



Circular industry for a resilient Europe

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The European Union will soon be entering a pivotal moment in its history. The results of the European elections will be decisive. 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. As an innovative start-up, we welcome these major advances, but we're concerned about what comes next in the green deal.

About us

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 tons of industrial waste. 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 currently concentrated in Europe. We recycle production residues from German and French industries, and are also present in Spain. We want to participate in the European leadership for eco-designed products, circular industry and deep tech.

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 new and innovative economic player, we are fully committed to the green transition. The purpose of this document is to present our vision of the European economy and industry. The NZIA is a good start, but we can be more ambitious. Adopting a real industrial policy is essential for the resilience of the European continent. Successive crises have shown the limits of the EU's current economic system. **That's why we are promoting a modern, sustainable and circular industrial policy. In brief, this document presents all of our proposals for the next european mandate.**

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

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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 material¹ : the Carbon Fiber Reinforced Polymer. This composite material provides performance and lightness for a wide range of essential and sustainable products. Indeed, we find carbon fiber in 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 study, 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.

1. "Material which is specifically engineered to exhibit novel or outstanding structural or functional properties"

Our vision

We take the stance that carbon fiber is a key material for the green transition in a developing circular economy. Specifically, we believe that all advanced materials are fundamental. 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 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.

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 Europe that believes in innovation for the ecological transition.

In order to develop advanced materials, we propose :

A European plan for advanced materials that covers several proposals :

- 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;
- We propose that 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 : carbon fiber, 3D printing materials for net-zero technologies, semiconductors, materials for sustainable construction, and every material that helps build renewable energies, but also materials for the environment, energy and social infrastructure; health and medicine; information, communication, electronics, transports, and net zero technologies.
- Recognition of composite materials as essential materials for the ecological transition.

Reforming waste management

The organisation of waste in our society 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 products, especially production residues.

Our vision

By-products are fundamental to the circular economy. Because they are not considered waste, they offer SMEs, innovative start-ups and large companies the opportunity to process products more easily 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 improves the exchange of materials between manufacturers, leading to growth, job creation and a halt to the burial and incineration of recoverable materials. In brief, substantial gains for society, the economy and the planet.

What we propose :

- We ask the European Commission to urge the Member States to take clear decisions on the establishment of criteria for the detection of a by-product.
- **We stress the European union to take measures of clarification, as defined in the directive.**
- The European union may create a list of by-products in order to clarify the difference compared to waste.
- In order to develop the circular economy, we call for a total implementation of the 2020 plan for a circular economy. More specifically on the assessment of a new scope for new by-products criterias.

Build a European vision for advanced manufacturing

In the light of the forthcoming reindustrialisation of our continent, 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.

Fairmat is an innovative industrial start-up. We reflect the definition of advanced manufacturing. Advanced manufacturing is defined as 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. In this respect, the USA presented the 2022 advanced manufacturing plan. This plan 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 economy. This new way of manufacturing provides high quality jobs, enhances environmental transition, and strengthens the industry's resilience. For example, we are committed to the principles of advanced manufacturing in order to develop innovative, virtuous and sustainable recycling techniques. We use deeptech, robotics, and advanced knowledge for material engineering. 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.

What we propose :

- The establishment of a European plan for advanced manufacturing strategy, which may include;
- The development and the implementation of clean and sustainable manufacturing to support decarbonation;
- Develop advanced materials to enhance the production of semiconductors, microelectronics, sustainable transport and sustainable buildings;
- Improve 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;
- Develop 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;
- Promote digital passports and NFC technologies to enhance product traceability, aiding in material loop closure. They are also applicable in optimising routes and minimising emissions in both forward and reverse logistics.

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 Annexe III under article 98. In 2022, the directive was amended, and Annexe III was also modified. Furthermore, a reduced VAT rate does not represent a loss of revenue for Member States. On the contrary, reducing the rate will help to develop the repair, recycling, reuse and re-employment sectors, which will ultimately lead to economic gains for Member States.

Our proposals

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.

Reshaping the european taxonomy system

In 2020, the EU introduced legislation that it considered to be one of the key measures for decarbonising Europe. This is the European taxonomy, which classifies economic activities that have a positive impact on the environment. Nowadays, what impact does taxonomy have ? As a start-up, we did not yet use the taxonomy to benefit from investment. Therefore, we must question the role of the taxonomy in directing investment towards companies whose activities are included in the taxonomy.

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 idea of recognising activities in the taxonomy is a good one. In addition, it includes non-financial reporting obligations, which are a step in the right direction. However, we are concerned about the real impact of the CSRD obligations. Do these obligations have an economic impact on the good performers? In fact, the current taxonomy is based on making economic players responsible. **We are calling for a more ambitious taxonomy in terms of financing green activities.**

Our proposals

CSRD obligations are an essential first step towards ensuring the transparency of economic activities in the context of the necessary ecological transition. In order to reinforce this vision, we propose :

- **Reporting obligations aligned with taxonomy classification. The CSRD must be binding.** Reporting should enable private and public investors to direct their investments towards more sustainable projects.

→ 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 establishment of a public, open and transparent list of companies included in the taxonomy’s classification system.
- **The creation of a European label for companies whose activities are considered sustainable. This label would make it possible to recognise the good “ performers “ in the ecological transition.**
- European funds should be based on compliance with the rules of the taxonomy. Companies whose activities are considered sustainable should be favoured in the allocation of certain European funds. This is an idea which is similar to the green bonds : we recommend extending this financial system.
- **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 a material, 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. In addition, we would like to present in this document other measures that would contribute to the development of the circular economy.

Our proposals

For the ecodesign regulation: it is still possible to amend the provisions, which will be largely specified by delegated acts, which is why we are proposing:

- 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).**
- The standardisation of the life cycle assessment, which is currently subject to multiple interpretations (especially in relation to databases). The PEF (product environmental footprint) method put forward by the Commission in the ESPR seems to us to be too restrictive. How can we verify the implementation of ecodesign standards if the methods are not aligned with the ambitions?
- 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 that the EU does not take into account the importance of including recycled material in new objects. This measure would enable the rapid development of circular economy sectors.

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: NGOs, 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