

Europacable Contribution to the Circular Economy Act: Securing the Future of Europe's Decarbonisation, Digitalisation and Resilience through Cabling Systems Circularity

Brussels, 16 December 2025

Europacable calls for a coherent, ambitious framework that supports circularity across the cable value chain. Our industry is committed to reducing virgin material use, increasing recycled content, and fostering reuse — while ensuring safety, performance, and competitiveness. To unlock the full potential of circularity, we urge the Commission to facilitate access to qualified secondary materials, support ecodesign and recycling innovation, ensure regulatory coherence and market incentives and promote circular business models.

Europacable, the voice of Europe's leading cabling systems manufacturers, welcomes the opportunity to contribute to the Circular Economy Act. While the industry is actively implementing circularity in its procurement and processes, the support of the European authorities through legislation and incentives is necessary to secure Europe's decarbonisation and energy and data sovereignty through a balanced package of accompanying legislation and incentives, particularly in the fields of recycling and reuse.

1. Strategic importance of the cabling systems industry in Europe's circular economy

Cabling systems are the invisible backbone of Europe's energy, transport, and digital infrastructure. They enable the electrification of buildings, the integration of renewable energy, the deployment of smart grids, and the connectivity of digital networks. As such, they are essential to achieving the EU's climate neutrality, energy security, and digital sovereignty objectives.

The cable industry is uniquely positioned to contribute to the circular economy through:

a) High-value material composition

Cabling systems are composed of **critical raw materials** such as **copper and aluminium**, which are listed in the European Commission's **Critical Raw Materials Act** due to their strategic importance and supply vulnerability. These metals are:

- **Highly recyclable** with very limited loss of performance, if any at all, when closed loop systems are applied.
- Increasingly subject to **global supply constraints**, making their recovery and reuse a strategic priority for Europe.

By promoting circularity in cabling systems, Europe can reduce its dependency on imported virgin materials and strengthen its industrial resilience.

b) Existing circular practices and industrial readiness

The cabling systems industry has already implemented several circular practices:

- **Closed-loop recycling systems** for copper, aluminium and plastic materials.
- **Take-back schemes** for unused cable lengths and offcuts.
- **Design-for-recyclability** and **life cycle assessments (LCA)** to optimize environmental performance.

Cable manufacturers have demonstrated the feasibility of integrating **higher percentages of recycled content** into new cables, while maintaining safety and performance standards.

2. Recycling: unlocking Europe's urban mine and securing critical raw materials

The cabling systems industry relies heavily on two families of components: metals – mainly copper and aluminium – and plastics. Copper and aluminium are not only essential for the

conductivity and performance of cabling systems, but they are also officially listed as **Critical Raw Materials (CRMs)** by the European Commission due to their strategic importance and supply risk. Other CRMs are also present in specific cables and accessories. To reduce dependency on virgin extraction and secure Europe's industrial resilience, Europacable calls for a robust framework to facilitate access to **qualified secondary materials**, particularly recycled copper and aluminium.

a) Facilitate decommissioning, sorting and processing

Europe holds a substantial source of cables at end-of-life, which are embedded in buildings and infrastructure networks – often referred to as “urban mine”, although the scope exceeds by far the urban realm. Unlocking this potential demands:

- **Organised decommissioning** of end-of-life cables in collaboration with building owners, public authorities, TSOs, DSOs, recyclers, and manufacturers, provided the environmental and business cases are favourable.
- **Efficient sorting and processing** systems to recover high-purity copper and aluminium suitable for reuse in new cabling systems.
- **Clear responsibility boundaries** must be established across the entire value chain — including producers, asset owners and operators, users, and recyclers — to ensure accountability and operational efficiency. It is essential to define where the responsibility of each actor begins and ends, particularly between cabling systems manufacturers, infrastructure owners and operators, end-users, and recycling entities.

Each player in the value chain should be assigned specific targets to contribute to Europe's overall recycling objectives. Moreover, measures should be taken to ensure that recovered secondary materials **remain within Europe**, supporting strategic autonomy and reducing exposure to global supply disruptions.

b) Ensuring quality and performance

While recycled copper and aluminium offer significant environmental benefits, their integration must not compromise the **functionality, safety, durability and economic feasibility** of cabling systems. Europacable calls for:

- **Investment in research and innovation** to improve the performance of recycled metals and plastics and increase the share of metals and plastics that can be used as secondary material.
- **Development of product-specific quality standards** for recycled materials.
- **Support for advanced recycling technologies** that preserve material integrity and enable industrial-scale reuse.
- **A balance of regulatory approach and economic incentives** to guarantee the competitiveness of the secondary materials to be used vs. the existing virgin materials.

3. Competitiveness and regulatory coherence

Ensuring the competitiveness of the European cable industry is essential to achieving the EU's circular economy and strategic autonomy objectives. Europacable calls for a regulatory framework that supports innovation and circularity while maintaining a level playing field for European manufacturers.

a) Protecting European Industrial Competitiveness

European cable manufacturers are global leaders in quality, sustainability, and technological innovation. However, their ability to integrate secondary materials — such as recycled copper, aluminium, and plastics — depends on:

- **Avoiding multiple regulation:** Circularity requirements must be harmonized across EU legislation to prevent overlapping or conflicting obligations, particularly between product, waste, and chemicals regulations. Existing legislation must be reviewed to eliminate contradictions that could impede circularity. For example, restrictions on

certain substances in recycled materials must be balanced against the environmental benefits of material recovery.

- **Strict market surveillance:** Enforcement mechanisms must be strengthened to prevent non-compliant or substandard products from entering the EU market. For example, aluminium power cables imported from outside the EU may circumvent environmental and safety standards if not properly covered by instruments like the **Carbon Border Adjustment Mechanism (CBAM)**.
- **Fair competition conditions:** Requirements to use recycled materials must be applied **only where technically and economically appropriate**, ensuring that recycled materials are competitive in terms of **price, availability, and performance** compared to virgin materials.

b) Harmonizing the Circular Single Market

To avoid fragmentation and inefficiencies, Europacable urges the Commission to:

- Establish a **harmonised approach** to circularity across Member States, avoiding a patchwork of national rules that hinder cross-border operations and investment.
- Promote **one European standard** (EN 45557) for secondary materials recycled content and the communication of recycled concentration through the Digital Product Passport (DPP). While the segregated method and the percentage-based mass balance method are recognised in the European standards, uncertainty remains regarding the use of the quantity credit mass balance method. This uncertainty should be lifted by defining rules to select the appropriate method according to product and/or industrial process.
- Ensure that circularity measures are **proportionate and predictable**, enabling long-term planning and investment by manufacturers.
- **Prevent exports** of end-of-life cables and scraps outside of the Union, to maximise the available stock of quality recyclable material, considering the available European capacity to recycle.

4. Lifecycle approach

The transition to a circular economy requires a fundamental shift in how products are designed, used, and managed throughout their lifecycle. For cabling systems, this means integrating **ecodesign principles** that prioritise **durability, recyclability, and low environmental impact** from the earliest stages of product development.

Europacable and its members are committed to embedding sustainability across the entire lifecycle of cabling systems—from raw material sourcing to end-of-life recovery—while maintaining the highest standards of safety and performance.

Europe's cabling systems manufacturers already apply **Life Cycle Assessment (LCA)** methodologies to evaluate and reduce the environmental footprint of their products. This includes:

- Measuring **carbon emissions, energy use, and resource depletion** across the entire value chain.
- Comparing the **environmental impact** of virgin vs. recycled materials.
- Identifying opportunities **to reduce emissions** in manufacturing.

The use of secondary material needs to be carefully assessed to avoid creating adverse environmental effects such as excessive GHG emissions, depletion of resources (such as water and energy) and pollution, depending on the selected recycling process. This could be avoided by defining strict selection criteria.

Europacable supports the development of **standardised LCA tools and databases** to ensure consistency and transparency across the industry.

5. Reuse and circular business model

In addition to recycling, **reuse** represents a powerful lever for reducing resource consumption, minimising waste, and extending the lifespan of cabling systems. While

these are traditionally designed for long-term use in fixed installations, the industry is increasingly exploring **innovative business models** that enable the reuse of materials and products across the value chain.

Europacable supports the development of a regulatory and economic environment that encourages reuse, fosters innovation, and enables scalable circular practices.

The cabling systems industry is taking commercial initiatives to support the **development of product reuse**, such as, for instance, the return and resale of unused cable lengths. Such initiatives need to be fostered by developing appropriate measures: **e.g. fiscal incentives** (VAT relief) for reused materials and products. This can help scale circular business models, reduce waste, and support the uptake of sustainable practices across the value chain.

Conclusion

Europacable urges the Commission to define clear rules that will foster the development of a strong circular economy for cabling systems, which are instrumental for the security, decarbonisation and digitalisation of Europe. We remain committed to work closely with the European institutions to reach the appropriate level of circularity that will preserve Europe's environment and economy.

About Europacable

Europacable is the voice of Europe's leading wire and cable producers. High-quality, sustainable power and telecommunication cables, produced by our members in Europe, empower the electrification and digitalisation of our societies. Founded in 1991, Europacable represents the largest cable makers in the world providing global technology leadership, as well as highly specialized small- and medium sized businesses from across Europe.

With our future being ever more electrified and digitalised, cable technology will be the core backbone of Europe's energy and telecommunication infrastructures. Sustainable, low-carbon manufacturing and high-performance cables are essential to achieve Europe's climate neutrality objectives by 2050. Europacable is committed to the principles of free enterprise and fair trade. Our members employ over 80.000 people of which more than 50% in Europe, generating a worldwide turnover over € 70 billion in 2024.

Europacable is a member of CurrentOS, EuroFSA, FEEDS, Orgalim, RGI, WindEurope and a partner of CENELEC and EUEW. Europacable is listed in the European Commission's Transparency Register under 453103789-92. www.europacable.eu