmental footprint.

ACHIEVING DIGITAL SUSTAINABILITY REPORT + 11 PROPOSALS

DECEMBER
Arcep publishes a report and 11 concrete proposals for combining the development of digital technology uses and reducing its environmental footprint.



"Digital must play its part in the low-carbon strategy"



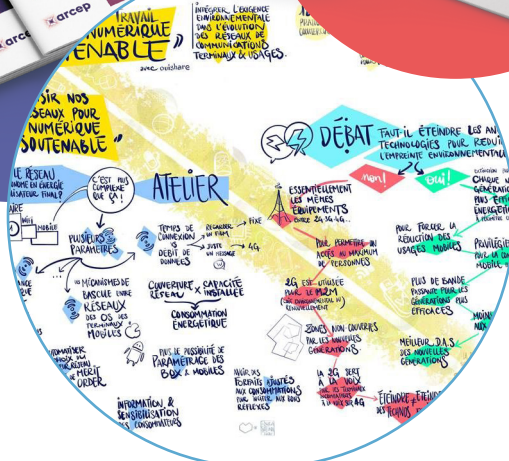
SÉBASTIEN SORIANO
DECEMBER
Arcep Chair from 2015 to 2020

INTERNATIONAL

JUNE
Arcep joins international bodies' work on tackling telecoms and digital's environmental footprint, notably OECD.

"ACHIEVING DIGITAL SUSTAINABILITY" PLATFORM

JUNE
Arcep launches a collaborative platform and invites stakeholders to contribute to discussions and the publication of a 1st report.



2. Le Conseil national du numérique/French National Digital Council.

2021

LAURE DE LA RAUDIÈRE

JANUARY
Arcep Chair



"I am fully committed to the ambition of combining the increased use of digital technologies and reducing their environmental footprint"

DIGITAL & THE ENVIRONMENT ROADMAP

FEBRUARY
The Government publishes a roadmap designed to converge the digital and Green transitions. It entrusts Arcep with new responsibilities.

ENGAGEMENT LETTER ON MOBILE DEVICES

MARCH
The Government tasks Arcep with producing a report on handset subsidies and replacement rates.

ENVIRONMENTAL DATA COLLECTION

MARCH
Arcep begins a new information-gathering campaign on telecoms' (networks, devices) environmental footprint.

Digital accounts for
2.5%
of the carbon footprint in France

Estimated length of use of a smartphone in France:
between 23 & 37 months

MOBILE DEVICE REPLACEMENT RATES

JUNE
Arcep submits a report to the Government on the impact that smartphone sales and distribution practices have on replacement rates.

DIGITAL MARKET BAROMETER

JULY
Arcep, the Economic Council (CGE) and the National Agency for Territorial Cohesion (ANCT) publish an annual study on digital device ownership and changing user habits including, for the 1st time, environmental considerations.

84%
of smartphones in circulation are less than 3 years old

COLLABORATIVE WORKSHOPS ON THE 26 GHZ BAND

NOVEMBER
To study how to take environmental issues into account in 26 GHz band awards for 5G, Arcep hosts two "Achieving digital sustainability" workshops.



DATA COLLECTION LAWS & POWERS

NOVEMBER - DECEMBER
The REEN³ Act of 15 November assigns Arcep new responsibilities, and the Act of 23 December 2021 expands its data collection powers to other digital sector players.

ASSESSMENT OF A 4G VS 5G DEPLOYMENT

JANUARY
Thanks to the Mobile Technical Experts Committee, Arcep publishes a report comparing the energy consumption of a 4G vs. 5G deployment.

"ENVIRONMENTAL" TRAINING

MAY
Three-day training programme for Arcep directors and staff, to deepen their awareness of environmental issues, providing keys to understanding and concrete actions to take.



Devices account for
65 to 90%
of the digital environmental footprint



PROGRESS REPORT

OCTOBER
Arcep hosts a webinar for "Achieving digital sustainability" platform participants (associations, institutions, operators, tech companies, experts) and delivers a progress report on its achievements and ongoing work.

2022

ARCEP & ADEME STUDY ON DIGITAL'S CARBON FOOTPRINT

JANUARY
The Government had tasked the two organisations with measuring the digital environmental footprint in France and finding levers for action and best practices to reduce it. Arcep and ADEME publish the 1st two volumes of this study.

ANNUAL "ACHIEVING DIGITAL SUSTAINABILITY" SURVEY

APRIL
In this 1st edition, Arcep publishes the initial indicators collected from the country's four main telecoms operators⁴ to monitor the progression of their environmental footprint – and so making manifest one of the 11 proposals set forth in the December 2020 report, which aimed to introduce a Green Barometer.

3. Act No. 2021-1485 of 15 November 2021 on reducing the digital environmental footprint in France.
4. Altice France - SFR, Bouygues Telecom, Iliad- Free and Orange France.

2022

EUROPE

JUNE
European telecoms regulators lay out their 1st shared targets for reducing the digital environmental footprint in a draft BEREC report, from the "Sustainability" working group cochaired by Arcep.

ANNUAL REPORT

JULY
Arcep assesses the environmental footprint of the electronic communications sector, devices and data centres.

EUROPE

NOVEMBER
The European Regulators Group for Postal Services (ERGP) studies the sector's impact on the environment. It analyses the measures that postal operators have taken to reduce it, and those set out in the European Green Deal.

**FRANCE
NATION
VERTE**
Agir • Mobiliser • Accélérer

HIGH COMMITTEE FOR GREEN ICT

NOVEMBER
The Government tasked the High Committee for Green ICT with establishing a decarbonisation roadmap for the digital sector. Arcep contributes regularly to the Committee's working groups.

PUBLIC DEBATES

JUNE
Arcep participates in public debates on environmental issues, such as the Digital Assembly, organised under the French Presidency of the Council of the European Union.

INTERNATIONAL

OCTOBER
Arcep takes part in investigations into how international bodies, notably the ITU and OECD, can take telecoms and ICT's environmental impact into consideration, as part of the G7 work on the digital tech sector.

ENVIRONMENTAL DATA COLLECTION

JANUARY
Arcep extends its data collection to include device suppliers (smartphones, computers, smart TVs, etc.) and data centre operators.

80%
of devices' carbon footprint is tied to their production

DIGITAL MARKET BAROMETER

JANUARY
Arcep, the Economic Council (CGE), the National Agency for Territorial Cohesion (ANCT) and, for the 1st time, Arcom, publish a new edition of the Digital Market Barometer, including a close-up look at TVs' environmental footprint.

ARCEP & ADEME STUDY ON DIGITAL'S CARBON FOOTPRINT

MARCH
Arcep and ADEME publish the 3rd and final volume of their forward-looking assessment of the digital environmental footprint in France, in 2030 and 2050.

If nothing is done, the digital carbon footprint in France will increase
45%
by 2030 compared to 2020

METHODOLOGICAL GAP ANALYSIS ON MEASURING THE DIGITAL ENVIRONMENTAL FOOTPRINT

APRIL
Co-managed by ADEME and Arcep, the Technical Experts Committee on assessment seeks to identify methodological disparities that can explain the differences in the findings of digital environmental impact studies, and to make recommendations for improving existing standards.

ANNUAL "ACHIEVING DIGITAL SUSTAINABILITY" SURVEY

APRIL
In this 2nd edition, Arcep publishes annual indicators collected from the country's four main telecoms operators.

EUROPE

MARCH
The Body of European Regulators for Electronic Communications (BEREC) publishes a draft report on environmental indicators for consultation.

ROUTER & STB CONSUMPTION

JANUARY
Arcep publishes a protocol for measuring ISP routers, Wi-Fi extenders and STBs' power consumption. It explains what influences these devices' consumption.

DAILY BEST PRACTICES

JANUARY
Arcep publishes a tutorial for digital device users, offering tips and best practices for curtailing their environmental footprint.

2023

LOCAL AUTHORITIES

JULY

Arcep hosts a workshop on digital sustainability for local decision-makers and officials: providing information about sober consumption and the sustainable design of digital services, and presenting ANCT (National agency for territorial cohesion) tools.



THE CARBON-RELATED IMPACT OF SHUTTING DOWN 2G/3G

SEPTEMBER

Arcep's independent Technical experts committee on mobile networks publishes its report on the carbon-related impact of shutting down 2G and 3G networks.



EUROPE

OCTOBER

BEREC publishes a new report on environmental indicators for the telecoms sector – indicators that are adopted by the European Commission's Joint Research Centre.



SATELLITES

NOVEMBER

Arcep, ADEME and CNES co-host an event on the topic of "Satellites and the environment: when the promises of megaconstellations collide with the limits of space".



BEREC



Workshop on drafting a general policy framework for the sustainable design of digital services hosted by Arcep and the *Institut du numérique responsable* (Institute for sustainable IT).



ENVIRONMENTAL DATA COLLECTION

JULY

Arcep publishes a draft decision for consultation on enhancing its annual "Achieving digital sustainability" inquiry by including mobile network hardware suppliers and adding new indicators.



VIDEO SHARING PLATFORMS

SEPTEMBER

Arcom, in concert with Arcep and ADEME, publishes a recommendation for TV services, on-demand audiovisual media services and video sharing platforms. The goal: to encourage these companies to provide consumers with information on the environmental impact of using these services, due to the data traffic they generate.



SUSTAINABLE DESIGN OF DIGITAL SERVICES

OCTOBER

Arcep and Arcom, in collaboration with ADEME, as well as DINUM, CNIL and Inria, launch a public consultation on a general policy framework for the sustainable design of digital services, designed to serve as a reference grid for digital industry stakeholders wanting to commit to sustainable design.



EUROPE

DECEMBER

BEREC publishes a draft report on empowering end-users through environmental transparency on digital products for consultation.

