

4. NRRP—Italy’s Strategic Reform and Investment Programme

Sustaining an Ecological Transition

*Giovanni Barbieri, Floriana Cerniglia, Giuseppe F. Gori,
and Patrizia Lattarulo*

Introduction

The intention of this chapter is to provide an overview of the Italian National Recovery and Resilience Plan (NRRP), and more specifically, the investment intended to ensure an ecological transition. Implementing the NRRP is particularly challenging in the Italian context and transcends the short-term goal of a prompt post-pandemic economic recovery. On the one hand, it entails a profound overhaul of the type and aim of sectoral investments with the objective of supporting a radical technological transformation for the country. On the other hand, it forces a change of pace, through reforms, in the modernisation process of its institutions and the operating procedures of the economic system. Relaunching public investment is at the heart of the decade-long scientific and institutional debates associated with attempts—in Italy—at reforming the normative framework within which public and private actors operate. Considerable effort has been made to delineate a system that can both facilitate the immediate implementation of construction plans in order to foster economic growth in the short run, and ensure completion within a reliable timeframe, thus guaranteeing that the infrastructures also support growth in the medium and long run.

In the past, reform initiatives clashed with the limited availability of resources and the complexities of multi-level public policy. The NRRP’s funds, and related push for reforms, will enable the country to face, in a coordinated and effective manner, one of the main bottlenecks that have dampened Italy’s economic growth for decades. Against this backdrop, the investments planned through the NRRP aim to ensure an ecological transition, which is one of its three main strategic axes along with digitisation/innovation and social inclusion.

Ecological transition touches upon various normatively sensitive issues, involving a plurality of actors, and represents the most substantial aspect of the NRRP in financial terms. Supporting a green economy is a priority for the European Commission, as can be seen from the approach it has required of national systems to tackle their long-term environmental and economic challenges. In fact, the first years of the von der Leyen Commission have been characterised, COVID-19 aside, by a change in European environmental policy, especially with the European Green Deal and heightened activism on legislation which kicked off a notable series of initiatives all centred around making Europe the first continent to become carbon neutral by 2050.

The European Green Deal is supported by Next Generation EU and obliges member states to earmark at least 37% of resources from their NRRPs for measures that contrast climate change, and in addition, to apply the general principle of Do No Significant Harm (DNSH), which stipulates that the overall measures of the NRRPs—even those that are not specifically connected to ecological transition—do not undermine the EU’s environmental goals. The Conte II government began redacting the Italian NRRP in the summer of 2020, it was later finalised by the Draghi government in April 2021, and subsequently approved by Parliament. Note that the investments in the Italian Plan are the largest of all the European countries: €191.5bn plus €30.6bn in direct government funding through its Complimentary Fund.¹

4.1 Public Investment and the NRRP-Italian Public Works Schedule

Given Italy’s protracted recession, public investments have become indispensable for relaunching the economy. The past ten years have been characterised by a deep economic and financial crisis, saddled with public budget constraints aimed at debt consolidation, which resulted in the loss of approximately €200 billion in public investments (Figure 4.1) compared to the trend in the prior decade. In short, the loss is equivalent to about five years’ worth of investments, at the 2008–2009 pre-crisis rate.²

The European funds for the Italian National Recovery and Resilience Plan earmarked for public investment (approximately equivalent to the amount ‘lost’ over the previous ten years) represent a unique opportunity that cannot be missed to bridge the infrastructure gap. However, there exist well-known and worrisome shortcomings—like low administrative capacity of the public sector and the extended

1 The data in this chapter mostly comes from the government’s official website: “Italia Domani, il Piano Nazionale di Ripresa e Resilienza”, <https://italiadomani.gov.it/en/home.html>, which provides a detailed description of the NRRP and the state of implementation through intuitive, constantly updated, fact sheets which monitor the investments made and the reform process. By going to the website, anyone can monitor the information provided on the progress and costs of the various measures and the investments made through the NRRP.

2 A detailed assessment of the fall in public investment in the decade from 2008 to 2018 is available in the previous two editions of this series (2020, 2021) in the relevant chapters on Italy.

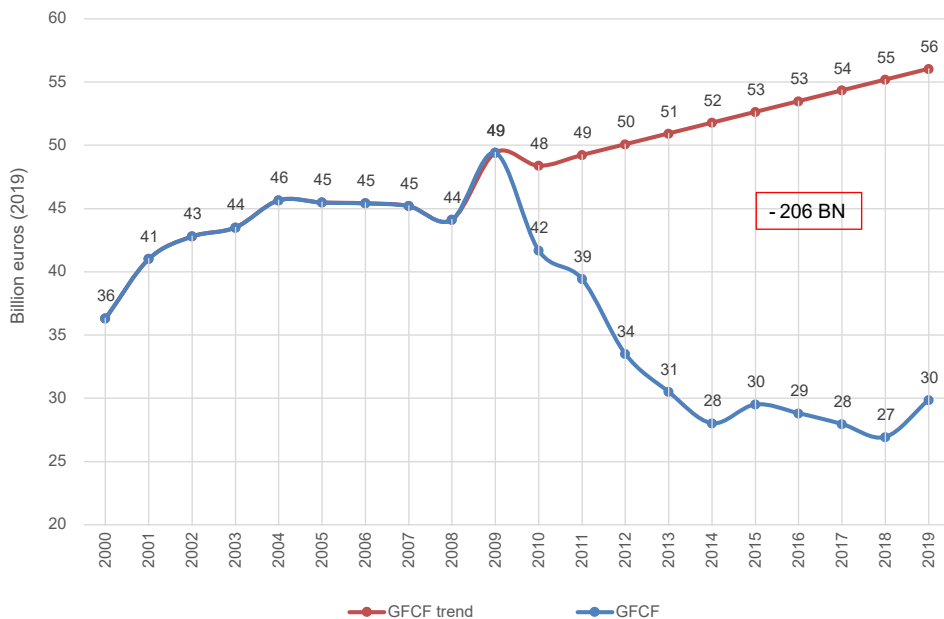


Fig. 4.1 Government gross fixed capital formation (GFCF): real values and trend at constant 2019 prices for Italy.

Source: IRPET calculations based on ISTAT data.

time required to complete public works—that could impede the correct use of funds. The time pressure on projects, from start to completion (end 2026), imposed by the European institutions is due to the realisation that excessively protracted deadlines could not only impact demand in the short-term and countercyclical demand, but if too much time passes, the projects’ contributions could wane, or even become irrelevant, if they no longer fulfil the role of dynamic catalysts for the growth and competitiveness of the economic system (Gori and Lattarulo 2022).

It is true that public works in Italy can take a long time from start to finish. Projects greater than €15 million can take up to seven years from the time of award and execution to project completion. The design phase generally takes a large share (from 44% to 56%) of the overall schedule.³

The idea of channelling the majority of NRRP resources for investments to “ready-made” or “backburner” projects, for which a large chunk of the planning and design phase has already been done, is aimed at avoiding bottlenecks in the pre-award phase and beating the completion date.

Another important factor to assess the probability of respecting the deadlines established by the NRRP is that the cost of the projects that could start in 2022 represents a significant jump for the public administrations and general contractors

³ For an analysis of the determinants of the time scale of public works in Italy, see Gori et al. (2022).

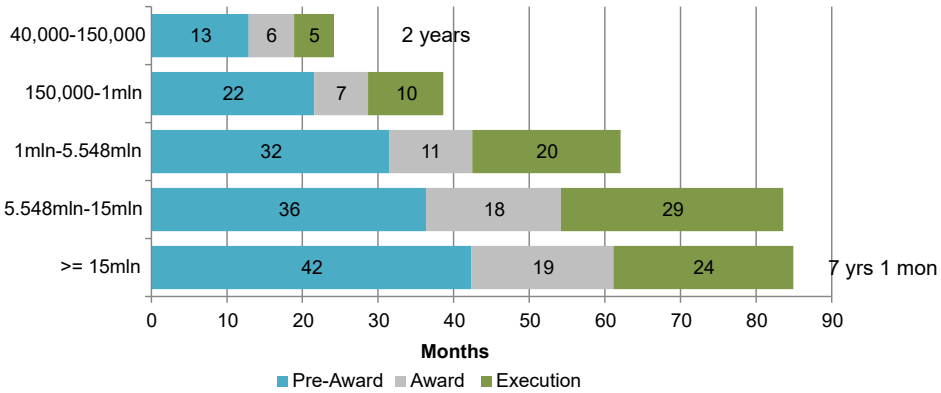


Fig. 4.2. Average time for project phases of public works in Italy (lots) by amounts, 2012–2021 average. Note: Definitions. Pre-award phase: from the first design phase to the date of publication of the bid/notice. Award phase: from the date of publication of the bid/notice to the date of publication of the adjudication report. Execution phase: from the date of publication of the adjudication report to the date set for project completion. Lot is the part of a public work which is the subject of a tender. Source: IRPET calculations based on ANAC data.

with respect to previous years. Figure 4.3 compares the average annual cost of projects undertaken by municipalities and other contracting entities from 2018 to 2020 and the overall cost of the procedures available through the NRRP in 2022. The funds available have quadrupled for municipalities and are one and a half times greater for other contracting entities.

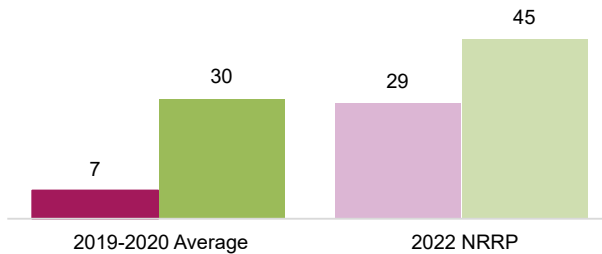


Fig. 4.3. Resources for Construction and Civil Engineering. Public funding of works undertaken by Italian contractors and funds provided by the NRRP in 2022. Source: IRPET calculations based on ANAC data.

Dealing with such a large spike in funds and therefore a high project complexity is challenging for contractors who mainly work with municipalities.⁴ The two most important challenges are connected to the increase in administrative procedures related to the award phase, and the amount of spending generated by the procedures and spread over subsequent years. Such a large increase in funds has led to legislative

4 On the time for performance of local contractors see Gori et al (2017).

measures being put in place to provide technical, organisational, and accounting support to ensure the effective implementation of investments over the five-year period. These include:

- selection procedures with centralised rankings of senior technical, legal and administrative personnel (approximately 1,000 professionals spread throughout the country);
- simplified budget procedures for municipalities;
- design costs covered by the NRRP;
- other procedural support measures like developing platforms for e-procurement and tenders.

These measures are the result of intense academic and political-institutional debates over the past years. The main reason for the decade-long stagnation of investments by municipalities, besides the limited availability of resources, is the reduced ability to adequately handle an appropriate number of projects, which over time have become increasingly technically complex.

This factor naturally depends on the experience gained over the years and the availability of qualified personnel. However, small and medium municipalities (<= 10,000 residents, which represent 85% of all municipalities) generally award less than three contracts per year with an average cost of less than €300,000, which is hardly enough to guarantee having obtained the needed and necessary specialised technical experience for the size of the current tenders. This matter was already an issue and object of reform before the NRRP.⁵

Starting precisely from these considerations, the NRRP provides a clear framework of reforms and spending strategies. The Italian National Recovery and Resilience Plan is consistent with the EU Commission's indications and provides equal weight to the allocation of resources and to the necessary reforms not only to ensure rapid economic recovery but also to improve the effective management of infrastructure expenditure. In this respect, the NRRP prevalently concentrates on "horizontal" reforms in the public administration and those which "enable" simplification and rationalisation of legislation aimed at managing public contracts for the environment and the accounting of auditing firms.⁶ As for public investment, the measures which accompany the expenditure of NRRP resources are especially aimed at ensuring that deadlines are met, hence they focus on two key aspects: strengthening the administrative capacity of contracting authorities and simplifying procedures both upstream at the planning and design stage and downstream at the award stage. A first step was taken with the

5 For example the Contract Code (Codice dei Contratti) of 2016 (D.Lgs 50/2016) and other regulatory interventions, which aimed to simplify procedures for public administrations.

6 For a discussion on procurement reforms in Italy see G. Gori, L. Landi, and P. Lattarulo, "Il procurement dei lavori pubblici alla luce delle recenti riforme", Nota di lavoro 2/2020.

extension and consolidation of measures aimed to simplify awarding and authorisation procedures (Simplification bis Decree). However, a more incisive reform is expected with the new Contracts Code which should be approved by 31 March 2023.⁷

4.2 Ecological Transition and Green Investments in the Italian NRRP

The slump in Italian public investments over the past decade has been associated with an initial significant decrease in its environmental component. In fact, the capital expenditure of public administrations decreased steadily from 2008 to 2014; in 2014 it settled at around 30% less than what was spent in 2000. Today, this gap has not yet been closed. In particular, the decrease in the government's contribution persists; however, it must be noted that the liberalisation/privatisation process has progressively assigned large parts of these investments to state-owned and private enterprises.

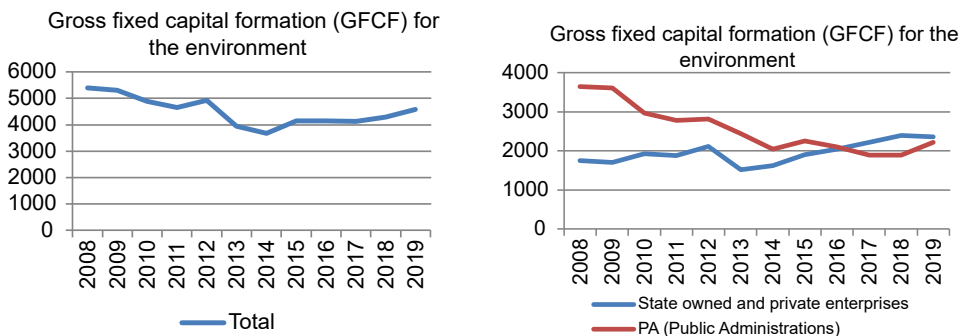


Fig. 4.4 Capital expenditure for environmental services, REAL VALUE.

Source: Calculations based on ISTAT data.

The Italian NRRP has six main missions (Figure 4.5) which follow the six-pillar structure defined by Regulation 2021/241 of the European Parliament and the European Council.⁸ The six missions are: 1. Digitisation, innovation, competitiveness, culture and tourism; 2. Green revolution and ecological transition; 3. Infrastructure for sustainable mobility; 4. Education and research; 5. Inclusion and cohesion; 6. Health. The €191.5bn budget is allocated throughout the plan as follows: 21% for Mission 1; 31% for Mission 2; 13.3% for Mission 3; 16.1% for Mission 4; 10.4% for Mission 5 and 8.2% for Mission 6.⁹ These missions are in turn further broken down into sixteen components covering a

⁷ The draft law "Government Proxy in Matters of Public Contracts" is in the pipeline, and thanks to the NRRP, it will enable a thorough review of the Call for Tender Code, given the numerous amendments made in the recent years, and ensure Italian legislative compliance with the EU regulatory framework.

⁸ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0241>.

⁹ For a first sketch of the NRRP see Barbieri and Cerniglia 2021, namely the chapter on Italy in the 2021 volume, pp. 63–78, <https://doi.org/10.11647/OBP.0280>.

variety of fields and areas of intervention. Its prevalent resource is capital expenditure (62%), followed by incentives for private investments (19%), running expenditure for things like reforms (12%), and the rest for direct transfers and social protection (7%).¹⁰ It is an impressive plan, especially for infrastructure projects (approximately €108bn), which are very important given the significant drop in public investment in previous years.

In this respect, the strong ecological imprint of the NRRP represents an important factor in rebalancing investments in favour of those with significant green content. Mission 2 of the Italian NRRP is dedicated to ecological transition (and green revolution), €59.5bn¹¹ have been earmarked with the aim to bridge the current gap, €27bn of which will be for existing projects. It has the most funding of all the missions, with no less than 31% of the total NRRP resources (€191.5bn).

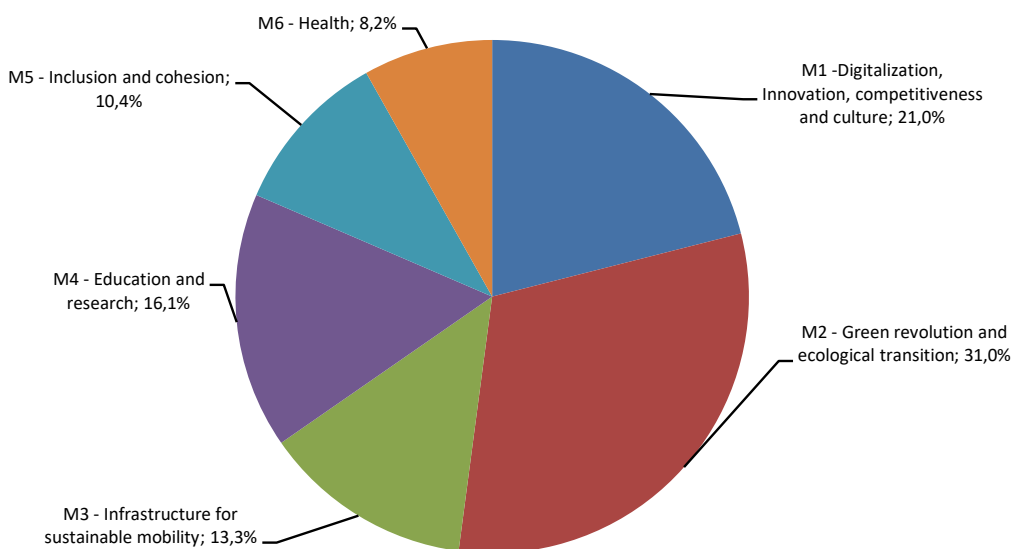


Fig. 4.5 Percentage of NRRP funding by Mission.
Source: Calculations based on Italia Domani data.

However, further funds will also be used through measures more generally directed at climate objectives, which define the broader set of green investments. For each measure, whether or not it falls under Mission 2, the European Commission has associated a climate target coefficient of zero, 40% or 100%. While not all the measures under Mission 2 have a 100% compliance coefficient with the climate objectives, other

¹⁰ Corte dei conti, Relazione sullo stato di attuazione del Piano Nazionale di ripresa e resilienza, March 2022.

¹¹ The National Complimentary Fund (Fondo Nazionale Complementare) has allocated an additional €9.6bn of its €30.6bn budget to Mission 2, bringing the total budget for Mission 2 to €68.66bn.

missions can have measures with a positive or even 100% compliance coefficient. For example (Figure 4.6, column chart), the “green” quota of the resources used by Mission 3 (Infrastructure for sustainable mobility) is around 82%, which is higher than that of Mission 2 (78%); however, the green resources for Mission 3 (€20.8bn) are only half of those for Mission 2 (€46.2bn). In short, roughly €71.7bn will be dedicated to green investments, 93.4% of the funds will come from Missions 2 and 3 (64.4% and 29%, respectively) and will be divided into 108 actions (Figure 4.6, pie chart).

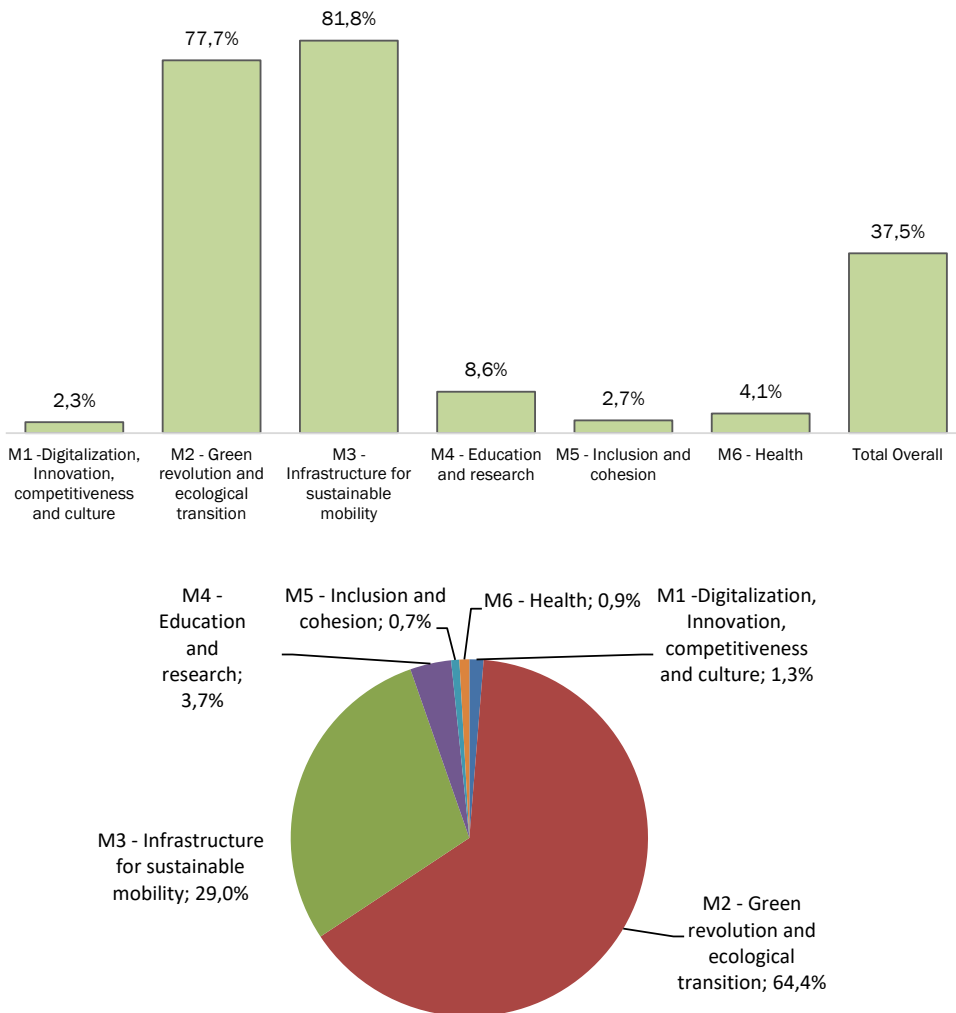


Fig. 4.6 Percentage of green investment by Mission (column chart) and breakdown of green investment by mission (pie chart).
 Source: Calculations on Italia Domani data.

Out of the total funding allocated to the Italian NRRP, green investment accounts for 37.5%, which is slightly above the minimum threshold set by the EU. However, in absolute terms, it is by far the most significant investment of all the EU countries.

The overall policy mix for green investment in the NRRP includes proper public investments as well as support for investments by enterprises and private citizens. The breakdown by components (Table 4.1) highlights a major concentration of actions in the fields of renewable energy, hydrogen, networks, sustainable mobility (30.5%) and investments in the national rail network (28.7%).

Table 4.1. NRRP—Green investment by mission and component.

Mission-Component	Description	MM Euro	Share
M2-C1	Sustainable Agriculture and Circular Economy	2.3	3.2%
M2-C2	Renewable energy, hydrogen and sustainable local mobility	21.9	30.5%
M2-C3	Energy efficiency and redevelopment of buildings	12.6	17.6%
M2-C4	Protection and valorisation of land and water resources	9.4	13.1%
M3-C1	High railway speed and road maintenance 4.0	20.6	28.7%
	Other	5.0	6.9%
	Total	71.7	100.0%

Source: Calculations on Italia Domani data.

A more effective classification is proposed by Brugnaro and Orlando (2022), who group investments into four broad categories: transportation and other green infrastructure, efficiency gains, renewable energy, and environmental protection.

The first category (transportation and other green infrastructure) groups the total investments earmarked in Mission 3 for the national rail network (€20.6bn) and in Mission 2 for sustainable mass urban transport and alternative transportation (€9bn).

The second category (energy efficiency) mainly concerns immovable assets and includes measures to reduce energy consumption or substitute existing fossil fuels with green energy. Funding for improving the energy efficiency of public buildings is only a small part (€2.1bn), and the bulk will go to improving the energy efficiency of private buildings (€12.1bn). The latter measure is the most significant green expenditure in the NRRP and consists of renovation incentive mechanisms (110% super-bonus) introduced as early as in the Initial stages of the pandemic. Lastly, another measure that falls into this category is upgrading smart power grids (€3.6bn).

Measures for enhancing green transportation/infrastructure and improving energy efficiency represent 71% of the NRRP's green resources and include individual measures with significant budgets. A partial list of these measures is reported in Table 4.2 with reference to their NRPP mission and component.

The remaining share of resources falls into the categories of renewable energy (approximately 14%) and environmental protection (15%). The primary measures include the construction of solar energy plants (€4.6bn), and measures for developing the bio-methane sector (building new plants and upgrading existing ones), hydrogen (research, production, distribution) wind energy and charging/fuelling

Table 4.2. Main NRRP green measures by budget size.

Measure	Description	BN Euros
M2C2I2.01	Upgrading smart electricity grids	3.6
M2C2I4.02	Development of rapid mass transport (subway, trams, buses)	3.6
M2C2I4.04	Renewal of bus fleets and trains with low environmental impact	3.4
M2C3I2.01	Support for energy efficiency and seismic resistance of private and public buildings	12.1
M2C4I2.02	Interventions for increased resilience, land enhancement and improved energy efficiency of the municipalities	4.2
M3C1I1.01	Construction of new high capacity/high-speed lines along the main routes in the South for passengers and freight	4.6
M3C1I1.02	High capacity/high-speed lines that connect the North to Europe	8.6
M3C1I1.05	Upgrading metropolitan railway junctions and key national rail networks	3.0

infrastructures. A hefty sum (€2.2bn) will also be used for promoting renewables for energy communities and self-consumption. The largest portion of environmental protection—mainly Component 4 of Mission 2—is a mixed bag of measures for adapting to climate change, such as management and prevention of flood risks (approximately €6bn).

Finally, it is worth mentioning the horizontal principle of DSNH (Do No Significant Harm). Respecting this principle as well as exceeding the threshold of 37% of resources allocated to environmental objectives was a precondition for the NRRP's approval. Therefore, the set of measures and reforms in the Italian NRRP was assessed on the basis of six indicators, or environmental objectives: adapting to climate change; sustainable use and protection of water and marine resources; transition to a circular economy; prevention and reduction of air, water, and soil pollution; and protection and recovery of biodiversity and ecosystems. The assessment was conducted with a long-term view, in order to consider all the anticipated effects, both direct and indirect, on the indicators. Based on the analysis, the effects were then placed in four scenarios: (1) the measure has negligible or zero impact on the objective, (2) the measure supports the objective 100%, (3) the measure "substantially" contributes to the environmental objective, (4) the measure requires an overall DSNH assessment.

When evaluations fell into one of the first three scenarios, a simplified DSNH compliance certification procedure was adopted, which required public administrations to draft a brief statement. Evaluations in the fourth scenario—mainly investments and reforms in sectors such as energy, transport, or waste management—required a more in-depth analysis.

Note that most major measures shown in Table 4.2 are associated with a 100% contribution coefficient to climate objectives, which require the simplified DSNH compliance certification procedure.

4.3 Related Reforms

The NRRP's ambitious reform agenda includes three types of reforms: "horizontal reforms" (which concern the public administration (PA) and legal system), "enabling reforms" aimed at ensuring the implementation of the NRRP (including the reform of public procurement contracts), and 'sectoral reforms' specific to each of the six missions.

When considering sectoral reforms, the NRRP does not restrict the use of natural resources, it addresses the challenge of environmental sustainability by introducing measures to provide incentives for disseminating innovative technologies (e.g. hydrogen), prioritising the optimisation of resource management (water and waste), and simplifying procedures, as a strategy to facilitate the widespread and speedy dissemination of energy efficient plants and green technologies. Obtaining authorisations is an important cause of delays in public works and it is also a factor that generates great uncertainty for the overall timetable, which is a problem that has been repeatedly referred to by contractors (Gori and Lattarulo 2021).

The NRRP is committed to boosting interventions through a simplification process aimed at easing the authorisation burden of PAs as well as that of households and businesses. Measures have been provided to support procuring entities and the PA responsible for environmental authorisations. Furthermore, specific actions are foreseen to create synergy between public and private resources. Thus, the main sectoral reforms for a green transition, as identified in the Italia Domani (NRRP) documents, focus on a national strategy for a circular economy and waste management, a legal framework for more efficient water resource management, and the simplification of regulatory procedures for renewable energy, renovations, and local public services. In other words, it addresses the important themes of regulating public services and a myriad of measures aimed at simplifying procedures in many areas (from the promotion and diffusion of hydrogen to speeding up procedures for producing energy from renewable energy sources and for—public and private—energy efficient plants, and measures to contrast hydrogeological risks). The complete list of reforms is in Table 4.3 below.

More specifically, concerning the main fields of action, the "National Waste Management Programme" is aimed at promoting the mechanisation of urban selective waste collection and the proliferation of modern disposal/recycling plants. The plan is expected to be adopted by the end of June 2022, and act as a preliminary step to plant modernisation investments. Technical support will be provided to those local authorities who have difficulty with programming and implementation.

Table 4.3 List of reforms under Mission 2 Green Revolution and Ecological Transition.

Measure	Description
M2C1	Sustainable agriculture and circular economy
M2C1 1.1	National strategy for circular economy
M2C1 1.2	National waste management programme
M2C1 1.3	Technical support to local authorities
M2C2	Renewable energy, hydrogen, infrastructure and sustainable mobility
M2C2 1.1	Simplification of authorisation procedures for onshore and offshore renewable plants; new legal framework to support production from renewable sources and extension of the time frame and eligibility of current support regimes
M2C2 1.2	New legislation for promoting renewable gas production and consumption
M2C2 3	Administratively simplifying and reducing regulatory barriers to hydrogen deployment
M2C3	Energy efficiency and safety of buildings
M2C3 1.1	Simplifying and speeding up procedures for adopting energy efficiency measures
M2C4	Protection of the territory and water resources
M2C4 2.1	Simplifying and speeding up procedures for undertaking initiatives against hydrogeological instability
M2C4 3.1	Adoption of national air pollution control programmes
M2C4 4.2	Measures to ensure full management capacity of integrated water services

Source: Italia Domani Ministry for Ecological Transition (Ministero della Transizione Ecologica) Implementation of NRRP Measures, December 2021.

Facilitating and in general simplifying authorisation procedures is essential. In the energy sector it is important to encourage the use of renewables and the construction of power plants on a regional/national scale—with a focus on promoting hydrogen as the main source of clean energy, and energy efficiency by optimising electricity stocking systems. It is also necessary in the building sector to facilitate renovation authorisations for residential buildings.

“Measures to ensure full management capacity of integrated water services” include strengthening the industrial development of the sector, especially in the lagging South, whose inability to resolve its shortcomings alone has been acknowledged. Regarding hydrogeological risks, the focus is mainly on the simplification of procedures and the provision of support to operators.

4.4 Multilevel Governance and the Role of Local Governments

The NRRP’s governance (defined in DL 77/21¹²) is very hierarchical; it focuses on national implementation and the Council Presidency. It is a complex structure nested in a system of oversight and coordination by the Italian Presidency of the Council of

12 <https://temi.camera.it/leg18/temi/d-l-77-2021-governance-del-pnrr-e-semplificazioni.html>.

Ministers, the Ministry of Economy and Finance (MEF), and interactions at various administrative levels for the implementation of measures.

The first level is the European level, which coordinates and monitors measures through relevant technical and political interactions, including the various institutions and social partners. As for the second (national) level, the Ministry for Ecological Transition is “the point Ministry” for all of the measures in the NRRP, while the other ministries are responsible for the various related components. It is in charge of coordinating the work of the other implementing parties and interfacing with the European Commission (EC). The regions, along with the pertinent territorial authorities and other public and private bodies, are the “implementors” of the “assigned projects”. The Ministry has a “mission structure” equivalent to that at the national level, which is capable of coordination, oversight, and reporting. It is responsible for stipulating agreements with the implementors. Overall, the governance of the NRRP is highly centralised at the national, executive level, and more specifically in the office of the Prime Minister. Various ministries however have the authority to make important investment and implementation decisions. This also means that the specific identification and location of the projects rests with the ministries through normative provisions.

An important investment role is given to local governments, especially municipalities, in the NRRP. However, these entities have witnessed the significant depletion of their resources and competencies due to a decade of fiscal restrictions, especially the 2008 financial crisis. Consequently, the risks linked to their implementation capability are significant.

The resources assigned to local governments, specifically in Mission 2, are quite considerable (approximately €20bn for regions, municipalities and other governing bodies, see Figure 4.7 and Table 4.4); which means that, as a consequence, so is the increase in responsibility for project implementation. More specifically, €6bn have been earmarked for “Actions aimed at increasing resilience, enhancing land and improving energy efficiency” (M2C3. 2.2); €3bn for “Rapid mass transport development” (M2C2.4.2); and €2.4bn for “Renovation of bus fleets and green trains” (M2C2. 4.4.1).

The main strategy aimed at easing the work of public administrations, especially in the South—the major recipients of the funding—is based on strengthening administrative capacity. More specifically, it concerns those actions that have to do with improving human capital skills and supporting small and remote municipalities with their planning. Thus, the NRRP provides for temporary employment contracts of technical personnel that cover the period of the investment. In order to overcome the lack of resources or planning capacity of small and remote municipalities, resources have been specifically earmarked for recruiting technical personnel. In order to speed up the recruitment procedures, a centralised selection process for specialised personnel has been established. Public authorities who need other types of support can refer to Consip, Invitalia, CdP, Anac, or Sogei for help using resources from MEF. In short, a mix of measures and resources has been established with the intent of bridging the

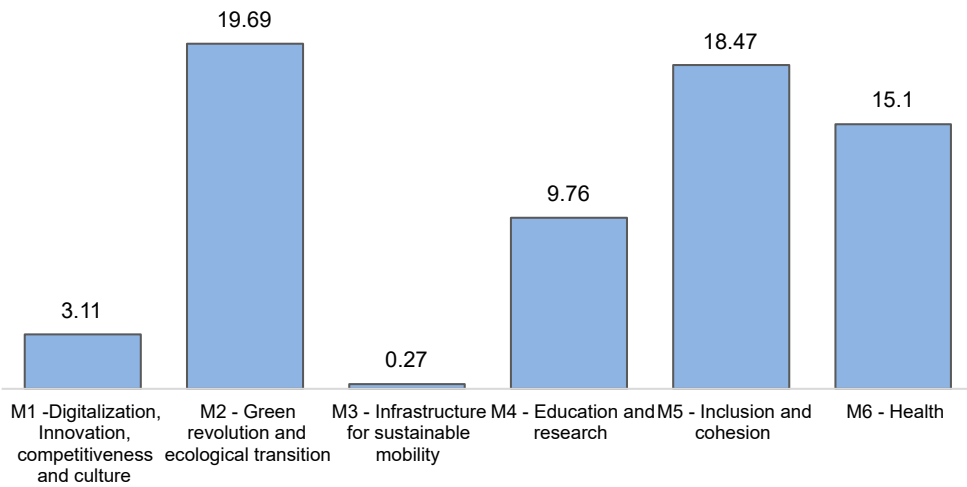


Fig. 4.7 Estimate of resources for territorial authorities by NRRP Mission.

Source: Italia Domani 2021.

various shortcomings of these local administrations. Only municipalities that are regional capitals or joint municipalities can award contracts, while all municipalities can introduce measures that simplify administrative procedures.

However, many limitations to these measures are already beginning to emerge; for example, technical personnel are being recruited at a slow pace due to a lack of adequate administrative skills, public administrations are suspicious of a possible imbalance in resources (investments vs current expenditure), and there is concern that the schedules set by the NRRP may not be respected, leading to refusals of personal responsibility by public administrators. Last but not least, there are price-side tensions caused by a weakened production system and an impoverished public sector following years of economic crises and further worsened by exceptional economic circumstances.

4.5 Conclusions

Linked to the success of Italia Domani, Italy's NRRP, is a huge gamble for the future of the country, and for the general consolidation of European integration, which must increasingly focus on investments to finance European public goods. The gamble for Italy is quite significant due to the resources involved, the structural lags that must be overcome, and the major political consensus required on the overall objectives and/or missions that the NRRP has placed on the political agenda.

Causes for concern include the deadlines set by the European Commission, the insufficient planning and execution capacity of public administrations faced with such huge investment resources, and the laborious cooperation required by the social partners and political parties for the reform process.

Swift implementation of the measures is essential for a rapid economic recovery in the short term and the launch of a solid recovery in the medium to long run, which must contend with major changes in technological innovation, ecological transition and social cohesion. The resources earmarked for ecological transition are a bit (if not much) over the 37% mark imposed by the EU and amount to investments of €72bn in energy efficiency, sustainable mobility, renewable energy, circular economy (which is almost equivalent to Italy's capital expenditure of the previous fifteen years on environmental protection and water and waste management). It should also be noted that the Ministry for Economic Development in its National Integrated Energy and Climate Plan (2019) estimated an overall need for investments for the 2017–2020 period of approximately €1.194bn, €800bn of which are for the transport sector.¹³

The government has thus intervened with multiple instruments to support public administrations, with a preference for supporting human capital and simplifying administrative procedures. On the former point, it has intervened by offering greater recruitment possibilities, the availability of resources, and the pre-selection of qualified personnel. On the latter point, both the enabling reforms and the sectoral reforms related to Mission 2 place significant attention on simplifying administrative and authorisation procedures for measures linked to the environment.

Some of the limits of the measures aimed at supporting public administrations are now emerging, as are the numerous contradictions in the overall process. One is the limited effectiveness of the measures with respect to the huge investments available, especially in the Southern regions, which is even more grave if one considers that rebalancing the territorial divide is one of the NRRP's priorities as well as an urgent national requirement. There is also a need for additional current expenditure to sustain investments made by the public administrations in those cases where the savings obtained are not sufficient to cover future expenditures.

However, the most worrisome prospect for the disbursement of investments is the recent inflationary trend, especially in the energy and construction goods markets. Prices were already increasing before the Ukraine crisis; in fact, the Italian government had responded by creating a price adjustment fund for contractors. Nonetheless, the resources that have been made available through the fund and other government interventions might not be sufficient to cover the local administrations' needs, especially those of municipalities. If costs cannot be covered, procurement authorities will not be in a position to launch tendering procedures, making the risk of a substantial gridlock in the tendering process quite real. In conclusion, this inflationary effect could become embedded in the Italian system, which currently already suffers from significant lags in the entire procurement process.

13 https://www.mise.gov.it/images/stories/documenti/PNIEC_finale_17012020.pdf. This plan is in the process of being updated by the Ministry, and more recent data on investment needs will soon be available.

References

- Brugnara, L., and C. Orlando (2022) 108 misure Verdi, cosa fa il PNRR per la transizione ecologica, Osservatorio Conti Pubblici Italiani (OCPI), 12 May, <https://osservatoriocpi.unicatt.it/ocpi-pubblicazioni-108-misure-verdi-cosa-fa-il-pnrr-per-la-transizione-ecologica>.
- Cerniglia, F. and G. Barbieri, (2021) "Relaunching Public Investments in Italy", in F. Cerniglia, F. Saraceno, and A. Watts (eds), *The Great Reset: 2021 European Public Investment Outlook*. Cambridge: Open Book Publishers, pp. 63–78, <https://www.openbookpublishers.com/10.11647/OBP.0280>.
- Cerniglia, F. and F. Rossi (2020) "Public Investment Trends across Levels of Government in Italy", in F. Cerniglia and F. Saraceno (eds), *A European Public Investment Outlook*. Cambridge: Open Book Publishers, pp. 63–81, <https://www.openbookpublishers.com/10.11647/obp.0222>.
- Corte dei conti (2022) *Relazione sullo stato di attuazione del Piano Nazionale di ripresa e resilienza*, March, <https://www.corteconti.it/Download?id=ece03c3a-0a39-449a-8d19-3105b75ded32>.
- Ferretti, C., G. Gori, and P. Lattarulo, (2020) "Tutela dei bisogni e investimenti, il ruolo dei comuni di fronte all'emergenza covid-19", in Ires, Irpet, Srm, Polis, Ires, Liguria ricerche, Aur, (eds) *La finanza territoriale, Rapporto 2020*, Catanzaro Rubbettino, pp. 23–41.
- Gori, G. F., P. Lattarulo, and N. C. Salerno (2022) "L'efficienza temporale nella realizzazione delle opere pubbliche in Italia", *Nota di lavoro UPB 2/2022*, <https://www.upbilancio.it/nota-di-lavoro-2-2022/>.
- Gori, G. and P. Lattarulo, (2022) "Decentramento e investimenti pubblici locali negli scenari del PNRR", in N. Antonetti, and A. Pajno (eds), *Stato e sistema delle autonomie dopo la pandemia*. Bologna: Il Mulino, 203–16.
- Gori, G., L. Landi, and P. Lattarulo, (2020) "Il procurement dei lavori pubblici alla luce delle recenti riforme", *Nota di lavoro 2/2020*, <https://www.upbilancio.it/nota-di-lavoro-22020/>; <http://www.irpet.it/archives/55544>.
- Gori, G., P. Lattarulo, and M. Mariani (2017) "Understanding the Procurement Performances of Local Government: A Duration Analysis of Public Works", *Environment and Planning C: Politics and Space* 35(5), <https://doi.org/10.1177/0263774X16680109>.
- Gori, G., L. Landi and P. Lattarulo (2020) "Il procurement dei lavori pubblici alla luce delle recenti riforme, UPB" *Nota di lavoro 2/2020*, https://www.upbilancio.it/wp-content/uploads/2020/05/Nota-appalti-2_2020.pdf.
- Presidency of the Council of Ministers (2021) "Italia Domani. Piano Nazionale di Ripresa e Resilienza". Italian Government, <https://italiadomani.gov.it/en/home.html>.
- Senato e Camera dei Deputati (2022) "Monitoraggio del l'attuazione del Piano Nazionale di Ripresa e Resilienza", *Dossier*, 30 June, https://documenti.camera.it/leg18/dossier/pdf/DFP28d.pdf?_1665063471640.
- Viesti, G. (2021) "Il PNRR e il Mezzogiorno : 80 miliardi, un totale in cerca di addendi", *Quaderno di Rassegna Sindacale*, 2/2021, <https://www.futura-editrice.it/prodotto/qrs-n-2-2021/>.
- Viesti, G. (2022) "The Territorial Dimension of the Italian NRRP", in A. Caloffi, M. De Castris, and G. Perucca, *The Regional Challenges in the Post-Covid Era*, AISRE, Milan: Franco Angeli, pp. 201–18, <https://series.francoangeli.it/index.php/oa/catalog/book/858>.
- Viesti, G. (2022) "Un piano per rilanciare l'Italia ?", in *L'Italia nella bufera*, Il Mulino 2/2022, 28–38.