

## GREEN RECOVERY TRACKER REPORT: ITALY

The final Italian Recovery and Resilience Plan (RRP) was presented by Prime Minister Draghi on 27 April 2021, after disagreements over an earlier version of the plan led to the dissolution of the previous government. The RRP draws on €235bn in total, with €191.5bn coming from the EU Recovery Facility (€68.9bn grants, the remainder loans), €13bn from the REACT EU Fund, and €30.6bn from a complementary fund using domestic funding sources. Overall, Italy's recovery measures fall short of the green transition potential of the recovery funds available. Our analysis identifies the following spending shares:

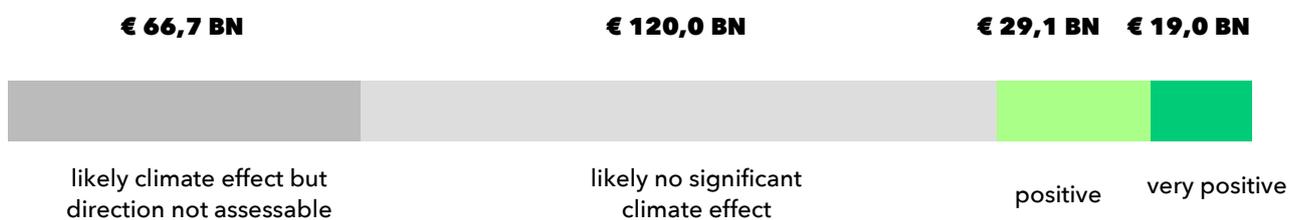


Figure 1: Amounts committed by assessment category (all recovery measures)

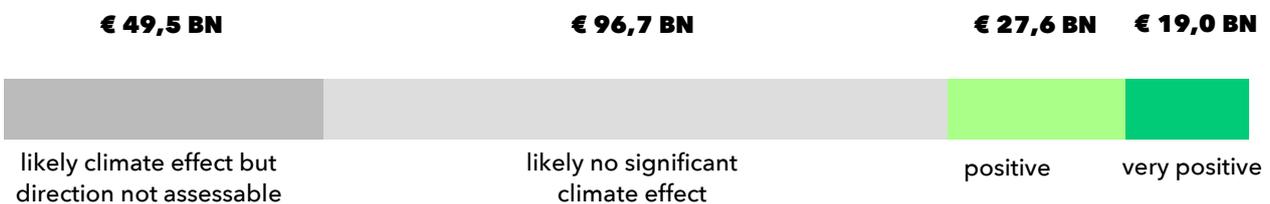


Figure 2: Amounts committed by assessment category (EU Recovery and Resilience Facility funding only)

While the plan includes investments into measures that are relevant to the green transition, there is a significant imbalance in the allocation of funds between sectors and activities. Many of the green investments in the plan are only likely to bring about an incremental shift towards a climate neutral economy and look fairly insignificant relative to the needs of an economy-wide transition to climate neutrality. In particular, we note that there is a lack of appropriate support for crucial pillars of the energy transition, notably the expansion of renewable energy generation and the direct use of electricity, as well as local sustainable mobility infrastructure. Altogether, the plan and the associated reforms favour permitting procedures for gas infrastructure while not pushing the electrification of final energy use. There is also a risk that a relatively high share of the recovery funds will be allocated to projects on, for instance, biomethane and hydrogen, which are attributable to the gas sector. In some cases, fossil gas activities can directly access recovery resources, for example through the inclusion of support for gas boilers in energy efficiency investments or support for gas-powered buses, which would lead to a lock-in risk of infrastructure which will slow down the climate transition.

### **In focus: Green Spending Share**

We find that Italy's recovery plan (RRP) achieves a green spending share of 16%, below the EU's 37% benchmark. At the same time, we find that 26% (€49.5bn) may have a positive or negative impact on the green transition depending on the implementation of the relevant measures. According to the government, the RRP achieves a climate spending share of 40%.

When assessing the full recovery package (including funds from the EU Recovery Facility, REACT EU and the Complementary Fund), Italy reaches a green spending share of 13%. Furthermore, we find that, overall, 28% (€66.7bn) may have a positive or negative impact on the green transition depending on the implementation of the relevant measures, illustrating the importance of further scrutiny during the further planning, review and implementation of the recovery measures.

*Our calculation of the green spending share aims to mirror the approach used for the official assessment of national recovery plans, which distinguishes between measures contributing fully to climate mitigation (100% coefficient) and measures contributing partly (40% coefficient). Therefore, we fully count "very positive" measures towards the green spending share, while "positive" measures are weighted using a coefficient of 40%, which is applied to the associated costs. All individual assessments can be accessed via the country page on our website.*

## OUR HIGHLIGHTS

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### Good Practice

#### **Support for smart electricity grids**

The RRP includes €3.6bn in funding for smart electricity grids, which will, among other things, be used to reinforce the urban electricity distribution network. This investment will help prepare the energy system for the transition to climate neutrality, including in areas such as the mobility sector. Reinforced grids will, for example, be better able to serve the needs of electric vehicles.

### Bad Practice

#### **No overall strategy for the green transition, and no strategic use of RRF funds**

The resources for measures relevant to the green transition are dispersed in various smaller components and elements, e.g. in support measures for "green islands" or agrivoltaic projects, with little funding for industrial decarbonization or other important areas of the transition, especially with regards to greening electricity supply and expanding electrification. There are, moreover, significant support measures which may favor the gas sector, such as investments in biomethane and hydrogen, while a strategy for electrification and increasing renewable electricity supply is lacking. Overall, despite its size, the RRP does not provide a clear impetus for the transition to a climate neutral economy.

### To Our Surprise

#### **Very little support for directly using electricity, despite its climate importance**

Especially in the transport sector, there is only a negligible amount of support for electrification, even though it is an internationally recognized strategic component of decarbonization strategies. The total investments in electric mobility are just €1.2bn. While there are further resources allocated to public transport in municipalities, it is not clear that these will support electric mobility, and there is a risk that these funds may support fossil gas vehicles. The share of investments in electric mobility is also remarkably low compared to other EU countries' use of EU recovery funding.

## KEEP AN EYE ON...

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- > The links between the recovery plan and wider climate policy: the RRP sets out a national target of reducing emissions by 51% until 2030, relative to 1990. Notably, this target is only mentioned in the RRP and is not an official national decarbonization target. However, the plan does not specifically link individual recovery measures with this overall target. The total impacts quantified in the plan amount to a reduction of 5.6 Mt CO<sub>2</sub>e, just 3% of the necessary emission reductions until 2030. However, it must be noted that no estimates are provided for many relevant measures, including in the buildings, mobility and transport sectors.
- > Lacking ambition on renewables: altogether, the RRP outlines funding for 4.2 GW of additional renewable generation capacity – just 70% of the 6 GW of capacity development that would be required in any single year to be on track for the 2030 target. This target is also significantly below the Italian national share of the European Commission's ask that member states use recovery funds to develop 40% of the 500 GW of generation capacity that is required EU-wide by 2030. The individual measures supporting renewables are fragmented and not linked to a wider strategy: there is no strategy for offshore wind, but just a generic budget of €0.6bn for offshore technologies, most likely tidal generation. The key support for solar PV (€2.2bn) is confined to municipalities of less than 5000 residents, and not accompanied by any reforms. A large amount of funding has been allocated to support the development of solar PV on agricultural land ("agrivoltaic"), with investments of €1.5bn for just 430 MW in generation capacity. Lastly, there are no financial resources or strategic reforms for developing energy storage, despite the target in the National Energy and Climate Plan of developing 10 GW of storage capacities.
- > Risk of inefficient spending for energy efficiency: altogether, €22bn are allocated to energy efficiency measures. Most of this, €18.5bn, is used for a fiscal rebate mechanism ("ecobonus"). This scheme consists of a tax rebate paying back 110% of the costs of building refurbishments, leading to relatively high costs. At the same time, the mechanism is not supported by strong efficiency conditionalities, requiring an improvement of just two energy classes, and still allowing investments in fossil gas heating systems. There is also no energy efficiency strategy for the public sector, and a measure for efficiency improvements of school buildings targets just 195 school buildings out of a total of 32,000, while at the same time allocating further resources to the restructuring of buildings without conditionalities on efficiency improvements.

- > No drive for electric mobility and an unbalanced allocation of funds for mobility: despite the large overall budget dedicated to mobility measures, especially high-speed rail, the RRP does not allocate many resources to the promotion of electric mobility and to the greening of local public transport. Less than 1% of the overall funds are allocated to the electrification of mobility, leading to a significant risk that Italy will fall further behind in the transition to electric mobility. Overall, there is an imbalance in the allocation of funds in the mobility sector, with a large portion of funds allocated to long- and medium-distance railways, and a lack of funds for addressing the most urgent issues in the sector. Specifically, these measures will likely do little to reduce emissions from road transport and improve air quality in cities, despite the latter being the first recommendation given by the European Commission in the European Semester process for the transport sector. According to the government's own assessment, the significant investments in high-speed rail infrastructure will only lead to emission reductions of 2.3 Mt CO<sub>2</sub>e, only a very small part of the reductions of 174 Mt CO<sub>2</sub>e that are required by 2030 overall based on the decarbonization target included in the RRP.
- > Faster approval processes for new energy infrastructure: some of the reforms included in the RRP consist of speeding up the authorization process for new energy infrastructure, in line with the targets set out in the National Energy and Climate Plan (NECP). There is a risk that the proposed reform will mostly favor gas power plants, especially as the Italian Capacity Market Mechanism has already triggered requests for the authorization of ca. 15 GW of additional gas power capacity. At the same time, according to transmission system operator Terna, the peak demand of 58.8 GW is already significantly lower than the overall capacity of the existing network (119.3 GW). It is particularly problematic that thermal power plants, such as gas plants, are authorized centrally, while most renewable energy facilities must be approved at the regional level, making reforms of the process for authorizing renewable energy projects more complex. Furthermore, the reforms include potential relaxations of regulations in the authorization processes for high speed rail infrastructure, hydrogen and biomethane. While a simplification of administrative procedures is necessary in principle given the current complex public administration infrastructure, there are concerns that this may also weaken important provisions for environmental protection.

**OVERVIEW: MOST IMPORTANT MEASURES OF THE RECOVERY PACKAGE BY SECTOR**

Sector	Most important measures with effect on green transition
Energy	<ul style="list-style-type: none"> <li>• Agrisolar park (M2C1 2.2, €1.5bn from RRF, positive - 3500€/kW)</li> <li>• Agrivoltaic development (M2C2 1.1, €1.1bn from RRF, very positive - 550€/kW)</li> <li>• Renewable energy promotion for energy communities and self-consumption (M2C2 1.2, €2.2bn from RRF, very positive)</li> <li>• Development of biomethane (M2C2 1.4, €1.9bn from RRF, likely climate effect but direction not assessable)</li> <li>• Smart grid strengthening (M2C2 2.1, €3.6bn from RRF, very positive)</li> <li>• R&amp;D and supply chains for renewables and batteries (M2C2 5.1, €1.0bn from RRF, very positive)</li> </ul>
Mobility	<ul style="list-style-type: none"> <li>• Strengthening of cycling mobility (M2C2 4.1, €0.6bn from RRF, very positive)</li> <li>• Rapid mass transport (M2C2 4.2, €3.6bn from RRF, very positive)</li> <li>• Development of infrastructure for electric charging (M2C2 4.3, €0.8bn from RRF, very positive)</li> <li>• Fleet renewal: buses and green trains (M2C2 4.4, €3.6bn from RRF, likely climate effect but direction not assessable)</li> <li>• High speed railway connections towards the South (M3C1 1.1, €4.6bn from RRF, positive)</li> <li>• High speed rail lines in the North (M3C1 1.2, €8.6bn from RRF, positive)</li> <li>• Development of European Railways Transport Management System (M3C1 1.4, €3.0bn from RRF, positive)</li> <li>• Strengthening of metropolitan railway junctions and key national connections (M3C1 1.5, €3.0bn from RRF, very positive)</li> <li>• Upgrading, electrification and increased resilience of Southern railways (M3C1 1.7, €2.4bn from RRF, very positive)</li> </ul>
Industry	<ul style="list-style-type: none"> <li>• Transition 4.0 (M1C2, €4.5bn from Complementary Fund, likely climate effect but direction not assessable)</li> <li>• Hydrogen use in hard-to-abate sectors (M2C2 3.2, €2.0bn from RRF, positive)</li> </ul>

Buildings	<ul style="list-style-type: none"> <li>• Substitution plan for school buildings, and energy efficiency upgrades (M2C3 1.1, €0.8bn from RRF, positive)</li> <li>• Energy efficiency investments - Ecobonus and Sismabonus (M2C3 2.1, €13.8bn from RRF; M2C3 3.3, €4.7bn from Complementary Fund; likely climate effect but direction not assessable)</li> <li>• Investments in kindergartens (M4C1 1.1, €4.6bn from RRF, likely climate effect but direction not assessable)</li> <li>• School buildings requalification and safety (M4C1 3.3, €3.9bn from RRF, likely climate effect but direction not assessable)</li> <li>• Improvements in housing quality (M5C2 2.3, €2.8bn from RRF, likely climate effect but direction not assessable)</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>• Logistic development for the agricultural, fisheries, forestry and floriculture sectors (M2C1 2.1, €0.8bn from RRF, likely climate effect but direction not assessable)</li> <li>• Innovation and mechanisation in the food and agricultural sector (M2C1 2.3, €0.5bn from RRF, likely climate effect but direction not assessable)</li> <li>• Protection and valorisation of urban and extraurban green (M2C4 3.1, €0.3bn from RRF, positive)</li> </ul>

*This report was written by Matteo Leonardi and Francesca Bellisai (ECCO) as well as Felix Heilmann (E3G). We are grateful to Johanna Lehne, Eleonora Moro and Elisa Gianelli (E3G) as well as Helena Mölter (Wuppertal Institute) for providing valuable inputs.*