

Maximising the benefits:

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

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Authors

This Technical Report was authored by Sanna Markkanen, with input from Hector Pollitt, Pascale Palmer, Eliot Whittington, Ursula Woodburn, Romain Pardo, Janaina Topley Lira and Isabelle Cross.

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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 Europe, national governments and the EU administration are increasingly recognising the need to ensure that decisions taken now will support both on the economic recovery and progress towards a prosperous and climate neutral economy by 2050, with strong backing also for raising intermediate emissions reduction targets to better support this long-term target. As we have previously set out in *The Green Deal and Europe’s recovery: Building a prosperous, resilient and climate neutral EU through business and political action*,⁶ the European Green Deal provides a template for how Europe’s economic recovery can be achieved and 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.

In this report, we draw on Cambridge Econometrics' E3ME modelling^{i,ii} 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](#) and our assessment of different markets in Europe [here](#).

- **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.

ⁱ For a more detailed overview of E3ME, see Mercure et al. (2018) or the E3ME model manual.

Mercure, J-F., Pollitt, H., Edwards, N. P., Holden, P. B., Chewpreecha, U., Salas, P., et al. (2018). Environmental impact assessment for climate change policy with the simulation-based integrated assessment model E3ME-FTT-GENIE. *Energy Strategy Reviews*, 20, 195–208. doi: <https://doi.org/10.1016/j.esr.2018.03.003>

ⁱⁱ Cambridge Econometrics. (2020). *What is E3ME? Our Global Macro-econometric Model*. Retrieved from: <https://www.e3me.com/what/e3me/>

- 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 the Green Recovery Plan for Spain

Spain was one of the first countries to be hit by the Covid-19 pandemic in Europe, and one of the worst hit.⁷ Having not yet fully recovered from the 2008 global financial crisis, the Spanish economy was ill-equipped to handle another major blow. Although the government has attempted to reduce redundancies and support workers and employers through the crisis, recent estimates suggest that unemployment in Spain could exceed 20 per cent before the end of 2020. Even after the lockdown was eased, the recovery has been fragile and fraught with hurdles, including localised outbreaks that have further deteriorated the already negative outlook for the economically vital tourism sector.⁸

However, the Spanish government has remained supportive of the EU's ambitious climate objectives, endorsing both the EU's 2050 climate neutrality target and a more ambitious emissions reduction target for 2030. The national Covid-19 recovery plan, unveiled on 8 October 2020, sets out a plan to reshape the country's economy with the help of €140 billion of EU coronavirus recovery aid. Transition to green energy and a digital economy are at the forefront of these plans, along with a proposal to invest €72 billion of the country's share of the EU Recovery Fund to create 800,000 jobs over the next three years.¹⁸

While there is an enormous challenge ahead, Spain is drafting plans to use the Recovery Fund to address the chronic weaknesses of its labour market, and to improve future resilience by adopting best practices from other EU countries.⁹ In this context, there is a reason to be optimistic that green spending will be a contributor to economic recovery in Spain, helping the country to boost its economy and labour market while cutting CO₂ emissions.

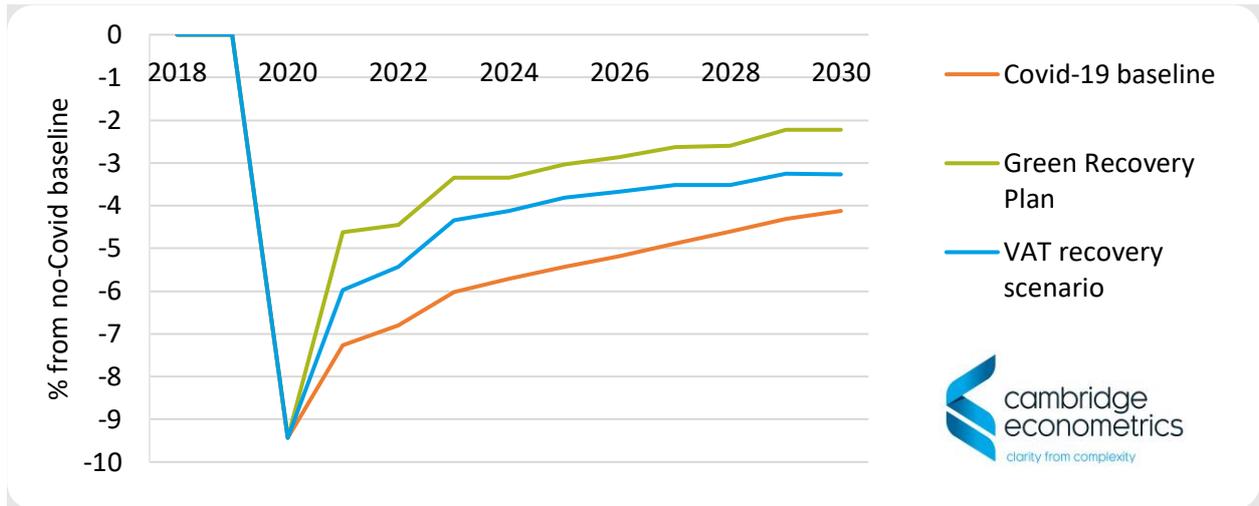
The modelling used to assess the economic, environmental and emissions impacts of two different types of economic recovery packages presented in this report strongly supports this view. The results show that a green recovery could save 400,000 jobs in the next three years, with longer-term labour market benefits. Measures to boost the use of renewables and EVs could reduce CO₂ emissions by 20 per cent, compared to a no-Covid baseline.

Socio-economic impacts

The model results suggest that the Spanish economy will be hit hard by Covid-19, with a long road to recovery. As shown in Figure 1 and Figure 2, the upwards slope mapping the recovery trajectories for GDP and employment is shorter and less steep than the EU average. A similar pattern is evident for all three scenarios, but the recovery plans are successful in reducing the severity of the short-term negative effects of Covid-19 and increasing GDP in the long run.

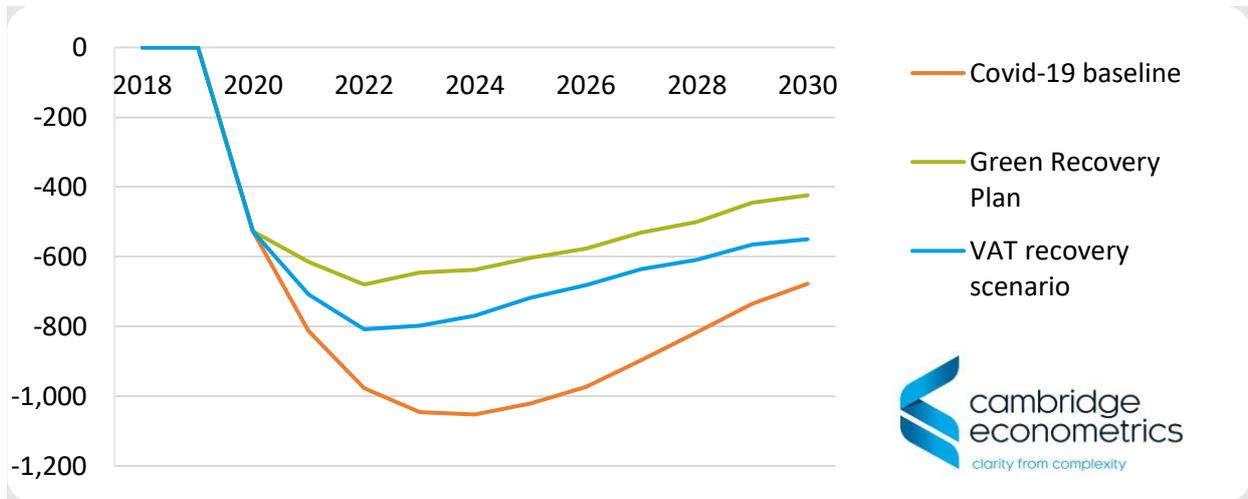
Although both recovery plans show considerable benefits compared to the Covid-19 baseline scenario, these benefits are consistently larger (by around 1 per cent of GDP) for the Green Recovery Plan.

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



The recovery packages are also able to reduce the loss of jobs in Spain (by around 400,000 people in the Green Recovery Plan). However, in all scenarios the employment losses continue to 2022, after which the recovery is slow. The persistent nature of reduced employment levels in Spain suggests that some longer-term measures to boost employment would likely be required in addition to short-term economic recovery spending in 2021–23.

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



Sectoral impacts

Table 1 shows the impacts on sectoral production in Spain. Although the Spanish economy has been heavily affected by a loss of tourism during the pandemic, the modelling results suggest that consumer services will have started to recover by 2024. However, with output levels well below capacity, investment remains weak and recovery is much slower in the advanced manufacturing (e.g. engineering) and construction sectors.

The VAT recovery scenario provides a boost to household expenditure and therefore the consumer services sectors, but the impact on investment sectors like construction is more noticeable in the Green Recovery Plan. Overall, with the exception of energy and utilities, all sectors see a smaller reduction in output in the Green Recovery Plan than in the other scenarios.

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

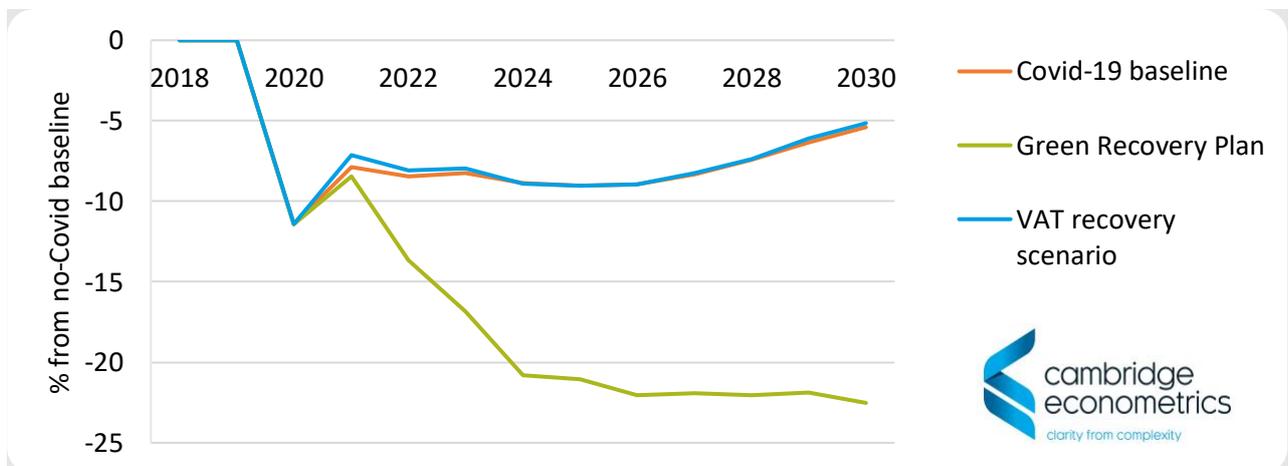
	Covid-19 baseline	VAT recovery scenario	Green Recovery Plan
Agriculture	-5.5	-3.8	-2.1
Energy and Utilities	-6.8	-5.1	-7.1
Basic Manufacturing	-8.4	-7.0	-6.1
Advanced Manufacturing	-14.9	-13.4	-11.6
Construction	-8.8	-8.4	-7.2
Consumer Services	-6.1	-4.4	-3.3
Transport and Comms.	-4.6	-3.4	-3.2
Business Services	-3.7	-2.7	-2.2
Public Services	-1.6	-1.0	-0.4

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

The prolonged loss of production in the Spanish economy due to Covid-19 means that CO₂ emissions are still 5 per cent below the no-Covid baseline in the Covid-19 scenario (see Figure 3). The VAT recovery scenario has little impact on emissions. The Green Recovery Plan, on the other hand, shows substantial emissions reductions. Driven by uptake of renewables and EVs (see Figure 4), Spanish emissions could be reduced by nearly 20 per cent by 2030, compared to a no-Covid baseline.

Figure 3: Emissions impacts in Spain

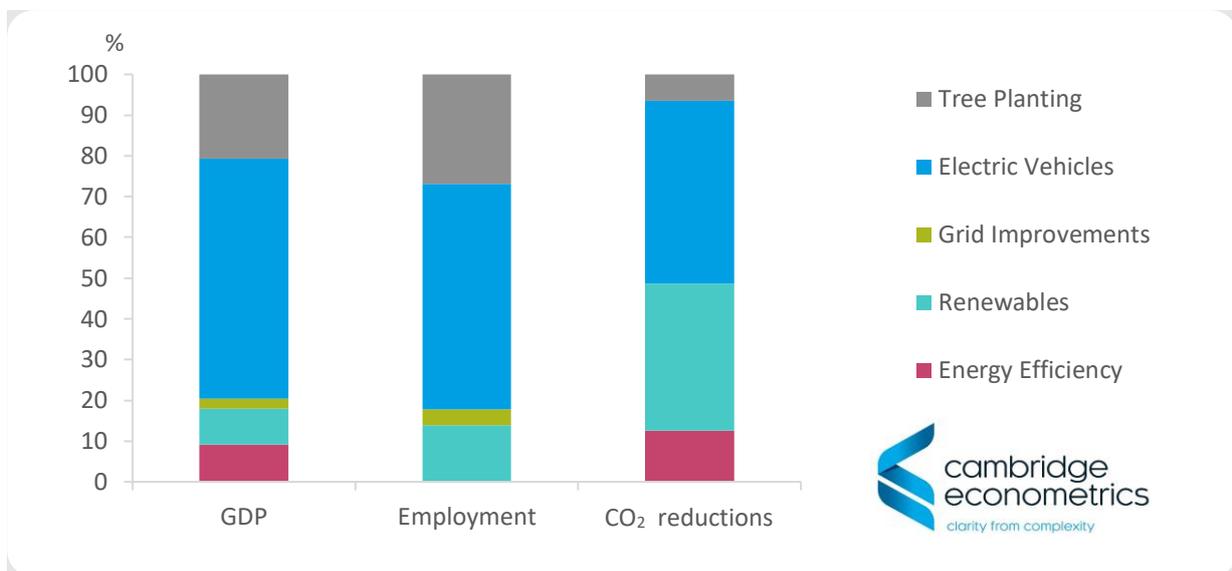


Contributions of each policy

Figure 4 shows how each of the five policies included in the Green Recovery Plan contributes to economic recovery and emissions in Spain in 2021–30. Like the other European countries, the largest benefits to GDP in Spain come from the vehicle scrappage scheme that promotes EVs; this accounts for around 60 per cent of the GDP increase and 50 per cent of the employment increase. The tree-planting programme contributes 20–30 per cent of the economic and employment benefits, with the rest being made up by the other policies.

The CO₂ reductions in Spain come mostly from the increase in renewables near the beginning of the period (the subsidies are available for two years, in 2021–23), and the increasing penetration of EVs. These two measures account for just over 80 per cent of the total emissions reduction.

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



“Robust alignment between the Spanish Recovery Plan and deep decarbonisation pathways towards climate neutrality will create new opportunities for growth and increased sustainability. Adequate policy frameworks will be key to harness the socio-economic benefits of a green recovery. Iberdrola supports an ambitious approach to climate action within the Spanish Recovery Plan, and has proactively proposed projects, plans and action programs that are fully aligned with the European Green Deal.”

Gonzalo Sáenz de Miera

Director of Climate Change, Iberdrola

“Salesforce is committed to bold climate action. By conserving, restoring, and planting 1 trillion trees by 2030, we can help slow the planet’s rising temperatures, as well as stimulate biodiversity and restore some of the planet’s ecosystem. That’s why Salesforce is proud to support 1t.org, an initiative that aims to do just that, by contributing our technology and achieving our own goal to support and mobilize the conservation and restoration of 100 million trees over the next decade. Planting trees on a large scale creates valuable jobs and economic prosperity. The Green Recovery can and must create quality employment and build a more sustainable, inclusive and resilient future.”

Gavin Patterson

President and Chief Revenue Officer, Salesforce

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