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THE ITALIAN CLIMATE CHANGE THINK TANK

# LEARNINGS FROM THE ITALIAN NRRP TO INFORM THE NEXT MFF

POLICY PAPER

MAY 2025

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# TABLE OF CONTENTS

# EXECUTIVE SUMMARY

A debate is now underway at the European level regarding the allocation of European funds in the next budget cycle. In this context, both the EU Commission[1] and the EU Parliament[2] have pointed to the Next Generation EU ("**NGEU**") NGEU and Recovery and Resilience Facility ("**RRF**") as starting points for determining future Union spending.

At the EU level, NGEU, and within it the RRF, marked a pivotal moment and a turning point in the way European funds are allocated and distributed. The RRF opened the possibility for the EU to generate European debt on the capital market, allowing it to provide Member States not only with loans but also with grants, to be used to finance a series of measures (reforms and investments) previously assessed and approved by the European Commission and Council.

The regulatory framework governing the allocation of RRF funds required Member States to prepare national recovery and resilience plans ("**NRRPs**"), which had to comply with horizontal principles such as additionality and the "*do no significant harm*" ("**DNSH**") principle. The plans were assessed against four criteria (i) **relevance**, which included a quantitative requirement that at least 37% of allocated funds be spent on climate and environmental measures, (ii) **effectiveness**, (iii) **efficiency** and (iv) **coherence**.

Italy's National Recovery and Resilience Plan ("**NRRP**" or the "**Plan**") was considered compliant with these principles and criteria. However, in 2021, when the Plan was first adopted, ECCO had determined that it lacked sufficient climate ambition and did not duly comply with some of the requirements, including the 37% climate spending target.

In this paper, we have assessed how the Plan is being implemented and its current contribution to the achievement of climate objectives, four years after its adoption. To determine the Plan's progress, we have selected and examined a number of climate flagship measures within it, two reforms and four investments relevant to the climate and the energy transition. Specifically, the reforms examined include the streamlining of permitting procedures for renewable energy projects and the phase-out of environmentally harmful subsidies; the investments analysed are the so-called *Superbonus*, the *Transizione 5.0*, smart electricity grids and renewable energy communities.

Different dynamics emerged from the reforms analysed. With regard to streamlining permitting procedures for renewables, uncertainty, lack of multilevel governance, and the overlap of several applicable regimes has resulted in policy incoherences, including within the strategy of the National Energy and Climate Plan ("**NECP**"). With regard to the phase-out of environmentally harmful subsidies, the measures implemented under the Plan do not adequately address the need to decarbonise the national economy by reforming and removing fossil fuel subsidies, nor do they provide a clear methodology, timeline or criteria for the phase-out.

Additional lessons can be drawn from the analysis of flagship climate investments. On the one hand, measures such as the *Superbonus* or *Transizione 5.0* were not fully in line with the measure's cost-efficiency criterion. The *Superbonus* did not constitute a comprehensive strategy for national

[1] EU Commission, *The road to the next multiannual financial framework*, COM(2025) 46 final, February 2025.
[2] EU Parliament, *Draft report on a revamped long-term budget for the Union in a changing world*, 2024/2054(INI)

energy efficiency in the building sector and lacked a long-term perspective, especially in balancing the costs to the Italian State with environmental and climate benefits. *Transizione 5.0*, while being a measure from which companies could have benefitted, had an overly complex access framework and governance structure, which led to very few applications from the private sector, especially from small and medium enterprises. Similarly, investments in renewable energy communities were characterised by complex requirements for accessing funds and significant delays in the legislation's approval and implementation of the access platform.

Conversely, investments in smart electricity grids have proven effective: these were already necessary, and their main beneficiaries—distribution and transmission operators—work within a highly regulated market and possess a significant spending capacity for investments. In this context, NRRP funds helped alleviate the financial burden on operators and limited the impacts of passing costs onto final consumers through tariffs. Nevertheless, the fact that these investments were undeferrable and that investments in infrastructure are common between national public and private investors raises questions about the added value of the funds granted to this measure.

Overall, we found that, at the national level, several obstacles emerged in the allocation and effective expenditure of the funds. Out of the €194.5bln allocated to Italy under the RRF, only €63.93bln—just 35.6% of the total—has been spent to date, leaving the remaining €130bln to be spent over the next 15 months.

These findings paint a complex picture of implementation, with significant variation across projects but also several shared critical issues. In Italy, difficulties related to the absorption of public funds, complexity of access procedures, capacity building, understaffing and bureaucracy have been identified by both local and regional authorities, as well as beneficiaries, as some of the main reasons for the delay in the effective use of funds. Moreover, the NRRP did not systematically conduct a prior evaluation to determine whether the financed measures would have been profitable, especially from a climate and environmental standpoint– and no consistent monitoring and reporting on the environmental impact of individual measures has been undertaken in the implementation phase, making it hard to effectively assess the contribution of NRRP measures to climate objectives. Finally, certain measures under the NRRP appear to have been adopted in isolation, with insufficient consideration of the existing regulatory context or other national and European plans, including the NECP.

In this context, based on the findings from our analysis, we have prepared a list of policy recommendations that can inform discussions around the next Multiannual Financial Framework for the 2028-2034 period ("**MFF**").

Given the centrality of climate objectives to the EU's development and competitiveness strategy, the **amount** of funds earmarked for climate will be a crucial element that will have to be considered. While the current MFF set a climate mainstreaming target of 30%, the increased focus on defence and security spending risks having an impact on the quantity of funds available for climate; however, it must be stressed that there can be no European security without climate security (including adaptation to climate hazards and increased resilience to reduce disaster risks) and energy independence. The latter can only mean investing in renewables and ending dependence from imported fossil fuels – as Mario Draghi recalled in his recent hearing at the Italian Senate, "*in*

*the energy field we must always remember that if we want complete autonomy, sovereignty over our energy supply, energy production cannot come from gas*"[3].

Even at the national level, the current geopolitical and financial context could lead to a decrease in national spending for climate, due to increased defence and security spending and stricter fiscal rules. In this respect, the Italian government very recently declared[4] its intention to redirect €25bln (of which €14bln from RRF funds, €11bln from cohesion funds and €7bln from the upcoming Social Climate Fund) in favour of Italian enterprises and workers to help them face economic consequences from tariffs imposed by the US. It is crucial to keep in mind that redirecting EU funds to support the Italian industrial sector and its workers will only prove effective if the funds contribute to making the nation's production system competitive and secure, which can only be achieved by abandoning Italy's fossil energy dependencies.

In that context, it is key that the **quality** of funds earmarked for climate must also be guaranteed by the next MFF, directing climate funds to measures that have the most relevant impact in achieving climate objectives.

The new framework will also need to be designed in a way which allows for the **absorption** of EU funds by final recipients. This means ensuring that national, local and regional authorities responsible for selecting beneficiaries and distributing funds are equipped with adequate capacity, and possibly allowing the **pre-allocation of funds** to smaller beneficiaries with insufficient financial capacity. Improvement of the allocation and management of EU funds by local authorities, as well as access to EU funds by beneficiaries, would further benefit from a deeper **harmonisation** of "*rules and horizontal requirements (e.g., environmental requirements) across funding programmes and EU financial instruments*", a recommendation also echoed in the Draghi Report.

The case studies examined in this paper also highlight possible ways in which the horizontal principles and assessment criteria set out under the RRF could be further refined to ensure a better alignment between funded measures and climate targets, and to horizontally apply them to the allocation of all EU funds. In particular:

- **Additionality**: EU funds must bring added value and avoid crowding out private investments. This could result in allocating EU funds to projects that would not otherwise have gone ahead, would have been implemented more slowly, or would have had a reduced design/impact, depending on the specific situation of the Member State receiving the funds.
- **DNSH**: The DNSH principle represents a crucial environmental safeguard and an essential baseline that must be maintained and implemented horizontally in the allocation of all future EU funds. Nevertheless, a better operationalisation of the DNSH principle, possibly through sector-specific guidance and *ex post* monitoring, would better ensure that EU funds are not used to support environmentally harmful activities, and that projects that represent necessary intermediate steps towards the decarbonisation of certain sectors benefit from EU funds. A harmonised operationalisation of the principle through all MFF funds, completed by sector-specific guidance from the EU Commission could also ease the administrative burden for national authorities in applying this principle.
- **Relevance**: In order to ensure that EU-funded measures make a comprehensive and adequate contribution to climate targets, the use of EU funds for national measures should

[3] Mario Draghi's hearing on his Report on EU competitiveness, 18 March 2025.
[4] ANSA, *Il Piano di Meloni, recuperare 25 miliardi per aiutare le imprese*, 9 April 2025.

always be aligned with European climate and decarbonisation objectives. This alignment should be demonstrated through a dedicated publicly available assessment.

- **Effectiveness**: Monitoring should be required both during the implementation phase and after the completion of each measure, with the goal of verifying that effectively implemented measures are in line with decarbonisation goals. Any such monitoring should be harmonised across EU funds and in an easily accessible form, to avoid increasing administrative burden on both local authorities and beneficiaries. The European Commission should conduct regular evaluations on the results of such monitoring efforts and provide country-specific recommendations to ensure that national measures remain aligned with initial climate targets. In this respect, the NRRP governance system at the EU level could be extended to other EU funds, with the European Semester and its country-specific recommendations serving as a possible enforcement mechanism to ensure implementation of the recommendations provided by the EU Commission.
- **Efficiency**: All measures funded by the EU should undergo a prior cost-benefit analysis to ensure fiscal sustainability and a positive economic outcome. This analysis should explicitly account for environmental and social costs, including carbon social costs.
- **Coherence**: Access to European funds should always be conditional on strict alignment with key policy frameworks, particularly the NECPs, as well as national financial planning instruments.

With regard to measures specifically related to climate, these should be systematically subjected to a mandatory prior climate impact assessment to estimate the expected reduction of greenhouse gas ("**GHG**") emissions from each measure. Once this climate impact is established, the distribution of EU funds should prioritise those measures with the highest emission reduction potential (or ancillary reforms that facilitate the implementation of such measures), ensuring a positive cost-benefit ratio between the measures' costs and their climate and social benefits. In addition, EU-funded climate measures should undergo an assessment regarding their social impact, to ensure alignment with the objectives of a just transition. In particular, EU-funded measures should consider the diverse needs of different social groups in the context of the transition and be adapted and proportionate to the social group targeted by each measure.

Finally, at the national level, it is necessary to invest in the development of public administration capacities, especially local authorities, to ensure that they can effectively and correctly manage projects (including administering calls for tenders and ensuring the realisation of projects) and monitor the progress of European-funded measures. In this respect, the establishment of a multilevel stakeholder dialogue can be beneficial to avoid top-down approaches and the centralisation of spending, which risks overlooking peripheral regions.

# 1 THE ITALIAN NATIONAL RECOVERY AND RESILIENCE PLAN

## 1.1 STRUCTURE AND GOVERNANCE OF THE ITALIAN NATIONAL RECOVERY AND RESILIENCE PLAN

In the aftermath of the COVID-19 pandemic, the EU launched the largest recovery package in its history, NGEU, which was financed for the first time through the issuance of EU bonds. As one of the countries most affected by the COVID-19 outbreak, Italy received the largest share of the €750bln allocated to the fund. Of this, €191.5bln was allocated to Italy under the RRF, in addition to €13bln from ReactEU, €30.5bln from a National Complementary Fund and €26bln from additional national resources– amounting to a total of €261bln initially allocated to Italy's National Recovery and Resilience Plan ("**NRRP**" or the "**Plan**"), the largest recovery plan in Europe.

| Governance | Fund | Amount billion € |
|---|---|---|
| **Recovery resources, identified in the Italian NRRP submitted to the EU on 29 May 2021, fully following RRF governance rules.** | Recovery Resilience Facility (RRF) | 191,5 |
| | | |
| | *Of which grants* | *68,9* |
| | *Of which loans for existing projects* | *69,1* |
| | *Of which loans for new projects* | *53,5* |
| | React – EU | 13 |
| | Complementary Fund (national resources) | 30,5 |
| **Sub-total** | | 235 |
| **Additional national resources as allocated within 2032 to specific projects.** | Additional national resources | 26 |
| **Total** | | **261** |

The Draghi government chose to structure the Italian NRRP around six missions[5], ranging from energy policies to social inclusion. These were accompanied by (i) horizontal reforms, such as the reform of the Public Administration or the judicial system, and (ii) enabling ones, such as the simplification and rationalisation of legislation and the promotion of competitiveness.

It is important to highlight that, in its initial version, the Italian NRRP allocated around €70bln to **Mission 2: Green Revolution and Energy Transition,** and around €30bln to **Infrastructures and Sustainable Mobility.** The substantial funding allocated to the green transition reflects the recognition of climate policies as key drivers for transformation, growth and increased productivity. In 2022, following the Russian invasion of Ukraine, the Commission issued the REPowerEU communication[6], aimed at increasing Europe's energy independence through structural investments in renewables, energy efficiency and, in light of the urgency of the geopolitical situation, diversifying natural gas supplies. As a result, REPowerEU measures were implemented in the NRRP through the addition of a chapter. For Italy, this led to the additional allocation of €19.26bln, of which €15.9bln was redirected from existing NRRP resources and additional EU funds (€3.66bln). The Government, therefore, updated the NRRP by introducing Mission 7-REPowerEU, which included 5 new reforms and 17 investments, as well as by modifying some existing measures, with certain financial streams either reduced or erased from other Missions.

***Table 2. NRRP after REPowerEU***

| Governance | Fund | Amount billion € |
|---|---|---|
| **Recovery resources, identified in the Italian NRRP as modified by REPowerEU** | Recovery Resilience Facility (RRF) | 194,5 |
| | *Resources Mission 7* | *19,26* |
| | *Unfunded projects* | *15,9* |
| | React – EU | 13 |
| | Complementary Fund (national resources) | 30,5 |
| **Sub-total** | | 235 |
| **Additional national resources as allocated within 2032 to specific projects.** | Additional resources | 26 |
| **Total** | | **264** |

## 1.2 NRRP GOVERNANCE AT THE EU AND NATIONAL LEVEL

The RRF operates as a performance-based instrument, with payments disbursed upon the achievement of certain milestones and targets related to the implementation of reforms and investments by Member States. The Commission ensures a mid-term evaluation[7]. When analysing the governance structure, it is also important to note that—unlike other EU funds such as those for cohesion policy—the Commission allocates funds directly to national governments, rather than to local and regional authorities.

[5] 1. Digitalisation, Innovation, Competitiveness and Culture, 2. Green Revolution and Energy Transition, 3. Infrastructure for sustainable mobility, 4. Education and Research, 5. Inclusion and Cohesion, 6. Health

[6] EU Commission, *REPowerEU Plan*, COM(2022) 230 final, 18 May 2022.

[7] EU Commission, *Mid-term evaluation of the Recovery and Resilience Facility*, December 2024, COM(2024) 82 final.

At the national level, the Plan's governance[8] envisages coordination between national and local authorities (Local and Regional Authorities). This structure was established by Law Decree no. 77/2021 dated 31 May 2021[9] and later modified by Legislative Decree no. 13/2023 dated 24 February 2023[10]. The governance of the NRRP in Italy follows a tailored structure, with the Presidency of the Council of Ministers playing a leading role, particularly through the "*Cabina di Regia*" (a form of control room). The Cabina di Regia coordinates the implementation of the NRRP, ensures its political relevance and informs the Parliament on the execution of the plan every six months. Additionally, a "*Struttura di Missione PNRR*" (a Mission Unit for NRRP) was established in 2023 to support the Ministries in implementing the Plan and to act as a contact point with the EU Commission. A **Unit for the simplification and improvement of legislative efficacy** also supports the Cabina di Regia by removing bureaucratic obstacles that could hinder the Plan's implementation. To ensure a multilevel coordination between national, local and regional authorities, in particular at the sectoral and technical level, a **Focal Point NRRP State-Regions** has also been set up. The resources allocated to the NRRP are distributed among the relevant Ministries and, afterwards, distributed to the public authorities or the private sector responsible for the projects' delivery. The Italian Court of Auditors (*Corte dei Conti*, hereinafter "**ICA**") controls the effectiveness and efficiency of NRRP spending and issues reports every six months.

## 1.3 ORIGIN OF THE FUNDS FOR FINANCING THE ITALIAN NRRP

As mentioned above, Italy was allocated approximately €194.5bln from the RRF to finance its NRRP, of which €71.8bln came in the form of grants and €122.6bln in loans. €191.5bln were destined to the NRRP in its original form, in 2021, while the rest was allocated in 2023 with the inclusion of REPowerEU in Mission 7 of the Plan. To date, €122.2bln have already been earmarked by the EU Commission upon evidence, provided by the Italian government, of achievement of the relevant milestones and targets[11].

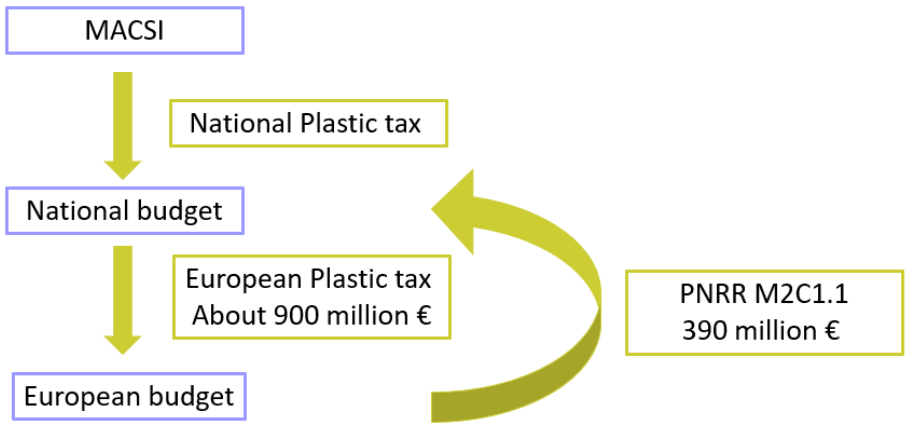
The RRF was the main component of NGEU, whose main innovation is represented by the possibility to generate European debt on the capital market with the aim to provide Member States not only with loans but also with grants. However, in addition to issuing European debt, the NGEU is also supported by so-called "*own resources*" included in the EU budget, which primarily consist of: (i) a portion of Member States' Gross National Income; (ii) a portion of the income from Member States' respective VAT; (iii) custom duties; and (iv) targeted levies.

[8] A detailed description of the NRRP governance can be found on the website of the Italian Parliament, *La governance del PNRR*.
[9] Law Decree no. 77/2021 dated 31st May 2021, available at https://www.bosettiegatti.eu/info/norme/statali/2021_0077_DL.pdf
[10] Legislative Decree no. 13/2023 dated 24 February 2025, available at https://www.normattiva.it/uri-res/N2Ls?urn:nir:stato:decreto.legge:2023;13~art45
[11] Sixth report on the implementation of the NRRP – Part I, published by the Minister for European affairs, NRRP and cohesion policies on 27th March 2025.

***Box 1 – Targeted levies: the tax on single-use non-recycled plastic packaging***

An example of a targeted levy contributing to European own resources is the one imposed, starting from 1st January 2021[1], on the amount of non-recycled plastic packaging waste that each Member State produces. On each kilogram of such waste, a uniform call rate of €0,8 is applied.

In order to provide this contribution without increasing the burden on the state budget, Italy introduced a plastic tax in the 2020 Budget Law, charging manufacturers, purchasers and importers of single-use plastic products, which should have come into force in the summer of 2020. This tax would have collected around €900mln per year and could have been used, in addition to contribute to EU own resources, to partially finance the NRRP. Indeed, the 2021 NRRP version in Mission 2, Component 1, a contribution of 390 million euros was established to reinforce the recycling process of plastic whose resources should have been allocated from the plastic tax. However, despite having been introduced five years ago, this Italian tax on single-use plastic has not entered into force yet. This has led Italy to draw the contribution to the European Union (which in the EU budget for the financial year 2024 amounted to €842.456.480) from the country's national budget.




See ECCO, *Plastics in Italy – a vice or a virtue?*, April 2022

## 1.4 THE CRITERIA FOR ACCESSING RECOVERY AND RESILIENCE FACILITY FUNDS

Italy received the majority of its NRRP funding from the RRF. Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021, which established the Recovery and Resilience Facility (the "**RRF Regulation**"), provides a series of principles, eligibility conditions and criteria that the EU Commission and Council must consider in order to assess Member States' recovery and resilience plans and authorise the subsequent allocation of funding in favour of NRRPs.

First of all, the RFF Regulation sets out that recovery and resilience plans must comply with two main horizontal principles, namely (i) **additionality** of RRF funding with respect to national budgets

and other Union Programmes and instruments, and (ii) **respect of the DNSH** principle[12]. Secondly, article 17 of the RRF Regulation outlines the eligibility of recovery and resilience plans, which requires Member States to prepare their NRRPs in coherence with (i) country-specific recommendations ("**CSRs**") identified for each country in the latest European Semester; (ii) National Energy and Climate Plans ("**NECPs**"), Just Transition Plans, Youth Guarantee implementation plans, partnership agreements and operational programmes under Union funds.

In line with the above, the RRF Regulation requires the EU Commission to assess each national plan's compliance with four elements: (i) **relevance**, (ii) **effectiveness**, (iii) **efficiency** and (iv) **coherence**. Each element includes a set of criteria, whose compliance in national plans must be assessed by the EU Commission when determining the amount to be allocated to the Member State concerned[13].

Among the abovementioned criteria, some of the most relevant for assessing the 'climate dimension' of the recovery and resilience plans are:

- **Compliance with the DNSH principle**, under the relevance element of the plans;
- Allocation of **37%** of the total funds to measures that "*contribute **to the green transition,** including biodiversity, or to addressing the challenges resulting therefrom*"[14].

In its Decision no. 10160/21 dated 6 July 2021 on the approval of the assessment of the recovery and resilience plan for Italy[15], the EU Council confirmed the EU Commission's assessment according to which Italy's NRRP could be rated "A" under all assessment criteria, except for the efficiency criterion, related to the reasonable and plausible nature of the estimated amount of the total costs of the plan[16].

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[12] Article 5 of RRF Regulation.

[13] Here is a summary of the relevant elements for each criterion:

1. Relevance – the NRRP must: (i) represent a comprehensive and adequately balanced response to the economic and social situation, consistent with six pillars set out in the RRF Regulation (1. green transition; 2. digital transformation; 3. smart, sustainable and inclusive growth; 4. social & territorial cohesion; 5. health and economic, social, institutional resilience; 6. policies for next generation); (ii) contribute to effectively addressing all or a significant subset of challenges identified in the relevant country-specific recommendations in the European Semester, including fiscal aspects; (iii) contribute to effectively strengthening the growth potential, job creation, and economic, social and institutional resilience of the Member State, increasing social and territorial cohesion and convergence within the Union; (iv) DNSH; (v) for REPowerEU-related measures, the NRRP must contain reforms contributing to energy security, diversification of EU's energy supply, uptake of renewables, energy efficiency and energy storage capacity and reduction of dependence from fossil fuels; (vi) for REPowerEU-related measures, the NRRP must contain reforms with cross-border/multi country dimension; (vii) 37% of total NRRP funding must be allocated in favour of the green transition + 37% of REPower EU chapter; (viii) 20% of total NRRP funding must be allocated in favour of the digital transition;
2. Effectiveness – the NRRP must: (i) have a lasting impact on Member State concerned; (ii) include effective monitoring and implementation system (timetable, milestones, targets);
3. Efficiency – the NRRP must: (i) set out measures for a reasonable and plausible amount, in line with cost efficiency principle and commensurate to expected national economic and social impact; (ii) include measures for the prevention, detection and correction of corruption/fraud/conflicts of interests in the use of the funds and avoid double funding;
4. Coherence – the NRRP must ensure that its measures are coherent with each other.

[14] Article 19 of RRF Regulation, which provides that the 37% requirement also applies to the funds destined to REPowerEU. See also Annex V and VI, on how to rate national plans' compliance with the assessment criteria.

[15] Council Decision no. 10160/21 dated 6 July 2021 on the approval of the assessment of the recovery and resilience plan for Italy

[16] In this respect, EU Council Decision no. 10160/21 deems that, even though the costs of the NRRP are in line with the cost efficiency principle and commensurate to their expected economic and social impact at national level, "*relevant details on the methodology and on the basis used to make the cost estimates are missing or incomplete for some measures, this hindering a full positive assessment of the cost estimate*".

With a focus on climate-related criteria, the Commission and the Council considered that under Italy's NRRP "*no measure for the implementation of reforms and investments projects [...] does significant harm to environmental objectives (Rating A)*"[17] and that "*measures [...] contribute to a large extent (Rating A) to the green transition, including biodiversity, or to addressing the challenges resulting therefrom*". Regarding the latter, measures supporting climate objectives in Italy's NRRP were estimated to account for 37.5% of the NRRP's total allocation.

Despite the EU Commission and Council's positive assessment of the percentage of NRRP measures supporting climate objectives, estimates conducted by ECCO in 2021 painted a different picture: out of the total RRF funds, ECCO calculated that those with a decisive positive impact in terms of GHG emission reductions amounted to only 16%.[18]. Furthermore, ECCO found that, even if the NRRP refers to the Italian NECP, there is no coherence between NRRP and NECP targets[19].

The methodology[20] used in the study to assign a climate coefficient to each measure was based on the EU taxonomy and the EU Commission's official assessment, although with some differences. It allocated weighted coefficients based on a qualitative evaluation of the measures, but applied a stricter analytical framework for climate spending. For instance, funds allocated to biodiversity were not included, and other measures that allowed for the use of fossil fuel-based solutions (such as *Superbonus*, which allowed the installation of gas boilers) received a more negative evaluation than that given by the EU Commission. In other projects, very few details were publicly available, and therefore, ECCO adopted a more conservative evaluation. Furthermore, for some investments, we found that the climate component of certain measures was overestimated (given an overreliance on fossil fuels) by the Italian government in its submission to the EU Commission, for example, in the transport sector.

In 2023, an updated analysis conducted by ECCO, taking into account the newly added Mission 7 – REPowerEU, showed a substantial improvement in the climate mitigation potential of the measures included in the additional chapter. Indeed, 70% of the measures included in Mission 7 were found to have a positive impact on emission reductions. Based on ECCO's estimates, thanks to this additional chapter, the percentage of measures with a positive impact on the climate rose to 21.5% of those financed through the RRF–an improvement, but still below the threshold set at the European level[21].

Notwithstanding the conclusions of the *ex ante* assessment of the NRRP's compliance against the 'climate criteria' provided under the RRF Regulation, an analysis of how the Plan has been, and is being, implemented appears necessary in order to assess its actual alignment with climate objectives, four years after its initial approval. To this end, we have selected a number of flagship measures from the NRRP, both investments and reforms, and tracked their progress, climate impact, and compliance with the principles and criteria set out in the RRF Regulation.

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[17] Despite the Italian NRRP financing climate and environmentally harmful technologies such as gas boilers and gas buses.
[18] See the 2021 Green Recovery Tracker Report: Italy, ECCO, E3G, Wuppertal Institute.
[19] ECCO, *Italy's National Recovery and Resiliency Plan's climate impact*, December 2021.
[20] See Green Recovery Tracker, *Our Methodology*.
[21] We note that the RRF Regulation, as amended in 2023 to integrate REPowerEU, allows the derogation of the DNSH principle for reforms and investments in energy infrastructure and facilities ensuring security of gas and LNG supply as long as such reforms and investments (i) are necessary and proportionate to meet immediate security of supply needs, (ii) include satisfactory efforts to limit potential harm to environmental objectives, (iii) do not jeopardise the achievement of EU's 2030 climate targets and EU's 2050's goal of climate neutrality, (iv) are planned to be operational by 31st December 2026.

# 2 CASE STUDIES: EXAMPLES FROM SELECTED REFORMS AND INVESTMENTS UNDER THE ITALIAN NRRP

NRRPs were required to include both reforms and investments, with the introduction of reforms financed by EU funds designed to innovate regulatory and procedural regimes, thereby facilitating investments across various sectors.

## 2.1 REFORMS

With regard to Mission 7 – REPowerEU, we have chosen to focus on two specific reforms, namely the streamlining of permitting procedures for renewable energy capacity (2.1.1) and the reduction of environmentally harmful subsidies (□). Together, these reforms aim to create a national environment which fosters investments in renewable energy projects while also removing existing support to fossil fuels that leads to a distortion of market dynamics and delays the electrification of the economy.

### *2.1.1 STREAMLINING PERMITTING PROCEDURES FOR RENEWABLE ENERGY*

***Overview of the reform***

Reform 1 of Mission 7 aims to simplify the legal framework for the deployment of renewable energy projects through the adoption and entry into force of a single primary legislative act (so-called *Testo Unico Rinnovabili*, hereinafter "**TUR**"), consolidating all existing norms that currently regulate the development (including the authorisation) of such projects. The previous Italian framework consisted of a variety of legislative and regulatory acts, with permitting procedures and competent authorities often differing from one Italian region to the other, depending on the size and type of project.

Reform 1 includes the following milestones and timeline:

| MILESTONE/TARGET | TIMELINE | DESCRIPTION |
|---|---|---|
| Identification of renewable acceleration areas. | Q4 – 2024 | Entry into force of primary legislation that identifies renewable energy acceleration areas in subnational administrative units. |
| Entry into force of primary legislation (TUR). | Q2 – 2025 | Entry into force of the TUR (primary legislation) collecting, compiling and consolidating all norms regulating the deployment of renewables, and superseding all relevant past legislation. |
| Establishment & operationalisation of the single-entry digital platform for authorisations related to renewables. | Q4 – 2025 | The single-entry digital platform for obtaining all authorisations related to the installation and deployment of renewable energy sources at the national and regional level is established and operationalised. The principle "once-and-only" is in effect. |

In December 2024, the TUR entered into force[22], introducing several changes including: (i) the simplification of permitting procedures for renewable energy power plants, through the inclusion of three different regimes set out in a single legislative act (while previously, the applicable regimes were dispersed across different legal acts); and (ii) entrusting the Italian manager of energy services, the *Gestore dei Servizi Energetici* ("**GSE**"), with the task of identifying and mapping national areas

[22] Legislative Decree no. 190 dated 25 November 2024, which entered into force on 30 December 2024.

appropriate for the development of renewable energy power plants. The GSE has been given deadline of 21 May 2025 to identify these areas. Following this, the Regions are required to identify, by 21 February 2026, specific renewable acceleration areas in which permitting procedures may be further simplified and accelerated.

***Assessment of the reform's implementation***

Two of the three milestones set out in Mission 7 – Reform 1 have been formally achieved within the planned deadlines: the TUR entered into force in Q4 2024, instructing the GSE and Regions to identify renewable acceleration areas.

The TUR has the merit of regrouping the permitting procedures for renewable power plants into a single act and reducing the number of procedures to three: (i) no permit required for the smallest power plants, (ii) the Simplified Procedure (*Procedura Abilitativa Semplificata*), and (iii) the Single Authorisation (*Autorizzazione Unica*) for the largest and most impactful projects. The TUR also includes deadlines for the identification by the GSE and the regional implementation of areas where permitting procedures can be further expedited.

However, the TUR does not provide all the answers needed, and some critical issues of the TUR include:

- While it provides a global framework for renewable permitting procedures, it allows 180 days for Italian Regions to adapt their regulatory framework and comply with the principles set out in the TUR. This creates uncertainty regarding the applicable regime for projects that will be initiated during this transition period;
- Furthermore, it has been highlighted[23] that there is a lack of clarity in the criteria for identifying the applicable permitting procedure for each type of project. This uncertainty, coupled with the absence of additional technical assistance or adequate planning to support local authorities in implementing these new regimes, could result in even longer procedures and higher costs for proponents of renewable projects. An additional layer of complexity for local authorities results from the coexistence, in the near future, of the old regime for permitting procedures already initiated with the new procedures;
- There is a lack of coherence between the provisions set out under the TUR and those outlined in pre-existing acts, specifically:
    - The TUR does not clearly indicate how it will materially contribute to the objectives set out in the Italian NECP[24];
    - While the TUR sets out the process for identifying renewable acceleration areas, it leaves it to Regions to coordinate acceleration areas with previously identified "suitable areas" (*aree idonee*), which are specific areas that must be identified by Italian Regions as suitable for the construction and operation of renewable power plants, where permitting procedures must be simplified[25]. This could lead to a lack of harmonisation at the national level and fragmented implementation;

[23] See Italia Solare's Letter to MASE dated 23 December 2024.

[24] See Studio Legale Tedioli, Il Testo Unico sulle Fonti Rinnovabili: una svolta per la semplificazione normativa o un'occasione mancata?, December 2024.

[25] Suitable areas were introduced with Legislative Decree no. 199 dated 8 November 2021. Provisions on suitable areas were not repealed by the TUR.

- The TUR does not eliminate the requirement for infrastructure connected to renewable power plants to comply with construction regulations and construction permitting procedures[26], thus increasing the number of regimes applicable when developing a renewable project.

***Assessment of the reform with regard to principles and assessment criteria***

| PRINCIPLE/ CRITERION | DULY FULFILLED BY THE MEASURE |
|---|---|
| ***Additionality*** | **N/A** |
| ***DNSH*** | **YES** |
| ***Consistency*** | **PARTIALLY**<br>The TUR does not clearly explain how it will contribute to achieving the decarbonisation goals set out in the NECP. |
| ***Relevance*** | **YES** |
| ***Effectiveness*** | **PARTIALLY**<br>Due to the current transition phase and the difficulties that have already surfaced, it is unclear what the impact of the TUR will be. |
| ***Efficiency*** | **N/A** |
| ***Coherence*** | **PARTIALLY**<br>Even though the TUR is consistent with measures set out within the NRRP, it is not clear in defining how it aligns with pre-existing regulations (for instance, the "suitable area" framework). |

### *2.1.2 REDUCTION OF ENVIRONMENTALLY HARMFUL SUBSIDIES*

***Overview of the reform***

Reform 2 of Mission 7 of the Plan aims to reduce environmentally harmful subsidies ("**EHS**") allocated by the Italian government. In Italy, the Minister for Environment and Energy Security ("**MASE**") is required to compile a non-comprehensive list, on a yearly basis, of existing subsidies that are environmentally harmful, environmentally friendly, or whose impact on the environment is uncertain[27].

Reform 2 includes the following milestones and targets:

| MILESTONE/TARGET | TIMELINE | DESCRIPTION |
|---|---|---|
| Adoption of a government report, building on the outcome of government consultation with stakeholders, to define the roadmap to reduce EHS by 2030. | Q4 – 2024 | The reform shall provide for the reduction of EHS set out in the "2022 Catalogue of Environmentally Harmful Subsidies". A report shall outline the actions taken to consult relevant stakeholders on the above reform of EHS, including the input received by stakeholders. Consulted stakeholders shall include relevant public bodies and private stakeholders. |
| Entry into force of primary and secondary legislation. | Q4 – 2025 | The implementation of the reform of EHS shall start, with a reduction of EHS of at least €2bln in 2026. In addition, the legislation shall define the timetable for a further reduction of EHS of at least €3.5bln by 2030. |

[26] Specifically, the single legislative act for construction matters (*Testo Unico delle disposizioni legislative e regolamentari in materia di edilizia*) approved by Decree of the President of the Italian Republic, no. 380 dated 6 June 2001. See article 1 of the TUR.
[27] Article 68 of Italian Law no. 221 dated 28 December 2015.

***Assessment of the implementation of the reform***

The first milestone, related to the adoption of a government report and roadmap to reduce EHS following consultations with stakeholders, is considered to have been achieved by the government[28] and is represented by the chapter on EHS included in the latest version of the NECP dated June 2024[29].

With regard to the consultation of relevant stakeholders, the NECP highlights—without providing further details—how environmental organisations supported the elimination of EHS, while industrial companies were strongly against it or the current methodology used to list EHS in MASE's annual catalogue. Companies and umbrella organisations also recommended a gradual approach to phasing out EHS, to avoid jeopardising competitiveness.

However, the latest NECP does not include a credible roadmap for reducing EHS (and especially fossil fuel subsidies): after recognising that wider fiscal reform is needed and referencing Reform 2 of Mission 7, the NECP provides a list of 18 "inefficient" EHS to be considered for reform or phase-out. However, the NECP does not define "inefficient", nor does it explain the methodology and criteria applied to select specific EHS as the ones that must be phased out first. Such a methodology would have been particularly useful given the selection of EHS with a global value of €1.9bln out of the total €24.19bln that Italy spent in EHS, according to the MASE's latest EHS catalogue[30].

In addition to prioritising EHS that have a minimal impact on the overall amount of Italian EHS, the NECP does not outline a timeline for an effective phase-out of all EHS in alignment with European and national climate objectives. As such, compliance with the first milestone of Reform 2 of Mission 7 represents a missed opportunity to establish a comprehensive framework and timeline to phase-out all EHS, recover resources (thus ensuring a better management of public spending and creating fiscal space), and define the criteria for selecting which EHS should be reformed first and those which require a more gradual removal.

[28] See ItaliaDomani – Progress on the implementation of the plan.
[29] National Integrated Energy and Climate Plan, MASE, June 2024.
[30] The 2024 MASE's catalogue of EHS is available here, and it includes data from 2022.

***Assessment of the reform with regard to principles and assessment criteria***

| PRINCIPLE/ CRITERION | DULY FULFILLED BY THE MEASURE |
|---|---|
| ***Additionality*** | **N/A** |
| ***DNSH*** | **YES** |
| ***Consistency*** | **PARTIALLY**<br>The EHS reform set out in the NECP does not duly address the CSR to remove EHS in the mobility sector, as it does not include among "inefficient" EHS significant disproportions among (i) fiscal and parafiscal levies on energy carriers to fuel vehicles, nor (ii) the difference between excise duties on diesel and those on petrol. |
| ***Relevance*** | **NO**<br>The reduction of EHS reform does not duly fulfil the relevance criterion with regard to its element linked to a comprehensive and adequate contribution to the green transition. Indeed, the implementation of this reform, in the form of a recommendation to phase-out less than €2bln EHS in the short to medium-term, does not constitute an adequate response to the significant amount of yearly EHS granted in Italy (in 2022, €24bln), that must be phased out to achieve a true decarbonisation of the Italian economy. |
| ***Effectiveness*** | **PARTIALLY**<br>While the NECP provides a list of 18 EHS to be phased out in the short to medium-term, it does not duly set out a long-term roadmap to end EHS. As such, the effectiveness criterion linked to a lasting impact on the Member State appears only partially satisfied. |
| ***Efficiency*** | **N/A** |
| ***Coherence*** | **PARTIALLY**<br>Even though the reform appears coherent with other NRRP measures, its implementation through the latest version of the NECP does not appear duly integrated in the broader Italian framework for EHS. While the NECP sets out a list of 18 "inefficient" EHS to be phased out as a priority, it does not provide a clear roadmap to achieve the targets set out in the NRRP, nor does it provide a broader methodology to approach EHS. |

## 2.2 INVESTMENTS

### *2.2.1 STRENGTHENING OF THE ECOBONUS FOR ENERGY EFFICIENCY*

***Overview of the investment***

Under the Plan, Mission 2 Component 3 on energy efficiency and the requalification of buildings included the investment related to strengthening the Ecobonus for energy efficiency. This measure, often called *110% Ecobonus* or *Superbonus*, aims to finance the renovation of residential buildings to achieve energy savings and emission reductions, and to support the construction sector in the context of the economic downturn caused by the COVID-19 pandemic. Under this measure, a tax deduction equal to 110% of the costs of the works over five years was applied to building renovation projects, resulting in primary energy savings of at least 40% and an increase by at least two categories in the energy efficiency certificate.

The regressive nature of this measure was mitigated by the possibility of the option to use the tax deduction in an alternative way: beneficiaries of the *Superbonus* scheme could decide to transfer the tax credit to reduce the high initial investment costs either to the construction company performing the work (which would discount it on the invoice and then recover the amount in the form of a tax credit itself) or to financial institutions, which would, in turn, pay the necessary capital upfront. The goal of allowing such a tax credit transfer was to ensure that even households without the ability to pay in advance, whether due to limited financial capacity or not owning a home, could access the incentive.

€13,73bln of NRRP funds (barely 11% of the total costs of the *Superbonus*, which currently amount to approximately €123bln) were allocated to the *Superbonus*, supporting a total of 60.756 NRRP *Superbonus* projects[31]. Under the Plan, the following milestones and targets had to be achieved with regard to the *Superbonus*:

| MILESTONE/TARGET | TIMELINE | DESCRIPTION |
|---|---|---|
| Entry into force of the extension of the Superbonus. | Q4 – 2021 | The legal act(s) shall extend the Ecobonus and Sismabonus benefits until 31 December 2022 for condominiums and 30 June 2023 for social housing. |
| Building renovation Superbonus T1. | Q2 – 2023 | Complete building renovation for at least 17.000 square meters which results in primary energy savings of at least 40% and increasing at least two categories in the energy efficiency certificate. |
| Building renovation Superbonus T2. | Q4 – 2025 | Complete building renovation for at least 35.800.000 square meters which results in primary energy savings of at least 40% increasing at least two categories in the energy efficiency certificate. |

***Assessment of the investment's implementation***

The milestones and targets set out for the *Superbonus* under the NRRP have so far been achieved: by Q2 – 2023, more than 17.000.000 square metres were retrofitted as set out in the NRRP, and ICA expects that the target of 35.800.000 will not only be achieved by 2025 but also largely exceeded[32]. However, it appears that the ratio between the costs of the *Superbonus* on the Italian public budget and its environmental and climate benefits is negative, as highlighted by the ICA in a recent report[33] examining the implementation of the NRRP.

Furthermore, the contribution of the *Superbonus* to the reduction of GHG emissions from the civil sector appears to be limited to a reduction of about 1% of the sector's emissions compared to what would have occurred without it, according to both MASE's 2022 8th national communication to the United Nations Framework Convention on Climate Change[34] and to the 2023 report published by the *Istituto per la Protezione e la Ricerca Ambientale* on GHG emissions reductions in Italy[35]. As such, even though certain estimates show that the *Superbonus* overall contributed to increasing the Nation's GDP[36], it did not have a significant impact in terms of reduction of GHG emissions from the civil sector. While the two factors (GDP growth and GHG emissions reduction) should have been aligned, the climate impact of the measure was limited by the fact that it allowed the financing of gas boilers, and its requirement of improved energy efficiency category of the retrofitted building was not stringent enough.

The ICA found that, when considering the social benefits of the *Superbonus* (in terms of carbon social costs avoided[37]) as well as the private benefits achieved (in terms of energy savings for

[31] See the Italian Court of Auditors' Report on the implementation of the NRRP, December 2024, p. 167.
[32] Italian Court of Auditors, *Report on the implementation of the NRRP*, December 2024, pp. 159 *et ss.*
[33] Italian Court of Auditors, *Report on the implementation of the NRRP*, December 2024, pp. 167 *et ss.*
[34] MASE, *Italy – Eighth National Communication under the UNFCCC*, December 2022.
[35] Istituto per la Protezione e la Ricerca Ambientale, report no. 384/2023, Italian Greenhouse Gas Emissions: emissions reduction target and scenarios, 2023.
[36] Camera dei Deputati, *Superbonus' economic dimension*, May 2024.
[37] To calculate the carbon social cost avoided by the *Superbonus* measure, ICA used a carbon price of €197/ton$CO_2$.

families), the return on investment for this measure occurs in 2057[38], i.e., 35 years after the investment was made. This period is longer than the lifespan of most of the equipment financed through the *Superbonus* (such as heat pumps, boilers, solar panels…)[39], making the cost-benefit ratio negative.

In this light, and despite the measure's positive impact on the Italian GDP, the high costs of the *Superbonus* do not appear justified when looking at its limited impact on climate, and the fact that climate and social benefits are not sufficient to compensate for the costs within a reasonable timeframe. However, this variates significantly depending on the specific intervention: in this respect, the most efficient interventions (i.e., those allowing for a quicker return on investments, such as heat pumps, district heating, hybrid heating systems and biomass plants) are also those that received the lowest amount of funding; conversely, expensive interventions such as vertical walls and fixtures have higher-than-average return on investment periods[40].

It is also worth mentioning that the European Court of Auditors ("**ECA**") pointed to the *Superbonus* as an obstacle, in some specific instances, to programmes that would favour a more significant retrofitting of buildings. In its Special Report on "*Smart cities – Tangible solutions, but fragmentation challenges their wider approach*"[41], which assesses the effects of the Horizon 2020 Lighthouse programme in helping European cities become smarter and more sustainable, the ECA identifies the lack of coordination with additional national public and private funding as one of the main challenges encountered in the implementation of the programme. In this respect, the ECA explicitly mentions the *Superbonus* as an example of a challenge faced by cities in implementing Lighthouse projects, when referring to the efforts made by the city of Trento in retrofitting three social housing buildings (comprising 156 apartments). According to the ECA, these efforts were hampered by the entry into force of the *Superbonus*, which provided higher incentives for more conservative retrofitting solutions than those eligible for incentives under the Lighthouse programme.

The *Superbonus* was activated in 2020 and then dismantled in 2023, with a gradual decrease in the percentage of tax reduction granted to certain categories of beneficiaries and the removal of the right to transfer the tax credit[42]. The latter led to the removal of the mechanism that compensated for the regressive nature of the scheme[43].

Overall, the measure contained some positive elements that should be replicated (for instance, a scheme that allowed even vulnerable households to access the incentive), but it did not represent a comprehensive strategy for national energy efficiency and lacked a long-term perspective, especially with regard to the balance between costs to the Italian State and environmental and climate benefits.

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[38] When considering only the social benefits of the *Superbonus* (and not the benefits for private households for energy savings), the year of return on investment is 2083.

[39] ICA highlights how, even when considering the economic benefits, especially in the construction sector, resulting from the *Superbonus*, the year of return on investment would be 2046, 24 years after the investment was made and still a period of time longer than the average lifespan of the equipment financed with the scheme.

[40] Italian Court of Auditors, *Report on the implementation of the NRRP*, December 2024, pp. 178-179.

[41] European Court of Auditors, Special report 24/2023: *Smart cities – Tangible solutions, but fragmentation challenges their wider adoption*, October 2023.

[42] Italian Law Decree no. 39/2024.

[43] See ECCO, *The Integrated National Energy and Climate Plan – ECCO's scoreboard*, July 2024.

***Assessment of the investment with regard to principles and assessment criteria***

| PRINCIPLE/ CRITERION | DULY FULFILLED BY THE MEASURE |
|---|---|
| ***Additionality*** | **YES**<br>The funds allocated to the *Superbonus* helped finance an innovative measure insofar as it allowed even the most vulnerable households to access the incentive, through the possibility to transfer the tax credit. |
| ***DNSH*** | **NO**<br>Gas boilers could still be installed with *Superbonus*, therefore we consider that the measure was not completely compliant with the principle. |
| ***Relevance*** | **PARTIALLY**<br>The impact of the *Superbonus* in terms of GHG emission reductions was very limited, and as such its actual contribution to achieving the green transition pillar was not particularly relevant. Nevertheless, the scheme included some positive elements, such as the non-regressive character of the initial scheme. |
| ***Effectiveness*** | **PARTIALLY**<br>Even though the *Superbonus* measure achieved – and will likely achieve – the milestones planned with regard to the number of square metres to be retrofitted, its lasting impact appears limited by the fact that the scheme was interrupted after only 3 years from its implementation. A new scheme will have to be set up to continue the retrofitting of Italian buildings. |
| ***Efficiency*** | **NO**<br>The high costs of the *Superbonus* investment were not justified by a cost-benefit analysis, especially when taking into account environmental and climate benefits. |
| ***Coherence*** | **PARTIALLY**<br>While the *Superbonus* was consistent with energy efficiency objectives, it did not duly contribute to achieving national climate objectives. |

### *2.2.2 TRANSITION 5.0*

***Overview of the investment***

Among the investments introduced under Mission 7 of the NRRP (added in 2023 to integrate REPowerEU in the Plan), there is investment no. 15, known as *Transizione 5.0*, which supports companies in becoming more sustainable and digitalised by granting them a tax credit commensurate to their investments in (i) digital assets, (ii) assets for self-production and self-consumption from renewable sources (except for biomass), and (iii) training their staff in skills for the green transition.

Possible beneficiaries of *Transizione 5.0* funds are companies and organisations based in Italy, of any legal form, in any economic sector, of any size and under any business income taxation regime; they must comply with workplace safety regulations and have fulfilled their social security and welfare obligations. Investments that are eligible for these funds include new assets that are instrumental to business operations and interconnected to the company's production management system. Eligible investments must result in a reduction in energy consumption of at least 3% or in energy savings in the targeted process of at least 5% compared to previous consumption. *Ex ante* certification of compliance with eligibility criteria by an independent evaluator and *ex post* certification of the actual realisation of the investments is required.

The milestones and targets for this investment are the following:

| MILESTONE/TARGET | TIMELINE | DESCRIPTION |
|---|---|---|
| Entry into force of the legal act establishing the criteria of eligible interventions. | Q1 – 2024 | The legal act shall make Transition 5.0 tax credits available to potential recipients, determining the eligibility criteria, also in terms of minimum energy savings and the maximum expenditure cap for the measure. |
| Granting of RRF resources. | Q2 – 2026 | Notification of the granting of all RRF resources earmarked for this investment. |
| 0.4 Mtoe of energy savings in final energy consumption in the period 2024-2026. | Q2 – 2026 | The investment shall generate 0.4 Mtoe of energy savings in final energy consumption in the period 2024-2026. |

The first milestone was achieved in 2024 with the entry into force of Law Decree no. 19 dated 2 March 2024, as amended by Budget Law for 2025[44], and subsequent implementing acts[45], which set out eligibility and allocation rules for investments made between 1 January 2024 and 31 December 2025. These include: (i) eligibility criteria, (ii) investments not covered by *Transizione 5.0* due to their non-compliance with the DNSH principle (including investments in favour of activities covered under the EU Emission Trading Scheme ("**ETS**") producing $CO_2$ emissions above relevant benchmarks), (iii) investment caps and (iv) procedures to request and access the funds.

***Assessment of the implementation of the investment***

The *Transizione 5.0* investment received half of the NRRP funds allocated to Mission 7, specifically €6.3bln out of €11.2bln granted to the entire mission, of which €6.237bln are available in the form of tax credits (the remaining amount is destined to the management of the funds). These resources must be allocated by Q2 of 2026: however, based on official data published by GSE[46], only approximately €500mln have been requested for ongoing *Transizione 5.0* projects, **representing barely 8% of the total amount available**. In addition to the requested €500mln, only €13mln have been effectively allocated to completed projects.

In light of the limited participation in this measure, the framework regulating it was amended and simplified in December 2024 by the Budget Law for 2025, to encourage Italian enterprises to apply for the funds, with further amendments expected in the future[47] (including the possible reallocation of funds in favour of different measures). Despite these changes, accessing *Transizione 5.0* funds remains a challenge due to a range of reasons, including:

- The delayed adoption of the implementing regulation and the delayed operation of the online platform to access the funds (which only became operational in September 2024) have led to the funds being available only at the end of 2024. This has led to the measure having a very short lifespan, making it a less attractive financing option to enterprises than most traditional ones;

[44] Law no. 207 dated 30 December 2024.
[45] In particular, Ministerial Decree dated 24 July 2024.
[46] See GSE, Available Resources, at https://www.gse.it/servizi-per-te/attuazione-misure-pnrr/transizione-5-0, last opened in March 2025.
[47] Sixth report on the implementation of the NRRP – Part II, published by the Minister for European affairs, NRRP and cohesion policies on 27th March 2025, at p. 196

- The uncertainty linked to the several changes made to the framework applicable to *Transizione 5.0* resulted in many potential beneficiaries waiting for the final (and simpler) regulation;
- Above all, small and medium enterprises ("**SMEs**") have highlighted[48] the complexity of the certification process, especially of the *ex-ante* assessment of the eligibility criteria, as a reason for not requesting the funds. According to SMEs, this certification process involves several different experts and generates significant preliminary costs with no certainty of receiving the funds;
- Finally, no specific technical support for SMEs has been set up nor envisaged in the framework regulating the implementation of *Transizione 5.0*, leaving them in a state of uncertainty and with limited knowledge of the overall functioning of the measure.

Informal discussions with relevant stakeholders also highlighted how the criterion linked to automatic non-compliance with the DNSH principle of certain investments in favour of activities covered under the EU ETS lead to the systematic exclusion of most enterprises in sectors such as steel and cement, which could have instead benefitted from the measure to (at least partially) decarbonise their energy consumption.

***Assessment of the investment with regard to principles and assessment criteria***

| PRINCIPLE/ CRITERION | DULY FULFILLED BY THE MEASURE |
|---|---|
| ***Additionality*** | **YES** |
| ***DNSH*** | **PARTIALLY**<br>A strict application of the DNSH principle, especially to activities in industrial sectors covered by the EU ETS regulation, led to the automatic exclusion of several potential beneficiaries of the *Transizione 5.0* investment. |
| ***Relevance*** | **YES** |
| ***Effectiveness*** | **NO**<br>Due to its delayed implementation and complex procedures of access, the *Transizione 5.0* has not been able to duly support the Italian industrial sector in transitioning towards decarbonisation and electrification. Most of the funds allocated to this measure will likely not be disbursed within the scheduled deadlines and might be redirected towards other measures, as such significantly limiting the lasting impact of the measure. |
| ***Efficiency*** | **YES** |
| ***Coherence*** | **YES** |

### *2.2.3 FINANCING INFRASTRUCTURAL INVESTMENTS VERSUS FINANCING LOCAL PROJECTS: A COMPARISON*

***Overview of the two investments and their progress***

This section compares the nature, timeline and status of implementation of the two investments set out in Mission 2 of the NRRP, specifically (i) the promotion of renewable energy sources for energy communities and jointly acting renewables self-consumers, and (ii) the strengthening of smart electricity grids.

[48] Ole 24Ore, *Procedure complesse e tempi stretti»: le imprese rinunciano al Piano 5.0*, March 2025.

| ITEM | RENEWABLE ENERGY COMMUNITIES | | SMART GRIDS | |
|---|---|---|---|---|
| **Investment** | | | | |
| *Description of the Investment* | Investment for the promotion of renewable energy sources for energy communities and jointly acting renewables self-consumers, aiming to install 1.730MW of new power capacity for either collective self-consumption or renewable energy communities, especially in municipalities with populations between 5.000 inhabitants.<br>This measure includes financial support for up to 40% of the costs in the form of grants. | | Investment for the strengthening of smart electricity grids through the reinforcement of the distribution network (including the urban distribution network) and the improvement of the network's management. | |
| **Timeline of implementation** | | | | |
| *Milestones, targets and deadlines* | Award of all public contracts for the allocation of the grants for the implementation of the interventions for energy communities. | Q4 - 2025 | Increase the network capacity for the distribution of renewable energies by at least 1 000 MW. | Q4 - 2024 |
| | Installation of new power generation capacity of at least 1.730MW from renewable energy sources in energy communities and jointly acting renewables self-consumers located in municipalities of less than 5.000 inhabitants. | Q2 - 2026 | Increase the network capacity for the distribution of renewable energies by at least 4 000 MW. | Q2 - 2026 |
| | | | Electrification of energy consumption reaching at least 1.500.000 inhabitants. | Q2 - 2026 |
| *In time* | TBD.<br>The deadline set in the call for tenders to award public contracts for the allocation of grants is set on 31 March 2025. | | Yes. | |
| *Final deadline* | 30 June 2026. | | 30 June 2026. | |
| **Status of implementation[49]** | | | | |
| *Funds destined to the measure* | €2.2bln | | €3.6bln[50] | |
| *Funds effectively spent to date* | €0 | | €1.1bln | |
| *Projects selected* | 0[51] | | 22[52] | |
| *Difficulties and advantages of implementation* | | | The smart grid investment proved to be a successful investment, reinforcing urban distribution networks and helping prepare | |

[49] The data referred in this section of the table is available at openpnrr.it

[50] In addition to the initial allocation of €3.6bln, Mission 7 allocated additional €450mln to the reinforcement of the distribution network.

[51] According to GSE's data, (i) 430 access requests for funds from investment 1.2 have been uploaded on the GSE platform, for a total amount of 60MW, and (ii) 630 requests to access the grants available for municipalities under 5.000 inhabitants have also been presented to GSE.

[52] The 2024 ICA's report on the implementation of the NRRP highlights that, while 100% of the design phase has been achieved, only 7.2% of the implementation phase has been realised so far.

| | | |
|---|---|---|
| | The absence of projects selected for this investment is evidence of difficulties in its realisation, including[53]:<br>• **Delays** in adopting implementing acts regulating the award of the available funds: the relevant decrees only entered into force in 2024, with the deadline to present a request for funds expiring in March 2025;<br>• **Complexities** linked to the documents and data required to access the funds, and lack of support and information on the procedure;<br>  • The expected **economic return** from this investment is estimated around 3.6% of the costs of energy bills;<br>• The possibility of accessing the funds is **limited to municipalities with fewer than 5.000 inhabitants**, of which there are just over 5.000 across the entire Italian territory, significantly limiting the possible beneficiaries of the measure. | the network for the transition to climate neutrality. Successful features of the investment included:<br>• **Beneficiaries** of this investment are distribution and transmission operators working within a **highly regulated market, disposing of a significant spending capacity** for investments on the network;<br>• Interventions on the distribution network were **already needed and undeferrable**; as such, NRRP funds discharged operators from bearing the entirety of the costs and limited the impacts of reflecting the costs on final consumers through tariffs. |

***General considerations***

As highlighted in the table above, although the two investments were part of the same mission and were approved at the same time, with similar deadlines, their implementation has been progressing at a very different pace. While funds for smart grids have been partially spent, the projects have been selected, and the design phase has been completed, for renewable energy communities, no projects have been selected yet, and the entire amount of funds remains to be distributed, just one year before the final deadline.

According to ICA's 2024 report on the status of NRRP implementation, one of the reasons why smart grid investments proved successful is that these investments were already needed and undeferrable in Italy, with European funds supporting them, thereby avoiding additional costs on final consumers and lowering the costs for operators. This was not the case for investments in renewable energy communities, which represent an innovative approach for electricity access in small communities and require the design and conception of new projects. Furthermore, renewable energy communities implicate a significant organisation from project proponents, whereas smart grid projects are primarily led by grid operators[54].

These differences showcase how it is more straightforward to effectively allocate funds for projects that are already planned in more traditional investment sectors such as infrastructure, where the beneficiaries are well-established stakeholders with spending capacity. However, these sectors are also those most likely to receive national public and private funds: European funds, on the other hand, should be destined to decarbonisation sectors, projects and beneficiaries that are riskier, more innovative and traditionally receive less financial support.

[53] Politecnico di Milano, *Electricity Market Report 2024*, November 2024.

[54] See the Italian Court of Auditors' Report on the implementation of the NRRP, December 2024, pp. 198-210.

Moreover, when allocating European funds to innovative projects, these funds should be accompanied by sufficient information, simplified access procedures, technical support and adequate timelines in order to create a supportive framework and ensure effective access to funds, also for those proponents of projects that are smaller entities with a limited spending capacity.

***Assessment of the investment with regard to principles and assessment criteria***

| PRINCIPLE/ CRITERION | DULY FULFILLED BY THE MEASURE RENEWABLE ENERGY COMMUNITIES | DULY FULFILLED BY THE MEASURE SMART GRIDS |
|---|---|---|
| ***Additionality*** | **YES** | **PARTIALLY**<br>The funds allocated to this measure contributed to infrastructural projects that were undeferrable in a sector where national public and private investments tend to be recurring. |
| ***DNSH*** | **YES** | **PARTIALLY** |
| ***Relevance*** | **PARTIALLY**<br>The limited number of beneficiaries that could access this investment since its conception will lead to a limited contribution to the green transition pillar. | **YES** |
| ***Effectiveness*** | **PARTIALLY**<br>The limited number of potential beneficiaries of this investment limits its lasting impact. | **YES** |
| ***Efficiency*** | **PARTIALLY**<br>The expected economic return for beneficiaries of this investment has been calculated as very low (3.6%). | **YES** |
| ***Coherence*** | **YES** | **YES** |

# 3 CRITICAL ISSUES AND RECOMMENDATIONS FOR THE FUTURE

## 3.1 CRITICAL ISSUES

According to the most recent available data[55], Italy has so far spent only €63.93bln out of the €194.5bln allocated to it under the RRF and out of the €122.2bln already earmarked by the EU Commission. This amount accounts for barely 35.6% of the total RRF funds destined for Italy (including REPowerEU) and 51% of the amount already earmarked. Furthermore, out of 270.406 projects, 164.566 have been completed to date. This highlights a delay in the scheduled use of the RRF funds and confirms the difficulties of the Italian government in spending the allocated European funds[56] and ensuring their effective absorption by smaller-scale projects. To date, more than €130bln[57] remain to be spent before the RRF deadline at the end of June 2026.

[55] Sixth report on the implementation of the NRRP – Part I, published by the Minister for European affairs, NRRP and cohesion policies on 27 March 2025.

[56] With regard to spending European funds at Italian national level, see ECCO's recent publication *EU ETS auctions in Italy: transparency and traceability of revenues*, February 2025.

[57] According to data presented at the public debate held at the *Camera dei Deputati* on 17 March 2025, whose public transcript can be found at https://documenti.camera.it/leg19/resoconti/assemblea/html/sed0448/stenografico.pdf

A key element contributing to the difficulties in the absorption of RRF funds is the **insufficient cash flow of small potential beneficiaries to pre-finance the projects**. To avoid this obstacle and encourage effective spending of RRF funds, the Italian government recently introduced a provision allowing for up to 90% of the costs of a project financed by the NRRP to be allocated upfront to ensure sufficient cash flow from the start.[58]

Further difficulties related to **capacity building, understaffing and bureaucracy** have been identified by **local and regional authorities** as significant reasons for the delays and obstacles to the effective use of the funds (although it should be taken into account that there may be an underestimation of project completion due to the slowness of the reporting process). A lack of sufficient resources, technical support and the capacities of public administration has emerged as a recurring issue in implementing NRRP measures – not only with regard to the effective spending of RRF funds but also concerning the preparation of call for tenders, the determination of eligibility criteria, the award of tenders to selected projects and the actual allocation of funds. This was the case, as seen above, in the creation of renewable energy communities.
Furthermore, **insufficient capacities within public administration** have also been identified as one of the reasons slowing a smooth transition to new regulatory frameworks: for instance, one of the main obstacles identified in the application of the new TUR is the risk of longer procedures and higher costs for proponents of renewable projects due to the difficulties encountered by local authorities in applying the new regime without any *ad hoc* technical support or additional resources.

Another commonly cited reason for the delay in spending RRF funds is the **complexity**, on the side of possible **beneficiaries**, of the **procedures** that must be followed to access them. This has been the case with *Transizione 5.0* funds, where complex assessment procedures and strict eligibility criteria have discouraged several companies, especially SMEs, from applying for financing. The complexity of procedures has also been cited as one of the main obstacles in allocating funds for renewable energy communities. It is worth noting that complex procedures seem to particularly affect smaller potential beneficiaries (whether SMEs or small municipalities), possibly hindering efforts towards a just transition.

In addition to the obstacles related to the spending of RRF funds, the Italian NRRP experience has presented other critical issues. Some of these can be traced back to an unclear and at times inconsistent application of the principles and criteria set out in the RRF Regulation, which were used to assess the Plan in the first place.

### *3.1.1 HORIZONTAL PRINCIPLES: ADDITIONALITY AND DNSH*

With regard to **additionality**, our analysis has shown that RRF funds in Italy were most effectively spent on important projects that were already planned or in any event undeferrable (as in the case of investments in smart grids). This raises a question about how the additionality horizontal principle should be implemented at European level; whether it should be strictly interpreted to mean that EU funds should only contribute to projects that would not otherwise happen, or whether a more nuanced interpretation could also be acceptable (while also avoiding crowding out private investments).

[58] Article 18-*quinquies* of law Decree no. 113/2024 dated 9 August 2024 and Ministerial Decree dated 6 December 2024.

As for the **DNSH** principle, the Italian experience with the NRRP has shown mixed results in its application. On one hand, the principle has not been applied strictly enough in some instances. This was the case with the *Superbonus*, which allowed gas boilers to be funded through RRF funds, even though they do not comply with key elements of the DNSH principle. On the other hand, the standardised application of the principle can lead to the exclusion of projects from the outset that represent an intermediate but necessary step towards the green transition, especially in some industrial sectors; this was the case with the exclusion from *Transizione 5.0* of certain ETS-covered activities that generate expected greenhouse gas emissions above relevant benchmarks.

### *3.1.2 ASSESSMENT CRITERIA: RELEVANCE, EFFECTIVENESS, EFFICIENCY AND COHERENCE*

First of all, with regard to the **relevance** of measures funded through the RRF in achieving climate objectives, our analysis demonstrates that many of the adopted measures made insufficient progress towards the green transition, with only a limited contribution to its advancement. The NRRP could have been a key moment to truly drive the decarbonisation of the Italian economy in a comprehensive way, but instead, many measures lacked a long-term vision. This was the case with the EHS "roadmap" set out in the NECP, which fails to set out a strategy for reforming EHS; with the *Superbonus*, which kept being revised up to its final deletion without possibilities for correcting the measure and thus resulting in a non-significant effect in terms of emissions reduction (a 1% reduction in GHG emissions compared to prior levels) despite substantial costs); with measures for renewable energy communities, which were directed at a limited number of participants; with *Transizione 5.0*, whose short lifespan is one of the reasons why it is not preferred as a financing option.

In terms of **effectiveness**, the lasting impact of the Italian NRRP is also difficult to assess due to a **lack of consistent monitoring and reporting on the climate impact of individual measures**. This is also evidenced as a broader issue of the allocation of RRF funds by the ECA in its Special Report no. 14/2024 dated 11 September 2024[59]. ECA highlights how discrepancies in different methodologies used by the Commission to evaluate the climate impact of NRRPs, alongside the absence of an obligation to report the actual climate impact of individual implemented projects, generates an approximate tracking of the climate impact of the RRF (potentially overestimating its positive effects) and raises doubts about the achievement of the RRF's climate and environmental objectives.

Concerns regarding the deployment of monitoring at the national level were also recently raised during a parliamentary debate on the implementation of the NRRP, held on 17 March 2025 at the Italian *Camera dei Deputati*[60]. On this occasion, it was highlighted how, even though the NRRP governance foresees a monitoring system both at the EU and Italian level, the mid-term evaluation of the RRF was only carried out at European level. At the national level, although the government is required to present a report to Parliament on the implementation of the Plan every six months, almost a year passed between the publication of the two most recent reports[61].

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[59] European Court of Auditors, *Special report no. 14/2024: Green transition – Unclear contribution from the Recovery and Resilience Facility*, September 2024.

[60] The transcript of the debate is available at https://documenti.camera.it/leg19/resoconti/assemblea/html/sed0448/stenografico.pdf

[61] The *Fifth Report to the Parliament on the NRRP* is dated 30 July 2024, while the *Sixth report on the implementation of the NRRP* was published by the Minister for European affairs, NRRP and cohesion policies on 27 March 2025..

Regarding the **efficiency** of fund expenditure, as evidenced by the cost-benefit analysis of the *Superbonus* set in the 2024 ICA's report, **the NRRP did not systematically carry out a prior evaluation of whether financed measures would be beneficial**, especially from a climate and environmental standpoint. This was also the result of the absence, in the RRF Regulation, of a requirement to publicly assess the contribution of each proposed investment/reform to the achievement of European decarbonisation goals, leading to a limited effect in terms of emission reductions for several measures.

Finally, with regard to the **coherence** of the NRRP, the case studies analysed above show how some measures—even if consistent with other measures of the Plan—have at times been adopted **in isolation, without considering the pre-existing regulatory context or other national and European plans**[62]. For instance, the TUR does not sufficiently coordinate provisions on acceleration areas with existing legislation on suitable areas when reforming permitting procedures for renewables; the *Superbonus* was not sustainably integrated into the government's medium and long-term budget planning; the EHS reform envisaged in the NECP does not specify the methodologies for identifying inefficient EHS to be phased out first, nor does it consistently set out a roadmap to phase-out the entirety of the EHS listed in the catalogue. These inconsistencies and lack of integration between different measures serve to further **complicate the legal and regulatory framework and risk hindering the construction of a coherent path to decarbonise and electrify the Italian economy**. A more consistent and coherent approach could have positioned the NECP as an investment strategy for climate in Member States, financed through NRRP funds; instead, to date, there has been no assessment of how NRRP funds have supported the NECP's implementation.

## 3.2 RECOMMENDATIONS

The allocation of common resources through the RRF is based on a well-defined strategy, which involves the review and approval of national reforms and investments, each individually assessed by the European Commission for their effectiveness and alignment with EU objectives. This approach to public fund allocation has marked a pivotal moment and a turning point in the way European funds are assigned and distributed, and constitutes an essential model for future financing mechanisms, including the funds under the next MFF for the 2028-2034 period.

This has been recognised by both the EU Commission in a recent communication about the MFF[63] as well as by the EU Parliament in a draft report on the EU long-term budget[64]. The latter specifically points to the RRF as a starting point to inform the delivery of Union spending, but warns of the necessity to "*correct the RRF's fundamental flaws*"[65]. The RRF and national plans experience appears all the more relevant to the discussion on the next MFF given that, according to a recent leak relating to the possible structure of the 2028-2034 MFF, it appears that multiple programmes

[62] As mentioned in section 1.4 above, in 2021 ECCO found that there was no coherence between certain NRRP and NECP targets, nor between the NRRP and the 2050 national Long Term Strategy despite the fact that consistency between the NRRP and the NECP was an eligibility requirement provided for in the RRF Regulation, highlighting a higher level of lack of coherence between national instruments related to climate action. See also footnote no. 19.

[63] EU Commission, *The road to the next multiannual financial framework*, COM(2025) 46 final, February 2025.

[64] EU Parliament, *Draft report on a revamped long-term budget for the Union in a changing world*, 2024/2054(INI)

[65] *Ibidem*, para. 75.

that are currently separated (such as Cohesion Funds, Just Transition Fund, Social Climate Fund, LIFE and others) will all be merged into one national plan per Member State.

For this reason, and with the aim to avoid some of the shortcomings encountered in the implementation of the NRRP, future allocation of European funds could take into account the following considerations, to be implemented both at the European and national level, with the aim of maximising the positive climate and social impacts of the use of these funds.

### *3.2.1 EUROPEAN DIMENSION*

***General considerations***

If the next MFF aims to play a role in contributing to the achievement of European decarbonisation objectives, the following considerations must be taken into account. First of all, from a **quantitative** perspective, it must be highlighted that EU funds currently cover a significant portion of public climate investments[66] across several Member States. For this reason, faced with a situation where national climate spending is at a concrete risk of decreasing (due to stricter fiscal rules and a likely increase in defence spending), it is crucial to preserve significant EU funds earmarked for climate.

Secondly, with regard to the **quality** of climate spending included in the next MFF budget, it will be essential to ensure accurate tracking of climate-related investments across MFF programmes and Member States, moving from the performance-based approach adopted in the RRF to an impact-based one. To this end, it could be proposed in the next MFF that Member States be required to prepare an *ex-ante* assessment of where climate funding is most needed, thereby facilitating the monitoring and evaluation of actual flows of EU funds in favour of climate.

Furthermore, effective **absorption and spending** of EU funds must be improved[67] within the next MFF to avoid some of the obstacles encountered with other EU funds (RRF, ETS). In this regard, the next MFF could envisage the possibility of the **pre-allocation of funds** in favour of small beneficiaries that would otherwise struggle to ensure the necessary cash flow to pre-finance the costs.

Finally, in order to facilitate the **allocation and management of EU funds by local authorities and access to EU funds by beneficiaries**, harmonisation of "*rules and horizontal requirements (e.g., environmental requirements) across funding programmes and EU financial instruments*"[68] should be established.

***Improving consistency and enforcement of horizontal principles and assessment criteria***

This analysis has shown how the application, under the RRF Regulation, of horizontal principles and assessment criteria was at times ineffective in contributing to achieving climate objectives. Therefore, we have outlined some ideas on how they could be better designed and enforced in order to ensure the alignment of EU spending with decarbonisation objectives.

**Additionality**: European funds must truly contribute to accelerating investments in areas where traditional public and private investments are often insufficient, responding to the **criterion of**

[66] See Agora Energiewende, *Investing in the Green Deal*, September 2024.
[67] See also ECA's special report no. 13/2024, *Absorption of funds from the Recovery and Resilience Facility – Progressing with delays and risks remain regarding the completion of measures and therefore the achievement of RRF objectives*, September 2024.
[68] Mario Draghi, *The future of European competitiveness*, 2024, p. 295.

**effective additionality** and avoiding the crowding out of private investments. European funds must not **replace national public spending** or **overlap with other European funds for the same projects.** Instead, they must contribute to **supporting public investment in those sectors of risk and innovation for decarbonisation** where funding is most needed. The financial context of each Member State differs, and for this reason, the additionality principle could be adapted to different national situations – either by enabling the investment to happen, allowing it to happen much faster than it would otherwise, or improving the design/impact[69].

**DNSH**: The horizontal application of the DNSH principle across EU funds represents **an important step to ensure that EU funds are not used for environmentally harmful and unsustainable activities**. However, its implementation has at times been insufficient in ruling out harmful activities, and at times too strict, excluding activities and industries that require intermediate steps to decarbonise[70].

For this reason, as also evidenced by ECA[71], **further guidelines and better monitoring** by the EU Commission are needed to ensure a consistent and harmonised operationalisation of the DNSH principle. Clearer guidelines would ensure a uniform interpretation of the principle by national administrations, which conduct DNSH assessments for individual measures, and might reduce managing authorities and beneficiaries' administrative burden in ensuring compliance with the principle.

Furthermore, while the EU Commission has so far often provided a programme-based guidance on the operationalisation of the DNSH principle, **an approach relying on sector-specific guidance** on what qualifies as harmful could be envisaged, possibly excluding projects with a smaller impact (under a certain threshold) from ensuring DNSH[72].

**Relevance**: As per the declared intentions of the Commission under its previous and current mandates, mainstreaming climate objectives within the overall policy framework of the EU is a priority. In that respect, **effectively aligning spending of European funds to climate and decarbonisation objectives is a necessary prerequisite**.

To this end, a systematic assessment of the contribution of measures and projects financed through EU funds against this backdrop should be foreseen. The overarching climate objectives of the EU need to be prioritised, together with competitiveness and security of the continent, and any fund allocated should effectively tackle all three consistently. As emphasised in several communications launched at the beginning of this mandate[73], Europe's reliance on imported fossil fuels causes

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[69] On the possible interpretations of the additionality principle, see *Multilateral Development Banks' harmonized framework for additionality in private sector operations*, 2018.

[70] In this respect, a sector-specific approach could allow for the financing of solutions with the best available level of environmental and climate performance in those sectors where intermediate steps towards decarbonization are needed but there are no technologically and economically feasible alternatives available – as long as these do not lead to locking-in environmentally and climate harmful effects in the medium and long term (as indicated in the EU Commission's notice *Technical guidance on the application of "do no significant harm" under the Recovery and Resilience Facility Regulation*, C/2023/111, October 2023. See also EU Commission, Technical Guidance on applying the "do no significant harm" principle under the Social Climate Fund Regulation, C(2025) 880 final, 5 March 2025, at section 1.3.4).

[71] ECA's Special Report no. 21/2022, The Commission's assessment of national recovery and resilience plans Overall appropriate but implementation risks remain, 2022.

[72] See Joint Statement on *Creating a simpler and more focused EU budget – Operationalising the "Do No Significant Harm" principle in the next MFF*.

[73] EU Commission, *Action Plan for Affordable Energy*, , COM(2025) 79 final, 26 February 2025.

energy price volatility and higher supply costs, while making the EU more vulnerable to external pressure and global market uncertainty. In that respect, the **exclusion** of the allocation of any EU funding **to new fossil fuel related infrastructure** would respond to climate, security and competitiveness goals.

**Effectiveness**: We found that several measure (such as the *Superbonus*, *Transizione 5.0*, strengthening of renewable energy communities), did not ensure an effective impact – especially from a climate perspective – either due to difficulties in their actual implementation or faulty monitoring during the implementation phase of projects. For this reason, the **monitoring** of EU funds effectiveness in achieving climate targets must be enhanced by means of strengthened EU-level reporting and oversight mechanisms; to this end, existing monitoring systems (such as progress reports for NECPs) could be simplified and streamlined, for instance by means of a single, harmonised platform. Beyond an initial, overall evaluation of national plans (as was the case with the NRRP process), individual measures financed through EU funds should undergo **systematic monitoring both during their implementation phase and after their completion – with the goal of verifying that they are in line with the pursuit of decarbonisation objectives**. Any such monitoring should be harmonised across EU funds and in an easily accessible form, to avoid increasing administrative burden on both local authorities and beneficiaries

**Efficiency**: To ensure cost-efficiency of financed measures, a mandatory cost-benefit analysis should be required for every measure financed with EU funds, taking into account expected **environmental and social return** (for instance, the carbon social costs of measures). Moreover, the alignment of **fiscal and climate policy recommendations** would ensure consistency in financing for the energy transition, avoiding measures that are too expensive for public budgets that contribute too little to climate targets[74].

**Coherence**: In addition to coherence of measures envisaged within single instruments (as was the case with the internal coherence of NRRP's measures), access to funds by Member States should be conditional upon **strict consistency with key policy frameworks**, ensuring coherence between planned measures and (i) the targets set in each country's **NECPs**; (ii) **national financial planning over the short and medium-term**, including in light of the revised Stability and Growth Pact; and (iii) the **existing legal and regulatory framework**, avoiding overlapping subsidy schemes that could hinder the allocation of funds by competent authorities and access to funds by possible beneficiaries. Guaranteeing a monitoring framework for the NECP based on the NRRP conditionalities and assessment criteria could ensure consistency between the different Plans and facilitate the drafting of *ex post* evaluations of the measures included in both of them.

Effective compliance, from a climate perspective, with the principles and criteria listed above should not only be assessed *ex ante* and from a global perspective but should also be monitored in the implementation phase of individual measures. To this end, the European Commission could include regular climate and energy mentions in **CSRs under the European Semester, to ensure that national spending of EU funds remains aligned with climate targets and policies**. Furthermore, more specific and enforceable CSRs could connect climate and energy targets to

[74] As mentioned above, this was the case with tax credit schemes for energy efficiency – which according to ECCO's estimates only led to an average reduction of 1% (compared to what would have been achieved without interventions) of emissions from the building sector. See ECCO, *The National Energy and Climate Plan – Sectoral Scenarios: Building Sector*, 2024.

recommendations relating to public spending, ensuring the alignment of climate policies with investment strategies, including in preparation for national budgets[75].

***Specific considerations for climate measures***

With regard to climate-related measures and projects, these should be **subject to a mandatory climate impact assessment based on a solid scientific and public methodology**, in order to evaluate their expected reduction of GHG emissions, in addition to their contribution to pursuing national and European targets.

Once such climate impact is established, the distribution of EU funds should prioritise measures that have the highest emission reduction potential (or ancillary reforms that facilitate the implementation of such measures), ensuring a **positive cost-benefit ratio between the costs of the measures and climate and social benefits** (in particular, the avoided carbon social costs – i.e., the costs linked to negative environmental and health consequences resulting from GHG emissions – and any savings for private consumers). This would allow governments to avoid environmentally ineffective and fiscally unsustainable measures such as the *Superbonus*, whose cost-environmental and social benefit analysis was particularly negative.

In addition to measuring GHG reductions, climate measures benefiting from European funds should always be subject to an impact assessment with respect to **social impacts**, to ensure consistency with the objectives of a **just transition**. In particular, measures financed by European funds should take into account the **different needs of various social categories** in the context of the transition and be adapted and proportional to the social group targeted by each measure. This could result in measures providing direct income support and grants for the most vulnerable groups, while for higher income groups, support measures could take the form of selective demand incentives in favour of green technologies and solutions.

### *3.2.2 NATIONAL DIMENSION*

At the national level, it is crucial to ensure the development of **capacities within the public administration**, especially local authorities, to ensure that it can effectively and correctly manage projects (especially administering calls for tenders and ensuring the realisation of projects) and the monitoring of measures funded through European funds. In this context, it is worth highlighting the role that a multilevel stakeholder engagement could have played in ensuring coherent and efficient public spending. As early as 2023, it could be observed that many administrations operated a trade-off between ensuring stakeholders' participation and the necessity of spending resources quickly[76]. Often, centralisation and top-down interventions focused mainly on large municipalities were prioritised over a participatory process and the peripheral territories.

The case studies analysed above have highlighted how several measures, such as the *Transizione 5.0* and renewable energy communities, are currently not duly implemented, and the available funds not effectively allocated, due to complex procedures in accessing the funds. This represents an obstacle both for the competent authorities (often local ones) and for the potential beneficiaries of the measure. Member States should grant sufficient technical support, resources and capacities

[75] See also E3G, *Cash for which reforms - Improving climate and energy policy coordination through the next EU budget*, March 2025.
[76] ECCO, *Strategy for public participation and multi-level dialogue in the Integrated National Energy and Climate Plan (NECP)*, June 2023.

to the public administration to manage the funds and ensure that clear information and simple procedures are set up to access the funds. In this respect, the next MFF could include operational expenditures to address absorption issues and reinforce local authorities and peripheral administration.

THE ITALIAN CLIMATE CHANGE THINK TANK

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Publication date:
May 21, 2025