**Carbon8 secures £5m investment led by EDF and Vicat to accelerate the deployment of its CCUS technology applied to industrial residues in heavy industry**

At Vivatech (Paris), Carbon8, the UK clean technology company specializing in carbon capture, utilization and storage (CCUS), announce the closure of a £5 million (€5.79m/US$6.19m) funding round.

Vicat, the international cement group, EDF Group and its corporate venture capital arm, EDF Pulse Ventures[[1]](#footnote-2), have co-invested £4m (€4.69m) in the company.

Carbon8, originally a spin-out from the University of Greenwich (London), has developed and commercialized a technology to help hard-to-abate industrial sectors decarbonize, and shift these industries to a more circular operation by converting their residues into assets for commercial use.

Carbon8’s CCUS solution can help industries like cement, Energy from Waste, steel and paper, achieve their Net Zero targets; these industries are currently responsible for over 20% of global greenhouse gas emissions[[2]](#footnote-3).

Carbon8’s patented ACT (Accelerated Carbonation Technology) process combines industrial residues with captured CO₂ emissions to produce high-value minerals. Through the deployment of its innovative CO2ntainer, Carbon8’s process becomes a Plug ‘n Play solution, which is scalable and modular. The CO2ntainer can be deployed directly to an industrial site, capturing carbon from the point source and permanently storing it in the output materials of the ACT process.

This form of permanent CO2 capture and storage enables heavy industry to better manage their residues, addressing simultaneously their goals of zero landfill and Net Zero emissions.

The new materials manufactured in the process mean that these industries can also shift to a circular economy model, using the materials produced by ACT in a variety of sectors, including aggregates for construction use and and fertilisers. Carbon8 is also researching other potential uses.

**John Pilkington, CEO of Carbon8 said:** “Vicat Group and EDF Group share Carbon8’s vision of pioneering cleantech solutions for heavy industry and helping industry achieve their Net Zero ambitions. The investment made by EDF and Vicat is hugely valuable as we accelerate the growth of our business, and maximise the positive impacts - capturing carbon, re-using residues - that we can offer to industry. We are delighted to have the support of these two major companies, and the continued backing of our other investors.”

Vicat Group was Carbon8’s first commercial strategic customer in September 2020 when a CO2ntainer was deployed at Vicat’s Montalieu-Vercieu cement plant, near Lyons in France. The CO2ntainer helps boost growth in the use of alternative fuels in the cement-making process and uses captured CO2n to carbonate cement-plant dust by producing quality aggregates. Carbon8’s technology is likely to be rolled-out at other Vicat cement plants in France and internationally.

**Laury Barnes-Davin, Scientific and R&D director of Vicat Group said:** “Under our commitment to limiting our environmental impact, Vicat has looked at a number of innovative ideas for reducing its carbon emissions. We were drawn to Carbon8’s two-part technology: capturing the CO₂ that Montalieu emits, and using it to produce an aggregate that can be marketed in the construction industry. It opens up great potential for our operations not just in France but also in all the countries where we work across the globe.”

For EDF Pulse Ventures, the solution developed by Carbon8 enables EDF Group to support its industrial customers in their decarbonization strategy with a “CO2 as a service” offer, finding new outlets for their residues.

**Julien Villeret, Chief Innovation Officer (EDF Group) said:** “The development of CO2 sequestration is key to achieving carbon neutrality by 2050. The solution developed by Carbon8 enables our industrial customers to accelerate decarbonization rapidly while integrating themselves into a circular economy logic. This investment is fully consistent with the raison d’être of EDF Group, which aims to build a carbon neutral world.”

**This press release is certified. Check its authenticity on medias.edf.com**

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**Notes to Editors**

**About Carbon8 and ACT**

ACT relies on a process of carbonation. This process is something which happens naturally in the atmospheric conditions. If left in the open, compounds such as calcium or magnesium oxides, hydroxides, or silicates will react with the carbon dioxide. However, this process is extremely slow - taking place over tens of years. Carbon8’s technology accelerates this process in a controlled way and in doing so, has created one of the worlds few economically-viable forms of carbonation and permanent carbon capture and utilisation (CCU). The ACT process mineralises and stabilises these industrial by-products or residues to produce a granular solid. Carbon8’s expertise around the carbonation process means that it is able to control the physical characteristics of the end-product. The end-product has various valuable applications, such as aggregates for construction, or agricultural fertiliser. For maximum efficacy, the most reactive residues need to be high in calcium or magnesium oxide, hydroxide, or silicates. Carbon8’s CO₂ntainer system (a modular, containerised solution – carbon capture in a box) is similar in size to a shipping container so can be easily transported by HGV to site.

**About EDF**

A major player in the energy transition, the EDF group is an integrated energy company, present in all business lines: production, transport, distribution, trading, energy sales and energy services. Leader in low-carbon energies in the world, the Group has developed a diversified production mix based mainly on nuclear and renewable energy (including hydropower) and invests in new technologies to support the energy transition. EDF's raison d'être is to build a CO*2*-neutral energy future that reconciles preservation of the planet, well-being and development, thanks to electricity and innovative solutions and services. The Group participates in the supply of energy and services to approximately 38.5 million customers (1), including 29.3 million in France (2). In 2021, it achieved consolidated revenue of 84.5 billion euros. EDF is a company listed on the Paris Stock Exchange.

Within EDF's innovation department, EDF Pulse Ventures' mission is to identify new activities and innovative solutions outside the EDF group, to develop the investment portfolio carried by EDF Pulse Holding in start-ups and in venture capital funds. Since 2017, around 270 million euros have been invested in 25 internal or external start-ups and in 20 investment funds, mainly in France, but also in Europe and North America.

(1) Customers are counted since 2018 by delivery site; a customer can have two delivery points: one for electricity and another for gas.

(2) Including ÉS (Electricité de Strasbourg) and SEI

**About Vicat Group**

With 200 years of experience, Vicat is a leading industrial player in the field of mineral and biosourced construction materials. Committed to a carbon neutral trajectory on its value chain by 2050, the family business (listed on the stock exchange) today exercises 3 main businesses: Cement, Ready-Mixed Concrete (BPE) and Aggregates, as well as activities complementary to these core businesses. The cement group employs nearly 9,500 people and achieved a consolidated turnover of 3.123 billion euros in 2021. Present in 12 countries – France, Switzerland, Italy, United States, Turkey, Egypt, Senegal, Mali, Mauritania, Kazakhstan, India and Brazil – Vicat achieves more than 60% of its turnover abroad

1. EDF Pulse Ventures aims to develop EDF Pulse Holding’s investment portfolio by identifying new activities and innovative solutions. [↑](#footnote-ref-2)
2. https://www.iea.org/reports/transforming-industry-through-ccus [↑](#footnote-ref-3)