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Commission Notice

The 2024 annual Union work programme for European standardisation

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Article 8 of Regulation (EU) No 1025/2012 on European standardisation¹ lays down that the Commission shall adopt an annual Union work programme for European standardisation. In line with the respective rules, this Commission Notice identifies the European standards and European standardisation deliverables that the Commission intends to request from the European standardisation organisations for 2024, together with specific objectives and policies for these standards and deliverables (see Annex).

The Notice was drawn up to specifically support EU policies and legislation with the objective of contributing to a green, digital and resilient single market as well as the EU's international objectives.

The role of standardisation for EU policies has been addressed in several Commission policy documents, most notably the standardisation strategy² and EU industrial strategy³. Standards support EU policies to ensure that EU products and services are competitive worldwide and reflect state-of-the-art safety, security, health, social and environmental considerations. In addition, they are an important tool for research, development and innovation valorisation by demonstrating proof of concept and leveraging the roll-out of completely new industrial value chains in the green and digital areas⁴.

Pursuant to Article 8(3) of Regulation (EU) 1025/2012, the Commission includes objectives for the international dimension in its annual Union work programme. It will continue its cooperation on standardisation with international partners by implementing actions envisaged by digital partnerships with Japan, South Korea and Singapore, in the context of the EU-US Trade and Technology Council and within G7/G20 groups. In the EU free trade agreements with international partners, the Commission promotes an approach in support of international standardisation processes as prescribed through the principles of the World Trade Organization, i.e. transparency, openness, impartiality and consensus effectiveness and relevance, coherence and development dimension. The Commission will promote cooperation and exchange of information on standardisation including at international level as an essential part of the chapter on technical barriers to trade and good regulatory practices

¹ Regulation (EU) No 1025/2012 of the European Parliament and of the Council of 25 October 2012 on European standardisation, amending Council Directives 89/686/EEC and 93/15/EEC and Directives 94/9/EC, 94/25/EC, 95/16/EC, 97/23/EC, 98/34/EC, 2004/22/EC, 2007/23/EC, 2009/23/EC and 2009/105/EC of the European Parliament and of the Council and repealing Council Decision 87/95/EEC and Decision No 1673/2006/EC of the European Parliament and of the Council, OJ L 316, 14.11.2012, pp. 12-33.

² [COM\(2022\)31](#)

³ [COM\(2021\) 350](#)

⁴ [Council Recommendation](#) on the guiding principles for knowledge valorisation of 21 November 2022.

in every free trade agreement it negotiates. In addition, it will continue dialogue with other countries to explore possible areas of cooperation on global challenges.

The role of international research and innovation cooperation is equally important to promote the EU's leading role as a global standards setter, as identified in the Global Approach to Research and Innovation⁵.

The Annex to this Notice contains actions for developing and revising European standards or European standardisation deliverables. They are necessary and suitable for the support of EU legislation and policies, and thereby strengthen the EU's leading role in setting global standards.

The Commission's annual EU work programme shall identify the strategic policy priorities for European standardisation. Since the publication of the standardisation strategy in 2022, subsequent Commission Notices have identified a list of policy priority actions among the items listed in the Annex. These priority standardisation deliverables support critical EU policies in achieving a green, digital and resilient single market and deserve particular attention from the European standardisation system, including fast-track deliverables.

Following the Commission Decision⁶ to set up the High-Level Forum on European Standardisation, which was established in January 2023, the Commission receives advice from the Forum on the priority actions for the annual Union work programme. This advice has been taken into account in this year's Commission Notice.

Against this background, the Commission has identified the following standardisation actions as **policy priorities**:

- 1. Technologies for European high performance computing and European quantum communication infrastructure:** in line with the Commission Recommendation on critical technology areas for the EU's economic security for further risk assessment with Member States⁷, the Commission reiterates the policy priority items from the annual Union work programme 2023 on quantum.
- 2. Critical raw materials - recycling of permanent magnets and exploration, extraction, refining and recycling of critical raw materials:** the Commission reiterates like in 2023 that critical raw materials are a policy priority with a view to the Commission proposal on the Critical Raw Materials Act⁸ and the confirmed role of critical raw materials in maintaining resilient supply chains.
- 3. EU Trusted Data Framework:** the Commission adds a new priority action on a trusted data framework to support the implementation of the Data Act⁹.
- 4. European Digital Identity framework:** the Commission includes a new priority item to support establishing a framework for a European Digital Identity.

⁵ [COM\(2021\)252](#)

⁶ [C\(2022\)6189](#)

⁷ [C\(2023\) 6689 final](#)

⁸ [COM\(2023\)160 final](#)

⁹ [REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on harmonised rules on fair access to and use of data \(Data Act\)](#)

5. **Ecodesign of air-to-air conditioning and heat pumps:** the Commission includes a new priority item on heat pumps based on the objectives of the Commission proposal on the Net Zero Emission Industry Act¹⁰ and the clear role of standards in achieving its objectives.
6. **Cybersecurity requirements for products with digital elements:** the Commission reiterates the 2023 policy priority on cybersecurity requirements that aims to create conditions for developing secure products with digital elements.
7. **Hydrogen technologies and components:** the Commission reiterates the 2023 policy priority on hydrogen technologies and components that aims to improve the development and maintenance of hydrogen infrastructure and technological components in the single market.
8. **Electric vehicle charging infrastructure:** the Commission includes a new priority item on electric vehicle charging infrastructure for automatic connectivity between charging infrastructure and electric vehicles, while ensuring the interoperability of charging infrastructure across different manufacturers, systems and networks.

¹⁰ [COM\(2023\)161 final](#)



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ANNEX

ANNEX

to the

Commission Notice

The 2024 annual Union work programme for European standardisation

Overview

In this 2024 annual Union work programme for European standardisation, the following **policy priorities** were identified amongst the 72 actions listed below:

1. Technologies for European high performance computing and European quantum communication infrastructure (Action 7)
2. Recycling of permanent magnets (Action 1) and exploration, extraction, refining and recycling of critical raw materials (Action 2)
3. EU Trusted Data Framework (Action 10)
4. European Digital Identity framework (Action 8)
5. Ecodesign of air-to-air conditioning and heat pumps (Action 33)
6. Cybersecurity requirements (Action 6)
7. Hydrogen technologies and components (Action 16)
8. Electric vehicles charging infrastructure (Action 44)

The full list of actions in the 2024 annual Union work programme is divided into four main categories: (1) Resilience of European industry, (2) Digital transition, (3) Green transition, and (4) Internal market for products and services.

The actions on resilience aim to support the following:

- Recycling of permanent magnets (Action 1)
- Exploration, extraction, refining and recycling of critical raw materials (Action 2)
- New multi-materials and functions for additive manufacturing (Action 3)
- Biotechnology and biomanufacturing (Action 4)
- Advanced materials (Action 5)

The actions on digital transition aim to support the following¹:

- Cybersecurity requirements (Action 6)
- Technologies for European high performance computing and European quantum communication infrastructure (Action 7)
- European Digital Identity framework (Action 8)
- Online verification of age (Action 9)
- EU Trusted Data Framework (Action 10)
- Interoperability for data processing services (Action 11)
- Customer data in the insurance sector (Action 12)
- Secure, interoperable virtual and augmented reality ecosystem and virtual economy (Action 13)
- Harmonisation of barcodes in order to enable interoperable ticketing with use of barcodes. (Action 14)
- Revision of standardisation request in support of Union policy on artificial intelligence (Action 15)

The actions on green transition aim to support the following:

- Hydrogen infrastructure, support and storage (Actions 16-18)

¹ Information on standardisation activities discussed in the context of the European Multi-Stakeholder Platform on ICT Standardisation can be in this link: <https://joinup.ec.europa.eu/collection/rolling-plan-ict-standardisation/rolling-plan-2023>

- Low voltage direct current technologies (Action 19)
- Electricity grids (Action 20)
- Ecodesign and energy labelling requirements to reduce energy consumption (Actions 21-40)
- Improve the greening and climate resilience of buildings and construction materials (Actions 41, 42)
- Transport and permanent storage of carbon dioxide (Action 43)
- Electric vehicles charging infrastructure (Action 44)
- Low carbon steel (Action 45)
- Recycling and reuse of materials in end-of-life vehicles (Action 46)
- Ambient air quality (Actions 47-50)
- Reduction of methane emissions in the energy sector (Action 51)
- Monitoring of industrial emissions (Action 52)
- Reduction of pollution from microplastics released in the environment (Action 53)
- Assessment of ecosystem services (Action 54)
- Fertilising products (Action 55)
- Soil health measurements and access (Action 56)
- Aviation fuel (Action 57)

The actions on the internal market for products and services support the following:

- Quality and safety of medical devices (Action 58)
- Improving the safety of pressure equipment and facilitating the access of SMEs to it (Action 59)
- Improving the access of SMEs to the simple pressure vessels market (Action 60)
- Safety of machinery (Action 61)
- Equipment intended for use in potentially explosive atmospheres (Action 62)
- Personal protective equipment (Action 63)
- Correct and traceable measuring systems to protect the public from incorrect measuring (Action 64)
- Interoperability of the rail system (Action 65)
- Electromagnetic Compatibility (Action 66)
- Fire safety of ships carrying liquefied gases in bulk and ships using gas as a propellant (Action 67)
- Low Voltage (Action 68)
- Radio Equipment (Action 69)
- Recreational craft (Action 70)
- Safety of consumer products and facilities (Action 71)
- Data dictionary for reporting to financial sector supervisory authorities (Action 72)

Actions for the development and revision of European standards or European standardisation deliverables supporting the resilience of European industry				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
1	Recycling critical raw materials from permanent magnets	COM/2023/160 final Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020	<p>Development of European standards for recycling permanent magnets. The standards should:</p> <p>Support methods that are economically competitive with primary production; ensure that the recycling processes are environmentally friendly; recover neodymium in a form that is suitable for producing high-quality magnets; collecting and sorting used products containing neodymium magnets.</p>	The aim of the action is to secure the EU supply chains and reduce the environmental impacts associated with primary production.
2	Critical raw materials	COM/2023/160 final Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for ensuring a secure and sustainable supply of critical raw materials and amending Regulations (EU) 168/2013, (EU) 2018/858, 2018/1724 and (EU) 2019/1020	Development of European standards and standardisation deliverables supporting exploration, extraction, refining and recycling of critical raw materials.	The aim of the action is to strengthen the EU critical raw materials value chain to support the green and digital transitions and build up EU resilience.

Actions for the development and revision of European standards or European standardisation deliverables supporting the resilience of European industry				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
3	Additive manufacturing techniques	A new Circular Economy Action Plan For a cleaner and more competitive Europe - COM/2020/98 final	Develop European standards supporting additive manufacturing, including 3D/4D printing, covering metal, polymer, ceramic, biological, and other material-based manufacturing systems.	The action aims to contribute to energy efficiency and increase the competitiveness of new multi-materials items and multi-functional materials and products for various applications, including biomedical, in additive manufacturing.
4	Bio-materials, bio-based, and wood-derived products	Commission work programme 2024 Delivering today and preparing for tomorrow COM/2023/638 final A sustainable Bioeconomy for Europe: Strengthening the connection between economy, society and the environment COM/2018/673 final Sustainable Carbon Cycles COM/2021/800 final	Develop new standards and revise existing standards on bio-materials, bio-based, and wood-derived products for defining terminology, harmonising testing methods for performance evaluation, and setting performance criteria improving sustainability, renewability, and biodegradability. Develop product category rules in support of EN 15804 for structural timber products, wood based panels and their ancillaries.	The main objective is to support the modernisation and strengthen the EU industrial base through the creation of new value chains and sustainable, more cost-effective industrial processes, and strengthen and scale-up the bio-based sectors and industries, unlock investments and boost market uptake.

Actions for the development and revision of European standards or European standardisation deliverables supporting the resilience of European industry				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
5	Advanced materials	Commission work programme 2024 Delivering today and preparing for tomorrow COM/2023/638 final	Conducting a mapping study on existing standardisation and identified gaps on advanced materials (including nanomaterials and graphene) for the green and digital transition.	The action aims to map standard needs for innovation uptake and ensure the safety and sustainability of advanced materials, including critical raw materials substitution. This will form the basis for developing standards that foster research and innovation in sustainable substitution processes and facilitate potential joint actions at EU and national levels.

Actions for the development and revision of European standards or European standardisation deliverables supporting the digital transition				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
6	Cybersecurity requirements for products with digital elements	COM(2022)454 - Proposal for a Regulation on horizontal cybersecurity requirements for products with digital elements and amending Regulation (EU) 2019/1020 (Cyber resilience Act) -	Develop European standards and European standardisation deliverables corresponding to essential cybersecurity specifications as set out by the Cyber Resilience Act and notably concerning: (i) security specifications relating to the properties of products with digital elements and vulnerability handling specifications (ii) methodologies concerning assurance levels relating to products with digital elements as referred to above; (iii) evaluation methodologies for evaluating cybersecurity risks associated with products with digital elements.	The main objective is to create conditions for developing secure products with digital elements by ensuring that hardware and software products are placed on the market with fewer vulnerabilities and ensure that manufacturers take security seriously throughout a product's life cycle.

Actions for the development and revision of European standards or European standardisation deliverables supporting the digital transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
7	Quantum technologies	COM/2021/118 final/2 - 2030 Digital Compass: the European way for the Digital Decade -	Development of European standards for supply chains for modular quantum computers and communication architectures, and their enabling technologies for European high performance computing and for European quantum communication infrastructure. Development of new European standards or revision of existing ones on safety, privacy and cybersecurity of quantum computing and communication technology. Development of European standards for supply chains for reliable quantum source, sensor and metrology devices.	The main objectives are: (i) To ensure systematic collection of industry (start-ups, SMEs, large industries, etc.) standardisation needs and promoting standardisation activities among industry experts to support standardisation activities. (ii) To ensure the quality, safety and security of quantum technology products and services and their interoperability, essential to the (commercial) development of QT and deployment of pan-EU infrastructures, and to build trust among vendors, customers and service providers. (iii) To drive standardisation in line with EU policy.
8	European Digital Identity framework	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EU) No 910/2014 as regards establishing a framework for a European Digital Identity - COM/2021/281 final -	Align European and international standards, incorporating a cohesive European Digital Identity Framework. This includes devising technical reports, standards, and guidelines for the EU Digital Identity Wallet and electronic attestations.	The goal is to empower citizens with a universally-recognised, secure, and user-friendly digital identity, paving the way for enhanced online transactions and business opportunities while upholding European data protection values.

Actions for the development and revision of European standards or European standardisation deliverables supporting the digital transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
9	Online verification of age	<p align="center"> COM(2022) 212 final - A Digital Decade for children and youth: the new European strategy for a better internet for kids (BIK+) Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EU) No 910/2014 as regards establishing a framework for a European Digital Identity COM/2021/281 final </p>	<p align="center">Development of new European standards for online age assurance/age verification, in the context of the proposal for a European identity framework (eID) proposal.</p>	<p align="center">The main objective is to improve child safety online through secure, certified and interoperable age verification (systems to access online services across the EU). The aim is to build trust and confidence in AV mechanisms and in particular to minimise the risk of children accessing age-inappropriate content.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the digital transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
10	EU Trusted Data Framework	<p>Regulation (EU) 2022/868 of the European Parliament and of the Council of 30 May 2022 on European data governance and amending Regulation (EU) 2018/1724 (Data Governance Act)</p> <p>REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on harmonised rules on fair access to and use of data (Data Act)</p>	<p>A comprehensive set of standards, practices, and rules to ensure trusted, legally compliant data sharing across parties, including data intermediaries and altruism organizations. This encompasses data catalogue standards for publication and discovery of data assets, ontology standards for integration and use of shared data, and common KPIs to guide European data spaces towards cross-domain interoperability, enhancing transparency and usage. All actions will be coordinated closely with the European Data Innovation Board and, where relevant, the Data Spaces Support Centre.</p>	<p>Data producers and users encounter notable interoperability challenges when combining data from varied sources, both within and across sectors. Encouraging the adoption of standard, compatible formats and protocols for coherent data gathering and processing across sectors is vital, and can be promoted via the rolling plan for ICT standardisation and a fortified European Interoperability Framework. The primary goals are to enhance the Findability, Re-usability, and Interoperability of data—core tenets of the FAIR data principles—in bolstering the European Data Economy. Common European Data Spaces, supported by EU funding avenues like Horizon Europe and Digital Europe, each evolve at their unique pace. Ensuring interoperability across these spaces is essential, paving the way for generic tool development and aiding businesses active across multiple data realms.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the digital transition				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
11	Interoperability for data processing services	<p>REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on harmonised rules on fair access to and use of data (Data Act)</p> <p>-</p>	Development of harmonised standards for the interoperability of data processing services that satisfy the essential requirements under paragraphs 1 and 2 of the Data Act. This could include work on the basis of existing open interoperability specifications developed by industry.	<p>The main objective is to make Chapter VI of the Data Act operable. The chapter contains provisions to allow users of data processing services to switch between providers of data processing services.</p> <p>To allow switching, data processing service providers must provide customers with open interfaces. Overall, switching can only become a reality if data processing services are interoperable.</p> <p>That is why Art. 29 of the Data Act seeks to establish a 'common language' among data processing services. To this end, it empowers the Commission to launch a standardisation mandate.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the digital transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
12	Customer data in the insurance sector	<p><u>Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on a framework for Financial Data Access and amending Regulations (EU) No 1093/2010, (EU) No 1094/2010, (EU) No 1095/2010 and (EU) 2022/2554</u></p> <p><u>COM/2023/360 final</u></p> <p align="center">-</p>	<p>Development of new standards to enable access to and the sharing of insurance data of financial sector customers. This action supports the Commission policy to strengthen data access in financial services (deliverable of the Commission Work Programme of 2023) and the Commission proposal for a regulation on a framework for financial data access.</p>	<p>The objective is to ensure that customers in the financial sector can access their data based on common standards, as per the Commission proposal for a regulation on a financial data access framework. This specifically includes the obligation on insurance firms (“data holders”) to share non-life insurance data (e.g. assets, contract and product data) at the request of the customer with licensed third parties (“data users”) based on common standards. The standardisation work will have to comply with the scope of the final legal act once the proposal for a regulation for a framework on financial data access is adopted.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the digital transition				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
13	Secure, interoperable virtual and augmented reality ecosystem and virtual economy	An EU initiative on Web 4.0 and virtual worlds: a head start in the next technological transition - COM/2023/442 final -	Situation assessment and recommendations on standards for human-computer interfaces, spatial computing, app deployment, device security and communication, biometric sensors in devices, virtual and augmented reality model storage and exchange—including designs of virtual assets—and standards for the virtual economy and society addressing identification, ownership, IP protection, and child safety.	<p>The Commission aims for a Web 4.0 and virtual worlds that are powered by open and highly distributed</p> <p>technologies and standards that enable interoperability between platforms and networks and freedom of</p> <p>choice for users, and where sustainability, inclusion and accessibility are at the core of technological</p> <p>developments. To ensure that Web 4.0 and virtual worlds are shaped as an open, secure space, respectful of EU values and rules, international engagement is needed. The Commission, in cooperation with Member States and stakeholders, will engage with key organisations active in the development of standards.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the digital transition				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
14	Harmonisation of barcodes in order to enable interoperable ticketing with use of barcodes.	PLAN/2021/10509 Proposal for a Regulation of the European Parliament and of the Council addressing market challenges hampering the development of Multimodal Digital Mobility Services (MDMS) -	Development of European standards for barcodes to be used in ticketing applications covering various ticketing modes with modular barcodes on smartphones and on paper tickets for mobility services.	The goal is to allow for seamless multimodal passenger transport by 2030. This can be greatly facilitated by integrated electronic ticketing and an EU interoperable barcode standard valid across transport modes.
15	Revision of standardisation request in support of Union policy on artificial intelligence	Proposal for a Regulation laying down harmonised rules on artificial intelligence (Artificial Intelligence Act) and amending certain Union legislative acts COM/2021/206 final	Laying down technical specifications supporting the implementation of the upcoming act on artificial intelligence, including aspects related to risk management, data quality, record keeping, transparency, human oversight, accuracy, robustness, cybersecurity, quality management, conformity assessment, biometric identification, resource performance of artificial intelligence systems, and energy efficient development of general-purpose models of artificial intelligence.	Ensuring that artificial intelligence systems can be safe and trustworthy, are monitored appropriately throughout their life cycle, respect fundamental values and human rights recognised in the EU, and strengthen European competitiveness.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
16	Hydrogen technologies and components	<p>Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the internal markets for renewable and natural gases and for hydrogen</p> <p align="center">COM/2021/804 final</p> <p>Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652</p>	Develop European standards on quality, technology and safety for the production and use of hydrogen.	Improving the development and maintenance of hydrogen infrastructure and technological components in the single market.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
17	Transport and storage of hydrogen	<p><u>Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022 on guidelines for trans-European energy infrastructure, amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No 347/2013</u></p> <p><u>Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on common rules for the internal markets in renewable and natural gases and in hydrogen</u></p> <p><u>COM/2021/803 final</u></p>	<p>Revise existing standards and develop new European standards for hydrogen quality and safety – relevant for injection into the dedicated hydrogen network, and end uses, including hydrogen-based fuels.</p>	<p>Enabling and promoting the scaling up of transport and storage methods for hydrogen, which will facilitate the replacement of fossil fuels and feedstocks in hard-to-decarbonise sectors.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
18	Containers for hydrogen (liquid and gaseous) in inland waterway transport	<p align="center"> COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS NAIADES III: Boosting future-proof European inland waterway transport - COM/2021/324 final Directive (EU) 2016/1629 of the European Parliament and of the Council of 14 September 2016 laying down technical requirements for inland waterway vessels, amending Directive 2009/100/EC and repealing Directive 2006/87/EC </p>	Development of European standards to enhance the safety of hydrogen-fueled inland water transport by aligning standards of vessels carrying hydrogen containers with refuelling points including swappable containers.	The goal is to limit the time for bunkering and refuelling of hydrogen and with the uptake of zero-emission technologies to reduce emissions from the transport sector ensuring the safety of operation.
19	Low voltage direct current technologies	<p align="center"> COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS EU Solar Energy Strategy COM/2022/221 final </p>	Develop European standards and European standardisation deliverables supporting the integration of solar electricity into the energy system.	Contribute to the rapid deployment of solar photovoltaics (PV) and solar thermal technologies.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
20	Electricity grids	COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Grids, the missing link - An EU Action Plan for Grids COM/2023/757 final	Develop European standards and standardisation deliverables, particularly in the form of a workshop agreement for setting common specifications for use by transmission system operators for electricity towards grid manufacturers.	The action aims to lower costs, accelerate project delivery, increase the amount of output with the already existing manufacturing facilities that electricity suppliers can produce, and enable suppliers across the EU to have better access to other markets within Europe.
21	Ecodesign with regard to water pumps	Commission Regulation (EU) No 547/2012 of 25 June 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water pumps	Revise existing standards and develop new standards for the measurement and calculation methods of the ecodesign specifications of water pumps.	The main objective is to reduce the energy consumption of water pumps, considering an extended product approach, possibly looking into other aspects e.g. related to circular economy.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
22	Ecodesign and energy labelling of household dishwashers	Commission Regulation (EU) 2019/2022 of 1 October 2019 laying down ecodesign requirements for household dishwashers pursuant to Directive 2009/125/EC of the European Parliament and of the Council amending Commission Regulation (EC) No 1275/2008 and repealing Commission Regulation (EU) No 1016/2010 Commission Delegated Regulation (EU) 2019/2017 of 11 March 2019 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of household dishwashers and repealing Commission Delegated Regulation (EU) No 1059/2010	Revise existing standards and develop new standards for the measurement and calculation methods of the ecodesign and energy labelling specifications of household dishwashers.	The main objective is to reduce the energy consumption and improve resource efficiency of dishwashers.
23	Ecodesign and energy labelling of cooking appliances	Commission Regulation (EU) No 66/2014 of 14 January 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for domestic ovens, hobs and range hoods	Revise existing standards and develop new standards for cooking appliances.	Reducing the energy consumption of cooking appliances.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
24	Ecodesign and energy labelling of electronic displays	<p align="center"> <u>Commission Regulation (EU) 2019/2021 of 1 October 2019 laying down ecodesign requirements for electronic displays pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Commission Regulation (EC) No 1275/2008 and repealing Commission Regulation (EC) No 642/2009</u> - </p>	<p>Revise existing standards and develop new standards for electronic displays covering high dynamic range (HDR) encoding function and resolution levels above 4k (or HD), setting a specific testing method for behaviours of ABC and adapting verification methods for plastic additives content.</p>	<p>Reducing the energy consumption of electronic displays (televisions, monitors), covering HDR and resolution levels above 4k (or HD), by setting a specific testing method for ABC and adapting verification methods for plastic additives content.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
25	Ecodesign and energy labelling of light sources	<p><u>Commission Regulation (EU) 2019/2020 of 1 October 2019 laying down ecodesign requirements for light sources and separate control gears pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012</u> <u>Commission Delegated Regulation (EU) 2019/2015 of 11 March 2019 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of light sources and repealing Commission Delegated Regulation (EU) No 874/2012</u></p>	<p>Revise existing standards and develop new standards covering procedures and methods for measuring the required parameters for LED light sources and OLED light sources.</p>	<p>Reducing the energy consumption of light sources, yielding an estimated 41.9 TWh of annual final energy savings in 2030.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
26	Ecodesign and energy labelling of local space heaters	Commission Regulation (EU) 2015/1188 of 28 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for local space heaters Commission Delegated Regulation (EU) 2015/1186 of 24 April 2015 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of local space heaters	Revise existing standards and develop new standards for local space heaters.	Reducing energy consumption and further limiting the environmental impact of local space heaters.
27	Ecodesign of solid fuel local space heaters	Commission Regulation (EU) 2015/1185 of 24 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for solid fuel local space heaters	Revise existing standards and develop new standards for solid fuel local space heaters.	Reducing energy consumption and further limiting the environmental impact of solid fuel local space heaters.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
28	Ecodesign and energy labelling of photovoltaic products (modules, inverters and systems)	<p align="center"> <u>Commission Regulation PLAN/2020/7002 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for photovoltaic products (modules, inverters and systems)</u> <u>Commission Delegated Regulation PLAN/2020/7007 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of photovoltaic products (modules, inverters and systems)</u> </p>	<p>Develop new standards for photovoltaic products (modules, inverters, and systems), to support the measurement and calculation of the relevant product parameters – through reliable, accurate and reproducible measurement methods that take into account the recognised state-of-the-art measurement methods.</p>	<p>Reducing the environmental impacts associated with photovoltaic products (modules, inverters, and systems).</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
29	Ecodesign and energy labelling of smartphones and tablets	<p><u>COMMISSION REGULATION (EU) / laying down ecodesign requirements for smartphones, mobile phones other than smartphones, cordless phones and slate tablets pursuant to Directive 2009/125/EC of the European Parliament and of the Council and amending Commission Regulation (EU) 2023/826</u></p> <p><u>C/2023/3538 final Commission Delegated Regulation (EU) 2023/1669 of 16 June 2023 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to the energy labelling of smartphones and slate tablets</u></p>	<p>Develop new standards for smartphones and tablets to support the measurement and calculation of the relevant product parameters through reliable, accurate and reproducible measurement methods that consider the recognised state-of-the-art measurement methods.</p>	<p>Reducing the environmental impacts associated with smartphones and tablets.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
30	Ecodesign and energy labelling of solid fuel boilers	<u>Commission Regulation (EU) 2015/1189 of 28 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for solid fuel boilers</u> <u>Commission Delegated Regulation (EU) 2015/1187 of 27 April 2015 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of solid fuel boilers and packages of a solid fuel boiler, supplementary heaters, temperature controls and solar devices</u>	Revise existing standards and develop new standards for the measurement and calculation methods of the ecodesign and energy labelling specifications of solid fuel boilers.	The main objective is to reduce the energy consumption of solid fuel boilers.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
31	Ecodesign and energy labelling of space heaters	<p><u>Commission Regulation (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters</u></p> <p><u>Commission Delegated Regulation (EU) No 811/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device</u></p>	<p>Revise existing standards and develop new standards for space heaters and combination heaters to support measurement of the relevant product parameters through reliable, accurate and reproducible measurement methods that take into account the recognised state-of-the-art measurement methods.</p>	<p>Standardising energy consumption, sound power level and nitrogen oxide emission specifications for space heaters and combination heaters throughout the EU. This should help make the single market operate better and improve the environmental performance of these products.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
32	Ecodesign and energy labelling of water heaters	<p><u>Commission Regulation (EU) No 814/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks</u> <u>Commission Delegated Regulation (EU) No 812/2013 of 18 February 2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of water heaters, hot water storage tanks and packages of water heater and solar device</u></p>	<p>Revise existing standards and develop new standards for water heaters and hot water storage tanks to support measurement of the relevant product parameters through reliable, accurate and reproducible measurement methods that consider the recognised state-of-the-art measurement methods.</p>	<p>Standardising energy consumption, sound power level and nitrogen oxide emission specifications for water heaters, and specifications for standing losses by hot water storage tanks throughout the EU. This should help make the single market operate better and improve the environmental performance of these products.</p>
33	Ecodesign of air-to-air air conditioners and heat pumps	<p><u>Commission Regulation (EU) No 206/2012 of 6 March 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for air conditioners and comfort fans as amended by Commission Regulation (EU) 2016/2282 of 30 November 2016</u></p>	<p>Revise existing standards and develop new standards for air-to-air air conditioners and heat pumps through reliable, accurate and reproducible measurement methods that consider the recognised state of the art.</p>	<p>Reducing the energy consumption of air-to-air air conditioners and heat pumps in their usage phase, as well as their sound power level.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
34	Ecodesign of electric motors	<p align="center"> Commission Regulation (EU) 2019/1781 of 1 October 2019 laying down ecodesign requirements for electric motors and variable speed drives pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Regulation (EC) No 641/2009 with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products and repealing Commission Regulation (EC) No 640/2009 - </p>	<p>Revise the existing standards, taking the following into account: (1) setting resource efficiency specifications, including identification and reuse of rare earth in permanent magnet motors; (2) setting the level of verification tolerances; (3) setting method and energy classes for motors with a rated voltage above 1000 V; (4) establishing combinations of motors and variable speed drives sold together, as well as integrated variable speed drives (compact drives); (5) adding other types of motors to the scope, including permanent magnet motors.</p>	<p>Providing repeatable, reproducible, cost-effective, and practice-relevant test methods for measuring the energy consumption of electric motors with a view to reducing their energy loss rate, thus contributing to the functioning of the single market and to energy savings.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
35	Ecodesign of electrical and electronic household and office equipment	<u>Commission Regulation (EU) 2023/826 of 17 April 2023 laying down ecodesign requirements for off mode, standby mode, and networked standby energy consumption of electrical and electronic household and office equipment pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 1275/2008 and (EC) No 107/2009</u>	Revise existing standards and develop new standards for electrical and electronic household and office equipment.	Reducing standby mode, off mode and networked standby energy consumption of electrical and electronic household and office equipment.
36	Ecodesign of external power supplies	<u>Commission Regulation (EU) 2019/1782 of 1 October 2019 laying down ecodesign requirements for external power supplies pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No 278/2009</u>	Revise existing standards and develop new standards for external power supplies to support measurement of the relevant product parameters through reliable, accurate and reproducible measurement methods that take into account the recognised state-of-the-art measurement methods.	The main objective is to standardise the energy consumption of external power supplies, thus contributing to the functioning of the single market and to energy savings.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
37	Ecodesign of industrial fans	<p align="center"> <u>Commission Regulation (EU) No 327/2011 of 30 March 2011 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW</u> </p>	<p>Revise the existing standards and develop new standards to enable an extended products approach, notably by identifying a sufficient number of operating points and an interpolation/calculation method and/or a characteristic curve. Complement direct measurement methods with appropriate calculation/interpolation methods and quantify their validity. Establish methods for circulating fans and large comfort fans and for large fans e.g. through extrapolation from scaled models.</p>	<p>Providing repeatable, reproducible, cost-effective, and practice-relevant test methods for measuring the energy consumption of industrial fans with a view to reducing their energy loss rate, thus contributing to the functioning of the single market and to energy savings.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
38	Ecodesign of variable-speed drives	<p align="center"> Commission Regulation (EU) 2019/1781 of 1 October 2019 laying down ecodesign requirements for electric motors and variable speed drives pursuant to Directive 2009/125/EC of the European Parliament and of the Council, amending Regulation (EC) No 641/2009 with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products and repealing Commission Regulation (EC) No 640/2009 - </p>	<p>Revise the existing standards along with the following: (1) address system losses directly associated with variable-speed drives, in particular losses induced upstream in the grid when the input current is not sinusoidal, and harmonic losses induced downstream in the motor; (2) set the level of verification tolerances; (3) if applicable, add energy classes to encourage more efficient drives; (4) set specifications for combinations of motors and variable-speed drives sold together, as well as integrated variable-speed drives (compact drives); (5) add other types of variable-speed drives in scope.</p>	<p>Providing repeatable, reproducible, cost-effective, and practice-relevant test methods for measuring energy consumption/losses of variable speed drives with a view to reducing energy loss rates, thus contributing to the functioning of the single market and to energy savings.</p>
39	Ecodesign for servers and data storage products	<p align="center"> Commission Regulation (EU) 2019/424 of 15 March 2019 laying down ecodesign requirements for servers and data storage products pursuant to Directive 2009/125/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No 617/2013 </p>	<p>Development of a new European standard for the measurement and calculation of the efficiency, performance and power demand of data storage products and for the characterisation of the Processor Power Management functionality of servers.</p>	<p>The main objective is to help ensure a high level of environmental performance of servers and data storage products throughout the Union and thus contribute to the free movement of those products in the Union</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
40	Ecodesign for small, medium and large power transformers	<p align="center"><u>Commission Regulation (EU) No 548/2014 of 21 May 2014 on implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers</u></p>	Development of a new European standard for the measurement and calculation of the energy efficiency and performance of small, medium and large power transformers.	The main objective is to help ensure a high level of environmental performance of small, medium and large power transformers and thus contribute to the free movement of those products in the Union and to energy savings.
41	Carbon removals in construction products	<p align="center"><u>COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS</u> <u>New EU Forest Strategy for 2030</u></p> <p align="center"><u>COM/2021/572 final</u> <u>COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL</u> <u>Sustainable Carbon Cycles</u></p> <p align="center"><u>COM/2021/800 final</u></p>	Develop a standardised framework of dynamic life cycle assessment to account more accurately for carbon removals associated with carbon storage in construction products.	The main objective is to reflect the progress made in dynamic life cycle assessment to better account for carbon storage in standards for construction products, mainly when using time-dependent characterisation factors applied to a dynamic life cycle inventory.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
42	Climate resilience of infrastructure	<p align="center"> <u>COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS</u> <u>Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate Change</u> <u>COM/2021/82 final - point 2.3.2</u> </p>	<p align="center"> Revise - according to state-of-the-art knowledge - a broader range of standards for assets (including non-infrastructure) that are vulnerable to climate impacts, with a view to improving their climate resilience. </p>	<p align="center"> Improving the climate resilience of the existing infrastructure stock and new major infrastructure projects. </p>
43	Transport and permanent storage of carbon dioxide	<p align="center"> <u>Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on establishing a framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem (Net Zero Industry Act) - COM/2023/161 final</u> </p>	<p align="center"> Develop new European standards for transporting carbon dioxide through pipelines, ships, trains, and trucks and for its permanent geological storage. </p>	<p align="center"> The main objective is to ensure high interoperability of emerging carbon dioxide transport infrastructure and permanent storage capacities. </p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
44	Electric vehicles charging infrastructure	Regulation (EU) 2023/1804 of the European Parliament and of the Council of 13 September 2023 on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU	Development of European standards on: - Standard for a Public Key Infrastructure (PKI) for e-mobility (Plug and Charge concept); - Standard for people with disabilities for recharging infrastructure; - ID codes for electric recharging and hydrogen refuelling infrastructure; - Convergence of Open Charge Point Protocol and IEC 63110 (charging infrastructure back-end).	The objective is to guarantee user-friendliness and promote automatic connectivity between charging infrastructure and electric vehicles while ensuring the interoperability of charging infrastructure across different manufacturers, systems, and networks.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
45	Low carbon steel	<p><u>COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery</u></p> <p><u>COM/2021/350 final</u></p> <p><u>COMMISSION STAFF WORKING DOCUMENT Towards competitive and clean European steel Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Updating the 2020 New Industrial Strategy: Building a stronger Single Market for Europe's recovery</u></p> <p><u>SWD/2021/353 final</u></p>	<p>Develop standards that establish harmonised methodologies for emission and recycling criteria for steel production, hydrogen-based processes and carbon capture technologies.</p>	<p>The goal is to support the transition to production of steel with processes that reduce the carbon emissions</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
46	Recycling and reuse of materials in end-of-life vehicles	<p align="center"> <u>Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on circularity requirements for vehicle design and on management of end-of-life vehicles, amending Regulations (EU) 2018/858 and 2019/1020 and repealing Directives 2000/53/EC and 2005/64/EC</u> <u>COM/2023/451 final</u> - </p>	<p>Develop European standards improving the processes for the circular design, production, reuse and recycling of vehicles and their components. These standards shall include improving the design for recycling plastic parts, as well as on the treatment of end-of-life vehicles to increase the recovery of critical raw materials and the quality of steel and aluminium scraps, as well as calculation and measurement methods for the quality of sorted, recycled, and recovered automotive materials.</p>	<p>The action aims to improve the recycling and reuse of materials and reduce waste generation from end-of-life vehicles.</p>
47	Ambient air quality - measurement methods for monitoring polycyclic aromatic hydrocarbons in ambient air	<p align="center"> <u>Article 4(1), (8) and (13) of and Annex V to Directive 2004/107/EC of the European Parliament and of the Council of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air</u> - </p>	<p>Develop standards for measuring concentrations in ambient air of polycyclic aromatic hydrocarbons.</p>	<p>Ensuring that the analysis of polycyclic aromatic hydrocarbons in ambient air is sufficiently precise, reliable and comparable across the EU.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
48	Ambient air quality – modelling-based assessments	Articles 6, 7, 9 and 10 and Annex I to Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe -	Develop standards ensuring that modelling-based assessments of air quality are objective, reliable and comparable, and of sufficient quality to generate reliable information about concentrations of air pollutants in ambient air.	Ensuring that the information collected on air pollution is sufficiently representative and comparable across the EU.
49	Ambient air quality - performance of sensor-based systems measuring air pollution	Articles 6, 7, 9 and 10 and Annex I to Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe -	Develop validated test standard(s) to evaluate the performance of sensor-based systems measuring air pollution. The standard will evaluate if sensor-based systems comply with the data quality objectives in Directive 2008/50/EC.	Improving ambient air quality assessments by evaluating the extent to which sensor-based systems comply with the data quality objectives in Directive 2008/50/EC. Standard(s) will also allow for more extensive use of this monitoring method and improved assessment of air quality.

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
50	Ambient air quality - particle number concentration	<p align="center"> Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on ambient air quality and cleaner air for Europe COM/2022/542 final </p>	Development of a new European standard for measurement of particle number concentration.	<p>The main objective is to improve air quality by improving the data and the scientific understanding of the effects of ultrafine particles (UFP), on health and the environment. For this it is necessary to ensure that the measurement of ultrafine particles or particle number concentration in ambient air is sufficiently precise, reliable and comparable across the EU. The proposal for a revised Ambient Air Quality Directive introduces the obligation to measure this unregulated air pollutant of emerging concern. Requirements to measure UFPs are particularly focused on urban settings.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
51	Methane emissions in the energy sector	<p><u>Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on methane emissions reduction in the energy sector and amending Regulation (EU) 2019/942</u></p> <p><u>COM/2021/805 final</u></p> <p align="center">-</p>	<p>Development of new and revision of existing European standards on the quantification of methane emissions in oil, gas and coal operations including inactive, plugged, closed and abandoned assets. Development of new and revision of existing European standards on surveys to detect and repair methane leakages in oil and gas operations. Development of new European standards on equipment which avoids venting by design.</p>	<p>The objective of is to support obligations on energy operators to measure and mitigate methane emissions in a comparable manner across the Union. This will ensure a level-playing field among operators, access to comparable information and a harmonised level of effectiveness in reducing methane emissions.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
52	Monitoring of industrial emissions	<p align="center"> Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) - </p>	<p>Develop European standards on methods for:</p> <ul style="list-style-type: none"> (a) Periodic monitoring and measurement of total per-and polyfluoroalkyl substances (PFAS), (b) Periodic monitoring and measurement of endocrine disruptors compounds, (c) Periodic monitoring and measurement of microplastics, (d) Periodic monitoring and measurement of nanomaterials, (e) Periodic monitoring and measurement of hazardous substances meeting the criteria set out in Article 57 of the REACH Regulation. 	<p>Ensuring sampling and analysis of relevant polluting substances and measurements of process parameters as well as the quality assurance of automated measuring systems and the reference measurement methods to calibrate those systems is carried out in accordance with European standards.</p>
53	Microplastics	<p align="center"> Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on preventing plastic pellet losses to reduce microplastic pollution COM/2023/645 final </p>	<p>Develop European standards supporting measures to tackle pollution from microplastics (plastic particles with a diameter of usually less than 5 mm), that are unintentionally released into the environment (from e.g. pellets and synthetic textiles).</p>	<p>The aim of the action is to reduce microplastic releases into the environment and thus lower environmental pollution and potential risks to human health.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
54	Assessment of ecosystem services	<p>Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulation (EU) No 691/2011 as regards introducing new environmental economic accounts modules</p> <p>COM/2022/329 final</p> <p align="center">-</p>	<p>Development of European standards and deliverables distinct from financial and statistical standards, to support the assessment of ecosystem services. Data on ecosystem services underpin reporting on biodiversity, climate change and the health of terrestrial and marine ecosystems. These standards will specify the technical characteristics to consider when choosing procedures and models to estimate and collect data.</p>	<p>The main objective of the action is to support the data quality of the European ecosystem services accounts to provide better information for the European Green Deal</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
55	Fertilising products	<p align="center"> <u>Regulation (EU) 2019/1009 of the European Parliament and of the Council of 5 June 2019 laying down rules on the making available on the market of EU fertilising products and amending Regulations (EC) No 1069/2009 and (EC) No 1107/2009 and repealing Regulation (EC) No 2003/2003</u> - </p>	<p>Development of new European standards, or revision of existing ones, with regard to testing methods for the determination of the presence of contaminants, organic pollutants, microorganisms and other examination of specific parameters relevant to the agronomic efficiency and safety of EU fertilising products and which are laid down in Regulation (EU) 2019/1009.</p>	<p>The objective of this action is to ensure that manufacturers, market surveillance authorities and notified bodies will be able to rely on testing methods covered by harmonised standards for assessing the compliance of EU fertilising products with the requirements in Regulation (EU) 2019/1009. CEN is currently working under standardisation request M/564 on the development of harmonised standards for EU fertilising products. A new standardisation request is planned in order to request CEN to develop additional harmonised standards for testing methods needed to support new provisions included recently in the above act.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
56	Soil health measurements and access	<p align="center"> Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Soil Monitoring and Resilience (Soil Monitoring Law) COM/2023/416 final </p>	<p>Development of a digital soil health data portal in georeferenced spatial format providing access to soil health data. This requires the development of new European standards for harmonised measuring of: Electrical Conductivity (saturated soil paste extract (eEC)); Soil water holding capacity estimation method; Soil basal respiration; Metabarcoding of bacteria, fungi, protists and animals in soil; Abundance and diversity of nematodes in soil; Microbial biomass in soil; Abundance and diversity of earthworms in soil and Concentration in soil of organic contaminants: pesticides, microplastics, PFAS. In addition, transfer functions and their methodology need to be developed and validated to ensure the accuracy and reliability of these measurements and their interpretation in various soil health contexts.</p>	<p>The main objective is to assess soil health in the EU and make those data available in a digital soil health data portal "with the view to achieve healthy soils by 2050 and maintain soils in healthy condition, so that they can supply multiple ecosystem services at a scale sufficient to meet environmental, societal and economic needs, prevent and mitigate the impacts of climate change and biodiversity loss, increase the resilience against natural disasters and for food security and that soil contamination is reduced to levels no longer considered harmful to human health and the environment." (Art 1)</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the green transition

Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
57	Aviation fuel	<p align="center"><u>Directive (EU) 2023/958 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC as regards aviation's contribution to the Union's economy-wide emission reduction target and the appropriate implementation of a global market-based measure</u></p>	<p align="center">Conduct initial scoping of future standardisation deliverables on aviation fuel specifications aiming at reducing non-CO₂ effects and improving air quality, to be done in agreement with European Union Safety Aviation Agency.</p>	<p>The main objective is to conduct an initial scoping of future aviation fuel standardisation deliverables to optimise the aviation fuel composition, contribute to mitigating non-CO₂ aviation effects, improving air quality and reinforcing safety and airworthiness, without prejudging EU ongoing feasibility assessment and regulatory measures on fuel content optimisation that could be developed in the meantime, and ensuring consistency with international rules and standards governing civil aviation. The work should be conducted in agreement with European Union Safety Aviation Agency and build on the preparatory work conducted by the agency.</p>

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
58	Medical devices and in vitro diagnostic medical devices	Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC Regulation (EU) 2017/746 of the European Parliament and of the Council of 5 April 2017 on in vitro diagnostic medical devices and repealing Directive 98/79/EC and Commission Decision 2010/227/EU	Revise existing standards and develop new European standards for design and manufacturing of: <ul style="list-style-type: none"> – medical devices covered by Regulation (EU) 2017/745 (MDR) – in vitro diagnostic medical devices covered by Regulation (EU) 2017/746 (IVDR). The standards will apply to design and manufacturing, risk management and obligations on economic operators and sponsors, including those relating to: <ul style="list-style-type: none"> – quality management systems – risk management – clinical investigations and performance studies – clinical evaluation. 	Ensuring the smooth functioning of the single market as regards medical devices by setting high standards of quality and safety for medical devices and in vitro diagnostic medical devices. These should meet common safety concerns as regards such products, thus ensuring a high level of health protection and safety for patients, users and other people.
59	Pressure equipment	Directive 2014/68/EU of the European Parliament and of the Council of 15 May 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of pressure equipment	Revise existing standards and develop new standards for pressure equipment or assemblies.	Improving safety and facilitating market access for small and medium-sized firms. This will make EU companies more competitive in the global marketplace.

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
60	Simple pressure vessels	Directive 2014/29/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of simple pressure vessels	Revise existing standards in the EN 286 series and develop new standards.	Improving safety and facilitating market access for small and medium-sized firms. This will make EU companies more competitive in the global marketplace.
61	Machinery products	Regulation (EU) 2023/1230 of the European Parliament and of the Council of 14 June 2023 on machinery and repealing Directive 2006/42/EC of the European Parliament and of the Council and Council Directive 73/361/EEC -	Develop or revise European standards for machinery products to cover the proposed Regulation's new essential safety and health specifications.	The main objective is to ensure health and safety by ensuring harmonised European standards are maintained, reflecting the generally acknowledged state of the art. The availability of harmonised European standards will facilitate market access, in particular for SMEs. Users and owners of machinery products will benefit from improved safety and may benefit from knock-on effects such as efficient use of energy and easier access to innovative technologies. Economic operators will benefit from legal certainty.

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
62	Equipment intended for use in potentially explosive atmospheres (ATEX)	<u>Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres</u>	Develop new or revise existing European standards, to support state-of-the-art technology in the field of equipment intended for use in potentially explosive atmospheres.	Ensuring health and safety of equipment intended for use in potentially explosive atmospheres.
63	Personal protective equipment	<u>Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC</u>	Develop new or revise existing European standards, to support state-of-the-art technology in the field of personal protective equipment.	The main objective is to ensure the protection of the health and safety of users and the free movement of PPE in the internal market. Furthermore, the availability of harmonised European standards will facilitate market access, in particular for SMEs.

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
64	Weighing and measuring instruments	<u>Directive 2014/31/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of non-automatic weighing instruments</u> <u>Directive 2014/32/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of measuring instruments</u>	Develop new or revise existing European standards to support state-of-the-art technology in the field of weighing and measuring instruments.	(i) Protecting the public against incorrect results from weighing operations by means of non-automatic weighing instruments when used for certain categories of applications; (ii) Supporting correct and traceable measuring instruments that can be used for a variety of measurement tasks which directly and indirectly affect people's daily lives in many ways. These tasks are carried out for reasons of public interest, public health, safety and order, environmental protection, consumer protection, levying taxes and duties and fair trading. They may require the use of legally controlled measuring instruments.
65	Interoperability of the rail system	<u>Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union</u>	Develop new or revise existing European standards and standardisation deliverables in support of the application of Directive (EU) 2016/797.	The main objective is to ensure a high level of interoperability of the rail system keeping account of technological (digital) developments and ecological (green) constraints.

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
66	Electromagnetic Compatibility	<u>Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to electromagnetic compatibility</u>	Revising existing standards and development of new standards in support of the essential requirements set out in Directive 2014/30/EU	Ensure that harmonised standards in support of the essential requirements of the Electromagnetic Compatibility Directive 2014/30/EU are updated and represent the latest state of art. Those harmonised standards, the references of which will be cited in the OJEU, will provide presumption of conformity to the corresponding essential requirements. Hence it will be ensured that electrical equipment does not generate, or is not affected by, electromagnetic disturbance, enhancing economic and societal resilience through standardisation.

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
67	Fire safety of ships carrying liquefied gases in bulk and ships using gas as a propellant	Directive 2014/90/EU of the European Parliament and of the Council of 23 July 2014 on marine equipment and repealing Council Directive 96/98/EC -	Development of a new European standard for testing of fixed dry chemical powder and related fire-extinguishing systems for the protection of ships carrying liquefied gases in bulk and ships using gas as a propellant.	The main objective is to improve maritime safety. The International Maritime Organisation has been revising the Guidelines for the approval of fixed dry chemical powder fire-extinguishing systems for the protection of ships carrying liquefied gases in bulk, but so far, there is no validated test standard for a jet and/or pool fire test. The development of such a standard, in close coordination with ISO, should improve maritime safety not only for gas tankers but also for gas propelled passenger ships.

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
68	Low Voltage	<u>Directive 2014/35/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of electrical equipment designed for use within certain voltage limits</u>	Revising existing standards and development of new standards in support of the essential requirements set out in Directive 2014/35/EU	Ensure that harmonised standards in support of the essential requirements of the Low Voltage Directive 2014/35/EU are updated and represent the latest state of the art. Those harmonised standards, the references of which will be cited in the OJEU, will provide presumption of conformity to the corresponding essential requirements. Hence, it will be ensured that electrical equipment does not endanger health and safety of persons and domestic animals, or property, when properly installed and maintained and used in applications for which it was made.

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
69	Radio Equipment	Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC	Development of updated European radio equipment standards ensuring user health and safety, electromagnetic compatibility, radio spectrum protection, and emergency service access.	The main objectives are to enhance the safety of radio equipment users, prevent harmful interference affecting essential radio communication, and ensure emergency service access
70	Recreational craft	Directive 2013/53/EU of the European Parliament and of the Council of 20 November 2013 on recreational craft and personal watercraft and repealing Directive 94/25/EC	Development of new or revision of existing European standards, to support state-of-the-art technology in the field of recreational craft and personal watercraft.	The main objectives are ensuring health and safety of recreational craft and personal watercraft as well as ensuring respect of exhaust & noise emission requirements.

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
71	Consumer products safety standards	Directive 2001/95/EC of the European Parliament and of the Council of 3 December 2001 on general product safety	Develop or revise European standards to support the General Product Safety Directive 2001/95/EC, focusing on children's products and other items under the scope of the Directive, in collaboration with the Commission's expert group Consumer Safety Network. This includes enhancing the childrens' safety from internal blinds, corded window coverings and safety devices, gymnastic and stationary equipment safety, and safety of locking devices for windows and balcony doors.Childrens' safety from internal blinds, Corded window coverings and safety devices, Safety of gymnastic equipment and stationary equipment, Safety of locking devices for windows and balcony doors.	The main objective is enhancing product safety under Directive 2001/95/EC by ensuring current standards incorporate the latest scientific knowledge. This will guarantee compliance with the general and specific safety requirements outlined in the Directive and its accompanying decision.

Actions for the development and revision of European standards or European standardisation deliverables supporting the the internal market for services and products				
Ref	Title	Reference	European standards/European standardisation deliverables	Specific objectives and policies for European standards/European standardisation deliverables
72	Data dictionary for reporting to financial sector supervisory authorities	COM(2021) 798 - Strategy on supervisory data in EU financial services Regulation (EU) 2019/876 amending Regulation (EU) No 575/2013 as regards the leverage ratio, the net stable funding ratio, requirements for own funds and eligible liabilities, counterparty credit risk, market risk, exposures to central counterparties, exposures to collective investment undertakings, large exposures, reporting and disclosure requirements, and Regulation (EU) No 648/2012	<p>Development of a new European standard for the description of the content and format of data reported by entities active in the financial sector to the relevant authorities for the purpose of financial supervision and data disclosed to the public under various legislative frameworks.</p> <p>The standard should ensure the data are described in a structured, comprehensive, consistent and unambiguous manner, using terms anchored in legislation to establish a clear link between collected and/or disclosed data items and the relevant legislative specifications.</p>	<p>The long-term objective is to modernise EU supervisory reporting and put in place a system that delivers accurate, consistent, and timely data to supervisory authorities at EU and national level, while minimising the aggregate reporting burden for all relevant parties.</p> <p>Data standardisation and a common understanding of the data collected and disclosed under different legislative frameworks will make it easier to use digital technologies and simplify the transmission, validation, and analysis of the data.</p>