

Iberdrola and FCC sign an agreement to promote recycling of photovoltaic panels

- Following the creation of Energyloop, the collaboration of the companies continues to create new circularity solutions to advance the energy transition.
- They will work to ensure that 100% of the materials that make up the photovoltaic panels can be recycled.

FCC Ámbito, a subsidiary of FCC Servicios Medio Ambiente, and Iberdrola, through its PERSEO Venture Builder programme, have signed a strategic collaboration agreement to promote the industrial-scale recycling of photovoltaic panels. Following the successful creation of the company <u>EnergyLoop</u> as a joint experience for the <u>recycling of wind turbine</u> <u>blades</u>, the two companies are furthering their collaboration to develop circularity solutions for waste linked to photovoltaic <u>solar generation</u>.

With the industrial <u>photovoltaic</u> panel treatment plant that FCC Ámbito has just inaugurated in Cadrete (Zaragoza) as a reference asset, both companies will carry out – within the framework of this collaboration – the monitoring and potential application of new treatment technologies that may be developed in the short or medium term and improve the industrial recovery capacity of photovoltaic panels.

In addition, and with the challenge of the complete circularity of the different materials that make up the photovoltaic panels, we will study the possibility of reusing the materials obtained in the treatment processes as secondary raw materials in the manufacture of new photovoltaic panels. To this end, possible synergies will be assessed with companies in which Iberdrola has a stake, through Perseo, in activities such as the manufacture of photovoltaic panels or the recycling of metals.

Other aspects included in the scope of the agreement are the study of calls for European or national public aid that may arise to promote the recycling of photovoltaic panels, either for the promotion of R&D&I or for the implementation of industrial-scale installations.

Linked to this activity, FCC Ámbito is leading the PV4INK R&D&I project, financed by the Ministry of Science and Innovation and the European Union's Next Generation funds. This project is aimed at recovering the silver contained in photovoltaic panels and use it in high-value applications. In this way, the rate of recovery will increase and we will also recover a strategic element for the energy transition.



In contrast to what is beginning to happen with <u>wind farms</u>, photovoltaic installations still have many years of operation ahead of them. Iberdrola seeks to be ready when their useful life comes to an end, for which this collaboration agreement will provide an ideal positioning. In this same context, Iberdrola is participating in the European RETRIEVE project, whose general objective is to develop innovative and flexible recovery technologies for each main component of photovoltaic panels – especially silicon.

On behalf of FCC Ámbito, María Jesús Kaifer, Technical Director and Head of Circular Economy, emphasised that "From the perspective that the energy transition is key in decarbonisation processes, our company considers strategic growth objectives, such as developing comprehensive recycling solutions for materials from the <u>energy transition</u>".

María added that "this strategic agreement is a continuation of our efforts in the search for the best technologies for the recovery of the resources contained in waste in order to incorporate them back into production processes. The recycling of photovoltaic panels is another project that we are tackling together with a leading company in its sector, Iberdrola, in order to join forces to guarantee the circularity of renewable energies".

Álvaro Portellano, Head of PERSEO Venture Builder at Iberdrola, commented that "Iberdrola's goal is to recycle all the components of its facilities. We see recycling not as a challenge but as an opportunity. Therefore, we see this new collaboration as a valuable opportunity to contribute to the circularity of new elements of the energy transition, and it expands the scope of our alliance with FCC Ámbito, which already successfully addresses the recycling of wind turbine blades through EnergyLoop".

"In 2020, the PERSEO Venture Builder programme was launched to promote the development of innovative industries such as, among others, those related to the circular economy. In this sense, we are excited to combine this objective with the strengths and capabilities of FCC Ámbito – a global leader in waste management – to promote and lead the recycling of photovoltaic panels in the Iberian Peninsula," said Portellano.

Aligned with FCC Medio Ambiente's Sustainability Strategy 2050

FCC Ámbito is the subsidiary of FCC Servicios Medio Ambiente specialising in the integrated management of industrial and commercial waste, recovery of by-products and soil decontamination. As a whole, it has a total of 39 treatment centres in Spain and Portugal, with more than 67 processing lines that guarantee the functionality of the facilities.

FCC Servicios Medio Ambiente is the FCC Group company that has been providing municipal services and integrated waste management for 120 years, serving more than 67 million people in nearly 5,400 municipalities around the world. In 2023, the company managed 24.7



million tonnes of waste and produced 4.8 million tonnes of secondary raw materials and fuel derived from waste.

FCC Ámbito contributes its extensive experience in the recycling and marketing of secondary raw materials for the definition of the operational processes in the development of the projects arising from this alliance. The incorporation of new technologies in this type of project will allow FCC Ámbito to consolidate and position itself as a key player in the country's circular economy processes, a fundamental pillar of FCC Medio Ambiente's 2050 Sustainability Strategy.

This Sustainability Strategy consists of a 30-year business development roadmap that integrates very demanding objectives and commitments with high added value for the company and society as a whole, and which are grouped into four lines of action: environmental, social, excellence and good governance.

The circular economy – the core of Iberdrola's business model

This collaboration responds to Iberdrola's commitment to a sustainable energy model and is part of its PERSEO Venture Builder programme to promote the development of innovative industrial companies working in new areas of electrification and in sectors that are difficult to decarbonise.

Iberdrola defines its circular economy strategy as a process that affects its entire value chain, both its own production processes and those of its suppliers and customers. The group prioritises the contracting of companies with environmental management systems and, together with its suppliers, promotes eco-design, the analysis of the life cycle of products, and the use of materials with a low environmental impact.

The company also promotes the circular economy by reducing the use of natural resources through its commitment to <u>decarbonisation</u> and electrification, and the more sustainable use of natural resources by promoting the use of more efficient and cleaner technologies and processes. It also encourages research to develop solutions for waste use and promotes responsible consumption through environmental awareness programmes.

Since its creation in 2008, PERSEO has invested €100 million in start-ups that develop innovative technologies and business models, focusing on those that improve the sustainability of the energy sector through greater electrification and decarbonisation of the economy. The programme has focused its actions on the analysis of business opportunities and technological collaboration with start-ups and emerging companies around the world.



Through PERSEO, the Venture Builder programme was launched in 2020 with €40 million for the creation of new business models aimed at supporting electrification in sectors that are difficult to decarbonise and the development of circular economy solutions, among others.