

# G7-IEA Conference on Ensuring an Orderly Energy Transition

## Keynote Speech

Mark Carney

16th September 2024

Thank you to Fabio and Mary for hosting this event today. I'm sorry that I cannot be with you in the Eternal City.

Although the need for an orderly transition has never been greater, its prospect has never been more precarious. Climate science indicates that global emissions need to peak by next year and fall rapidly thereafter to keep 1.5 alive.<sup>1</sup>

The Italian G7 Presidency has thus rightly emphasised understanding the macroeconomic impacts of climate change. In my brief remarks, I will touch on three aspects:

- The macro impacts of climate change itself
- The macroeconomics of the net zero transition, and
- How climate policy is becoming the third pillar of macro policy.

### I. The Physical Impacts of Climate Change

Extreme weather events have tripled since the 1980s. The resulting economic losses are expected to intensify, with coastal flooding projected to increase by 50 per cent by the end of this century, threatening assets worth one fifth of global GDP.<sup>2</sup>

The greater frequency of these negative supply side shocks will make life harder for central bankers to keep inflation expectations anchored.

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<sup>1</sup> <https://unfccc.int/process-and-meetings/the-paris-agreement>

<sup>2</sup> [Kirezci et al \(2020\). Projections of global-scale extreme sea levels and resulting episodic coastal flooding over the 21st Century. Scientific Reports volume 10. Article number: 11629](#)

They will also be a headwind to growth. For example, Allianz estimates that global growth was 0.5% lower *last year* because of the spike in extreme weather events, consistent with broader findings of the NGFS.<sup>3</sup>

Over the longer term, conservative estimates suggest that, over this century, unabated climate change could cause the equivalent of a decade of no economic growth.

As significant as such GDP estimates are, they don't include major economic channels such as financial instability, disruptions to supply chains, and climate-induced mass migration. Nor do they consider that half of global GDP is at least moderately dependent on natural assets.<sup>4</sup>

Obviously, at a minimum, there is enormous value in preventing this destruction. Moreover, if done effectively, the net zero transition can reinforce global growth through several channels.

## II. The Macro Economic Impacts of the Net Zero Transition

First, as the IEA has documented the transition represents a multi-decade investment boom after a decades-long drought.<sup>5</sup>

And second, addressing climate change can increase productivity including by finding the most cost-effective emissions reductions across value chains and reducing demand for carbon-intensive products and processes.

Investment on this scale required for mitigation alone will increase the equilibrium real interest rate,  $r^*$ , thereby reducing the risks of monetary policy being trapped at the effective lower bound and raising both the path and terminal values of monetary policy rates consistent with price stability.

While fundamentally positive and likely to be less inflationary under current, insufficient climate policies, the net zero transition can be expected to put

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<sup>3</sup> [Allianz \(2023\), Global boiling: Heatwave may have cost 0.6pp of GDP](#)

<sup>4</sup> [WWF \(2022\), Living Planet Report – Building a nature positive society](#)

<sup>5</sup> [IEA \(2021\), Net Zero by 2050](#)

upward pressure on inflation during the initial decade of the transition, until the lower levelized costs of clean energy weigh on prices thereafter.<sup>6</sup>

### III. Climate Policy is Macro Policy

On balance, the monetary policy implications pale in comparison to the macro impacts of climate policy itself, which should be viewed as the third pillar of macro policy alongside fiscal and monetary policy.

With their budgets strained by the immediate imperatives of defence, health care, disaster relief, and support for households hobbled by the energy crisis, governments have limited fiscal capacity. Private finance can deliver the trillions of dollars of additional investment needed.

As Secretary Yellen and I have emphasised in research for the G30, the more credible and predictable are government climate policies, the more investors will pour in money in anticipation, creating a virtuous circle of large-scale investment, faster decarbonisation, more jobs, and faster growth.<sup>7</sup>

The analogy to Monetary Policy is clear, the greater the credibility, the lesser the total tightening required. This is the climate variant of Mervyn King's Maradona theory of monetary policy.<sup>8</sup>

Just substitute *emissions expectations* for *inflation expectations*, and the reaction function of the central bank for a broader set of climate policymakers.

If climate policy actions are anticipated, they will bring forward investment, smoothing the transition and lowering its inflationary impacts.

Of course, climate policy is more complicated than monetary policy, but even here the path is apparent.

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<sup>6</sup> [Pisani Ferry \(2021\). Climate Policy is Macro-Economic Policy, and the Implications will be Significant. Peterson Institute for International Economics Policy Brief](#)

<sup>7</sup> [Group of Thirty \(2020\). Mainstreaming the Transition to a Net-Zero Economy](#)

<sup>8</sup> [King \(2005\). Monetary Policy: Practice Ahead of Theory](#)

This begins with clear objectives. The foundations were laid at COP26, where the proportion of global emissions covered by country net zero targets rose from less than one third to almost 90%. These can be reinforced by National Transition Plans (and Carbon Budgets). Ideally these are cross referenced or integrated into the objectives of authorities such as market and financial regulators.

It extends to clear assessments of the effectiveness of climate policies, by independent bodies (such as the UK Climate Change Committee that marks to market).

To maximise its potential for strong and inclusive growth, **the net zero transition must involve the whole economy**. In particular, capital shouldn't be constrained by regulatory fiat or simplistic bans on financing whole industries. These only promote paper decarbonisation and starve action plans to reduce emissions. Instead, capital must be incentivised to go where the emissions are and help companies in high emitting sectors get them down. This is directly relevant to the design of transition taxonomies and plans.

Finally, the net zero imperative will be profoundly affected by the rapidly evolving global **trading system**. The integration of Industrial and Trade policies, CBAMs, and carbon markets is a subject for another speech, but the core point is that the more carbon is viewed as a vector of national competitiveness, the greater the global incentives to decarbonise will be.

The ability to create a virtuous circle of climate action and investment has been greatly enhanced by the recent progress in creating a sustainable financial system.

To that end, I will conclude with the priorities to close three gaps: on data, action plans, and investment.

#### IV. Closing the Finance Gaps

**To close the climate data gap** we need fully implement climate disclosure and provide open access to the core climate data.

Jurisdictions representing over half of global GDP, over half of global greenhouse gas emissions, and 40% of global market capitalisation have committed to implement standards aligned with the ISSB standard.<sup>9</sup>

These disclosures must be broadly available so that every stakeholder has free access to the emissions data of companies, their targets for reducing emissions, and their performance against those targets.

To that end, President Macron and Mike Bloomberg launched the Net Zero Data Public Utility (NZDPU) which is currently in proof-of-concept phase and will serve as an open, free global repository of climate transition-related data.<sup>10</sup>

This creates a similar feedback loop within the private sector as Climate Change Committee disclosure does in the public sector.

**Second, while disclosure defines the problem, action plans are needed to fix it.** Every country, city, company, and financial institution needs a credible, science-aligned net-zero transition plan to fulfil their commitments.

GFANZ is helping mainstream this imperative in financial institutions and real economy corporates. By the end of this year, over 250 major financial institutions (and 4000 major companies) will have voluntarily set out their transition plans. But voluntary action can only go so far. The actions of the ambitious firms must be supported by effective public policy.

The ISSB's recent announcement that it intends to develop educational materials for transition plans disclosures is an important step.<sup>11</sup> G7 authorities should encourage ISSB to go further and set out formal guidance within the IFRS S2 standard on what firms should disclose about their

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<sup>9</sup> [IFRS \(2024\)](#)

<sup>10</sup> <https://nzdpu.com/home>

<sup>11</sup> [IFRS \(2024b\)](#)

transition plans. And to ensure a level playing field, G7 authorities need to mandate the development of a transition plan by large companies and financial institutions.

To be effective, transition finance needs an authoritative view of the investment pathways required to get on track. The IEA's NZ Scenarios and Investment Ratio analysis are two crucial tools to assess whether adequate measures are being taken.

**The final gap to close is the investment gap.** That means not only the rapid growth of clean-energy investment but also an acceleration of progress in those heavy-emitting industries, which generate a third of global emissions.

**The Industrial Transition Accelerator, or ITA,** was launched at COP28 to turbocharge industrial decarbonization efforts in the heavy-emitting sectors.<sup>12</sup> A key conclusion of our work thus far is that authorities need to spur demand for green products.

The ITA will publish its demand-side policy playbook in a few weeks to detail the policy levers that can secure demand for different industrial sectors.

**Finally, the world will not get to net zero without major improvements in cross-border financing to emerging and developing economies.**

MDBs and DFIs should use all their capacities – operational, financial, and technical – to maximise the total amount of financing towards climate and development goals. Crowding in private finance at the scale needed will require much greater and more effective use of guarantees, risk insurance, and blended finance. These are some of the conclusions of the World Bank Private Sector Investment Lab.

The World Bank is now streamlining and simplifying its guarantees, developing new FX risk management facilities, preparing to launch a platform

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<sup>12</sup> <https://ita.missionpossiblepartnership.org/>

for securitising and distributing private sector loans, and looking to expand its use of first-loss equity investments.

To promote the speed and scale needed, G7 shareholders should send clear signals that these tools are a priority at all MDBs. In addition, they must help create a new pool of catalytic capital.

## V. Conclusion

Let me finish with a central banking analogy that draws on Paul Volcker's legacy, noting that he was a committed environmentalist.

Although the monetary tightening of the Volcker Fed is firmly in the central banking pantheon, the very human cost of that disinflation should not be forgotten. A brutal recession and millions of unemployed, a 'sacrifice ratio' necessitated by the string of errors and timid actions that preceded it.

High and volatile inflation at least can be vanquished. It need not be a permanent condition. The same cannot be said of climate change. The world is on course to exhaust our entire carbon budget for a 1.5-degree world this decade.

Caught in the climate version of Paul Krugman's *Timidity Trap*<sup>13</sup>, we have been dithering towards climate disaster—a drift that, if allowed to continue, will at best set up a future climate Minsky moment, with policies that cause abrupt and wrenching economic adjustments, strand trillions of dollars in assets, and impair financial, price and potentially geo-political stability.

There is still time to recognise that climate change is macro critical, that climate policy has become the third pillar of macro policy, and that through credible policy coordination we can catalyse enormous private investment that creates jobs, accelerates growth, smooths inflation, and promotes energy security.

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<sup>13</sup> [Krugman \(2014\). The Timidity Trap. New York Times](#)

The degree of climate change is a choice, but the window for making that choice is closing rapidly. Paul Volcker wouldn't wait.

I'm confident that with Italian leadership the G7 won't either.