

Never Waste a Good Crisis: Can We Build Greener Economies Through Stimulus Spending?

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Summary

This policy brief presents key findings from the CLIMREC project on how macroeconomic crises influence climate policy and decarbonization efforts. The findings are based on analyses of stimulus spending in 40 major global economies during the 2008 Global Financial Crisis (GFC) and the COVID-19 pandemic.

Main findings:

- Neither the GFC nor COVID-19 pandemic led to a widespread acceleration of the green transition: most governments allocated only modest funding to decarbonization.
- Net green spending in economic stimulus packages increased from 2008 to 2020, but the rise was relatively modest.
- Countries with strong green industrial interests were more likely to include green measures in their stimulus packages.
- Green spending patterns showed continuity over time – countries that led in green stimulus during the GFC were largely the same frontrunners during the COVID-19 recession.

Reducing global emissions and reaching net-zero by 2050 will be costly. But what happens to climate commitments when national economies face crisis?

Previous research outlines two potential pathways. One suggests that during economic downturns, governments prioritize immediate economic stabilization and scale back climate ambitions. The other argues that crises can open windows of opportunity for transformative change, where governments leverage stimulus packages to align economic recovery with climate goals (Kingdon, 1984). These contrasting pathways are summarized in Table 1.

	Retrenchment /stagnation	Critical Juncture /Catalyst
Impact of economic crises	Weakening or slowdown of climate policy	Acceleration of climate action through transformative change
Primary goal	Save jobs, prevent bankruptcy, restore short-term growth	Rebuild economy via green transition
Core challenge	Fiscal/Resource constraints	Seizing opportunity amid disruption and uncertainty

Policies/ Resource allocation	Emission-neutral or inconsistent (depending on the structure of economy)	Green industrial policy/emission-reducing investments/ Targeted stimulus toward climate mitigation and clean technology
Long-term effect	Policy delay, diluted ambition, potential backsliding	Structural shift toward low-carbon economy
School of thought	Limits-to-growth	Keynesian
Key assumption	Climate policy is costly/ there is a conflict between economic growth and climate policy	Climate policy can have economic benefits/ There may be complementarity between economic growth and climate policy
Key references	Nordhaus, 1974; Hartwick, 1977.	Aklin & Urpelainen, 2018; Barbier, 2010; Bowen and Stern 2010; Burns and Tobin 2016; Tienhaara 2014.

Table1. Two schools of thought on how economic crises may affect climate policy

Why Use Crises to Accelerate the Green Transition?

Crises offer a rare opportunity to shift the economy into a greener, more sustainable direction. Governments can use stimulus packages not only to stabilize economies, but also to advance green industrial policy (Aklin & Urpelainen 2018; Barbier 2010). These periods of large-scale public spending allow governments to make structural investments—such as in clean energy and sustainable infrastructure—that are typically harder to push through in normal times due to the upfront costs they impose on businesses and consumers (see, e.g., Mildenberger 2020).

Unlike traditional climate regulations (e.g., carbon pricing), which often face lobbying resistance and voter backlash, green stimulus policies deliver visible, concentrated benefits.

Because they reward rather than penalize key stakeholders, they are more likely to gain political support.

A core insight from green industrial policy research is that it is often more effective to begin decarbonization with green spending initiatives that help build supportive coalitions, rather than with market-based policies that may provoke opposition (Meckling 2021; Meckling et al. 2022).

This is why many economists and political scientists argue it's not only strategic—but also politically rational—to accelerate climate action during times of crisis.

Why Are Crises Often Not Used to Accelerate Decarbonization?

Despite the potential of crises, governments do not always use them to pursue green transitions. One key reason is that the design of stimulus packages—specifically, how funds are allocated—can trigger distributive conflicts over climate policy. Policymakers face competing pressures over which industries and interest groups to support during recovery efforts.

According to distributive conflict theory (Aklin & Mildenerger 2020), the balance of political power between green and fossil-fuel stakeholders plays a critical role in shaping outcomes. Where fossil interests are dominant, stimulus funds are more likely to reinforce carbon-intensive sectors. In contrast, where green industries have greater influence, governments are more likely to direct spending toward climate-friendly investments. Thus, the stimulus response is often a reflection of existing power structures rather than a bold departure from them.

How much of the stimulus funds was allocated toward green investments during GFC & COVID?

During the Covid-19 pandemic, countries devoted a smaller share of stimulus funds to green objectives (8.5%) than during the Global Financial Crisis (10.3%). However, the overall climate-friendliness of Covid-19 stimulus packages was higher, as fossil-related spending fell sharply from 10.5% in 2008–09 to 3% in 2020. As a result, net green spending shifted from slightly negative during the GFC (-0.2 pp) to clearly positive in the Covid-19 recession (5.5 pp). This improvement, however, was driven primarily by reduced fossil spending rather than greater green investment (Tørstad, Hovi, and Sælen, 2025).

Economic stimulus package	Gross green spending	Gross fossil spending	Net green spending
GFC	10.3 %	10.5 %	-0.2 pp
COVID	8.5 %	3%	5.5 pp
GFC-COVID change	-1.8 pp	-7.5 pp	5.7 pp

Table 2. Average share of green and fossil spending in GFC and Covid-19 economic stimulus packages (Tørstad, Hovi, and Sælen, 2025).

Cross-Country Gross Green Spending Patterns (Figure 1)

- **Top performers across both crises:** South Korea, Denmark, and the EU consistently devoted the largest shares of stimulus to green measures.
- **Other steady contributors:** Germany, Italy, and China also showed relatively strong and consistent green spending.
- **Crisis-specific leaders:**
 - **GFC only:** Nigeria and Switzerland had high green shares.
 - **Covid-19 only:** Poland, Spain, and Belgium stood out.

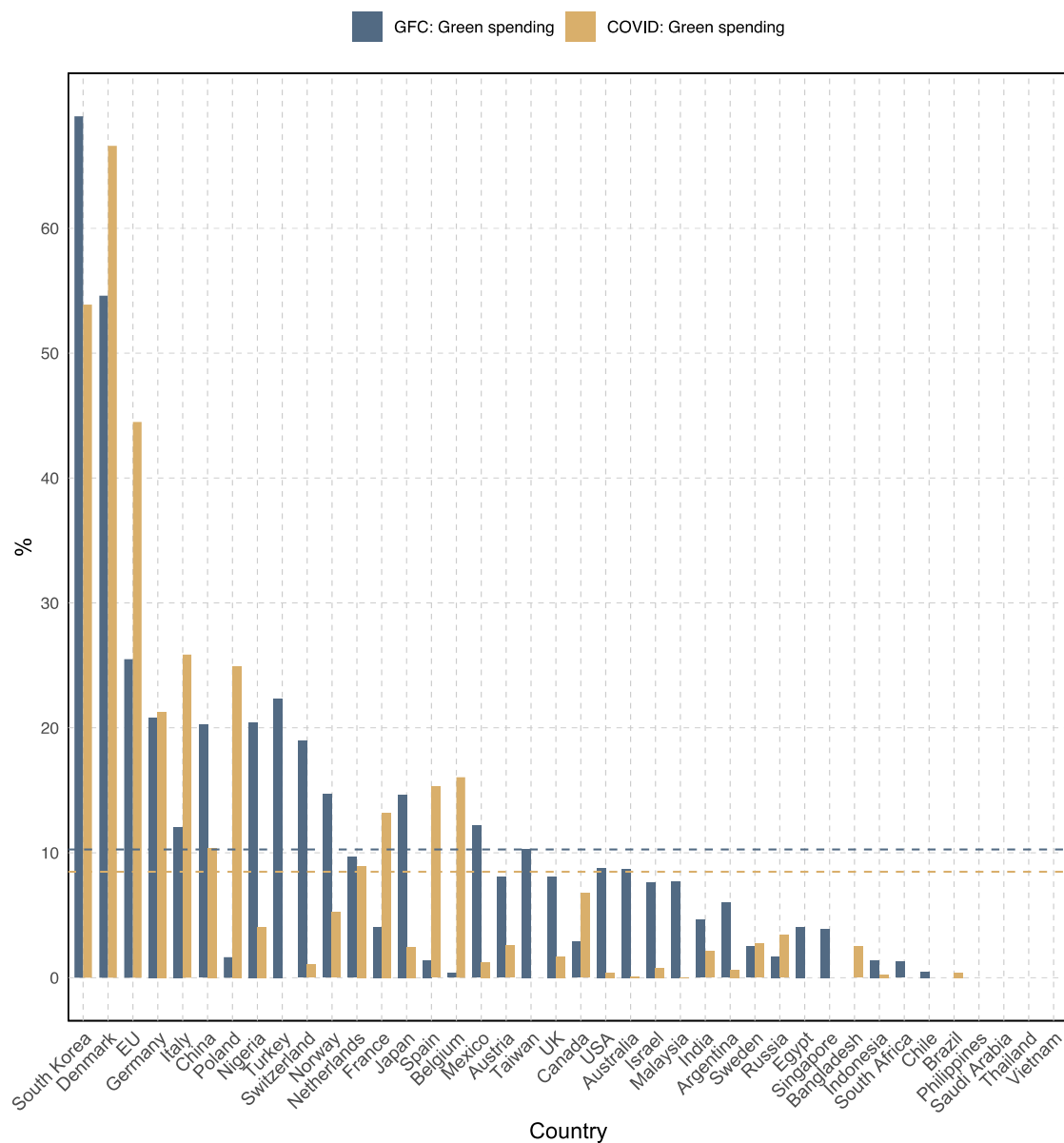


Figure 1. Overview of gross green spending (as share of total stimulus). Dashed lines represent means across all countries. Countries are sorted by highest to lowest average values across the two crises (Tørstad, Hovi, and Sælen, 2025).

Why did some countries invest more in green transition during crises than others did?

Strong green industries matter:

Countries with green industries and technology sectors devoted more stimulus funds to green recovery packages (Tørstad, Hovi, and Sælen, 2025).

Fossil interests less decisive:

The scale of fossil fuel production did not consistently translate into higher fossil-oriented stimulus spending (Tørstad, Hovi, and Sælen, 2025).

Role of political regimes:

Liberal democracies invested significantly more in green measures and prioritized long-term projects, even after controlling for income levels and economic structure (Stankovic and Hovi 2025).

Policy recommendations:

1. Leverage Fiscal Policy for Positive Incentives

Green spending is more politically feasible than cost-imposing regulation. Prioritize subsidies, tax relief, and investment incentives during recessions. Pair short-term relief with long-term structural transformation. Align crisis responses with net-zero strategies.

2. Design “Green-Ready” Stimulus Frameworks

Crises demand fast decisions; pre-planned pipelines make green investment feasible under time pressure. Prepare project pipelines for green infrastructure, energy efficiency, and innovation. Embed climate criteria in fiscal policy frameworks, ensuring stimulus can quickly support low-carbon objectives.

3. Promote Institutional Learning and Cross-Country Exchange

Countries that led in 2008 led again in 2020 – signaling institutional path dependency. Encourage policy learning and exchange of best practices among consistent green leaders and laggards. Establish monitoring frameworks to track the climate impact of stimulus spending.

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Suggested reading

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