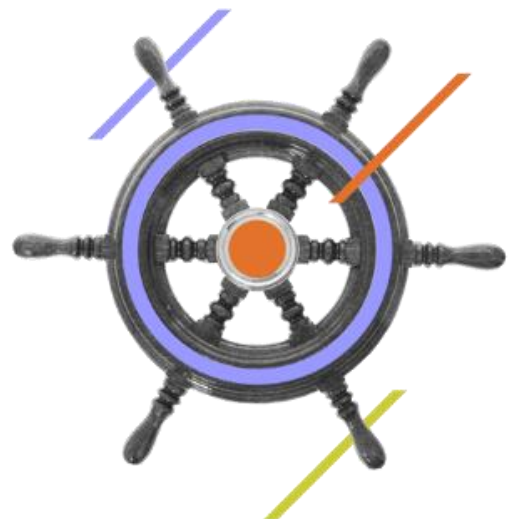




THE ITALIAN CLIMATE CHANGE THINK TANK

A MACROECONOMIC GOVERNANCE FRAMEWORK FOR THE CLIMATE TRANSITION

POLICY PAPER
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1 EXECUTIVE SUMMARY

The ecological transition is crucial not only for achieving the climate goals contained in the European Green Deal, but also the innovation and industrial competitiveness goals of the Green Deal Industrial Plan. The transition is therefore a prerequisite for growth and thus for debt sustainability. The transition must however be actively supported, because it implies a shift of investment from traditional sectors to others where private finance would not normally invest, in the absence of specific public policies. The investment risk must therefore be partly borne or guaranteed by the public sector in order to create favourable conditions for attracting private investment.

Public financing has a key role to play in the transition, so it is important that all Member States are able to deploy the necessary resources, irrespective of the available fiscal space. Significant imbalances in the capacity of Member States to finance the transition would jeopardise the level playing field of the single market.

To date, the debate on the reform of the Stability and Growth Pact and the proposals put forward seem to indicate a lack of political consensus on the creation of the fiscal space for climate investment at the national level. If this is the case, the alternative is for this space to be created at Union level.

One of the possible solutions is the implementation of the European Sovereignty Fund, proposed in the Green Deal Industrial Plan, as a European Climate Fund. This Fund should be linked to the submission of national plans prepared on the basis of the National Energy and Climate Plans (NECPs) and approved by the Commission. These plans should be integrated into the medium-term plans introduced by the reform of the Stability Pact, and this would ensure central control over impacts and results. Not least through the inclusion of robust conditionalities and regular monitoring of the use of funds. Finally, these plans should complement the green transition-oriented measures contained in the National Recovery and Resilience Plans (NRRPs), in order to avoid a duplication of projects and to respond to a real need for funding that cannot be met through existing funds.

A European Climate Fund should cover investment spending, support selective incentives that aim at creating a market for climate-friendly goods and infrastructure, and also ensure the availability of social spending to protect social groups negatively impacted by the transition. Without this, the transition would become much more difficult because the market for zero/low emission goods might not reach the required scale to generate a concrete change in consumption patterns. And the exclusion of the most deprived from the transition would increase social inequalities, social unrest and foster opposition to change. The fund should also have a long time horizon to ensure the policy stability that is a prerequisite for the private sector to invest significantly in the climate transition.

The monitoring of the European Climate Fund plan's implementation should be integrated into the debt sustainability analysis (DSA) within the Stability Pact. The Commission should also adopt economic models that integrate climate risk by taking into account the work the ECB is already doing in this area.

2 CLIMATE IMPACTS

The literature on the negative impacts of climate change is now extensive. The European Environment Agency [estimates](#) that extreme climate events between 1980 and 2020 have generated around €487 billion of economic damage among the 27 Member States, and could cause even greater damage in the coming years. A [technical report](#) by the European Joint Research Centre estimates that exposing the current economy to a global warming of 3°C would result in an annual loss of €175 billion (1.38% of GDP) with much more severe impacts for Mediterranean countries than for northern European countries. Limiting warming to 2°C, on the other hand, would halve this damage, while achieving the Paris target of 1.5°C would reduce it by 75%. An [analysis](#) by the ECB estimates that the loss of GDP could reach 10% per year by 2100 in the most extreme scenario.

Beyond the physical impacts of extreme events caused by climate change, we must also consider how adverse weather conditions undermine economic growth by disrupting the environmental conditions on which the production models underpinning our economies are based. The IPCC's [Sixth Assessment Report](#) (AR6) highlights, for example, how climate change reduces food security by reducing agricultural productivity, while droughts and the resulting hydrogeological changes we are already seeing in many areas of Europe are approaching the threshold of irreversibility. Entire sectors, from agriculture to tourism, but also all productive activities that depend on water, for example, risk facing unmanageable and irreversible loss and damages. This in turn would slow down economic activity with an impact also in terms of lower tax revenues and increased social costs.

It is therefore clear that achieving the global and national mitigation targets contained in the Paris Agreement is crucial if European economies are to mitigate the adverse economic impacts of climate change. However, reaching that goal is not only about damage limitation, but also about seizing an opportunity for economic development. Indeed, the IEA [estimates](#) that the green technology market will be worth around \$650 billion per year by 2030. An [analysis](#) by E3G also points out that achieving net zero emissions by 2050 would have a positive impact estimated at around 2% of European GDP. **The climate transformation of our economies will therefore be the challenge that defines the economic development of countries in the coming decades.**

However tackling this transformation and achieving the targets contained in the European Green Deal and the Green Deal Industrial Plan requires significant public and private investment, which the Commission estimates at around 2% of annual EU GDP until 2030 and the [IEA](#) at around 4.5% of global GDP between 2030 and 2050. **The ability to meet this investment need is therefore the fundamental prerequisite for the future industrial development of European countries.** Unless every Member State is guaranteed access to the required level of funding, it is difficult to imagine that these countries, and consequently the Union itself, will be able to achieve the climate targets. For countries with limited fiscal space, however, the current macroeconomic rules contained in the Stability and Growth Pact constitute a significant obstacle to combining financing the transition adequately with reducing debt. The reform of the Pact is therefore an important opportunity to address the issue of ensuring adequate resources for all.

Failing to implement the European Green Deal and the Green Deal Industrial Plan would entail serious risks for the EU, that go beyond the significant climate damage and the loss of industrial competitiveness. The most indebted countries, with lower capacity to finance climate investments, would see their growth slow down and their debt sustainability decline year by year, jeopardising the economic and social resilience of the Union. Moreover, the division within the single market between economies capable of innovating and competing domestically and internationally, and economies that remain outdated and increasingly less competitive, would risk undermining the political unity of the EU.

3 COMBINING THE FINANCING OF THE TRANSITION WITH FISCAL RESPONSIBILITY

Opening a space for climate investment does not mean abandoning the fiscal responsibility that underpins the Stability and Growth Pact. A [study](#) commissioned by the Green/EFA group in the European Parliament and conducted by the University of Pisa suggests that effective adaptation policies tend to increase GDP growth, and thus debt sustainability. In particular, the study looks at the Italian case and analyses two scenarios (rapid and slow adaptation) compared to a scenario without adaptation. The conclusion is that the fast adaptation scenario is more effective in promoting growth and avoids an increase in debt dynamics towards the end of the simulation period (2050), and that despite a significant increase in the public deficit in the early years, it does not prevent debt sustainability.

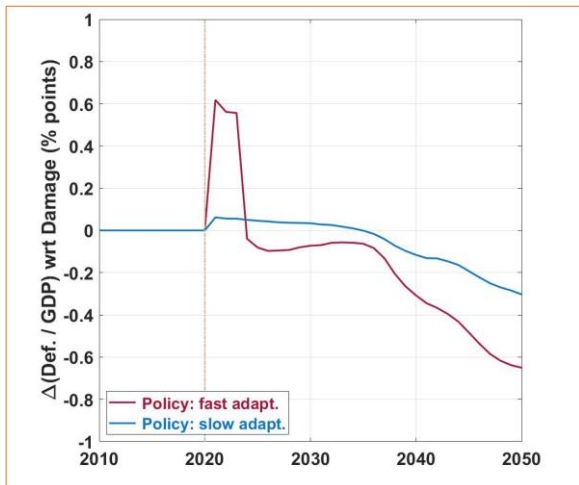


Figure 1

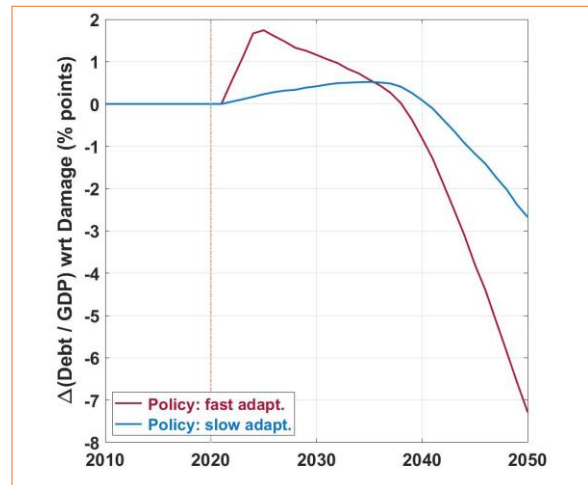


Figure 2

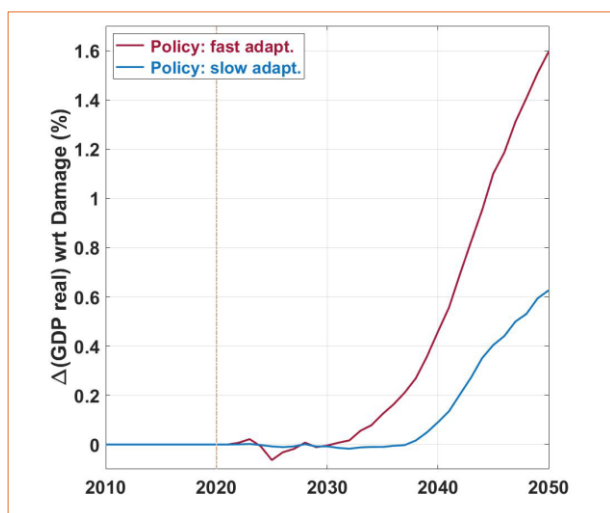


Figure 3

Difference between a fast adaptation scenario (red) and a slow adaptation scenario (blue) compared to a scenario without adaptation policies for Italy.

Figure 1 - Change in the deficit-to-GDP ratio

Figure 2 - Change in debt ratio

Figure 3 - Change in real GDP

Source: <https://www.greens-efa.eu/en/article/study/climate-risks-and-debt-sustainability> 29/11/2022 - Greens/EFA

Adaptation policy, as contained in the National Adaptation Plans (NAPs), is therefore crucial in avoiding or minimising the costs of climate change damage, and has a positive effect on GDP and thus on debt sustainability. **This suggests that imposing overly constrictive fiscal rules on economies with high debt levels may be counterproductive as it would prevent these countries from taking the necessary actions to improve debt stability.**

This is especially true for mitigation spending, which in reducing the severity of climate change reduces both the damage costs and the costs of adaptation itself. Even the ECB, in the [paper](#) already mentioned argues that ' (...) in the medium to long term the macroeconomic costs associated with physical risk would become more significant than those related to transition risk'.

However, the models on which the current debt sustainability calculation is based do not fully take into account the costs of climate inaction and the benefits of swift action, and therefore fail to show the importance of climate action on debt sustainability. This shortcoming is recognised by the ECB itself, which is working on integrating these factors into its economic models and estimates that they will be ready in 2024.

4 THE REFORM OF THE STABILITY AND GROWTH PACT

The Commission [presented](#) a Communication on 9 November 2022 detailing an orientation on how to reform the Stability and Growth Pact to make it simpler, more transparent and more effective. As we highlighted in a [note](#) however, despite recognising that climate change is among the challenges that threaten growth and the sustainability of public finances, the communication outlines a macroeconomic framework in which countries with limited fiscal space are unlikely to find the resources needed to finance the transition.

In a [previous publication](#) we outlined the reasons why granting a special status to climate expenditure through a 'green golden rule' could combine the financing of the transition with fiscal responsibility. Indeed, the orientation presented by the Commission envisages a four-to-seven-year adjustment period for Member States before the national debt needs to be on a downward trajectory, and this is [described](#) by Commissioners Gentiloni and Dombrovskis as an alternative to the green golden rule. A period of increased green investment capacity

of only 4-7 years would, however, be limiting in the face of a transition that the Commission expects to continue at least until 2050. Moreover, meeting the 3% annual deficit limit, imposed through an annual expenditure ceiling, is a challenging target for many countries even before the substantial resources needed for the green transition are taken into account. If we look at Italy, for example, in the five years before the Covid-19 crisis the Italian deficit was between 1.6% and 2.6%, but the 2022 [budget planning document](#) puts it at 4.5% for 2023. The space for further spending, which would likely have been quite small before the crisis, is therefore further squeezed. This should be measured against a need for investment in mitigation alone that RSE¹ and [ENEL-Ambrosetti](#) calculate at over 100 billion per year (about 4.8% of GDP).

A second potential critical element in the Commission's orientation is related to the strengthening of compliance and enforcement mechanisms. In particular, the Excessive Deficit Procedure ([EDP](#)) would be automatically triggered for high-debt countries in case of deviation from the fiscal trajectory agreed in the medium-term plan. This could also occur due to external factors related to the international economic situation and at least partially independent of the fiscal prudence of member countries. Transition-related programmes over multi-year periods might therefore have to be discontinued if the procedure is initiated, putting the transition at risk or preserving it only through a return to austerity in other expenditure areas.

In a crisis, such as the current one related to the Russian invasion of Ukraine, economic indicators worsen. The reaction to this, as signalled by the Commission with REPowerEU, must be more investment in decarbonisation and energy efficiency. The answer cannot be a reduction in spending or a slowdown of the decarbonisation process, because this would make the economic system even more fragile and would risk an increase in social inequality. This in turn could fuel a populist vision of an excessively costly transition where the less well-off bear the brunt, therefore increasing social tensions.

The presence of a risk of discontinuation of public climate financing would be a disincentive to crucial private investment, which is key to achieving the high levels of expenditure estimated to be necessary for the transition. Most international studies assign a very high multiplier effect (1:4, 1:5) for public spending on innovation in relation to private spending. It is therefore crucial that climate transition expenditure is guaranteed over a long period and that it does not occur at the cost of other expenditure items, in particular social expenditure. **Guaranteeing the stability of decarbonisation policies is crucial for mobilising the private sector, and is one of the main strengths of the US IRA, which has a ten-year horizon.**

5 A REFORM OF THE PACT CONSISTENT WITH CLIMATE ACTION

¹ Studi a supporto della Governance del sistema energetico nazionale (Maria Gaeta, Fabio Lanati, Federica Odifreddi, Laura Tagliabue, Corine Nsangwe Businge, Alberto Gelmini) - December 2021

The Commission's proposed orientation has the main merit of preventing the imposition of over-ambitious debt reduction trajectories that could force Member States into a policy of austerity at a time when they are facing the climate challenge. We would however like to suggest three main improvements that could make the reform of the Stability Pact more compatible with climate action:

1. The first improvement relates to the Debt Sustainability Analysis (DSA), on the basis of which the Commission proposes the reference trajectory for debt adjustment. **As soon as the ECB's new macroeconomic models, which fully take climate risk into account, are available (currently scheduled for 2024), the DSA should integrate them and re-evaluate the fiscal adjustment trajectories on the basis of these.** Moreover, in order to avoid the need for excessive revision, it would be advisable to **incentivise as much as possible the inclusion of transition-related investments in the medium-term plans from the outset. This can be achieved by including them in the common model that the Commission will present and on the basis of which Member States will have to submit their medium-term plans.**
2. The second improvement is to **ensure that the 3% annual deficit limit is not a barrier to climate spending.** In particular, the role of public investment in relation to private investment will have to be bigger and more decisive in the early stages of the transition, when the risks inherent in new technologies are greater and the economic returns lower. The inclusion of strong conditionalities to spending is also crucial to ensure its effectiveness towards climate goals.
3. The third improvement is to **protect climate expenditure from possible automatic excessive deficit procedures,** in order to provide the necessary stability for long-term private investment and avoid putting climate expenditure in competition with social expenditure.

The ECON committee of the European Parliament recently commissioned a study which looks at the reform proposal presented by the Commission on 9 November 2022. The [study](#) suggests that the 3% annual deficit limit would prevent most Member States from investing sufficient resources in the green transition: only three member states (Denmark, Luxembourg and Sweden) would be able to cope with the large public expenditure required, which is estimated in the analysis to be around 1.1% of European GDP per year, thus lower than other estimates, including that of the Commission itself.

The stance of various countries in recent months suggests, however, that there is a lack of political space for significant changes in the Commission's orientation on the reform of the Stability Pact, such as giving special status to climate expenditure with respect to the annual 3% deficit limit or with respect to the automatic debt containment procedures. If these limits cannot be overcome in order to create the fiscal space necessary to finance the transformation of European economies at the national level, then they must be overcome by creating the fiscal space at the Union level.

The analysis commissioned by the ECON committee suggests that the creation of a centralised climate fund would improve the ability of Member States to finance the necessary expenditure, and consequently the ability of the EU to achieve the objectives of the European Green Deal. **A mixed approach, where part of the public investment -**

corresponding to the EU's strategic objectives - is financed from the centre according to well-defined plans while the rest is financed at national level, could provide a solution that contains the risks of moral hazard associated with the centralisation of debt.

6 A EUROPEAN CLIMATE FUND

We have argued that transition-related spending is strategic, and therefore must be differentiated from ordinary spending and protected as being of common European interest. The Commission's proposal of a European Sovereignty Fund within the Green Deal Industrial Plan (GDIP) package could offer a way to do so. GDIP is born in the context of the international race to improve countries' position in that future green market, estimated at \$650 billion per year by the IEA. Several countries, including China and the United States (the latter with the Inflation Reduction Act), have deployed substantial public resources to foster the building of industries and value chains of transition-related technologies. **The development of the proposed European Sovereignty Fund as a European Climate Fund modelled on the Recovery and Resilience Fund would enable all Member States to make the investments that are critical to the security and prosperity of the Union, placing them under the direct supervision of the European institutions.** This would not only reduce the risk of abuse, but also ensure the coherence of Member States' transition plans while respecting national sovereignty in drawing them.

The European Climate Fund would be a key part of the European strategy for industry and for the Green Deal. The Fund would have to be adequately financed and guaranteed for a period consistent with the timescales of the 2030 and 2050 targets, in order to offer private investors the necessary guarantees for investment in the transition. A centralised fund that finances itself on the market by issuing common debt would offer greater placement power and lower servicing costs, and foster the creation of a liquid green bond market. Financing would be in the form of **loans with a long time horizon, as the benefits of the transition are accrued over the long term.**

Funds would be allocated on the basis of national transition plans linked to the NECPs and approved by the Commission on the basis of strict criteria of consistency with the European Green Deal, the Green Deal Industrial Plan and the 'Do no significant harm' (DNSH) principle. The introduction of strong conditionalities for expenditure and the requirement of consistency with the NECPs are key elements to ensure quality of intervention and to avoid the dispersion of funds to projects with a dubious climate impact. This approach has the additional advantage of encouraging climate action by Member States, steering them towards a transformation where the level of ambition and timing of implementation are subject to central control, avoiding a piecemeal approach that could be detrimental to the economy and the Union's climate ambitions.

These plans should also be additional to the transition-oriented measures in the NRRPs up to 2026, in order to avoid the duplication of projects and to ensure they respond to real financing needs that cannot be met by existing funds. They should also be integrated into the medium-term fiscal-structural plans envisaged in the Commission's orientation on the reform of the Stability Pact. The implementation of these plans is indeed crucial in stimulating economic growth and thus the debt sustainability of the various

countries, but it must also correspond to a real capacity of the Member State to spend the funds received.

The Fund should cover investment spending, but also incentives to facilitate the creation of a market for transition-related goods, as well as social spending to protect negatively impacted social groups. As we indicated [in a previous analysis](#), the climate transition needs all of these expenditure items in order to be effective in creating a market for green goods and to avoid exacerbating inequalities, which would inevitably lead to social tensions and hostility to the transition. In this sense, the European Climate Fund would complement the Social Climate Fund, which estimated budget of only EUR 65 billion over 7 years at European level risks making it insufficient for its intended purpose.

Finally, the transition plan and its progress should be integrated into the debt sustainability analysis (DSA) linked to the reformed stability pact. The Commission should also equip itself with models that incorporate climate risk by coordinating their implementation with the tools already being developed by the ECB.

7 GLOSSARY

ARG: Sixth Assessment Report

ECB: European Central Bank

DNSH: Do no significant harm

DSA: Debt Sustainability Analysis

ECON: Economic Policy Committee of the European Parliament

EDP: Excessive Deficit Procedure

IEA: International Energy Agency

IPCC: Intergovernmental Panel on Climate Change

IRA: Inflation Reduction Act

NAP: National Adaptation Plan

NECP: National Integrated Energy and Climate Plan

NRRP: National Recovery and Resilience Plan

REPowerEU: EU Communication published on 18 May 2022 aiming to ensure the Union's independence from Russian gas supplies



THE ITALIAN CLIMATE CHANGE THINK TANK

ECCO is Italy's independent climate *think tank*. The mission of ECCO's think tank is to work in the public interest to accelerate decarbonisation and build resilience in the face of the climate change challenge.

ECCO has a national, European and global reach and works to develop and promote fact-based and science-based climate analyses, proposals and strategies in constant dialogue with experts from the scientific community, policy makers, institutions, civil society, business, trade unions and philanthropy.

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