The NGFS Short-Term Scenarios: **main takeaways**

The NGFS short-term scenarios, released on 7th May 2025, **are the first publicly available tool offering a dedicated framework to analyse the potential near-term impacts of climate policies and climate change on financial stability and economic resilience.**

Focused on a five-year time horizon, the short-term scenarios explore four sets of assumptions on the future evolution of climate policies and physical risks:

- a first, **physical risk only** scenario – Disasters and Policy Stagnation – delves into the economic and financial consequences of extreme but plausible regional weather events;[1]
- two scenarios – Highway to Paris and Sudden Wake-up Call – focus on the effects of **transition risks only;**[2]
- a fourth scenario – Diverging Realities – combines **transition and physical risks,** assuming (i) large discrepancies across regions' climate ambitions,[3] (ii) adverse weather events affecting some regions (Asia, South America and Africa), and (iii) the supply chain disruptions in critical raw materials;

Note that these scenarios are not mutually exclusive, since physical and transition impacts could add up in various proportions.

The main takeaways of the short-term scenarios are:

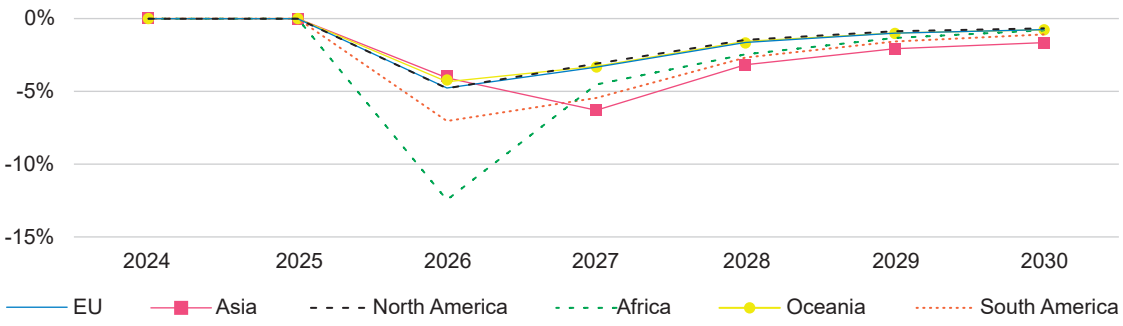
i. **regional extreme weather events generate temporary but material GDP losses, with effect on the global economy, and could increase the cost of the transition;**
ii. **delaying transition efforts increase the economic costs of transitioning and could cause additional financial stress.**

Extreme weather events could cause severe regional GDP losses, with effects on the global economy

Regional climate disasters could cause large GDP losses at the regional level, ranging from 6% in Asia up to 12.5% of GDP for Africa in Disasters and Policy Stagnation (Fig. 1). Default probabilities increase across all sectors, with agriculture and capital-intensive sectors, such as **coal production and power supply,** which are particularly affected.

Regional extreme weather events can also have effects on the global economy, for instance, through trade and financial linkages.

Fig. 1: Impact of Disasters and Policy Stagnation on the region shocked: GDP (% deviation from baseline)



How to read the graph: The sequence of extreme dry events in 2026 and wet events in 2027 in South America generates a loss of 7% in 2026 and 5.5% in 2027 in the region.

1 The Disasters and Policy Stagnation scenario combines, at regional level (1) droughts, heatwaves, and wildfires (dry events) in 2026, and (2) floods and storms (wet events) in 2027. These are plausible but very severe events (1 in every 50 years). The scenario has six regional versions: events occur in each region in turn, with spillovers to the rest of the world through trade and financial linkages.
2 These narratives simulate different transition pathways and do not include any physical risk.
3 With net-zero transition being pursued only in advanced economies.

Extreme weather events could also increase transition costs, already in the short-term

The Diverging Realities scenario assumes that regional weather events induce supply-chain disruptions, which inflate transition costs, compared to a scenario without physical risks. For instance, European GDP is lowered in 2030 by 1.7% in *Diverging Realities* (vs an increase of 0.1% in *Highway to Paris*); for North America, GDP is lowered by 0.8% by 2030 (vs a decline of 0.2% in *Highway to Paris*).

Delaying transition efforts could generate a global net economic loss, already in the short-term

An early implementation of ambitious but gradual climate policies limits the negative effects of a transition to a low-carbon economy *(Highway to Paris)*: 0.4% in global GDP losses in the Highway to Paris scenario vs losses of 1.3% by 2030 if the transition is delayed by three years (*Sudden Wake-Up Call*, see Fig. 2).[4] In the latter case, at the time of the shift in climate policies (2027), global GDP falls by 1.2% (Fig. 2) and unemployment rate rises by 1.3 pp worldwide, compared to baseline[5] (Fig. 3).

Fig. 2: Delaying transition policies by 3 years
(World GDP, % deviation from baseline in HWTP vs SWUC scenarios)

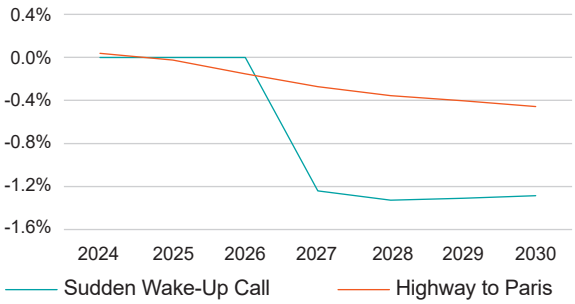
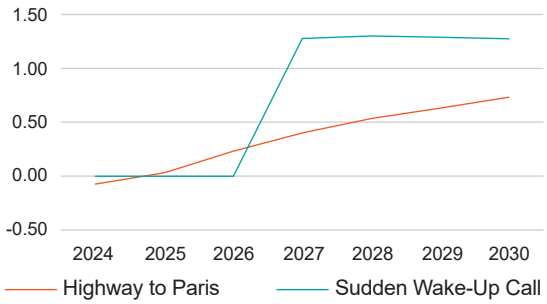


Fig. 3: Delaying transition policies by 3 years
(World unemployment rate, pp deviations from baseline in HWTP vs SWUC scenarios)



4 The difference is mainly caused by two factors: (i) abrupt, uncoordinated and delayed policy shifts and (ii) insufficient government investment in green innovation and technologies increase the economic costs of transition.

5 The baseline scenario is calibrated using the October 2023 IMF World Economic Outlook projections and accounts for climate targets pledged by January 2023.

NGFS Short-term scenarios: technical overview

The NGFS short-term scenarios provide **a better understanding of the near-term macro-financial impacts** of (i) the transition towards a net zero global economy and (ii) of severe but already plausible climate events, **in a policy-relevant timeframe.**

They are calibrated to provide adverse macroeconomic pathways, more closely aligned with recent trends in extreme weather events.

Key innovations include:

- modelling of **compound extreme climate events** (simultaneous occurrences of multiple hazards such as floods, storms, heatwaves, droughts, and wildfires);
- **incorporating cross-regional transmission of shocks** (short-term spillover effects of both transition and physical shocks through trade and financial linkages);
- **providing a framework to study the interplay between climate risks and business cycles,** by integrating climate policy, extreme weather events, economic trends and sectoral dynamics;
- **zooming in on a policy-relevant timeframe** for financial stability and monetary policy;
- providing **granular economic data** across a **wide range of sectors and countries.**

These features make the short-term scenarios **particularly well-suited for climate stress-testing exercises** and for analysing financial risks that may materialise within a business-planning, policy-relevant timeframe. The NGFS long-term scenarios remain more appropriate for strategic longer term risk assessments, to analyse structural changes in the economy or to assess how strategic policy or business decisions could affect the risks for financial institutions in the longer term.

NGFS
Central Banks and Supervisors
Network for Greening the Financial System