



Circular industry for a resilient Europe



FAIRMAT

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The European Union is on the brink of a crucial juncture in its history. The upcoming European elections will be pivotal and will shape the future trajectory of Europe. Over the past five years, the work undertaken by the European Commission has placed the EU in a new economic, environmental and social framework. Guided by the objectives of decarbonisation to fight climate change, the European Union has shown an ambition unprecedented on the international political scene. However, the various crises have also revealed certain weaknesses. As an innovative start-up, we welcome these major advances, but we're also concerned about what comes next.

Fairmat, in a nutshell

Established in 2020 by Benjamin Saada, Fairmat specializes in recycling carbon fiber, crafting second-gen composites, and offering circular industrial solutions. FAIRMAT's mission is thus to transform carbon fibre composites into second-generation materials that combine high technical performance with carbon-neutral production. By recycling carbon fibre composites, we avoid the landfill and incineration of several tonnes of industrial waste, which also avoids tonnes of CO2 emission. The solutions proposed by FAIRMAT are key to anchoring carbon-free value chains in Europe, in line with the European ambition expressed in the Net Zero Industry Act.

Our activities are mainly concentrated in Europe. We recycle production residues from German and French industries, and are also present in Spain. Our vision for the future is connected to Europe: we believe we are part of its human talent, its ingenuity and its ambitions.

Recycling is a fundamental idea at Fairmat. It complements our commitment to sustainable development, which takes environmental impacts into account, while supporting the development of the circular economy. This commitment is inherent in all our 120 employees who are committed to developing Fairmat.

Explore Fairmat's innovations at www.fairmat.tech.

Global purpose

As a novel and forward-thinking economic player, we are wholeheartedly dedicated to the green transition. The purpose of this document is to articulate our vision for harmonising the economy and the environment through a circular and sustainable industry.

Successive crises have shown the limits of the EU's current economic system and Europe seems to be less attractive compared to other global competitors. For example, 90% of professional federations consider that compared to our global competitors, the EU investment environment is less attractive than 3 years ago. Furthermore the EU experienced a 15% decline in greenfield investment projects between 2021 and 2022, contrasting with a corresponding 18% rise in the USA during the same timeframe. The NZIA (Net Zero Industry Act) is a good start to tackling global challenges, but we believe we can be more ambitious. Ambitious means boldness, but the European Union has a formidable economic asset: the single market. Bolstering European industry, as part of the green transition, is crucial and it is facilitated by the enhancement of the single market, fostering the development of a circular European economy.

Within the framework of this central idea, we are promoting a modern, sustainable and circular industrial policy. In short, this document sets out all our proposals for the next European mandate.

We share this document with all those who are likely to have an impact on European policies.

1. BUSINESSEUROPE Reform Barometer 2023 - The EU's global competitiveness under threat

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Building an advanced green industry based on the circular economy

Developing advanced materials for a resilient economy

Fairmat recycles a major advanced material² : the Carbon Fiber Reinforced Polymer. This composite material provides robustness and lightness for a wide range of essential and sustainable products. Indeed, we find carbon fiber in planes, wind turbine blades, cars, bikes, spacecraft parts and many other components where light weight and high strength are needed. Advanced materials are not only useful for performance, but also for a low-carbon, resilient economy : lightness means sustainable. In a recent study³, WWF, in collaboration with EY and Iddri, shows that by making electric cars lighter, demand for batteries could be reduced by 17% compared with the current scenario. Reducing the weight of cars also entails extracting and producing fewer critical raw materials, which is fundamental for a stable economy. Carbon fiber is, therefore, a strategic material, and the recycling of it is equally significant.

² For further information, see: <https://cordis.europa.eu/article/id/443403-advanced-materials-research-for-industrial-applications-and-society/fr>

Our vision

We assert that carbon fiber is a strategic material, crucial for advancing the green transition within the framework of a developing circular economy. Furthermore, advanced materials are even more strategic because they enable the production of green technologies, which are essential to the decarbonisation of our economies (3D printing batteries components, nano-enabled, recycled thermoplastic material). Designing products, based on advanced materials, that are more efficient and more sustainable is one of the new drivers of a successful ecological transition. The idea of replacing and saving raw material resources must be essential, and it's permitted through the development of advanced materials. At their core, advanced materials embody the intelligence, hard work, and human innovation invested in their development.

But it also raises issues of competitiveness and economic sovereignty. Faced with China, the United States and especially with Japan in the field of advanced materials, we need to build a European single market of advanced materials.

As advanced materials hold strategic significance, we suggest

- Advanced materials should be considered essential in the strategic sectors of green transition and advanced industry.
- **The creation of a list of advanced materials, such as the list of critical materials.** This list would include various materials: materials for the environment, energy and social infrastructure; health and medicine; information, communication, electronics, transports, and net zero technologies.
→ **Include in this list recycling targets for these advanced materials.**
- We must emphasise the importance of advanced materials in making modern means of transport lighter: we propose to stimulate the development of new lightweight means of transport.
→ For instance, graphene-based batteries do not use raw materials and thus reduce the demand.
- Innovation is key for advanced materials, but it can be incomplete without manufacturing. We advocate the full integration of an R&D approach closely linked to manufacturing into EU policies.

Reforming waste management

The organisation of waste in Europe is based on the 2008 directive, amended by the 2018 directive. The directive defines what waste and by-products are. As a start-up that recycles by-products, we are directly affected by how the legislation should or should not evolve. Recycling by-products is uncomplicated, compared to recycling waste products.

The development of a circular economy requires an easy way to exchange waste, especially production residues.

Our vision

By-products play a pivotal role in the circular economy. As they are not classified as waste, they provide SMEs, innovative start-ups, and large companies with the opportunity to efficiently and easily process products and give them a second life. However, it seems that the Member States do not have the same interpretation of the directive. France has retained the definition of the 2008 directive, which is restrictive, whereas Spain, Belgium and Portugal have adopted the vision of the 2018 directive. We believe that we can reduce our waste through better waste management legislation. Our vision is to enhance the consideration of certain production residues as a by-product. This would improve the exchange of materials between manufacturers, leading to growth, job creation and a halt to the burial and incineration of recoverable materials, which avoids the emission of millions of tonnes of CO₂. But to enable this view, we need to prevent national disparities in waste regulation and its shipment. National rules need closer harmonisation and alignment with European rules, as illustrated by the Waste Directive.

To facilitate the transition to a circular economy within the single market, we propose

- We ask the European Commission to urge the Member States to take decisions on the establishment of clear criteria for the detection of a by-product. → Moreover, the European union may create a list of by-products in order to clarify the difference compared to waste. This would be enabled by an extensive amendment of the waste regulation framework.
- By-products play a pivotal role in shaping a new economic paradigm, serving as catalysts for the growth of a European circular and sustainable industry. We suggest that the commission contemplate a comprehensive revision of the definitions of by-products, waste, and production residues to further align with evolving perspectives and foster a more robust framework.
- To truly develop a circular industry we need to streamline the transportation of waste, particularly those deemed as by-products, we advocate for the automatic recognition of waste as by-products. When a producer designates their product as a by-product, this classification should be uniformly acknowledged across all Member States.

Enhanced/advanced manufacturing for an improved circular economy

In light of the deployment of net zero industries we need to understand how the new modern industrial systems work. We live in an era where resource efficiency is paramount, but also where a plethora of advanced digital technologies are more accessible and evolving at an unprecedented pace. With the integration of these new paradigms, we have the capability to construct a sustainable and resilient economy.

Fairmat is an innovative industrial start-up. We reflect the definition of advanced manufacturing. We indeed use the innovation of improved methods for manufacturing existing products, and the production of new products enabled by advanced technologies. The future of industry inevitably involves new, advanced and innovative processes, especially to enhance the green transition and the circular economy. In this respect, the USA presented the 2022 advanced manufacturing plan. This plan⁴ includes many useful insights toward the development of advanced manufacturing.

Our vision

We believe that advanced manufacturing is one of the key insights for a resilient and circular economy. This new way of manufacturing provides high quality jobs, enhances environmental transition, and strengthens the industry's resilience. Moreover, with the EU's commitment to fostering a European industry, it will be essential to leverage innovative manufacturing methods (deeptech, robotics, and advanced expertise in material engineering) to effectively recycle our productions. **If Europe wants to develop a resilient economy, it must be able to face up to international industrial competition, and follow the advanced manufacturing principles for a circular economy.**

To bring forth a new era of industry,
we suggest the following

The establishment of a European strategy for advanced manufacturing, which may include;

- The improvement of education in advanced industrial systems. We propose to create specialised courses and training in this field. This proposal leads to the need for a better connection between European talent and leading companies;
- New digital technologies like big data analytics and AI to improve product demand forecasting for organisations. This data can be instantly shared with supply chain partners through integrated ERP software, streamlining inventory management and reducing waste.
- Enhancing product traceability, aiding in material loop closure. They are also applicable in optimising routes and minimising emissions in both forward and reverse logistics.

[4 To see the US advanced manufacturing plan](#)

Making net zero industries valuable for every European citizens

Driving Circular Economy through Fiscal Incentives

The circular economy is enabled by an alliance of stakeholders (industry, consumers, policymakers, academia) and their technological innovations and capabilities. As an essential component of the circular economy, recycling is a costly activity: the techniques are innovative, economic profitability is not immediate and production costs are high. The efforts made by entrepreneurs are significant and are the result of a commitment to contributing to a successful ecological transition. But to really develop the circular economy, people need to incorporate eco-designed and recycled products into their consumption habits.

Our vision

In order to develop a circular economy, we believe that financial incentives should be introduced. These incentives can be directed to the VAT : reducing the price of a product through VAT is quick and easy.

The 2006/112 directive defines the implementation of VAT in the Member States. It allows Member States to set reduced rates on certain goods and services. These reduced rates are defined in the Annex III under article 98. The directive is frequently amended, and Annex III is also subject to revisions.. Furthermore, a reduced VAT rate does not represent a loss of revenue for Member States. The right to repair, introduced by the EU, serves as a positive example of a European initiative for a circular economy, facilitated by a law on VAT rates. In a period where the green transition holds greater significance than ever, the implementation of tax incentives proves to be an effective approach to diminish energy and raw material demand, prolong the lifespan of objects, and promote recycling.

To foster the advancement of the circular economy and ensure its positive impact on citizens, we recommend

The amendment to Annex III of the 2006 directive. We are proposing to extend the list of goods and services eligible for a reduced rate of vat to :

- A range of certain recycled content products and the percentage of recycled content in these products.
- Products made from secondary raw materials.
- Products recycled from waste and by-products.

Promoting sustainable investments

In 2020, the EU introduced legislation that it considered to be one of the key measures for decarbonising Europe. This is the European taxonomy, categorising economic activities with a positive environmental impact. What influence does the taxonomy wield today? As a startup, we have not yet leveraged the taxonomy for investment benefits - which raises an issue of performance. Consequently, it is imperative to scrutinise the role of the taxonomy and the CSRD in guiding investments toward companies aligned with its classifications.

Our vision

We want to reward good players who respect the taxonomy's standards. This means that we advocate directing investment towards truly green activities. It is essential to recognise activities that make a real contribution to decarbonisation, that fight climate change and that have a social impact. Today, we reckon that companies, such as startups, who act for green transition are not rewarded for their impact. This might be connected to the lack of performance of the taxonomy. We are therefore arguing for real societal implementation of the taxonomy. The implementation of a binding taxonomy system could prove beneficial for both public and private investments.

To consolidate the existing system, we believe in the CSRD. However, once again, we are concerned about its impact on business activities. The CSRD directive is not coercive and targets mainly the big polluters. Its impact on sustainable companies is limited and does not encourage their growth. Consequently, technologies that contribute to a green and industrial transition should receive greater recognition and support.

In encouraging sustainable investments, we propose

- Reporting obligations aligned with taxonomy classification. The CSRD must be binding. Through the data collected, extra-financial reporting should enable private and public investors to direct their investments towards more sustainable projects.
 - Access to the European Single Access Point (ESAP) marks a positive initial step. Nevertheless, we remain vigilant regarding its implementation and accessibility. The abundance of information on the platform could pose challenges concerning open data. Consequently, we advocate for enhanced utilisation of the platform, incorporating the introduction of performance indicators measuring companies' sustainability. Firms positively influencing the environment should receive heightened recognition within the ESAP.
 - This would include a “malus” system for investments that run counter to the taxonomy, and a “bonus” for investments in sustainable activities according to the taxonomy.
- The creation of a sovereign fund based on compliance with the rules of the taxonomy and CSRD.
 - While the STEP fund represents a commendable initiative for achieving a net-zero economy, there is a need to increase the funds.
 - Companies whose activities are considered sustainable should be favoured in the allocation of certain European funds.
- We are also calling for the creation of a special “European taxonomy” fund for start-ups whose activities are considered “sustainable” by the taxonomy.

Improving the eco-design of products

Since March 2022, eco-design has been at the heart of the European Union's decision-making process. Considered as a minor revolution, eco-design is certainly one of the keys to achieving a sustainable circular economy. The "Ecodesign for Sustainable Products Regulation" (ESPR) is ambitious and attempts to set sustainable design standards for a large range of products: textiles, furniture, mattresses, tyres, detergents and paints, as well as steel, aluminium and iron. Taking into account the environmental aspects of a product's design and development process in order to reduce its impact on the environment is a good thing for the planet, but also for consumers.

Our vision

As a start-up that recycles carbon fiber composites, initially destined for destruction, into a 2nd generation material, we are committed to producing a material that retains its durability, but also its recyclability properties, while at the same time performing well. The ESPR is a common-sense measure, as it is part of a drive to develop the circular economy. We therefore welcome the regulation. Nevertheless, we are remaining attentive to a number of points, in particular with regard to the ecodesign forum, the delegated acts on products, the inclusion of SMEs in the working groups as well as the aid granted for the implementation of future standards, the product impact analysis method, and finally the recyclability of products. The durability of products is crucial, but so is their recyclability: if we are to establish a genuine circular economy, we need to be able to recycle ad infinitum. In addition, we would like to present in this document other measures that would contribute to the development of the circular economy.

The ecodesign regulation is now approved, but we remain concerned about it, especially considering the delegated acts. We thus propose :

- The “eco-design forum” is a great initiative, but we are concerned about the real impact that SMEs will have compared to industries in this forum. We are asking the European Commission to provide incentives to support SMEs in implementing standards, but also in being included in the Forum (article 17).
- Definition issues. We are concerned about the durability’s definition in this regulation. We believe that durability, as defined, can have an impact on the recyclability of future products. We are also concerned about the inexistence of the recyclability definition (Article 2). It is indeed a fundamental point for the circular economy.

Beyond the regulations :

- We regret that the EU has not taken on the idea of an economic ‘bonus’ for products that include recycled materials. This measure would enable the rapid development of circular economy sectors.
- The Life Cycle Assessment stands as a crucial tool for enhancing ecodesign requirements. However, achieving a circular economy becomes challenging when producers lack access to objective and transparent data throughout the entire value chain. We advocate for the EU to prioritise the generation of open and unbiased data to mitigate the adverse impacts of products. Eco designing products is possible only through an unbiased data.
- Support the decarbonation of SMEs and startups through financial aids and open data. Small companies suffer from the lack of open data : this puts a brake on decarbonation.

We strongly believe that the European Union has a key role in building a strong, resilient and circular industrial ecosystem. We are also convinced that change is in the hands of all stakeholders: NOGOs, companies, and citizens. So if you want to discuss, improve and/or share these proposals, join the loop and contact our Head of Public Affairs, Hugues d'Antin. hugues.dantin@fairmat.tech

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