

# OSSIGENO PER LA CRESCITA

Decarbonisation at the heart of  
post-COVID economic strategy

Proposals for reforms and actions  
for a resilient economy



# EXECUTIVE SUMMARY - OSSIGENO PER LA CRESCITA

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## Decarbonisation as a Pillar for Growth and Recovery Post Covid

Oxygen for Growth is evidence of how innovation combined with decarbonisation is an indispensable ingredient for economic growth to help recover from the Covid crisis. The innovation necessary is not just in technology, but also in policy, which will have to overcome the fragility of our decision-making system, recognise decarbonisation as an opportunity, develop a strategy that is coherent and solid over time and be a driver for the multiplier effect of private investments.

This report is the first in Italy to identify at systemic level the role of decarbonisation in economic recovery on a macroeconomic level, of structural reforms in taxation, sustainable finance, the circular economy, Green Public Procurement and work, and of the six key strategic sectors of industry, energy efficiency, electricity, transport, food and adaptation to climate change. The report is not a list of projects, but research into support for implementing them.

The results show that there is an unprecedented opportunity for renewal of the Italian production system. The resources mobilised by Europe provide the power to drive a level of growth and new employment capable of tackling the inequalities that hit young people and single-income families after the 2008 financial crisis, which now appear to have been exacerbated by the Covid crisis.

Investment is the only way to direct production towards sustainable and inclusive growth. The European funds must develop a belief among businesses and consumers that decarbonisation is the right way forward. In order to attract significant volumes of private investment, policies need to be coherent and governance effective. There must be no uncertainty about the direction economic policy is taking or the choices concerning energy transition.

The European Union has reacted to the crisis brought about by the pandemic very differently from the way it has tackled crises over the last decade. The decision to make the European Union the first climate-neutral continent by 2050, and the commitments to take an unprecedented leap forward in technology and to combat inequality, form part of a change in approach that is clear in the Next Generation EU (NGEU) programme and in other tools for economic and social recovery, including the new European budget. In July 2020 political agreement in Europe on the Next Generation EU - NGEU (€750 billion) and the new 2021-2027 European budget (€1,074 billion) confirmed the focus on directing economic resources towards decarbonisation targets, introducing a condition that at least 30% of the budget should be spent on actions for climate change and a principle of coherence with respect to climate policy for the entire spending programme. Placing “transformative resilience” at the heart of political action indicates a deep cultural change, recognising that policies must prepare individual countries to face a future that will be characterised by frequent shocks of various types.

The European plan is an opportunity for Italy - which with the new European budget goes from being a debtor to a creditor country - but also introduces an element of risk. The greatest challenge lies in changing an extremely complex form of governance in which the inability to approve projects - visible at all levels of society - stems from a lack of strategy, which in turn is the result of a lack of political vision and choice. In this context, instead of projects proceeding in a fluid and coordinated manner among all those involved and the various levels of subsidiarity, progress is brought to a halt by gargantuan, fragmented decision-making processes. The key aspect will not be the project itself, but to what extent the project is coherent with the overall strategy and capacity for implementation.

Without a vision and a clear political decision concerning decarbonisation, based on strategies for the fundamental segments of transition, which in turn need to include a governance mechanism for their implementation, funds can easily be badly spent and not lead to the change of direction our economy so desperately needs.

The real reform is therefore agreement on the goal of decarbonisation within public administration and among players in the economy, as well as a determination to ensure growth goes hand in hand with a strategy of innovation that is based on decarbonisation and can therefore offer a long-term perspective.

The figures presented in the “virtuous scenario” of our report are not just a goal, they are the only figures possible if Italy is to overcome the Covid disaster and build a sustainable society across the board.

## Scenarios and Macroeconomic Implications

The meaning of sustainable growth goes far beyond that of an economy that combats the negative effects of climate change. It extends to overcoming unequal distribution and distortions of the labour market, the result of the dominating economic model, and for Italy also, but not only, of long-term stagnation. The resources available to us are sufficient to deal with the long-term stagnation, but not to deal with the fragility of our decision-making system, which has been put on the spot by the not insignificant conditions attached to the European plan.

The starting point is 2020, in which year it is expected that there will be an 8.4% reduction in GDP, a 9% reduction in emissions, a collapse in investments to 16% of GDP, a significant impact on work, a reduction in income, an increase in inequality and an increase in people’s propensity to save. The ratio of public debt to GDP will be around 160%.

The following two scenarios are possible.

1. **In the virtuous scenario** the acceleration during the period of access to EU funds is significant. After bouncing back, the average annual growth rate remains at around 5% for a few years before falling to an average of 3.5% and converging on levels of around 2% in the long term. This trajectory is capable of supporting the energy transition and of generating the conditions for repayment of the debt. By 2030, good use of the EU funds takes GDP approximately 30% higher than it would have been without the funds and about 15% higher than in the conservative scenario. The impact on employment is significant. The rise in the number of jobs takes employment levels for people of working age from 57% in 2020 to 68% in 2030, still below the European average but with a major improvement in opportunities for young people. By 2030 the reduction in the debt-to-GDP ratio appears sufficient to bring levels down to pre-Covid levels, but not to those before the 2008 financial crisis.
2. **In the conservative scenario** after the bounceback in 2021, growth continues at around 2% during the years in which the EU funds are being used and falls to around 1% after 2030. Decarbonisation goals are uncertain and do not meet the long-term target of climate neutrality. The debt-to-GDP ratio is still unable to fall to below 140% in 2030.

The difference between the two scenarios is essentially down to the assumptions concerning Italy’s spending capacity, which is linked to the coherence of the decarbonisation policies as an indicator of support for private investment. In the *virtuous* scenario, the capacity of public policies makes it possible to commit and spend 80% of the EU resources and at the same time engage the private sector. In the *conservative* scenario, which reproduces Italy’s historic inability to use European resources in full, it is only possible to spend part of the EU resources - 50% - in a situation in which the private sector is reluctant to innovate in the face of the liquidity crisis following lockdown, which is not offset by a clear direction in economic policy and decarbonisation choices.

At the same time as the capacity for using the funds, it becomes clear that the short-term policies for relaunching demand are important, and must necessarily be directed towards decarbonisation goals. In particular, the reduced propensity for households to spend could - with the right incentives - be an opportunity to renew durable goods as part of energy transition. As in the sections on specific sectors, this shows the importance of the conditional nature of incentives (as in, for example, energy efficiency and mobility).

Clarity and support for policies with respect to decarbonisation target thus emerge as a central element on a par with the availability of resources.

The decisions the Italian Government will take on how to spend the European funds are important, not only for technical and administrative reasons, but also in substantive terms, and will have a significant impact on the outcome. Therefore, at the same time as preparing the National Plan, it will be important also to set out who does what in the next three years. The recommendation in this case is to start organising these aspects straight away, while collecting projects, and to use the experience in managing European funds that has been accumulated over the years.

In Italy the Next Generation EU funds will be managed centrally, at national level, and it is not clear what role regional government and local bodies will play in implementation. This is an important issue, because it separates the methods for implementing the NGEU (centralised) from those of the Multiannual Financial Framework, which is decentralised to regional government, for implementing the structural funds.

This central issue reveals a fundamental aspect, which has still not been part of discussions in recent months. This is the involvement of regional governments in decarbonisation goals. A governing body which is key to the management of European funds and the process of authorising infrastructure and renewable systems, a pillar of decarbonisation, cannot be exempt from the quantitative and procedural obligations relating to the reduction of carbon emissions to meet national targets. This factor must form part of the reforms in the Recovery Plan.

Finally, the national climate strategy is currently outlined in the Integrated National Energy and Climate Plan (PNIEC), which only applies to 2030, and does not yet include the revised goals set out in the Green Deal. Italy was supposed to have set out its Long Term Strategy (LTS) by January 2020, and the lack of a long-term decarbonisation strategy is significant when it comes to ensuring that the various projects and initiatives are consistent with the long-term vision.

Having structured the report in this way, some important considerations emerge from the macroeconomic section.

1. The State emerges as a key player in the decarbonisation process. No longer solely as an issuer of policies and measures, but directly by financing energy transition, with its decisions on public spending, subsidies and support for businesses and households and with support for research and innovation. The State is the key (and hitherto missing) element required to hedge the risk inherent in innovation and accelerate the decarbonisation process. In this, the construction of a decisive policy to reduce the regulatory risk linked to decarbonisation investments and policies plays an equally important role.
2. Investment is the only way to shift production towards sustainable and inclusive growth. Public investments emerge as the new players in climate policy, making it possible to anticipate strategies in various segments of decarbonisation. The efficacy of the recovery will depend on the efficiency of the policy.
3. Macroeconomic models are an indispensable tool in the development of strategies and economic policies aiming to guarantee a transition towards a net zero carbon emission global economy. Different models from those currently used by financial institutions will be necessary to plan all of this. Non-equilibrium models show a greater capacity to interpret the complexity of the impacts and opportunities of the reconstruction and innovation phase we will be dealing with and should be used in scenario analysis for government and financial institutions.
4. The European rules imposed by the fiscal pact have only been temporarily suspended and will need to be redesigned. Once the emergency phase has passed, the risk for Italy based on current rules will return. It is therefore important to reconsider on the one hand the possibility of separating public investments focused on achieving energy transition from

public debt, and on the other the criteria to assess member state sustainability and debt risk. It is reductive and mistaken to consider sustainability solely on the basis of public debt, especially in light of the fact that the financial crises of the past have been caused by the dimensions and quality of private debt (as in the 2008 financial crisis). Italy's total public and private debt is less than that of other economies considered to be virtuous and frugal. These are two important points for our country which it will only be possible to uphold in Europe if, at the same time, the country has demonstrated an effective spending capacity with respect to Europe's shared objectives of resilience and decarbonisation.

5. Finance emerges significantly as a central player in decarbonisation. The role of the ECB will be fundamental in orienting investment choices and accelerating energy transition. Recovery policies focus on reducing the risks hanging over shared goods (including the environment) and the creation of public goods (education, health, justice, etc.). Climate risk is considered the greatest systemic risk we are facing in the immediate future. Private investors seem increasingly determined to combat climate risk and seem willing to take on more initiatives and a few more risks if they find coherence in the decisions of the Central Banks as well as in fiscal policy. As a consequence, the constraints to the ECB's mandate must be updated to provide coherence and support the direction inaugurated by the NGEU.

### Reforms for Decarbonisation

Five areas have been selected in the report to support a strategy coherent with decarbonisation objectives:

**Taxation** A revision of energy taxation has a central role to play in the post-Covid strategy in order to support the overall coherence of decarbonisation. Europe plans to propose a revision of the energy taxation directive in 2021, but it would be useful to bring forward this process at national level to consolidate the message of the policy and ensure a fertile terrain for investments. A minimum price for CO<sub>2</sub> in all sectors is a minimum guarantee for investments in decarbonisation. Tax on energy in Italy is particularly high, and this gives room for manoeuvre when it comes to decarbonisation. It will not be necessary to increase the tax burden as part of the reform process, but rather to start reorienting the tax rates in a manner that is consistent with decarbonisation. The proposal to transfer the general electricity tariff system costs to taxation and to replace them by introducing taxation consistent with the decarbonisation policy is one example of this process. Low fossil fuel prices risk slowing down the choice of green options, but also represent an extraordinary opportunity to introduce a global carbon charge system. We believe that well-designed carbon taxes, and the gradual but rapid elimination of fossil fuel subsidies, can help align post-Covid economic recovery with climate targets.

**Sustainable Finance** Sustainable finance is a central element of the economic recovery and decarbonisation strategy, in line with traditional regulatory tools. The EU Sustainable Finance Action Plan was launched in 2018, based on the Paris Agreement commitments of making financial flows consistent with decarbonisation goals (Article 2). This implies disinvesting in projects involving fossil fuels, which increase carbon lock-in and with it the exposure of capital to climate change risks and investing in new carbon neutral projects. This is what Europe is asking of private investors. The allocation of public funds must be consistent with the goals of climate change mitigation and adaptation, in line with the new EU law currently under development. At the same time, investors complain of a lack of projects capable of attracting significant investment volumes with acceptable risk profiles. Public policies must take action in order to create the conditions to leverage private

investment within the framework of a model of public/private cooperation. The EU taxonomy classifies the priority sectors in the decarbonisation of the economy. The European Commission's Technical Expert Group on Sustainable Finance requires the taxonomy to be used to prepare national growth and resilience plans in order to identify the sectors towards which resources should be directed. Sustainable finance tools such as green bonds would make it possible to add additional capital for a sustainable economic recovery.

### **Circular Economy**

The circular economy is a model of production and consumption which is important for decarbonisation and greater resilience in the face of current challenges. The efficient use of materials can significantly contribute to reducing emissions and to the sustainability of the debt generated by works.

Circular economy regulation in Italy is recent and undergoing development. Here too, it is important to bring forward the outcomes of regulation in order to use the opportunities created by the circular economy in the specific structure of our production system. A circular economy is a particularly favourable model for Italian SMEs, thanks to its presence in some key international marketing supply chains, the importance of Italian design and the lack of raw materials. Encouraging a circular economy using the recovery fund is an opportunity to add value to SMEs, by offering them an environment in which to innovate their products and processes and helping to eliminate the risk that SMEs could hold back innovation and lose competitiveness on the markets.

The national recovery plan should contain a section on the circular economy, with a specific strategy and funding for programmes in the key areas and sectors identified by the European Commission Circular Economy Action Plan.

### **Green Public Procurement**

Public demand comprises more than 40,000 entities throughout the country with expenditure totalling approximately €170 billion a year. Green Public Procurement (GPP) involves adopting minimum environmental criteria when purchasing goods, services and works. There are five areas of economic activity in which minimum environmental criteria have the greatest impact on reducing CO<sub>2</sub> emissions: building and construction, energy services, public lighting, public transport and catering services. These are areas in which decarbonisation will have a profound effect, along with impacts on employment. Italy is the only country in Europe to have made GPP mandatory, although in practice it is often disregarded. The post-Covid reform strategy needs to take action on barriers to GPP to ensure that it serves the overall policy of decarbonisation. One very important aspect of GPP is the possibility of measuring the economic value of a product over its useful life, rather than just as its initial cost. This principle is fundamental for adopting solutions that will create a circular economy or with high initial capital outlay, such as e-mobility. Useful life cost needs to become a standard value, and public accounting needs to find a solution in order to enable this value to be used together with an asset's book value.

### **Work**

Development and decarbonisation include important changes in the world of work. Labour policies must specifically include the issues and implications of decarbonisation. With the losses of the great 2008-2009 recession still not recouped, Covid is exposing approximately two million workers to the risk of

unemployment. The areas most involved in decarbonisation directly employ one million workers. Work must aim to meet decarbonisation goals. In order for this to happen, systems safeguarding work need to be extensively and inclusively revised, with the introduction of guarantee mechanisms. Collective bargaining and industrial relations must be called upon to help govern the energy and environmental transition. The need to guarantee training becomes pressing during a period of transformation. The proposal from a State that promotes employment, and is an employer of last resort, can guide the economy and offer an indispensable buffer for facing the profound change required by decarbonisation. The proposal aims to reform the current structure of measures to guarantee income and combat poverty by generating work opportunities and new production activities. A new public economy and a decarbonisation strategy require new governance. This could take the form of a national agency which would engage the various social parties in the green development process.

### Sector-specific Actions for Decarbonisation and Resilience

The report identified the fundamental requirements for economic growth and decarbonisation in the form of a series of actions to boost economic growth and the short term and the long term. It is not a list of projects, but identifies significant actions for achieving the double dividend, and highlights the steps necessary to build a coherent policy framework.

**Industry** Climate strategy has to be seen as an industrialisation strategy. Resources need to be distributed with both a short-term and a long-term approach, in both cases avoiding carbon lock-in. Investments in readily available technologies can make domestic industry more competitive, and at the same time deliver benefits for employment and the environment. However, this is mainly the case for solutions relating to energy efficiency and the circular economy. In many industrial sectors that are fundamental to decarbonisation - steel, cement and chemicals - little technology has reached the necessary technological and commercial maturity. It is a matter of priority for a significant amount of the resources for growth to be directed into these industrial sectors moving forward. All the leading sectors of the domestic economy need to be represented in the recovery plan. The technological response to decarbonisation must be accelerated, either with pilot projects or by bringing forward the commercial launch of technologies. The same applies to the supply chains that are strategic to climate policy, hydrogen and electrochemical energy storage. Only by (at least partially) covering the risk using public resources will it be possible to open a channel towards private investment. Without a strategy focused on this element, it will be harder for private capital to contribute to growth. It would be blocked by the risk of lock-in on the one hand, and by the risk of speedier innovation on the other, the timing being dependent on the Covid crisis.

**Energy Efficiency** Energy efficiency is one of the areas with the greatest potential for achieving the double dividend of economic recovery and decarbonisation. The construction industry in particular accounts for 8% of Italian GDP, is linked to 90% of other areas of the economy and operates on the domestic market to the tune of 70%. The industry is already heavily subsidised, but there is still vast untapped potential, particularly in the residential sector. It would require a 30-year programme and short-term shock measures to unblock the process of increasing efficiency. The construction of schools and public housing are priority uses of the recovery fund

resources. It is estimated that an extraordinary plan to renovate all of Italy's schools would require around €40-50 billion, while public housing would require around €15-20 billion. The construction of a revolving fund for these two areas replenished by the savings achieved could progressively lead to full efficiency over the years. This expenditure would lead to annual energy savings of 13.5 and 5.5 TWh respectively. These projects need to be part of a long-term strategy including a programme of reforms to eliminate damaging incentives and obstacles to transition. What is required is an energetic tax system consistent with decarbonisation goals, incentives (tax deductions and Industry Plan 4.0) that no longer support works and technologies that are not compatible with energy transition, decarbonisation and the promotion of a circular economy.

### Electricity System

The development of electric renewable energy systems is central to decarbonisation goals. The necessary development of installations before 2050 and the positive impacts in terms of work and added value suggest that investments should be accelerated. The development of renewables has stalled. The policy has not facilitated the construction of an industrial system centred on technologies capable of renewing global energy systems. Renewables have been perceived as a cost rather than an opportunity for growth and development. The political intent to develop renewables on the market without costs for the consumer has been thwarted by the insurmountable obstacle of the authorisation process. In policy terms, the PNIEC identifies targets for developing renewables and energy storage that should be seen as minimum goals which cannot be missed. There is still no Long-Term Strategy to 2050, which would be a fundamental document to assist policymakers in evaluating the compatibility of investments with the long-term decarbonisation strategy. The proposals as a whole involve unlocking authorisations, confirming the role of market development of renewables alongside auctions, and planning the effect on industry of the development of renewables and associated technologies, energy storage and hydrogen. The national strategy must, as a priority, find a solution to governance and authorisations and to the industrial repercussions inherent in the development of energy technologies. Regulation needs to be consistent with policy objectives and be aligned with decarbonisation goals.

### Transport

Transport is one of the sectors lagging behind in the move towards decarbonisation, but also one of those most affected by the pandemic. In the post-Covid phase, transport systems will find major opportunities for renewal, which could be potentially of interest for reducing climate change. However, a series of different, complementary measures will be needed to exploit such opportunities to the full. In the first place, measures will need to expand the electrification of the vehicle fleet. Secondly, they will need to direct travel towards more energy-efficient means of transport (ships, railways, public transport and non-motorised travel). Finally, they will need to direct the expected changes in passenger and goods transport towards sustainability, by promoting smart working and e-commerce respectively. The underlying goals of the Next Generation EU programme facilitate the implementation of a set of actions that are effective and can be rolled out in the short term, possibly based on high-employment actions. The result is an innovative sector-based policy, which is based not so much on new infrastructure projects as on changing the way existing networks are regulated, using measures based on technology, fiscal rebalancing, support for good practice and the redevelopment of building layouts and functions.



**Adaptation** Adaptation is a high-yield economic investment which adopts existing tools and technologies and experiences of good management and planning practice. The environmental, healthcare-related and socio-economic co-beneficiaries of the reduction in climate damage are also important. All of these elements make adaptation a win-win strategy. The Recovery Fund is a unique opportunity to invest in adaptation projects. However, maximum integration between the various Plans and Strategies currently available to the Italian Government is necessary in order to avoid conflict and overlap. Generally speaking, “transformative resilience” has to be stimulated by mainstreaming, i.e. by integrating adaptation into development programmes, policies and strategies for managing the country.

**Food** The food system accounts for a significant quantity of emissions, estimated to be around 30% of the total at global level. With the approval of the Farm to Fork Strategy in May 2020, the European Commission set out for the first time that taking action on the food system as a whole is one of the keys to decarbonisation. This is a major turning point, because it is asking for agricultural production, product processing, logistics and distribution systems, commerce, methods of consumption and excess food and waste management to be considered as part of a single strategy. The food system’s contribution to decarbonisation could be huge, especially as support for economic recovery. The outcomes of the European policy - still under development - need to be brought forward in the shape of actions to reduce waste, adopt conservative farming practices, increase the infrastructure for processing organic waste and make food and agriculture systems local, in order to provide solutions to a fragmented distribution system that is unlikely to achieve innovation by itself.