University of Cambridge Institute for Sustainability Leadership

CLG Europe

Policy Briefing

The Green Deal and Europe’s recovery: Building a prosperous, resilient and climate neutral EU through business and political action

funded by

We Mean Business Coalition

The University of Cambridge Institute for Sustainability Leadership

The University of Cambridge Institute for Sustainability Leadership (CISL) is a globally influential Institute developing leadership and solutions for a sustainable economy. We believe the economy can be 'rewired', through focused collaboration between business, government and finance institutions, to deliver positive outcomes for people and environment. For over three decades we have built the leadership capacity and capabilities of individuals and organisations, and created industry-leading collaborations, to catalyse change and accelerate the path to a sustainable economy. Our interdisciplinary research engagement builds the evidence base for practical action.

CLG Europe

CLG Europe develops credible, ambitious positions amongst its membership and deploys effective strategic communications to engage with the highest levels of policy audiences. CLG Europe is diverse in its membership and representative of Europe in both geography and sector, welcoming the innovative talent of SMEs as well as leading established companies. The group works closely with policymakers – particularly the Green Growth Group of EU climate and environment ministers, and supportive Members of the European Parliament through its Green Growth Partnership.

The group also maintains a network of sister groups across the EU and works in partnership with some of the largest business-focused organisations in support of climate action as one of the founders of the We Mean Business coalition, for which it provides the EU policy lead.

We Mean Business Coalition

This report was funded by the We Mean Business Coalition. We Mean Business is a global non-profit coalition working with the world's most influential businesses to take action on climate change. The coalition brings together international non-profit organisations: BSR, CDP, Ceres, The B Team, The Climate Group, CLG, WBCSD.

Authors and acknowledgements

This policy briefing was prepared by Jonathan Gaventa, Romain Pardo, Chris Carroll, Annabel Ross and Catherine Weller with input from Nina Seega, Nick Villiers, Martin Porter, Eliot Whittington, Ursula Woodburn and Polina Yaseneva, and support from Isabelle Cross and Annabelle Roblin.

We would like to thank CLG members and WMB partners including Jen Austin, Policy Director, WMB; James Beard, Senior Campaign Manager, EV100; Dominic Gogol, Policy and Advocacy Manager, WMB; Roland Hunziker, Director, Sustainable Buildings & Cities, WBCSD; Aleksandra Klassen, Senior Impact Manager, RE100; and Eline Reintjes, Junior Cause Analyst, The B Team, for their helpful and constructive comments.

Citing this briefing

Please refer to this publication as University of Cambridge Institute for Sustainability Leadership (CISL). (2020). *The Green Deal and Europe's recovery: Building a prosperous, resilient and climate neutral EU through business and political action*, Cambridge, UK: CLG Europe.

Copyright

Disclaimer

The opinions expressed here are those of the authors and do not represent an official position of CLG, CISL, the wider University of Cambridge, or clients.

CLG Europe membership

Full members

Affiliate members

Summary

The Covid-19 pandemic is confronting Europe with a deep health, social and economic crisis that is upending business-as-usual. The EU and national governments are designing far-reaching programmes to restart Europe's economy and recover from the damage that the pandemic has caused. If designed well, these recovery packages can not only restart economic activity but also accelerate the shift to a sustainable and resilient climate neutral economy. If poorly designed, however, they risk making the health, social and economic costs of climate change even worse.

The European Green Deal was described as "a growth strategy for Europe" when it was launched last year.[1] It is now even more relevant, and provides a template for how Europe's economic recovery can be achieved. Green investments can create jobs and kick-start economic activity in the short term, while leading to a more productive, resilient and climate-friendly European economy.

Leading businesses are committed to clean and inclusive growth, and to achieving a net zero European economy by 2050. Many businesses are already setting ambitious objectives to decarbonise their operations and value chains, and developing projects that create growth and jobs. They recognise that climate action is well aligned with developing new industries, strengthening Europe's competitiveness, delivering better health outcomes, creating more pleasant places to live and building a more just and resilient society.

Because of that, more than one thousand businesses around the world are calling on governments to put policies that strengthen climate action and resilience at the heart of recovery plans.[2]

Business and political action combined can deliver a strong recovery that addresses the social and economic crisis from Covid-19 and the wider climate and environmental crisis at the same time. This report sets out how this can be achieved:

- **A green, just and resilient recovery:** By placing the European Green Deal at its heart, Europe's recovery plan can address the social impacts of the crisis, create jobs, support a just transition and mobilise green investment in line with net zero goals.
- **Clear climate ambition:** Europe's net zero 2050 climate ambition backed up by strong policies provides companies with the clarity and confidence they need to unlock further investments in climate solutions. The EU Climate Law should be swiftly enacted, and the 2030 target for greenhouse gas emission reductions strengthened to at least 55 per cent.
- **Industrial innovation and a circular economy:** Ensuring a circular economy and creating new markets for low carbon materials will lead to more resilient supply chains and create jobs while reducing environmental impacts. Investing in clean industrial innovation can help to renew Europe's industrial base and secure its future competitiveness.
- **Clean energy, buildings and mobility:** By adopting an integrated approach to clean energy, buildings and mobility, the EU can support high-quality jobs, broader social and environmental benefits such as improved air quality, and accelerate the move towards a net zero economy.
- **Sustainable land use and nature:** Healthy nature underpins our food system, rural livelihoods and agricultural productivity. Stimulus spending should be directed towards reducing emissions from land use and supporting nature-based solutions.
- **Sustainable finance:** Sustainable finance reforms are needed to avoid future economic crises (and avoid deepening the current one), through measures to reduce systemic risk in the financial system.

Introduction

The coronavirus pandemic created a systemic shock with deep economic and social consequences. The EU is experiencing a historic recession with an unprecedented annual decline of 7.4 per cent of gross domestic product (GDP).[3] As the EU and national governments work to restart their economies, it is critical to build the foundations for resilient and sustainable growth.

This briefing sets out how business action and government action can create a prosperous, resilient and climate neutral Europe. It assesses how the European Green Deal can form the foundation of Europe's recovery, including through supporting industrial innovation and a circular economy; clean buildings, energy and mobility; sustainable land use and nature; and a more sustainable financial system.

The European Green Deal as the cornerstone of Europe's recovery

The European Green Deal agenda – launched in December 2019 – was designed as a "growth strategy" for Europe. It aims to support "the transition of the EU to a fair and prosperous society that responds to the challenges posed by climate change and environmental degradation, improving the quality of life of current and future generations".[1]

The context facing Europe has radically changed since the European Green Deal was announced. Europe needs a strategy not just for its long-term economic direction, but also for its short-term economic and social recovery. As a result, the European Green Deal is more urgent and relevant than ever: it provides a template for how the recovery can be delivered, and includes both near-term investment opportunities and a clear direction of travel.

Governments globally are preparing bailout and recovery plans to restore economies after the crisis. It is crucial to not only restore growth in the short term but to set up a resilient pathway to a climate neutral economy. This requires both a 'green stimulus' of public spending and investment, and market signals to incentivise private investment and steer it towards green outcomes.[4]

The macro-economic case

Green investments offer immediate economic, social and environmental benefits, including high-quality and more resilient jobs. By contrast, a failure to align economic recovery investments with climate goals would build up risks for the future, including environmental harm, stranded asset risks, and the need for further bailouts. These risks need to be managed to protect future pensions, healthcare budgets and other essential public services.

Companies with a high environmental, social and governance (ESG) performance have considerably outperformed the market as a whole since the start of the economic crisis, according to recent Blackrock analysis.[5]

Green stimulus also creates higher economic multipliers, according to a University of Oxford Smith School analysis of 700 stimulus policies. The most effective investments include clean physical infrastructure, building efficiency retrofits, investment in education and training, natural capital investment, and clean research and development.[6] According to the New Climate Economy, more ambitious action to address climate change could deliver more than $26 trillion in net global economic benefits between now and 2030 compared with business-as-usual, including the creation of more than 65 million new low carbon jobs globally.[7] This is also backed up by modelling by Cambridge Econometrics, which shows that the most effective way to avoid the current recession continuing into 2021 is through public investment in building retrofits and renewables, combined with VAT cuts.[8]

In addition, green construction projects are less susceptible to offshoring to imports and more labour intensive in the early stages. As a result they create 2–3 times more jobs for every $1 million of investment than fossil fuels.[6] A McKinsey assessment found that for a typical large European country, €75 billion to €150 billion of capital investment in green sectors could yield €180 billion to €350 billion of gross value added, generate up to three million new jobs, and enable a carbon-emissions reduction of 15 to 30 per cent by 2030.[9]

The jobs created through green stimulus measures are also more sustainable over the long term. The CLG Europe report *Working towards a climate neutral Europe: Jobs and skills in a changing world* shows that the net zero transition can deliver sustainable European jobs that are more resilient to economic shocks.[10]

Importantly, green stimulus also delivers economic returns over the long term by driving down the costs of the clean energy transition and supporting a more efficient, innovative and productive economy more widely.[6] Climate modelling from Climate Action Tracker demonstrates that green stimulus measures can have a large impact on emissions pathways and enable sustained emissions reductions.[11]

Business and political support

There is widespread support for a green recovery from business, investors, governments and civil society.

Over one thousand companies globally have joined calls for a green recovery. In May 2020, 155 companies – with a combined market capitalisation of over €2.1 trillion and representing more than five million employees – signed a statement urging governments around the world to align their Covid-19 economic aid and recovery efforts with the latest climate science.[12] Similar business alliances for a green recovery have been formed in Germany, France, Spain, Finland, Slovenia and the UK.[13,14,15,16,17,18,19]

In the EU, the Green Recovery Alliance brings together 270 CEOs of leading companies, Members of the European Parliament (MEP), business leaders, trade unions and campaign groups. Nineteen member states signed a declaration to support a green recovery from the crisis.[20] A group of 113 major investors, representing €11 trillion in assets, signed an open letter to EU leaders calling for a sustainable economic recovery from Covid-19 and maintaining momentum on the Green Deal and the sustainable finance agenda.[21]

> “*We must not slow down nor back down on the ambitions of the European Green Deal. Now more than ever, we need to accelerate the transition to a green economy and make it work for both people and the planet. A recovery plan must ensure a vibrant, resilient and green economy, that is climate neutral.*”
>
> ***Jesper Brodin***
> *CEO, Ingka Group (IKEA)*

> *There is no time to lose as Europe deals with an unprecedented health and economic crisis and the long term risks associated with climate change. A resilient, inclusive and climate neutral economy is the only viable path for Europe's economy and the wellbeing of its citizens. And the Green Deal provides us with a blueprint and toolbox for ambitious and swift government and business action. In 2050, when our (grand)children look back to 2020, they need to see that we acted decisively and boldly. We must do what is right for future generations.*
>
> ***Harry Verhaar***
> *Head of Global Public & Government Affairs, Signify, and Chair of CLG Europe*

Building blocks for a green recovery

The core areas of focus of the European Green Deal are also sectors that can contribute the most to Europe's recovery:

Like other sectors, European **industry** has been hit hard by the Covid-19 crisis. The industrial sector also requires deep process, product and business model transformations as Europe transitions to a net zero emission, resource-efficient economy.[22] As governments consider how to best support the industry to recover and rebuild, they should be sure to address both of these needs together, creating jobs and growth now and ensuring competitiveness and resilience in the future. Accelerating these transformations will enable European leadership and competitiveness in key global industries and markets with enormous growth potential from the transition to climate neutrality.

By adopting a smart and integrated approach to clean **energy, buildings and mobility** as part of the European Green Deal and the EU recovery plan, the EU can support high-quality jobs, broader social and environmental benefits such as improved air quality, and accelerate the move towards a net zero economy. Addressing energy, buildings and mobility in an integrated manner can create opportunities for efficiency gains and faster decarbonisation. For example, accelerated building renovation 'frees up' the electricity that is needed to support deployment of electric vehicles.[23]

Buildings renovation (including insulation, heat pumps, microgeneration, smart energy controls and high efficiency standards) is one of the quickest and most cost-effective ways of creating jobs, and serves to increase the spending power of consumers by lowering energy bills. Recent analysis shows that renovating buildings in line with the net zero target is a €243 billion business opportunity for the EU-27, but needs innovative financial support (such as energy performance contracting or green mortgages) to unlock this investment.[24] Renewables projects have also been disrupted by lockdown restrictions and are hampered by uncertainty on future power demand. However, wind and solar are now the cheapest forms of new power generation and are expected to double over the next decade, creating hundreds of thousands of jobs.[25,26,27] Similarly, the entire transport sector has been strongly affected by the pandemic and lockdown policies, but presents the potential to build back better – including through support for electric mobility, active travel (walking and cycling) and new modes of working that lower transport demand. A faster switch to electric transport could create 200,000 jobs and save nearly €50 billion a year from reduced oil imports.[28] Digital transformation will allow initiatives in these sectors to scale more quickly.

The crisis has also reinforced the importance of resilient and sustainable food systems, and access to nature for the quality of life of European citizens. **Sustainable land use and nature** should form a key part of Europe's recovery. Nature-based solutions and bioeconomy opportunities (such as soil carbon sequestration and natural flood management) can offer employment – especially in the rural economy –

and an improved local environment. At the same time, delivering on Europe's climate plans will require land use to not only eliminate its own emissions but also act as a large net carbon sink. The 2050 climate neutrality objective cannot be achieved without using nature-based solutions, such as protecting and restoring natural ecosystems, complementing emissions reductions elsewhere.

Finally, the unprecedented economic shock reiterates the importance of developing a **sustainable finance** system that manages risks and accelerates clean investments. This will help to prevent future crises and stop the current crisis from deepening.

The continued importance of climate ambition during an economic emergency

The European Green Deal is based on the goal of achieving net zero greenhouse gas emissions in Europe by 2050. This goal was endorsed in the European Council in December 2019 and formalised in a proposal for an EU Climate Law in March 2020.[29] To meet the 2050 goal and to support international efforts to ratchet up climate ambition, the European Commission is set to propose a higher 2030 climate target later this year.

EU institutions should act swiftly to enact the European Climate Law and increase Europe's 2030 target for greenhouse gas emission reductions to at least 55 per cent.[30] Strengthening climate ambition has become even more critical, despite the short-term pressures of the coronavirus crisis. Climate ambition backed up by strong policies provides companies with the clarity and confidence they need to unlock further investments in climate solutions.[31] This will give direction to the recovery and provides a clear steer on what suitable investments look like, making the recovery more sustainable and avoiding stranded assets.

A green, just and resilient European recovery

What is on the table?

In May 2020, the European Commission announced a recovery plan for Europe, including updated proposals for the 2021–27 EU budget, and 'Next Generation EU', a €750 billion emergency temporary recovery instrument.[32]

The recovery plan positions the European Green Deal as "a jobs-creating engine" and the green economy is a central theme of the recovery package. The most relevant elements include:

- a Recovery and Resilience Facility and new REACT-EU initiative to help member states achieve a sustainable recovery, including supporting the green and digital transitions
- an expanded 'sustainable infrastructure' window for the InvestEU facility, aimed at leveraging private sector investment
- a €40 billion budget for the Just Transition Fund, to support the clean energy transition and help workers and regions dependent on high carbon industries
- a stronger climate focus for Horizon Europe innovation funding
- an additional €15 billion for the European Agricultural Fund for Rural Development, which can help fund environmental initiatives in rural areas.[33]

These proposals build on and expand the Sustainable Europe Investment Plan (SEIP) announced earlier this year, which seeks to mobilise €1 trillion in sustainable investments over the next decade. Using finance from the EU budget, combined with a framework to mobilise private capital and support for sustainable projects, the SEIP uses public investment as a lever to unlock and redirect private investments towards a more sustainable economy.[34]

What should happen next?

The multi-year EU budget and the EU recovery plan now need to be agreed by the European Council and Parliament. This will not be an easy process, as there are long-running disputes on the size and distribution of the budget. It will be essential to maintain and strengthen the climate and environment focus as negotiations continue.

To access EU recovery funds, member states will need to develop 'Recovery and Resilience Plans'. It is critical for countries and the European Commission to ensure that the investments outlined in these plans are consistent with climate neutrality and contribute to the achievement of climate objectives on the ground.

Achieving a just recovery and transition

The economic and social impacts of the crisis will be felt differently across the EU, and will exacerbate existing inequalities. An inclusive recovery requires additional policy measures to address deepened socioeconomic inequalities resulting from the crisis.

Member state recovery plans funded through the EU should include initiatives on skills and jobs that will enable workers to transition to sectors that will thrive in the future, and address skills shortages that currently prevent achieving greater decarbonisation in certain sectors. Building renovations, for example, need skilled, accredited tradespeople who can coordinate complex projects and meet high quality standards. Developing jobs in the circular economy will also contribute to decarbonise the construction sector.

At the same time, some jobs in the energy sector, in coal regions for example, and the automotive sector, will be negatively impacted by the Covid-19 crisis and the transition to a climate neutral economy. Economic recovery plans should provide support for these workers to be reskilled in a way that is consistent with this objective and place them under just transition initiatives. The Just Transition Fund should also be used to finance upskilling and reskilling of workers in the area of building renovation.

To avoid fragmentation of its initiatives on jobs and skills, the EU should bring together a comprehensive vision to address what digital skills need to be developed across various sectors to increase economic competitiveness, resilience and innovation in support of its climate neutrality goal.[10]

Driving green investment in line with net zero goals

The need to restore Europe's economy is coupled with large investment needs to put Europe on a pathway to net zero emissions by 2050. Net zero pathways can lead to higher GDP, a more productive economy and large savings from reduced fossil fuel imports – but they require an upfront pulse of investment to re-tool Europe's economy.[35] By focusing investment and stimulus measures on clean investment, the EU can simultaneously support Europe's recovery and its transition to a sustainable net zero emissions economy.

To achieve this, **a stronger pipeline for green investments still needs to be built**. Businesses are showing increased interest in clean investments, but technical assistance from the EU will be needed to guide member states, local authorities, companies and the finance sector to build a pipeline of projects commensurate with the ambitions of the EU recovery plan and European Green Deal. This will serve to build up the supply side to match the increasing demand for sustainable finance in both equity and debt markets. **Further clarity is also needed on how the proposed structures will seek to work with and crowd in private finance**. Guarantees and blended finance structures are important tools to accelerate the flow of private finance into areas that support a just recovery and transition, and to broaden the pipeline of green projects beyond those which are currently scalable on a standalone basis.

Action is also needed to **ensure the investment in the EU recovery package is actually green**. A clear plan is needed to advance the proportion of climate mainstreaming in the EU budget and recovery instrument, beyond the 25 per cent promised so far. The new EU budget package simply repeats rather than strengthens previous commitments for at least 25 per cent of the budget to go to climate-related spending – despite the EU increasing its climate target since the budget was first proposed. Given the European Investment Bank has already presented a lending policy that commits to 100 per cent Paris Agreement alignment and **at least 50 per cent climate and environmentally sustainable investment**, the new multi-annual EU budget should aim to meet this level of climate alignment in the first half of its term.

Financial support packages should also include **measures to ensure receiving businesses are well managed and their strategies are science based and aligned with climate goals**. The EU plan includes a commitment that public investments in the recovery should respect the green oath to "do no harm" – however, it is not yet clear how this will be assessed or over what time horizon. A failure to align economic recovery investments with EU climate goals would build up risks for the future, including the need for further bailouts. Clear methods and scrutiny are needed to ensure public money does not support activities that undermine the Green Deal goals. The recently agreed EU sustainable finance taxonomy establishes a strong set of principles that can guide investment through the recovery, and should be consistently applied to all investment in the EU budget and recovery instruments.[36]

Industrial innovation and a circular economy

What is on the table?

EU Industrial Strategy

On 10 March 2020, the European Commission published a new Industrial Strategy that sets out a future direction for European industry to take and the measures that can be enacted in support of this strategy.[37] Against a backdrop of increasingly assertive strategies from other major economies, its focus is on ensuring the global competitiveness of European industry through harnessing digitalisation and achieving climate neutrality. It recognises that industry will need to significantly evolve and adapt itself in order to hit the EU goal of net zero emissions by 2050.

The Commission outlines critically important enabling conditions for industrial transformation in view of achieving climate neutrality, such as the need to build a much more circular economy, encouraging industrial innovation and financial support for the transition. The strategy recognises that the 'energy efficiency first principle' should be the primary focus of industrial efforts to decarbonise, and gives special attention to increasing electrification of industrial processes and breakthrough technologies such as 'clean hydrogen'. The Commission commits to taking a more strategic approach to renewable energy and backs further investment in research, deployment and infrastructure in order to help develop new production processes and boost employment.

Circular Economy Action Plan

The Industrial Strategy is complemented by the European Commission's new Circular Economy Action Plan (CEAP) that was published on 11 March 2020.[38] The CEAP sets out a number of initiatives with the intention of strengthening Europe's industrial base, reducing the material footprint of products and maximising the potential of the circular economy in terms of emissions reductions.

The action plan includes many positive elements to support the development of circular and low carbon markets. A standout proposal is to have a new sustainable product policy framework in place applicable to intermediate and consumer products, and include the product groups of steel, cement and chemicals. The goal here is to develop sustainability principles for different products and to apply an entire life-cycle approach across different value chains.

The CEAP includes plans to strengthen EU rules on green public procurement and to have a review of the Industrial Emissions Directive in order to better ensure circularity in industrial processes. Numerous sectors are covered by the CEAP, and special attention is given to those using the greatest amount of resources and that have the highest potential for circularity, including electronics and information and communications technology (ICT), batteries and vehicles, packaging, plastics, textiles, construction and buildings. Finally, the Commission also wants to tackle plastic pollution and will propose new mandatory requirements for recycled plastic content and reducing waste.

Support for the circular economy and industrial innovation in the EU recovery plan

The EU recovery plan includes several levers to strengthen investment in the circular economy and industrial innovation. A new natural capital and circular economy initiative under the InvestEU programme aims to mobilise at least €10 billion over the next ten years, while circular economy investments can also be supported by investment through Next Generation EU and the Just Transition Fund. The EU's main research and innovation programme, Horizon Europe, is also being expanded, "reflecting the crucial role of research and innovation in driving the shift towards a clean, circular, competitive and climate neutral economy."[33]

What are businesses doing?

Leading industrial players, including those in energy-intensive sectors, are already making ambitious climate commitments and investing in clean production processes. In the steel sector, HYBRIT, a joint venture between SSAB, LKAB and Vattenfall, is planning to produce zero emissions steel using fossil-free-energy hydrogen by 2023. DSM-Niaga and ECOR have developed fully recyclable alternatives for particleboard and other panel materials without compromising on material safety, quality and recyclability.[22]

> “*Europe's economic recovery and longer term industrial policy should create a momentum to decarbonise heavy industry. Accelerating clean industrial innovation, like fossil-free hydrogen-based steelmaking, and creating low carbon markets for materials are crucial drivers of success in making Europe's industry more competitive and put it on track for climate neutrality by 2050 at the latest.*”
>
> ***Martin Pei***
> *Executive Vice President and CTO, SSAB, and Chairman of HYBRIT Development AB*

"We should not lose the opportunity to learn from the Covid-19 crisis and rebuild a better economy; we should not go back to normal but to a new normal. The new ways of collaborating for urgent solutions between governments and companies have been remarkable, and the potential to simultaneously catalyse the transitions needed for NetZero carbon economy through the stimulus measures designed to restart and reopen the economies must be seized.

"One of the key elements for Europe's recovery, increasing its long-term resilience against challenges like climate change and resource scarcity, is to move towards a more circular economy, from circular product design to waste management. A political framework that supports the innovation and deployment of sustainable, low carbon materials, processes, and products will help to reap the associated economic, environmental, and social benefits and create jobs in the process."

Dimitri de Vreeze
Co-CEO, Royal DSM

What should happen next?

Industrial innovation, digitalisation and a circular economy are crucial to both Europe's recovery and to its shift to a zero carbon economy. It is essential to avoid a carbon-intensive recovery that would store up problems and create more disruption as Europe decarbonises. Investing in industrial decarbonisation, through both direct investment and a supportive policy environment, will help keep industry in Europe and ensure high-quality jobs for the future.

A recent CLG Europe Business Briefing concluded that the EU Industrial Strategy and Circular Economy Action Plan, along with more immediate Covid-19 recovery plans, present a huge opportunity to focus investment into more sustainable business practices and deliver a more resilient European economy.[39]

Ensuring a circular economy and creating new markets for low carbon materials

The shift to a circular economy offers enormous job creation opportunities: recent studies estimate 700,000 new jobs can be created by applying circular economy principles across the EU economy.[40] The European Commission also argues the shift to a circular economy will increase resilience to global supply issues.[33]

Economic stimulus measures supporting the build-out of new infrastructure have potential for a double benefit through **prioritising green infrastructure, and building this new infrastructure with low carbon materials**. Green public procurement standards are a powerful tool to create markets and increase demand for low embodied carbon products and materials. These standards are even more important given the large expansion of public investment foreseen as part of Europe's economic recovery.

Regulatory measures to help create markets for low carbon and circular products should also be prioritised, including the development of new resource efficiency and recyclability standards to drive demand at both material and product level. The Commission should make its new sustainable product policy framework a priority legislative initiative and set ambitious environmental design parameters including on the carbon footprint and material efficiency of key industrial materials.

Accelerating clean innovation

Facilitating access to public and private sector funds to support the acceleration of clean industrial innovation must be an area of focus of all relevant EU investment tools. The increased investment for Horizon Europe (EU research funding) is welcome, but support for clean innovation is needed at all stages of technology development cycles. The EU Emissions Trading System (ETS) Innovation Fund in particular must ensure that funds support innovative projects that reduce CO_2 emissions in the production of energy-intensive products. The potential revision to state aid rules to support priority European projects can also unlock stronger support for clean industrial innovation in Europe.

Clean energy, buildings and mobility

What is on the table?

The EU agenda for clean energy, buildings and mobility includes both a package of policy measures in the European Green Deal, and financial support in the EU recovery plan.

European Green Deal initiatives

Flagship initiatives as part of the European Green Deal include the following:

- **A 'Renovation wave'** initiative for the building sector will be launched in Q3 2020. This initiative was highlighted in the EU recovery plan as a key initiative for creating jobs while reducing emissions and improving quality of life.
- A **Strategy for smart sector integration** will be presented in June 2020 to highlight measures to support a flexible and efficient energy system, increased electrification and the role of renewable gases in hard-to-electrify sectors. New strategies are also under development on **hydrogen**, **offshore wind** and updating the EU's **energy infrastructure priorities**.
- A **Strategy for smart and sustainable mobility** will be published later this year, to chart out a pathway to zero-emission mobility. The Alternative Fuels Infrastructure Directive and the Trans-European Transport Network regulation will be updated to support rapid development of charging infrastructure for electric vehicles, and the legislation on CO_2 emission performance standards for cars and vans will be revised in 2021.

In addition, the European Commission will propose a stronger 2030 climate target later this year. This is expected to lead to new measures being introduced to meet the new target, including updating the EU ETS and renewables and efficiency targets.

Support for clean energy, buildings and mobility in the EU recovery plan

The recovery plan for Europe makes substantial new financial resources available for clean buildings, energy and mobility. The Commission's forthcoming 'Renovation wave' initiative aims to double the rate of retrofitting Europe's buildings, supported through the new Recovery and Resilience Facility and the expanded budget for InvestEU. Renewable energy will be supported through a new 'Strategic Investment Facility' as well as the potential to access increased InvestEU funding. The Connecting Europe Facility budget will be increased to support the goal of "one million charging points, clean fleet renewals by cities and companies, sustainable transport infrastructure and [enabling] the shift to clean urban mobility".[33] The Just Transition Fund can support initiatives in each of these areas.

What are businesses doing?

Businesses operating in a wide range of sectors including retail, logistics, energy, food and infrastructure are committed to play a key role to fully decarbonise these sectors and are already investing in low carbon energy, mobility and buildings.

Across the EU, EV100 member companies, brought together by The Climate Group, have committed to roll out charging infrastructure at over 1,000 company locations and are targeting the electrification of over one million vehicles by 2030.[41]

Business demand for renewable energy is increasing rapidly, and 241 companies have committed to going 100 per cent renewable electricity via the RE100 coalition, led by The Climate Group, in partnership with CDP. More than a quarter of RE100 member companies are procuring renewables with direct impact – directly enabling or financing additional renewable capacity.[42]

Companies are also increasingly treating energy productivity as a business opportunity. The Climate Group and the World Green Building Council have joined forces to combine EP100 commitments, under which companies commit to improve their energy productivity, and the Net Zero Carbon Buildings Commitment.[43,44] Under this commitment, a company commits to owning, occupying and developing buildings that operate at net zero carbon emissions by 2030. With this approach, a net zero carbon building reduces energy demand, is highly energy efficient and is fully powered by renewable electricity.

> “*Europe should continue to be at the forefront of global efforts to address the climate crisis, and the scope of the recovery plans outlined so far show an understanding that this leadership is even more urgent and necessary as we recover from the Covid-19 crisis. Ambitious policies to ensure economic stimulus is aligned with climate objectives will deliver real benefits for economies and society as a whole, with research, development and innovation at the heart of Europe's reindustrialisation. Now we must quickly establish clear and predictable frameworks to unlock the investment required. The resources, technology and knowledge to drive a green recovery are already in place.*”
>
> ***Ignacio Galán***
> *Chairman & CEO, Iberdrola*

What should happen next?

Economic stimulus packages and Green Deal policies should accelerate the momentum for increased decarbonisation of energy, buildings and mobility, in order to seize the economic and job creation opportunities. These packages should also avoid subsidising high carbon energy and mobility, as this creates stranded asset risks and is a barrier to clean growth.

Clean buildings

As indicated by the European Commission and its plans for a 'Renovation wave', **building renovation should be one of the flagship initiatives for economic recovery**. Renovation of the building stock can, for example, offer major opportunities in some of the most disadvantaged regions of Europe. In order to meet Europe's climate objectives, the current renovation rates should at least double. Building renovations have strong returns over time, but require upfront investment. As financing is one of the main challenges of increasing renovation rates, more clarity is needed on how the EU recovery plan will support banks, cities and companies to scale up investments in projects with a focus on energy renovation. Access to funding should be combined with access to technical assistance and further efforts to develop a fundable pipeline of projects.

Public authorities should show leadership by creating projects to renovate public buildings: this will both set an example and provide important learning that can help refine future approaches and policies. Eurostat rules for energy performance contracting allows public sector projects to be treated off-balance sheet, hence these initiatives will not be adding to public debt levels.[45]

In addition, **the EU could also revise public procurement rules to include energy efficiency and circular economy criteria**, to address embedded emissions.[46] Life-cycle carbon measurement could be further explored to reduce the life-cycle emissions of building materials. The stimulus for building-related projects should also adopt clear energy efficiency targets.

Clean energy

Policy and financial measures are needed to help **get Europe back on track towards a carbon-free energy system**, including through supporting the smart systems that will underpin a renewables-based energy system. In order to speed up the decarbonisation of the energy sector, **renewable energy sources need to be better integrated to the grid**. Large corporate projects will benefit from increased investment in smart grids as this reduces connection costs and times for new projects. EU member states should **remove barriers to corporate renewable power purchase agreements** (PPAs) in their national energy policies, including through streamlining administrative procedures.[47] These PPAs enable companies to reduce their energy costs and accelerate the deployment of renewable energy projects by securing a revenue stream for generated electricity and by easing access to project finance.[48] Partnerships between the EU, member states and industry could support research and innovation on energy storage.

Clean mobility

As Europe seeks to rebuild its mobility sector, recovery measures can also be used to prioritise clean mobility, including public transit systems, electrification of transport and promotion of active travel. The EU should **move forward with CO_2 emission performance standards for cars and vans, scale up investments in charging infrastructure and drive demand for electric vehicles (EVs)**. Scrappage schemes should prioritise zero emission cars by, for example, exchanging old petrol or diesel vehicles for vouchers towards EVs and giving a much bigger bonus/purchase incentive to these types of vehicle.

Sustainable land use and nature

What is on the table?

Farm to Fork Strategy

The Commission's new Farm to Fork Strategy, published on 20 May 2020, is based on the idea that "a shift to a sustainable food system can bring environmental, health and social benefits, offer economic gains and ensure that the recovery from the crisis puts us onto a sustainable path."[49] It clearly recognises that food systems are one of the key drivers of climate change and environmental degradation, and proposes that energy efficiency, climate-friendly and circular economy practices, including more carbon storage in soil, are all to be promoted and supported on European farms.

Climate stability is crucial for food security, and we need a robust and resilient food system that functions in all circumstances. While the Strategy recognises this in principle, this long-term perspective must guide the detail of the spending decisions under the Common Agricultural Policy finance mechanisms, which are currently under review.

Biodiversity Strategy

The new EU Biodiversity Strategy, also launched in May 2020, brings the restoration of nature to the forefront of the agenda.[50] The strategy proposes a new headline target of "Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss." New EU commitments on increasing coverage by protected areas, reducing pesticide and fertiliser use, increasing organic farming, and improving greening of urban areas in the EU can also play a role in improving carbon storage potential in soils and vegetation.

The EU's significant market leverage must be utilised to drive change in global supply chains. A new legislative proposal is foreseen to stop products associated with deforestation being placed on the EU market. This will happen alongside taking action at home to increase the quantity, quality and resilience of EU forests.

The need to prioritise 'win–wins' in the quest for sustainably sourced renewable energy is acknowledged, with a commitment to prioritise ocean energy, fish-stock-friendly offshore wind, and solar farms that provide soil cover. The sustainability trade-offs around energy generation from biomass are also acknowledged, and various policies may be reviewed in light of upcoming work to better understand potential biodiversity risks.

The strategy identifies that at least €20 billion per year "should be unlocked for spending on nature", partly through redirecting EU funding mechanisms, and mobilising private finance, for example via the InvestEU instrument.

Support for sustainable land use and nature in the EU recovery plan

The Commission's recovery package announced a €15 billion reinforcement for the European Agricultural Fund for Rural Development. This is intended to support rural areas in the transformation necessary to align with the European Green Deal and achieve the targets set out in the new Biodiversity and Farm to Fork strategies.

What are businesses doing?

European businesses increasingly recognise the impacts they have on nature. They also produce the innovations and have expertise that can help progress nature restoration and sustainable land use. Many businesses are also investing in nature-based solutions as part of reaching their own net zero commitments. In a welcome move, the EU Biodiversity Strategy indicates that the Commission will continue helping to build a European Business for Biodiversity movement.

Unilever's actions and commitments to regenerate nature:

As of today, 95% of Unilever forest-related commodities are certified as sustainably sourced to globally recognised standards putting it on track to achieve a deforestation-free supply chain by 2023. In addition to this initiative, Unilever is setting out to help regenerate nature. To do this, the company will set up a €1 billion "Climate & Nature Fund" to finance projects that will restore landscapes, protect wildlife, increase local biodiversity and carbon capture, restore soil health and preserve water conservation. Unilever will empower a new generation of farmers and smallholders who are committed to protecting and regenerating their farm environment. This commitment will build on the work of some of its brands that is already underway, such as Ben & Jerry's initiative to reduce GHG emissions from dairy farms and Knorr supporting farmers to grow food more sustainably.

On top of its ambition to climate neutrality by 2030, all Unilever products will be carbon neutral, from sourcing to point of sale, by 2039, eleven years ahead of the Paris Agreement deadline. As transparency will be a vital accelerator in the global race to zero emissions, the company will communicate the carbon footprint of every product and prioritise building partnerships with suppliers who have set and committed to their own science-based targets.

Stora Enso's strategy for renewable and recyclable solutions:

The contribution of a circular bioeconomy to a net zero society is increasingly understood. Innovating sustainably sourced bio-based solutions to offer alternatives to plastics, concrete, glass, metal and other non-renewable materials will be one way to contribute to overall carbon reductions. Stora Enso's strategy is to find renewable and recyclable solutions that can substitute fossil-based and non-renewable materials in packaging, building construction and industrial intermediate chemicals.

What needs to happen next?

The EU Biodiversity and Farm to Fork strategies offer a positive vision of how Europe can move towards more sustainable land use and protect and restore its natural systems. It is important that the Council and Parliament confirm these strategies and get behind this vision.

However, there is a real risk of an 'implementation gap'. Financial support for progress in this area is potentially available from numerous pots, both existing and newly created, but there is still a risk that investment in land and nature may fall through the cracks. To get near the level required, it is acknowledged that private financing will be required on top of EU funding. **More work is therefore needed to match the funding to the ambition.**

Furthermore, **the Green Deal goals must steer existing EU funding mechanisms** – including Common Agricultural Policy funding and EU structural and investment funds. Funding must be used to help farmers and landowners achieve deep emission reductions and incentivise natural carbon dioxide removals.

For the EU to **tap into the huge potential of restoring carbon-rich habitats** and transforming agricultural practices, and to ensure resilience in economic recovery, **member states will need to embody this perspective in the detail of their Recovery and Resilience Plans**. The Commission will need to be rigorous in its assessment and approval of those plans, and actively monitor delivery to ensure the ambition levels are met. New pieces of legislation, such as on deforestation in supply chains, and setting restoration targets, will also need to maintain high levels of ambition.

Sustainable Finance Strategy

What is on the table?

In parallel to economic stimulus measures and public investment, regulatory measures are needed to future-proof the financial system, increase resilience and avoid future crises.

The European Commission launched a Sustainable Finance Action Plan in 2018, which included the development of a sustainable finance taxonomy to identify green investments.[51]

In late 2020 the European Commission will launch a renewed Sustainable Finance Strategy.[52] This focuses on three main themes:

- *Strengthening the foundations for sustainable finance*, including through measures on company reporting and transparency; accounting standards and rules; and definitions, standards and labels for sustainable financial assets and financial products.
- *Increasing opportunities for citizens, financial institutions and corporates to enhance sustainability*. This includes supporting retail investors and citizens to green their investments and providing tools to monitor the impact of sustainable finance in the real economy.
- *Reducing and managing climate and environmental risks*. This could include the development of a 'brown taxonomy' to disincentivise environmentally harmful investments, and improving data on climate-related physical risks and other adverse environmental impacts.

What are businesses doing?

There is strong commitment from both businesses and the financial sector for a more sustainable financial system. Investors increasingly recognise the risks associated with climate change and continued investment in carbon-intensive assets as well as the opportunities.

Over 160 major international companies have committed to disclosing climate-related financial information following the recommendations of the international Task Force on Climate-related Financial Disclosures.[53]

> *"Aligning financial flows with climate neutrality will increase the resilience of the financial system and the economy while avoiding future crises. The implementation of the European Commission's new recovery plan is a case in point. It is now in our hands to create a double dividend or a double debt for the future."*
>
> ***José Manuel Entrecanales***
> *Chairman and CEO, ACCIONA*

What needs to happen next?

While there is growing attention to ESG factors, European and global financial systems are not yet adequately managing the systemic risks posed by climate change impacts, environmental degradation and the shift to a low carbon economy. **Businesses and financial institutions need to ensure climate and environment risks are disclosed, monitored and managed. This should be underpinned by EU financial regulation**. Further progress is also needed to ensure the financial sector fully supports businesses on their transition path towards sustainability.

The EU's Sustainable Finance Strategy needs to support businesses as they transition. Clear, comparable and workable corporate disclosure standards are needed, to enable risks to be assessed and to avoid greenwashing. **The EU sustainable finance taxonomy should be rapidly implemented, and a parallel 'brown taxonomy' is needed** to identify investments that do active harm and to guide financial institutions in understanding what areas of the economy are key to a green and just recovery, thereby helping them to proactively engage with clients on that basis. Support and training for businesses, accountants and service companies is needed as these standards are rolled out.

Conclusions

In the face of an unprecedented economic and social shock from the Covid-19 pandemic, governments and businesses can work together to both respond to the immediate crisis and build a more resilient, prosperous and climate neutral future. Although launched before the pandemic took hold, the European Green Deal serves as an important blueprint for supporting sustainable growth and should underpin Europe's recovery efforts.

Key recommendations for how this can be achieved include:

Strengthening climate ambition

Europe's net zero 2050 target remains critically important, and will help steer a more sustainable recovery. The EU should swiftly agree to increase its 2030 target for greenhouse gas emission reductions to at least 55 per cent on 1990 levels, to keep in line with 2050 goals.

A green and just recovery

The EU recovery plan offers a large potential to support a just transition and to scale up investment in line with achieving a net zero emission economy. To fulfil this ambition the EU needs to:

- Strengthen collaboration between governments, businesses and investors to build up the pipeline of green projects.
- Develop a comprehensive vision to build the skills needed for the green economy.
- Create stronger safeguards to ensure EU spending is fully targeted towards climate-friendly investment.

Industrial innovation and circular economy

Industrial innovation and circular economy are key sectors for Europe's recovery. The EU should:

- Facilitate access to public and private sector funds to support the acceleration of clean industrial innovation.
- Prioritise green infrastructure and build this new infrastructure with low carbon materials, including through green public procurement.
- Develop regulatory measures to help create markets for low carbon and circular products.

Clean energy, buildings and mobility

An integrated approach to clean energy, buildings and mobility should be a key focus for EU budget spending and national 'Recovery and Resilience Plans' as it will create jobs, reduce costs and accelerate decarbonisation, and provide sizeable environmental and social benefits. The EU should:

- **Buildings:** Place the 'renovation wave' at the heart of economic recovery as it represents a key opportunity for rapid job creation and restoring spending power to households and small businesses. Governments should work with financiers and businesses to create a rapidly deployable pipeline of projects.
- **Energy:** Support faster deployment of renewable energy and associated infrastructure, such as smart grids, through stimulus spending. This can be strengthened by measures to simplify corporate purchasing of renewables as businesses seek to green their energy supply.
- **Transport:** Support clean mobility, including by moving forward with CO_2 emission performance standards for cars and vans. The EU recovery plan should also scale up investments in electric vehicle charging infrastructure, and in using digital innovation to shift mobility demand and support active travel.

Sustainable land use and nature

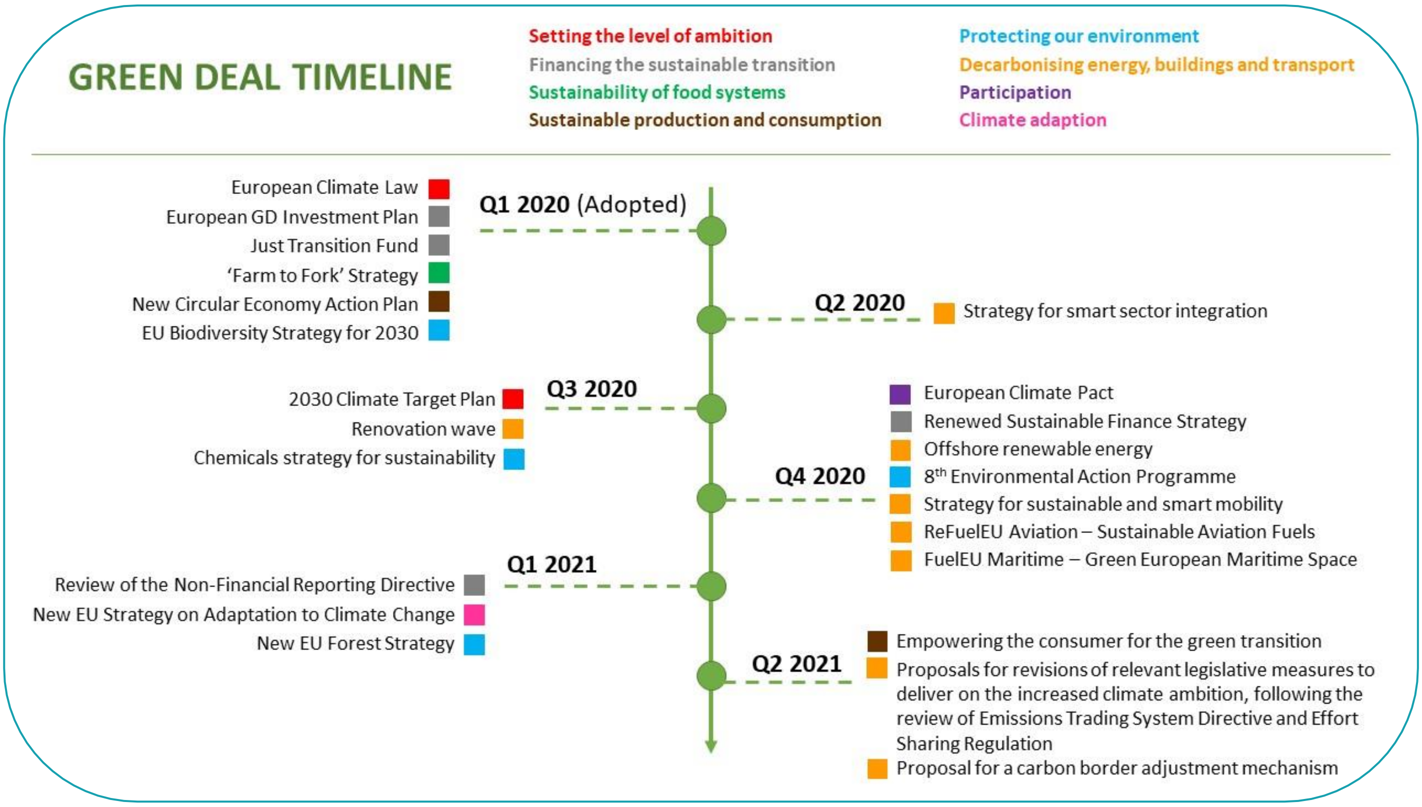
The EU Biodiversity and Farm to Fork strategies provide a positive vision of how Europe can move towards more sustainable land use, and protect and restore its natural systems. In order to fulfil this vision, the EU will need to:

- Steer investments in the real economy, including through reforming the Common Agricultural Policy and using other EU funds to help farmers and landowners to achieve deep emission reductions and incentivise natural carbon dioxide removals.

Sustainable finance

The EU's renewed Sustainable Finance Strategy offers an opportunity to strengthen financial regulation to manage risk and provide the right signals through the financial system. This is critical for both unlocking green investment and avoiding future crises. The EU will need to:

- Use financial regulation to support businesses and financial institutions to disclose, monitor and manage climate and environment risks.
- Implement the sustainable finance taxonomy and develop a 'brown taxonomy' to identify investments that do active harm, and to guide financial institutions in understanding what areas of the economy are key to a green and just recovery.


GREEN DEAL TIMELINE
Setting the level of ambition
Financing the sustainable transition
Sustainability of food systems
Sustainable production and consumption
Protecting our environment
Decarbonising energy, buildings and transport
Participation
Climate adaption
Q1 2020 (Adopted)
European Climate Law
European GD Investment Plan
Just Transition Fund
'Farm to Fork' Strategy
New Circular Economy Action Plan
EU Biodiversity Strategy for 2030
Q2 2020
Strategy for smart sector integration
Q3 2020
2030 Climate Target Plan
Renovation wave
Chemicals strategy for sustainability
Q4 2020
European Climate Pact
Renewed Sustainable Finance Strategy
Offshore renewable energy
8th Environmental Action Programme
Strategy for sustainable and smart mobility
ReFuelEU Aviation – Sustainable Aviation Fuels
FuelEU Maritime – Green European Maritime Space
Q1 2021
Review of the Non-Financial Reporting Directive
New EU Strategy on Adaptation to Climate Change
New EU Forest Strategy
Q2 2021
Empowering the consumer for the green transition
Proposals for revisions of relevant legislative measures to deliver on the increased climate ambition, following the review of Emissions Trading System Directive and Effort Sharing Regulation
Proposal for a carbon border adjustment mechanism

References and notes

[1] European Commission. (2020). The European Green Deal. COM(2020) 640. Retrieved from: https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf

[2] This figure compiles the number of businesses having signed international, European and national statements listed on page 6

[3] European Commission. (2020). Spring 2020 economic forecast: A deep and uneven recession, an uncertain recovery. Retrieved from: https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts/spring-2020-economic-forecast-deep-and-uneven-recession-uncertain-recovery_en

[4] Palmer, R., Jacobs, M., Laybourn-Langton, L., & Davies, M. (2020). Recovering Better: A Green, Equitable and Resilient Recovery from Coronavirus. E3G. Retrieved from: https://www.e3g.org/library/briefing-summary-recovering-better-a-green-equitable-and-resilient-recovery

[5] BlackRock. (2020). Sustainable investing: Resilience amid uncertainty. Retrieved from: https://www.blackrock.com/corporate/about-us/sustainability-resilience-research

[6] Hepburn, C., O'Callaghan, B., Stern, N., Stiglitz, J., & Zenghelis, D. (2020). Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change? *Oxford Review of Economic Policy,* 36 (S1). Retrieved from: https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf

[7] New Climate Economy. (2018). Unlocking the Inclusive Growth Story of the 21st Century: Accelerating Climate Action in Urgent Times. Retrieved from: https://www.blackrock.com/corporate/about-us/sustainability-resilience-research

[8] Cambridge Econometrics. (2020). Green stimulus package together with a VAT rate cut could lead the UK out of recession in 2021. Retrieved from: https://www.camecon.com/news/green-stimulus-package-together-with-a-vat-rate-cut-could-lead-the-uk-out-of-recession-in-2021/

[9] McKinsey. (2020). How a post-pandemic stimulus can both create jobs and help the climate. Retrieved from: https://www.mckinsey.com/business-functions/sustainability/our-insights/how-a-post-pandemic-stimulus-can-both-create-jobs-and-help-the-climate

[10] University of Cambridge Institute for Sustainability Leadership (CISL). (2020). Working towards a climate neutral Europe: Jobs and skills in a changing world. Cambridge, UK: CLG Europe. Retrieved from: https://www.corporateleadersgroup.com/reports-evidence-and-insights/Jobs-and-skills-in-a-changing-world

[11] Climate Action Tracker. (2020). A government roadmap for addressing the climate and post COVID-19 economic crises. Retrieved from: https://climateactiontracker.org/documents/706/CAT_2020-04-27_Briefing_COVID19_Apr2020.pdf

[12] We Mean Business. (2020). Over 150 global corporations urge world leaders for net-zero recovery from COVID-19. Retrieved from: https://www.wemeanbusinesscoalition.org/press-release/business-ambition-statement/

[13] Mendiluce, M. (2020). Businesses call on government to deliver on green promises. *Apolitical*. Retrieved from: https://apolitical.co/en/solution_article/businesses-call-on-government-to-deliver-on-green-promises

[14] Germany: Stiftung 2 Grad. (2020). Unternehmensappell für Krisenbewältigung und Zukunftsfähigkeit. Retrieved from: https://www.stiftung2grad.de/unternehmensappell-klima-konjunkturprogramm

[15] France: Entreprises pour l'environnement. (2020). Putting the environment at the core of a collective rebound. Retrieved from: http://www.epe-asso.org/en/opinion/

[16] Spain: Grupo Crescimento Verde. (2020). Más de 240 personalidades del mundo de la política, la sociedad civil y la empresa, piden al Congreso una recuperación verde y sostenible para salir de la crisis. Retrieved from: https://grupocrecimientoverde.org/mas-de-240-personalidades-del-mundo-de-la-politica-la-sociedad-civil-y-la-empresa-piden-al-congreso-una-recuperacion-verde-y-sostenible-para-salir-de-la-crisis/

[17] Finland: Climate Leadership Coalition. (2020). Green recovery to improve EU trade balance and create new jobs. Retrieved from: https://clc.fi/2020/05/25/green-recovery-to-improve-eu-trade-balance-and-create-new-jobs

[18] Slovenia: CER. (2020). CER has set up a national alliance for green recovery. Retrieved from: http://www.cer-slo.si/cer-has-set-up-a-national-alliance-for-green-recovery-29-04-2020.html

[19] UK: Prince of Wales's Corporate Leaders Group. (2020). More than 200 leading businesses urge UK Government to deliver clean, inclusive and resilient recovery plan. Retrieved from: https://www.corporateleadersgroup.com/reports-evidence-and-insights/news-items/leading-businesses-urge-uk-government-to-deliver-resilient-recovery-plan

[20] Doyle, A. (2020). Four more EU nations back a green post-coronavirus recovery. *Climate Change News*. Retrieved from: https://www.climatechangenews.com/2020/04/20/four-eu-nations-back-green-post-coronavirus-recovery

[21] CDP, IIGCC and PRI. (2020). Open letter to EU leaders from investors on a sustainable recovery from COVID-19. Retrieved from: https://www.iigcc.org/download/iigcc-letter-to-eu-leaders-from-investors-on-a-sustainable-recovery-from-covid-19/?wpdmdl=3446&refresh=5edf9768970c41591711592

[22] University of Cambridge Institute for Sustainability Leadership (CISL). (2019). Forging a carbon-neutral heavy industry by 2050: How Europe can seize the opportunity. Cambridge, UK: CLG Europe. Retrieved from: https://www.corporateleadersgroup.com/reports-evidence-and-insights/forging-a-carbon-neutral-heavy-industry-by-2050-how-europe-can-seize-the-opportunity

[23] Egerter, A., Hopkins, G., Mandel, J., & Verhaar, H. (2018). Energy Efficiency and Electric Vehicles: How Buildings Can Pave the Way for the Global EV Revolution. *Rocky Mountain Institute*. Retrieved from: https://rmi.org/insight/energy-efficiency-and-electric-vehicles

[24] BPIE. (2020). Covid-19 recovery: Investment opportunities in deep renovation in Europe. Retrieved from: http://bpie.eu/publication/covid-19-recovery-investment-opportunities-in-deep-renovation-in-europe

[25] BNEF. (2020). Scale-up of Solar and Wind Puts Existing Coal, Gas at Risk. Retrieved from: https://about.bnef.com/blog/scale-up-of-solar-and-wind-puts-existing-coal-gas-at-risk

[26] Sandbag and Agora Energiewende. (2020). The European Power Sector in 2019. Retrieved from: https://ember-climate.org/wp-content/uploads/2020/02/Sandbag-European-Power-Sector-Review-2019.pdf?utm_source=newsletter&utm_medium=email&utm_campaign=newsletter_axiosgenerate&stream=top

[27] Kapetaki, Z., Ruiz, P. et al. (2020), Clean energy technologies in coal regions: Opportunities for jobs and growth: Deployment potential and impacts, *Publications Office of the European Union*, Luxembourg, doi:10.2760/063496, JRC117938

[28] European Climate Foundation. (2018). Fuelling Europe's Future: How the transition from oil strengthens the economy. Retrieved from: https://europeanclimate.org/resources/fuelling-europes-future-how-the-transition-from-oil-strengthens-the-economy

[29] European Commission. (2020). Proposal for a regulation establishing the framework for achieving climate neutrality (Climate Law). COM/80 final. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588581905912&uri=CELEX:52020PC0080

[30] University of Cambridge Institute for Sustainability Leadership (CISL). (2019). Raising European climate ambition for 2030: A CLG Europe position paper, Cambridge, UK: CLG Europe. Retrieved

from: https://www.corporateleadersgroup.com/reports-evidence-and-insights/Raising-European-climate-ambition-for-2030

[31] United Nations Global Compact, We Mean Business and WRI. (2018). How business and government can fast track zero-carbon economic growth. *The Ambition Loop*. Retrieved from: https://ambitionloop.org

[32] European Commission. (2020). Recovery plan for Europe. Retrieved from: https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/recovery-plan-europe_en

[33] European Commission. (2020). Europe's moment: Repair and Prepare for the Next Generation. SWD(2020) 98 final. Retrieved from: https://ec.europa.eu/info/sites/info/files/communication-europe-moment-repair-prepare-next-generation.pdf

[34] European Commission. (2020). Financing the green transition: The European Green Deal Investment Plan and Just Transition Mechanism. Retrieved from: https://ec.europa.eu/ireland/news/financing-the-green-transition-the-european-green-deal-investment-plan-and-just-transition-mechanism_en

[35] European Commission. (2018). A Clean Planet for all – A European strategic long-term vision for a prosperous, modern, competitive and climate neutral economy. COM(2020) 773 final. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0773

[36] While the taxonomy is name-checked in the EU recovery plan, there is not a clear process for it to be consistently applied to supported investments.

[37] European Commission. (2020). Communication for a New Industrial Strategy for Europe. COM(2020) 102 final. Retrieved from: https://ec.europa.eu/info/sites/info/files/communication-eu-industrial-strategy-march-2020_en.pdf

[38] European Commission. (2020). Circular Economy Action Plan for a cleaner and more competitive Europe. Retrieved from: https://ec.europa.eu/environment/circular-economy/pdf/new_circular_economy_action_plan.pdf

[39] University of Cambridge Institute for Sustainability Leadership (CISL). (2020). How the EU Industrial Strategy and Circular Economy Action Plan can support the decarbonisation of European industry. Cambridge, UK: CLG Europe. Retrieved from: https://www.corporateleadersgroup.com/reports-evidence-and-insights/news-items/how-the-eu-industrial-strategy-and-ceap-can-support-the-decarbonisation-of-european-industry

[40] Cambridge Econometrics, Trinomics, and ICF. (2018). Impacts of circular economy policies on the labour market. Retrieved from: https://circulareconomy.europa.eu/platform/sites/default/files/ec_2018_-_impacts_of_circular_economy_policies_on_the_labour_market.pdf

[41] The Climate Group. (2020). Charging ahead on electric vehicles: 2020 EV100 Progress and Insights Report. Retrieved from: https://www.theclimategroup.org/news/charging-ahead-electric-vehicles-2020-ev100-progress-and-insights-report

[42] RE100, The Climate Group & CDP. (2019). Annual report: Going 100% renewable: how committed companies are demanding a faster market response. Retrieved from: http://www.there100.org/media.virbcdn.com/files/5c/aa8193f038934840-Dec2019RE100ProgressandInsightsAnnualReport.pdf

[43] The Climate Group. (2019). Smarter Energy Use: Businesses doing more with less: EP100 Annual Report 2019. Retrieved from: https://www.theclimategroup.org/news/smarter-energy-use-businesses-doing-more-less

[44] World Green Business Council. (2019). Advancing net zero: The Net Zero Carbon Buildings Commitment. Retrieved from: https://www.theclimategroup.org/news/smarter-energy-use-businesses-doing-more-less

[45] Eurostat and European Investment Bank. (2019). A Guide to the Statistical Treatment of Energy Performance Contracts. Retrieved from: https://www.eib.org/attachments/pj/guide_to_statistical_treatment_of_epcs_en.pdf
[46] BPIE. (2020). An action plan for the Renovation Wave: collectively achieving sustainable buildings in Europe. Retrieved from: http://bpie.eu/wp-content/uploads/2020/04/An-action-plan-for-the-renovation-wave_DIGITAL_final.pdf
[47] Re-source Platform. (2020). Corporate sourcing of renewables, a key driver for Europe's green economic recovery. Retrieved from: http://resource-platform.eu/wp-content/uploads/files/downloads/RE-Source-Platform-European-Corporate-Sourcing-Green-Recovery-Letter.pdf?v=2
[48] WBCSD. (2020). Corporate renewable power purchase agreements (PPAs). Retrieved from: https://www.wbcsd.org/Programs/Climate-and-Energy/Energy/REscale/Corporate-renewable-power-purchase-agreements-PPAs
[49] European Commission. (2020). A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system. COM(2020) 381 final. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52020DC0381
[50] European Commission. (2020). Communication for an EU Biodiversity Strategy for 2030: Bringing nature back into our lives. COM(2020) 380 final. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590574123338&uri=CELEX:52020DC0380
[51] European Commission. (2020). Communication on an Action Plan: Financing Sustainable Growth. COM(2018) 97 final. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0097
[52] European Commission. (2020). Consultation document: Consultation on the renewed Sustainable Finance Strategy. Retrieved from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0097
[53] We Mean Business. (2020). Commitment: Commit to implement the recommendations of the Task Force on Climate-related Financial Disclosures. Retrieved from: https://www.wemeanbusinesscoalition.org/commitment/commit-to-implement-the-recommendations-of-the-tcfd/