

# DEFINING THE TRANSITION PATHWAYS TOWARDS A SUSTAINABLE ECONOMY MATTERS

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## 1. THE NEED FOR FORWARD-LOOKING INFORMATION, NOTABLY REGARDING LONGER-TERM HORIZON ISSUES, HAS LONG BEEN RECOGNISED ALTHOUGH ITS ABSENCE WAS MAINLY ATTRIBUTED TO A LACK OF DISCLOSURE REGULATION

ATCFD 2017 study by the 2° Investing Initiative<sup>1</sup> observed that poor forecasting and long-term risk disclosure is pervasive across all types of companies, owing to a lack of forward-looking disclosure requirements. Reviewing the case of 10 major jurisdictions, the study identified forward-looking requirements in only a very limited number of jurisdictions. In the United States, for example, the Securities and Exchange Commission — which rules on risk reporting — does not have a timeframe and only asks for specific forward-looking goals around inflation risk and contractual obligations.

## 2. ACCORDING TO THE NGFS, IN THE ABSENCE OF WELL-ORGANISED AND EXPLICIT TRANSITION SCENARIOS, MAJOR NEGATIVE IMPACTS ON THE ECONOMY AND THE FINANCIAL SECTOR ARE EXPECTED

The NGFS anticipates major negative impacts from economies staying inactive faced with the rapid rise in climate-related threats. The main outcome of such inaction is a disorderly transition.

To assess the consequences of poor transition planning for economies, the NGFS sets out at least three possible highly adverse scenarios<sup>2</sup>. Some of these passive scenarios lead to high physical risks (i.e. nationally determined contributions, the current limited level of transition policies), while others imply high transition risks (sector divergent policies, delayed transition).

According to the NGFS assessments, the magnitude of the passive scenario's macroeconomic effects highlights the stakes for the economy, such as a 5.5% reduction in GDP in 2050 and cumulative losses mainly resulting from physical risks representing 13% of GDP in 2100.

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The financial sector is obviously impacted. The probability of default of most of the economic sectors exposed might be up to six times the current levels threatening the regulatory ratios and profitability of banks.

## 3. REPUTATIONAL RISK IN THE FINANCIAL SPHERE IS MAGNIFIED BY THE ABSENCE OF EXPLICIT TRANSITION SCENARIOS TO REFER TO. THIS WEIGHS ON THE FINANCIAL SECTOR AND RISKS MULTIPLYING TRANSITION COSTS FOR ECONOMIES

On many occasions, we have seen NGOs stressing that banks or asset managers have increased their financing for fossil energy players compared with previous years, despite the commitment made by these financial organisations to align their business with climate goals.

For instance, a report by Friends of the Earth France and Oxfam France highlights that between January 2020 and March 2021, the major French banks financed \$100 billion for companies operating in the coal, oil and gas sectors. Between 2019 and 2020, the four major French banks all increased this financing, by an average of 22.5%! These NGOs also assert that the continued growth in financing for fossil fuels, including shale oil and gas, accounts for the warming trajectory of more than 4°C by 2100 that French banks are positioned on.

This example demonstrates that in the absence of a transition scenario to refer to in order to legitimise all their current financing operations, financial institutions face repeated accusations of brown funding, putting them at the forefront of those responsible for climate change.

The effect of these repeated reputational shocks is difficult to assess and is probably non-linear. It will depend on many context elements. However, these effects are multi-pronged. Reputational shocks may eventually increase the liquidity risk and even trigger forms of runs. Such a shock could also erode the customer base and weigh on sales. In turn, it could negatively affect the stock prices of the financial institutions concerned. It could undermine employee retention and make it harder to recruit new talent. Lastly, these reputational risks could also be combined with physical and transition risks.

All in all, for financial players to effectively limit the reputational risk linked to the absence of explicit transition scenarios, this would require them to withdraw from any funding that is even remotely related to coal, gas, and oil or to any industrial sector releasing GHGs, etc.

The consequences of such a radical approach, which corresponds to insufficient investments in both carbon intensive and renewables energies, since the symmetric investment in renewables should be still lagging, may well contribute highly to triggering one of these unwanted disorderly transition scenarios. According to a McKinsey study out of the \$9.2 trillion total spending in the net zero scenario, \$2.7 should be dedicated to high emissions assets (near 30%)<sup>3</sup>...

1. <https://2degrees-investing.org/wp-content/uploads/2017/03/Hit-and-Miss-about-TCFD-disclosure-guidance-for-financial-institutions.pdf>

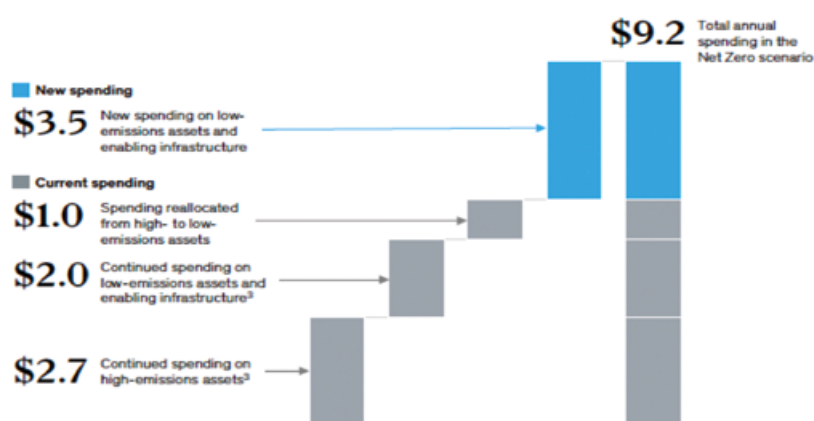
2. [https://www.ngfs.net/sites/default/files/medias/documents/820184\\_ngfs\\_scenarios\\_final\\_version\\_v6.pdf](https://www.ngfs.net/sites/default/files/medias/documents/820184_ngfs_scenarios_final_version_v6.pdf)

3. McKinsey: The net-zero transition - January 2022.

CHART 1.

**Whatever the transition scenario around 30% of investments will necessary be dedicated to high-emission assets**

Source: McKinsey:  
The net-zero transition,  
January 2022



#### 4. VERY DIVERSE TRANSITION PATHWAYS ARE COMPATIBLE WITH THE CARBON TARGETS AGREED ON WITH COP21. HOWEVER, THE UNDERLYING TECHNOLOGICAL AND POLITICAL STAKES AND CHALLENGES ARE OFTEN STAGGERING.

The four scenarios set out by the ADEME<sup>4</sup> in November 2021 illustrate how diverse and fragile transition scenarios that are compatible with the Paris Agreement can be, as they all involve significant technological and political stakes.

Each of these scenarios sets a specific level of natural resource intensity for the economy. Similarly, each of them requires specific levels of technological innovation to be achieved: carbon capture and storage, circular economy, use of soils, etc.

More importantly, each scenario sets a very different level of energy consumption (ranging from a 23% reduction to a 55% reduction), with major political consequences due to the subsequent effects on national industries and economic performance. Furthermore, the deeper the changes required from citizens in each transition scenario regarding customs and ways of life, the higher the risk of instability and discontinuity with the transition path.

#### 5. TRANSITION PLANNING IS NECESSARY IN ORDER TO BETTER ASSESS AND MITIGATE CLIMATE-RELATED RISKS IN THE FINANCIAL SECTOR

According to Frank Elderson, ECB Executive Board Member: "There is a need to start thinking about the next important step in risk management, which will require banks to **look at the thirty years ahead and devise intermediate targets for their risk exposures** that can render them fit for a carbon-neutral economy by 2050"<sup>5</sup>.

However, such enabling scenarios, which define intermediate targets, still need to be clarified and stabilised. F. Elderson concludes that: "The next important step in risk management — transition

planning — and what banks, as well as supervisors and other competent authorities, need to do in order to make it work [...] is to look at the thirty years ahead and devise intermediate targets for their risk exposures that can render them fit for a carbon-neutral economy by 2050 [...]".

However, defining these intermediate and final targets requires technological and political options and priorities to be available and continuously updated (energy mix, energy intensity of economies, alternative technologies for producing or storing energy, etc.) at national, regional and global level.

This also makes it necessary to continuously calculate their expected and observed impacts on climate-related physical risks.

#### 6. TRANSITION PLANNING IN ADDITION TO "MERELY" IMPROVING THE MANAGEMENT OF CLIMATE-RELATED RISKS IS ALSO A PREREQUISITE TO ENABLE THE FINANCIAL SECTOR TO DETERMINE, ON A DAY-TO-DAY BASIS, WHETHER EACH INDIVIDUAL FINANCING APPLICATION IS CONSISTENT WITH PREDEFINED, ORDERLY AND SWIFT TRANSITION PATHWAYS

While a central goal of any participant in the financial sector is to manage (i.e. have a **forward-looking strategic and concrete approach to identify, quantify, mitigate and, ultimately, suppress**) any possible build-up of "climate-related risks", they must also contribute to an optimal transition for the economy.

For an economic player, the transition challenges go far beyond simply the decarbonisation of their production (supply chain changes, reduced energy intensity, refocus on sustainable energy, increased use of recycled raw materials, etc.) and mitigating climate-related threats. The biggest challenge for economic actors (i.e. financier counterparts) is to transform themselves while adapting to profound changes in demand that are very dependent on the actual transition scenario: lower production volumes, sustainability requirements, etc.

4. Prospective – Transition(s) 2050 - ADEME.

5. Overcoming the tragedy of the horizon: requiring banks to translate 2050 targets into milestones, Elderson, 20 October 2021.

Consequently, finance providers need to specifically look at each of these strategic shifts.

From the financial sector standpoint, this means making it possible to finance new sustainable energy sources and related distribution and storage facilities, adapting levels of demand, and assessing the transition and physical risks.

The financial sector also needs to efficiently assess the levels of technological and economic-related risks, while providing ongoing financial support to effectively transition corporates that are not yet carbon neutral. Before ultimately providing financing exclusively for carbon neutral economic actors beyond 2050.

Lastly, given that the energy transition cannot be achieved by turning off the carbon tap overnight (see the economic and political impacts of the sudden rise in oil and gas prices at the end of 2021), and that GHG-intensive activities need to be maintained at a limited level until renewable energy substitutes are available, the financial sector needs to provide sufficient access to financing for carbon-intensive activities based on a reasonable cost and risk during the transition. This also requires tailored and explicit transition pathways.

Otherwise, Nouriel Roubini may well be right<sup>6</sup>: “Making matters worse, the aggressive push to decarbonise the economy is leading to underinvestment in fossil-fuel capacity before there is a sufficient supply of renewable energy. This dynamic will generate much higher energy prices over time.”

We should also learn from the wise comments made regarding the EU taxonomy in November 2021 by the World Economic Forum<sup>7</sup>, which stressed the need to **provide positive incentives towards investing and developing technologies contributing to an effective transition**, such as electrical equipment and industrial automation. This suggests that an explicit transition pathway definition should also help prevent these numerous technologies, which are vital for improving

energy efficiency and successfully transitioning to a sustainable economy, from remaining “under the radar”.

**7. PRECISE TRANSITION PLANNING IS ALSO AN ESSENTIAL CONTRIBUTING FACTOR TO REDUCE THE BURDEN OF DISORDERLY TRANSITIONS AND EXPAND THE FINANCIAL SECTOR'S CONTRIBUTION TOWARDS ACCELERATING THE EMERGENCE OF CARBON REDUCTION INNOVATIONS, AS WELL AS THE TRANSFORMATION TO A SUFFICIENTLY SUSTAINABLE ECONOMY**

In the absence of internationally agreed transition pathways, any forward-looking strategic approaches outlined by financial institutions would be constantly challenged, whenever the “Hot House World” scenario set out by the NGFS (i.e. the ‘no explicit transition pathway’ scenario) materialises. Indeed, such a disorderly transition scenario is ever evolving, progressively moving from current general, lenient and fuzzy targets towards uncoordinated divergent and abrupt national ones.

In the end, the likely outcome would combine the consequences of high physical risks stemming from taking too little action too late and all the impacts of disorderly radical, inconsistent, unstable, late and aggressive guidelines. Lastly, without internationally agreed transition pathways, the only option is for supervisors and financial institutions to mitigate all the NGFS adverse scenarios as early as possible, further contributing to increased transition costs (e.g., cutting lending, amassing additional capital, etc.).

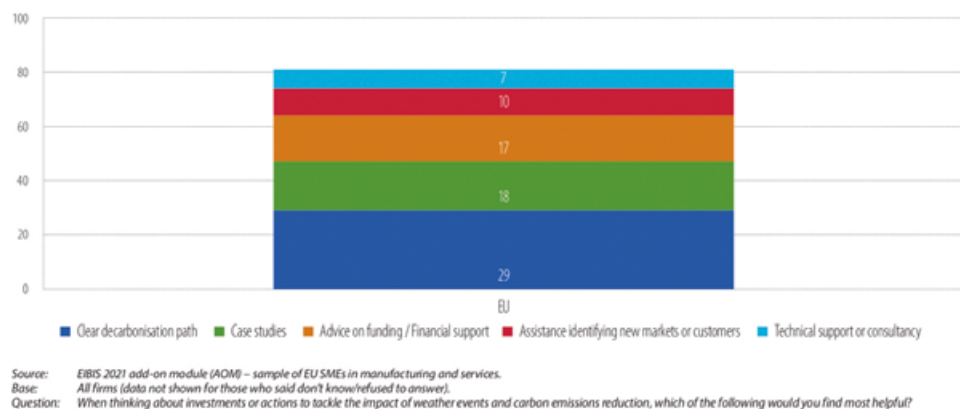
Lastly, insufficient transition planning is equivalent to focusing the financial sector on just financing for green assets. This is not a credible option, since suddenly withdrawing access to finance for non-green economic players — brown industries, households, SMEs, etc. — is likely to be one of the key features of any disorderly transition scenarios to be avoided.

**CHART 2.**

**For small businesses, policy support needs to be multifaceted**

*Note: EU firms to benefit from clarity on the pathway to carbon-neutrality, in %*

*Source: EIB 2021 investment survey*



6. <https://www.channelnewsasia.com/commentary/omicron-variant-ukraine-russia-vladimir-putin-joe-biden-inflation-interest-rates-finance-2022-2407316>  
 7. <https://www.weforum.org/agenda/2021/11/3-ways-expand-eu-taxonomy-accelerate-green-transition/>

### 8. OPTIMISING THE BENEFITS OF DOUBLE MATERIALITY INFORMATION ADDS TO THE NEED FOR MORE PRECISE TRANSITION PLANNING IN MANY AREAS

Appropriate non-financial reporting, in terms of EU regulations, requires all EU firms to assess and explain why the issues reported are material from an “impact” perspective, in addition to the firm’s “financial and risk” perspective. In other words, companies also need to report their decisions’ material negative impacts — actual and potential — for individuals, society and the environment.

However, the form and content of such reporting will be different if companies and financial institutions have access to agreed transition pathways. In this case, sustainability reporting should help clarify whether these companies contribute to such a transition pathway, i.e. the optimal pathway, rather than whether they contribute to the fastest possible withdrawal from brown activities and ensure an exclusive focus on greener activities. In other words, from an impact perspective, it is a more intelligent approach to set out the positive contribution made by any company to a politically agreed transition pathway, rather than forcing this through the requirement to show the greenest possible non-financial disclosures. Doing the latter would in turn contribute to non-linear disorderly transition scenarios due to sudden shifts in the focus of financing from brown to green-only assets, as well as to the potential political rejection of green targets.

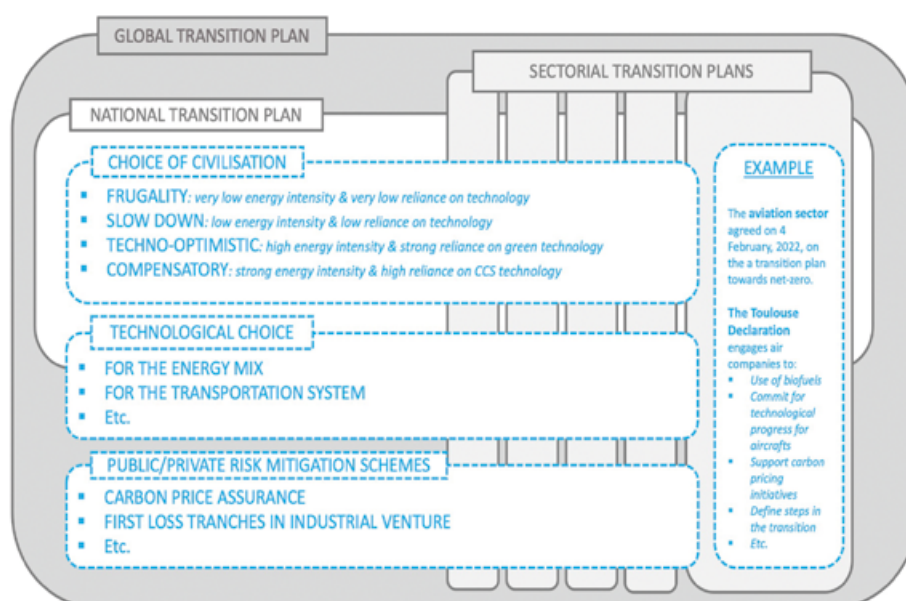
### 9. A HOLISTIC VIEW IS ALSO NECESSARY AND REQUIRES MAINLY PUBLIC SECTOR POLICY CLARIFICATIONS

Pilita Clark reports<sup>8</sup> that “some bankers acknowledge the risk of sticking with companies determined to keep generating a lot of emissions, but little bank revenue, especially if rival lenders start staking out profitable green turf. Others say it is risky to be a first mover in the absence of meaningful carbon pricing or other government policies to level the financing playing field.” In addition, she appropriately stresses that “Private equity firms — which face less scrutiny — are estimated to have invested more than \$1tn in the energy industry since 2010, mostly in fossil fuels, which underlines where the net zero financing battle is heading next.”

A Bruegel analysis<sup>9</sup> illustrates the magnitude of clarifications that policymakers are expected to bring about, as well as the subsequent risk faced notably by the financial sector if these clarifications are not made. Overall, the Bruegel report found that “the current national energy and climate plans (NECPs) of EU countries are insufficient to achieve a cost-efficient pathway to EU-wide climate neutrality by 2050.” The think tank adds that “it is not possible today to determine tomorrow’s optimal clean energy system, largely because the cost, limitations and capability developments of competing technologies cannot be predicted. Energy systems with widely diverging shares of ‘green fuels’, in the form of electricity, hydrogen and synthetic hydrocarbons, remain conceivable.” The think tank finds “the overall cost of these systems to be of the same order of magnitude, but they involve larger investments at different stages of value chains.”

The clarification imperative is not first needed for the financial sector. Indeed<sup>10</sup>, a clear decarbonation pathway is the main enabler notably for smaller entities to invest in a climate-related transition:

**CHART 3.**  
*The consistency of corporates’ transition plans with global, national, and sectoral ones is a priority*



8. FT “Banks risk becoming new fossil fuel villains in 2022”.  
9. <https://www.bruegel.org/2022/01/decarbonisation-of-the-energy-system/>  
10. EIB Investment Report 2021-2022

## CONCLUSION

One cannot agree more with the first key insight summarising the December 2021 Eionet Report<sup>11</sup> which states that “sustainability is a systemic vision at the conceptual level and a macro-dynamic process in the real world. Then it belongs to the upper macro-level of public policies.”

Policy makers have to make many essential choices, e.g., behavioural, technological, ...

Each sector critical for achieving the net zero objective, also must clarify its own choices and check their consistency with national and global ones.

In addition, public and private schemes and partnerships should develop to mitigate the high degree of uncertainty specific to the transition to a net zero economy. Uncertainty notably stems from the many technologic bets (extent of use of hydrogen, evolution of the efficiency of renewables storage, carbon capture efficiency, ...) necessary to roll out many of the possible transition plans. Such bets make the extent of investment and related returns uncertain, and ultimately hinder the predictability of carbon price on the short, medium and long terms.

These choices, projections, risk mitigation approaches and consistency checks, are key success factors to reduce transition uncertainties, optimise its cost. One cannot just rely on either green investment attractiveness or reputation risk, which have contributed so far to the involvement of the financial sector thanks to ever demanding sustainability disclosures.

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11. Sustainability transition and the European Green Deal: a macro-dynamic perspective.