



European
Commission

JRC PORTFOLIO 12

SUSTAINABLE MATERIALS AND PRODUCTS FOR A CIRCULAR AND RESILIENT EUROPE

The European economy needs to be future-proof and hence sustainable, climate-neutral, digital, resilient, and circular. This requires a robust upscaling of the use of secondary raw materials and of sustainable products (goods and services), as well as providing consumers with trust in these products and innovative business models. Enabling a shift towards a resource-efficient and decarbonised economy requires scientific and technical support, including innovative instruments such as novel criteria, targets, measurement and verification methods and related quality-assured data. These will, in the longer term, generate new scientific evidence that allows a widening of the range of policy options for the next generation of circular economy and sustainability policies. It will also contribute to the security of the supply of raw materials.

The portfolio aims to:

Develop novel methods, models and standards to assess safety, sustainability and circularity of a broad range of products, materials, value chains and waste management options

Make green products the norm through validation of research findings on specific flagship products, through support of specific policy processes

Develop and maintain the knowledge base to support the creation of the next generation of policies for sustainable, resource-efficient and resilient production and consumption systems

Joint
Research
Centre

Delivering on anticipation, integration and impact of EU policies

- ▶ monitoring and anticipating EU and global trends in materials and product production and consumption that may pose considerable challenges in terms of environmental impact and resource dependency and developing EU policy options for a path to greater sustainability from an early stage; this includes foresight exercises for selected materials and technologies that are key for the climate-neutral and digital transitions,
- ▶ integrating a unique combination of laboratory testing capacity, modelling and analytical skills and stakeholder consultation processes to prepare a JRC consolidated contribution to EU policies,
- ▶ having a direct impact on EU policy by proposing new, legally binding sustainability and circularity requirements for materials, products, value chains and waste management, as well as by developing the methodological tools and data to assess and verify such requirements.

Time frame

In the **short and medium term**, the portfolio aims to ensure the effective policy implementation of product-specific circular and sustainability requirements. The **long-term ambition** of the portfolio is to co-shape future circular and sustainable economy strategies, thereby significantly reducing the European Union's (EU) environmental impacts and resource dependencies.

Find out more



SUSTAINABLE MATERIALS AND PRODUCTS FOR A CIRCULAR AND RESILIENT EUROPE

<https://joint-research-centre.ec.europa.eu/jrc-research-portfolios/sustainable-materials>

Main partners

Partner DGs

AGRI, CLIMA, CNECT, DEFIS, EEAS, ENER, ENV, ESTAT, GROW, INTPA, JUST, MOVE, RTD, SANTE, TAXUD, TRADE

Selected stakeholders

CEN/CLC, EEA, EIT-RM, OECD, International Resource Panel, Market Surveillance Authorities, Standardisation bodies (CEN/CENELEC, ISO, IEC), UN

Sustainable products

Secondary raw materials

Critical raw materials

Circular economy

Open strategic autonomy

European Green Deal

Ecodesign

Ecolabel and Green Public Procurement

Environmental Footprint methodology

Green claims

Waste management

Sustainable chemicals and materials

Product Compliance Network

European Platform on Life Cycle Assessment

Raw Materials Information System 3.0

Batteries

Science for policy

Joint Research Centre

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