Energy efficiency investing set to be major beneficiary of the EU's post-COVID economic stimulus package

"Energy efficiency is the Swiss Army Knife of stimulus spending" (BloombergNEF)

SOLAS CAPITAL

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Executive summary

- In response to the coronavirus crisis, the European Union (EU) has put together a EUR 750 billion economic recovery package for member states. Together with the EUR 1.07 trillion EU budget for 2021-27, the combined package of EUR 1.8 trillion is the biggest green economic stimulus package in history.
- The value of this current EU package exceeds several times over the 2008-09 stimulus package and will be channelled toward the European Green Deal with the aim of EU carbon neutrality by 2050.
- This added funding creates a once-in-a-generation opportunity for the EU to rapidly accelerate towards carbon neutrality.
- Policymakers will focus on stimulus measures that most effectively connect economic multipliers (job creation) with green multipliers (CO_2 and greenhouse gases abatement).
- Energy efficiency (EE) delivers the highest levels of new jobs and green multipliers and will play a pivotal role in the stimulus measures across the continent.
- Given EE's market and technology maturity, the new stimulus measures are aimed at crowding-in private funding, thus boosting private EE investments on an unprecedented scale.
- Incentivised by the EU stimulus package, the commitment of significant private capital to EE initiatives will be instrumental in meeting the Paris Agreement targets (buildings account for 40% of energy use and 36% of EU CO_2 emissions) and spurring massive EE renovation across the EU.
- Due to the current economic crisis, banks are constrained in their ability to extend credit and end customer liquidity is similarly rationalised.
- This opens up a wide space for innovative EE infrastructure debt funds and fully financed energy service solutions for building owners and energy users.
- These third-party financing solutions will enable corporations to enjoy the many benefits of EE without using limited banks credit lines or their own liquidity.
- Solas Capital is focused on supporting energy service companies and through its Solas Sustainable Energy Fund (SSEF), backed by the EIB and an EU guarantee, investors are able to benefit from this unique climate action investment opportunity that aligns with the new EU Sustainable Finance Taxonomy.

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1. Introduction: The EU's financial response to the COVID crisis

The stimulus measures announced by the European Commission will be decisive to the EU's low carbon transition and drive once-in-a-generation investment towards carbon neutrality by 2050.

When the COVID-19 pandemic hit Europe in early March 2020, the governments of the EU member states focused on immediate, ad-hoc measures to save lives and livelihoods. Weeks and months later, attention on rescue actions has switched to long-term financial stimulus to reboot Europe's economy, rebuild job markets and create a resilient, green, and sustainable Europe. The investment package will determine how Europe will manage its energy policy and the environment in the coming decades.

The 2008 financial crisis provided policymakers with valuable lessons on how important it is to direct sovereign funds towards sustainable outcomes. Greenhouse gas emissions fell dramatically in 2009, but the following year emissions reached record levels because governments implemented economic recovery measures with limited consideration for long-term environmental consequences.[1] It is clear that this time Europe is much more concerned about the lasting effects of its recovery spending.

The massive financial firepower of the new stimulus package announced in May 2020 and finally agreed in July is the biggest green stimulus package in history.[2] The stimulus will be dedicated to green transformation, and to the activation of private capital as an important component of collaboration between government and the private sector in meeting the goals of the 2015 Paris Agreement.[3]

Energy efficiency (EE) investments are essential to ensuring Europe's future as a sustainable yet prosperous economy. The benefits are great: EE investments contribute to reducing greenhouse gas emissions, improve the competitiveness of European businesses, generate jobs, and enhance Europe's energy security. European leaders are placing EE at the heart of its strategy to make Europe the first climate-neutral continent by 2050.[4]

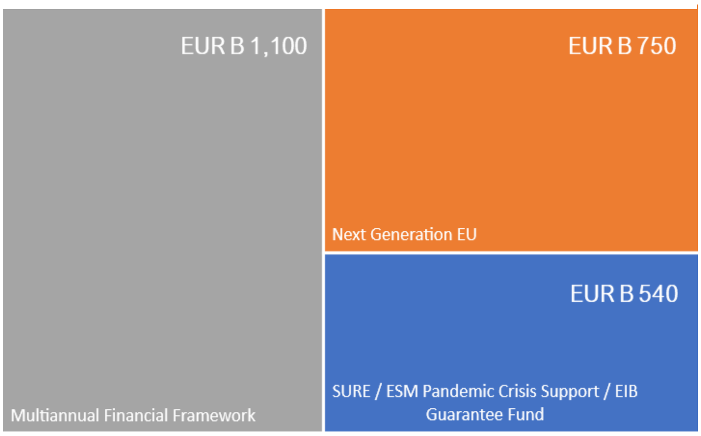
This paper briefly looks at the impact of the EU's financial stimulus and the opportunity it creates for specialist EE investment funds.

The EU brings EUR 2.36 trillion of financial firepower to reboot the economy and invest into the next generation's sustainable future.

On 21 July 2020, EU leaders announced agreement on an innovative EUR 750 billion recovery instrument, the **Next Generation EU**. Of the total amount, a proposed EUR 390 billion will be distributed as grants and EUR 360 billion as loans. Importantly almost one third of funds are earmarked specifically for fighting climate change.[5]

The recovery instrument, along with the EU's revised EUR 1.074 billion 2021-27 budget, and other safety nets endorsed by the European Council, will bring **the**

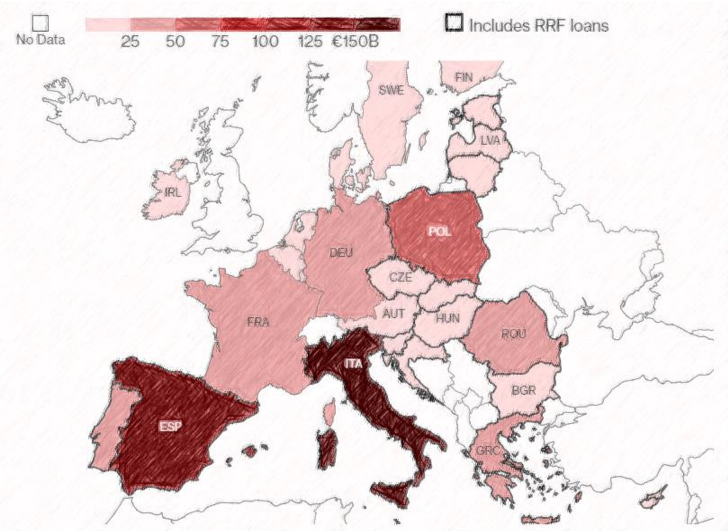
Figure 1. The EU post-COVID stimulus value



Source: European Commission, 'The EU Budget Powering – The Recovery Plan For Europe' (05.2020)

EU's total impact funding to EUR 2.36 trillion to mitigate the economic shock of the pandemic.[6] Highly significant is that all expenditure under the stimulus and EU revised budget must be consistent with the Paris Agreement goals of cutting greenhouse gases.[7]

Figure 2. Indicative Next Generation EU funding by country



Source : Bloomberg, 'EU Aims to Back Struggling South With Fiscal Shock and Awe' (05.2020)

Disbursement of the EU stimulus funds is planned to start in January 2021 and will run until December 2024.

The additional funds will be allocated based on need, with about 19% reserved for Spain, 5% for France, and 4% for Germany.

The EU's recovery funding will be repaid in part through increased future contributions to the EU budget by member states and by new revenue streams, including an extended EU Emissions Trading System and a tax on high-emission imports.

2. The stimulus' purpose: Towards climate-neutral Europe by 2050

The 2020 stimulus far exceeds any previous EU post-crisis response and aims for a green and sustainable EU for the next generation.

The amounts dedicated to address the COVID crisis significantly outstrip those deployed after the financial crisis of 2008-09, and in some countries like Germany, will exceed by nearly ten times the stimulus funds allocated in the previous downturn.[8]

The EU stimulus package is designed to support climate-friendly investments and will be deployed with the fundamental goal to create a **green, digital, and resilient Europe.**[9] The underlying aim of the Next Generation EU package is to turn challenge into opportunity, and accelerate implementation of the European Green Deal.[10]

The European Green Deal treats investments in building renovation and EE as instrumental to meeting the EU's climate goals.

The European Green Deal comprises a set of EU guidelines, actions, and commitments to facilitate transforming the EU-27 economies for a sustainable and CO_2 neutral future. It was also described by Ursula von der Leyen, the European Commission President, as the "motor for the recovery" emphasising its importance at the heart of the EU recovery plan in the coming years.[11]

Buildings require significant amounts of energy and raw materials. They are responsible for approximately 40% of final energy consumption and 36% of CO_2 emissions in the EU. Currently, about

35% of buildings in the EU are over 50 years old, and almost 75% of the building stock is energy inefficient.[12] To meet the Paris Agreement objectives, it is estimated 250 million homes across the EU need energy renovation. This implies a future annual home renovation rate of 3.4%.[13] Depending on the country, currently only 0.4-1.2% of existing building stock is renovated each year, and only 0.2% are deep retrofits.[14]

To address challenges of EE and affordability, the European Commission has committed itself to engage in a '**renovation wave**' of public and private buildings and to rigorously enforce legislation related to the energy performance of buildings. Additionally, the Commission is working to include emissions from buildings in the EU's Emissions Trading System (ETS) as part of broader efforts to ensure that the relative prices of different energy sources provide the right signals for EE investment.[15]

3. Economic multipliers: Policy measures to support the stimulus package

Policymakers will look for the most efficient connection between job- and green-multipliers.

Since the EU recovery efforts will involve much higher levels of public spending than any EU expenditure in non-crisis years, the decisions of member governments and the European Commission will follow the logic of **highest expected outcomes**. Decision makers will be looking for spending opportunities that simultaneously reignite the economy, encourage high job multipliers, and implement programs that result in emissions decline.[16]

Energy efficiency generates the highest multipliers and is expected to play an instrumental role in the EU's stimulus measures.

Green stimulus packages offer a unique opportunity to reboot the economy after the massive lockdown of 2020, putting sustainability priorities at its centre, while at the same time creating jobs at unprecedented scale.

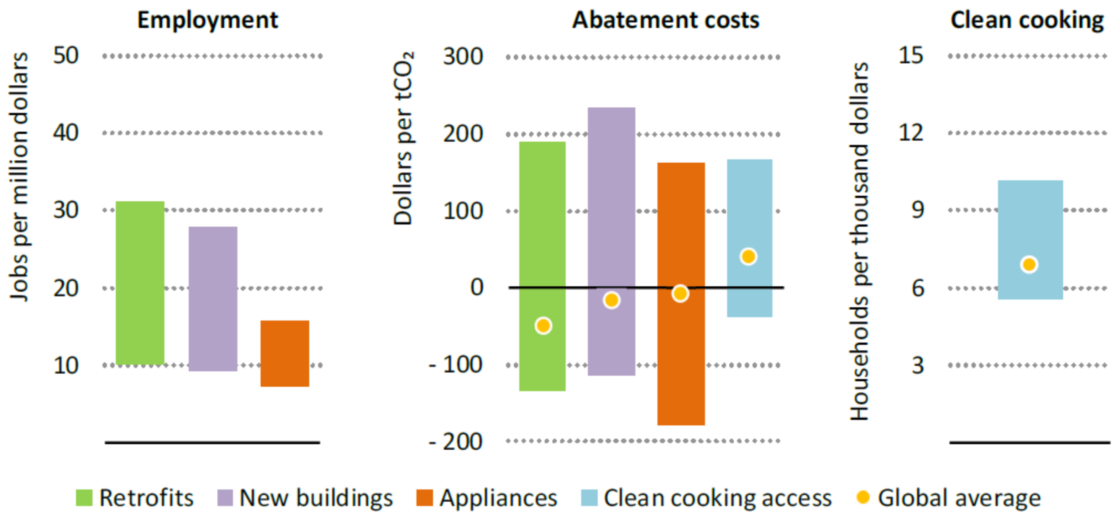
A lesson from the 2008-09 financial crisis is that green stimuli have advantages over traditional "brown" ones.[17] Estimates suggest that every USD 10 million in spending generates 76 full-time jobs in renewables or in EE, but only 27 in fossil fuels.[18] Moreover, if the same investment amount is deployed into EE measures in the building sector, the **job multiplier shoots** to a range from 90 to 300 FTEs created.[19] As Fatih Birol, Executive Director of the International Energy Agency, outlined simply in June 2020, "Energy efficiency is a jobs machine. It creates jobs, jobs, jobs".[20]

Thanks to energy cost reduction, most CO_2 abatement opportunities in buildings are **cash positive** for end-users where the annual savings achieved exceed the service payment for the investment (see Figure 3 below). Estimates show that retrofits in existing buildings and efficiency measures in new construction could save EU households an average of 15% in annual heating costs.[21]

In addition to reducing greenhouse gas emissions and having the highest jobs multiplier impact EE investment generates significant benefits to society, including:

- health benefits – among the most underestimated benefits of EE are the health benefits of clean, well-ventilated buildings and stable, comfortable indoor environments – of increased value in a post-COVID world;
- reduced energy cost base improves business and national economic resiliency and competitiveness;
- greater fuel and energy independence increases energy security and reduces impact of external shocks.[22]

Figure 3. EE investment impacts on employment, emissions, and households



Source : IEA, 'Sustainable Recovery. World Energy Outlook Special Report', (06.2020)

4. Sources of funding: EE requires crowding-in of private funding

The EU stimulus package will aim to draw in private capital to boost the EE market at an unprecedented scale.[23]

There is no possibility that investment on this scale can be funded exclusively by public sources. In January 2020 the European Commission announced its priorities for the European Green Deal for mobilizing sustainable investment, with the aim of creating a framework to facilitate public and private investments.[24] To activate wide-ranging, pan-European, and long-lasting retrofit programs, the European Commission seeks to **massively crowd-in private capital** that would be mobilised by public spending support.

The design of the recovery measures in relation to EE will depend on a number of drivers, including the maturity of available technologies, market development in a given sector or country, and local political decisions.

Solas Capital expects some measures to be deployed at the EU level, including regulatory interventions or backstops that give impetus to new investment and phases out outdated technologies. However, the majority of the stimulus will be deployed at the member state level and will include incentivisation of private investment.

The EE market is mature, with established demand and supply sides, that requires further incentivisation through policies and instruments to scale it up to a higher level. Most of the available technologies are well tested and can be deployed quickly and at scale. From this perspective, the stimulus measures will focus on boosting existing market forces for building retrofits allowing **private capital to play a major role**. This is not just a goal, but a necessity given the investment volumes required to achieve the EU's investment targets. These measures can be grouped into four main categories: A) investment grade, B) sub-investment grade, C) grants and D) public initiatives.

Figure 4. Selected sovereign stimulus tools

	Private sector		Public sector	
Stimulus type	A. Investment grade	B. Sub-investment grade	C. Grants	D. Public initiatives
Example measures	- Direct/indirect tax incentives - Revised depreciation rules to strengthen tax shields - Targeted subsidies	- Lending activity (subordinated lending) - Guaranteed schemes to activate private capital	- Mainly grants issued on a case-by-case basis	- Leverage of public sector procurement, both at the central and local level - Promotion of public-private partnerships
Area of use	To stimulate existing markets, where technology, as well as demand and supply sides exist, and may be relatively freely expanded (e.g. EE building retrofit), with the aim to incentivise private investments.	To fill gaps in private lending and stimulate development of new technologies e.g. EE investing in SMEs and households.	For high-potential R&D projects	Any investments in climate protection that takes place both at central and local levels in municipalities, from public transport to the renovation of municipal buildings.

Source: Analysis based on McKinsey & Company, 'How a post-pandemic stimulus can both create jobs and help the climate' (05.2020) and other sources listed under Reference 23.

5. The funding gap: Opportunity for specialist third-party financing

Banking activity is expected to remain limited and corporate liquidity constrained.

The banking sector is going through a massive real-life stress test, the scale of which seems to mirror worst-case scenarios.[25] According to the ECB in Q1 2020 banks tightened their credit requirements for enterprises, and imposed other financing conditions, including increased margin and collateral requirements.[26] It is expected that mid-term credit activity of banks will remain constrained and dependent on expected public guarantee schemes,[27] further pushing the door open for more innovative and alternative financing solutions.

In response and keeping in mind the overall uncertainty due to the economic downturn, corporate CFOs will most probably retain such banking credit options only for core liquidity or high margin generating investment projects. According to a survey by PwC, CFOs will defer immediate capex investments.[28] Other urgent priorities of CFOs are cost cutting measures and focus on corporate sustainability and ESG (environmental, social and corporate governance) alignment, especially in view of stimulus and incentive packages.[29]

Specialised third party financing is key to enabling EE service models at scale.

Energy Service Companies (ESCOs) – third-party EE project developers and energy managers – implement energy retrofit projects in buildings that immediately reduce a building's energy costs. Through an energy service agreement with an ESCO, energy users outsource their energy management (a non-core activity) and have their facilities retrofitted and financed by the ESCO or a third-party financing party that avoids the significant upfront costs.

EE service models supported by specialist funding are perfectly placed to meet the changing requirements of businesses as they offer attractive non-traditional financing sources, are immediately cash positive for the energy user, and they are fully ESG compliant.

The business model of ESCOs is highly dependent on specialised third-party financing. An innovative and specialized funder is ideally positioned to fill this market gap. These funding sources are a more flexible and attractive alternative to standard bank financing for businesses and homeowners across Europe and offer a broader choice of financing solutions.[30] Such EE service contracts more easily enable corporates to **enjoy EE benefits** that are independent from bank credit lines.

Tenants and employees expect retrofits to be carried out quickly, without disruption and resulting in improved comfort. Building owners want no additional capital outlay and guarantees that future servicing payments will be recouped from savings.[31] The fully funded ESCO service model is best placed to meet the expectations of all these stakeholders.

6. Solas Capital's solution: superior risk-adjusted returns aligned with EU's 2050 strategy

Solas Sustainable Energy Fund (SSEF) advised by Solas Capital is a dedicated EE infrastructure debt fund and provides a unique opportunity for institutional investors to find attractive, sustainable long-term returns in a post-pandemic environment that is aligned with the new EU Sustainable Finance Taxonomy. SSEF provides:

- A proven business case aimed at EE in the EU building sector (including behind-the-meter electricity generation and storage);
- Investment that will benefit from the EU stimulus package, boosting EE retrofit demand;
- Stable long-term returns and investment cash flows that are guaranteed by an EU guarantee instrument designed to encourage investment;
- A double bottom line with the aim of supporting sustainable green investments across the EU.

Global CO_2 emissions flat-lined in 2019 and are set for a record decline this year due to a sharp fall in economic activity rather than any fundamental gains in energy efficiency. Nonetheless, 2020 still provides a base from which it is possible to put future emissions into structural decline.[32]

Achieving this structural emissions decline is the only way for Europe to meet its carbon neutrality goal by 2050 without compromising prosperity. Solas Capital is proud to contribute towards the EU's goal of a sustainable future through SSEF.

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