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New report identifies 55 high-impact climate technology projects that can help Europe meet 2050 net-zero emissions target

The report reveals how targeted investments can accelerate innovation cycles to help tackle climate change, create 12.7 million jobs and generate nearly €800 billion of gross value added

Paris, October 14, 2020 - Cappemini Invent, the digital innovation, consulting and transformation brand of the Capgemini Group, today released a new report highlighting 55 clean technology projects that can speed economic recovery and help ensure Europe can meet its greenhouse gas emission goals over the coming years. Entitled "Fit for Net-Zero: 55 Tech Quests to Accelerate Europe's Recovery and Pave the Way to Climate Neutrality," the Capgemini Invent analysis serves as a guide for policymakers and investors, and offers actionable projects for deploying the European Commission's €750 billion recovery fund¹ to help transform Europe's economy and set it on course to be the world's first net-zero continent by 2050. The study was commissioned by Breakthrough Energy, a network of entities founded by Bill Gates and the world's top tech and business leaders to speed the transition to a clean energy future.

EU Member States will begin submitting their national recovery and resilience plans from October 15. As they do, there are a number of questions to consider including, do their plans align with the EU's climate law and net-zero emissions target for 2050, and do the plans contain enough detail to turn aspirations into real-world projects that ensure emissions reductions are on the trajectory needed to beat climate change?

The "Fit for Net-Zero" report investigates and analyzes existing and future technologies in five interconnected economic domains: energy; buildings and construction; industry; transport; and food and land use. Capgemini Invent engaged eminent innovators, entrepreneurs, corporate strategists and policymakers to help identify and examine more than 200 potential projects, each with differing levels of technological maturity, to assess their transformational potential and readiness for investment support.

Based on this research, Capgemini Invent identified 55 high-impact technologies most likely to deliver transformational results at speed and scale. Composed of projects and investments distributed across the innovation cycle and by economic area and maturity, these quests have the potential to create an annual market of net-zero goods and services totaling up to €790 billion of gross value added per year, reduce emissions by 871 MtCO₂, and create nearly 13 million jobs by 2030 through both new jobs and the transformation of existing ones. Over time, every €1 invested in this portfolio of clean technologies is expected to generate €9 of future turnover in European markets by 2050. These projects could also help improve air quality, food safety and increased energy independence for Europe.

Ann Mettler, Senior Director of Breakthrough Energy, commented, "This research clearly shows that a step change in clean tech innovation is needed to reach net-zero emissions by 2050. Many promising climate technologies are in the pipeline but now need to be scaled -- quickly. This requires Europe to go beyond its strength in research and science and put equal emphasis on development and deployment. The best innovation will have limited impact if it remains stuck in a lab. That is why this report examines in great

¹ Source: Climatechangenews.com, "EU €750 billion Covid recovery fund comes with green conditions"



detail 55 examples of the best and most cutting-edge clean technology quests around Europe. They can provide a solid basis on which Europe can regain global technology leadership, help solve the climate crisis, and lay the grounds for a sustainable and job-rich recovery."

The study also concludes that stronger EU policies can accelerate the innovation cycle and the deployment of clean technologies, including:

- Seamless investment through the innovation cycle helping late-stage businesses to dramatically scale up the implementation and market uptake of low- and zero-carbon technologies. This needs to be in addition to existing seed and early-stage funding and, crucially, it must be accompanied by a push to secure low-carbon markets innovations can sell into.
- **Increased research and development** through gap analyses identifying where public investments and private partnerships can help fledgling technologies establish and grow into new markets.
- **Validation and early deployment:** Driving technology cost reductions, faster version-cycles, business model evolution, initial consumer rollouts and supply chain engagement.
- Rapid, large-scale deployment: Implementing external pricing mechanisms to increase the market competitiveness of low-carbon technologies and encourage investments in breakthrough technologies.

Cyril Garcia, CEO of Capgemini Invent and member of the Group Executive Board, said, "Our work for Breakthrough Energy, confirms that Europe's clean tech revolution can be as significant as the digital revolution and plays to Europe's core industrial strengths and leadership. This report is practical and actionable; it highlights some already best-available technologies that are well-positioned to make a real impact by 2030, as well as the promising breakthrough and next-gen clean technologies that will help Europe meet its ambitious 2050 net-zero target."

To read a full copy of the report, click here.

Research Methodology

Capgemini Invent analyzed over 200 technology projects across all EU27 Member States. This was supplemented by structured interviews with 90 innovation leaders from corporations, professional and technology organizations, and public officials from the EU and Member States. This enabled the identification of 55 Technology Quests, assessed by jobs, emission-reduction and competitiveness criteria in five economic sectors, along with an analysis of the potential future market size. Each Technology Quest was categorized according to three levels of maturity: "Drive to Market Scale" promises the most immediate payoffs; "Innovation Acceleration & Scale-Up" generates returns after 2030; and longer-term "Innovation Bets" have the potential to trigger deep and disruptive innovations that could represent massive leaps in our ability to solve the climate crisis.

About Capgemini Invent

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