REPORT ON THE STATE OF THE GREEN ECONOMY $\left. \begin{array}{c} 2020 \end{array} \right.$

EXECUTIVE SUMMARY

Focus

Recovering from the **pandemic** with the **Green Deal**



REPORT ON THE STATE OF THE GREEN ECONOMY - 2020

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The Covid-19 pandemic is having a huge impact on citizen lives, with many victims, and on the economy, causing a great recession in Italy, in Europe and in the whole world. How will we come out of this crisis? The stimulus packages for the economic recovery in the European Union — and not only — are undoubtedly paying a greater attention to environmental issues, especially climate-related issues, as the key to a **Green Deal**. This renewed green boost is thus at the heart of the 2020 edition of the States General of the Green Economy.

1. Package of proposals by the Council

The National Council of the Green Economy, which is composed by 69 organizations of companies representing the main sectors of the green economy in Italy, has defined a **package of proposals**, hereby reported integrally, **for the Italian recovery plan employing the EU Next Generation funds**. The proposals are defined in terms of measures both to boost investments and to provide guidelines for programs and reforms, and they are the outcome of discussions among organizations of companies and experts.

In particular, proposals related to **energy and climate** aim to direct EU Next Generation funds towards low-carbon technology innovation and processes, in order to strengthen — both with new plants and improving current capacity — renewable energy sources and energy efficiency. Furthermore, proposals aim to: support and extend the *110% ecobonus* tool; apply the EU Taxonomy system to direct all investments towards mitigation and adaptation to climate change; gradually introduce a carbon tax for sectors that are not regulated by the ETS system.

The proposals regarding **circular economy** focus on increasing the funds from *Piano Transizione* 4.0, by extending the supporting measures for companies for further five years and by doubling both the amount of incentives and the investment limits that can access the incentives. The increased funds should be directed to support — via tax credit — circular economy interventions, such as the design of longer-lasting products and of goods that are conceived to be reused, repaired, updated for function recovery or designed for recycling processes. Supported measures also aim to incentivize investments for developing a circular bioeconomy, in order to employ local and national biomass, to improve plants and technologies for subproducts and the recycling of plastic waste, construction waste as well as organic waste and sludges, so to obtain materials, digestate, compost and renewable energy.

The proposals regarding **green cities** aim to fund a national program for urban regeneration that focuses on: recovering and enhancing degraded areas and abandoned buildings to cope with the housing and activity demand, with no new land consumption; restoring and making areas and cities more liveable and more beautiful, by increasing green infrastructures and sociality spaces, as well as by adopting climate mitigation and adaptation measures in order to reduce flood risks and exposure to heatwaves. In addition, in light of a green recovery, measures should aim as well to increase by 30% the protected land and sea, by limiting soil consumption and waterproofing, slowing down urban expansion and by defining a plan for biodiversity restoration.

For what concerns sustainable **urban mobility**, the Council proposes to increase investments with the aim to strengthen public transportation, shared mobility, and bicycle lanes, with a target of reducing by 2030 the private motorization rate in Italy under the level of 500 cars per thousand inhabitants. Furthermore, incentives should be extended towards electrification and measures should aim to reach 25% of renewable energy share in the transport sector and to double the electricity share coming from renewable sources, focusing on LNG and Bio-LNG for heavy road transport, for maritime transport and for agriculture mechanization.

Regarding the **agri-food system**, the Council proposes to incentivize the dissemination of agriculture productions based on agroecology principles, which foster: the restriction of the use of phytosanitary products; the increase of organic fertilization; the reduction of greenhouse gas emissions; carbon capture; and the increase of organic production. The Council also proposes to launch initiatives for fiscal incentives for companies who apply circular business models in the food transformation sector and in retail commercial activities; part of the resources — that are already directed to support the sectoral contracts — should regard specific "sectoral contracts for green economy": as to say, contracts with proven environmental improvement targets and with a rewarding system for enhancing high-value natural land, for protecting soil fertility, for reducing erosion, and for enhancing organic carbon in soils.

2. The European Green Deal

Given the particularly noteworthy initiative that the EU has been taking for the Green Deal, this year the Report proposes a focus — not exhaustive but quite broad — on the European guidelines for investments and reforms that are to be defined in the national Recovery Plans. Even the simple citation of the arguments gives an idea of the breadth of the EU green directions. They began with the EU Commission proposal for the Green Deal in 2019, well before the pandemic, and arrive to the new Next Generation EU fund proposal for a green and digital transition. Sectoral directions are very detailed: the update of the energy strategy; the new EU Climate Law that enshrines climate neutrality by 2050 and increases the greenhouse gas emissions reduction targets to 55% by 2030; the measures to preserve and restore ecosystems and biodiversity; the Circular Economy Action Plan; the Farm to Fork strategy for the agri-food sector; the new decarbonization strategy for industry; the strategy for building and renovating in terms of both energy and resource efficiency; the strategy to boost the transition towards a sustainable and smart mobility; the European Taxonomy for sustainable finance.

3. Strategic topics on green economy

As is the tradition, the Report on the State of the Green Economy provides a synthetic update on the trends of strategic topics and sectors. This year's update also includes some references to the effects of the pandemic based on the available partial data.

GREENHOUSE GAS EMISSIONS In 2020 the Italian economy has been entering a deep recession, with an estimated GDP fall of around 10% or little less. The recession has been hitting harder on some sectors of the economy, but all activities have been affected, including the green economy ones. The first semester of 2020 saw an unprecedented fall in energy demand, which generated as well a notable reduction in greenhouse gas emissions. According to preliminary estimates by ENEA, with respect to the first six months of the previous year, $\rm CO_2$ emissions fell by more than 28 million tons: a 17% cut. The transport sector is responsible of around half of this reduction. The power sector also contributed significantly, with a 19% emission cut with respect to the first semester of 2019. According to

recent estimates, in the first semester of 2020 energy consumption decreased by almost 12 million tons of oil equivalent (Mtoe) with respect to the same period of 2019, thus registering a trend decline of -14%. The power sector saw a -6% compared to the first semester of 2019.

Renewables are the only energy sources that have continued to increase, with more than a 3% growth in the first semester of 2020 compared to the first semester of 2019. According to the estimates by ENEA, this could result, by the end of the year, in a record-high 20% share of renewables in the overall energy demand in Italy. Based on the latest updates from Terna, in the first semester of 2020, the electricity demand fell by 9% while the generation from renewable sources increased by over 2 TWh: this occurred thanks to the recovery of hydropower (+1,7 TWh) and the growth of photovoltaics (+1,2 TWh), which were able to counteract the decrease in wind power (0,7 TWh). Overall, the electricity demand was covered by 40% from renewable sources from the beginning of the year (it was 35% in the first semester of 2019).

RENEWABLE ENERGY

Due to the significant reduction in industrial production and in the construction sector, special waste production is estimated to decrease by 25% in 2020 as compared to the previous year. The production of urban waste showed a smaller reduction, between 10 and 14%, with an increase in organic household waste and, at the same time, a reduction in similar waste produced by stores, restaurants, bars and other services. Separate collection has continued with no evident contraction, but significant difficulties were registered in recycling, due to both the reduction of plants activities and, especially, secondary raw materials end markets. The halt in numerous activities and difficulties in foreign markets has caused a reduction in the demand as well as a fall of secondary raw materials prices, with difficulties in market placing. This year, more than ever before, the Italian consortia system has played a role, especially in the packaging sector, by supporting the sectors and ensuring collection of separate waste, as well as by financially supporting recycling and alleviating temporary market shortcomings.

CIRCULAR ECONOMY

The halt in catering business and tourism, especially internationally, and the lack of personnel and limitations to international sales have played a significant role in the difficulties of the agri-food sector: in 2020 agri-food sales are expected to decrease by approximately 24 billion euros.

AGRICULTURE

2020 was a disrupting year for mobility: use and registration of cars fell during the lockdown, and urban public transport and rail transport saw a significant decrease, not to mention the fall in air travel. It is worth mentioning the increase in electric cars registration on a monthly basis until June 2020, reaching 12.1% of the total registered cars in April and 3% of the overall registered cars in May and June, when sales started to rise again.

TRANSPORT

Good expectations for the various sectors of green economy derive, on the one hand, from the increased awareness of citizens on the environment, the quality of life and development observed during the pandemic, contributing to drive the market and the consumption and, on the other hand, from the fact that recovery and stimulus measures include a green approach, which is expected to grow even more. This is also encouraged by a strong European motivation with Next Generation EU, with greater attention to the climate crisis and thus pushing for measures on energy efficiency and savings in buildings, by the expected high increase in renewable energy, by the protection of resources, with the circular economy as a greener and more competitive economy in our future, and by agri-food production of increasingly high ecological quality.

GREEN CITY

Significant changes are expected in urban mobility as well: a robust increase in cycling and walking — with a boom in in bicycles sales — in micro mobility and in shared mobility could eventually lead to a reduction of privately owned cars and their use in cities. Together with the market success of ecological vehicles, especially electric ones, this would enable a great improvement in emission

levels, both locally and in greenhouse gas emissions, as well as a reduction in traffic congestion. Nonetheless, the reduced use of public transportation – hopefully temporary – could favor cars use. In cities of all dimensions a green awakening is happening and we are looking forward to the translation of the interesting declarations by many local administrators into significant interventions of high ecological quality, especially in urban regeneration.

4. The international framework and the pandemic

What has been the impact of the pandemic at the international level? $\mathbf{CO_2}$ in the atmosphere is still increasing, despite the reduction in greenhouse gas emissions derived from the effects of Coronavirus pandemic. $\mathrm{CO_2}$ concentration reached 417.2 ppm in May at Manua Loa observatory, as compared to 411.8 of the previous year. Daily $\mathrm{CO_2}$ emissions decreased on average by 17% worldwide at the beginning of April. However, as Covid-19 restrictive measures are reduced, the overall reduction in emissions for the entire year 2020 is expected to be between 4 and 7%, as compared to 2019. This substantial reduction in greenhouse gas emissions will likely not result in a reduction of $\mathrm{CO_2}$ atmospheric concentrations, as emission levels will remain higher than the sink levels (from land, forests, and seas) — despite the emission reduction.

IPSOS has released the results of an international poll to understand citizens' support to the topic of climate change and the green recovery perspective during the pandemic. In short, **the poll shows that 71% of respondents worldwide agree that in the long-term climate change will be a crisis as dangerous as the Covid-19 pandemic** and 68% believe the government would fail not addressing it immediately; 65% believe green economy is the key for the recovery from the crisis generated by Covid-19 and 57% say they would not vote for a political party whose program does not seriously address climate change.

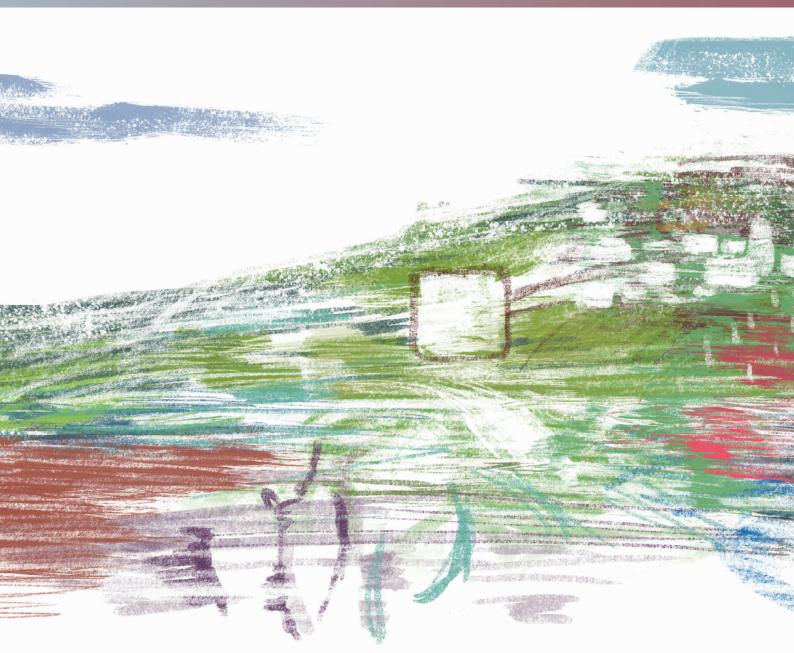
STRATEGIES FOR THE RECOVERY

Beside the EU initiative on the Green Deal, previously explained and commented, it should also be mentioned the OECD proposal for a recovery focused on the fight against climate change based on five fundamental sectors: agriculture, construction, electricity, industry, and transport. The interventions proposed by OECD are articulated in 25 guidelines promoting green economy with investments, taxes and subsidies regulation, as well as dissemination of good practices and information and education initiatives. The OECD, likewise the European Union, connects world economic recovery to the achievement of the Paris agreement targets.

However, it should be borne in mind that public interventions during the 2020 pandemic are of an emergency nature, and are devoted to the increased health expenditures, to social support to affected incomes, to payroll subsidies, and to subsidies to keep enterprises afloat, with no specific green approaches. In order to evaluate whether the recovery will have an effective green approach, we will have to wait until the health emergency will be overcome, with effective vaccines, going beyond subsidies and emergency health expenditure. In order to do so, we will have to wait until 2021, and most likely the second part of it.

We believe the transition to climate neutrality can have an acceleration after the pandemic; such acceleration could trigger a real Green Deal and open a new phase of development for green economy. This derives from various considerations on the worsening of the ongoing crisis, on updated economic and technological answers, on the increased commitment by a group of countries, led by the European Union. In such complex international dynamic, nothing is taken for granted: the next months will be crucial in defining the way forward, to understand if the European Green Deal initiative will effectively take off and what support it will have worldwide. And also, to understand if Italy will be able to play an advanced role in the new green European initiative.





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