



THE PRINCE OF WALES'S
CORPORATE LEADERS GROUP

Technical Report

Maximising the benefits:

Economic, employment
and emissions impacts of
a Green Recovery Plan
in the UK

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Read the full report setting UK results alongside other European results here:

<https://www.corporateleadersgroup.com/reports-evidence-and-insights/maximising-the-benefits>

Introduction

In its January 2020 World Economic Outlook report,¹ the IMF projected the global economy to grow by 3.3 per cent in 2020. By April, the rapid spread of Covid-19 had resulted in this projection being revised downwards, to -3 per cent. Towards the end of June, the figure was down to -4.9 per cent, and the IMF was describing the situation as “a crisis like no other”, with uncertain recovery.²

These figures highlight the unexpected and unprecedented severity of the impact of Covid-19 on economies and labour markets, in addition to health and wellbeing. While some countries are emerging out of the pandemic with few casualties, the detrimental effect on economic growth and employment has been largely unavoidable, and the scale and nature of the impacts has meant that no sector has been left unaffected.

Measures to stop the spread of the virus – such as the closure of schools, factories and services – have forced businesses across all sectors of the economy to close down or downsize, leaving hundreds of thousands of people without work, and many others in precarious employment situations.³ The negative effects were initially heavily concentrated in sectors that serve consumers, especially ‘social’ sectors such as hospitality, but they have since spread wider as a result of declining investment. Around the world, millions of people have come to rely on government support mechanisms.

As we enter the last quarter of 2020, the focus has shifted from assessing and estimating the full extent of the damage to developing plans to support the economic recovery. The desired nature, structure and priorities of these plans are subject to debate at national, European and global levels. Widespread calls – whether by business and economists or from the public – for ‘Building back better’ and ‘Building back greener’ express the increasing awareness among the general public of the inequalities that the pandemic has highlighted,^{4,5} as well as a growing concern over the full extent of damage that natural degradation can inflict.

At the same time, millions of workers are simply worried about losing their jobs and feeding their families when emergency support schemes are wound down. Getting things ‘right’ in the economic recovery planning and policy implementation is important, as the impacts of the recovery spending will shape the scale of our economy, its competitiveness, sustainability and its effectiveness in providing inclusive prosperity in the years to come. The impacts will likely last well beyond the current short-term timeframe that policymakers are currently focusing on.

The pressure is mounting on policymakers to implement socially and environmentally responsible recovery packages that avoid repeating the mistakes made in the aftermath of the 2008 financial crisis. This is a pressure that many politicians and policymakers understand and support. In the UK the government has clearly set out the value of a green recovery – strongly supported by [business voices](#). The Corporate Leaders Group has clearly set out [the case for a green recovery](#) and [documented business actions](#) that are already supporting it.

In this report, we draw on Cambridge Econometrics’ E3ME modelling^{6,7} results to analyse the potential benefits of a Green Recovery Plan. The modelling assesses the economic, employment

and environmental impacts of three different scenarios, including two recovery plans that could both boost GDP and protect jobs:

- A **Covid-19 baseline scenario**, which shows the impacts of Covid-19, and how these impacts are likely to play out in 2020–30 if no recovery plans are put in place. This scenario was developed by Cambridge Econometrics in mid-2020, but has since been updated to take in more recent information, with the macro-level outcomes for each country remaining similar to those predicted by the IMF.
- A **VAT recovery scenario**, which follows a ‘return to normal’ approach by reducing VAT rates by 5 percentage points to encourage households to resume spending.
- A **Green Recovery Plan**, which aims to boost economic activity while simultaneously reducing CO₂ emissions.

The modelling results show the impacts of these three scenarios in graphical format compared to a no-Covid baseline, illustrating the impact of each recovery scenario in relation to what the situation would have been if Covid-19 had not happened (no-Covid baseline).

The Green Recovery Plan consists of the following policies, which are all implemented for a two-year period (2021–23) and the cost of which is covered by the governments. These measures are combined with a lower VAT reduction rate so they come out at the same cost to government as a VAT reduction alone. The policies in the Green Recovery package are described below, with more detailed information available from the full report [Assessment of Green Recovery Plans after Covid-19](#). This UK briefing has been drawn from a longer report which sets the UK results alongside results from other European countries and the whole of the EU: [Maximising the benefits: Economic, employment and emissions impacts of green recovery stimulus in Europe](#).

- **Energy efficiency** in buildings is improved to reduce energy consumption in this sector by 8 per cent, primarily through the implementation of energy efficiency measures in 2021–23. This is ambitious but achievable, and would put the EU, for example, on a path that would be consistent with achieving the current 2030 target for building energy efficiency.
- Boosting the uptake of **renewable energy** technologies by offering a capital subsidy of 50 per cent on new wind and solar equipment to incentivise investment during the immediate recovery period.
- Accelerated **electricity grid improvements** through additional government investment.
- Subsidy to cover 20 per cent of the cost of new **electric vehicles (EVs)** for households that scrap their old internal combustion engine vehicles.
- A **tree-planting** initiative to plant 10 billion trees worldwide over 2021–23, allocated to countries based on a combination of land mass and the size of the current forestry sector.

The Green Recovery Plan is a stylised version of what a financially, economically and politically feasible recovery package with a green focus might look like, rather than a true reflection of an existing or proposed recovery spending plan. It includes a selection of policy measures that have been either already implemented or proposed in various countries, and that could realistically be implemented.

The results presented in this report provide much needed evidence of the multiple benefits of green recovery spending. They clearly show that spending on sectors that support decarbonisation and the transition to a climate neutral economy can have additional benefits, including positive impacts on economic growth and employment. Moreover, they illustrate how these policies work to generate mutually reinforcing positive outcomes, and how the impacts of specific types of green recovery spending may vary between countries depending on contextual factors.

The policy package is a hypothetical construct but the modelling results can help governments to make informed decisions regarding the nature and structure of recovery spending by demonstrating the multiple benefits that can be derived from a mixture of several different green policy measures. By showing the contribution that each green policy measure can have on GDP, employment and CO₂ emissions in various types of national contexts, the results will also allow policymakers to identify specific green recovery spending options that might be most appropriate in their specific national context or build on extending existing programmes.

Impacts of a Green Recovery Plan for the United Kingdom

The Covid-19 pandemic emerged as a global threat to health and economies only a few months after the UK formally left the EU on 1 January 2020. At the time of writing this report, the UK economy is officially in recession. In a move that has limited the scale of unemployment increases, more than 9 million workers have had the bulk of their wages subsidised by government under the furlough scheme designed to avoid redundancies, costing the Treasury some £27 billion.⁸ Self-employed people have likewise been eligible for government support while lockdown measures forced them to temporarily cease operations. Support continues to be made available for businesses that need to be shut down because of local lockdown measures to control a second wave of the virus. These initiatives have sought to prevent “the record fall in output translating into a corresponding fall in unemployment”.⁹

The UK government has been working on various Covid-19 recovery plans, with a strong intention to ‘build back greener’¹⁰ and to direct a large chunk of the recovery spending to support progress towards the UK’s 2050 net zero carbon target. Although the exact details of the various policy initiatives are still being finalised, there is some indication of green recovery measures forming at least a part of the recovery package, including a commitment of £350 million to cut emissions in industry and construction sectors,¹¹ a £40 million Green Recovery Challenge Fund to create jobs in nature recovery and conservation,¹² and £2 billion in grants for home insulation.²¹ These measures will be supported by various employment initiatives, tax cuts (such as temporary exemptions to Stamp Duty to fuel the property markets and a VAT reduction to hospitality services) and direct subsidies, such as the ‘Eat Out to Help Out’ scheme.

At the time of writing, the effectiveness of the various existing measures remains to be seen. Just as in many other countries, the UK is facing the rise of a second wave of Covid-19. Unlike other countries the UK has significant economic uncertainty connected to its trade relationships, as a trade deal with the EU remains elusive and the significant risk of a no-deal Brexit remains. The combination of Covid-19 and Brexit make future economic outcomes in the UK highly uncertain.

Understandably, businesses are cautious about investing and there is a call for the public sector to fill the gap. The modelling results suggest that a green economic recovery plan that includes energy efficiency and subsidies for renewables and EVs could boost investment, while simultaneously reducing the UK’s CO₂ emissions by 20 per cent compared to a no-Covid baseline – equivalent to nearly 60 Mt CO₂ or roughly 10 per cent of our 1990 emissions.

Socio-economic impacts

As shown in Figure 1, the UK economy has been severely affected by Covid-19 and is likely to recover slowly. The effects on employment have so far been smaller (see Figure 2) but remain uncertain going forward, as further job losses may occur once existing support schemes are phased out. The impact of Brexit on the recovery is likewise impossible to estimate at present while trade deal negotiations are ongoing.

The VAT recovery scenario and Green Recovery Plan both help to boost GDP and employment for the UK over the period 2021–24, but have limited long-term impact. The Green Recovery Plan again shows better outcomes for GDP and jobs in both the short and long runs, but the difference is less pronounced than in other countries and takes longer to materialise. One explanation for this is that the VAT reductions are particularly effective in the UK’s service-oriented economy, and much of the Green Recovery Plan’s positive impact on consumption arises from the VAT reductions (with the additional impact leading to overall favourable outcomes arising from the positive effect that the green policy measures have on investment). Also, the baselines for this analysis were calculated in the summer of 2020 – when the UK’s furlough scheme was in full effect. Its withdrawal would change the likely predicted baseline and potentially would make recovery efforts more important.

Figure 1: GDP impacts in the UK (% difference from no-Covid baseline)

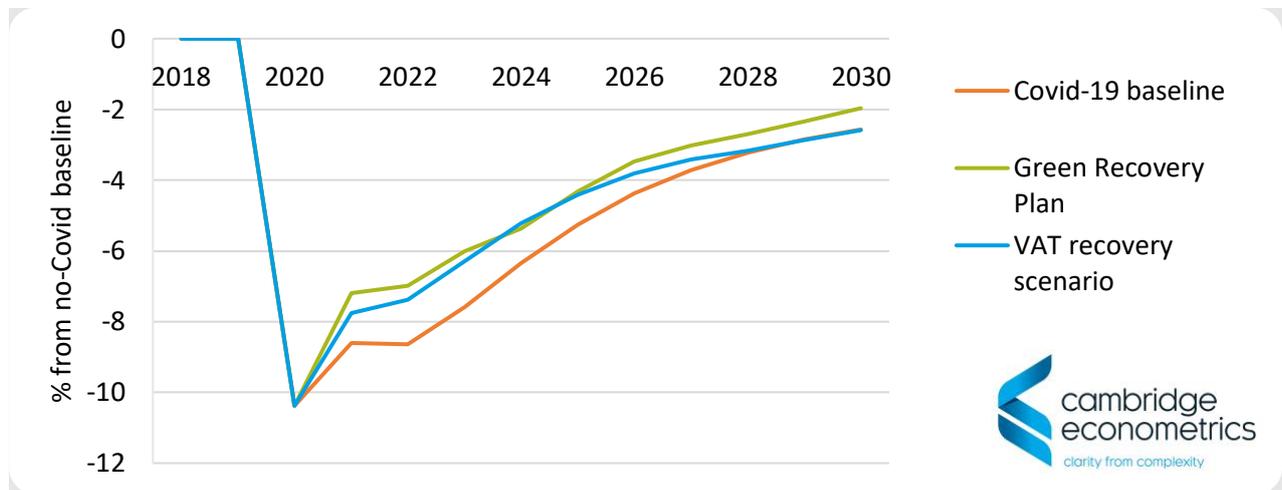
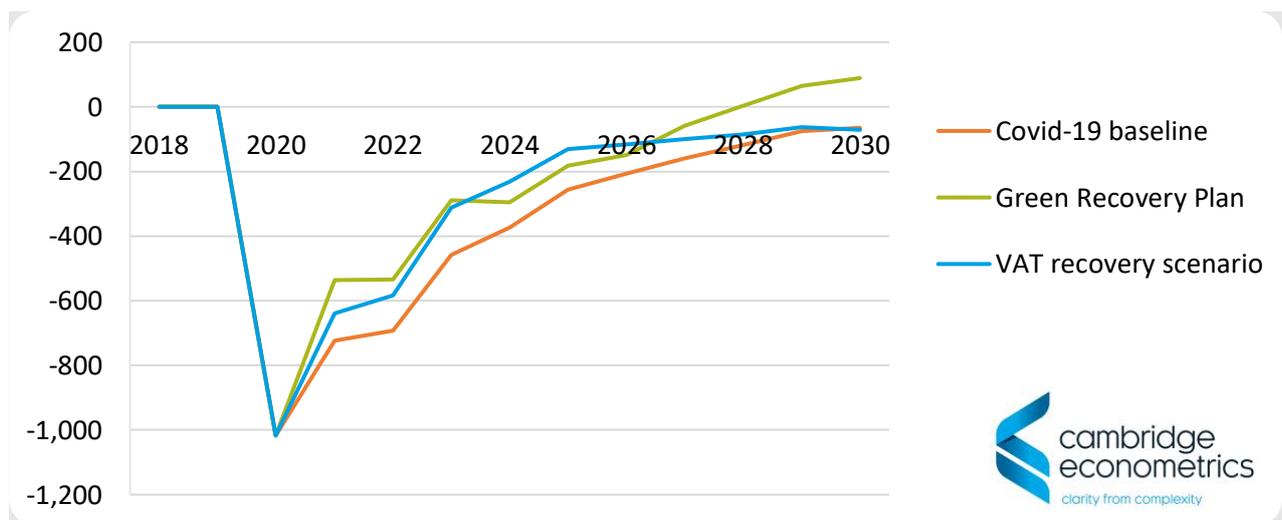


Figure 2: Employment impacts in the UK (thousands, compared to a no-Covid baseline)



Sectoral impacts

Table 1 shows the impacts on sector-level output in the UK. Following the same pattern as Germany and Spain, the impact of Covid-19 by 2024 will be most evident on manufacturing and construction. This is because of the negative effects of the pandemic on investment. Consumer

services, which was initially the most negatively affected sector in the UK, will have nearly recovered by 2024.

The Green Recovery Plan lessens the effects of Covid-19 primarily on manufacturing through a small increase in the demand for investment goods (e.g. EVs). However, the positive effects of the Green Recovery Plan are more concentrated in this one sector than is the case in countries such as Spain and Germany. This also limits the overall benefits from the Green Recovery Plan in the UK, compared to the VAT recovery scenario and Covid-19 baseline.

Table 1: Sectoral impacts in the UK (2024), % difference from no-Covid baseline

	Covid-19 baseline	VAT recovery scenario	Green Recovery Plan
Agriculture	-0.3	-0.3	-0.3
Energy and Utilities	-5.2	-4.9	-9.4
Basic Manufacturing	-10.3	-10.0	-8.9
Advanced Manufacturing	-13.1	-12.9	-10.0
Construction	-7.8	-8.0	-7.6
Consumer Services	-2.6	-2.6	-2.8
Transport and Comms.	-4.7	-4.5	-4.7
Business Services	-2.7	-2.6	-2.6
Public Services	-0.5	-0.5	-0.3

The energy and utilities sector includes a range of different types of companies, some of which focus more heavily on renewable energy than others. Our view is some power generators with a strong presence in renewables would significantly benefit from a Green Recovery Plan. The emissions reductions figures presented in Figure 3 would support an assumption that reduced demand for energy (for example as a result of improved energy efficiency) would result in fossil fuels are replaced by renewables.

Emissions impacts

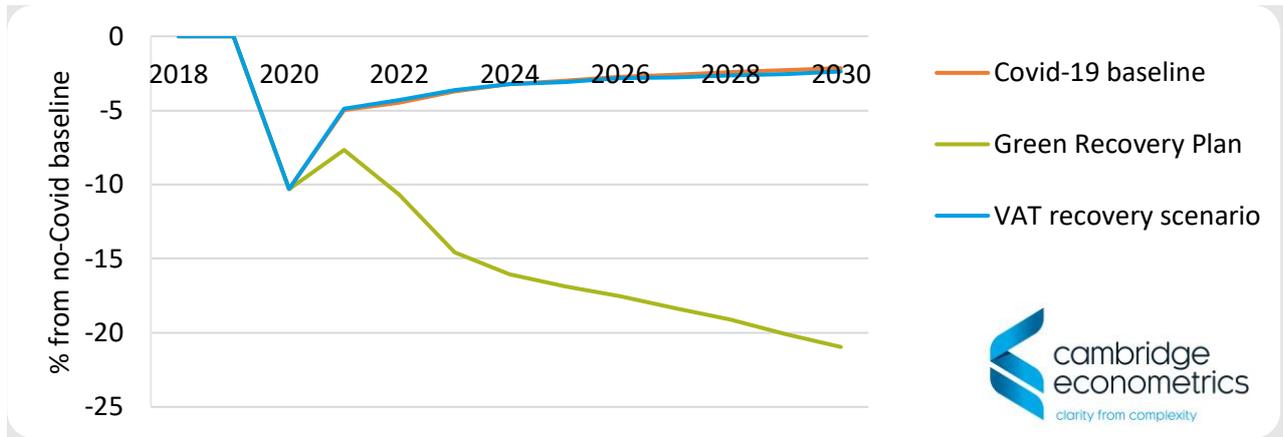
Figure 3 shows the impact of the scenarios on emissions. Although Covid-19 has a large short-term impact on UK emissions, by 2030 the difference is reduced to around 2 per cent.

The VAT recovery scenario does not have any considerable impact on CO₂ emissions in the UK. However, the Green Recovery Plan leads to a persistent fall in emissions, which continues well beyond the end of the stimulus period. This long-term impact is the result of two developments:

- 1) The support for renewables in 2021–23 provides additional stimulus to a growing sector, resulting in a permanent reduction in conventional (carbon intensive) capacity;
- 2) The car scrappage scheme speeds up the uptake of EVs, leading to them becoming established as a mainstream technology, supporting faster transition of the vehicle fleet into EVs than would have otherwise been the case.

Some long-term emissions reduction also arises from the declined demand for gas for domestic heating as a result of energy efficiency improvements (see Figure 4). These reductions could reach 20 per cent (compared to a no-Covid baseline) by 2030.

Figure 3: Emissions impacts in the UK

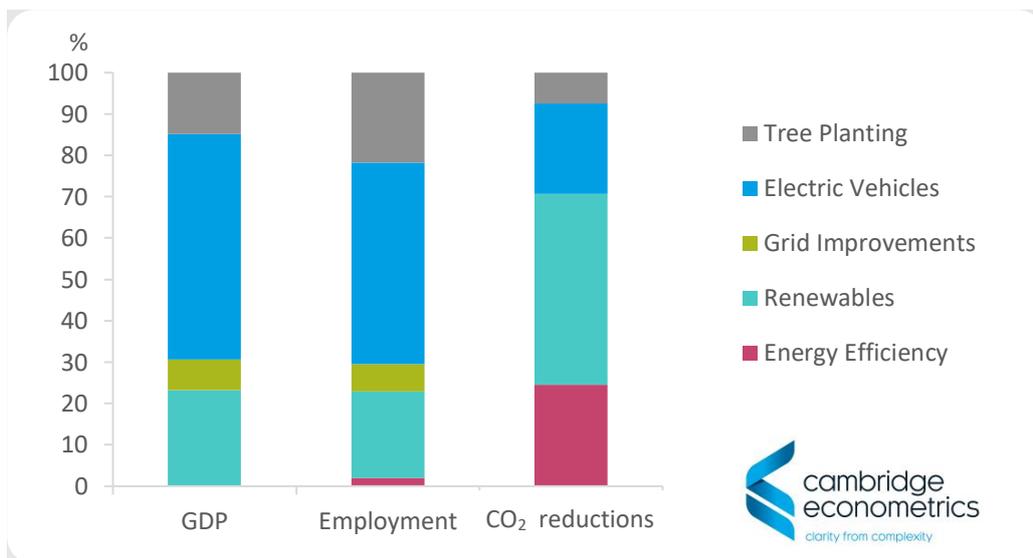


Contributions of each policy

Figure 4 shows the percentage contribution of each environmental policy to the aggregate outcomes in the Green Recovery Plan across 2021–30. As with the results for the EU, the shift to EVs through a car scrappage scheme makes the largest contribution to the GDP and employment impacts. However, the UK sees a much larger contribution from the renewables subsidies and grid improvements (around 30 per cent combined) than is the case in other European countries.

The renewables subsidies make the largest contribution to emission reductions in the UK (around 50 per cent), with a further 20 per cent coming from energy efficiency. Most of the remaining emission reductions come from the uptake of EVs.

Figure 4: Contribution of each Green Recovery policy in the UK (2021–30)



“The green recovery measures set out will require urgent action and meaningful collaboration across sectors. However, I am confident that by working together and making bold choices, these actions will boost not only natural capital, through reduced emissions, but human and financial capital too.

“At Anglian Water we are already making huge strides towards our 2030 net zero carbon goal through measures including rapid adoption of renewable energy to power our sites, such as the installation of a 42,000-panel 11.6MWp solar array at Grafham Water in Huntingdonshire.”

Peter Simpson

CEO Anglian Water Group and Co-Chair of CLG UK

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