

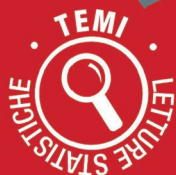


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2021 SDGs REPORT

STATISTICAL INFORMATION FOR 2030 AGENDA IN ITALY





2021 SDGs REPORT. **STATISTICAL INFORMATION FOR 2030 AGENDA IN ITALY**

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INDEX

	Pag.
Foreword	5
1. Indicators for sustainable development: general framework	7
1.1 Introduction	7
1.2 Progress towards sustainable development and the impact of the pandemic	8
1.3 Sustainable development at regional level	9
1.4 SDGs and the monitoring of the NRRP	10
2. Analysis of statistical measures by Goal	19
2.1 Goal 1 – End poverty in all its forms everywhere	19
2.2 Goal 2 – End hunger, achieve food security and improved nutrition and promote sustainable agriculture	25
2.3 Goal 3 – Ensure healthy lives and promote well-being for all at all ages	31
2.4 Goal 4 – Quality education for all. Provide quality, equitable and inclusive education and promote continuous learning opportunities for all	39
2.5 Goal 5 – Achieve gender equality and empower all women and girls	48
2.6 Goal 6 – Ensure availability and sustainable management of water and sanitation for all	56
2.7 Goal 7 – Ensure access to affordable, reliable, sustainable and modern energy for all	63
2.8 Goal 8 – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	69
2.9 Goal 9 – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	78
2.10 Goal 10 – Reduce inequality within and among countries	84
2.11 Goal 11 – Make cities and human settlements inclusive, safe, resilient and sustainable	90
2.12 Goal 12 – Ensure sustainable consumption and production patterns	97
2.13 Goal 13 – Take urgent action to combat climate change and its impacts	104
2.14 Goal 14 – Conserve and sustainably use the oceans, seas and marine resources for sustainable development	111

	Pag.
2.15 Goal 15 – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	117
2.16 Goal 16 – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	124
2.17 Goal 17 – Strengthen the means of implementation and revitalize the global partnership for sustainable development	129
Statistical measures by target and typology	137
3. International processes and national evolutions in SDGs statistical information Systems	157
3.1 The global process of implementation of the 2030 Agenda and the indicators defined by the United Nations in the IAEG-SDGs	157
3.2 Global statistical measures: some examples	160
3.3 European initiatives for achieving the 2030 Agenda	166
3.4 The evolution of the process of producing national statistical measures for the SDGs	169
3.5 Statistical measures for monitoring the National Sustainable Development Strategy	172

FOREWORD

The Sustainable Development Goals (SDGs), with their detailed targets, represent an extraordinary challenge, which we should always keep in mind and appreciate in their deep meaning. They indicate what changes the nations and peoples in the world are committed to achieve by 2030, and they do it based on a global consensus. Such consensus, which originally seemed unattainable, it has indeed been achieved by means of a long, complex and difficult process of dialogue as well as an international and interdisciplinary cooperation.

In this process, knowledge, information and data do play a key role, both in defining the desired goals and in monitoring and evaluating the strategies and actions taken to achieve them.

Official statistics are entrusted with the task of producing the evidence needed to fuel a generative and virtuous dynamics that reaches and involves institutions, stakeholders and citizens committed to achieving the Goals. I will quote a line by Lee Jong-Wook, who served as Director General of the World Health Organisation, which perfectly describes the inseparable link between evidence and practice, because “action without knowledge is a useless effort, and knowledge without action is a wasted resource”¹.

Statistics is called upon to contribute to the progress towards sustainability by providing its service, which consists in making available ever better, more specific, finer and up-to-date evidence to accompany each stage in the construction of sustainable development. Indeed, data and statistics produced for the specific purpose of describing precisely and clearly the targets, as well as monitoring the actions designated to achieve those targets are needed. Data and statistics are also needed to assess governance, resources and above all the effectiveness of the implementation of those actions. In this framework, statistical resources support all those involved in the process of sustainable development: for this reason, they must be accessible and easy-to-use for deeply involved users who are not necessarily experts, such as citizens, stakeholders, and local administrators.

This year’s SDGs Report portrays an Italy affected by the pandemic, which has created a wide gulf of inequality and exclusion. The experience of staying indoors is in fact very different, depending on the type of house one lives in; the digital divide has immediately translated into a social and cultural divide. The visible effects are an increase in poverty, a weakening of social capital in terms of training and education, and a worsening of the already significant arrears. The younger generations, families and especially women have been burdened with even more loneliness and care responsibilities.

In the uncertain climate of 2020, with its demographic repercussions on mortality, birth rates and marriages, and with the unknowns on employment, we have however been working on compensations, particularly for the accommodation and catering sector, and above all we have begun to look beyond, in search of a strategy that will make strategic sectors – such as tourism, mobility, health and social services, and public administration – more sustainable.

¹ Lee Jong-Wook 2005. Opening speech at the 58th World Health Organisation World Conference, Geneva.

Some sectors, such as the public administration, have accelerated innovation processes of enormous scope, such as smart working. The digitalization of businesses and services, although imposed by emergency measures, has started and is taking root.

The desire for recovery should be channelled in the direction of sustainability, especially reinforcing, jointly with vigilance, innovation capacity, also thanks to the substantial resources made available by the National Recovery and Resilience Plan. Energies and measures must be focused on particularly sensitive areas, such as the fragility of the territory, the efficient management of water and energy resources, land consumption, illegal activities, and the regeneration and treatment of waste. Protecting the weakest members of society, more inclusive access to resources, including digital resources, fighting educational poverty, strengthening education, research, knowledge, services for families and businesses, infrastructure and transport, are decisive sustainability objectives, whose achievement is challenging but within our reach.

Statistical tools describe their features precisely. I hope that, beginning this year already, data will be able to measure the distance we are narrowing, step by step.

Gian Carlo Blangiardo
President of the Italian National Statistical Institute

1. INDICATORS FOR SUSTAINABLE DEVELOPMENT: GENERAL FRAMEWORK¹

1.1 Introduction

The dissemination of the fourth edition of the Sustainable Development Goals (SDGs) Report takes place in a context characterised by the approval of the National Recovery and Resilience Plan (NRRP), whose positive effects are expected to start in the coming months, but also by still high levels of uncertainty about the evolution of the health crisis.

The Report takes these aspects into account by offering an initial overview of the impact of the pandemic on the SDG indicators updated to 2020. This set is given by 92 statistical measures; for the other 142 measures, the update is to 2019, and for 92 to 2018.

Overall, 354 statistical measures are published (including 326 different ones)² for 135 UN-IAEG indicators. Compared with the March 2020 publication, 119 have been updated.

In addition to the overall picture of the evolution of the SDGs, the Report offers its usual analysis at regional level, which is very useful to measure territorial imbalances.

This chapter introduces also an initial proposal for correspondence between the SDGs indicators and the six Missions provided by the NRRP. For each indicator, the availability of regional data and the year in which they were updated are specified: this information is relevant for possible interventions to improve and develop the database currently available.

For the statistical measures for which regional data are available, indications are given about the evolution of the process of reducing or widening the gaps between regions over the last few years. This measure of convergence makes possible an initial mapping of critical territorial aspects.

¹ This chapter was edited by Fabio Bacchini, Barbara Baldazzi and Lorenzo Di Biagio.

² The national statistical measures for the SDGs are edited by: Domenico Adamo, Barbara Baldazzi, Ciro Baldi, Tiziana Baldoni, Alessandra Battisti, Eugenia Bellini, Donatella Berna, Elisa Berntsen, Danilo Birardi, Emanuela Bologna, Silvia Bruzzone, Alessandra Burgio, Alessandra Capobianchi, Tania Cappadozzi, Raffaella Cascioli, Cinzia Castagnaro, Raffaella Chiozzini, Carmen Federica Conte, Cinzia Conti, Luigi Costanzo, Stefania Cuicchio, Daniela De Francesco, Viviana De Giorgi, Elisabetta Del Bufalo, Clodia Delle Fratte, Valeria de Martino, Andrea De Panizza, Alessia D'Errico, Claudia Di Priamo, Mascia Di Torrice, Gabriella Donatiello, Alessandro Faramondi, Aldo Femia, Doriana Frattarola, Luisa Frova, Flora Fullone, Lidia Gargiulo, Roberto Gismondi, Francesco Gosetti, Valentina Joffre, Antonino Laganà, Sandra Lalli, Cecilia Manzi, Marzia Loghi, Silvia Lombardi, Sandra Maresca, Anna Emilia Martino, Valeria Mastrostefano, Maria Liviana Mattonetti, Manuela Michelini, Giulia Milan, Costantino Milanese, Maria Giuseppina Muratore, Leopoldo Nascia, Alessandra Nurra, Renato Magistro, Sante Orsini, Monica Pace, Fernanda Panizon, Paola Patteri, Federica Pintaldi, Federico Polidoro, Maria Elena Pontecorvo, Sabrina Prati, Gaetano Proto, Simona Ramberti, Chiara Rossi, Mariangela Sabato, Maria Teresa Santoro, Miria Savioli, Elisabetta Segre, Giovanni Seri, Silvia Simeoni, Sabrina Sini, Mattia Spaziani, Vincenzo Spinelli, Carmela Squarcio, Simona Staffieri, Ilaria Straccamore, Giovanna Tagliacozzo, Stefania Taralli, Stefano Tersigni, Alessandra Tinto, Azzurra Tivoli, Caterina Torelli, Francesco G. Truglia, Angelica Tudini, Franco Turetta, Paola Ungaro, Donatella Vignani, Laura Zannella, Silvia Zannoni and Francesco Zarelli. The statistical indicators were developed through collaborations set up in Sistan and with institutions outside the statistical system. In particular: Istituto Superiore per la Protezione e la Ricerca Ambientale, Istituto Superiore di Sanità, Invalsi, ENEA, GSE S.p.A, Terna S.p.A., INGV, Bank of Italy, Ministry of Ecological Transition, Ministry of Foreign Affairs and International Cooperation, Ministry of Economy and Finance, Ministry of Health, Ministry of Education, Ministry of University and Research, Ministry of Justice, Ministry of Interior, Presidency of the Council of Ministers - Equal Opportunities Department, ASviS, Consob and Cresme.

The purpose of these in-depth analyses/reports is to promote the ongoing debate on the monitoring system of the NRRP, currently mainly linked to the macroeconomic impact of the measures³, by reinforcing the contributions already available in this area⁴.

The aggregate analyses illustrated in this chapter are accompanied by detailed analyses referring to each of the Goals reported in Chapter 2. Finally, Chapter 3 presents an update of the international and national processes of statistical information systems dedicated to the SDGs.

The Report is accompanied by an infographic, a dashboard that enables navigation among the indicators, the dissemination of data files and metadata referring to the statistical measures. All the documentation is available online at <https://www.istat.it/en/well-being-and-sustainability/sustainable-development-goals>.

1.2 Progress towards sustainable development and the impact of the pandemic

The overall analysis of the sustainable development indicators is presented taking into account the different timing of their updating. In detail, two subsets of measures are included: one containing those for which an update to 2019 or previous years is available, and the other referring to those updated to 2020.

The indicator levels for the first subset were compared with those of 10 years earlier (Figure 1.1, top graph). The overall picture is positive, with 60.5% of the measures improving, 19.1% unchanged and 20.5% worsening⁵.

The intensity of the positive signs drops significantly in case we include the available update to 2020 data: compared with the previous year, the share of measures improving decreases to 42.5%, while the percentage of those worsening increases to 37.0% (Figure 1.1, bottom graph).

3 See Chapter 4 of the NRRP and the Istat hearing on the 2021 Economic and Financial Document. (<https://www.istat.it/files/2021/04/Istat-DEF-2021.pdf>).

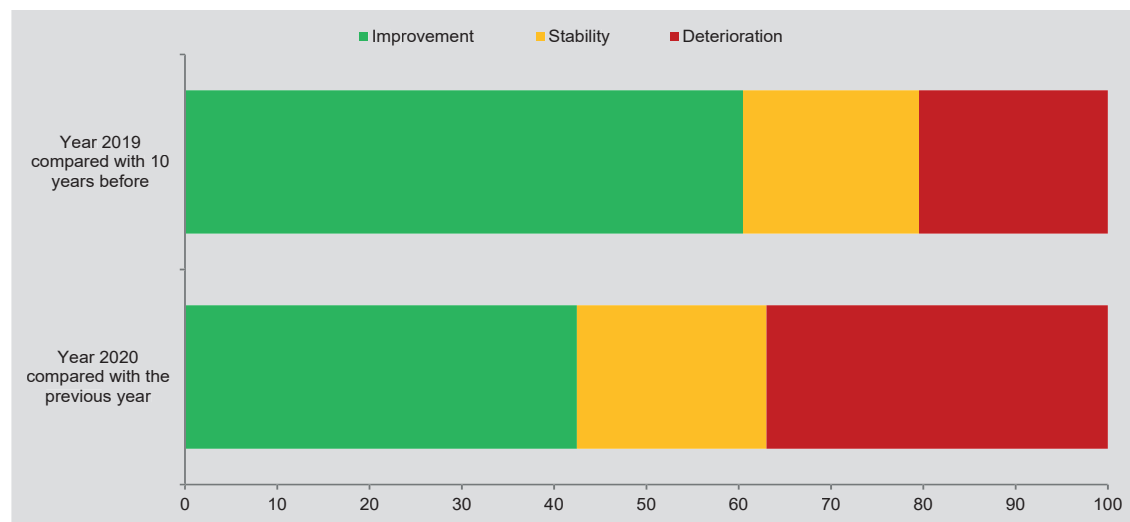
4 At the European level, see for example Monitoring report on progress towards the SDGs in an EU context (<https://ec.europa.eu/eurostat/documents/3217494/9940483/KS-02-19-165-EN-N.pdf/1965d8f5-4532-49f9-98ca-5334b0652820>), while at a national level, the analyses presented by both the Ministry of Economy and Finance in the annex to DEF 2021 dedicated to fair and sustainable wellbeing indicators (Part II, http://www.dt.mef.gov.it/modules/documenti_it/analisi_programmazione/documenti_programmatici/def_2021/DEF_2021_ALLEGATO_BES_versione_finale.pdf) and by the Italian Alliance for Sustainable Development. (https://asvis.it/public/asvis2/files/Pubblicazioni/Docu_PNRR_2021.pdf).

5 The synthetic representation of the trends measured by the indicators is achieved by calculating their changes in the short term (usually t over $t-1$) and in the long term (usually t over $t-10$). The changes are then classified according to

the values of a Compound Annual Growth Rate (CAGR), calculated as $CAGR = \left(\frac{y_t}{y_{t_0}}\right)^{\frac{1}{t-t_0}} - 1$, where t_0 is the base

year, t is the year considered and y is the value of the indicator. For indicators with a positive direction (i.e., those whose increase indicates convergence towards the objectives) the long-term trend is considered: improving, if $CAGR > 0.5\%$; stable, if $-0.5\% \leq CAGR \leq 0.5\%$; and worsening, if $CAGR < -0.5\%$. For the short term, a threshold of $\pm 1\%$ is considered. Naturally, the scale is applied in the opposite direction for indicators with a negative direction.

Figure 1.1 - Overall trend in statistical measures updated to 2019 and earlier years compared with 10 years earlier and statistical measures updated to 2020 compared with the previous year



1.3 Sustainable development at regional level

In this edition of the Report, the update of the levels of regional sustainable development is presented by the distribution of the quintiles of the indicators for the latest available year.⁶ In this way, it is possible to evaluate the relative position of each region with respect to the set of indicators. By doing so, however, the evaluation of their dynamics is blurred (Figure 1.2).

The regional map shows a stable difference in sustainable development in favour of the North-Eastern regions (20.4% of the indicators in the fifth quintile, the most virtuous) compared with the South and the Islands (respectively 46.9% and 54.0% of the indicators in the first quintile, the least virtuous).

In the Autonomous Provinces of Bolzano and Trento, more than 40% of the indicators are in the fifth quintile (42.5% and 49.3% respectively). Valle d'Aosta also has a particularly favourable distribution (40.6%). In the North-West (11.5% of indicators in the fifth quintile), the distribution of indicators is more favourable in Lombardia (25.2% in the fifth quintile) than in Liguria and Piemonte (13.5% and 12.9% respectively).

In the central regions, the distribution in quintiles is more unfavourable in Lazio, with a higher number of indicators in the second quintile (32.7%), compared with the Marche, Toscana and Umbria, characterised by a prevalence of indicators in the third and fourth quintiles.

In the South and Islands regions, the values for the indicators are among the lowest, with a prevalence in the first quintile especially in Sicilia, Campania and Calabria (56.8%, 54.1% and 49.3% respectively), while in Abruzzo the distribution appears closer to that of Lazio.

⁶ After ordering the regional distribution of the values of each indicator in such a way as to obtain five groups with the same number of units, the percentage of indicators in the various groups is considered for each region (from those in the lowest 20% to those in the last group, corresponding to the highest 20% of values). The calculation takes into account the polarity of each indicator, i.e. whether its increase has a positive or negative impact on sustainable development.

Figure 1.2 - SDGs statistical measures, by region, geographic distribution and quintile. Last available year (percentage distribution)

REGIONS AND GEOGRAPHICAL AREA	Quintiles					Total available measures
	I	II	III	IV	V	
	(0-20)	(20-40)	(40-60)	(60-80)	(80-100)	
Piemonte	11.6	21.8	34.0	19.7	12.9	147
Valle d'Aosta/Vallée d'Aoste	19.6	11.9	9.8	18.2	40.6	143
Liguria	15.5	19.6	27.0	24.3	13.5	148
Lombardia	19.7	12.2	18.4	24.5	25.2	147
Bolzano/Bozen	16.4	17.8	11.6	11.6	42.5	146
Trento	14.4	8.9	6.8	20.5	49.3	146
Veneto	15.6	19.7	20.4	23.8	20.4	147
Friuli-Venezia Giulia	14.9	18.9	12.8	28.4	25.0	148
Emilia-Romagna	15.0	15.6	18.4	29.9	21.1	147
Toscana	8.8	16.9	38.5	26.4	9.5	148
Umbria	12.2	21.1	25.9	25.9	15.0	147
Marche	13.5	18.9	31.1	25.0	11.5	148
Lazio	18.4	32.7	21.8	16.3	10.9	147
Abruzzo	16.2	35.1	27.0	12.8	8.8	148
Molise	31.3	27.9	15.0	11.6	14.3	147
Campania	54.1	14.2	14.2	8.8	8.8	148
Puglia	45.3	20.3	14.2	14.2	6.1	148
Basilicata	38.5	22.3	12.8	11.5	14.9	148
Calabria	49.3	14.2	10.8	12.2	13.5	148
Sicilia	56.8	13.5	6.1	12.2	11.5	148
Sardegna	27.0	37.2	12.8	13.5	9.5	148
North-West	11.5	15.9	25.7	35.4	11.5	113
North-East	9.7	17.7	20.4	31.9	20.4	113
Centre	7.1	24.3	46.4	14.3	7.9	130
South	46.9	15.9	17.7	11.5	8.0	113
Islands	54.0	17.7	9.7	14.2	4.4	113

1.4 SDGs and the monitoring of the NRRP

As mentioned previously, at European level SDGs have already become one of the tools used to monitor a country's development⁷. With respect to this scenario, the NRRP illustrates the areas of intervention through a number of indicators that describe Italy's delay in the social, economic and environmental spheres.

An initial mapping of the correspondences between the SDGs and the six Missions of the Plan⁸ is proposed with the aim of encouraging debate on the use of sustainability indicators to monitor the progress of the NRRP. It is worth recalling that, along with each Mission, the Plan envisages three types of Reforms: horizontal Reforms, which concern the justice

⁷ See for example European Commission. 2020. Country Report Italy 2020 (https://ec.europa.eu/info/sites/default/files/2020-european-semester-country-report-italy_en.pdf) and, for a more general approach, P. Van de Ven. 2019. "Measuring economic well-being and sustainability: a practical agenda for the present and the future" (Eurona, 1/2019).

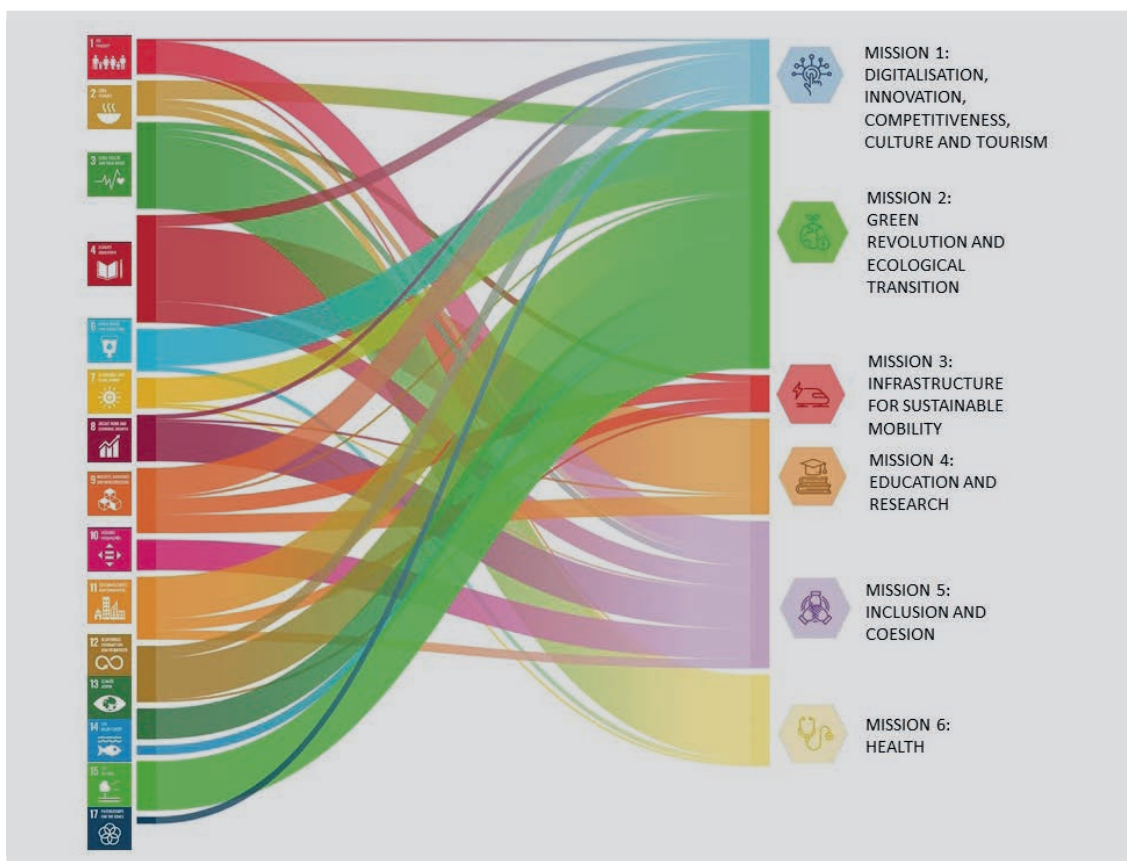
⁸ Please note that the Plan is divided into six Missions, which in turn are divided into a total of sixteen Components: M1 is Digitalisation, Innovation, Competitiveness, Culture and Tourism (three Components); M2 is Green Revolution and Ecological Transition (four Components); M3 is Infrastructure for Sustainable Mobility (two Components); M4 is Education and Research (two Components); M5 is Inclusion and Cohesion (three Components); and M6 is Health (two Components).

system and general government; enabling Reforms, which refer for the simplification and rationalisation of legislation and the promotion of competition; and accompanying Reforms, which are of a different nature and range from tax reform to the law on land use. Moreover, NRRP identifies intergenerational, gender and territorial equal opportunities as cross-cutting priorities on the basis of which the Missions and Reforms are assessed.

This general framework makes available a specific link to two Goals, 5 - Gender Equality and 16 - Peace, Justice and Strong Institutions: the first is associated with the monitoring of one of the transversal priorities, gender equality, and the second with horizontal Reforms for justice and general government and with enabling Reforms for regulatory simplification.

The overall picture of the relationships between the indicators belonging to the other 15 Goals and the 6 Missions highlights the significant capacity of the SDGs to represent the Missions of the NRRP (Figure 1.3)⁹.

Figure 1.3 - Overall framework of the relationships between Goals and Missions



This general framework has been enriched by a thorough analysis, which has led to each SDGs indicator being classified in correspondence with a Mission (the overall picture of the relationships between Missions, SDGs indicators and statistical measures is reported in

⁹ Inside Figure 1.3, the arc relating Goal to Mission represents the number of connected statistical measures. For example, Goal 1 is linked to Mission 5 by 13 statistical measures and to Missions 1 and 6 by one statistical measure. Vice versa, Mission 1 is connected to Goal 1 by one statistical measure, to Goal 4 by 5 measures, to Goal 8 by 2, to Goal 9 by 12, to Goal 12 by 5 and to Goal 17 by 3.

the Appendix). In particular, for each indicator, the number of measures used to represent it is reported, also specifying the availability of a regional breakdown and the latest update.

Tables contain two other information: the selection of the individual measure jointly with the trend of the convergence process over time between the regions, drawn up in order to provide a tool for monitoring territorial divergences, one of the transversal priorities of the NRRP.

For each indicator, the choice of the statistical measure took into account the availability of data in time series at a regional level. Then, these data were used to calculate the ratio between the coefficient of variation CV_t for the regional values at the time and that measured ten years earlier (CV_{t-10})¹⁰. The arrows in the last column indicate progress (green), stability (yellow) or deterioration (red) in the process of convergence between regions.

For example, the flu vaccination coverage of the elderly population (Goal 3, Mission 6, Indicator 3.b.1), which recorded a significant increase in the 2020-21 winter season (+12 percentage points, reaching 66.5% of over-65 population compared with 54.6% in the previous season), shows an increase in the distance between the most virtuous regions and those with the lowest percentages of vaccinated persons (divergent red arrows), which can reach up to 50 points.

In contrast, when considering the share of places available in nursery schools for 0-2 year olds (Goal 4, Mission 4, indicator 4.2.1), there is a reduction in the distance between the regions (converging green arrows), which reflects the relevant increase recorded by the southern regions.

The tables in the appendix make it possible to construct an initial list of issues with respect to which the trend of convergence between regions is particularly critical.

The framework of the reports and analyses presented underlines how the SDG framework can be a tool for monitoring the NRRP, both with respect to the transversal themes of the Plan, such as territorial and gender equality, and to the specific Missions.

¹⁰ The measure of change in relative inequality (given by the ratio of and) is averaged over the period, and varied by sign to take into account the negative polarity of the coefficient of variation (the smaller it is, the lower the regional inequality), thus obtaining the Compound Annual Rate of Convergence (CARG). Relative inequality is then classified as: improving (convergence between regions, decrease in inequality), if $CARG > 0.5\%$; stable, if $-0.5\% \leq CARG \leq 0.5\%$; and worsening (divergence between regions, increase in inequality), if $CARG < -0.5\%$.

Appendix - Tables of correspondence between NRRP Missions and SDG indicators by latest available year, selected measure and convergence between regions compared with 10 years earlier


MISSION 1: Digitalisation, innovation, competitiveness, culture and tourism	GLOBAL INDICATOR	STATISTICAL MEASURES	LAST AVAILABLE YEAR	REGIONAL DETAIL	SELECTED MEASURE	CONVERGENCE BETWEEN REGIONS
	1.4.1 - Proportion of population living in households with access to basic services	1	2020	YES	People age 6 and older who use their mobile phone daily, per 100 people with the same characteristics	→ →
	4.1.1 - Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	1	2018		Inadequate level of financial literacy (15-year-old students)	
	4.4.1 - Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	3	2019	YES	People with high level of IT competencies	→ →
	4.6.1 - Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	1	2018	YES	STEM graduates	← ←
	8.9.1 - Tourism direct GDP as a proportion of total GDP and in growth rate	2	2017		Tourism direct GDP as a proportion of total GDP	
	9.2.2 - Manufacturing employment as a proportion of total employment	1	2020	YES	Manufacturing employment as a proportion of total employment	
	9.3.1 - Proportion of small-scale industries in total industry value added	1	2018	YES	Share of manufacturing value added of small-scale manufacturing enterprises on the total manufacturing value added	
	9.3.2 - Proportion of small-scale industries with a loan or line of credit	1	2018	YES	Percentage of small-scale enterprises with at least one line of credit	
	9.5.1 - Research and development expenditure as a proportion of GDP	4	2018	YES	Product and/or process innovative enterprises (per 100 enterprises)	→ →
	9.5.2 - Researchers (in full-time equivalent) per million inhabitants	1	2020		ICT specialists in employment	
	9.b.1 - Proportion of medium and high-tech industry value added in total value added	1	2018	YES	Proportion of medium and high-tech industry value added in total value added	→ →
	9.c.1 - Proportion of population covered by a mobile network, by technology	3	2020	YES	Households with fixed and/or mobile broadband connection	→ →
	12.b.1 - Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability	5	2019	YES	Nights spent in open air establishments, farmhouses and mountain refuges on nights spent in all the accommodation establishments	← ←
	17.8.1 - Proportion of individuals using the Internet	3	2020	YES	Individuals aged 6 years and over who used the Internet in the last 3 months	→ →

MISSION 2: Green revolution and ecological transition




GLOBAL INDICATOR	STATISTICAL MEASURES	LAST AVAILABLE YEAR	REGIONAL DETAIL	SELECTED MEASURE	CONVERGENCE BETWEEN REGIONS
2.3.2 - Average income of small-scale food producers, by sex and indigenous status	1	2019		Earnings before interest, taxes, depreciation and amortization of farms (EBITDA)	
2.4.1 - Proportion of agricultural area under productive and sustainable agriculture	5	2019	YES	Share of utilized agricultural land under organic farming	→ ←
2.a.1 - The agriculture orientation index for government expenditures	2	2019		Agriculture orientation index for government expenditures	
6.1.1 - Proportion of population using safely managed drinking water services	4	2018	YES	Water supplied per capita	← →
6.3.1 - Proportion of domestic and industrial wastewater flow safely treated	3	2018	YES	Public sewage coverage	
6.3.2 - Proportion of bodies of water with good ambient water quality	6	2019	YES	Coastal bathing waters	→ ←
6.4.1 - Change in water-use efficiency over time	1	2018	YES	Urban water supply network efficiency	← →
6.4.2 - Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	1	2018	YES	Freshwater withdrawal for public water supply	
6.6.1 - Change in the extent of water-related ecosystems over time	1	2018	YES	Wetlands of International Importance	
7.1.1 - Proportion of population with access to electricity	1	2020	YES	Households very or fairly satisfied with the continuity of the service of electricity supply	→ ←
7.2.1 - Renewable energy share in the total final energy consumption	5	2019	YES	Electricity from renewable sources	→ ←
7.3.1 - Energy intensity measured in terms of primary energy and GDP	4	2019	YES	Energy intensity	
7.b.1 - Installed renewable energy generating capacity in developing countries (in Watts per capita)	1	2020		Net installed renewable energy generating capacity	
9.4.1 - CO2 emission per unit of value added	1	2019		CO2 emission per unit of value added	
11.3.1 - Rapporto tra tasso di consumo di suolo per tasso di crescita della popolazione	2	2020	YES	Abusivismo edilizio	→ ←
11.4.1 - Total expenditure per capita on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)	1	2019		Public expenditure per capita spent on the preservation of the cultural and natural heritage	
11.5.1 - Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	2	2017	YES	Population at risk of landslides / flood	
11.6.1 - Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities	1	2019	YES	Municipal waste collected	← →
11.6.2 - Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	11	2019	YES	Air quality – PM2.5	← →
11.7.1 - Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	1	2019	YES	Incidence of urban green areas on urbanized area of the cities	==
12.2.2 - Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	3	2019	YES	Domestic material consumption per GDP	
12.4.2 - (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment	3	2018	YES	Hazardous waste generation	
12.5.1 - National recycling rate, tons of material recycled	4	2019	YES	Separate collection of municipal waste	→ ←
12.6.1 - Number of companies publishing sustainability reports	6	2017	YES	Public institutions that adopt forms of social and/or environmental reporting	
12.7.1 - Degree of sustainable public procurement policies and action plan implementation	1	2015	YES	Percentage of public institutions that purchase goods and/or services by adopting minimum environmental criteria (CAM), in at least one purchase procedure (Green purchases or Green Public Procurement)	
12.c.1 - Amount of fossil-fuel subsidies (production and consumption) per unit of GDP	1	2019		Fossil-fuel subsidies as a percentage of GDP	
13.1.1 - Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	8	2019	YES	Impact of forest fires	→ ←
13.2.2 - Total greenhouse gas emissions per year	4	2019		Emissions of CO2 and other greenhouse gasses	
13.3.1 - Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment (repeated in the refinement to be made to indicators 4.7.1 and 12.8.1, contained in annex III)	1	2020	YES	Concern for climate change	← →
14.4.1 - Proportion of fish stocks within biologically sustainable levels	1	2018		Fish stock in over exploitation (Western Mediterranean)	
14.5.1 - Coverage of protected areas in relation to marine areas	3	2020	YES	Marine protected areas	
15.1.1 - Forest area as a proportion of total land area	2	2020	YES	Forest area as a proportion of total land area	
15.1.2 - Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	3	2017	YES	Protected natural areas	==
15.2.1 - Progress towards sustainable forest management	4	2020		Proportion of forest area within legally established protected areas	
15.3.1 - Proportion of land that is degraded over total land area	2	2019	YES	Soil sealing from artificial land cover / Fragmentation of natural and agricultural land	==
15.4.1 - Coverage by protected areas of important sites for mountain biodiversity	1	2019		Average Proportion of Mountain Key Biodiversity Areas (KBAs) covered by protected areas	
15.4.2 - Mountain Green Cover Index	1	2018	YES	Mountain Green Cover Index	==
15.5.1 - Red List Index	5	2018		Proportion of species threatened with extinction, by level of the threat: Bees	
15.7.1 - Proportion of traded wildlife that was poached or illicitly trafficked	2	2018		Checks done / Offences detected in application of the CITES	
15.8.1 - Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species	1	2019		Spreading of alien animal and vegetal species	

MISSION 3: Infrastructure for sustainable mobility



GLOBAL INDICATOR	STATISTICAL MEASURES	LAST AVAILABLE YEAR	REGIONAL DETAIL	SELECTED MEASURE	CONVERGENCE BETWEEN REGIONS
3.6.1 - Death rate due to road traffic injuries	3	2019	YES	Age standardised death rate due to road traffic injuries	↔
9.1.2 - Passenger and freight volumes, by mode of transport	7	2019		Passenger / Freight volumes, by mode of transport	
11.2.1 - Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	5	2020	YES	Frequent users of public transport	↔
12.b.1 - Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability	1	2020		Tourism trips in Italy by main means of transport	

MISSION 4: Education and research



GLOBAL INDICATOR	STATISTICAL MEASURES	LAST AVAILABLE YEAR	REGIONAL DETAIL	SELECTED MEASURE	CONVERGENCE BETWEEN REGIONS
4.1.1 - Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	14	2020 / 2021	YES	Inadequate level of literacy / numeracy (students in grade 8, grade 10, grade 13)	
4.1.2 - Completion rate (primary education, lower secondary education, upper secondary education)	1	2020	YES	Early leavers from education and training	==
4.2.1 - Proportion of children aged 24–59 months who are developmentally on track in health, learning and psychosocial well-being, by sex	1	2019 / 2020	YES	Percentage of seats authorized in socio-educational services for early childhood (nurseries and supplementary services) on children aged 0-2	↔
4.2.2 - Participation rate in organized learning (one year before the official primary entry age), by sex	1	2018 / 2019	YES	Participation rate in organized learning (one year before the official primary entry age)	↔
4.3.1 - Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	6	2020	YES	Participation in life-long learning	↔
4.4.1 - Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	3	2019	YES	Individual who have basic or above basic overall digital skills	↔
4.6.1 - Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	2	2020	YES	People having completed tertiary education (30-34 years old)	↔
4.a.1 - Proportion of schools offering basic services, by type of services	4	2019 / 2020	YES	Physically accessible schools	
8.6.1 - Proportion of youth (aged 15-24 years) not in education, employment or training	1	2020	YES	People not in education, employment, or training (NEET)	↔
9.5.1 - Research and development expenditure as a proportion of GDP	6	2019	YES	R&D intensity	
9.5.2 - Researchers (in full-time equivalent) per million inhabitants	2	2018	YES	Researchers (in full time equivalent)	↔

MISSION 5: Inclusion and cohesion



GLOBAL INDICATOR	STATISTICAL MEASURES	LAST AVAILABLE YEAR	REGIONAL DETAIL	SELECTED MEASURE	CONVERGENCE BETWEEN REGIONS
1.1.1 - Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	1	2019		In-work at-risk-of-poverty rate	
1.2.1 - Proportion of population living below the national poverty line, by sex and age	1	2020		Absolute poverty (incidence)	
1.2.2 - Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	4	2019	YES	At risk of poverty or social exclusion - AROPE	==
1.4.1 - Proportion of population living in households with access to basic services	2	2019	YES	Housing cost overburden rate	↔
1.5.1 - Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	4	2018		Deaths and missing / Injured persons for landslides or floods	
1.a.2 - Proportion of total government spending on essential services (education, health and social protection)	1	2019		Proportion of total government spending on essential services (education, health and social protection)	
2.1.2 - Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	3	2019		Households with signals of food insecurity	
3.7.2 - Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	2	2019	YES	Age-specific fertility rates for 1000 women aged 15-19. The numerator is the number of live births to women aged 15-19 years, and the denominator is an estimate of women aged 15-19 years	↔
3.8.2 - Proportion of population with large household expenditures on health as a share of total household expenditure or income	1	2019		Population aged 16 and over reporting unmet needs for medical care due to being too expensive	
4.2.1 - Proportion of children aged 24–59 months who are developmentally on track in health, learning and psychosocial well-being, by sex	1	2019 / 2020	YES	Percentage of seats authorized in socio-educational services for early childhood (nurseries and supplementary services) on children aged 0-2	↔
4.3.1 - Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	4	2019	YES	Students with disabilities: Pre-primary / Primary / Lower secondary / Upper secondary	
4.a.1 - Proportion of schools offering basic services, by type of services	4	2019 / 2020	YES	Schools with pupils with disabilities by adapted computer workstations (Percentage value): Primary / Lower secondary / Upper secondary	↔
7.1.1 - Proportion of population with access to electricity	1	2019		Inability to keep home adequately warm	
8.3.1 - Proportion of informal employment in total employment, by sector and sex	1	2018	YES	Share of employed persons not in regular occupation	↔
8.5.1 - Average hourly earnings of employees, by sex, age, occupation and persons with disabilities	3	2020	YES	Share of employees with below 2/3 of median hourly earnings	↔
8.5.2 - Unemployment rate, by sex, age and persons with disabilities	6	2020	YES	Unemployment rate	↔
8.6.1 - Proportion of youth (aged 15-24 years) not in education, employment or training	1	2020	YES	People not in education, employment, or training (NEET)	↔
8.8.1 - Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status	1	2018	YES	Incidence rate of fatal occupational injuries or injuries leading to permanent disability	↔
8.b.1 - Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy	2	2019		Total government spending in employment programmes and social protection from unemployment as a proportion of GDP	
8.10.1 - (a) Number of commercial bank branches per 100,000 adults and (b) number of automated teller machines (ATMs) per 100,000 adults	3	2019	YES	Number of branches per 100,000 inhabitants	↔
10.1.1 - Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	6	2019	YES	Gross disposable income per capita	==
10.2.1 - Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities	1	2019	YES	People at risk of poverty	==
10.7.2 - Number of countries with migration policies that facilitate orderly, safe, regular and responsible migration and mobility of people	5	2019	YES	Number of acquisitions of citizenship	
10.7.4 - Proportion of the population who are refugees, by country of origin	1	2020		Residence permits for asylum per 1,000	
11.1.1 - Proportion of urban population living in slums, informal settlements or inadequate housing	3	2019	YES	Overcrowding rate	↔
11.7.2 - Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months	1	2016	YES	Persons aged 14-65 years old victims of at least one form of sexual harassment in the last 12 months	

MISSION 6: Health



GLOBAL INDICATOR	STATISTICAL MEASURES	LAST AVAILABLE YEAR	REGIONAL DETAIL	SELECTED MEASURE	CONVERGENCE BETWEEN REGIONS
1.3.1 - Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable	1	2020	YES	Unmet need for medical examination	→ →
2.1.2 - Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	2	2018		Prevalence of moderate or severe food insecurity	
2.2.2 - Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)	2	2019	YES	Overweight or obesity among minors from 3 to 17 years of age	
3.2.1 - Under-five mortality rate	1	2020	YES	Under-five mortality rate	→ →
3.2.2 - Neonatal mortality rate	1	2018	YES	Neonatal mortality rate	→ →
3.3.1 - Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	1	2019	YES	Number of new HIV infections per 100,000	→ →
3.3.2 - Tuberculosis incidence per 100,000 population	1	2019		Tuberculosis incidence per 100,000 population	
3.3.4 - Hepatitis B incidence per 100,000 population	1	2020		Hepatitis B incidence per 100,000 population	
3.4.1 - Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	3	2018	YES	Probability of dying between ages 30 and 69 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases	← ←
3.4.2 - Suicide mortality rate	2	2018	YES	Age standardised suicide mortality rate	← ←
3.5.2 - Alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol	2	2020	YES	Alcohol consumption (standardized rates)	==
3.6.1 - Death rate due to road traffic injuries	1	2019	YES	Road accidents serious harmfulness rate	→ →
3.8.1 - Coverage of essential health services	7	2019	YES	Hospital beds	→ →
3.8.2 - Proportion of population with large household expenditures on health as a share of total household expenditure or income	1	2019		Population aged 16 and over reporting unmet needs for medical care due to being too expensive	
3.9.3 - Mortality rate attributed to unintentional poisoning	1	2018	YES	Unintentional poisoning standardized mortality rate	→ →
3.a.1 - Age-standardized prevalence of current tobacco use among persons aged 15 years and older	1	2020	YES	Smoking (standardized rates)	→ →
3.b.1 - Proportion of the target population covered by all vaccines included in their national programme	4	2020 / 2021	YES	Influenza vaccination coverage age 65+	← ←
3.c.1 - Health worker density and distribution	4	2020	YES	Physicians	→ →
6.1.1 - Proportion of population using safely managed drinking water services	2	2020	YES	Households that don't trust to drink tap water	==
7.1.1 - Proportion of population with access to electricity	1	2019		Inability to keep home adequately warm	



GOAL 1

**END POVERTY
IN ALL ITS FORMS
EVERYWHERE¹**

In brief

- In 2020, more than 2 million households (7.7%), out of more than 5.6 million individuals (9.4%), were living in absolute poverty. Compared to the previous year, absolute poverty grew especially in the North-West (10.1% individuals in absolute poverty; +3.3 percentage points compared to 2019) and in the North-East (8.2%, +1.6 p.p.). On the other hand the increase in the Centre (6.6%; +1 p.p.), in the South (11.7%; +1 p.p.) and in the Islands (9.8%; +0.4 p.p.) showed a moderate intensity.
- Absolute poverty increased in every age class, except among those over 65 years. Also in the year of the pandemic, to live in families including only elderly or in which there was an elderly person - often with a pension income – mitigated the risk of falling into absolute poverty.
- The spread of Covid-19 has had a deep impact on the failure to apply for health care services. In 2019, 6.3% of people declared to have given up a doctor's appointment even if it was needed; in 2020 the share reached 9.6%. About half of them declared the reason they have foregone the appointment was related to Covid-19.

The statistical measures released by Istat for Goal 1 are twenty-one and refer to eight UN-IAEG-SDGs indicators (Table 1.1).

¹ This section was edited by Barbara Baldazzi with contributions by Clodia Delle Fratte, Valeria de Martino, Manuela Michellini.

Table 1.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
1.1.1	Proportion of the population living below the international poverty line by sex, age, employment status and geographic location (urban/rural)				
	In-work at-risk-of-poverty rate (Istat, 2019, percentage values)	National context	11.8		
1.2.1	Proportion of population living below the national poverty line, by sex and age				
	Absolute poverty (incidence) (Istat, 2020, percentage values)	Identical	9.4		
1.2.2	Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions				
	At risk of poverty or social exclusion - AROPE (Istat, 2019, percentage values)	Identical	25.6		
	Severe material deprivation rate (Istat, 2019, percentage values)	Partial	7.4		
	Very low work intensity (Istat, 2019, percentage values)	Partial	10.0		
	People at risk of poverty (Istat, 2019, percentage values)	Partial	20.1		
1.3.1	Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable				
	Unmet need for medical examination (Istat, 2020, percentage values)	National context	9.6	--	
1.4.1	Proportion of population living in households with access to basic services				
	Housing cost overburden rate (Istat, 2019, percentage values)	National context	8.7		
	Households very or fairly satisfied with the continuity of the service of electricity supply (Istat, 2020, percentage values)	Partial	94.2		
	Inability to keep home adequately warm (Istat, 2019, percentage values)	Partial	11.1		
	Households per difficulties of links with public transport means (Istat, 2020, percentage values)	Partial	30.2		
	Landfill of waste (Ispra, 2019, percentage values)	Partial	20.9		
	Irregularities in water supply (Istat, 2020, percentage values)	Partial	8.9		
	Households with fixed and/or mobile broadband connection (Istat, 2020, percentage values)	Partial	77.8		
	People age 6 and older who use their mobile phone every day, per 100 people with the same characteristics (Istat, 2020, percentage values)	Partial	82.6		
1.5.1	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population				
	Deaths and missing persons for landslides (Ispra, 2018, N.)	Partial	12	--	--
	Deaths and missing persons for floods (Ispra, 2018, N.)	Partial	32	--	--
	Injured persons for landslides (Ispra, 2018, N.)	Partial	29	--	--
	Injured persons for floods (Ispra, 2018, N.)	Partial	12	--	--
1.a.1	Total official development assistance (ODA) grants from all donors that focus on poverty reduction as a share of the recipient country's gross national income				
	Proportion of bilateral Official Development Assistance spending on essential services for developing countries (education, health and social protection) (Ministry of Foreign Affairs and International Cooperation, 2019, percentage values)	Identical	46.8	--	--
1.a.2	Proportion of total government spending on essential services (education, health and social protection)				
	Proportion of total government spending on essential services (education, health and social protection) (Istat, 2019, percentage values)	Identical	65.547	--	--
Legend					
	IMPROVEMENT				
	STABILITY				
	DETERIORATION				
--	NOT AVAILABLE / NOT SIGNIFICANT				

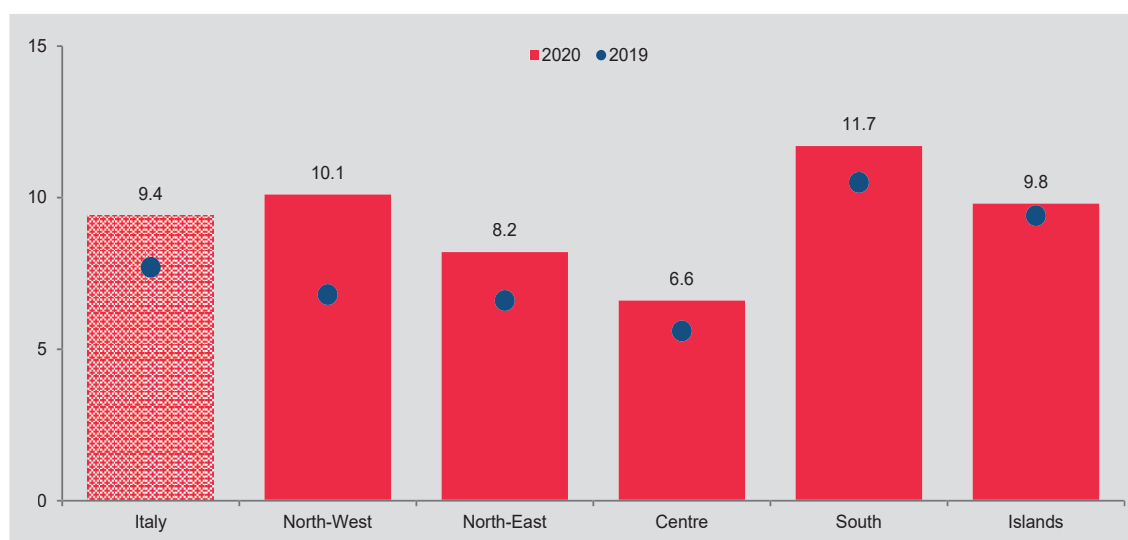
The number of people living in absolute poverty has grown, especially in the North-West

In 2020, there were more than 2 million households living in absolute poverty (with an incidence of 7.7%), totalling more than 5.6 million individuals (9.4%).

The economic crisis originated by the pandemic impacted on households' economic conditions differently across the territory (Figure 1.1). The individual incidence of absolute poverty grew especially in the North-West (10.1% individuals in absolute poverty; +3.3 percentage points more than in 2019) and in the North-East (8.2%; +1.6 p.p.). Absolute poverty recorded a limited growth in the Centre (6.6%; +1 p.p.), in the South (11.7%; +1 p.p.) and in the Islands (9.8%; +0.4 p.p.).

The shift over the territory of the population living in absolute poverty occurred in the 2020 pushed the axis of poverty to the North, where 45.6% of residents lived in absolute poverty (the share was 40.5% in 2019); in the South the share was 40.3% (45.1% in 2019).

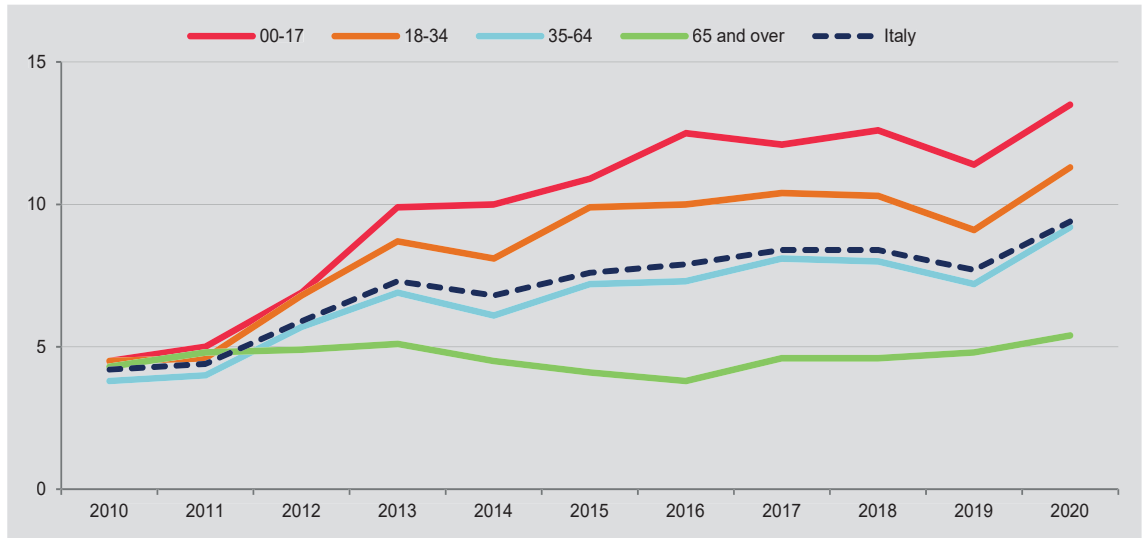
Figure 1.1 - Absolute poverty (incidence), by geographical area. Years 2019, 2020 (percentage values)



Source: Istat, Household Budget Survey

The incidence of absolute poverty increased significantly for every age class, except among those over 65 years. There were 1.3 million minors (with an incidence of 13.5%) living in households in absolute poverty, 11.3% among young people aged 18-34. Also in the year of the pandemic to live in a household only with elderly person or including at least one elderly person - often holding a pension income - reduced the risk to fall into absolute poverty. In every age class, with the exception of those over 65 years, there was a growth of 2 percentage points (Figure 1.2).

Figure 1.2 - Absolute poverty (incidence), by age class. Years 2010-2020 (percentage values)



Source: Istat, Household Budget Survey

Demand for health services declined due to the pandemic impact

Social protection² is an indispensable resource for a coordinated and systematic response to the pandemic crisis. It ensures that people can effectively access health care and that people mostly affected by the pandemic crisis receive a protection system on employment and income. In 2020, more than 200 countries launched new social protection measures. Most of these measures were new programmes. Other measures were an extension of pre-existing programmes to a broader scope of beneficiaries or with a time prolongation. They included all functions of social protection: special social benefits, income and employment protection measures, unemployment protection and health-related measures³.

Within this scenario, it is important to account for the fallout of the crisis on the requests for healthcare services due both to the restrictions introduced to contain contagions and to the population's fear of contracting infections, the closure of many outpatient facilities and the suspension of the provision of deferrable healthcare services.

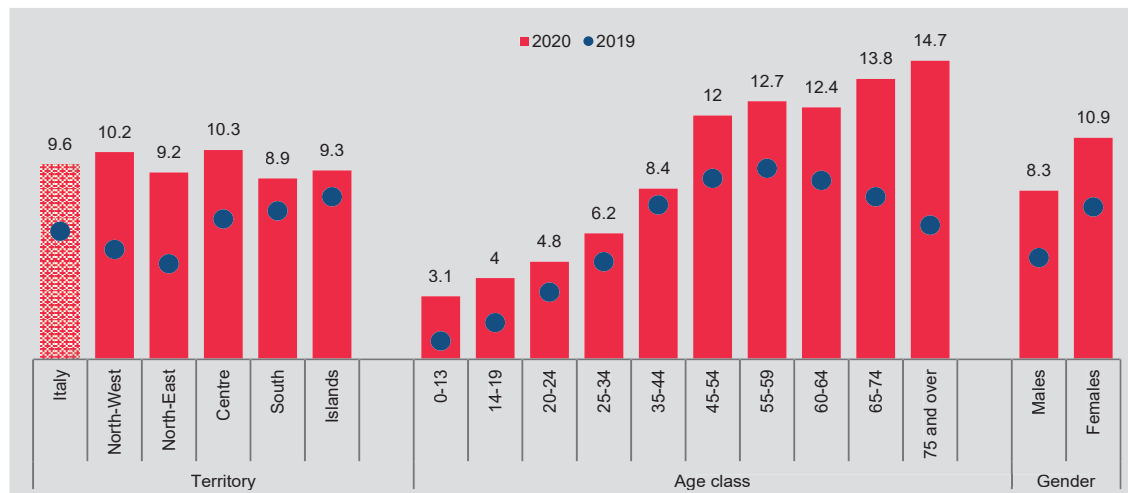
In 2020, 9.6% people declared they have foregone a medical appointment even if they needed it. They increased deeply respect to the previous year (in 2019 it was equal to 6.3%). About half of them declared the reason they foregone the appointment was related to Covid-19.

The share of individuals who have foregone health care services showed a sharper increase in the North (+4.7 percentage points compared to 2019) than in the South and Islands (+1.5 p.p.) and among those over 65 years (+5.8 p.p. in the 65-74 class and +8.1 p.p. in the 75 and over class). (Figure 1.3).

² Target 1.3 aims to implement adequate social protection systems and measures for all at the national level. The social protection functions specified in the target are those included in Convention 102 on Social Security (Minimum Standards), 1952, and the Resolution concerning the development of social security statistics, adopted by the Ninth International Conference of Labour Statisticians

³ For details on the programmes launched in countries for the Covid-19 crisis, see the ILO's Social Protection Response to the Covid-19 Crisis (<https://www.social-protection.org/gimi/ShowWiki.action?id=62&lang=EN>).

Figure 1.3 - Unmet need for medical examination by geographic area, age class and gender. Years 2019 and 2020 (percentage values)

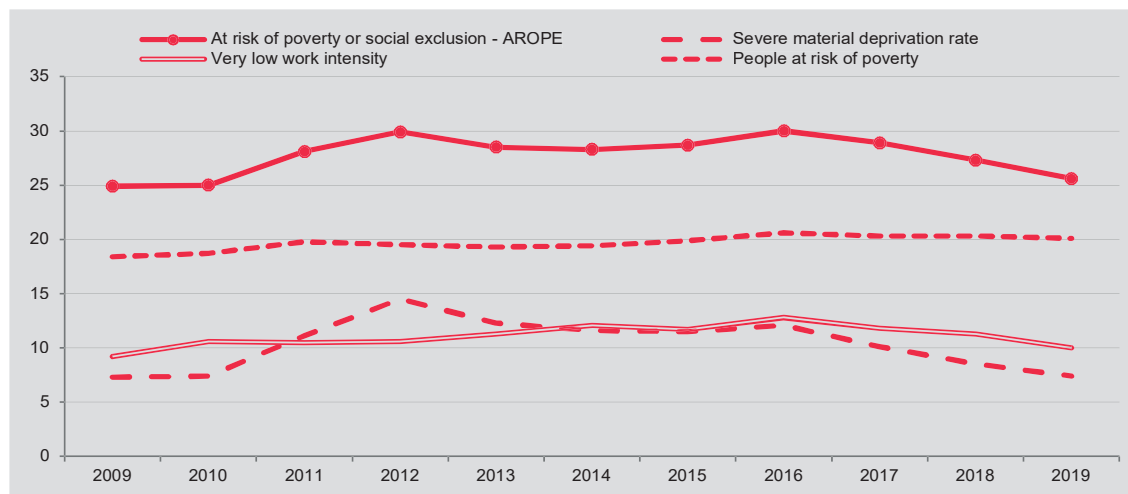


Source: Istat, Survey on Aspects of daily life

Statistical measures of poverty and income in 2019

Data retrieved from the Eu-Silc⁴ Survey make available additional measures of poverty. In 2019, 20.1% of residents in Italy lived at risk of poverty, 7.4% were in conditions of severe material deprivation and 10.0% lived in households with low work intensity (Figure 1.4). The composite indicator based on these three components, the share of the population at risk of poverty or social exclusion, was equal to 25.6% (about 15 million and 390 thousand people) and it improved for the third consecutive year (27.3% in 2018, 28.9% in 2017, 30.0% in 2016). The reduction is mainly due to the improvements of the indicator on low work intensity (10.0% in 2019; 12.8% in 2016) and that of severe material deprivation (respectively 7.4% and 12.1%); the risk of poverty was substantially stable over the three-year period (20.1% and 20.6%).

Figure 1.4 - Risk of poverty or social exclusion, risk of poverty, severe material deprivation and very low work intensity. Years 2009-2019 (percentage values)

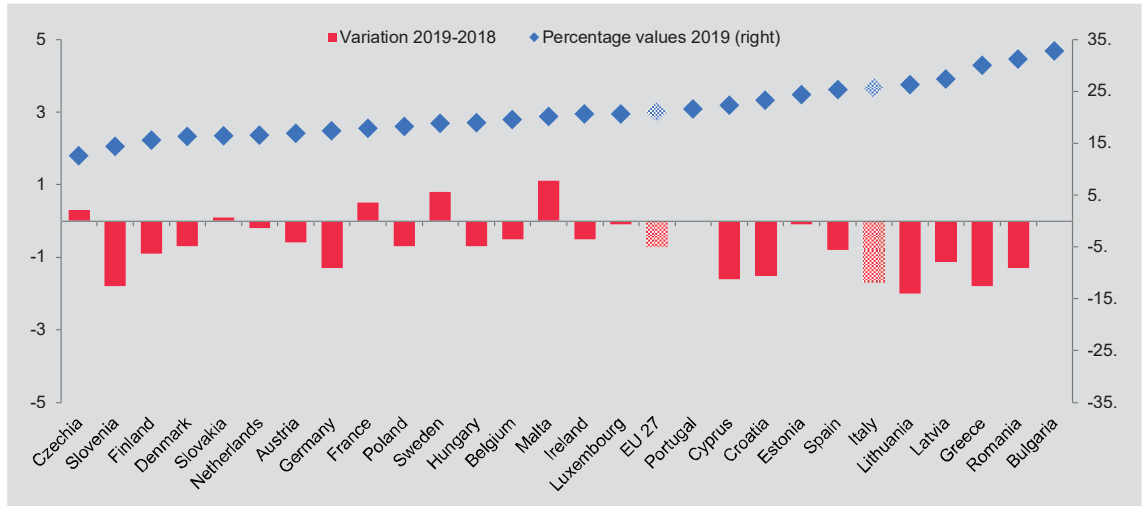


Source: Istat, Eu-Silc



At European level (EU27), the composite indicator of risk of poverty or social exclusion recorded a decrease between 2018 and 2019, from 21.6% to 20.9%. Italy was among the countries with the highest value of the indicator, although it showed one of the most important reductions in the reference two-year period (Figure 1.5).

Figure 1.5 - Risk of poverty or social exclusion and change with the previous year, by country. Years 2018-2019
(percentage values and variation 2018-2019)



Source: Eurostat



GOAL 2

**END HUNGER,
ACHIEVE FOOD SECURITY
AND IMPROVED NUTRITION AND PROMOTE
SUSTAINABLE AGRICULTURE¹**




























In brief

- In 2019, 1.6% of Italian households showed signs of food insecurity, as they declared they did not have enough money to buy food and could not afford a protein meal at least twice a week for some periods of the year. For the first time since 2013 the indicator has slightly increased.
- In 2019, among younger children (3-5 years) almost one out of three was overweight. The proportion dropped to one out of four for the age class 3-17 years. The proportions were higher in South and Islands. 2019 data broke the positive trend of recent years, reinforcing concerns about the health of the youngest and the adults of tomorrow.
- In 2019, the surface of organic crops reached 15.8% of the utilized agricultural area in Italy, almost doubling the EU average. However, the annual growth rate of the areas converted to organic farming or under conversion (+1.8%) was the lowest since 2012, and was negative in South and Islands.
- Indicators of agriculture's pressure on the environment improved. In 2019, 485 kg of fertilizers and 13.2 of plant protection products were distributed per hectare, respectively 5% and 3.1% less than the previous year. Ammonia emissions also decreased (by 1% over the previous year and 7.4% since 2009), staying below the limits set by EU directives.




The statistical measures released by Istat for Goal 2 are sixteen and refer to seven UN-IAEG-SDGs indicators (Table 2.1).

¹ This section was edited by Luigi Costanzo with contributions by Emanuela Bologna, Doriana Frattarola, Roberto Gismondi, Maria L. Mattonetti, Federico Polidoro, Giovanni Seri, Mattia Spaziani, Francesco G. Truglia.

Table 2.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
2.1.2	Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)				
	Prevalence of moderate or severe food insecurity (Fao, 2018, percentage values)	Identical	7.3	--	
	Prevalence of severe food insecurity (Fao, 2018, percentage values)	Identical	1.1	--	
	Households with signals of food insecurity (Istat, 2019, percentage values)	National context	1.6		(a) 
2.2.2	Prevalence of malnutrition among children under 5 years of age, by type (wasting and overweight)				
	Overweight or obesity among children from 3 to 5 years of age (Istat, 2018/19, percentage values)	Proxy	32.1		(b) 
	Overweight or obesity among minors from 3 to 17 years of age (Istat, 2018/19, percentage values)	National context	25.6		(b) 
2.3.1	Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size				
	Production per labour unit of farms below 15,000 euros of turnover per year (Istat-Crea, 2019, euro current prices)	Proxy	14,074		(c) 
2.3.2	Average income of small-scale food producers, by sex and indigenous status				
	Earnings before interest, taxes, depreciation and amortization (EBITDA) of farms below 15,000 euros of turnover per year (Istat-Crea, 2019, euro current prices)	Proxy	1,393		(c) 
2.4.1	Proportion of agricultural area under productive and sustainable agriculture				
	Share of utilized agricultural land under organic farming (Ministry of Agricultural, Food and Forestry Policies, 2019, percentage values)	Proxy	15.8		(c) 
	Growth rate of organic crops (Ministry of Agricultural, Food and Forestry Policies, 2019, percentage values)	National context	1.8		(c) 
	Ammonia emissions from agriculture (ISPRA, 2019, thousand tonnes)	National context	335		
	Fertilizers distributed in agriculture (Istat, 2019, Kg per hectare)	National context	484.5		(c) 
	Plant protection products distributed in agriculture (Istat, 2019, Kg per hectare)	National context	12.4		(c) 
2.a.1	The agriculture orientation index for government expenditures				
	Agriculture orientation index for government expenditures (Istat, 2019, index)	Identical	0.23		
	Share of public expenditure on agriculture (Istat, 2019, percentage values)	National context	0.49		
	Proportion of the value added of agriculture, forestry and fishing to the GDP (Istat, 2019, percentage values)	National context	1.91	--	--
2.a.2	Total official flows (official development assistance plus other official flows) to the agriculture sector				
	Official Development Assistance (ODA) in agriculture (Ministry of Foreign Affairs and International Cooperation, 2019, million euro current prices)	Identical	51.83	--	

Legend

	IMPROVEMENT
	STABILITY
	DETERIORATION
--	NOT AVAILABLE / NOT SIGNIFICANT

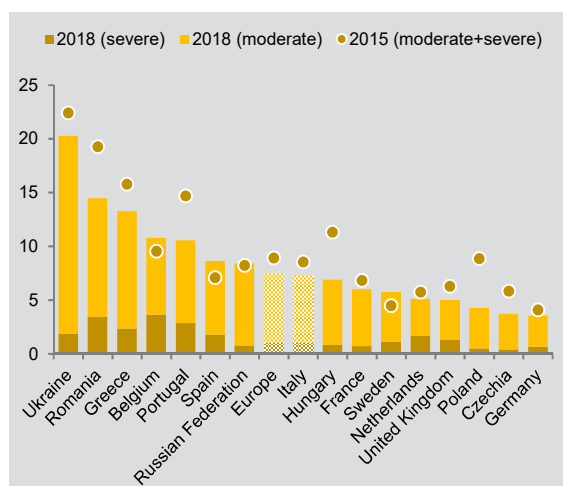
Notes

- (a) Variation compared to 2012
(b) Variation compared to 2011
(c) Variation compared to 2010
(d) Variation compared to the avg. value of 2016-2018

Food insecurity estimates have worsened. Negative signals also in Italy

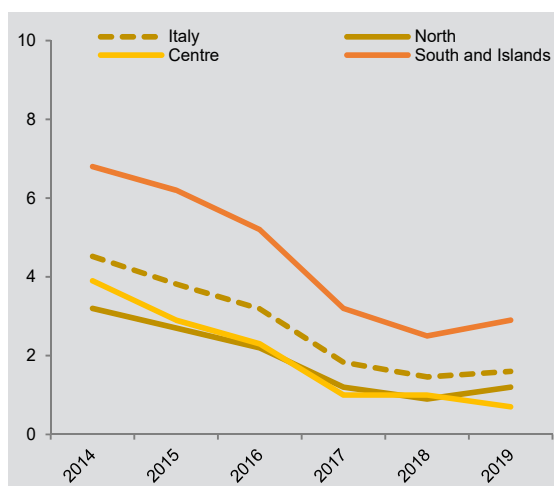
Food insecurity is the condition of people who experience any limitation, imposed by physical or socio-economic constraints, of their right to access sufficient, healthy, nutritious food that conforms to their preferences and is suitable for sustaining an active and healthy life². Based on the Food Insecurity Experience Scale (Fies)³, the FAO estimates that, in 2019, 25.9% of the world's population was affected, and 9.7% was severely affected, by food insecurity (+3.5 and +1.4 percentage points from 2015, respectively). In 2018, the estimated prevalence for Italy was 7.3%, just below the European average and, like that, slightly lower than in 2015 (-1.3 percentage points). However, among the largest EU27 economies, only Spain showed a higher value (Figure 2.1). Moreover, in Italy, the share of people experiencing severe food insecurity remained substantially stable (around 1.1% since 2015).

Figure 2.1 - Prevalence of food insecurity in major European countries by degree of severity according to the Food Insecurity Experience Scale. Years 2015 and 2018 (percentage values, three-year moving averages)



Source: FAO, Gallup World Poll

Figure 2.2 - Households with signs of food insecurity in Italy by geographical area. Years 2014-2019 (percentage values)



Source: Istat, Eu-Silc

For an in-depth analysis of the Italian situation, reference can be made to the percentage of households with signs of food insecurity, which was 1.6% in 2019 (but almost double in South and Islands)⁴. 2019 marked a setback compared to the steady improvements of the previous five-year period, when a downward trend was observed in all three geographical areas, with a tendency to reduce the gap between the Central-Northern regions and the Southern ones (Figure 2.2).

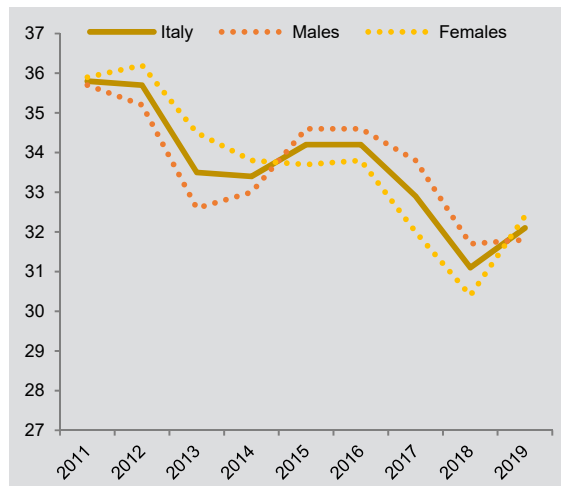
- See FAO, (1996), *Declaration of the World Summit on Food Security*. Moderate insecurity is associated with an inability to eat regularly and to maintain a healthy, balanced diet; severe insecurity is associated with a high probability of not being able to consume enough food for one's vital needs.
- The Fies is a standard form, conveyed by Gallup World Poll on behalf of FAO in about 150 countries since 2014. Data are globally comparable, but the small sample size does not allow the disaggregation of national estimates by territorial units or social groups. On the method of analysis, see Cafiero C., Viviani S., Nord M., 2018, *Food Security Measurement in a Global Context: The Food Insecurity Experience Scale*.
- Households that declare not to have had, in some periods of the year, enough money to buy food and not to be able to afford a protein meal at least twice a week (Source: Istat, Eu-Silc). This indicator allows breakdown of estimates by geographical area, which is particularly relevant in Italy because of the deep regional diversity of economic conditions.

Overweight and obesity among children and adolescents have increased again

In developed countries, the social and health impact of malnutrition is manifested by the increasing prevalence of overweight in childhood, which is a predictor for obesity in adulthood and for the early onset of several chronic diseases. Globally, the prevalence of overweight among children under five has increased steadily over the past two decades, reaching 5.6% in 2019⁵.

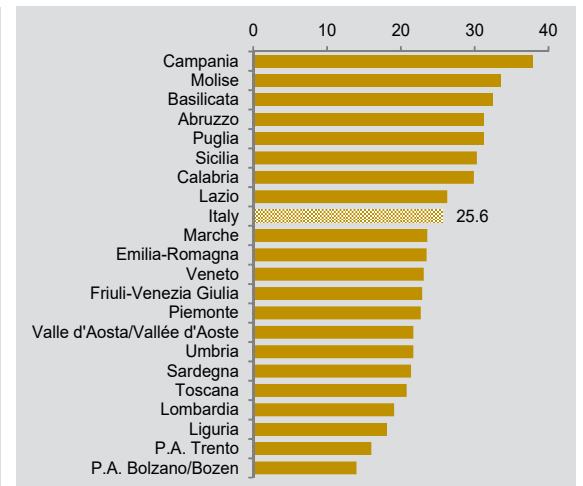
In the same year, the estimates available for Italy showed an increase in the prevalence of overweight and obesity among children and adolescents, that was equal to 32.1% for the youngest (3-5 years) and 25.6% for the age group of 3-17 years (Figures 2.3 and 2.4)⁶. Also for this indicator, 2019 data broke the positive trend observed in recent years, reinforcing the concerns about the spreading of a sedentary lifestyle and unhealthy eating habits among young people.

Figure 2.3 - Prevalence of overweight (a) among children aged 3 to 5 years by gender. Years 2011-2019 (b) (percentage values)



Source: Istat, Survey on Aspects of daily life. (a) According to the criteria adopted by the International Obesity Task Force. (b) Two-year moving averages (t, t-1).

Figure 2.4 - Prevalence of overweight (a) among minors aged 3-17 years by region. Year 2019 (b) (percentage values)



Source: Istat, Survey on Aspects of daily life. (a) According to the criteria adopted by the International Obesity Task Force. (b) Two-year moving averages (t, t-1).

Estimates for children and adolescents (3-17 years) describe a reduction in obesity and overweight with growth (from 32.8% of children aged 6-10 years, up to 14.8% of children aged 14-17) and a stable and significant gender gap. In 2019 overweight males were 27.9%, females were 23.1%, the gap is almost unchanged since 2011. Regional data showed a worse situation in South and Islands, suggesting a connection between childhood obesity and economic distress. In all regions of Southern Italy (except Sardegna) obesity was well above the national average (from 29.9% in Calabria to 37.8% in Campania). At the top

5 Unicef, Who, World Bank, (2020), *Joint Child Malnutrition Estimates*. Children for whom the product of body weight × height is greater than +2 standard deviations from the median of the *Who Child Growth Standards* are considered overweight.
 6 The estimates are two-year moving averages (t, t-1), based on the results of the Aspects of Daily Life survey, and refer, for the definition of overweight in children and adolescents (3-17 years), to the threshold values adopted by the *International Obesity Task Force* (IOTF), instead of the *Who Child Growth Standards* (see previous note).

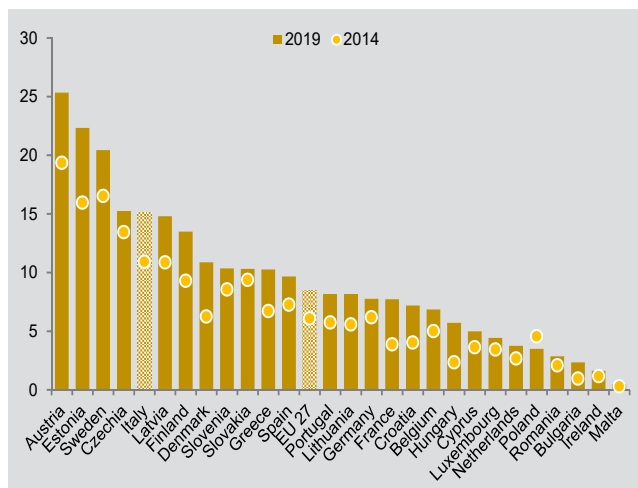
2. Analysis of statistical measures by Goal

of the ranking, Lombardia, Liguria and the provinces of Trento and Bolzano recorded a prevalence below 20%.

Growth of organic farming has slowed down

In Italy and in the EU, certified organic farming⁷ substantially fits the profile of sustainable and productive agriculture outlined by the target 2.4. In 2019, organic crops covered 15.8% of the utilized agricultural area in our country, almost double than the EU average (Figure 2.5). The growth of organic crops, however, continued to slow down (+1.8% over the previous year, the lowest value since 2012) and was negative in South and Islands, where a decline was observed for the second year in a row (-2.1% from 2017) (Figure 2.6).

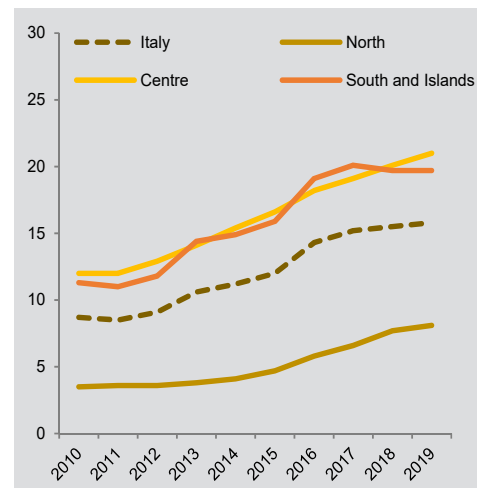
Figure 2.5 - Share of utilized agricultural area under organic farming (a) in EU countries. Years 2014 and 2019 (percentage values)



Source: Istat, Survey on Aspects of daily life.

(a) According to the criteria adopted by the International Obesity Task Force.
(b) Two-year moving averages (t, t-1).

Figure 2.6 - Share of utilized agricultural area under organic farming (a) by geographical area. Years 2010-2019 (percentage values)



Source: Ministry of Agriculture, Food and Forestry Policies.

(a) Totally converted to organic farming or under conversion, excluding kitchen gardens.

Indicators of environmental pressure from agriculture have improved

The dynamics of organic farming accounts for the spreading of sustainable agricultural practices, but indicators of the environmental pressure generated by agriculture are also needed. Most recent data show a reduction in the amounts of fertilizers and plant protection products sold (whose abuse is harmful to human health and biodiversity), as well as in ammonia emissions (which contribute to soil degradation, air pollution and the greenhouse effect).

⁷ The reference standard is the Regulation (EC) No. 834/2007, which recognizes as “organic farming” a variety of production methods, provided that they conform to three basic principles: exploitation of the soil’s natural fertility (improved only by limited interventions), promotion of the diversity of domestic plant and animal species, and exclusion of the use of synthetic products and GMOs.

In 2019, 485 kg per hectare (Kg/ha) of fertilizers (-5.2% on the previous year) and 12.4 of plant protection products (-3.1%)⁸ were distributed in Italy. The amount of fertilizers per unit area, however, was in line with the average of the last decade, while that of plant protection products has decreased by more than 20% since 2010 (Figure 2.7). The use of fertilizers and plant protection products was significantly higher in the North (901 and 18.7 kg/ha, respectively).

In the same year, ammonia emissions from agriculture, mostly generated by livestock farms, amounted to about 335 thousand tonnes all over Italy (94.4% of the total). Emissions from agriculture were 1.0% lower than in 2018 and 7.4% lower since 2009. Overall emissions comply with the cap set by the 2001 National Emission Ceilings (NEC) Directive for the period 2010-2019 (419 thousand tonnes per year) and the trend seems compatible with meeting the targets set for the next years by the new NEC Directive of 2016 (95% of 2005 emissions in 2020 and 84% by 2030) (Figure 2.8).

Figure 2.7 - Amounts of fertilizers and plant protection products distributed in agriculture per unit area. Years 2010-2019 (fixed base index numbers 2010=100)

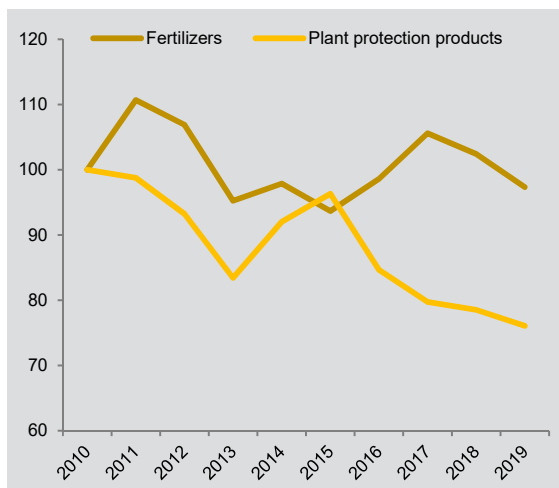
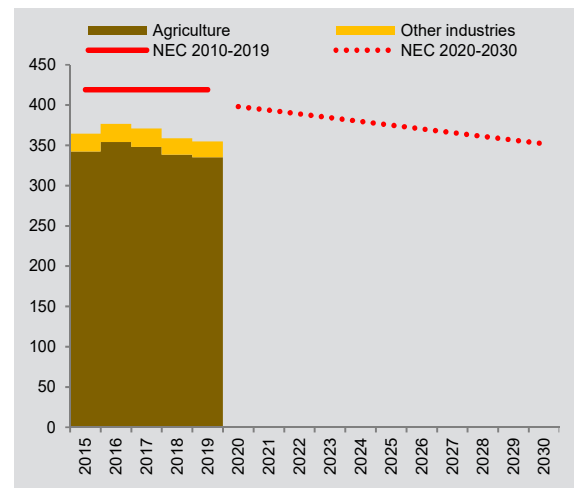


Figure 2.8 - Ammonia emissions from agriculture and other industries and national limits set by the NEC Directives. Years 2015-2030 (thousand tonnes)



Source: Istat, Survey on the supply of fertilizers for agricultural use (fertilizers, soil conditioners and improvers), Survey on plant protection products provided for agricultural use.

Source: Istat, processing on ISPRA data.

8 Data referring to quantities of fertilizers or plant protection products sold to farms. The reference area is a subset of the Utilised agricultural area, which includes arable land (except set-aside) and permanent crops.



GOAL 3

ENSURE HEALTH AND WELL-BEING FOR ALL AND ALL AGES

In brief

- Excess mortality, which includes deaths attributed directly to Covid-19 and those indirectly related to Covid-19, is a useful indicator to measure the impact of the pandemic. In 2020, total deaths from all causes were the highest ever recorded in Italy since World War II: 746,146 deaths; 100,526 more deaths than the 2015-2019 average (with an excess mortality rate of 15.6%).
- Influenza vaccine coverage for the 2020/2021 winter season increased significantly compared to the previous season, going from 54.6% to 66.5% for the elderly population over 65 years of age.
- In 2020, the prevalence of people who declare to have diabetes was 6.2%, a slight increase compared to 5.8% in 2010, according to the standardisation of the population age structure. Diabetes share will increase further due to the ageing of the population and the increase in the population in a condition of overweight or obesity.
- In 2020, the prevalence of people recording hypertension was stable compared to 2010 (19.4%). The trend over the past 10 years has increased for men and decreased for women.
- In 2020 the adult population with excess weight were 45.9% of the total (+1 p.p. compared to 2019). The share of men aged 14 years and over who presented risk behaviors in alcohol consumption returned to increase after more than 10 years (23.6%; +1.3 p.p. compared to 2019). Conversely, the share of women was stable (10.2% in 2020). The share of men and women aged 14 and over who report smoking remained stable: 15.8% for women and 22.5% for men.

The statistical measures released by Istat for Goal 3 are thirty-seven and refer to seventeen UN-IAEG-SDGs indicators (Table 3.1).

¹ This section was edited by Barbara Baldazzi with contributions by Emanuela Bologna, Alessandra Burgio, Lidia Gargiulo, Monica Pace and Alessandra Tinto.

Table 3.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
3.2.1	Under-five mortality rate				
	Under-five mortality rate (Istat, 2020, per 1,000 live births)	Identical	3.3		
3.2.2	Neonatal mortality rate				
	Neonatal mortality rate (Istat, 2018, per 1,000 live births)	Identical	1.9		
3.3.1	Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations				
	Number of new HIV infections per 100,000 (Italian National Institute of Health - ISS, 2019, per 100,000 inhabitants)	Identical	4.0	(a)	
3.3.2	Tuberculosis incidence per 100,000 population				
	Tuberculosis incidence per 100,000 population (Ministry of Health, 2019, per 100,000 inhabitants)	Identical	5.5	(b)	
3.3.4	Hepatitis B incidence per 100,000 population				
	Hepatitis B incidence per 100,000 population (European Centre for Disease Prevention and Control - ECDC; Ministry of Health, 2020, per 100,000 inhabitants)	Identical	0.3	(c)	
3.4.1	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease				
	Probability of dying between ages 30 and 69 years from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases (Istat, 2018, percentage values)	Identical	8.96		
	Healthy life expectancy at birth (Istat, 2020, average number of years)	National context	60.9		
	Overweight or obesity (standardised rates) (Istat, 2020, standardised rates per 100 persons)	National context	45.9		
3.4.2	Suicide mortality rate				
	Age standardised suicide mortality rate (Istat, 2018, per 100,000 inhabitants)	Identical	5.7		
	Number of deaths attributed to suicide (Istat, 2018, N.)	Identical	3,699		
3.5.2	Alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol				
	Litres of pure alcohol per capita (WHO, 2018, litre per capita)	Identical	7.8		
	Alcohol consumption (standardised rates) (Istat, 2020, standardised rates per 100 persons)	National context	16.7		
3.6.1	Death rate due to road traffic injuries				
	Age standardised death rate due to road traffic injuries (Istat, 2019, per 100,000 inhabitants)	Identical	5.1		
	Number of road traffic fatal injuries (Istat, 2019, N.)	National context	3137		
	Road accidents serious harmfulness rate (Ministry of Health, 2019, per 100,000 inhabitants)	National context	29.5	(a)	
3.7.1	Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods				
	Demand for family planning satisfied with modern methods (Istat, 2013, percentage values)	Proxy	67.2	--	--
3.7.2	Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group				
	Age-specific fertility rates for 1,000 women aged 10-14 (Istat, 2019, per 1,000 inhabitants)	Identical	0.018	(b)	
	Age-specific fertility rates for 1000 women aged 15-19 (Istat, 2019, per 1,000 inhabitants)	Identical	18.3	(b)	

Table 3.1 continues - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

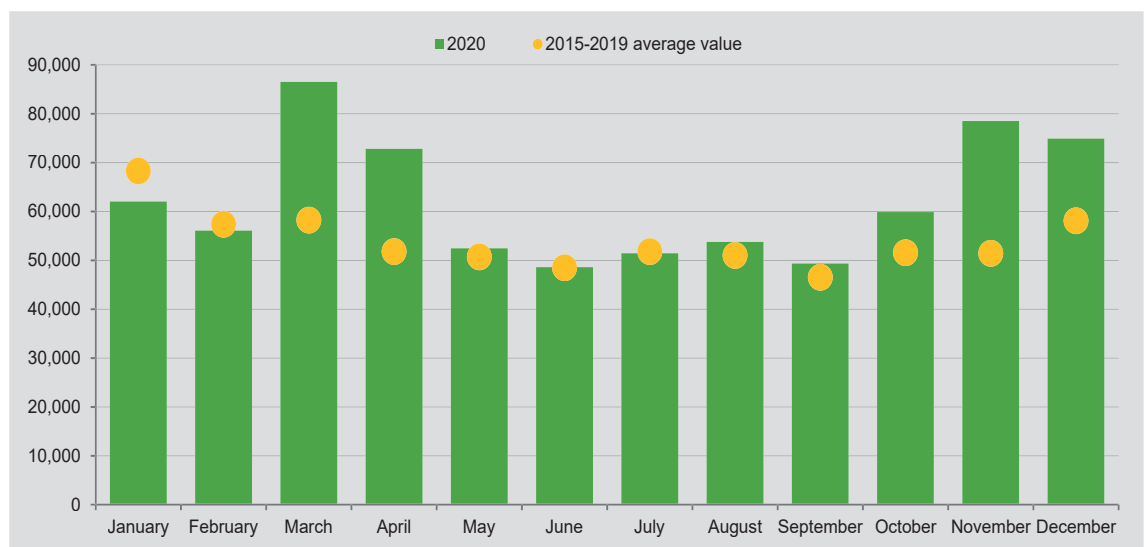
Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
3.8.1	Coverage of essential health services				
	Hospital beds (Istat processing on Ministry of Health Open Data, 2019, per 10,000 inhabitants)	Partial	31.3		(d)
	Day-hospital beds in public and private care institutions (Istat processing on Ministry of Health Open Data, 2019, per 10,000 inhabitants)	Partial	3.4		(d)
	Beds in the residential social-healthcare and social-welfare facilities (Istat, 2018, per 10,000 inhabitants)	Partial	69.6		(e)
	Persons on antiretroviral therapy (ART) (UNAIDS, 2019, percentage values)	Partial	90.0		(b)
	Proportion of deliveries with more than 4 check up visits during pregnancy (Ministry of Health, 2018, percentage values)	Proxy	88.1		(f)
	Hypertension (standardised rates) (Istat, 2020, standardised rates per 100 persons)	Proxy	19.4		
	Diabetes (standardised rates) (Istat, 2020, standardised rates per 100 persons)	Proxy	6.2		
3.8.2	Proportion of population with large household expenditures on health as a share of total household expenditure or income				
	Population aged 16 and over reporting unmet needs for medical care due to being too expensive (Istat, 2019, percentage values)	Proxy	1.3		
3.9.3	Mortality rate attributed to unintentional poisoning				
	Unintentional poisoning standardised mortality rate (Istat, 2018, per 100,000 inhabitants)	Identical	0.5		
3.a.1	Age-standardized prevalence of current tobacco use among persons aged 15 years and older				
	Smoking (standardised rates) (Istat, 2020, standardised rates per 100 persons)	Identical	19.1		
3.b.1	Proportion of the target population covered by all vaccines included in their national programme				
	Influenza vaccination coverage age 65+ (Ministry of Health, 2020/2021, per 100 inhabitants)	Identical	66.5		
	Pediatric vaccination coverage: polio (Ministry of Health, 2019, per 100 inhabitants)	Identical	95.0		(f)
	Pediatric vaccination coverage: measles (Ministry of Health, 2019, per 100 inhabitants)	Identical	94.5		(f)
	Pediatric vaccination coverage: rubella (Ministry of Health, 2019, per 100 inhabitants)	Identical	94.5		(f)
3.b.2	Total net official development assistance to medical research and basic health sectors				
	Total net official development assistance to medical research and basic health sectors (Ministry of Foreign Affairs and International Cooperation, 2019, million euro, current prices)	Identical	42.16	--	--
3.c.1	Health worker density and distribution				
	Physicians (IQVIA ITALIA, 2020, per 1,000 inhabitants)	Identical	4.0		(a)
	Nurses and midwives (Co.Ge.A.P.S. - Consorzio Gestione Anagrafica Professioni Sanitarie, 2019, per 1,000 inhabitants)	Identical	6.5		(f)
	Dentists (Co.Ge.A.P.S. - Consorzio Gestione Anagrafica Professioni Sanitarie), 2019, per 1,000 inhabitants)	Identical	0.9		(f)
	Pharmacists (Co.Ge.A.P.S. - Consorzio Gestione Anagrafica Professioni Sanitarie), 2019, 1,000 inhabitants)	Identical	1.3		(f)
Legend		Notes			
	IMPROVEMENT	(a) Variation compared to 2012			
	STABILITY	(b) Variation compared to 2010			
	DETERIORATION	(c) Variation compared to 2011			
		(d) Variation compared to 2014			
		(e) Variation compared to 2009			
--	NOT AVAILABLE / NOT SIGNIFICANT	(f) Variation compared to 2013			

Excess mortality increased in 2020 in the national territory although at different levels

A measure of the impact of the COVID-19 outbreak on mortality can be inferred from the calculation of excess deaths from all causes. Excess mortality was estimated by comparing 2020 data with the average death rate for the five-year period 2015-2019. It provides an assessment of both the direct and indirect impact of deaths attributable to Covid-19, and of deaths due to delayed or missed treatment for the overburdened health care system (Figure 3.1).

In 2020, deaths from all causes reached the highest value ever recorded in Italy since the Second World War, equal to 746,146 deaths and to 100,526 deaths higher than the 2015-2019 average (an excess mortality rate of 15.6%; 17.5% among men and 13.8% among women)². In the North, the excess mortality rate was 24.6%, in the Centre 7.5% and in the South and Islands 7.7%. The territories that recorded increases significantly higher than the national average were Lombardia (+36.6%), the Autonomous Province of Trento (+29.9%), Valle d'Aosta (+24.8%), Piemonte (+22.9%) and the Autonomous Province of Bolzano (+22.7%).

Figure 3.1 - Total deaths, by month. Year 2020 and average of the period 2015-2019 (absolute values)



Source: Istat, Integrated municipal daily mortality database; Istituto Superiore di Sanità

With reference to age groups, the most significant contribution to the excess of deaths in the year 2020 was due to the increase of deaths in the population aged 80 and over. In Italy 486,255 people aged 80 and over died (76,708 more than the average of the previous five-year period); in the 65-79 age group 184,708 people died (over 20 thousand more than the average of the previous five-year period).

² This assessment should include deaths in January and February 2020 that were approximately 7,600 lower than the average for the same two-month period in 2015-2019, and that the first deaths of Covid-19-positive persons occurred in the last week of February. Therefore to estimate the impact of the Covid-19 outbreak on total mortality, it is more appropriate to look at the excess mortality that occurred between March and December 2020. During this period, occurred 108,178 deaths higher than the average for the same period in the years 2015-2019, an excess rate of 21%. For updates on mortality see the page "Information on the health information on the health emergency and the recovery": <https://www.istat.it/en/archivio/240106>.

Conversely, in 2020, mortality in the under 50 population was lower than the 2015-2019 average, across all distributions.

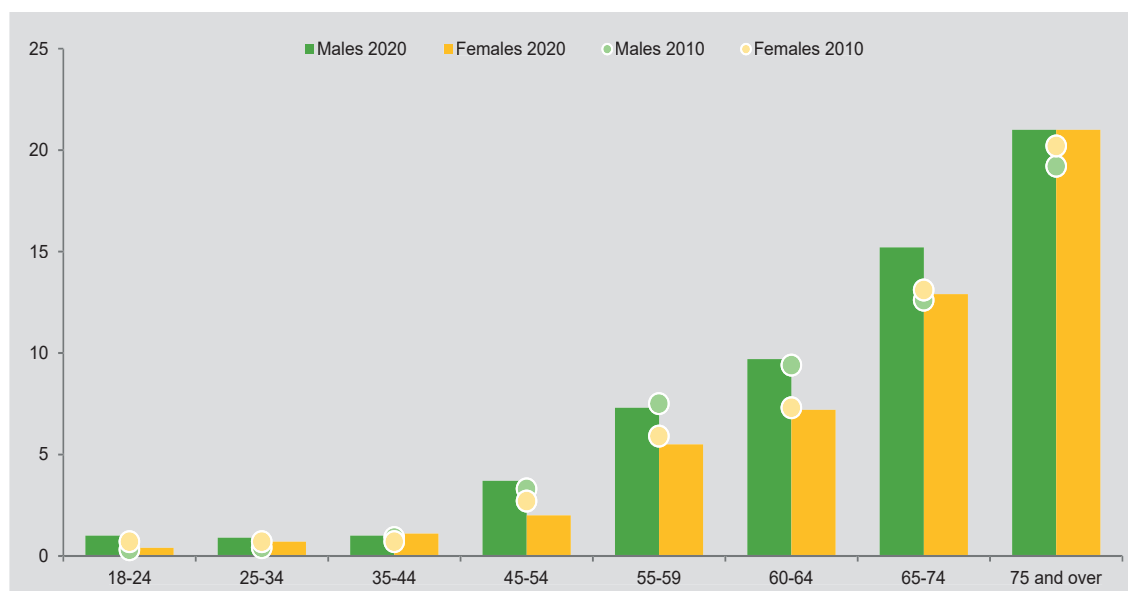
This trend was partly connected to the social containment measures that had significant effects on mobility and, consequently, on the reduction of road accidents. In the period January-September 2020, according to Istat data, there was a sharp reduction of road accidents (90,821, equal to -29.5%), of injuries (123,061; -32.0%) and of deaths within thirty days of the accident (1,788; -26.3%)³.

Estimated variations should also be checked according to standardized mortality rates adjusted for the effect of differences in the age composition of the reference population⁴. At national level, there was a 9% increase in the standardized mortality rate referred to the year 2020 compared to the average rate for the period 2015-2019. The increase in mortality affected life expectancy at birth which, in 2020, fell to 82 years, 1.2 years below the level of the previous year. Life expectancy at birth for men fell to 79.7 years, 1.4 years lower than the previous year, for women at 84.4 years, one year lower than the previous year.

Age-related and lifestyle diseases increased

In 2020, approximately 3.5 million people, equal to 7% of the adult population, had diabetes, confirming the growing trend of recent years (5.5% in 2010). This share is expected to grow due to the aging of the population and the increase of overweight or obese population.

Figure 3.2 - Diabetes for people aged 18 years and over, by age group and sex . Year 2020 (percentage values)



Source: Istat, Survey on Aspects of daily life

³ See also Automobile Club d'Italia - ACI, Istituto Nazionale di Statistica - Istat. 2020. Preliminary January-September 2020 estimate of road accidents. https://www.istat.it/it/files/2020/12/REPORT_STIMA-PRELIMINARE-INCIDENTI-STRADALI_2020.pdf.

⁴ The age-standardised rate is a measure of the phenomenon net of the age structure of the population, used for comparisons in space and/or time. Estimates calculated by the weights of the 2013 European standard population.

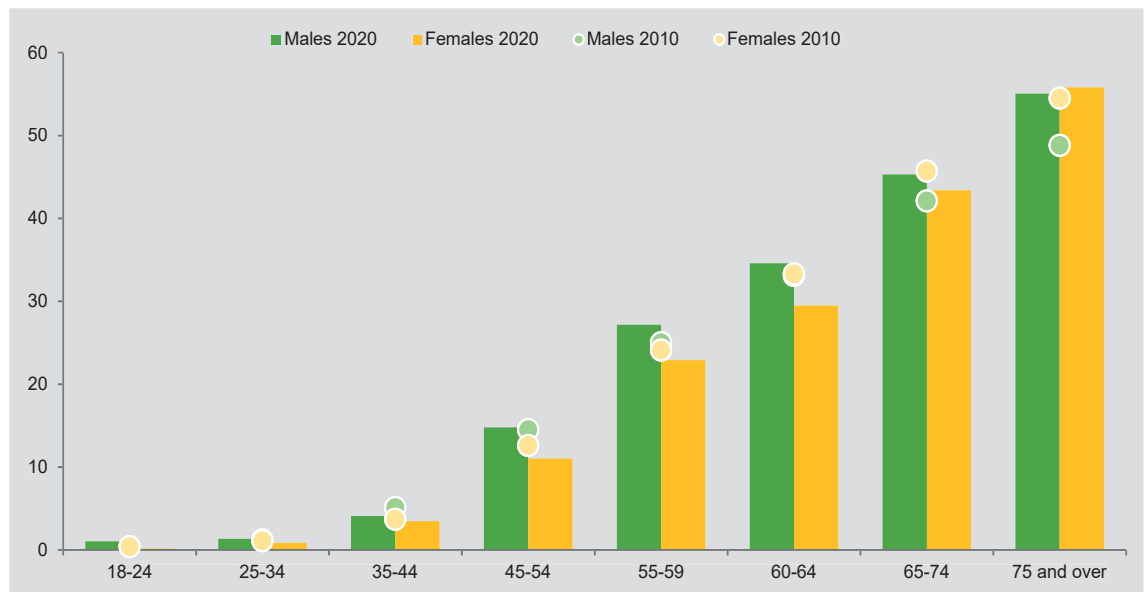
The higher prevalence of diabetes among men (6.7%) compared to women (5.7%) became more evident (according to the standardisation of the population age structure).

Among men, the share of individuals with diabetes increased for the older age groups and for all geographical areas. Among women the increase has been lower. Diabetes was more widespread for both genders among those over the age of 75, (21%; Figure 3.2).

In 2020, people affected by hypertension were just over 10 million, 21.9% of the adult population⁵. Looking at the age-standardized rates over the last 10 years, hypertension has increased for men, from 19.1% in 2010 to 20.4% in 2020, and has decreased among women (from 19.5% to 18.5%).

The share of hypertensive people increases with age; 34.6% of men in age class 60-64, 45.3% of men in age class 65-74 and 55% of men in the age class over 75 year old suffered from hypertension. Amongst women the share of hypertensives was lower in the age class 60-64 (29.5%), increased among those in the age class 65-74 (43.4%) and reached 55.8% among those in the age class over 75 (Figure 3.3).

Figure 3.3 - Hypertension for people aged 18 and over, by age group and sex. Year 2020 (percentage values)



Source: Istat. Survey on Aspects of daily life

Some health risk factors were on the rise in 2020

Alcohol consumption, smoking and excess weight are some of the health risk factors associated with the development of metabolic or cancer-related diseases, with consequences also on the reduction of life expectancy. In 2020, the prevalence of risky drinking⁶ among people older than 13 years was increasing, interrupting the reduction that had characterised

⁵ This value might be underestimated since a relevant share of the population is not aware of suffering from this pathology and might not declare it (data are collected by a self-reported source, HIS - Health Interview survey). The prevalence of diabetes is also slightly underestimated.

⁶ The indicator refers to habitual alcohol consumption that exceeds gender and age-specific thresholds or binge drinking, i.e. episodes of drunkenness concentrated on single occasions.

the last 10 years. The phenomenon affected both men (standardised rate was 23.6%; + 1.3 percentage points compared to 2019) and women (10.2%; + 0.7 p.p.). The share of at-risk consumption remained higher in the North-East (21.3%, up 2.5 p. p) and the North-West (18%; + 0.9 p.p.).

In 2020, on the other hand, the proportion of smoking men and women older than 13 years was stable, 22.5% and 15.8% respectively (standardized rates). Smoking increased among people living in the North-West (19.8%; +1.3 percentage points) and in the North-East (18.3%; +1.2 percentage points), while it was stable in the South and Islands (18.6%) and decreasing in the Centre (19.5%; -1.8 percentage points). The increase was also significant among people in the 55-64 age class.

In 2020 people in excess weight⁷ in the adult population were 45.9% of the total (increasing by 1 p.p. the standardized rate compared to 2019), with higher shares in the South (51.6%; +1.2 p.p.) and among males (54.9%; +1 p.p.). The worsening was widespread throughout the territory, with the exception of the Centre (where the share dropped to 42.5%; -1.2 p.p.), and by age, with the exception of over 65 people (who, however, presented the highest level of overweight people: 60.5% between 65 and 74). The attainment of a high educational qualification constitutes a protective factor, evidently because of the larger propensity for healthy habits. Among people with a low educational qualification (i.e. who hold at most a lower secondary school diploma) 56.1% were overweight, compared to 34.4% of those who hold a high educational qualification (at least a degree).

Influenza vaccination coverage in the 2020/2021 winter season increased significantly

Influenza vaccination coverage for the 2020/2021⁸ winter season increased significantly compared to the previous season, from 16.5% to 23.7% for the whole population.

The epidemiological situation related to the circulation of SARS-CoV-2, has led to the activation of information/education vaccination campaigns for the population in order to reduce the circulation of the influenza virus among adult and older population and to not increase pressure on hospitals already committed to the treatment of Covid-19 disease. Moreover, throughout the 2020/2021 winter season the epidemiological surveillance of influenza syndromes has monitored how the level of incidence of influenza-like syndromes has been stably maintained below the baseline.

Vaccination coverage of the over 65 years population, the target population of the anti-flu strategy, increased by 12 percentage points to reach 66.5% (equal to more than 9 million; Figure 3.4). The regions where the vaccination coverage for the over 65 years population was higher than 70% were Sicilia (91.7%), Calabria (79%), Umbria (77.4%), and Emilia-Romagna (70.1%). Only in the Province of Bolzano less than half of the over-65 population (41.5%) was vaccinated.

⁷ The indicator refers to the World Health Organization (WHO) classification of Body Mass Index (BMI: ratio of weight, in kg, to the square of height in metres).

⁸ Data as of July 8, 2021.

Figure 3.4 - Influenza vaccination coverage for the population aged 65 and over. Seasons 2003/2004 - 2020/2021 (percentage values)



Source: Ministry of Health



GOAL 4

QUALITY EDUCATION FOR ALL
 PROVIDE QUALITY, EQUITABLE
 AND INCLUSIVE EDUCATION
 AND PROMOTE CONTINUOUS LEARNING
 OPPORTUNITIES FOR ALL¹

In brief

- In Italy in the 2019/2020 educational year public and private early childhood services availabilities covered 26.9% of children up to 2 years of age, a share below the 33% target set in 2002 by the EU for year 2010. The gap between the Centre-North and the South and Islands was wide.
- In 2020, 27.6% of people in the 30-34 year age class held a tertiary qualification (34.3% of women and 21.4% of men), a share that has remained stable over the last 3 years. The level remained among the lowest in Europe. The European Union achieved and exceeded the target of 40% of individuals with a tertiary qualification.
- In 2018 Italy recorded 15.1 per thousand of people in the 20-29 age class with a STEM (Science, Technology, Engineering and Mathematics) degree, below the European average by about 4 points per thousand.
- Even for digital skills Italy showed a delay compared to the European Union: in 2019 only 41.5% had at least basic digital skills (in EU27 were 56%), with shares strongly differentiated by age and gender.
- Lifelong learning has been adversely affected by the shutdown of businesses, schools, and training centres due to social containment restrictions. In 2020, people in the 25-64 age class who had undertaken at least one training activity in the last 4 weeks were 7.2% compared to 8.1% in 2019, with a higher fall in the North West.
- In the 2020/2021 school year Italian and Mathematics skills worsened for students attending the last year of lower and upper secondary school. The situation was particularly serious in the South and Islands area.
- In 2020, the share of people in the 18-24 year-age class who left the education and training system without holding a diploma or a qualification was 13.1% (543 thousand people), slightly lower than the previous year and higher than the European target (10%). Early school leavers were more likely males (15.6%). Territorial gaps were still wide and persistent.















The statistical measures disseminated by Istat for Goal 4 are thirty-four, and refer to ten UN-IAEG-SDGs indicators (Table 4.1).

¹ This section was edited by Barbara Baldazzi with contributions by Raffaella Cascioli, Claudia Di Priamo, Donatella Grassi, Anna Emilia Martino, Giulia Milan, Simona Staffieri, Azzurra Tivoli and Laura Zannella.

Table 4.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
4.1.1	Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex				
	Inadequate level of literacy (15-year-old students) (Oecd-Invalsi, 2018, percentage values)	Identical	23.3		(a)  (b)
	Inadequate level of mathematics (15-year-old students) (Oecd-Invalsi, 2018, percentage values)	Identical	23.8		(a)  (b)
	Inadequate level of science (15-year-old students) (Oecd-Invalsi, 2018, percentage values)	Identical	25.9		(a)  (b)
	Inadequate level of financial literacy (15-year-old students) (Oecd-Invalsi, 2018, percentage values)	National context	20.9		(k)  (b)
	Inadequate level of literacy (students in grade 8) (Invalsi, 2020/2021, percentage values)	Identical	39.2	--	 (c)
	Inadequate level of numeracy (students in grade 8) (Invalsi, 2020/2021, percentage values)	Identical	45.2	--	 (c)
	Inadequate level of English listening competence (students in grade 8) (Invalsi, 2020/2021, percentage values)	Identical	40.9	--	 (c)
	Inadequate level of English reading competence (students in grade 8) (Invalsi, 2020/2021, percentage values)	Identical	24.1	--	 (c)
	Inadequate level of literacy (students in grade 10) (Invalsi, 2018/2019, percentage values)	Identical	30.4	--	
	Inadequate level of numeracy (students in grade 10) (Invalsi, 2018/2019, percentage values)	Identical	37.8	--	
	Inadequate level of literacy (students in grade 13) (Invalsi, 2020/2021, percentage values)	Identical	43.9	--	 (c)
	Inadequate level of numeracy (students in grade 13) (Invalsi, 2020/2021, percentage values)	Identical	51.0	--	 (c)
	Inadequate level of English listening competence (students in grade 13) (Invalsi, 2020/2021, percentage values)	Identical	25.2	--	 (c)
	Inadequate level of English reading competence (students in grade 13) (Invalsi, 2020/2021, percentage values)	Identical	12.9	--	 (c)
4.1.2	Completion rate (primary education, lower secondary education, upper secondary education)				
	Early leavers from education and training (Istat, 2020, percentage values)	Proxy	13.1		
4.2.1	Proportion of children aged 24–59 months who are developmentally on track in health, learning and psychosocial well-being, by sex				
	Percentage of seats authorized in socio-educational services for early childhood (nurseries and supplementary services) on children aged 0-2 (Istat, 2018/2019, percentage values)	Proxy	26.9		(d) 
4.2.2	Participation rate in organized learning (one year before the official primary entry age), by sex				
	Participation rate in organized learning (one year before the official primary entry age) (Ministry of Education, Universities and Research, 2018/2019, percentage values)	Identical	96.5		(e) 
4.3.1	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex				
	Participation in life-long learning (Istat, 2020, percentage values)	Proxy	7.2		
	Participation rate of youth and adults (25-64) in formal and non-formal education and training in the previous 12 months (Istat, 2016, percentage values)	Identical	41.5		(f)  (g)
	Students with disabilities: Pre-primary (Ministry of Education, Universities and Research, 2019, percentage values)	National context	2.4	--	--
	Students with disabilities: Primary (Ministry of Education, Universities and Research, 2019, percentage values)	National context	3.8	--	--
	Students with disabilities: Lower secondary (Ministry of Education, Universities and Research, 2019, percentage values)	National context	4.2	--	--
	Students with disabilities: Upper secondary (Ministry of Education, Universities and Research 2019, percentage values)	National context	2.7	--	--
4.4.1	Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill				
	Individual who have basic or above basic overall digital skills (Istat, 2019, percentage values)	Identical	41.5	--	 (h)
	People with high level of IT competencies (Istat, 2019, percentage values)	Proxy	22.0	--	 (h)
	Financial literacy score of adults (Bank of Italy, 2020, mean score)	National context	11.2	--	 (j)

Table 4.1 continues - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
4.5.1	Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated (*)				
4.6.1	Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex				
	People having completed tertiary education (30-34 years old) (Istat, 2020, percentage values)	National context	27.8		
	STEM graduates (Istat, 2018, per 1,000 population aged 20-29)	National context	15.1	 (k)	
4.a.1	Proportion of schools offering basic services, by type of services				
	Physically accessible schools (Istat, 2019/2020, percentage values)	Proxy	32.3	--	
	Physically inaccessible schools (Istat, 2019/2020, percentage values)	Proxy	46.8	--	
	Schools with pupils with disabilities by adapted computer workstations: Primary (Istat, 2020, percentage values)	Identical	75.1		
	Schools with pupils with disabilities by adapted computer workstations: Lower Secondary (Istat, 2020, percentage values)	Identical	79.2		
	Schools with pupils with disabilities by adapted computer workstations: Upper Secondary (Istat, 2020, percentage values)	Identical	78.1	--	
4.b.1	Volume of official development assistance flows for scholarships by sector and type of study				
	Volume of official development assistance flows for scholarships by sector and type of study (Ministry of Foreign Affairs and International Cooperation, 2019, million euro (current prices))	Identical	31.02	--	--
Legend		Notes			
	IMPROVEMENT	(a) Variation compared to 2009			
	STABILITY	(b) Variation compared to 2015			
	DETERIORATION	(c) Variation compared to 2018/2019			
--	NOT AVAILABLE / NOT SIGNIFICANT	(d) Variation compared to 2013			
		(e) Variation compared to 2010			
		(f) Variation compared to 2006			
		(g) Variation compared to 2011			
		(h) Variation compared to 2016			
		(i) Variation compared to 2017			
		(k) Variation compared to 2012			
		(*) There are 32 parity indices in the database and they relate to 22 indicators in this Goal			

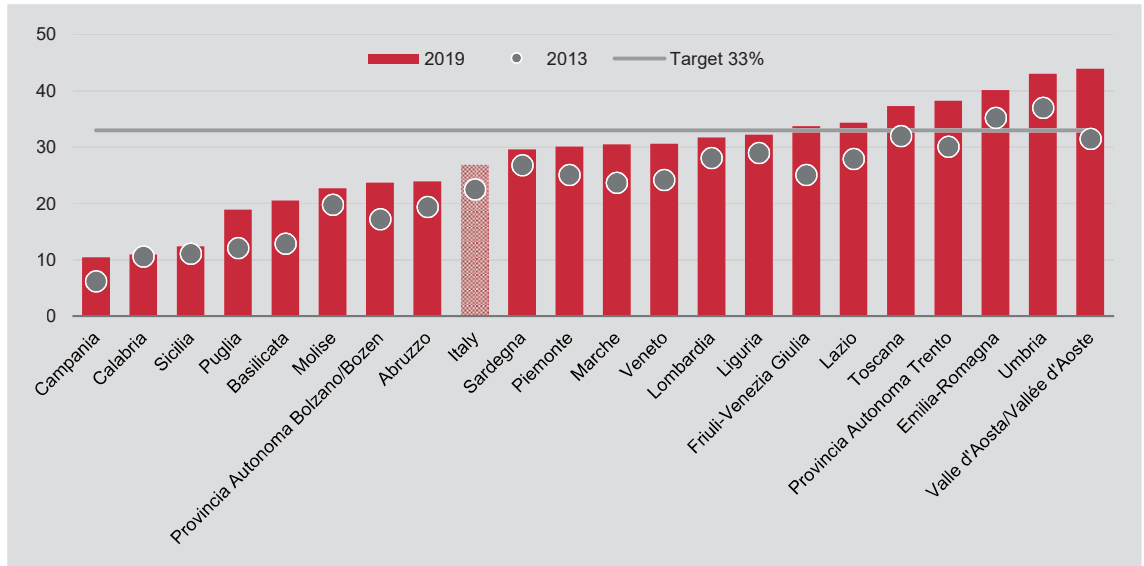
Not enough places available in kindergartens for 0-2 year old children

In Italy, in the educational year 2019/2020 there were 13,834 public and private early childhood services. Availabilities covered 26.9% of children up to 2 years of age, still below the 33% target set by the EU for year 2010². The gap between the Centre-North and the South and Islands was wide. Highest coverage was recorded in Valle D'Aosta (43.9%), Umbria (43%) and Emilia-Romagna (40.1%), where more than 4 children out of 10 had the opportunity to attend a day-care centre (Figure 4.1). Conversely, only 1 child out of 10 had the same opportunity in Campania (10.4%), Calabria (10.9%) and Sicilia (12.4%).

On the other hand, the participation of 5-year old children in pre-school (or in the first year of primary school) was homogeneous throughout the territory (96.5%).

² The supply of primary education services in Italy suffers from strong structural deficiencies and was the subject of European Recommendation No. 2 of 2019. It is one of the objectives of Mission 4 of the NRRP. In fact, the Kindergarten Plan aims at raising the take-up rate of early childhood education and care services assigning €4.6 billion for kindergartens and preschools.

Figure 4.1 - Percentage of seats authorised in socio-educational services for early childhood (nurseries and supplementary services) for children in 0-2 age class, by region. Educational years 2013/2014 and 2019/2020 (percentage values)



Source: Istat, Survey on nurseries and supplementary services for early childhood

Digital, financial and scientific skills were still low

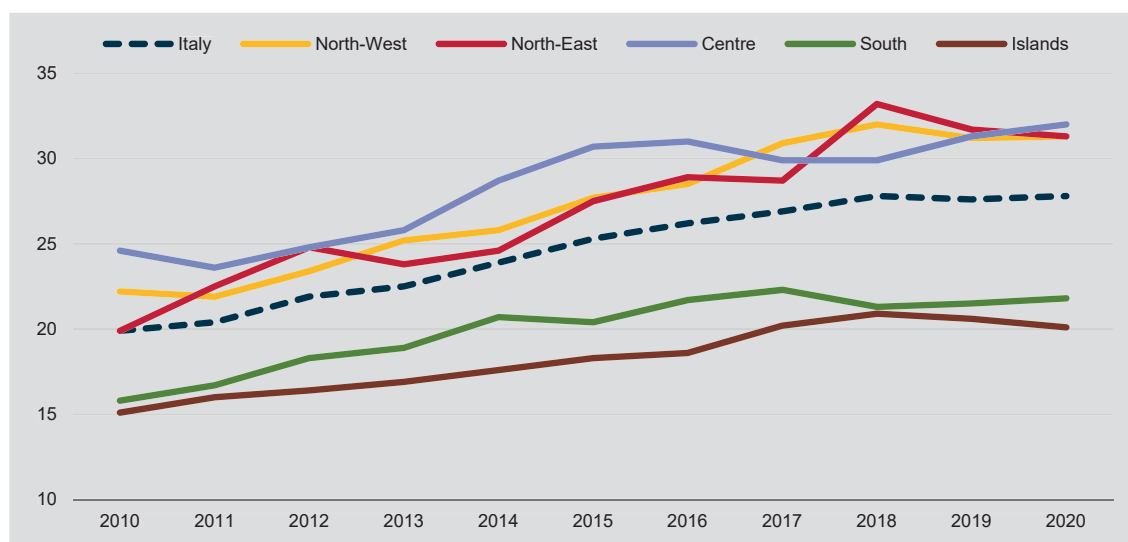
The digitalisation and innovation of processes, products and services, which represent a determining factor in the country's transformation, must be accompanied by a process of broadening and strengthening of scientific, technological, digital and financial skills. In 2019, the share of the population in the 16-74 age class, with at least basic digital skills was 41.5%, about 45% among men and 38% among women (in EU27 individuals with at least basic digital skills were 56%). Among people in the 60-64 age class, only 1 out of 4 had at least basic digital skills; the share dropped to 14.3% among people in the 65-74 age class. In the South and Islands, only 1 out of 3 people in the 16-74 age class had at least basic digital skills. The target set by the Skills Agenda for Europe of reaching 70% of the population adequately digitally skilled by 2025 is still far.

In 2020, the Italian average level of financial literacy³ was 11.2, on a scale ranging from 1 to 21, broadly in line with the value of 2017. University graduates had a higher degree of financial knowledge and skills than individuals with lower levels of education. Financial literacy was higher among people in the 35-44 age class, among men compared to women and among residents in the Centre-North compared to those in the South and Islands.

3 The financial literacy indicator (OECD approach) takes values between 1 and 21 and is calculated as the sum of the scores of three sub-dimensions: knowledge (score from 0 to 7; they concern the understanding of basic concepts useful for making financial choices: inflation; interest rate; difference between simple and compound interest rate; risk diversification), behaviour (score from 0 to 9; they concern the management of financial resources in the short and long term: setting financial goals, planning resources to be allocated to consumption, bill payments, savings in recent months) and attitudes (score from 1 to 5; they concern individuals' orientation towards saving, especially precautionary savings, from a long-term perspective). For further information, see https://www.bancaditalia.it/pubblicazioni/qef/2020-0588/QEF_588_20.pdf.

In 2020, in Italy the share of the population in the 30-34 age class who completed tertiary education was 27.8% (the European target was 40%), a stable share in the last two years after the increase of previous years. The differences between the North and the South and Islands had become larger over the years. In the North 31.3% of people in the 30-34 age class had a tertiary degree, in Central Italy 32%, in the South and the Islands only 21.8% and 20.1% respectively (Figure 4.2).

Figure 4.2 - People having completed tertiary education (30-34 years old) on total people aged 30-34 years, by geographical area. Years 2010-2020 (percentage values)

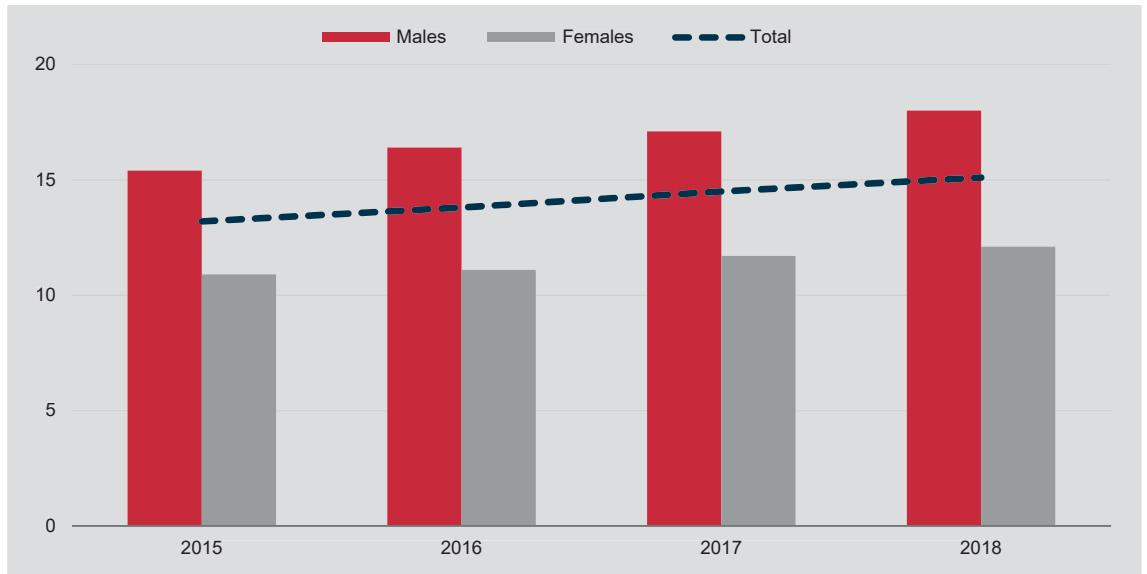


Source: Istat, Labour force survey

Italy was also characterised by a low level of the incidence of graduates in STEM (Science, Technology, Engineering and Mathematics) disciplines⁴. In 2018, 15.1 per thousand of individuals in the 20-29 age class held a STEM degree, 4 points per thousand lower than the EU27 average. A larger share of women hold a tertiary degree although males recorded a larger share of STEM tertiary degrees and Gender gap, although relatively small, has been growing in recent years (Figure 4.3). The share of graduates in STEM disciplines, on the other hand, recorded scarce differences across the territory.

⁴ STEM disciplines are: Natural Sciences, Physics, Mathematics, Statistics, Computer Science, Information Engineering, Industrial Engineering, Architecture and Civil Engineering.

Figure 4.3 - STEM graduates, by gender. Years 2012-2018 (per 1,000 individuals aged 20-29)

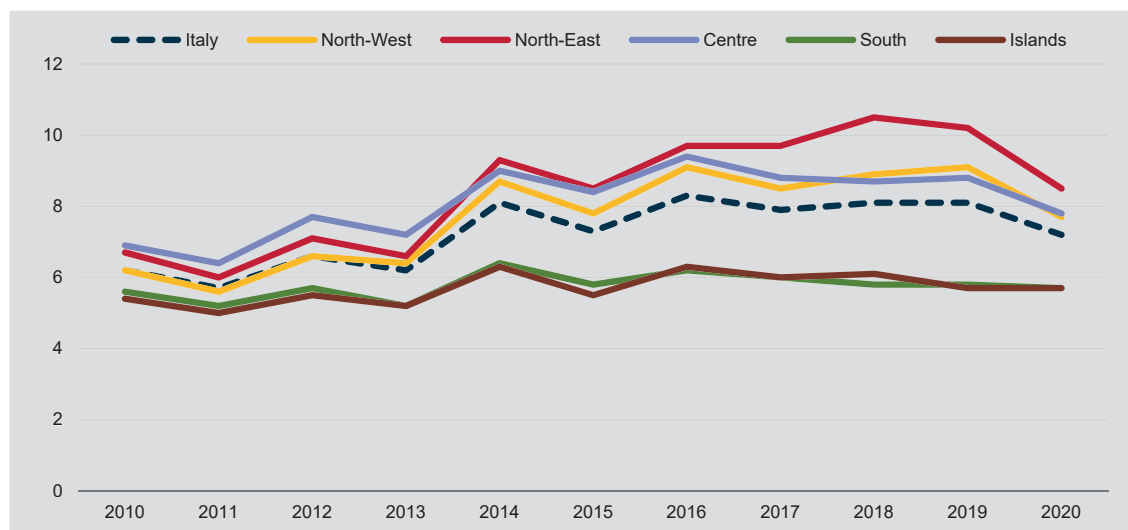


Source: Istat, Processing on Ministry of Education, University and Research data

The pandemic crisis has had a marked impact on participation in training activities

Lifelong learning allows a continuous updating of knowledge and the opportunity to learn and develop new skills. In 2020, the mobility limitations and the shutdown of businesses, schools, and training centres largely reduced training opportunities, since they did not shift suddenly into distance learning. During 2020, 7.2% of individuals aged 25 and 64 attended at least one training activity in the last 4 weeks (they were 8.1% in 2019). In the North-West and North-East that indicator fell to 7.7% compared to 9.1% in 2019 and 8.5% compared to 10.2%, respectively (Figure 4.4). There was also lower participation in the Centre (7.8% in place of 8.8%). In the South and Islands the share remained constant. People in the 25-34 age class (14.6%), women (7.4%) and with the highest level of education (16.9%) were the most involved in learning activities.

Figure 4.4 - Participation in life-long learning, by geographical area. Years 2010-2020 (percentage values)



Source: Istat, Labour force survey

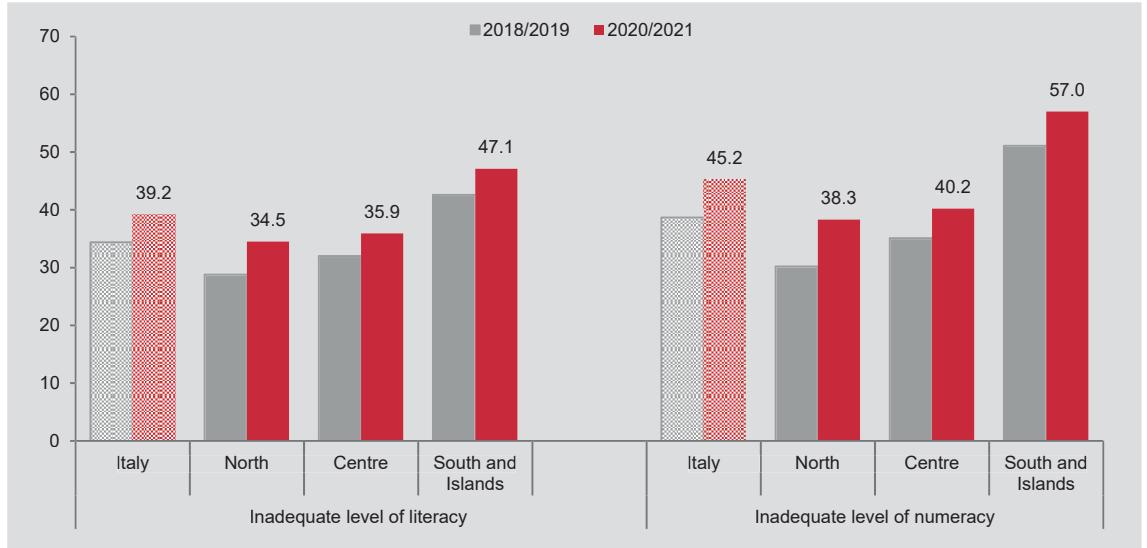
Students' skills deteriorated

In the 2020/21 school year, students in grade 8 who did not achieve adequate results (low performers), were 39.2% for skills in Italian (+5 p.p. compared to 2018 and 2019) and 45.2% for skills in Mathematics (+5 p.p. compared to 2018 and +6 p.p. compared to 2019; Figure 4.5). In some regions of the South and Islands (Campania, Calabria and Sicilia), the indicator measured highly critical situations, thus, 50% of students did not achieve adequate knowledge in Italian; 60% of students did not achieve adequate knowledge in Mathematics

Although a large share of students attending grade 13 showed already⁵ in 2019 inadequate levels of proficiency in Italian and Mathematics, in 2020 the share worsened. In 2020, 44 students out of every 100 did not achieve a sufficient knowledge in Italian (+9 p.p. compared to 2019) and 51 out of every 100 did not achieve sufficient skills in Mathematics (+9 p.p. compared to 2019; Figure 4.6). In many regions of the South and Islands, more than half of the students did not reach the 50% threshold in Italian (low performers were 64.2% in Campania, 63.5% in Calabria, 59.3% in Puglia, 57.2% in Sicilia, 52.8% in Sardegna and 50.2% in Abruzzo). In Mathematics the percentages of students below the minimum level of proficiency were even higher, involving some regions of the Centre (Campania 73%, Calabria and Sicilia 70.2%, Puglia 69.2%, Sardegna 62.8%, Abruzzo 60.7%, Basilicata 59.3%, Lazio 56.1%, Umbria 52.4%, Marche 51.1%).

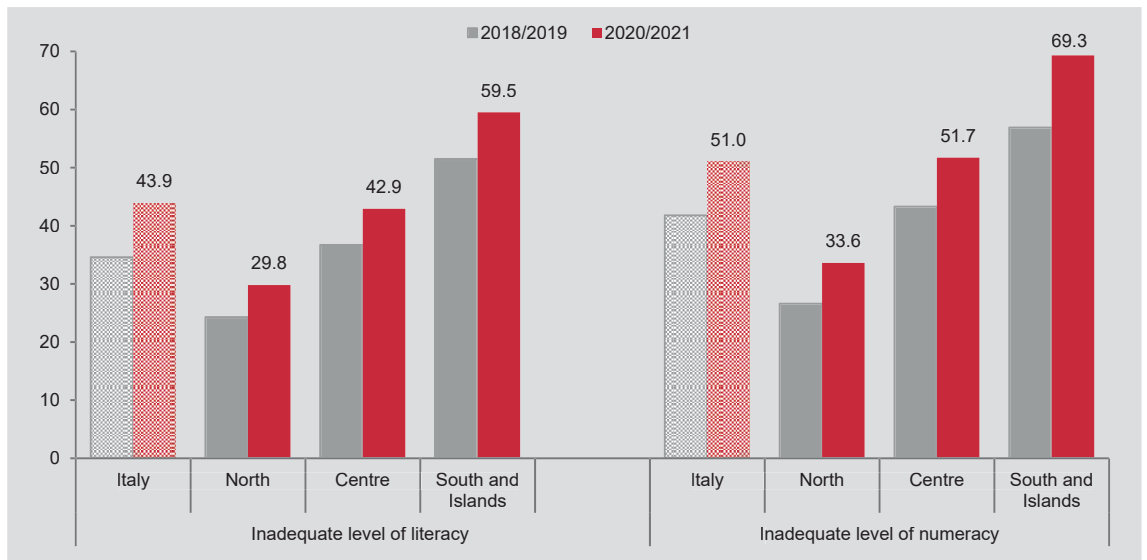
⁵ For the 2019/2020 school year, the Invalsi National Learning Surveys were not conducted for any school grade.

Figure 4.5 - Inadequate alphabetical and numerical skills (students in grade 8). Years 2018/2019 and 2020/2021 (percentage values)



Source: Invalsi

Figure 4.6 - Inadequate literacy and numeracy skills (students in grade 13). Years 2018/2019 and 2020/2021 (percentage values)



Source: Invalsi

In Italy, in 2020 the share of people in the 18-24 age class who left the education and training system without having obtained a diploma or a qualification was estimated at 13.1%, equal to 543 thousand people, a marginal reduction compared to the previous year. The level was still higher than the European target (10%), which has already been achieved by the EU27 (10.1%).

Early school leaving involved more men (15.6%) than women (10.4%). Territorial gaps were very wide and persistent, despite the fact that in 2020 the difference between the North and the South and Islands decreased to 5.3 percentage points (thanks to the decrease

recorded in the South and Islands), from 7.7 p.p. in 2019. In 2020, the dropout rate before completion of upper secondary education or vocational training was equal to 17.9% in the Islands, 15.5% in the South, 11.8% in the North-West, 9.9% in the North-East and 11.5% in the Centre. In Sicilia, Campania, Calabria and Puglia the share exceeded 15% (Figure 4.7).

Figure 4.7 - Early leavers from education and training, by region. Years 2010 and 2020 (percentage values)



Source: Istat, Labour force survey



GOAL 5

ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS¹

In brief

- In 2020, more than 49 women out of 100,000 inhabitants called the toll-free number 1522 because they were victims of violence. They were around 27 in 2019. The phone calls increased in all regions. The most common kind of violence is psychological, almost always jointly reported with physical violence. Women reported also other acts of violence (such as threats, economic and sexual violence).
- 111 murders of women were committed in Italy in 2019 (133 in 2018). Around 84% of women were murdered at home (by partners, former partners or other relatives). It was 79.7% in 2018.
- In 2019 there were 281 Anti-violence centers (24 more than in 2018), and 257 shelters (222 in 2018). These services were unevenly distributed on the territory.
- In 2020, the employment rate of women 25-49 years old with pre-school children and the employment rate of those without children was 73.4% slightly lower (-0.9 p.p.) than 2019. The ratio was worse for younger women in the 25-34 age class.
- In 2020, the distribution of domestic care continued to be unbalanced to the disadvantage of women. The asymmetry index in family work remained broadly stable compared to 2019 (62.8%), a share still above a fair distribution equal to 50%.
- Women's participation in political and economic life showed some improvements. In the regional elections held in 2020, the proportion of women chairing councils rose by almost one percentage point to 22%. At the end of 2020, the share of women in the boards of Italian companies listed in the stock exchange reached 39% (+ 2.3 percentage points compared to 2019), placing Italy in second position, after France (45%), in the EU27 ranking.

The statistical measures released by Istat for Goal 5 are seventeen and refer to seven UN-IAEG-SDGs indicators (Table 5.1).

¹ This section was edited by Carmen Federica Conte, with contributions by Elisabetta Del Bufalo, Francesco Gosetti, Maria Giuseppina Muratore, Miria Savioli.

Table 5.1 - Statistical measures released by Istat, taxonomy compared to SDG indicators and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
5.2.1	Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age				
	Proportion of women aged 16-70 subjected to physical or sexual violence by a partner or previous partner in the previous 12 months (Istat, 2014, percentage values)	Identical	2.0		(a) --
	Intimate partnership violence rate (Istat, 2014, percentage values)	Proxy	4.9		(a) --
	Proportion of women aged 16-70 subjected to psychological violence by a current partner in the previous 12 months (Istat, 2014, percentage values)	Proxy	9.2		(a) --
	Women victims of violence reported to the 1522 helpline 1522 (Istat, 2020, per 100,000 women)	National context	49.6		(b)
	Murders of women committed by partners, ex-partners or other relatives (per 100 women murdered) (Istat, 2019, percentage values)	National context	83.8		
	Anti-violence centers and women's Shelters: rate per 100,000 women aged 14 and over (Istat, 2019, per 100.000)	National context	1.98	--	
5.2.2	Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence				
	Proportion of women aged 16-70 subjected to sexual violence by a man other than intimate partner in the previous 12 months (Istat, 2014, percentage values)	Identical	1.6		(a) --
	Proportion of women aged 16-70 subjected to physical or sexual violence by a man other than intimate partner in the previous 5 years (Istat, 2014, percentage values)	Proxy	7.7		(a) --
5.4.1	Proportion of time spent on unpaid domestic and care work, by sex, age and location				
	Ratio of employment rate for women aged 25-49 with at least one child aged 0-5 to the employment rate of women 25-49 years without children (Istat, 2020, percentage values)	National context	73.4		
	Proportion of time spent on unpaid domestic and care work (Istat, 2014, percentage values)	Identical	13.5	--	--
	Share of household work time carried out by women in a couple on the total of the household work time (Istat, 2019/2020, percentage values)	National context	62.8		
5.5.1	Proportion of seats held by women in (a) national parliaments and (b) local governments				
	Women and political representation in Parliament (Istat, 2018, percentage values)	Proxy	35.4		(c)
	Women and political representation at regional level (Individual regional councils, 2020, percentage values)	Proxy	22.0		(d)
5.5.2	Proportion of women in managerial positions				
	Women in decision-making bodies (Various, 2021, percentage values)	Proxy	19.5		(b)
	Women in the boards of companies listed in stock exchange (Consob, 2020, percentage values)	Proxy	38.8		
5.6.1	Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care				
	Voluntary abortion rate of women aged 15-49 years for 1,000 women (Istat, 2019, per 1.000)	National context	5.8		
5.b.1	Proportion of individuals who own a mobile telephone, by sex				
	People age 6 and older who use their mobile phone every day, per 100 people with the same characteristics (Istat, 2020, percentage values)	Proxy	82.6		
Legend		Notes			
	IMPROVEMENT	(a) Variation compared to 2006			
	STABILITY	(b) Variation compared to 2013			
	DETERIORATION	(c) Variation compared to 2008			
--	NOT AVAILABLE / NOT SIGNIFICANT	(d) Variation compared to 2012			

The NRRP and gender equality

Women were affected deeply by the pandemic. Italy included the guidelines of the new European strategy for gender equality into the National Recovery and Resilience Plan (NRRP). Gender equality is classified as a cross-cutting goal to be achieved through the implementation of the Reforms and Missions of the NRRP. The evolution of Goal 5 indicators is an important tool for the gender equality analysis.

Calls for help for violence increased during the lockdown

Since the beginning of the pandemic in Europe, there has been an alarming increase in violence against women. In France, during the first week of the lockdown, reports of violence increased by 32%, in the first three weeks Lithuania increased by 20% and Spain recorded a 18% increase of calls for help during the first two weeks of the lockdown².

The phenomenon involved Italy too. In 2020, there were 15,128 (8,427 in 2019) calls to the toll-free number 1522³, addressed to women victims of gender violence or stalking to provide support and information⁴. Respect to 2019, some peaks were observed in April (+176.9%) and May (+182.2%)⁵. The phenomenon can also be analysed in relation to the calls to the help line of women victims of violence⁶. In 2020, more than 49 women per 100,000 inhabitants called the toll-free number because they were victims of violence; they were around 27 in 2019 (Figure 5.1). The increase in calls to the toll-free number was widespread throughout the territory and recorded a higher intensity in Lazio, about 60 per 100,000 women (38 in 2019), Campania, Piemonte and Lombardia, about 44 per 100,000 women in all three regions (28 in Campania and Piemonte and 26 in Lombardia in 2019).

2 Data made available in 2021 Report on Gender Equality in the European Union, March 2021 (https://ec.europa.eu/info/sites/default/files/aid_development_cooperation_fundamental_rights/annual_report_ge_2021_printable_en_0.pdf).

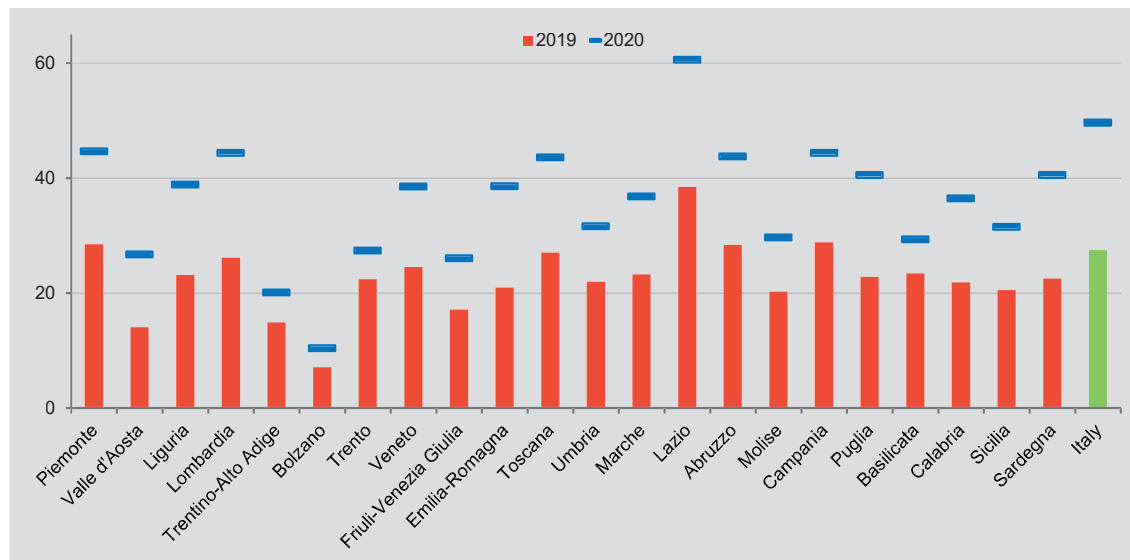
3 The number “1522” is a toll free number active from 2006 and managed by the Department for Equal Opportunities of the Prime Minister’s Office, which operates throughout the country, 24- available for fixed and mobile networks. In 2009 the service started as a network to support gender-based violence victims. After L.38/2009, as amended by the 2013 law about persecution crimes, the service launched also a specific activity to support victims of stalking. The help line provides first aid information for emergencies and information about the territorial services and anti-violence centers for victims. Any information collected during the phone calls is recorded on a digital platform. Information from phone calls is referred to “users”, i.e. those who call for information or to “victims”, i.e. those who have suffered some kind of violence and/or stalking. For any other information, refer to the Methodological Note in Istat, Department for Equal Opportunities 17 May 2021. “Le richieste di aiuto durante la pandemia”. Rome: Istat. (<https://www.istat.it/it/archivio/257704>).

4 During the lockdown, the Department for Equal Opportunities launched a specific campaign aimed at advertise the toll-free number 1522. Data could be partially effected by that campaign.

5 For further information, see Istat, Department for Equal Opportunities 17 May 2021. “Le richieste di aiuto durante la pandemia”. Rome: Istat. (<https://www.istat.it/it/archivio/257704>).

6 The indicator measures the female victims of violence or stalking who called the toll free number 1522 by region of origin of the call respect to the average female population (per 100,000 women).

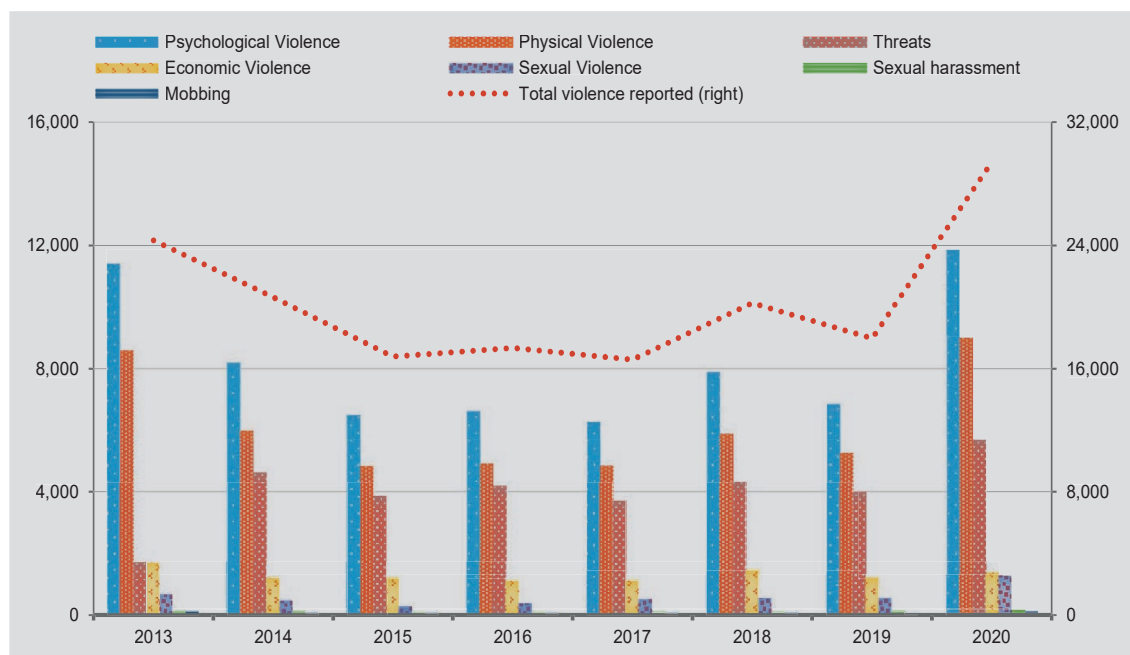
Figure 5.1 - Women victims of violence reported to the 1522 helpline, by region of origin of the call. Years 2019-2020 (per 100,000 women)



Source: Istat-Department for Equal Opportunities, 1522 helpline against violence and stalking

In 2020, every kind of violence⁷ showed a marked increase (+64% compared to 2019). The predominant violence was psychological (11,826 reports; +4,981 compared to 2019), followed by physical violence (8,997 reports; +3,766 compared to 2019) and threats (5,674 alerts; +1,677 compared to 2019). In 2020, there was a large increase for reports of sexual violence (1.267 reports; +718 compared to 2019). (Figure 5.2).

Figure 5.2 - Violence reported to the 1522 help line, by kind of violence suffered by women (a). Years 2013-2020 (N.)



Source: Istat-Department for Equal Opportunities, 1522 helpline against violence and stalking
(a) Prevailing violence and other violence reported in the same phone call.

7 It is possible to indicate more than one type of violence in a single call.



Murder of women were on the rise

In Italy in 2019 were committed 315 murders, of which 111 were women (in 2018, there were 345 murders of which 133 were women). Around 84% of women (79.7% in 2018) were murdered at home. Of these, 55 women (49.5%) were murdered by the partner, 13 were murdered by the former partner (11.7%; the share was 7.5 in 2018) and 25 by another family member (22.5%).

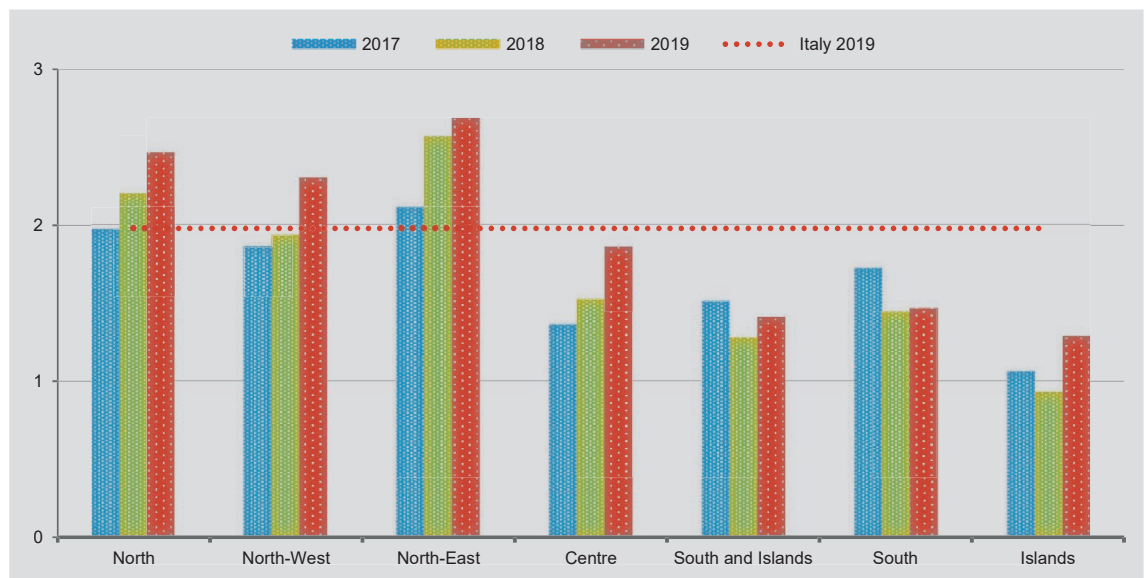
Anti-Violence centers and women's shelters increased in all regions

In 2019, 281 Anti-Violence Centres (AVC) were active (24 more than in 2018) and 257 women's shelters (there were 222 in 2018)⁸. AVC and women's shelters were unevenly distributed in the country. The average national coverage rate is 2 services offered per 100,000 women older than 14 (1.04 for AVC and 0.95 for women's shelters), higher than the coverage rate of 1.7 in 2018 (Figure 5.3).

The coverage of Anti-violence centers and women's shelters followed the North-South gradient with higher shares in the North-East (2.7 services per 100,000 women older than 14; it was 2.6 in 2018) and was less frequent in the Centre (1.9; it was 1.5 in 2018) and in the South and Islands geographical area (1.4; it was 1.3 in 2018)

The Autonomous Province of Bolzano made available the largest service coverage — 3.9 in total — followed by Friuli Venezia Giulia (3.8 in total), Valle d'Aosta and Emilia Romagna (respectively, 3.5 and 3.1). Basilicata (0.4 in total; it was 1.2 in 2018) and the Autonomous Province of Trento (0.8 in total, unchanged from 2018) recorded the lowest coverage.

Figure 5.3 - Anti-violence centers and women's shelters: rate per 100,000 women aged 14 and over, by geographical area. Years 2017-2019 (for 100,000 women)



Source: Istat, Survey on Anti-violence centers and Survey on women's shelters

⁸ The data refer to the number of CAV and women's shelters included in the Istat data collection. 2019 data are estimated.

The pandemic disadvantaged working women with young children

During the health crisis, the reconciliation of working women's life and working times became particularly difficult. In 2020, the ratio between the employment rate of women in the 25-49 age class with pre-school children and the employment rate of women in the same age class without children decreased (73.4%, -0.9 percentage points compared to the previous year), with a larger gap from 100 that is the equality ratio. The age class analysis highlighted the critical ratio for women in 25-34 age class with young children, for which the ratio was 57.5% (-2.6 percentage points compared to 2019 and -3.7 points compared to 2010). In the age class 35-44, the indicator increased to 82.3% close to the parity in the 45-49 age class (98.7%; +2.1 percentage points compared to 2019 and +12.9 points compared to 2010). The comparison of employment for women with children compared to women without children depends significantly on education. The ratio was 89% for employed mothers with a high level of education (ISCED 5, 6, 7, 8) compared to employed mothers without children with the same level of education. The ratio dropped to 73.5% for women with a medium level of education (ISCED 3, 4) and below 50% for women with a low level of education (ISCED 0, 1, 2).

In the last year, the ratio of women in the 25-49 age class with pre-school children fell in the North (79%; -2.1 percentage points compared to 2019) and in the Centre (80.3%; -1.4 percentage points compared to 2019). Conversely, in the South and Islands the ratio improved (67.5; +0.7 percentage points) recording a marginal reduction respect the other geographical areas.

The disadvantage gap for women in housework and care work continued especially in the South and Islands

It is always difficult to determine a balance between men and women in housework and care within the family. The distribution of domestic care continued to be unbalanced to the detriment of women. In 2020, the asymmetry index in family work showed a substantial stability (62.8%), far away from the 50% value that indicates a perfect distribution of the workload⁹. In the South and Islands, women recorded more difficulties to balance the distribution of housework and care within the family (69.5%) compared to women in the North (60.5%) and the Centre (62.3%). The indicator showed significant improvements compared to 2010. The average index fell by 8.6 percentage points compared to 2010 (71.4%). The improvement was most evident in the Centre (72.4%; -10.1 percentage points) and in the North (70.1%; -9.6 points), slightly lower in the South and Islands (74.9%; -5.4 percentage points).

⁹ The indicator measures the time spent on family work by the woman in the 25-44 age class on the total time spent on family work by both partners. The indicator derives from Time use Survey for the years 2008/09 and 2013/2014. The intermediate and subsequent years are estimates based on the trend of the phenomenon inferred from Survey on aspects of daily life. The perfect distribution of the domestic workload between the two sexes in the household is recorded when the indicator value is 50%. The values above 50% show a higher workload and care for women, below the threshold the workload is greater for men.

Women in political and economic life increased

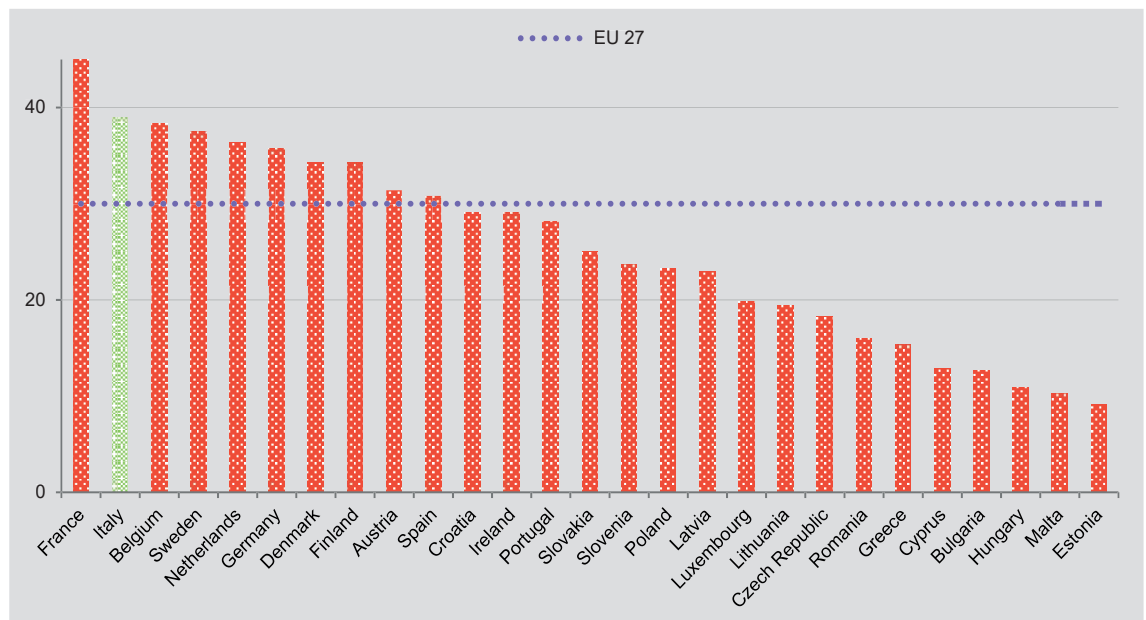
In 2020, nine out of twenty regions elected the new regional councils. The percentage of women chairing councils rose by almost one percentage point to 22%. Females in the Centre (32.9%) compared to the North (23.2%) and the South and Islands (15.8%) recorded a larger presence.

Umbria was the region with the highest number of women in local councils (38.1%). Conversely, Basilicata showed the lowest share of women (4.8%).

At the end of 2020, the share of women in the management bodies of Italian companies listed in the stock exchange reached 39% (+2.3 percentage points compared to 2019), placing Italy in second place, after France (45%), in Europe 27 (30%). This was the highest level since 2010 (+32 percentage points compared to 2010 when it was 6.8%; Figure 5.4).

In 2020, 76 companies that renewed the administrative body recorded a female share of 42.8%¹⁰ of the board. The role of female CEO was still moderate. In 2020, only 15% of listed companies (representing only 2% of the total market value of listed companies) had a female CEO; the female share rose to 27% (around 18% of the total capitalisation) for female president and honorary president¹¹.

Figure 5.4 - Share of women in the boards of large companies listed in the stock exchange, by country. Year 2020 (percentage values)



Source: EIGE - European Institute for Gender Equality

¹⁰ The shares reached by Italian women in recent years are mainly due to the implementation of the Golfo-Mosca Law (L.120/2011) which from 2012 earmarked for women one third of seats in the renewals of the boards of companies listed on the stock exchange. Law 160/2019 raised the reserve share to 40%. The increase recorded in the last year reflects this latest regulation.

¹¹ National Commission for the Company and the Stock Exchange — CONSOB. 2020. Report on corporate governance of Italian listed companies — Gender diversity — Statistics and analyses, 26 2.24; 2.25; 2.27; 2.28).

The share of women in authorities and other important public bodies¹² is still contained with some improvements. In May 2021 the female share was 19.5%, an increase of +0.4 percentage points compared to the previous (December 2020) and 7.5 percentage points compared to 2013.

¹² The bodies and/or organisations concerned are: Constitutional Court; Superior Council of the Magistrature (including the magistrates involved in the functioning of the Body) and some independent administrative authorities (Competition and Market Authority, Communications Guarantee Authority, Guarantor for the Protection of Personal Data;) Consob; Ambassadors.



GOAL 6

ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL¹
























In brief

- In 2018 Italy reached the second place in the European ranking of freshwater withdrawal by public water supply with 153 m³ per inhabitant per year.
- Italy is one of the European countries in the Mediterranean area that in 2018 made the major use of groundwater (springs and wells), that is the most precious resource for drinkable uses on Italian territory (84.8% of the total abstracted).
- In the public water supply networks, 215 litres per capita were daily supplied to end users in 2018, about 5 litres less than in 2015.
- The volume of water supplied per capita increased with the resident population and in areas with a higher concentration of extra-residential uses. In the provincial capitals, 237 litres per inhabitant per day were supplied, 22 litres more than the national value.
- The efficiency of urban water supply network has deteriorated steadily since 2008. The share of water input into the network reaching end users was 58.0% in 2018 (0.6 percentage points lower than in 2015). Efficiency declined for more than half of the regions. The most critical situations were concentrated mainly in the regions of the Centre and of the South and Islands.
- In 2019, water rationing measures were adopted in 9 provincial and metropolitan capital cities, all located in the regions of the South and Islands. The number of cities involved was lower than the previous year, and the number of days affected by emergency interventions to ensure water supply to citizens was more than halved.
- The share of households complaining about irregularities in the water supply service at home was stable: 8.9% in 2020 (8.6% in 2019).
- The share of households declaring that they do not trust to drink tap water remained high in 2020 (28.4%), despite a slight decrease from the previous year (29.0%).

The statistical measures released by Istat for Goal 6 are eighteen, and refer to eight UN-IAEG-SDGs indicators (Table 6.1).

¹ This section was edited by Giovanna Tagliacozzo, Simona Ramberti and Tiziana Baldoni.

Table 6.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
6.1.1	Proportion of population using safely managed drinking water services				
	Water supplied per capita (Istat, 2018, litre per capita per day)	National context	215	 (a)	
	Households that don't trust to drink tap water (Istat, 2020, percentage values)	National context	28.4		
	Irregularities in water supply (Istat, 2020, percentage values)	National context	8.9		
	Rationing of domestic water supply for part or all of the municipality (Istat, 2019, number of municipalities)	National context	9	 (c)	
6.3.1	Proportion of domestic and industrial wastewater flow safely treated				
	Sewage treatment (Istat, 2015, percentage values)	Partial	59.6	 (a)	--
	Urban wastewater safely treated with secondary or advanced treatment (Istat, 2018, N.)	National context	7,781	 (a)	
	Public sewage coverage (Istat, 2018, percentage values)	National context	87.8	--	--
6.3.2	Proportion of bodies of water with good ambient water quality				
	Coastal bathing waters (Istat, processing on Ministry of Health data, 2019, percentage values)	Partial	65.5	 (c)	
	Percentage of rivers and lakes with good chemical quality and high or good ecological quality (Ispra, 2010-2015, percentage values)	Partial	(*)	--	--
	Percentage of groundwater water bodies with good quality of chemical status (SCAS) and good quantitative status (SQUAS) (Ispra, 2010-2015, percentage values)	Partial	(*)	--	--
	Percentage of transitional waters with good quality of ecological and chemical status (Ispra, 2010-2015, percentage values)	Partial	(*)	--	--
	Percentage of coastal marine waters with good quality of ecological and chemical status (Ispra, 2010-2015, percentage values)	Partial	(*)	--	--
	Percentage of water bodies that have achieved the objective of ecological quality (high or good) on the total water bodies of surface waters (rivers and lakes) (Ispra, 2010-2015, percentage values)	Proxy	(*)	--	--
6.4.1	Change in water-use efficiency over time				
	Urban water supply network efficiency (Istat, 2018, percentage values)	Proxy	58.0	 (a)	
6.4.2	Level of water stress: freshwater withdrawal as a proportion of available freshwater resources				
	Freshwater withdrawal for public water supply (Istat, 2018, million m ³)	Partial	9,219.8	 (a)	
6.5.2	Proportion of transboundary basin area with an operational arrangement for water cooperation				
	Proportion of transboundary basin area with an operational arrangement for water cooperation (Istat processing on Ministry of the Ecological Transition data, 2019, percentage values)	Identical	100	--	--
6.6.1	Change in the extent of water-related ecosystems over time				
	Wetlands of International Importance (Ispra, 2018, hectares)	National context	80,836	 (c)	--
6.a.1	Amount of water-and sanitation-related official development assistance that is part of a government-coordinated spending plan				
	Water-and sanitation-related ODA that is part of a government-coordinated spending plan (Ministry of Foreign Affairs and International Cooperation, 2019, million euro current prices)	Identical	25.15	 (c)	
Legend		Notes			
	IMPROVEMENT	(a) Variation compared to 2012			
	STABILITY	(b) Variation compared to 2015			
	DETERIORATION	(c) Variation compared to 2013			
--	NOT AVAILABLE / NOT SIGNIFICANT	(*) Please refer to the table on www.istat.it			

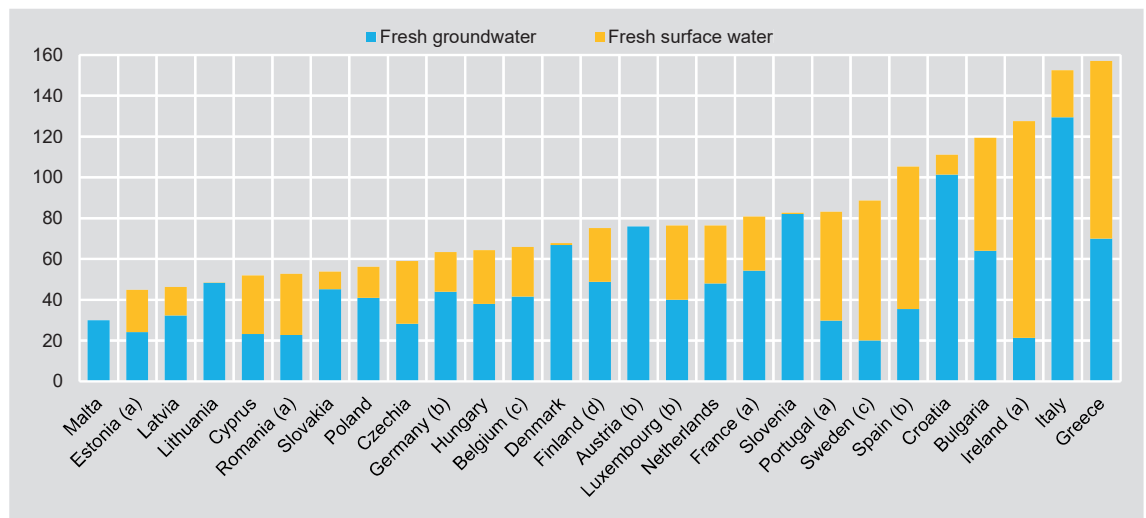
The withdrawals for drinkable use per inhabitant were high

In 2018 in Italy, the total volume of freshwater withdrawn for public water supply amounted to 9.2 billion m³ and represented the highest amount among EU27 countries².

The comparison among European countries showed relevant differences about the per capita indicator³ (Figure 6.1). Italy ranked second, after Greece (157 m³), in the per capita withdrawal of 153 m³ per year (419 litres per day). Both countries showed per capita amounts quite distant from the following countries in the ranking, such as Ireland (128), Bulgaria (119) and Croatia (111). The majority of Member States (20 countries out of 27) abstracted between 45 and 90 m³ per capita for public supply. Most Eastern European countries were at the lower end of the scale⁴.

Among the European countries of the Mediterranean area, Italy recorded one of the higher share abstraction of groundwater (springs and wells), which represent the most important and precious freshwater resource for the Italy (84.8% of the total volume abstracted). Conversely, in Spain, Greece and Cyprus the incidence of groundwater abstraction was significantly lower (33.5%, 44.5% and 44.6% respectively).

Figure 6.1 - Freshwater withdrawal for public water supply in EU27, by country. Year 2018 or last available year (m³ per capita per year)



Source: Istat, processing on Eurostat data

(a) 2017 data.
(b) 2016 data.
(c) 2015 data.
(d) 2014 data.

2 See Istat. 2020. "Urban water census. Year 2018". Statistiche Report. Rome: Istat. <https://www.istat.it/en/archivio/252831>.

3 Differences in water withdrawal between Member States are related to available water resources, water demand, abstraction patterns, as well as climate and agricultural and industrial activities connected to the urban network. Specific domestic conditions may influence volumes, such as the infrastructures and the extent of leakages in the water network.

4 See Istat. 2021 "Istat water statistics. Years 2018-2020". Statistiche Report. Rome: Istat. <https://www.istat.it/en/archivio/255680>.

Efficiency of urban water supply network continued to decline

In 2018, the efficiency indicator of urban water supply network, that is the ration between the volume of water supplied for authorized uses and the volume of water input into the network, was 58.0%, a low rate and in constant decline since 2008.

The infrastructural situation remained critical in some areas of the country, mainly due to the presence of physical losses (corrosion or deterioration of the system, breakages in the pipes, faulty joints, etc.) and to a lesser extent of physiological and apparent losses (administrative component due to unauthorized connections, measurement errors). The most critical situations were located in the Centre and in the South and Islands, with the lowest efficiency indicators for urban water supply networks in Abruzzo (44.4%), Umbria (45.4%) and Lazio (46.9%). All the Northern regions, except Friuli-Venezia Giulia (54.3%), recorded higher efficiency than the national value. Valle d'Aosta recorded the highest value (77.9%), albeit down by about 4 percentage points compared to 2015. The decrease in efficiency affected 13 regions and 6 out of 7 river basin districts. About 1 province⁵ out of 2 reached a level of efficiency lower than the national value (Figure 6.2a). About 96% of the resident population in the Islands lived in provinces with efficiency of urban water supply network below 55%, while in the most virtuous areas such as the North-West, the share of the population with an efficiency below 55% was equal to 4%. 10 provinces reached a level of efficiency lower than 45%. Except La Spezia, they were located in the Centre and in the South and Islands of the country (Pescara, Ragusa, Oristano, Benevento, Avellino, L'Aquila, Chieti, Latina and Frosinone). Latina (26.0%) and Frosinone (19.9%) were at the bottom of the ranking. The metropolitan city of Milano reached a high efficiency (81.3%), 5 other provinces, namely Aosta (77.9%), Ravenna (76.3%), Pavia (75.5%), Fermo (75.1%) and Biella (75.1%) recorded an efficiency of urban water supply network above 75%. The 109 provincial and metropolitan capital cities showed a better infrastructural performance, with the indicator of efficiency at 62.7%, about 5 percentage points higher than the national value, although there were some territorial gaps. South and Islands recorded double water losses in the distribution network than the North and about 10 percentage points higher than the national average.

The volume supplied per capita in urban water supply network slightly declined

The volume of water input into public urban water supply network was 8.2 billion m³ in 2018. The abstraction of water supplied to end users was 4.7 billion m³ for authorised uses⁶. The daily supply of water was 215 litres per inhabitant⁷, about 5 litres less than in 2015. The reduction trend started since 2008⁸ continued. The supply of water showed a

5 It includes 107 supra-communal territorial units (UTS) at provincial level (provinces, autonomous provinces, metropolitan cities, free consortia of municipalities and non-administrative units).

6 The volume of water supplied for authorised uses also includes public uses, such as street cleaning, water in schools and hospitals, watering of public green areas, fountains.

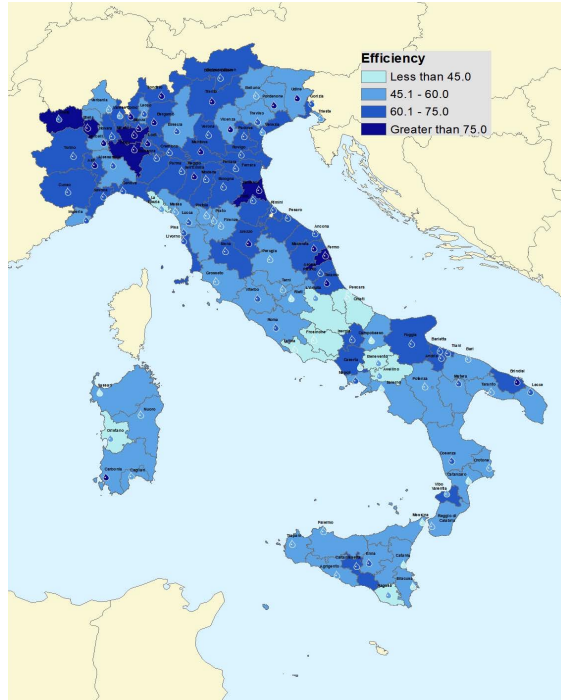
7 Either invoiced or provided for free use.

8 The decrease in water use should be analysed considering several factors: more sustainable consumption habits; variation in the criteria used to quantify the unmetered components of the water balance; less frequent application of the minimum amounts committed; reduction in non-domestic users, especially commercial activities and services, due to the economic crisis that the country has been experiencing for several years now.

relevant territorial heterogeneity, because it is related to infrastructural equipment, tourism, work, health, and to the demographic structure and socio-economic dynamics (Figure 6.2b). The supply of water per inhabitant was on average higher in the municipalities of the North than in those of the South and Islands. The North-West had the highest volume (254 litres per capita per day), even though it presented a strong regional variability and values fluctuating from 233 litres per inhabitant per day in Piemonte to 446 in Valle d'Aosta (region with the highest value). On the other hand, the lowest volume was supplied in the Islands (189), even though the lowest regional values were found in Umbria and Puglia (164 and 152, respectively).

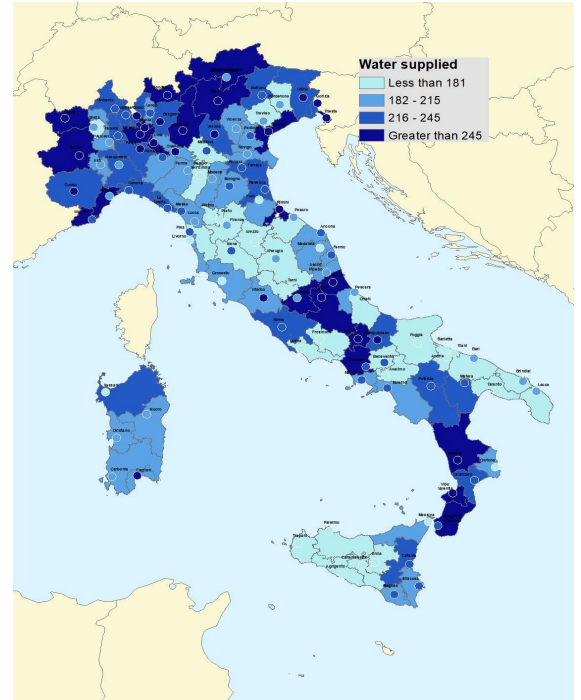
At provincial level, the daily supply varied from 118 litres per capita per day in the province of Enna to 446 in the province of Aosta⁹. Due to the higher concentration of population, services and non-residential uses, the provincial and metropolitan capital cities had on the whole a higher volume of water supplied per capita, equal to 237 litres per capita per day, 22 litres more than the national level. The cities of Milan, Isernia, Cosenza, L'Aquila, Pavia, Brescia and Venezia had levels above 300 litres per capita per day, while Barletta, Arezzo, Agrigento, Andria and Caltanissetta registered minimum levels (less than 150 litres).

Figure 6.2a - Urban water supply network efficiency, by province/metropolitan city and capital city. Year 2018 (percentage of water supplied on the volume input into the network)



Source: Istat, Urban Water Census

Figure 6.2b - Water supplied in urban water supply network, by province/metropolitan city and capital city. Year 2018 (litres per capita per day)



Source: Istat, Urban Water Census

⁹ Especially in mountainous areas, fountains can rise to significant volumes and this explains the higher values of per capita volumes.

Water rationing in the capitals of South and Islands decreased

In 2019, water rationing measures to users in the public water supply occurred in 9 of the 109 provincial/metropolitan capitals cities, located in the South and Islands (4 in Sicilia, 3 in Calabria, 1 in Abruzzo and 1 in Campania)¹⁰. Cities with rationing of water fell of 3 units and the days of water rationing largely decreased in some municipalities compared to 2018. The most relevant discomfort was suffered by the citizens of Agrigento, since water supply was suspended or reduced on the whole 2019.

More than 2 million households complained of water service irregularities

In 2020, 8.9% of households (about 2.3 million) complained about irregularities in the water supply service at home (8.6% in 2019). 64.1% of households who complained (just under 1.5 million) lived in the Centre and in the South and Islands, with higher values in Calabria (38.8%) and Sicilia (21.9%). In the North-West and North-East the percentages of households complaining for water irregularities were marginal (3.2% and 2.7%); in the Centre, less than 1 family out of 10 (8.6%) complained about water irregularities.

Trust to drink tap water was still low

About 3 out of 10 households (28.4%), in 2020, still declared to not trust to drink tap water. Although the indicator has gradually decreased over time (it was 40.1% in 2002), there were still relevant territorial disparities, with the lowest rates in the North-East (20.5%) and the highest rates in the Islands (49.2%). Sicilia (49.8%), Sardegna (47.5%), Calabria (41.1%) and Campania (40.5%) had the highest rates.

About 7.3 million inhabitants were not connected to the public sewage system

In 2018, about 9 out of 10 residents (87.8%) were connected to the public sewage system, regardless of the availability of subsequent wastewater treatment plants. Residents not connected to the public sewage network were 7.3 million¹¹.

¹⁰ Istat. 2019. Environmental data in cities. Rome: Istat. <https://www.istat.it/it/archivio/254037>.

¹¹ The public sewage system was completely missing in 40 municipalities with 394 thousand of residents (0.7% of the population) in 2018. More than half of these municipalities were located in Sicilia (25 municipalities). The towns with a sewage system often show partial extension of the network, especially in rural and mountainous areas and in municipalities where the service has recently been put into service.

Figure 6.3 - Percentage of resident population connected to the public sewage system, by region. Year 2018 (percentage value)



Source: Istat, Urban Water Census

The area with the highest public sewage coverage was the North-West (94.1%), with the highest regional percentage in Valle d'Aosta (97.3%). Although Sardegna's level was above average, the lowest coverage was recorded in the area of Islands (80.5%) influenced by Sicilia, where the regional minimum was reached, with a coverage percentage of 76.0% (Figure 6.3).

In 2018, the public urban wastewater treatment service was carried out by 18,140 plants (a slight increase on 2015). 42.9% of the plants adopted secondary or advanced treatments, 57.1% were primary plants and public Imhoff tanks¹². Overall wastewater service treated an average annual pollutant load of about 68 million population equivalent¹³, 65.5% in plants with advanced type treatment, 29.5% in secondary plants and the remaining 5.0% in primary plants and Imhoff tanks. The resident population connected to the urban wastewater treatment plants corresponded to 42.3 million inhabitants (about 70%) in 2018; about 18 million were not connected and lived in municipalities partially treated by urban waste water treatment plants or where the service was completely missing (339).

¹² Septic tanks that allow the treatment of domestic sewage from small-scale civil settlements.

¹³ Unit of measurement of the biodegradable organic pollutant load arriving at the wastewater treatment plant, expressed according to the equivalence: 1 population equivalent = 60 grams/day of BOD5 (five-day biochemical oxygen demand).



GOAL 7

ENSURE ACCESS

TO AFFORDABLE, RELIABLE,
SUSTAINABLE AND MODERN ENERGY
FOR ALL¹

In brief

- After the slight decrease recorded in 2018, the overall renewable energy share in the gross final energy consumption (GFC) returned to grow to 18.2% in 2019, marking an improvement of 5.4 percentage points over the last ten years. For the sixth consecutive year, Italy was among the European Union countries that exceed the national target assigned by the 20-20-20 targets.
- Despite the limited growth (+0.6%), in 2019 electricity generation was a major driver for the Renewable Energy Sources (RES) sector, with a share of renewables in gross domestic electricity consumption of 34.9%. The contribution from RES was smaller in the thermal (19.7%) and transport (9.0%) sectors.
- In 2019, energy intensity presented a new decline (-1.3%). The gradual decrease in the ratio of gross available energy to GDP in the last decade (-12%) located Italy in fourth place in the European ranking. The reversal of trend observed in industry sector in the last year rose the energy intensity of 1%, while the service sector decreased of 5%.
- In 2019, in Italy the percentage of the people not able to keep their home adequately warm was equal to 11.1%, with a decrease compared to the previous year. The percentage was higher in the population groups at risk of poverty, among foreign citizens and in the South and Islands.

The statistical measures released by Istat for Goal 7 are twelve and refer to four UN-IAEG-SDGs indicators (Table 7.1).

¹ This section was edited by Paola Ungaro.

Table 7.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
7.1.1	Proportion of population with access to electricity				
	Households very or fairly satisfied with the continuity of the service of electricity supply (Istat, 2020, percentage values)	Proxy	94.2		
	Inability to keep home adequately warm (Istat, 2019, percentage values)	National context	11.1		
7.2.1	Renewable energy share in the total final energy consumption				
	Renewable energy share in the gross final energy consumption (GSE S.p.A. - Gestore dei Servizi Energetici, 2019, percentage values)	Proxy	18.2		
	Renewable energy share (transport sector excluded) in the gross final energy consumption (GSE S.p.A. - Gestore dei Servizi Energetici, 2019, percentage values)	National context	17.1		(a)
	Renewable energy share in thermal sector (in the gross final energy consumption) (GSE S.p.A. - Gestore dei Servizi Energetici, 2019, percentage values)	Partial	19.7		(a)
	Electricity from renewable sources in the gross electricity consumption (Terna Spa, 2019, percentage values)	Partial	34.9		
	Renewable energy share in transport sector (in the gross final energy consumption) (GSE S.p.A. - Gestore dei Servizi Energetici, 2019, percentage values)	Partial	9.0		(a)
7.3.1	Energy intensity measured in terms of primary energy and GDP				
	Energy intensity (Enea processing on Eurostat and Istat data, 2019, tonnes of oil equivalent (Toe) per million euro)	Identical	91.61		
	Energy intensity of industry sector (Enea processing on Eurostat and Istat data, 2019, tonnes of oil equivalent (Toe) per million euro)	Partial	92.29		
	Energy intensity of services sector (Enea processing on Eurostat and Istat data, 2019, tonnes of oil equivalent (Toe) per million euro)	Partial	15.87		
	Final energy consumption in households per capita (Eurostat, 2019, kilogram of oil equivalent (KGOE))	National context	521		
7.b.1	Installed renewable energy generating capacity in developing countries (in Watts per capita)				
	Net installed renewable energy generating capacity (Istat processing on International Renewable Energy Agency data, 2020, watt per capita)	Identical	927.2		(a)

Legend

	IMPROVEMENT
	STABILITY
	DETERIORATION
--	NOT AVAILABLE / NOT SIGNIFICANT

Notes

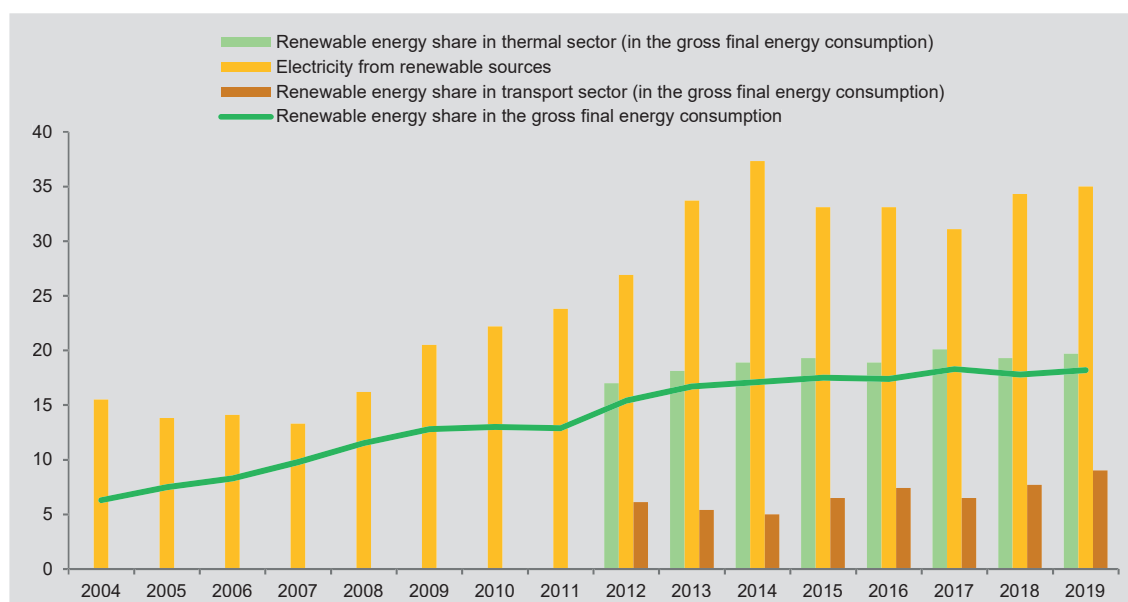
(a) Variation compared to 2012

In the last year, the overall share of energy from renewable sources in the gross final energy consumption recovered

National and international energy policies have been active from years to expand the renewable energy sources, with the aim of decarbonising the economy and guaranteeing climate change commitments. In 2019, one year before the deadline of the 2020 targets set by the EU Climate-Energy Package, Italy was among the fourteen Member States exceeding the target assigned at national level. In Italy, the overall share of energy from renewable sources on the gross final consumption was equal to 18.2%, a percentage slightly lower than the average of the EU27 (19.7%)². Italy was for the sixth consecutive year above the percentage of 17% set as national target.

In 2019, the overall share of gross final consumption from RES in the electricity, thermal and transport sectors increased, recovering 0.4 percentage points from the previous year's decline. Over the last ten years, the share of renewables increased by 5.4 p.p. (Figure 7.1), due to RES incentive policies, but also to the contraction of overall energy consumption. However, in order to achieve the ambitious goals defined by the 2020 National Integrated Energy and Climate Plan, which set a target of 30% for renewables by 2030, a further boost to production from renewable sources is required. To realise the "Green revolution and ecological transition", the National Recovery and Resilience Plan (NRRP) finances large investments in the energy field, focusing, among other components, on a further expansion of RES.

Figure 7.1 - Renewable energy share in final energy consumption. Years 2004-2019 (percentage values)



Source: GSE S.p.A. - Gestore dei Servizi Energetici; Terna S.p.A.

The sector analysis confirms the significant role of electricity, which grew in the 2009-2019 period from 20.5% to 34.9% (+0.6 percentage points in the last year). The thermal (heating and cooling) and transport (biofuels and the share of renewable electricity consumed in

² <http://ec.europa.eu/eurostat>.

transport) sectors increased, between 2012 and 2019, respectively from 17.0 to 19.7% (+0.4 p.p. in 2019) and from 6.1% to 9.0% (+1.3 in 2019). The transport sector was close to the binding target of 10% set by European legislation for 2020, because of the increase of biofuels released for consumption³ although it remained below the development trajectory defined by the 2010 National Action Plan (NAP) for Renewable Energy. Consumption in the electrical and thermal sectors continued to be above the NAP forecasts, contributing to the positive result of the overall share of energy from RES.

The energy contribution from RES varies at the regional level, both overall and by sector. In terms of the overall share of renewables on gross final energy consumption, in 2018, Valle d'Aosta, with almost 85% (+0.8 p.p. compared to the previous year), and the Autonomous Province of Bolzano, with almost 65% (-1.1 p.p. compared to 2017), were still the regions with the highest contribution from RES. Liguria, Lazio, Emilia-Romagna, Sicilia and Lombardia (all below 15%) reported much lower values of consumption from renewables. The Autonomous Provinces of Bolzano and Trento held the RES leadership except for thermal sector, for which Calabria (55.6%) was the first region.

Energy intensity still decreased

In the EU27, between 2009 and 2019, Gross Inland Consumption (GIC) of energy decreased by 3%⁴, consistent with the targets of reducing energy consumption pursued by European policies. In Italy, the reduction process was more intense, recording, in the same decade, a variation of GIC of -10% (-1% in the last year). In 2019 the GIC settled at 155.4 million tonnes of oil equivalent.

In 2019 Italy reached the fourth position in the EU ranking of energy intensity (ratio of gross available energy to gross domestic product), with 91.6 tonnes of oil equivalent consumed per million euro (TOE/M€), lower than the 112.8 EU27 average. 2019 confirmed the process of reduction of Italian energy intensity (Figure 7.2), which marked a further contraction of 1.3%, reaching an overall negative balance compared to the last decade of 11.8%, with an average annual variation rate equal to -1.2%. Despite the joint impact of GDP and GIC dynamics on the trend of the indicator⁵, the reduction in energy intensity was largely due to the measures in favour of energy efficiency, which, between 2011 and 2019, saved energy for 12 Mtep/year, equal to 77% of the 2020 target set by the National Action Plan for Energy Efficiency 2017⁶. A further acceleration to energy efficiency is expected, in the coming years, as a result of the investment plan made available by the NRRP, largely due to the renovation of the public and private building stock.

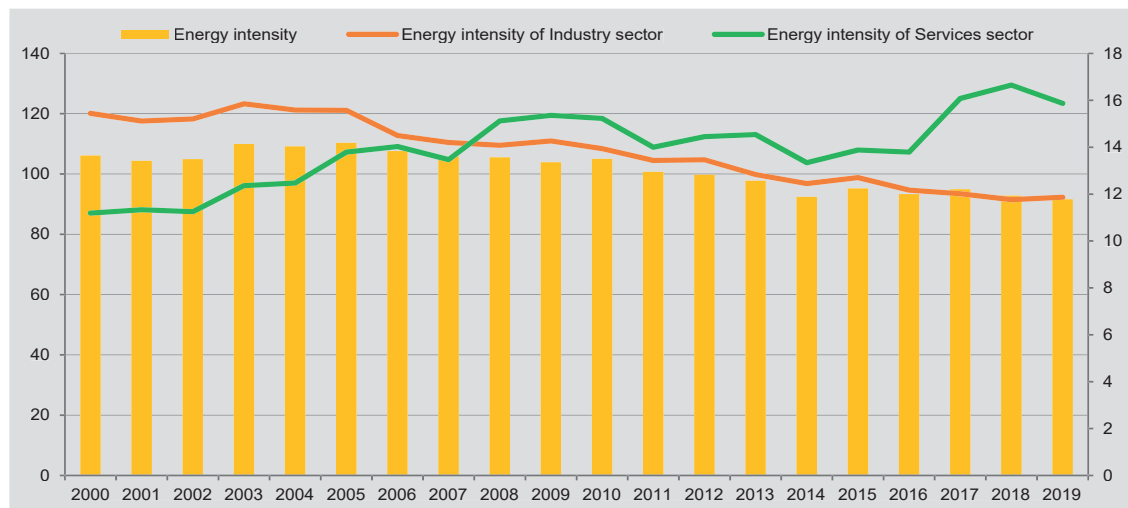
3 See Gestore dei Servizi Energetici – GSE. 2021. *Energia da fonti rinnovabili in Italia - Rapporto Statistico 2019*. Roma: GSE.

4 <http://ec.europa.eu/eurostat>.

5 The ODEX index, which measures progress in the various sectors adjusted for structural and cyclical effects and other factors not related to efficiency, confirms the positive trend for Italy. Assuming equal to 100 the index for the whole economy in 2000, in 2018 Italy reached 82.8 (<http://www.odyssee-mure.eu/>).

6 The expected 2020 targets largely exceeded in the residential sector (which achieved the target by more than 150%). Industrial sector (62%), transports (50%) and, above all, the tertiary sector (29%) lagged behind (see ENEA. 2020. *Rapporto Annuale Efficienza energetica 2020*. Roma: ENEA).

Figure 7.2 - Energy intensity, by sector. Years 2000-2019 (tonnes of oil equivalent per million euro)



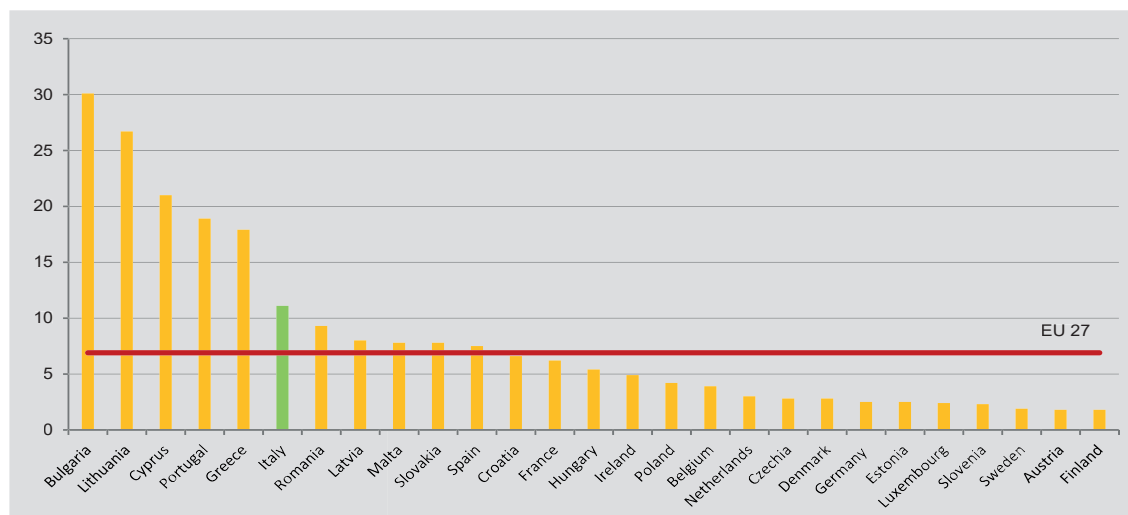
Source: ENEA, processing on Eurostat and Istat data

At sectoral level, the reduction in energy intensity was driven by improvements in industry sector, which, despite the slight increase in 2019, with 92.3 TOE/M€, decreased in comparison to 2009 of 17% (average annual rate of variation equal to -1.8%). The level of energy intensity was significantly lower in services sector: 15.9 TOE/M€ in 2019. The recent evolution showed a sharp increase in the two-year period 2017-2018, followed by a decline in the last year (-5%). The overall increase of 3.3% recorded over the last decade is equivalent to an average annual rate of +0.3%.

In 2019, 11.1% of the population had difficulty in adequately heating their homes

In 2019, in Italy the percentage of the population reporting difficulties in adequately heating their homes (11.1%) almost doubled the EU27 average (6.9%; Figure 7.3).

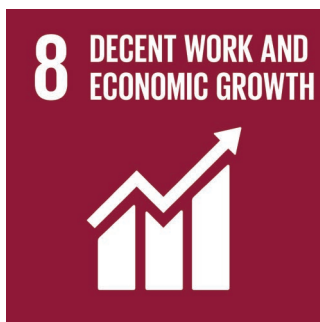
Figure 7.3 - Inability to keep home adequately warm, by country. Year 2019 (percentage values)



Source: Eurostat



A steady improvement has begun (-3 p.p. in 2019) since 2012, when the share was 21.3%. However, the incidence of the population that cannot afford to heat their homes shows particular criticalities in the weak groups. In 2019, the share of individuals with problems in adequately heating their homes reached 26.3% among people at risk of poverty (people living in households with an equivalised income below or equal to 60% of the median), while it was 7.3% in the rest of the population. The greatest difficulties were widespread among foreign citizens (17% compared to 11% for Italians), especially non-European ones (18%). Territorial disparities were significant: the share of people with difficulties exceeded 20% in the South and Islands (22% in the Islands and 19% in the South) and was lower in the North (7% in the North-West and 5% in the North-East) and in the Centre (7%). The worsening of the economic conditions of citizens due to the Covid-19 pandemic, jointly with the increase in expenses for household utilities due to the greater permanence in the home imposed by the pandemic restrictions, require a special political attention to the risk of energy poverty for the most vulnerable social categories.



GOAL 8

PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL¹

In brief

- In 2020, the dynamics of GDP was largely affected by the Covid-19 crisis and the suspension of many production activities. Gross domestic product in Italy suffered an exceptional fall (-8.9%), deeper than both the Euro area (-6.5%) and European Union (-6.1%). GDP per capita fell by 8.4%.
- The reduction in the pace of production had significant impact on labour market. In 2020, the employment rate contracted again to 62.6%, with a decrease of 0.9 percentage points compared to the previous year. The unemployment rate (9.2%) decreased as inactivity rate increased, due to the limitations to job searching.
- Social restrictions required a limited activity at the workplace, causing a relevant increase in the incidence of employed people working from home (from 4.8 in 2019 to 13.7%) in 2020.
- In 2020, low-wage employees (equal to 10.1%) returned to grow after a decline between 2016 and 2019.
- Despite the slight decline compared to the previous year, in 2018 Italy recorded significant levels of irregular employment. Irregular employees were equal to 12.9% of total employment.
- The positive trend in the rate of fatal occupational injuries or injuries leading to permanent disability continued and reached 11.3 per 10,000 employees in 2018 (-5.0% compared to the previous year). Territorial and gender gaps were still deep.
- In 2019, government spending in employment programmes and social protection from unemployment slightly grew to 1.26 % of GDP and 2.59 % of national budgets.








The statistical measures released by Istat for Goal 8 are twenty-eight and refer to twelve UN-IAEG-SDGs indicators (Table 8.1).

¹ This section was edited by Paola Ungaro with contributions by Ciro Baldi, Federica Pintaldi, Gaetano Proto, Chiara Rossi

Table 8.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
8.1.1	Annual growth rate of real GDP per capita				
	Annual growth rate of real GDP per capita (Istat, 2020, percentage values)	Identical	-8.4	--	--
8.2.1	Annual growth rate of real GDP per employed person				
	Annual growth rate of real GDP per capita (Istat, 2020, percentage values)	Identical	-7.0	--	--
	Annual growth rate of value added in volume per employed person (Istat, 2020, percentage values)	National context	-6.7	--	--
	Annual growth rate of real value added per worked hour (Istat, 2020, percentage values)	National context	2.7	--	--
8.3.1	Proportion of informal employment in total employment, by sector and sex				
	Share of employed person not in regular occupation (Istat, 2018, percentage values)	Proxy	12.9		
8.4.2	Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP				
	Domestic material consumption per capita (Istat, 2019, tonne per inhabitant)	Identical	8.0		
	Domestic material consumption per GDP (Istat, 2019, tonne per 1,000 euro)	Identical	0.28		
	Domestic material consumption (Istat, 2019, million tonnes)	Identical	484.5		
8.5.1	Average hourly earnings of employees, by sex, age, occupation and persons with disabilities				
	Hourly earnings (Istat, 2018, euro)	Identical	15.6	 (a)	 (b)
	Gender pay gap (Eurostat, 2019, percentage values)	National context	4.7		
	Share of employees with below 2/3 of median hourly earnings (Istat, 2020, percentage values)	National context	10.1		
8.5.2	Unemployment rate, by sex, age and person with disabilities				
	Unemployment rate (Istat, 2020 percentage values)	Identical	9.2		
	Non-participation rate (Istat, 2020 percentage values)	National context	19.0		
	Employment rate (20-64) (Istat, 2020, percentage values)	National context	62.6		
	Involuntary part time (Istat, 2020, percentage values)	National context	11.9		
	Share of employed persons with temporary jobs since at least 5 years (Istat, 2020, percentage values)	National context	18.2		
	Employed persons working from home (Istat, 2020, percentage values)	National context	13.7		
8.6.1	Proportion of youth (aged 15-24 years) not in education, employment or training				
	People not in education, employment, or training (NEET) (aged 15-24) (Istat, 2020, percentage values)	Identical	19.0		
	People not in education, employment, or training (NEET) (aged 15-29) (Istat, 2020, percentage values)	National context	23.3		
8.8.1	Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status				
	Incidence rate of fatal occupational injuries or injuries leading to permanent disability (INAIL, 2018, per 10,000 employed)	Proxy	11.3		
8.9.1	Tourism direct GDP as a proportion of total GDP and in growth rate				
	Tourism direct GDP as a proportion of total GDP (Istat, 2017, percentage values)	Proxy	6.0	--	--
	Number of jobs in tourism industries as a proportion of total jobs (Istat, 2017, percentage values)	National context	10.1	--	--

Table 8.1 continues - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
8.10.1	(a) Number of commercial bank branches per 100,000 adults and (b) number of automated teller machines (ATMs) per 100,000 adults				
	Number of branches per 100,000 inhabitants (Istat processing on Bank of Italy data, 2019, 100,000 inhabitants)	Proxy	40.6	 (c)	
	Number of ATM per 100,000 inhabitants (Istat processing on Bank of Italy data, 2019, 100,000 inhabitants)	Proxy	66.0	 (c)	
	Number of institutions per 100,000 inhabitants (Istat processing on Bank of Italy data, 2019, 100,000 inhabitants)	Proxy	0.8	 (c)	
8.a.1	Aid for Trade commitments and disbursements				
	Aid for trade (Ministry of Foreign Affairs and International Cooperation, 2019, million euro current prices)	Proxy	(*)	--	--
8.b.1	Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy				
	Total government spending in employment programmes and social protection from unemployment as a proportion of the national budgets (Istat, 2019, percentage values)	Proxy	2.591	 (a)	
	Total government spending in employment programmes and social protection from unemployment as a proportion of GDP (Istat, 2019, percentage values)	Proxy	1.260	 (a)	
Legend		Notes			
	IMPROVEMENT	(*) Please refer to the table on www.istat.it			
	STABILITY	(a) Variation compared to 2010			
	DETERIORATION	(b) Variation compared to 2014			
--	NOT AVAILABLE / NOT SIGNIFICANT	(c) Variation compared to 2012			

GDP per inhabitant collapsed in 2020

During 2020 in Europe GDP fell dramatically, deeper in Spain and Italy (-10.8% and -8.9% respectively) than in France (-7.9%) and Germany (-4.8%), due to the impact of the mobility restrictions and the closures of economic activities to mitigate the Covid-19 pandemic which differently affected European countries.

In Italy, production restrictions recorded the most relevant fall in the second quarter 2020 with a GDP contraction equal to 12.9%. After a large recovery in the third quarter due to the re-opening of almost every economic activity (+15.9%), in the fourth quarter, the second wave of the pandemic made GDP fall again (-1.8%). According to preliminary estimates of GDP at territorial level, in 2020 the contraction of production was more pronounced in the North (-9.1% for both the North-West and the North-East), than the Centre (-8.8%) and the South and Islands (-8.4%)².

Real GDP per inhabitant fell by 8.4%, an exceptional reduction, deeper than the one recorded during the recent economic crisis (-5.8% in 2009 and -3.4% in 2012). Value added in volume per employed person showed a more moderate fall (-6.7%), reflecting a more modest contraction of employment, supported by public labour retention policies³. The fall in value added affected all sectors, with more acute effects in those directly impacted by the restrictive measures: accommodation and food services (-33.7%) and transport and storage (-16.3%). Information and communication services (+2.4%) recorded a growth due to the large demand of ICT services during lockdown.

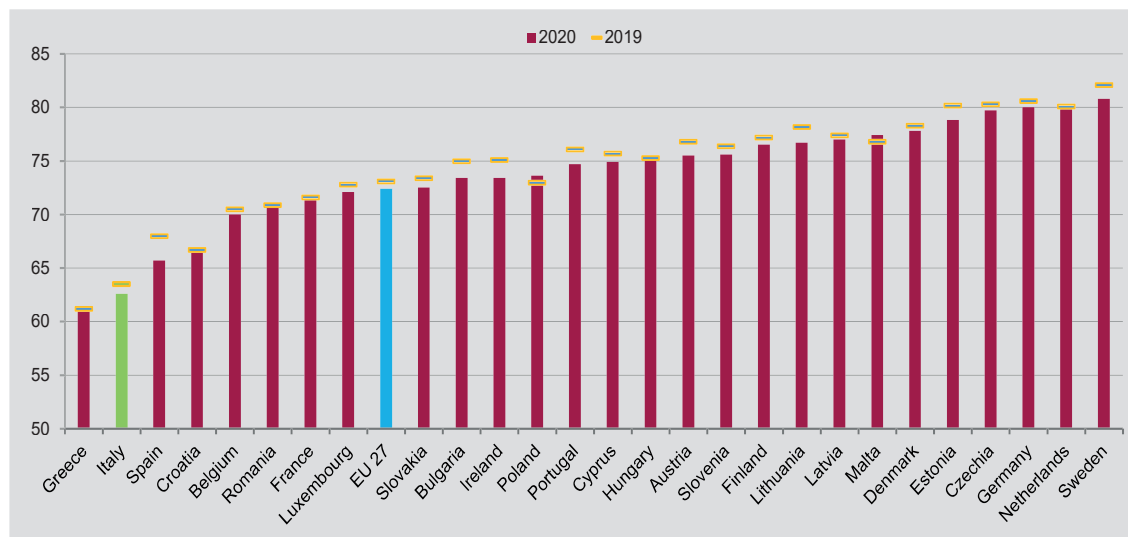
In 2020, the decline in employment assumed important territorial, gender, age and citizenship differentials

The economic crisis originated by the pandemic affected the labour market and interrupted the phase of employment growth recorded in Europe and Italy. Compared to 2019, the employment rate of 20-64 year old people decreased in Italy by 0.9 percentage points, a contraction lower than in Spain (-2.3%), but higher than the EU average (-0.7 p.p.), Germany (-0.6%) and France (-0.2%). Malta (+0.6), Poland (+0.6) and Croatia (+0.2) were the only countries showing an increase in employment. In 2020, Italy, recording 62.6 employed per 100 20-64 year old people, confirmed the second-to-last position in the European employment rate ranking (Figure 8.1) and deepened the gap to the target of 67% set by the Europe 2020 Strategy for our country. The distance to the average rate of the EU27 was still high (-9.8 percentage points), larger for the female component (-14.1%) than for the male component (-5.5%).

² See Istat. 2020. "Stima preliminare del Pil e dell'occupazione territoriale. Anno 2020". Statistiche Report. Roma: Istat. <https://www.istat.it/it/archivio/259142>.

³ The job retention measures led to a reduction in employees much lower than the reduction in hours worked per capita. The variation rate of value added per hour worked indicates a productivity increase equal to 2.7%.

Figure 8.1 - Employment rate (20-64 year old), by country. Years 2019, 2020 (percentage values)



Source: Eurostat

The overall resilience of employment compared to the large losses of production activity was due to permanent employees supporting policies (in particular, redundancy fund and layoff suspension). Besides the impact on self-employed and fixed-term jobs, the most relevant impact of the health emergency led to a generalised reduction in hours worked⁴. The decline in the employment rate recorded in Italy in 2020⁵ interrupted a growing trend observed since 2014 (which had allowed our country to recover, in 2019, the pre-crisis levels), hitting population selectively. The most vulnerable categories were deeply penalised, even considering the different participation of such categories in self-employment and fixed-term work and in production sectors most affected by closures. The employment rate of the 20-64 age class fell more sharply for women, dropping from 53.8% in 2019 to 52.7% (- 1.1 percentage point), than for men (from 73.4% to 72.6%; -0.8 p.p.), with a consequent increase in gender gap (-19.9 p.p. for women), which had instead improved in the last three years. The job losses suffered by young people were even more significant. Among 20-24 year old people, the share of employed people decreased by 2.8 p.p., reaching 30%, less than half the national average value. Among 25-34 year old people it decreased by 1.8 p.p.. For the first time in the last decade, employment rate of the foreign population (-3.8 p.p.) fell below the values recorded by Italian citizens, respectively, 60.6 and. 62.8%. The incidence of employed persons on the population decreased by 1.4 percentage points both in the North-West and in the North-East (reaching, respectively, 70.8% and 72.5%), by 0.9 percentage points in the Centre (67.4%) and by 0.5 in the South and Islands (48.0%).

In the forthcoming years improvements are expected thanks to the implementation of the National Recovery and Resilience Plan (NRRP). The Mission Inclusion and Cohesion envisages relevant reforms and investments to support employment through the reinforcing of training, the contrast to undeclared work and the reduction of inequalities for women, young people and the South in accordance with the transversal objectives of NRRP.

4 Ministero del Lavoro e delle Politiche Sociali, Istat, Inps, Inail e Anpal. 2021. *Il mercato del lavoro 2020. Una lettura integrata*. Roma: Istat.

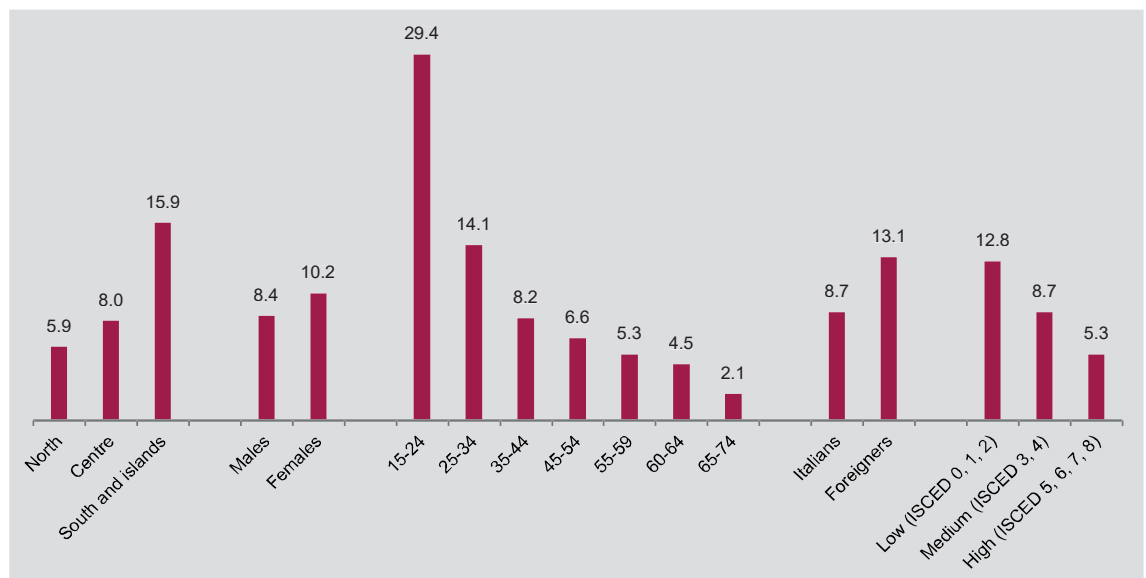
5 The contraction in the employment rate was concentrated in the second quarter when the restrictive measures were adopted (-0.9 percentage points compared to the first quarter), while the third and fourth quarters showed a recovery.

The decline in unemployment over the past year is related to the increase in inactivity

In Italy, in 2020, unemployment rate decreased falling from 10.0 to 9.2% (-0.8 p.p.), differently from the EU27 average (+0.3) and most Member States (with the exception of Greece, France and Poland)⁶. The unemployment rate gap between Italy and Europe decreased, although it remained still high (+2.2 p.p.), especially for women (+2.9 p.p.; +1.6 for men), placing Italy in third place in the EU27 unemployment rate ranking, far behind Spain (15.5%) and Greece (16.3%).

Italian unemployment rate is higher than ten years ago (8.4%; + 0.8 points), despite the progressive reduction started in 2015. The improvement in the unemployment rate in 2020 reflected the difficulties in job search due to the restrictions to production and mobility, which increased inactivity⁷.

Figure 8.2 - Unemployment rate, by geographical area, gender, age class, citizenship, level of education. Year 2020 (percentage values)



Source: Istat, Survey on Labour Forces

In 2020, data confirmed the traditional territorial gaps, by gender, age and educational level and highlighted greater difficulties in Southern Italy, especially in Calabria (20.1%), Campania (18.0%) and Sicilia (17.9%), for women, foreigners and for the lower educated and younger population groups (Figure 8.2). The problems experienced by the youngest are also witnessed by 15-29 year old NEETs (Not in Education, Employment or Training), whose share in the last year increased by 1.1 percentage points, reversing the positive downward trend observed since 2015 and reaching 23.3%. In 2020, Italy maintained the highest incidence of NEETs among EU countries, almost 10 percentage points higher than the EU27 average (13.7%).

⁶ <http://ec.europa.eu/eurostat>.

⁷ The inactivity rate recorded an annual increase of 1.6%, from 34.3% to 35.9%, marking an exceptional increase in the second quarter (+2.2 percentage points with respect to the first), when the unemployment rate instead fell by 1.7 percentage points.

The health crisis had a strong impact on work organisation

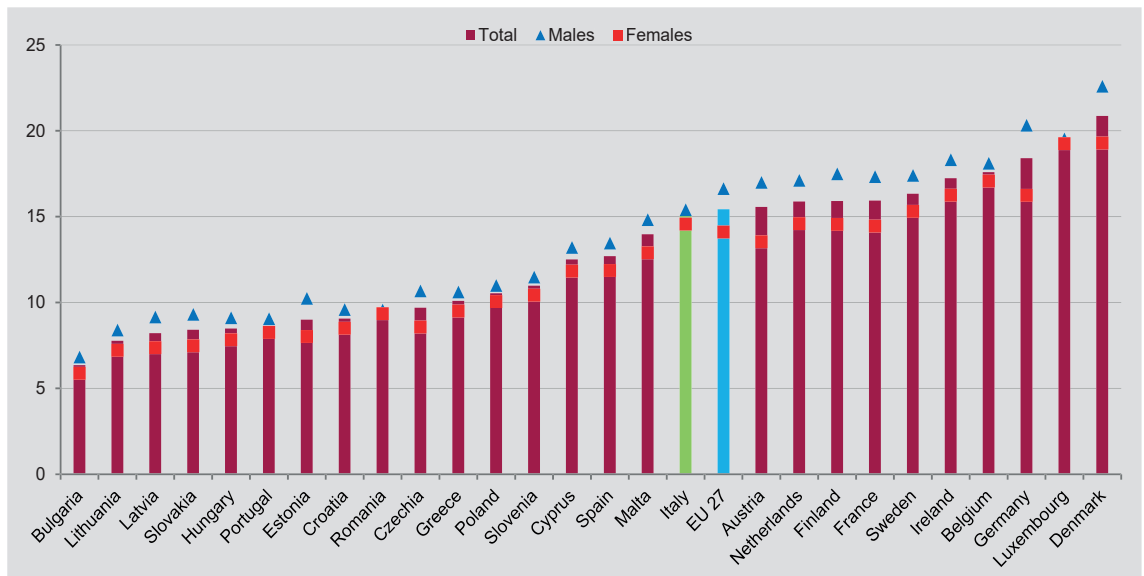
Mobility restrictions due to the pandemic radically changed work and school organisation, with the introduction of remote modalities, not yet experienced at school and only limitedly practised in the workplace. The percentage of employees working from home, that was characterised by small and alternating variations at around 4.5% between 2010 and 2019, almost tripled in 2020, reaching 13.7% (+8.9 percentage points compared to 2019 and +9.2 p.p. compared to 2010). The growth allowed our country to catch up with the European context. Today remote work is widespread especially in the central and northern geographical area (15.4% and 14.8% respect to 10.1% for the South and Islands), among women (15.7% respect to 12.3% of men) and Italian citizens (14.9% respect to 3.4% of foreigners). The incidence of employees working from home increases with age. It is equal to 4.6% for 15-24 year old employees, 11.7% for those aged 25-34 and 17% for the over 60 year old employees. The diffusion of remote work in the territory and in the different population groups is however affected by the different weight, in each category, of employment in the sectors that have widely chosen remote work (self-employed, full-time job, highly specialised intellectual, technical and clerical occupations, service sector).

The incidence of employees with low hourly wages increased again

In 2020, the percentage of employees with low earnings rose again, interrupting the reduction that had characterised the last four years. The share of employees with below 2/3 of median hourly earnings increased from 9.5 to 10.1%, even though they still showed a negative balance compared to ten years before (-1.1 p.p.). The incidence of low-paid employees was higher in the South and Islands (15.3%), compared to the Centre (9.9%) and North (7.8%). The percentage was high especially in Calabria (19%), Puglia (18%) and Sicilia (16%), among women (12.1% respect 8.5% for men), younger workers (29% among 15-24 year old employees and 14% among 25-34 year old employees) and less educated people (16% for those holding at most a lower secondary school diploma). There were better wage conditions in the Autonomous Provinces of Trento and Bolzano, Lombardia and Friuli-Venezia Giulia, with a share of employees with low pay less than 7%, among the 45-64 year old employees and among workers with tertiary education (4%).

In 2018, the average gross hourly wage received by employees⁸ was 15.6 euro (15.1 euro for women and 15.9 euro for men), a value substantially stable compared to 2014 (15.4 euro).

⁸ Employees in economic units with at least 10 employees operating in industry and services sectors (excluding public administration and defence, compulsory social security).

Figure 8.3 - Average hourly earnings, by country and gender. Year 2018 (euro at purchasing power standard)

Source: Eurostat

In the European context, in 2018, Italy was in line with the EU27 average, above Spain, below France, Germany and, even more, Luxembourg and Denmark, the hourly earnings top countries (Figure 8.3). The gender pay gap (GPG) at disadvantage of women is widespread in EU27. The largest GPG in relative terms⁹ was recorded in Estonia, where a man earned an average hourly wage 22% higher than a woman, Austria, Germany, the Czech Republic, Slovakia and Latvia (20%), while Italy (5.5%) was among the countries where the gap is smaller, second to Luxembourg (1.4%) and Romania (2.2%) and far respect to the EU27 average (14.4%).

Irregular employment declined slightly

The percentage of non-regular employees¹⁰ on the total decreased slightly in 2018, reaching 12.9% (-0.2 percentage points compared to 2017), a share however higher compared to ten years ago (12.2%). The decline of the last year regarded all the business sectors, with the exception of agriculture (+0.5 p.p.) and construction (+0.3), and all regions, with the exception of Calabria (+0.5 p.p.), Valle d'Aosta (+0.3) and Sardegna (+0.2). Irregular employment was more widespread among employees than among the self-employed¹¹, in arts and entertainment (23%) and agriculture (24%), reaching its maximum in household services (58%).

⁹ Measure of the difference between average gross hourly earnings of male and female paid employees as a percentage of average gross hourly earnings of male paid employees (<http://ec.europa.eu/eurostat>).

¹⁰ People employed who do not comply with work, fiscal and pension laws.

¹¹ See Istat. 2020. "L'economia non osservata nei conti nazionali. Anni 2015-2018". Statistiche Report. Roma: Istat. <https://www.istat.it/it/archivio/248596>.

The rate of accidents at work has fallen

In Italy, in 2018, the number of occupational fatal injuries or injuries leading to permanent disability was equal to 11.3 per 10,000 employees, decreasing by 5% compared to previous year, in continuity with the positive trend recorded in the last decade (-27%), also determined by the progressive change of our economy towards sectors with less risky working conditions. The accident rate was higher in the South and Islands (13.6) than in the Centre (11.8) and the North (12.3 for the North-East and 8.3 for the North-West). The most critical regions were Basilicata (23) and Calabria and Abruzzo (17), while Lombardia, Lazio and Piemonte recorded the lowest values. The occupational accident rate was highest in the province of Potenza (28.8) and lowest in Biella (4.9). Gender gap continued to be high despite the progressive reduction over time. In 2018 the job accident rate recorded by men more than doubled that of women (15.2 and 6.1 respectively). The incidence of fatal accidents and permanent disabilities on employed increased with age. It was 6.0 for 15-34 year old workers and 27.7 for the over 64 year old workers. The trends in the accident rate are however affected by sectoral characteristics of the local economies, as well as by the different participation rate by gender and by age in the economic sectors that present worse working conditions.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



GOAL 9

BUILD A RESILIENT INFRASTRUCTURE AND PROMOTE INNOVATION AND FAIR, RESPONSIBLE AND SUSTAINABLE INDUSTRIALISATION¹

In brief

- Between 2010 and 2019, air and rail passenger transport increased; road transport was still prevalent for goods.
- In 2020, pandemic containment measures led to a reduction of value added per capita in manufacturing. However, the share of value added and employment of manufacturing on total economy remained unchanged.
- In 2019, CO₂ emissions reduction per unit of value added continued although air and maritime transport recorded an increase of CO₂ emissions.
- In 2019, R&D to GDP ratio (R&D intensity) was equal to 1.45% (1.42% in 2018; provisional data) and it was still far from the European average (2.2%).
- Between 2013 and 2019, enterprises that made sales via the web, to businesses, public institutions and to end users increased sharply.
- Enterprises located in the South and Islands recorded higher propensity to use e-commerce than enterprises located in the rest of the country.

The statistical measures released by Istat for Goal 9 are twenty-six and refer to ten UN-IAEG-SDGs indicators (Table 9.1).

¹ This section was edited by Leopoldo Nascia with contributions by Andrea De Panizza, Valeria Mastrostefano and Paola Ungaro.

Table 9.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
9.1.2	Passenger and freight volumes, by mode of transport				
	Passenger volumes, by mode of transport (Istat, 2019, thousand)	Proxy	(*)	--	--
	Freight volumes, by mode of transport (Istat, 2019, thousand)	Proxy	(*)	--	--
	Kilometres of railway per 10,000 inhabitants (Istat, 2018, Km per 10,000 inhabitants)	National context	3.3		(a) --
	Kilometres of railways per 10,000 hectare (Istat, 2018, per 10,000 hectare)	National context	6.7		(a) --
	Double and multiple track railway on total railway (Istat, 2018, percentage values)	National context	40.4		(a) --
	High speed railway on total railway (Istat, 2018, percentage values)	National context	3.6		(a) --
	Electrical railway on total railway (Istat, 2018, percentage values)	National context	67.0		(a) --
9.2.1	Manufacturing value added as a proportion of GDP and per capita				
	Manufacturing value added per capita (Istat, 2020, euro chain linked)	Identical	3789.49		
	Manufacturing value added as a proportion of total value added (Istat, 2020, percentage values)	Proxy	16.5	--	--
9.2.2	Manufacturing employment as a proportion of total employment				
	Manufacturing employment as a proportion of total employment (Istat, 2020, percentage values)	Identical	15.7	--	--
9.3.1	Proportion of small-scale industries in total industry value added				
	Share of manufacturing value added of small-scale manufacturing enterprises on the total manufacturing value added (Istat, 2018, percentage values)	Proxy	41.9	--	
9.3.2	Proportion of small-scale industries with a loan or line of credit				
	Percentage of small scale enterprises with a least one line of credit (Istat, 2018, percentage values)	Proxy	42.1	--	
9.4.1	CO2 emission per unit of value added				
	CO2 emission per unit of value added (Istat, 2019, tonne per million euro)	Identical	159.76		
9.5.1	Research and development expenditure as a proportion of GDP				
	R&D intensity (Istat, 2019, percentage values)	Identical	1.45		
	Product and/or process innovative enterprises (per 100 enterprises) (Istat, 2016/2018, percentage values)	National context	55.6		
	Investment in ICT machinery on total investment (Istat, 2019, percentage values)	National context	4.1		
	Intellectual property rights investment on total investment (Istat, 2019, percentage values)	National context	17.5		
	Investment in R&D on total investment (Istat, 2019, percentage values)	National context	8.2		
	Software investment on total investment (Istat, 2019, percentage values)	National context	8.7		
9.5.2	Researchers (in full-time equivalent) per million inhabitants				
	Researchers (in full time equivalent) (Istat, 2018, per 10,000 inhabitants)	Identical	25.2		(a)
	Impact of knowledge workers on employment (Istat, 2019, per 100 in employment)	National context	17.6		(a)
	ICT specialists in employment (Istat, 2020, percentage values)	National context	3.6		(b)
9.b.1	Proportion of medium and high-tech industry value added in total value added				
	Proportion of medium and high-tech industry value added in total value added (Istat, 2018, percentage values)	Identical	32.1		(c)
9.c.1	Proportion of population covered by a mobile network, by technology				
	Households with fixed and/or mobile broadband connection (Istat, 2020, percentage values)	Proxy	77.8		
	Enterprises with at least 10 persons employed with web sales to end customers (Istat, 2020, percentage values)	National context	11.5		(d)
	Enterprises with at least 10 persons employed with web sales to firms and public institutions (Istat, 2020, percentage values)	National context	7.8		(d)

Legenda

IMPROVEMENT

STABILITY

DETERIORATION

-- NOT AVAILABLE / NOT SIGNIFICANT

Notes

(a) Variation compared to 2010

(b) Variation compared to 2011

(c) Variation compared to 2012

(d) Variation compared to 2013

(*) Please refer to the table on www.istat.it

Between 2010 and 2019, passenger transport by rail and air increased

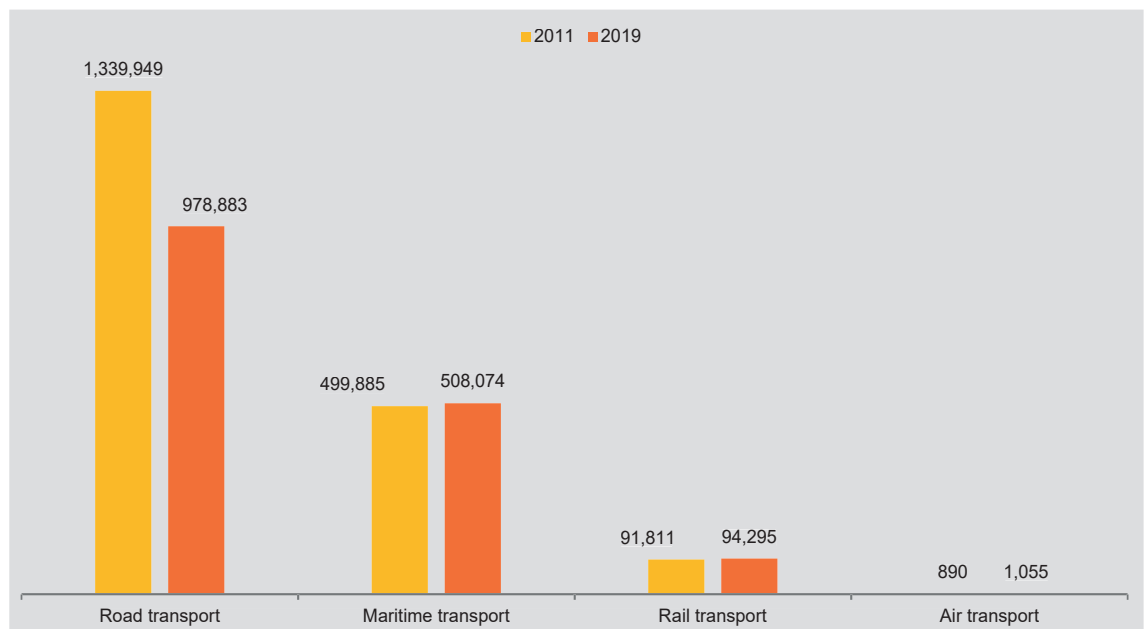
The infrastructures required to transport goods and passengers are a key variable for the environmental impact of mobility and for the integration of logistics into the international value chain. In Mission 3 the National Recovery and Resilience Plan (NRRP) envisages investments in “infrastructures for sustainable mobility” with the aim of favoring decarbonisation and increasing the country’s competitiveness.

Between 2010 and 2019, passenger transport was characterised by a steady increase of rail modality (+7% of passengers and +20% of passengers per Km). Air passengers recorded a higher growth, with a 38.9% increase. In 2019 the maritime transport passengers were slightly below 2010, although they recovered sharply compared to 2017. In the same year, local public transport passengers in capital cities of provinces² reached 3.4 billion.

Road transport was the prevalent modality for freight

Between 2011 and 2019, total freight transport declined to 350 million tonnes, due to the fall of the road modality. However, it remained the predominant transport modality in the country. In 2019, road transport moved 978 million tonnes of goods (61.9% of the total goods), maritime transport, 508 million tonnes (32.1% of the total goods). Rail and air transport continued to be a residual modality for goods (Figure 9.1).

Figure 9.1 - Freight volumes, by mode of transport. Years 2011–2019 (thousands of tonnes)



Source: Istat, Air transport Survey; Maritime transport Survey; Survey on urban environmental data

² Metropolitan rail services are excluded.

In 2020, the value added per capita of the manufacturing industry was impacted by the pandemic

Value added per capita of manufacturing industry suffered a setback in 2020, after years of moderate growth (from 2014 to 2018) and a slight decline in 2019, when it recorded 4,258 euro per capita. Value added per capita of manufacturing fell to 3,789.5 euro mainly for the temporary closure of many economic activities during the pandemic lockdown.

During 2010-2020, the value added proportion of manufacturing on total economy increased (16.5%), despite employment fell for the higher sector's productivity. In 2020, manufacturing showed a marginal decrease on the total economy (0.1 percentage points less than the previous year).

Small firms accounted for 41.9% of manufacturing value added. More than half of small firms recorded a credit line

In 2018, the share of small manufacturing firms' value added on total manufacturing value added was equal to 41.9%, with a higher incidence in the South and Islands (48.8%), especially in the Islands (62.4%). In several manufacturing sectors small firms' value added was higher than half of the total added value. In the wood industry and in the repair and installation of machinery and equipment small firms' value added was higher than three quarter of the total.

CO₂ emissions per unit of value added continued to fall, although not in air and water transport

In 2019, CO₂ intensity per unit of value added - defined as the ratio of carbon dioxide emissions³ to value added - continued its progressive reduction, falling below 160 tonnes per million euro, far below respect to 212 tonnes per million recorded in 2009. The trend is heterogeneous among industries. Manufacturing and supply of electricity, gas, steam and air conditioning were characterised by a steady fall in the intensity of emissions; on the opposite water and air transport recorded an increase.

Research intensity increased but remained below European average

Italy has recorded a moderate growth of R&D to GDP investment intensity for several years. However, R&D intensity remained below the EU27 average, equal to 2.2%. In 2018, R&D intensity accounted for 1.42% of GDP and increased to 1.45%⁴ in 2019. Business was the institutional sector with the highest research intensity (0.9%), followed by universities (0.32%) and by the public sector (0.18%). R&D intensity showed a deep regional gap. Piemonte and Emilia-Romagna were the most virtuous cases with a R&D intensity above 2%; conversely, Southern regions showed a much lower R&D intensity.

³ This includes all emissions from production activities and excludes emissions directly caused by households.

⁴ Provisional data.

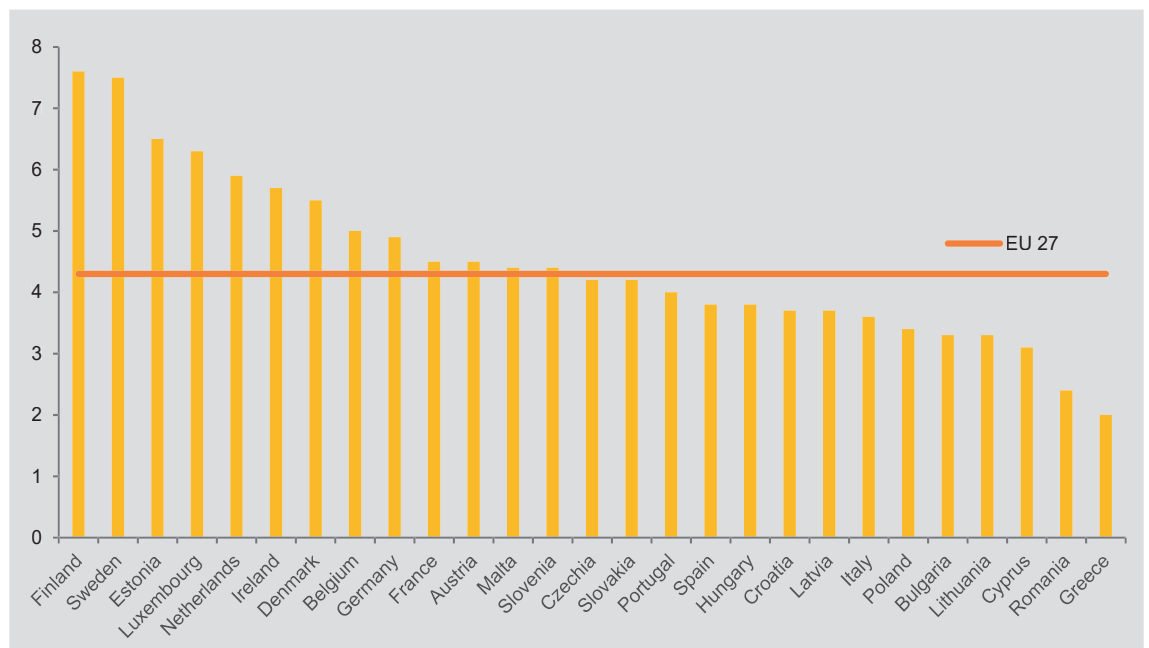
Although the number of researchers per 10,000 inhabitants increased, the gap between the South and the Centre-North deepened

Between 2010 and 2018 in Italy researchers per 10 thousand inhabitants grew from 17.1 to 25.2. The higher incidence of researchers was due to the positive performance of North and Centre, and the consequence was a wider gap with the South and Islands.

In 2020 in Italy only 3.6% of employees were employed in specialised ICT positions, below the European average

The number of ICT specialists, an indicator of the ability of businesses to turn new technologies into development and innovation, since 2011 grew less than the European average. From 2011 to 2020, the increase in ICT specialist positions in Italy was 0.6 percentage points, a much lower value than Germany (1.9 p.p.), France (1.8 p.p.) and the EU27 average (1.3 p.p.). In 2020 in Italy only 3.6% of employees were into specialised ICT positions compared to 4.3% of the average of the EU27 countries (Figure 9.2).

Figure 9.2 - ICT specialists in employment. Year 2020 (percentage values)



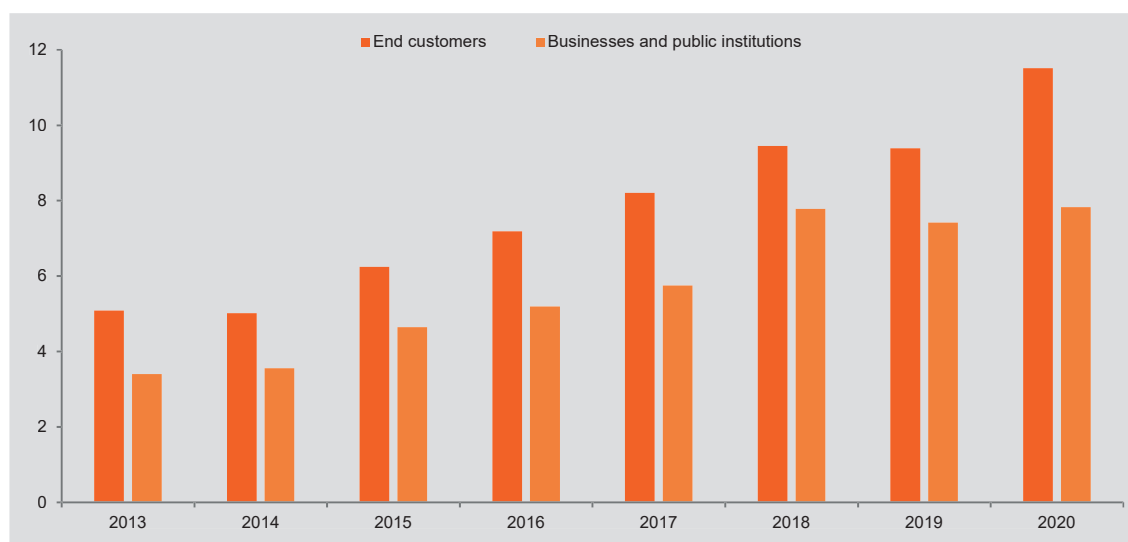
Source: Istat, Labour force Survey

The percentage of enterprises with at least 10 employees making sales via the web increased

Across time, information and communication technologies have become increasingly important in every economic and social sector. Electronic commerce via the web is spreading rapidly in the country, also for the impetus received during the lockdown. Already at the eve of the pandemic outbreak, electronic commerce was showing an acceleration.

Between 2013 and 2019⁵, in Italy, the percentage of enterprises with at least 10 employees making web sales to businesses and public institutions grew from 3.4% to 7.8% (Figure 9.3). Between 2018 and 2019, the increase was 0.4 percentage points. Firms located in the central and southern regions showed more frequently an attitude for e-commerce than those located in the Northern regions.

Figure 9.3 - Enterprises with at least 10 persons employed with web sales, by type of customer. Year 2013–2020 (percentage values)



Source: Istat, Survey on information and communication technology in enterprises

In 2019, 9.3% of firms in the South and the Island sold their goods and services via the web to businesses and to public institutions, followed by 8.3% of firms in the Centre and 7.2% of firms located in the North. Compared to the manufacturing industry, e-commerce between businesses and between businesses and public institutions was more widespread in the service sectors, especially in trade, information and communication services and accommodation and catering services. The construction industry had a lower concentration of firms with sales via the web to other business and to public institutions, although it has shown an acceleration in recent years.

Between 2012 and 2019, the percentage of firms that sold their goods and services via the web to end customers doubled (from 5.1% to 11.5%). In 2019, it grew by 2.1 percentage points. Firms located in the South and firms in accommodation and food services showed a higher propensity towards e-commerce. In 2019, almost a third of firms in accommodation and food services made web sales to end customers, with an increase of ten percentage points since 2013. In December 2020, despite the fall of 3.1% of the value of retail trade on annual trend due to the pandemic outbreak, the value of e-commerce recorded a marked increase of 33.8%⁶.

5 Data collected in year t refer to sales made in year t-1 since the Survey of Information and Communication Technology in Business asked to firms whether they made sales via the web in the previous year.

6 National Institute of Statistics - Istat. 2021. "Retail trade. December 2020". Flash Statistics. Rome: Istat. <https://www.istat.it/it/archivio/253286>.



GOAL 10

REDUCE INEQUALITIES BETWEEN AND WITHIN COUNTRIES¹

In brief

- In 2020, the gross disposable income of households in Italy decreased compared to the previous year (-2.8%). The economic policies adopted by the Government to mitigate the impact of the pandemic mitigated the fall of disposable income of households. Purchasing power recorded nearly the same decrease (-2.6%).
- In 2019, new residence permits showed a significant reduction; they were 177,254, equal to 26.8% less than in 2018. The contraction affected all the entry requests and like in the previous year, the asylum permits requests registered the highest decrease (-47.4%).
- The downward trend in entries was accentuated in 2020, for the temporary and prolonged border closure due to the Covid-19. In the first six months of 2020, about 43 thousand new residence permits were granted to non-EU citizens (less than half of the first six months of 2019).

The statistical measures disseminated by Istat for Goal 10 are fifteen, referring to six UN-IAEG-SDGs indicators (Table 10.1).

¹ This section was edited by Barbara Baldazzi and Cinzia Conti with contributions by Eugenia Bellini, Stefania Cuicchio, Clodia delle Fratte, Elisabetta Segre and Carmela Squarcio.

Table 10.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

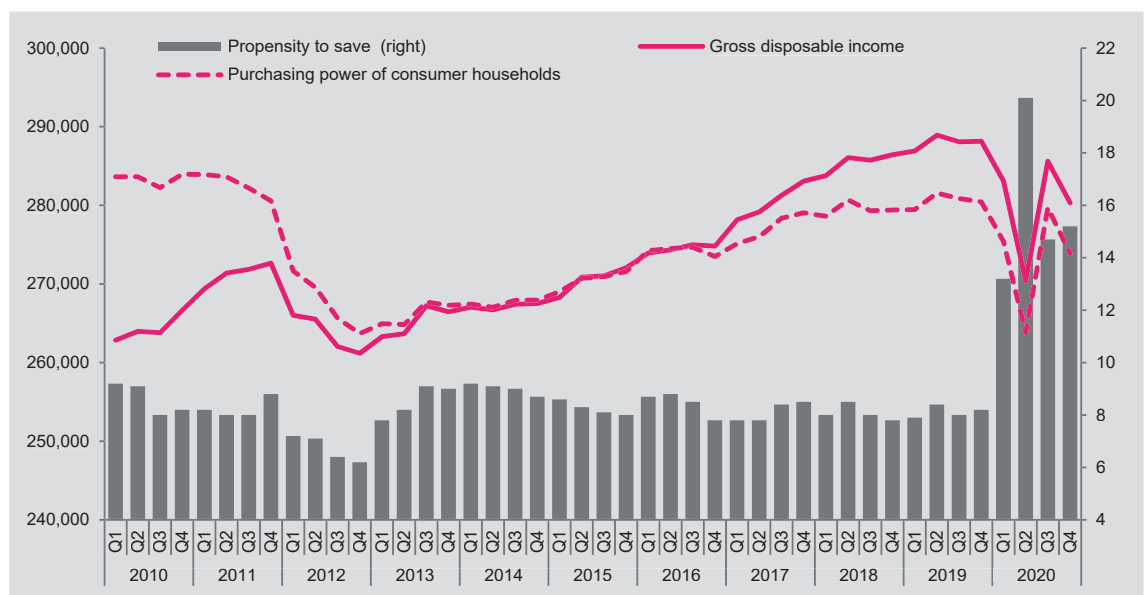
Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
10.1.1	Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population				
	Growth rates of household income per capita among the bottom 40 per cent of the population (Istat, 2018, percentage values)	Identical	1.87	--	--
	Growth rates of household income per capita among the total population (Istat, 2018, percentage values)	Identical	0.27	--	--
	Disposable income inequality (Istat, 2018, pure number - income ratio)	Proxy	6.0		
	Adjusted disposable income per capita (Istat, 2020, euro (current prices))	National context	22,579		
	Gross disposable income per capita (Istat, 2019, euro (current prices))	National context	19,124		
	Purchasing power (Istat, 2020, million euro (chain linked))	National context	1,093,400		
10.2.1	Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities				
	People at risk of poverty (Istat, 2019, percentage values)	Identical	20.1		
10.4.1	Labour share of GDP				
	Labour share of GDP (Istat, 2019, percentage values)	Identical	52.7	--	--
10.7.2	Number of countries with migration policies that facilitate orderly, safe, regular and responsible migration and mobility of people				
	Non EU citizens holding a long-term residence permit (Istat, 2020, N.)	National context	3,615,826	--	--
	Percentage of Non EU citizens holding a long-term residence permit (Istat, 2020, percentage values)	National context	63.1	--	--
	Number of acquisitions of citizenship (Istat, 2019, N.)	National context	127,001	--	--
	New permits (Istat, 2019, N.)	National context	177,254	--	--
	Percentage of new permits issued for asylum and other humanitarian reasons (Istat, 2019, percentage values)	National context	15.6	--	--
10.7.4	Proportion of the population who are refugees, by country of origin				
	Residence permits for asylum per 1,000 (Istat, 2020, per 1,000 permits)	Proxy	10.7	--	--
10.b.1	Total resource flows for development, by recipient and donor countries and type of flow (e.g. official development assistance, foreign direct investment and other flows)				
	Total net official development assistance (ODA) to Africa, LDCs, SIDS and Landlocked (Ministry of Foreign Affairs and International Cooperation, 2019, percentage values)	Identical	(*)	--	--
Legend		Notes			
	IMPROVEMENT	(*) Please refer to the table on www.istat.it			
	STABILITY				
	DETERIORATION				
--	NOT AVAILABLE / NOT SIGNIFICANT				

In 2020 disposable income fell down and the saving propensity increased

In 2020, gross disposable income of households fell by 2.8% (purchasing power fell by 2.6%). The reduction in per capita income of residents in current prices was equal to 2.3% (€19,092 in 2020 compared to €19,536 in 2019). The fall of gross adjusted disposable per capita income, i.e. including the value of services in kind provided by public administrations and public and non-profit institutions was less pronounced (-1.4%).

Although the measures adopted by the Government to support households mitigated the income fall, the restrictions on mobility of population and on some services led to a collapse in consumer spending in 2020 (-10.9%) and to a corresponding abnormal increase in the propensity to save. It reached an average value equal to 15.8% (Figure 10.1), 7.7 points higher than the previous year.

Figure 10.1 - Gross disposable income, purchasing power of consumer households (a) and saving propensity of consumer households. Quarterly data 2010-2020 (seasonally adjusted data in millions euro and percentage values)



(a) Gross disposable income of consumer households in real terms, obtained using the deflator of household final consumption expenditure (chained values with reference year 2015).

Economic aid measures for families are expected to limit the increase in inequality

In Italy, from the beginning of the economic crisis in 2008 until the end of 2015, the income gap between the poorest and the richest classes increased. Per capita income of the 40% of the population with the lowest income decreased larger than the one of the total population. The ratio between the amount of equivalent disposable income of the highest fifth percentile and that of the lowest fifth percentile of the population reached a value of 6.3 in 2015. In 2016 and 2018 the income of the poorest population increased significantly, more than the income of the total population (+4.8% and +2.7% respectively in 2016) and (+1.9% and +0.3% respectively in 2018). The disposable income inequality reduced to 6.0 in 2018 (Figure 10.2). According to the estimates, the reduction in income inequality continued in 2019 (5.9).

2. Analysis of statistical measures by Goal

Although, data on the impact of the pandemic on inequality are not yet available, the 2021 Report to Parliament on Equitable and Sustainable Well-being indicators² provides a preliminary estimate of the measures to support households and businesses. Income support measures allowed to significantly contain the gap of income inequality that should reach in 2020 6.1, +0.2 points compared to the 2019 estimate.

Figure 10.2 - Disposable income inequality (s_{80}/s_{20}) and growth rates of household income per capita among the bottom 40 per cent of the population and among the total population. Years 2004-2020 (percentage values and pure number)



Source: Istat, Eu-Silc (Years 2010-2018); Istat, estimates made according to a macroeconomic approach (Years 2019-2020).

The decrease in migration flows continued

In 2019, 177,254 new residence permits were approved, 26.8% less than in 2018. The contraction affected all permits requests. The most consistent reduction regarded the asylum requests, which fell from about 51,500 in 2018 to 27,029 in 2019 (-47.4%), continuing the negative evolution already recorded in 2018.

After the growth of the previous year, job permits decreased again (-22.5%). There was also a decrease for family reunification permits (-17.8%) and for study permits (-7.4%), the latter being characterised by a high share of very young people (over 56.5% were under 25 years) and women (57.9%).

Also as far as citizenships are concerned, the reduction of entries was generalized and heterogeneous. In 2019, new residence permits of Nigerian citizens decreased by more than 66% compared to the previous year, Albanians recorded a decrease of 8.7%. In the ranking by citizenship of new permits Nigeria fell from the third to the tenth position (Table 10.2).

2 See Ministry of Economy and Finance - MEF. 2021. "Equitable and sustainable well-being indicators", Annex to the Economic and Financial Document 2021, submitted to the Government and approved by Parliament. Rome: MEF. http://www.dt.mef.gov.it/export/sites/sitodt/modules/documenti_it/analisi_programmazione/documenti_programmatici/def_2021/DEF_2021_ALLEGATO_BES_versione_finale.pdf.

The fall of permits for Nigerian citizens is originated by the decrease in asylum applications, which was close to 75% between 2018 and 2019. That caused to Nigeria the loss of the first position for international protection permits, replaced by Pakistan.

The Covid-19 outbreak, which resulted in border closures for many countries, led to a collapse in new residence permits. In the first six months of 2020, about 43 thousand new residence permits were registered, with a 57.7% decrease compared to the same period in 2019, when they had reached 100 thousand. The decrease had a different impact among the motivations. In particular, the most frequent reason for entry (for family reunification), saw a contraction of 63.6%, while permits for asylum requests decreased by 55.5%.

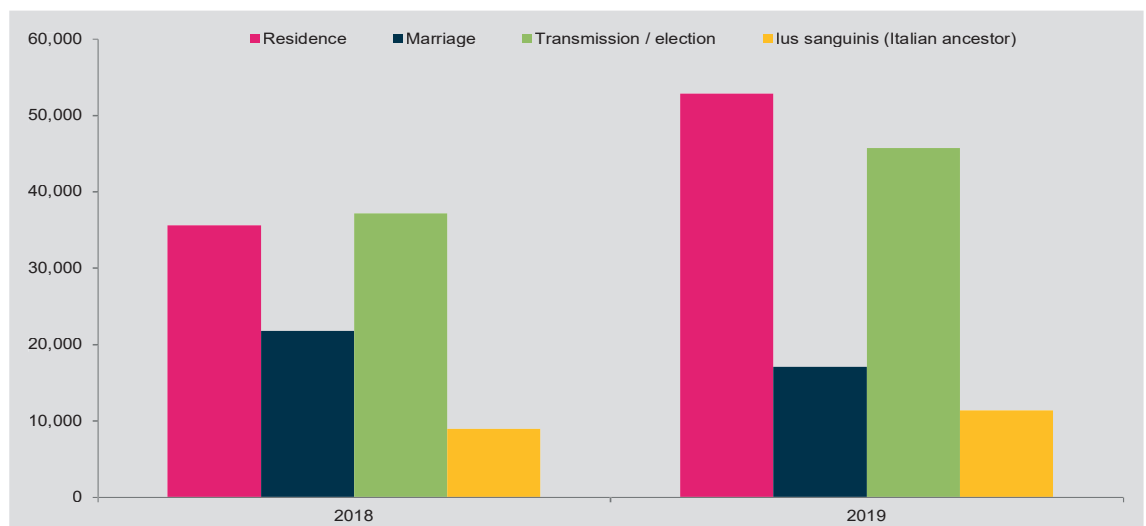
Table 10.2 - Non-EU citizens entered Italy, by first ten citizenships and reason for permit. Years 2018 and 2019 (N. and percentage values)

COUNTRIES OF CITIZENSHIP	Total		Motivation for permit - Year 2019				
	2019	2018	Work	Family	Study	Asylum / Humanitarian	Other reason
Albania	21,437	23,479	7.0	63.2	2.5	3.6	23.7
Morocco	16,032	20,396	4.0	83.3	2.7	5.2	4.8
India	11,405	13,621	18.8	56.5	14.1	5.9	4.7
Pakistan	11,202	13,355	0.8	41.4	2.4	52.3	3.0
Bangladesh	9,934	13,189	0.4	71.8	0.4	24.4	2.9
People's Republic of China	8,889	11,367	3.1	40.1	50.7	2.5	3.6
United States	7,837	9,135	32.1	36.2	25.8	0.0	5.8
Egypt	6,662	8,807	3.7	81.7	3.4	6.8	4.5
Ukraine	6,095	7,951	4.1	53.8	4.5	21.6	16.0
Nigeria	5,211	15,532	1.0	38.0	2.3	49.7	9.1
Other countries	72,550	105,177	4.9	53.3	14.3	17.1	10.3
Total	177,254	242,009	6.4	56.9	11.5	15.6	9.6

Source: Istat, processing on Ministry of Interior data

Foreigners who acquired Italian citizenship during 2019 amounted to 127,001, of which 113,979 (89.7%) were non-EU nationals, higher compared to the previous year, when they were over 103,000 (Figure 10.3). The acquisition of Italian citizenship by non-EU citizens was driven by the male component (+14.2%), compared to the female component (+6.7%).

Figure 10.3 - Acquisitions of citizenship of non-EU citizens, by motivation. Years 2018-2019 (N.)



Source: Istat, processing on Ministry of Interior data

In 2019, among the top ten communities by number of acquisitions, the largest increases, compared to 2018, occurred among Macedonians (+42.4%), Pakistanis (+37.9%) and Ecuadorians (+31.9%). Indians showed a clear decline, both in absolute (-742) and relative (-13.7) terms.

In January 1, 2020, in Italy there were 3,615,826 non-EU citizens legally residents, a number 3% fewer respect to the previous year.



GOAL 11

**MAKE CITIES
AND HUMAN SETTLEMENTS INCLUSIVE,
SAFE, RESILIENT AND SUSTAINABLE¹**

In brief

- More than a quarter of the Italian population declared unsatisfactory housing conditions. In 2019, the share of people living in overcrowded houses continued to increase and reached 28.3%, the highest percentage recorded in the last ten years.
- The share of people complaining for structural issues in their dwelling was 14.0% in 2019 and the share of people living in dwellings with issues coming from noise caused from neighbours or from outside was 11.9%.
- 30.2% of households in 2020 showed difficulties for public transport service in the area where they lived, with a decrease from the previous year (33.5%).
- Critical issues related to land management and use persisted. Soil sealing from artificial land cover per capita increased for the fifth consecutive year, standing at 355 m² per inhabitant in 2019 (353 in 2018).
- In 2019 the decrease in the share of urban waste sent to landfills continued, falling from 21.5% in 2018 to 20.9%. Conversely the volumes of urban waste collected per inhabitant increased, exceeding 500 kilograms.
- Air pollution levels continued to fall, although at an increasingly slow pace, with values, in 2019, still above the EU27 average.

The statistical measures released by Istat for Goal 11 are thirty-two and refer to nine UN-IAEG-SDGs indicators (Table 11.1).

¹ This section was edited by Giovanna Tagliacozzo with the contributions by Domenico Adamo, Valentina Joffre, Antonino Laganà and Renato Magistro.

Table 11.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
11.1.1	Proportion of urban population living in slums, informal settlements or inadequate housing				
	Share of total population living in a dwelling with a leaking roof, damp walls, floors or foundation, or rot in window frames of floor (Istat, 2019, percentage values)	Proxy	14.0		
	Overcrowding rate (Istat, 2019, percentage values)	Proxy	28.3		
	Noise from neighbours or from street (Istat, 2019, percentage values)	Proxy	11.9		
11.2.1	Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities				
	Households with difficulties of connection with public transport (Istat, 2020, percentage values)	Proxy	30.2		
	Students who travel to their study place, only by public transports (Istat, 2020, percentage values)	National context	26.8		
	Persons who travel by private means of transport (Istat, 2020, percentage values)	National context	75.0		
	Seat-Km of public transport networks (Istat, 2019, values per inhabitant)	National context	4,624		
	Frequent users of public transport (Istat, 2020, percentage values)	National context	12.5		
11.3.1	Ratio of land consumption rate to population growth rate				
	Soil sealing from artificial land cover per capita (Ispra, 2019, m ² per inhabitant)	Proxy	355	(a)	
	Illegal building rate (Cresme, 2020, per 100 building permits issued)	National context	17.7		
11.4.1	Total expenditure per capita on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)				
	Public expenditure per capita spent on the preservation of the cultural and natural heritage (Istat, 2019, Euro (current prices))	Proxy	34.5		
11.5.1	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population				
	Population at risk of flood (Ispra, 2017, percentage values)	National context	10.4	(b)	--
	Population at risk of landslides (Ispra, 2017, percentage values)	National context	2.2	(b)	--
	Deaths and missing persons for floods (Ispra, 2018, N.)	Partial	32	--	--
	Deaths and missing persons for landslides (Ispra, 2018, N.)	Partial	12	--	--
	Injured persons for floods (Ispra, 2018, N.)	Partial	12	--	--
	Injured persons for floods (Ispra, 2018, N.)	Partial	29	--	--
11.6.1	Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities				
	Landfill of waste (Ispra, 2019, percentage values)	Proxy	20.9		
	Municipal waste collected (Istat, processing on Ispra data, 2019, Kg per inhabitant)	National context	504		

Table 11.1 continues - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

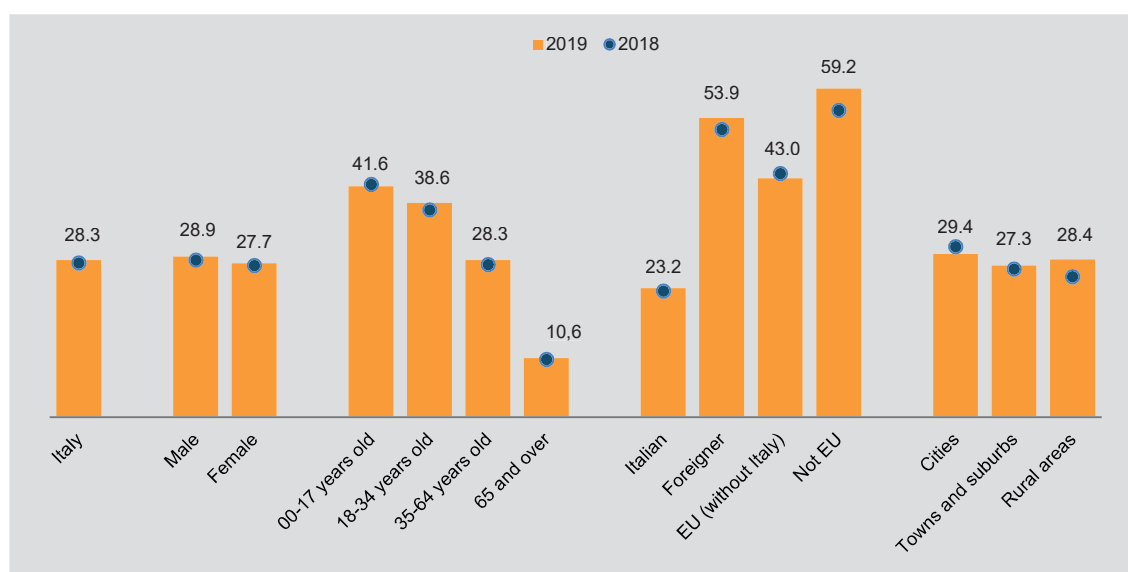
Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
11.6.2	Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)				
	Urban population exposure to air pollution by particulate matter Particulate <2.5 Micro g/m ³ (Eurostat, 2019, microgram per m ³)	Identical	15.1	 (c)	
	Urban population exposure to air pollution by particulate matter Particulate < 10 Micro g/m ³ (Eurostat, 2019, microgram per m ³)	Identical	25.5	 (c)	
	Air quality – PM2.5 (Istat, processing on Ispra data, 2019, percentage values)	Proxy	81.9	 (c)	
	PM10 daily limit exceeds in the municipalities capital of the province/metropolitan cities (Istat, processing on Ispra data, 2019, number of days)	Proxy	28	 (c)	
	PM10 Annual average concentration in the municipalities capital of the province/metropolitan cities (processing on Ispra data, 2019, microgram per m ³ ; Italy value indicates the number of municipalities with a value above the limit)	Proxy	80	--	--
	PM2.5 Annual average concentration in the municipalities capital of the province/metropolitan cities (Istat, processing on Ispra data, 2019, microgram per m ³ ; Italy value indicates the number of municipalities with a value above the limit)	Proxy	78	--	--
	NO2 Nitrogen dioxide. Annual average concentration in the municipalities capital of the province/metropolitan cities (Istat, processing on Ispra data, 2019, microgram per m ³ ; Italy value indicates the number of municipalities with a value above the limit)	National context	14	--	--
	O3 Ozone daily limit exceeds in the municipalities capital of the province/metropolitan cities (Istat-Ispra, 2019, number of days)	National context	53	--	--
	Number of Summer days (anomalies with respect to Climatic Normal 1971-2000 in regional capital municipalities and metropolitan cities) (Istat, 2019, N.)	National context	*	--	--
	Number of Tropical nights (anomalies with respect to Climatic Normal 1971-2000 in regional capital municipalities and metropolitan cities) (Istat, 2019, N.)	National context	*	--	--
	Number of Dry days (anomalies with respect to Climatic Normal 1971-2000 in regional capital municipalities/metropolitan cities) (Istat, 2019, N.)	National context	*	--	--
11.7.1	Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities				
	Incidence of urban green areas on urbanized area of the cities (Istat, 2019, n ² per 100 m ² of urbanized areas)	Proxy	9.0	 (b)	
11.7.2	Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months				
	Persons aged 14-65 years old victims of at least one form of sexual harassment in the last 12 months (Istat, 2015/16, percentage values)	Identical	5.1		
Legend		Notes			
	IMPROVEMENT	(a) Variation compared to 2012			
	STABILITY	(b) Variation compared to 2015			
	DETERIORATION	(c) Variation compared to 2010			
--	NOT AVAILABLE / NOT SIGNIFICANT	(*) Please refer to the table on www.istat.it			

More than a quarter of the population lived in overcrowded housing

Urban regeneration is at the heart of strategies aimed at reducing social inequalities, achieving ecological transition and combating urban decay. Overcrowded housing has been a very relevant issue during the pandemic emergency, which has led massively to remote working and distance learning. In 2019, the EU27 average recorded 17.1%² of the population in overcrowded housing conditions. Italy has one of the highest share in EU27 and reached the national highest value in 2019: 28.3% of people (27.8% in 2018 and five percentage points higher than 23.3% in 2009).

Central Italy recorded the highest values of overcrowded housing. Moreover, overcrowded housing was more widespread among non-EU foreign citizens (59.2%) and assumed a higher value in large cities (29.4%), although lower compared to 2018 (30.7%). However, there was a marked increase in rural areas (from 25.3% in 2018 to 28.4% in 2019) (Figure 11.1).

Figure 11.1 - Overcrowding rate, by gender, age group, citizenship, degree of urbanisation. Years 2018 and 2019 (percentage values)



Source: Istat, Eu-Silc

The share of those who report they meet structural (leaking roof, damp walls, floors or foundation, or rot in window frames of floor) or humidity issues, although slightly above the EU27 average (12.7%)³, in 2019 (14.0%) recorded an increase compared to the previous year (13.2%). For people who live in dwellings with problems of noise from neighbours or from streets, Italy recorded one of the lowest shares (11.9%) compared to the EU27 average (17.3%), although even in this case there was an increase compared to the previous year (it was 10.9% in 2018).

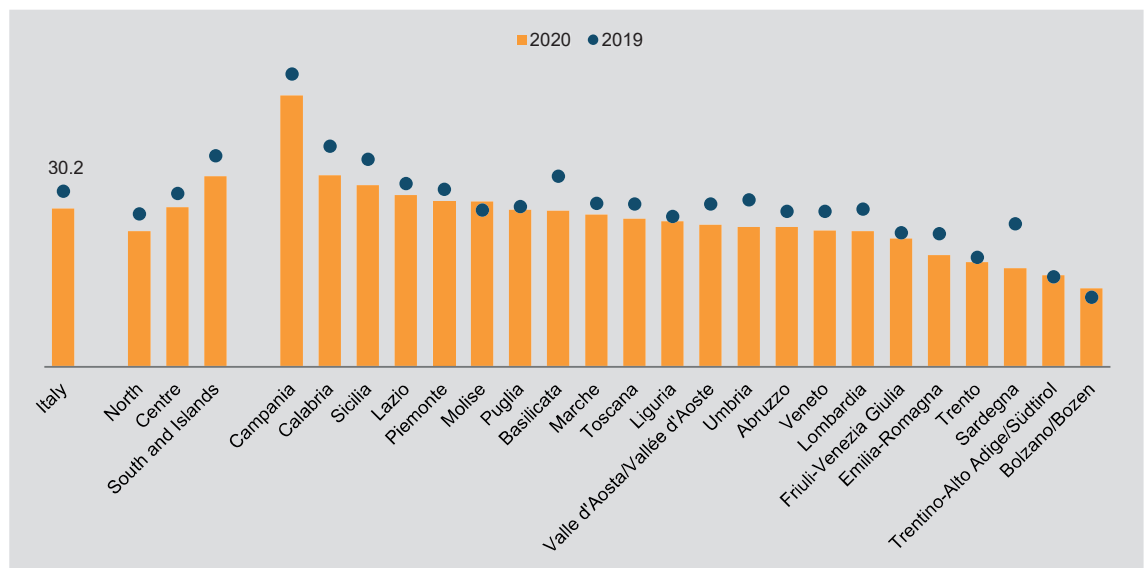
² <http://ec.europa.eu/eurostat>.

³ <http://ec.europa.eu/eurostat>.

The car was still the most used means of transport to reach the workplace

Sustainable mobility is a central issue for urban regeneration. The measures to mitigate the Covid-19 pandemic have strongly and directly affected the mobility of the population. In this scenario, 2020 data indicate an increase in the share of people who habitually reach their workplace only by private transport (75.0%). In 2020, 30.2% of households complained of difficulties in connecting with public transport in their area of residence. Data showed an improvement compared to 2019 (33.5%), although are stable compared to the trend observed in the last decade (29.5% in 2010) (Figure 11.2). Data confirmed the gap between the North (25.9%) and the South and Islands (36.4%); especially in Campania the difficulty of connection with public transport was reported by more than half of the households (51.8%).

Figure 11.2 - Households with difficulties of connection with public transport, by region. Years 2019 and 2020 (percentage values)



Source: Istat, Survey on Aspects of daily life

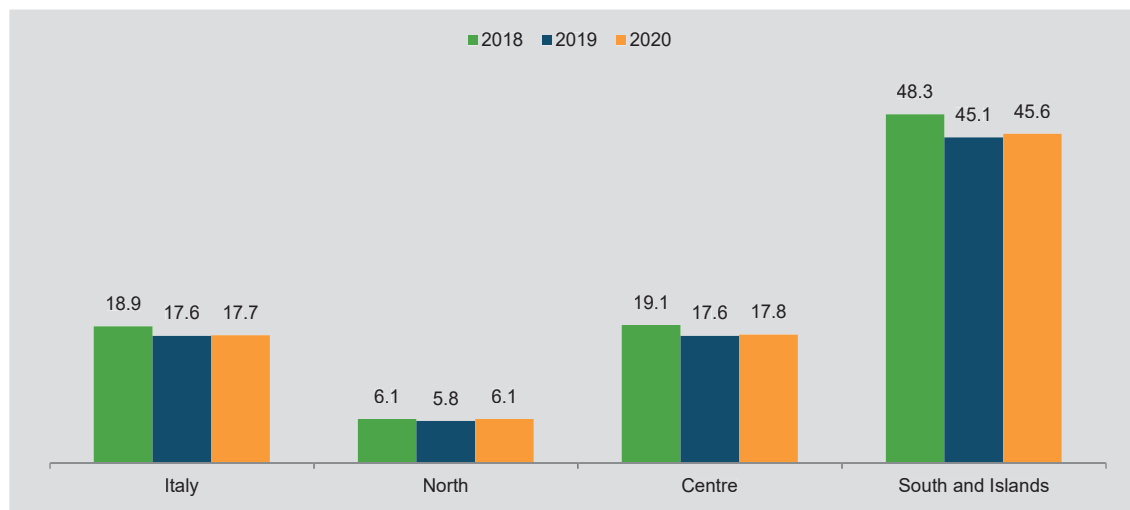
Illegal building rate was stable and per capita land consumption increased

Land care and the respect for land ecological functions are at the basis for disaster risk prevention and tackling with hydrogeological disruption. In 2019, per capita soil sealing⁴ from artificial land cover increased further to 355 m² per inhabitant (see Goal 15).

The land cover coming from the construction of buildings without urban planning threatens the resistance and safety of the territory. In 2020 17.7 illegal buildings for every 100 authorised by municipalities were counted (Figure 11.3).

⁴ *Soil sealing* is the covering of land with “impermeable” materials that partially or totally inhibit the ability of the soil to perform its vital functions.

Figure 11.3 - Illegal building rate. Years 2018, 2019 and 2020 (per 100 building permits issued)



Source: Centre for Economic, Social and Market Research for Construction and Territory (Cresme)

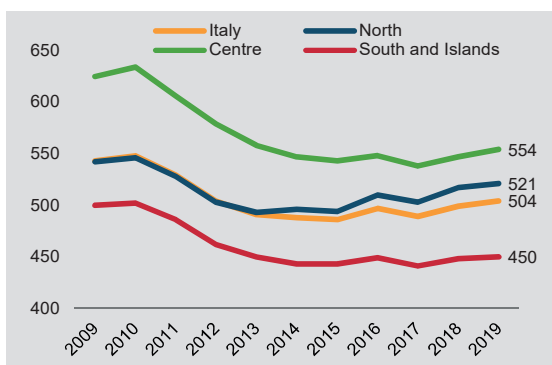
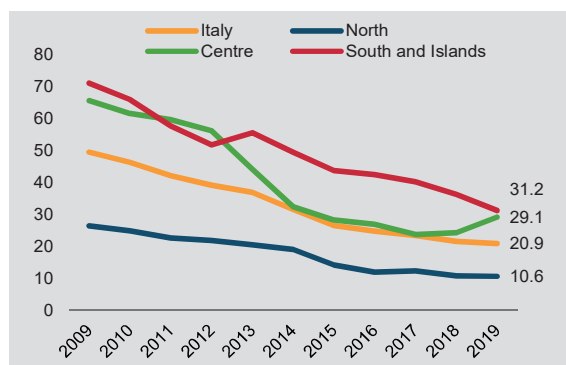
Share of municipal waste sent to landfills decreased, even though volume of municipal waste increased

Waste cycle management is crucial for the conditions of living and global health. At national level the share of municipal waste sent to landfill steadily decreased from 56.8% in 2006. In 2019 the share sent to landfill was equal to 20.9% of the total, lower compared to the previous year (21.5%). North and the South and Islands showed a similar trend, conversely in the last two years in every central region there was a reversal of the trend, especially in Lazio that shifted from 12.0% in 2018 to 20.2% in 2019 (Figure 11.4a).

In absolute terms, the volumes of municipal waste collected per inhabitant exceeded 500 kilos in 2019 (see Goal 12). In the North it reached 521 kg per inhabitant, in the Centre 554 kg and in the South and Islands 450 kg (Figure 11.4b). The most virtuous regions were Basilicata (355 kg) and Molise (368 kg), that limited municipal waste below the threshold of 400 kg per inhabitant.

Figure 11.4a - Municipal waste sent to landfills as a percentage of total municipal waste collected, by geographical area. Years 2009-2019 (percentage values)

Figure 11.4b - Municipal waste collected, by geographical area. Years 2009-2019 (kg per inhabitant)



Source: Ipsra



Urban average annual fine particulate matter fell although remained still high

Air pollution is one of the main risks for human health. Fine particulate matter is among the air quality indicators with an acknowledged correlation between exposure levels and health effects. In 2019 urban population exposure levels to particulate air pollution showed a reduction both $PM_{2.5}$, which fell to 15.1 micrograms per m^3 ($\mu g/m^3$) from 16.0 in 2018, and PM_{10} , which fell to 25.5 $\mu g/m^3$ from 26.1 in 2018. The values of both indicators, although steadily decreasing in the last five years, were still significantly higher than the World Health Organization⁵ reference values. Between 2018 and 2019 exceedances of the daily limit value for PM_{10} showed an improvement in 39 provincial capitals/metropolitan cities.

5 Highest annual average concentration of all fixed air quality monitoring stations. For $PM_{2.5}$ value greater than 10 micrograms per cubic meter for the protection of human health; for PM_{10} value greater than 20 micrograms per cubic meter.



GOAL 12

ENSURE SUSTAINABLE PATTERNS OF PRODUCTION AND CONSUMPTION¹

In brief

- In the last five years, the progress to limit material consumption that has characterised Italy since 2010 and allowed efficiency gains in production processes marked a setback. In 2019, domestic material consumption (DMC) per unit of GDP was stable compared to 2017 and 2018 (0.28 tonnes per 1,000 euro).
- In 2019, despite the progressive stabilisation, Italy was among the European Union countries with the lowest DMC, both per inhabitant and per unit of GDP. Our country reached the first position in the ranking per capita and the fourth position in the ranking per unit of GDP.
- 2019 confirmed the slight increase in municipal waste production per inhabitant that was already recorded the previous year (+2.0% in 2018 and +1% in 2019). However, there were advances in waste management processes and conversion into new resources.
- Circular material use rate showed an improvement in the Italian performance higher than the EU27 average profile, both in the last decade and in the last year, which brought our country to the fourth place in the European ranking.
- The recycling rate increased in 2019 (+2.5 percentage points) as well as the percentage of separate collection of municipal waste (+3.1 p.p.). However, separate collections remained below the legal targets and showed high territorial disparities.

The statistical measures released by Istat for Goal 12 are twenty-six and refer to eight UN-IAEG-SDGs indicators (Table 12.1).

¹ This section was edited by Paola Ungaro with contributions by Daniela De Francesco, Alessandro Faramondi, Aldo Femia, Flora Fullone, Maria Teresa Santoro, Angelica Tudini and Silvia Zannoni.

Table 12.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
12.2.2	Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP				
	Domestic material consumption per capita (Istat, 2019, tonne per capita)	Identical	8.0		
	Domestic material consumption per GDP (Istat, 2019, tonne per 1,000 euro)	Identical	0.28		
	Domestic material consumption (Istat, 2019, million tonnes)	Identical	484.5		
12.4.2	(a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment				
	Amount of hazardous waste generated (Ispra, 2018, tonne)	Proxy	10,045,155	--	--
	Hazardous waste sent to the recovery operations (Ispra, 2018, tonne)	Proxy	4,359,306	--	--
	Hazardous waste disposed of (Ispra, 2018, tonne)	Proxy	5,254,338	--	--
12.5.1	National recycling rate, tons of material recycled				
	National recycling rate (Ispra, 2019, percentage values)	Proxy	53.3	(a)	
	Separate collection of municipal waste (Ispra, 2019, tonne)	Proxy	18,452,091		
	Separate collection of municipal waste (Ispra, 2019, percentage values)	Proxy	61.3		
	Municipal waste collected (Istat processing on Ispra data, 2019, Kg per inhabitant)	National context	504		
	Circular material use rate (Eurostat, 2019, percentage values)	National context	19.3		
12.6.1	Number of companies publishing sustainability reports				
	Percentage of enterprises with at least 3 persons employed drafting environmental and sustainability reports and/or accounts (Istat, 2016/2018, percentage values)	Proxy	2.5	--	--
	Percentage of enterprises with at least 3 persons employed acquiring voluntary environmental certification of product or process (Istat, 2016/2018, percentage values)	National context	8.2	--	--
	Public Institutions that adopt forms of social and/or environmental reporting (Istat, 2016/2017, percentage values)	Proxy	16.1	--	(b)
	Number of organizations/enterprises with EMAS registration (Ispra, 2019, N.)	National context	1,019	--	--
	Number of local units with UNI EN ISO 14001 Environmental management system Certification (Istat processing on Accredia data, 2019, N.)	National context	20,274	--	--
	Number of local units with UNI CEI EN ISO 50001 Energy management system Certification (Istat processing on Accredia data, 2019, N.)	National context	1,763	--	--
12.7.1	Degree of sustainable public procurement policies and action plan implementation				
	Public institutions that purchase goods and/or services by adopting minimum environmental criteria (CAM), in at least one purchase procedure (Green purchases or Green Public Procurement) (Istat, 2015, percentage values)	National context	63.2	--	--
12.a.1	Installed renewable energy generating capacity in developing countries (in Watts per capita)				
	Net installed renewable energy generating capacity (Istat processing on International Renewable Energy Agency data, 2020, Watt per capite)	Identical	927.2	(c)	
	Total net official development assistance (ODA) gross deliveries for research in the different areas of intervention (Ministry of Foreign Affairs and International Cooperation, 2019, million euro, current prices)	National context	16.3		(d)
12.b.1	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability				
	Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability (Istat, 2018, N.)	Identical	(*)	--	--
	Impact of tourism on waste (Ispra, 2019, kg per equivalent inhabitant)	National context	9.1		
	Tourism intensity index (Istat, 2019, per 1,000 inhabitants)	National context	7,301	--	--
	Nights spent in open air establishments, farmhouses and mountain refuges on nights spent in all the accommodation establishments (Istat, 2019, percentage values)	National context	18.7	(e)	
	Tourism trips in Italy by type of trip and main means of transport (Istat, 2020, percentage values)	National context	(*)	--	--

Table 12.1 continues - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

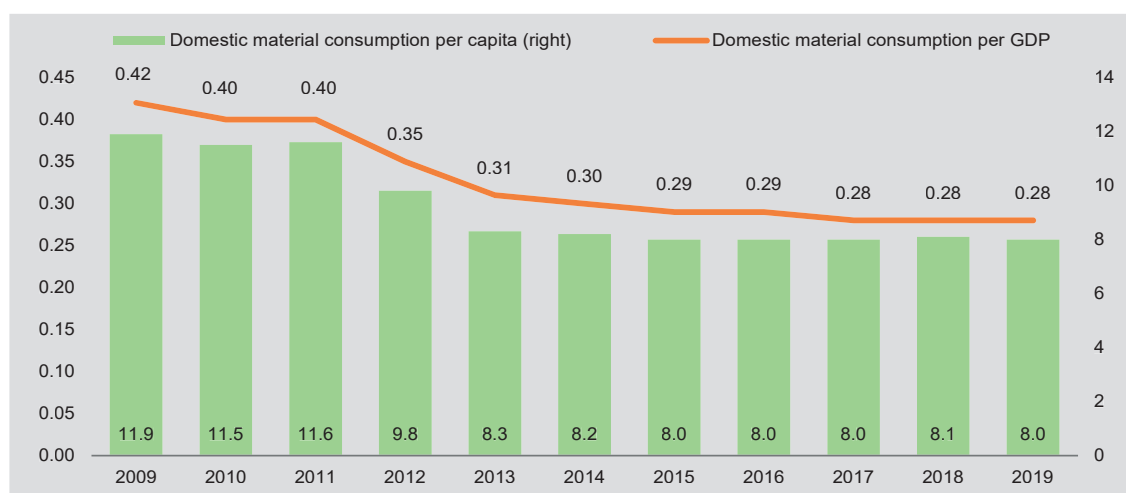
Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
12.c.1	Amount of fossil-fuel subsidies (production and consumption) per unit of GDP				
	Fossil-fuel subsidies as a percentage of GDP (Ministry of the Economy and Finance, 2019, percentage values)	Identical	0.67	--	

Legend	Notes
IMPROVEMENT	(a) Variation compared to 2010
STABILITY	(b) Variation compared to 2012/2015
DETERIORATION	(c) Variation compared to 2012
-- NOT AVAILABLE / NOT SIGNIFICANT	(d) Variation compared to 2013
	(e) Variation compared to 2007
	(*) Please refer to the table on www.istat.it

Domestic material consumption was substantially stable

Italy recorded a progress overtime in limiting material consumption at European level, thanks to the strong impetus given by European policies for promoting Sustainable Consumption and Production models aimed at turning the European Union into a resource-efficient economy. The advancements, partly linked to structural changes of production of European economies and to business cycle trends, showed signs of a progressive decoupling between the development of economic activity and pressures on the environment. Over the last ten years, the ratio between DMC and GDP – an indicator of efficiency in the use of material resources – has decreased by 33.3%, compared to the EU27 average change of 17% (from 0.58 to 0.48 tonnes per 1,000 euro)². In 2019, Italy was among the most virtuous Member States, placing in the fourth position in the decreasing DMC/GDP ranking (with a value that amounted to 59% of the EU27 average) and in the first position in the material consumption per capita ranking (57%).

Figure 12.1 - Domestic material consumption per capita and per GDP. Years 2009-2019 (tonne per capita and tonne per 1,000 euro, chain-linked volumes)



Source: Istat, Material flow accounts

2 <http://ec.europa.eu/eurostat>.

In 2019, Italy consumed 485 million tonnes of domestic material, 220 million tonnes less than ten years ago. Relative measures of DMC – in relation to GDP and inhabitants – fell from 0.42 to 0.28 tonnes per 1,000 euro and from 11.9 to 8.0 tonnes per capita over the same period (Figure 12.1). The reduction, particularly relevant between 2012 and 2013, was affected by the second phase of the Italian economic crisis. Nevertheless, it marks a progress into efficiency in the use of material resources by our economy, consolidated during the recovery of the economic cycle. From 2015, DMC ratios remained substantially stable and well below pre-crisis levels.

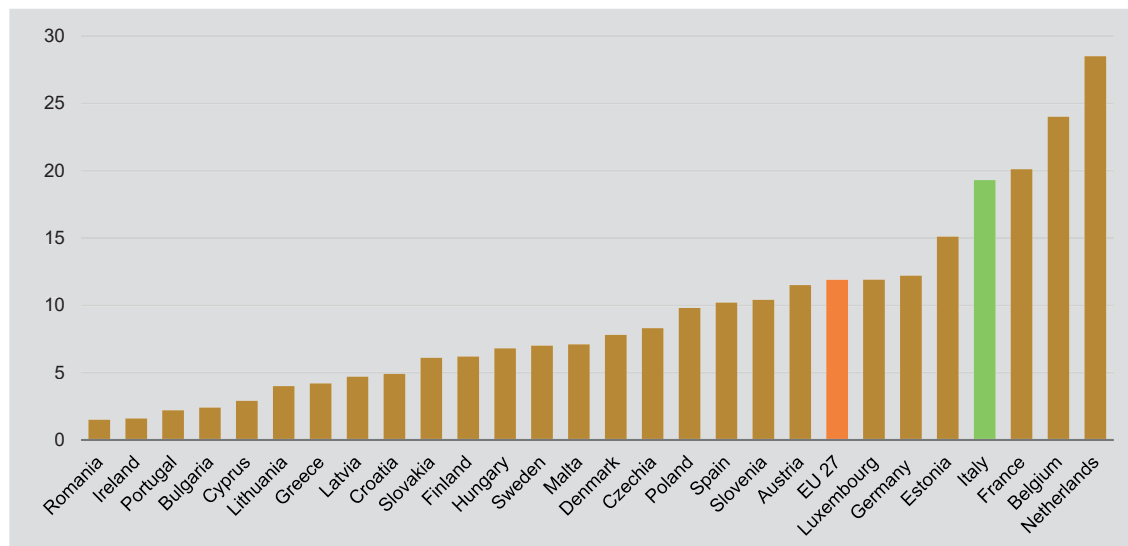
There are important regional disparities of material consumption, due to sectoral characterisation and to the heterogeneity of production processes. In 2017, DMC recorded lower intensities in the Centre (6.9 tonnes per inhabitant and 0.23 per 1,000 euro) than in the North (respectively 8.7 and 0.25). South and Islands placed in an intermediate position in terms of DMC per inhabitant (7.6 tonnes per capita) and reached a high intensity in terms to GDP (0.42 per 1,000 euro), in particular in Sardegna (0.78), Molise (0.75), Puglia (0.58) and Basilicata (0.53). Material consumption per unit of output was lowest in Valle d'Aosta and Lazio (below 0.20 tonnes per 1,000 euro), in Lombardia and Campania (both equal to 0.21 tonnes per 1,000 euro) and in Liguria (0.22). Per capita DMC recorded values from the lowest amounts of Valle d'Aosta and Campania (both 3.7 tonnes), Calabria (5.2) and Lazio (5.8) to the highest levels of Sardegna (15.6), Molise (15.0), Friuli-Venezia Giulia, Basilicata and Trentino-Alto Adige (about 12 tonnes).

Municipal waste generation per capita increased in 2019; waste cycle management further improved

In 2019, in Italy, the amount of collected municipal waste (MW) was 504 kilograms per capita, in line with the EU27 average (502) and showing progress of waste preventing higher than the European average. In fact, in Italy in the last decade the production of MW decreased by 7.2%, compared to an average reduction of 1.6% in EU27³. The decrease in the production of municipal waste, partly linked to the contraction of socio-economic indicators related the waste production (GDP and household consumption), was particularly relevant between 2011 and 2013. Nevertheless, it persisted, albeit with some discontinuity, with the production recovery. In 2019, MW per capita increased by 1% (+5 Kg per inhabitant).

3 <http://ec.europa.eu/eurostat>.

Figure 12.2 - Circular material use rate. Year 2019 (percentage values)



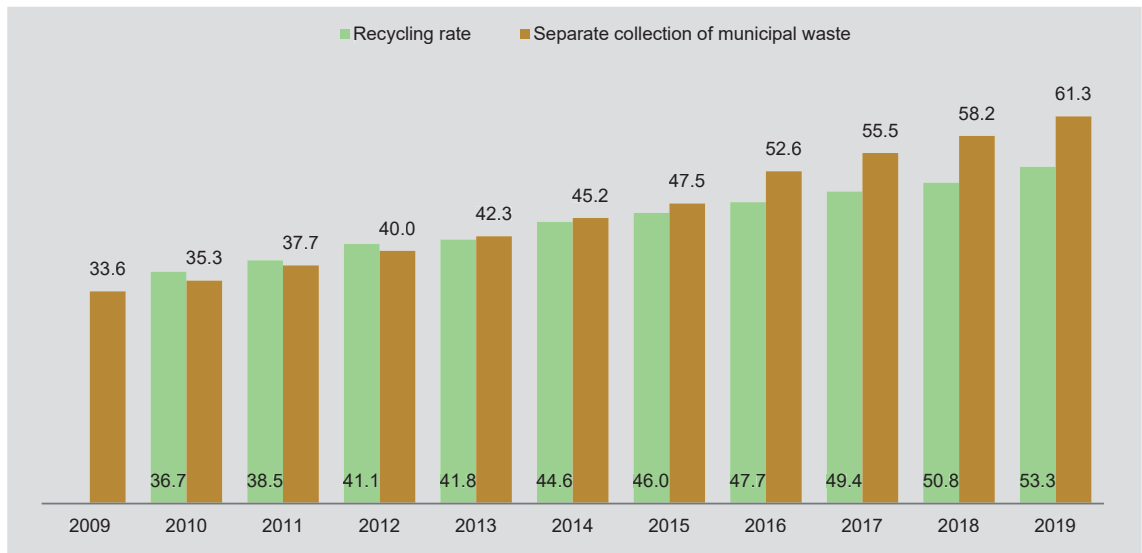
Source: Eurostat

Our country presented progress in the phases of the waste cycle oriented to the principles of economic circularity. The circular material use rate – equal to the share of material recovered and fed back into the economy in overall material use – recorded an improvement. Between 2010 and 2019, in Italy, the indicator increased by 7.8 percentage points, namely from 11.5% to 19.3% (+ 1 p.p. respect to the last year), compared to an average variation in the EU27 of +1.2 p.p. (from 10.7% to 11.9%). In 2019, Italy achieved the fourth position in the EU27 ranking of the circular material use rate (Figure 12.2), after the Netherlands (28.5%), Belgium (24.0%) and France (20.1%).

Between 2011 and 2019, also the recycling rate (Figure 12.3), that measures the ability to convert waste into new resources, increased, from 36.7% to 53.3% (+16.6 percentage points), with a more sustained growth in the last year (+2.5 p.p.). Since 2018, Italy has met the 2020 target set by the European Union (50%) and is progressively approaching the 55% target set for 2025. In 2019, our country recorded one of the highest recycling percentages in the EU27 (equal to 108% of the EU average value⁴), although still far from that of countries such as Germany (140%).

Separate collection of municipal waste represents another relevant step towards the goal of reducing the amount of waste returned to the environment and, more specifically, the delivery of waste to landfills (See Goal 11). The 18.5 million tonnes of MW object of separate collection in 2019 represented 61.3 per cent of national production, a share that has almost doubled compared to ten years ago and higher than 3.1 percentage points compared to last year. Despite the marked progress, Italy was still characterised by a significant delay respect to regulatory targets, as the country had not reached yet, in 2019, the 65% planned separate collection target for 2012.

4 <http://ec.europa.eu/eurostat>.

Figure 12.3 - Recycling rate and separate collection of municipal waste (a). Years 2009-2019 (percentage values)

Source: Ispra; Istat, processing on Ispra data

(a) Data from 2016 to date are only partially comparable with previous years due to a variation in the calculation criteria of production and collection data.

Significant territorial disparities were critical nodes. The Centre (58% of MW separate collection) and the South and Islands (51%) were disadvantaged respect to the North (68% for the North-West and 72% for the North-East), despite the lower gap of recent years due to the better performances of the Centre and the South. The results achieved in the North were characterised by the very positive contributions of the Autonomous Province of Trento (78% of differentiated MW), Veneto (75%) and Lombardia (72%), while the average values of the Southern and Central areas were positively influenced by Sardegna (73%) and Marche (70%). In 2019, Treviso and Mantova were confirmed as the best provinces in Italy for separated collection, with a share close to 90%. Coherently with the European Green Deal, the National Recovery and Resilience Plan (NRRP) is an opportunity to achieve further advancements. NRRP envisages reforms and relevant investments for the promotion of circular economy, for the improvement of efficient and sustainable waste management, for the strengthening of infrastructure for waste treatment and separate collection, and for the reduction of the North/South disparities.

Sustainability reports and environmental reporting were not widespread yet among enterprises

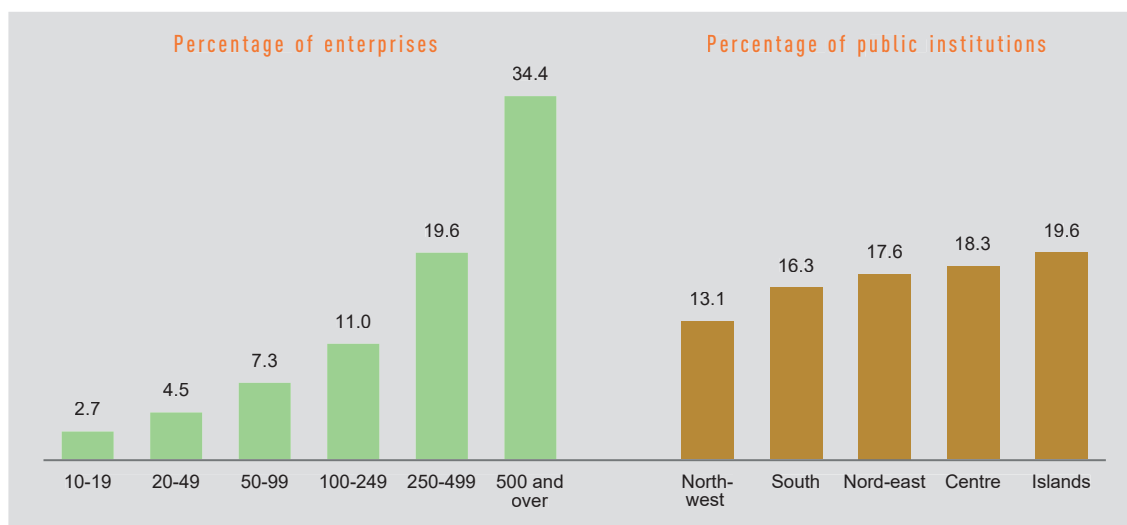
The increasingly widespread adoption of sustainable practices in corporate policies⁵ looks at non-financial reporting as an important opportunity to monitor corporate performance respect to sustainability and environmental protection goals. In 2016-2018, 2.5 out of 100 enterprises with at least three employees set up environmental and sustainability reports and/or accounts. The share, still marginal, is related to enterprise size because of the more

⁵ See Istat. 2020. *Sostenibilità nelle imprese: aspetti ambientali e sociali*. Rome: Istat. <https://www.istat.it/it/archivio/244337>.

stringent regulation about non-financial reporting for large firms⁶. Thus, 19.6% of enterprises with 250-499 employees and 34.4% of enterprise with 500 and more employees drafted environmental and sustainability reports and/or accounts; Figure 12.4). The most active enterprises were involved in sectors characterised by the management of environmental resources as major activity, such as electricity, gas, steam and air conditioning supply (13.1%), water supply, sewerage, waste management and remediation activities (11.4%) and mining and quarrying (5.3%). Environmental and sustainability reporting was more widespread in the South and Islands, with 3.4 firms out of 100 (3.7 in the South), respect to the Centre (2.3) and the North (2.2 for both the North-East and the North-West).

In 2016-2017, the public institutions that adopted forms of social and/or environmental reporting were 16.1%, with some territorial differences. The North-East, Centre and Islands recorded a higher share than the national average, conversely the North-West recorded a lower share (13.1%). Social and/or environmental reporting was widespread especially in Emilia-Romagna, Umbria, Sicilia, Puglia and Liguria (all above 20%), and less frequent in Molise, Piemonte, Lombardia, the Autonomous Province of Bolzano and Friuli-Venezia Giulia.

Figure 12.4 - Enterprises drafting environmental and sustainability reports and/or accounts and of public institutions that adopt forms of social and/or environmental reporting. Years 2016-2018 and 2016-2017 (percentage values)



Source: Istat, Permanent census of enterprises and Permanent census of the public institutions

⁶ The implementation of European Directive 2014/95/EU, as indicated by Legislative Decree 254/2016 introduced a mandatory disclosure of non-financial information for large public interest entities, leaving it in a voluntary (and simplified) modality for SMEs and other organizations not falling under the mandatory requirements by law.



GOAL 13

TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS¹



















In brief

- In the EU27, GHG emissions decreased; they reached 81.0 in 2017 compared to the base year 1990 (=100) and decreased further to 79.3 in 2018.
- Greenhouse gas emissions per capita slightly decreased to 8.7 tonnes of CO₂ equivalent in 2018 compared to 8.9 in 2017.
- In 2019, greenhouse gas emissions in Italy decreased by 2.8% compared to the previous year.
- The trend of decoupling in the relationship between the dynamics of emissions from productive activities and GDP was confirmed in 2019.
- In 2019, global average temperature anomalies over land recorded globally an increase of 1.28°C and of 1.56°C in Italy compared to the 1961-1990 climatological normal.
- In 2019, the forest area (wooded and non-wooded) covered by fire was 1.2 per 1,000 km², with higher values in the South and Islands.
- The National Seismic Network recorded a minimum level of 11 earthquakes with magnitudes of 4 or higher and under 4.9 in 2019.
- In 2020 in Italy 22.57 inhabitants per km² were exposed in areas at risk of flooding.
- In the same year, households concern about climate change declined by one percentage point to 70.0%, though it has been increasing over the years (it was 63.3% in 2012).

The statistical measures released by Istat for Goal 13 are fifteen and refer to three UN-IAEG-SDGs indicators (Table 13.1).

¹ This section was edited by Giovanna Tagliacozzo with contributions from Raffaella Chiocchini, Aldo Femia and Sabrina Sini.

Table 13.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

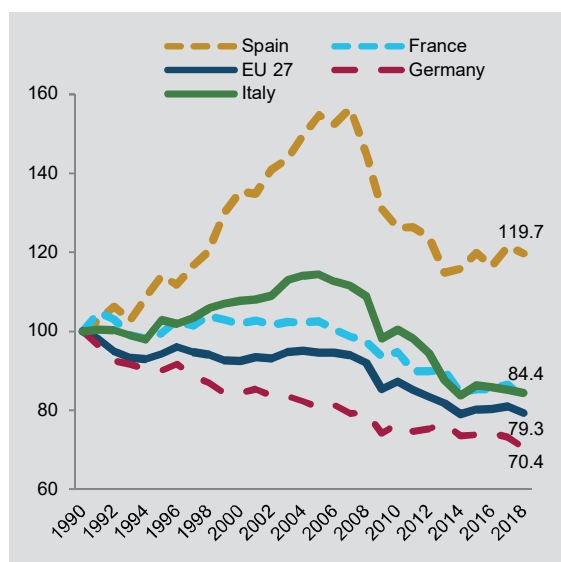
Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
13.1.1	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population				
	Population at risk of flood (Ispra, 2017, percentage values)	National context	10.4	 (a)	--
	Population at risk of landslides (Ispra, 2017, percentage values)	National context	2.2	 (a)	--
	Resident population in flood risk areas per km ² (Ispra, 2017, Inhabitants per km ²)	National context	22.57	 (a)	 (b)
	Resident population in landslides risk areas per km ² (Ispra, 2020, Inhabitants per km ²)	National context	4.24	 (a)	--
	Deaths and missing persons for floods (Ispra, 2018, N.)	Partial	32	--	--
	Deaths and missing persons for landslides (Ispra, 2018, N.)	Partial	12	--	--
	Injured persons for floods (Ispra, 2018, N.)	Partial	12	--	--
	Injured persons for landslides (Ispra, 2018, N.)	Partial	29	--	--
	Global average temperature anomalies over land and in Italy (Ispra, 2019, Degree Celsius)	National context	1.28 Global 1.56 Italy	--	--
	Impact of forest fires (Istat, Processing on State Forestry Corps data, 2019, per 1.000 km ²)	National context	1.2		
	Number of the seismic movements (>= 4.0) by magnitude class (National Institute of Geophysics and Volcanology - Ingv, National Earthquake Centre, 2019, N.)	National context	11	--	--
13.2.2	Total greenhouse gas emissions per year				
	Greenhouse gas emissions (GHG) inventory totals (UNFCCC) (Ispra, 2019, tonne CO ₂ equivalent)	Identical	415,622,271		
	Balance between the emissions generated in the Rest of the World by units that are resident in Italy and the emissions generated on the national territory by units that are not resident in Italy (Istat, 2019, tonne CO ₂ equivalent)	Identical	15,510,669	--	--
	Greenhouse gas emissions (GHG) accounts totals (Istat, 2019, tonne CO ₂ equivalent)	Identical	431,132,940		
	Emissions of CO ₂ and other greenhouse gasses (Istat-Ispra, 2019, tonne per inhabitant)	National context	7.1		
13.3.1	13.3.1 Amounts provided and mobilized in United States dollars per year in relation to the continued existing collective mobilization goal of the \$100billion commitment through to 2025				
	Concern for climate change (Istat, 2020, percentage values)	Proxy	70.0	 (c)	
Legend		Notes			
	IMPROVEMENT	(a) Variation compared to 2015			
	STABILITY	(b) Variation compared to 2017			
	DETERIORATION	(c) Variation compared to 2012			
--	NOT AVAILABLE / NOT SIGNIFICANT				

Greenhouse gas emissions decreased in Europe and Italy

In 2018, carbon dioxide emissions from fossil combustion continued to increase globally, with 33.5 billion tonnes of CO₂. In EU27 GHG emissions decreased, reaching 81.0 in 2017, compared to the base year 1990 (=100) and further decreased to 79.3 in 2018.

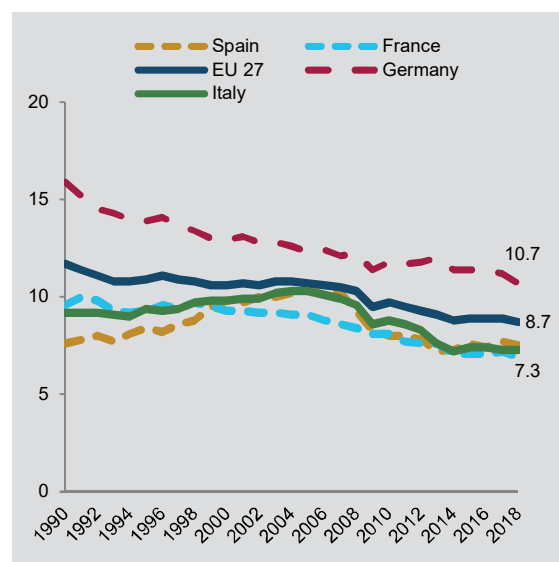
Germany in particular was a virtuous country because the greenhouse gas emission index was 73.2 in 2017 and fell to 70.4 in 2018. France (from 86.4 to 83.1) and Italy (from 85.1 to 84.4) improved their performance too, albeit with some discontinuities. Spain, despite the constant race to improve, recorded an index above 100 for 2018 (from 121.5 to 119.7; Figure 13.1a).

Figure 13.1a - Greenhouse gas emissions (CO₂ equivalent) in the main European countries. Years 1990-2018 (fixed base index numbers 1990=100)



Source: Eurostat

Figure 13.1b - Greenhouse gas emissions (CO₂ equivalent) in the main European countries. Years 1990-2018 (tonnes per capita)



Source: Eurostat

In 2018, in the EU27 countries, gas emissions per capita values slightly decreased with 8.7 tonnes of CO₂ equivalent on average, compared to 8.9 tonnes in 2017. In the last year emissions in Germany fell from 11.2 to 10.7, in Spain from 7.7 to 7.5 and in France from 7.2 to 6.9. Italy recorded constant per capita emissions - 7.3 - between 2017 and 2018 that fell to 7.1 in 2019² (Figure 13.1b).

In our country, the decrease in the volume of greenhouse gas emissions that began in 2005 continued. In 2019, greenhouse gas emissions were 415,622 thousand tonnes CO₂ equivalent³, with a further reduction of 2.8% compared to the previous year.

² For 2019, provisional data.

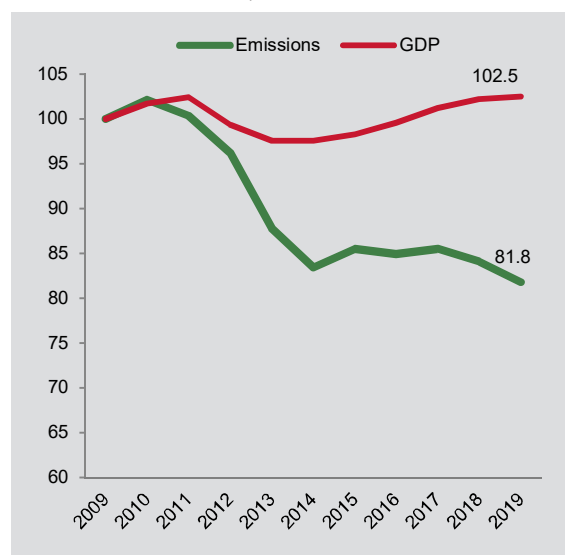
³ Total greenhouse gases according to the national emission inventory (UNFCCC).

2. Analysis of statistical measures by Goal

Environmental accounts⁴ allow to disaggregate emissions generated by production activities – which account for three quarters (74.3%) of total emissions – from those generated by household consumption (25.7%). In the last year, the dynamics of emissions from productive activities, compared to GDP, confirmed the trend of decoupling enlarging the gap between the two indexes to 20 points (Figure 13.2a).

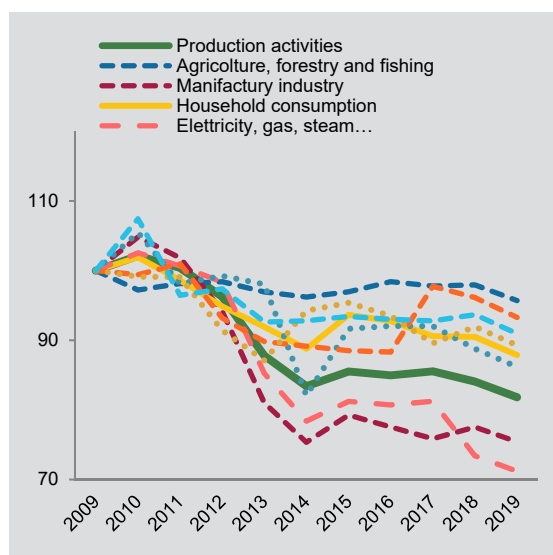
Manufacturing sector was the major cause for GHG emissions (21.1%), followed by the electricity, gas, steam and air conditioning supply sector (19.3%) and, with a smaller impact, by transport and storage (9.5%), agriculture, forestry and fishing (9.1%), water supply and distribution (5.5%). Household activities weighed for the two components related to transport and heating/cooling, 14.4% and 11.2% respectively.

Figure 13.2a - Greenhouse gas emissions (GHG) accounts totals generated by production activities, and GDP (chained volumes). Years 2009-2019 (a) (fixed base index numbers 2009=100)



Source: Istat, Air emissions accounts (a) For 2019, provisional data.

Figure 13.2b - Greenhouse gas emissions (GHG) accounts totals generated by production activities and by households. Years 2009-2019 (a) (fixed base index numbers 2009=100)



Source: Istat, Air emissions accounts (a) For 2019, provisional data.

In the period 2009-2019, there has been a steady reduction in emissions among production activities and households, and within different sectors, although with heterogeneous intensities. In 2019, the level of the emissions index was 81.8 (2009=100) for production activities and 87.9 for households. The manufacturing industry sector (75.4), along with the electricity and gas supply sector (71.2) in the last year reached the lowest levels of the index (Figure 13.2b).

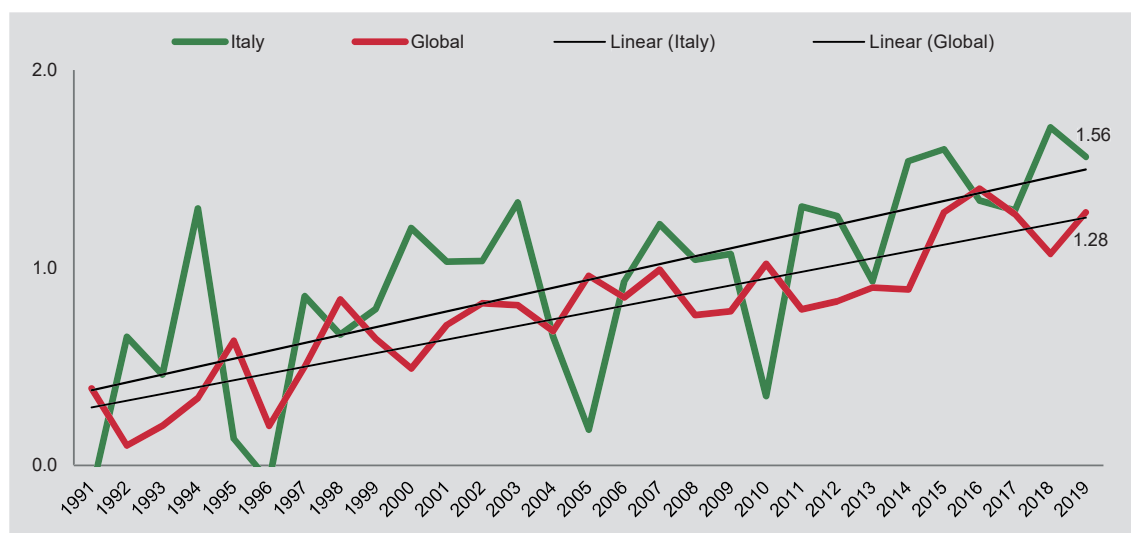
⁴ Air emissions accounts according to the principles and standards of the national economic accounts refer to resident units. They are quantified at 431,132 thousand tonnes of CO₂ equivalent in 2019 (provisional data), with a decrease of 2.7% compared to the previous year. The difference between the two measurements is due to the balance between the emissions of resident units operating abroad for road, air and maritime transport activities (i.e. those that contribute to Italy's GDP also in case they take place abroad) and the emissions of non-resident units operating on the national territory for the same activities.

Increased temperatures and extreme weather events

Temperature rise occurs with different intensity depending on the territorial and climatic zones.

In 2019 the average land temperature anomalies showed an increase of 1.28°C globally and 1.56°C in Italy compared to the normal climatological values of the period 1961-1990⁵. The time series 1991-2019 documents the upward trend, both globally and nationally (Figure 13.3).

Figure 13.3 - Global average temperature anomalies over land and in Italy compared to the 1961-1990 climatological normal. Years 1991-2019 (degrees celsius)



Source: Ispra

In provincial capitals, the increase in temperatures was even more significant and was reflected in the living conditions and health of the population. Indices of climate extremes, such as the number of summer days and tropical nights⁶, were on the rise in all cities⁷ (Figure 13.4a). Climate change has had also impacts on the precipitation regime, with an increase in extreme weather events, a reduction in the number of days without rain and related risk factors, with losses and damage to human and natural systems⁸ (Figure 13.4b).

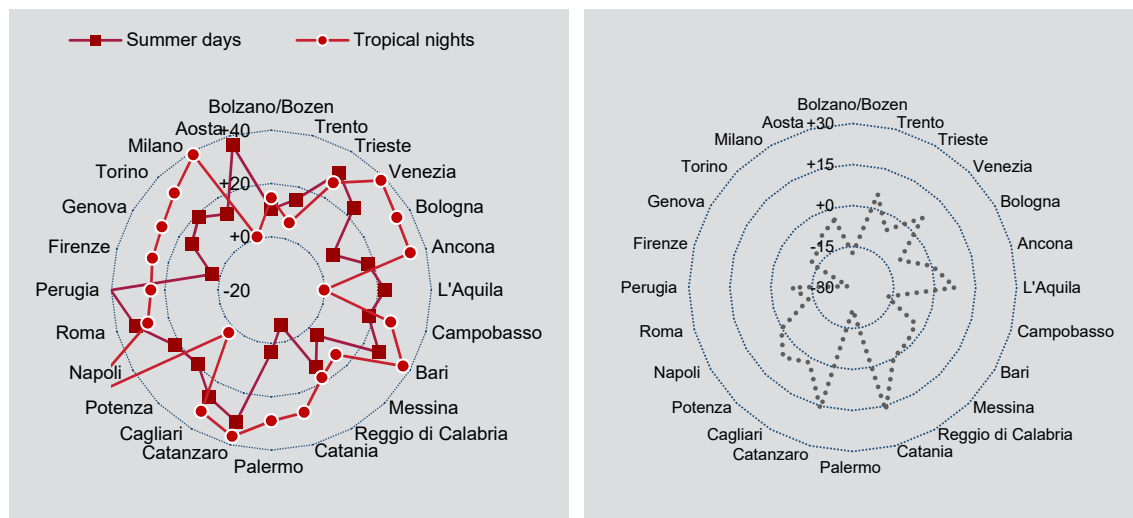
⁵ Italy and the entire Mediterranean basin are assessed as climate change *hot spots*, as they are most affected by climate change impacts.

⁶ “Summer days” are the days in the year with a maximum temperature higher than 25°C; “tropical nights” are the days with a minimum temperature higher than 20°C; “days without rain” are the days in the year with less than 1 millimetre of precipitation.

⁷ Regional/Metropolitan city capitals.

⁸ *Hazardous Events and Disasters includes Statistics on the occurrence and magnitude of hazardous events and disasters, exposure to hazards, vulnerability, coping capacity, impact of hazardous events and disasters on human and natural systems, and the efforts to reduce disaster risk. See, United Nations Economic Commission for Europe - UNECE. 2019. Recommendations on the Role of Official Statistics in Measuring Hazardous Events and Disasters. Geneva: United Nations.*

Figure 13.4a - Number of summer days (a) and number of tropical nights (a), in regional capital municipalities/metropolitan cities Year 2019



Source: Istat, Survey on Meteorological and hydrological data

(a) Anomalies with respect to the climatological normal 1971-2000 (mean value 2007-2016 for Reggio di Calabria, Catania and Messina).

Green urban areas produce positive effects by mitigating temperature. In 2019, in the 109 provincial capital cities, the average incidence of usable green areas compared to the incidence of urbanised areas was 9.1 m² per 100 of urbanised area, with a rather stable figure over time and large gaps between cities (Figure 13.5a).

Forest fires are also affected by climatic conditions changing, even though the impact of fires is also related to deficiencies in maintenance and prevention works. In 2019 the area covered by fire was 1.2 per 1,000 km². In the South and Islands the area was larger (2.2) especially in Calabria (3.5) and in Sicilia (4.2). Degradation and hydrogeological instability increase the risk and the vulnerability of the territories, causing landslides and floods. In 2020 in Italy, 22.6 inhabitants per km² were exposed to flood risk areas, namely, 37.6 in the North, 21.6 in the Centre and 8.4 in the South and Islands. Emilia Romagna reached the value of 121.0 and Liguria 50.5 (Figure 13.5b). Solutions based on the restoration and recovery of ecosystems (Nature based solutions⁹) are assessed as climate change adaptation measures.

9 EEA. Report No 1/2021. *Nature-based solutions in Europe: Policy, knowledge and practice for climate change adaptation and disaster risk reduction*. Luxembourg: Publications Office of the European Union.

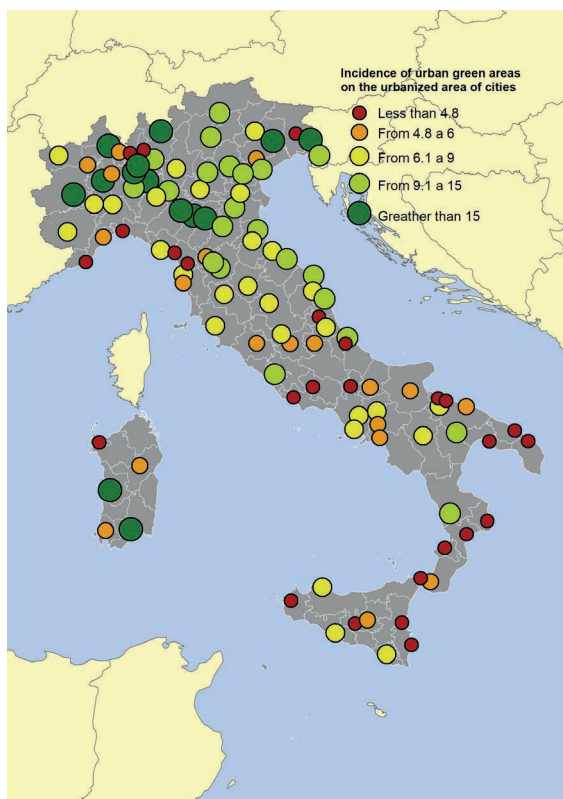
European Commission. 2021. *Forging a climate-resilient Europe - The new EU Strategy on Adaptation to Climate Change*. Brussels: European Commission.

United Nations Economic Commission for Europe - UNECE. 2019. *Recommendations on the Role of Official Statistics in Measuring Hazardous Events and Disasters*. Geneva: United Nations. <https://unece.org/DAM/stats/publications/2019/ECESTAT20193.pdf>.

United Nations Economic Commission for Europe - UNECE. 2014. *Conference of European Statisticians' Recommendations on Climate Change related Statistics*. Geneva: United Nations. https://unece.org/DAM/stats/publications/2014/CES_CC_Recommendations.pdf.

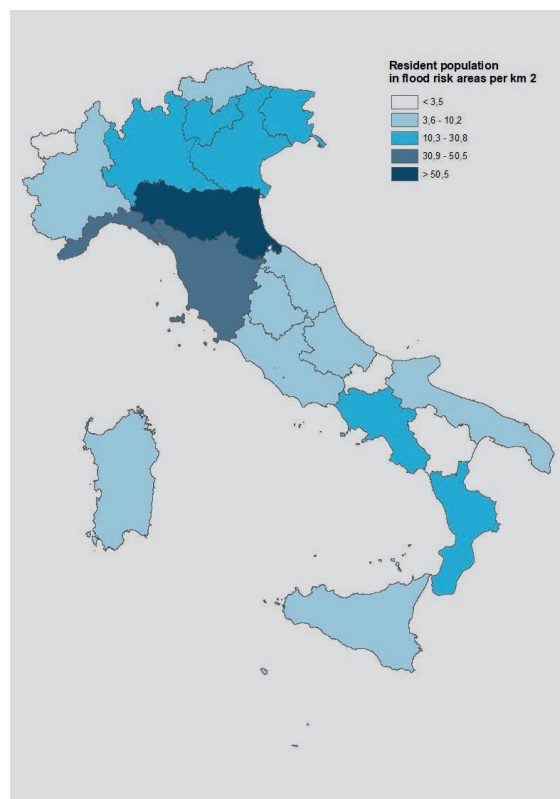
Economic Commission for Europe. 2020. *Conclusions of the Chair of the Expert Forum for Producers*. Geneva: Economic Commission for Europe. https://unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.33/2020/mtg3/2020_EF_Conclusions.pdf.

Figure 13.5a - Incidence of urban green areas on the urbanised area of the cities. Year 2019
(meters² per 100 meters² of urbanised area)



Source: Istat, Survey of urban environmental data

Figure 13.5b - Resident population in flood risk areas per km². Year 2020
(inhabitants per km²)



Source: Ispra

Concern about climate change grew among citizens: 70.0% by 2020

In 2020, household concern about climate change declined by one percentage point to 70.0%, though it has been increasing over the years (it was 63.3% in 2012).

Seismic events are included in the risk analysis and management of the components of hazard, exposure, vulnerability¹⁰. In 2019, the National Seismic Network recorded a minimum level of 11 earthquakes with magnitude equal to or higher than 4.0, all below 4.9. To work towards prevention and strengthening of anthropogenic and natural systems is the basis of a correct and effective risk management, aimed at reducing natural economic and human losses.

¹⁰ United Nations Office for Disaster Risk Reduction UNISDR. 2015. *Sendai Framework for Disaster Risk Reduction 2015-2030*. UNISDR/GE/2015 - ICLUX EN5000 1st edition. Geneva https://www.preventionweb.net/files/43291_sendaiframeworkfordrren.pdf.



GOAL 14

CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT¹

In brief

- Marine Protected Areas are the main measure of European Union's biodiversity conservation policy. In 2020, the perimeter of marine areas included in the Natura 2000 network delimited a total area of 20,716 Km², with an increase of 9,716 Km² compared to previous year and tripled compared to 2018 (5,878 Km²) due to the establishment of new sites, as requested by the European Commission (infringement procedure - EU-Pilot 8348/16/ENVI).
- Marine protected areas belonging to the Official List of Protected Areas (EUAP) were also on the rise. They recorded a 16.7% increase compared to 2013 for a total protected area of 3,076 km².
- The largest Site of Community Importance in the Mediterranean was established in Toscana. It is called Protection of Tursiops truncatus for the preservation of marine dolphins. In 2020, in Puglia, the share of Special Protection Areas quadrupled, passing from 5.2% to 21.8%, with the Tremiti and the Litorale di Gallipoli e Isola S. Andrea. In Sardegna, the extension of marine protected areas tripled (from 5.5% to 18.3%) thanks to the creation of new sites.
- The overall state of marine-coastal waters is assessed by the bathing waters indicator which, in 2019, was 65.5% of the total length of the Italian bathing coast, about one percentage point less than the previous year. Italy is the European country with the largest amount of bathing waters: about a quarter of the EU total, most of which with more than sufficient quality levels (less than 1% fall into the "poor" class).
- Intensive fishing activities, combined with the negative climate change's impacts, pose a threat to the sustainability of species inhabiting the seas, significantly limiting the reproductive capacity of fish stocks. In the Western Mediterranean, 92.7% of assessed fish stocks were overfished in 2018, with an increase of two percentage points from the previous year.




The statistical measures released by Istat for Goal 14 are four and refer to two UN-IAEG-SDGs indicators (Table 14.1).

¹ This section was edited by Giovanna Tagliacozzo, Tiziana Baldoni and Antonino Laganà.

Table 14.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
14.4.1	Proportion of fish stocks within biologically sustainable levels				
	Fish stock in over exploitation (Western Mediterranean) (Ispira, 2018, percentage values)	Proxy	92.7		
14.5.1	Coverage of protected areas in relation to marine areas				
	Coastal bathing waters (Istat, processing on Ministry of Health data, 2019, percentage values)	Proxy	65.5	 (a)	
	Marine protected areas EUAP (Ministry of the Ecological Transition, 2019, km ²)	Partial	3,076	 (b)	--
	Marine areas included in the network Natura 2000 (Ministry of the Ecological Transition, 2020, km ²)	Partial	20,716	 (c)	

Legend

	IMPROVEMENT
	STABILITY
	DETERIORATION
--	NOT AVAILABLE / NOT SIGNIFICANT

Notes

- (a) Variation compared to 2013
 (b) Variation compared to 2012
 (c) Variation compared to 2014

Expansion of Marine Protected Areas

The preservation and promotion of biodiversity, as well as the protection of coastal zones from anthropogenic pressures and the negative effects of climate change, are strategic axes aimed at strengthening the resilience of natural marine and terrestrial systems. They are consistent with the principle of do not harm to the environment², circular health³ and nature-based solutions⁴.

Marine and terrestrial protected natural areas aim to contribute significantly to halting biodiversity loss, marine conservation and sustainability of the coastal and off shore environment.

In Italy, marine areas belonging to the Natura 2000 Network, together with those belonging to the Official List of Protected Areas and those designated at national and regional level, constitute the main typologies. These typologies can be completely separate from each other or partially overlapping. Protected areas include stretches of coastline, seabeds, islands, ponds, submerged and marine parks, which, due to their relevant naturalistic, geomorphological and physical characteristics, help to ensure the long-term maintenance of threatened natural habitats and marine protection.

2 European Commission. 2021. *Technical guidance on the application of “do no significant harm” under the Recovery and Resilience Facility Regulation*. Commission Notice. Brussels: 12.2.2021 C(2021) 1054 final https://ec.europa.eu/info/sites/default/files/c2021_1054_en.pdf.

3 United Nations Environmental Programme - UNEP. 2020. *UNEP joins three international organizations in expert panel to improve One Health*. <https://www.unep.org/news-and-stories/story/unep-joins-three-international-organizations-expert-panel-improve-one-health>.

4 European Environment Agency - EEA. 2021. *Nature-based solutions in Europe: Policy, knowledge and practice for climate change adaptation and disaster risk reduction*. Report No 1/2021. Luxembourg: Publications Office of the European Union. <https://www.eea.europa.eu/publications/nature-based-solutions-in-europe>.

2. Analysis of statistical measures by Goal

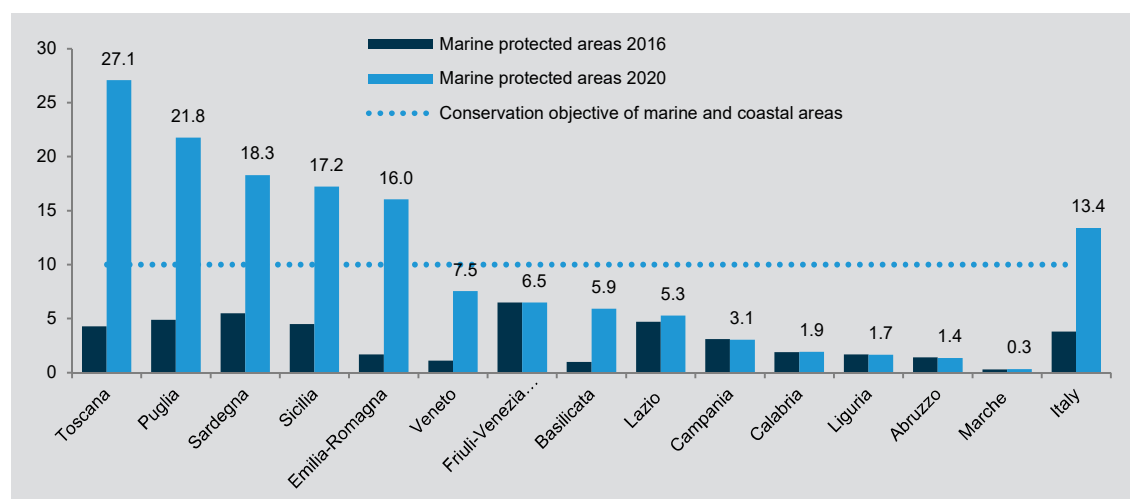
In 2020, marine areas belonging to the Natura 2000 network⁵ covered 13.4% of the sea surface, with a territorial extension of 20,716 km². Sicilia, with the largest surface area of all regions, equal to 6,502 km², and Sardegna (4,101 km², with 44 sites established) owned more than half of the protected areas. Toscana was the region with the highest incidence of protected waters: 27.1% corresponding to 4,426 km², followed by Puglia with 21.8% corresponding to 3,344 km².

In recent years, the surface areas of marine areas belonging to the Natura 2000 Network have greatly increased, following the establishment of new sites, which have more than tripled the total area, from 5,878 in 2018 to 20,716 Km² in 2020. The coverage increased by almost 10 percentage points and complied with the requirements of the European Commission in the infringement procedure (EU-Pilot 8348/16/ENVI), according to which each Member State is required to identify new marine sites, especially for certain species or habitats of particular importance.

In 2020 the sea areas of the Special Protection Areas (SPAs) Tremiti and the Special Areas of Conservation (SPAs/SACs) Litorale di Gallipoli e Isola S. Andrea in Puglia expanded. The share of protected waters increased from 5.2% to 21.8%. In Toscana, the Site of Community Importance (SCI) Protection of Tursiops truncatus, the largest site in the Mediterranean has been established to safeguard marine dolphins. It has an extension of 3,719 km² and increased the share of protected areas in the region from 4.3% to 27.1%. With the creation of new sites, Sardegna tripled as well the extension of its protected marine areas (from 5.5% to 18.3%).

Although Italy has reached 13.4% of protected waters, that is the target of marine and also coastal areas for 2020, the gaps among the 15 Italian regions with coastal territory were significant (Figure 14.1).

Figure 14.1 - Share of marine protected areas of the Natura 2000 Network in the total number of marine areas, by region. Years 2016 and 2020 (percentage values) (a)



Source: Ministry of the Ecological Transition
(a) Molise has no Marine Protected Areas of the Natura 2000 network.

⁵ Natura 2000 Network is an ecological network that includes two types of areas: Sites of Community Importance and Special Protection Areas. Sites of Community Importance are special areas of conservation of natural, semi-natural habitats and of flora and fauna, identified by the Member States in accordance with the “Habitats” Directive 92/43/EEC, which, once the procedure has been completed, will be designated by the Member State as Special Areas of Conservation (SAC), Special Protection Areas have been established in accordance with the “Birds” Directive 79/409/Cee and subsequent Directive 147/2009/Cee.

In compliance with EU directives, 12% of Europe's seas will be protected by 2020⁶, beyond the 10% threshold defined by Aichi⁷ target 11 and SDGs target 14.5.

In 2020, there were 39 protected areas allocated in 10 Italian regions: namely, Friuli (4), Liguria (3), Toscana (2), Lazio (5), Campania (6), Puglia (3), Calabria (1), Abruzzo (1), Sicilia (7) and Sardegna (7), for a total extension of 3,076 Km². They include the marine areas in the Official List of Protected Areas (EUAP) and those designated at national and regional level⁸. Sicilia and Sardegna are the two regions with the highest incidence and territorial extension, respectively 799 Km² and 899 Km².

Between 2003 and 2019, the EUAP and nationally and regionally protected marine areas increased from 2,634 to 3,076 Km² (+16.7%) including two new areas: the largest in Sardegna, called Capo Testa - Punta Falcone (51 Km²), adjacent to the larger marine area of Capo Testa at Isola Rossa (712 Km²), and Capo Milazzo area (5 Km²), in Sicilia, adjacent to the Capo Milazzo Seabed.

The share of coastal bathing waters decreased for the third consecutive year

Bathing waters are areas where the competent authorities expect a sufficient number of people to bathe and where there are no permanent bans⁹. Bathing areas are subject to monitoring, aimed at assessing the "presence of microbiological contamination or other organisms or waste affecting bathing water quality and posing a risk to bathers' health"¹⁰.

Although Italy is close to meet the target of the EU directive, a proportion of waters is still assessed as poor or not classified due to an insufficient monitoring. In 2019, 65.5% of the total length of the Italian coast was bathing. The non-bathing quota included not only coastline with a permanent ban for bathing purposes, because of other uses (ports, military areas, protected or inaccessible areas) and for health protection reasons (heavily polluted areas that cannot be fixed). It included also waters banned (temporary bans) for the whole bathing season, for the presence of contaminants above health risk thresholds or for a preventive measure.

For the third year in a row, the percentage of marine coastal bathing waters showed a slight decrease: one point less than in 2018 (66.5%) and about two points less than in 2016 (67.2%), that was the year with the maximum share in the 2013-2019 period.

6 The 2020 study by the European Environment Agency (EEA) "Spatial Analysis of Marine Protected Area Networks in Europe's Seas II" defined the percentage coverage and extent of marine protected areas (after the exit of the UK) and indicated that protected marine areas amount to 12% of Europe's seas. Data show that European countries are in line to meet the 30% coverage target of the Biodiversity Strategy.

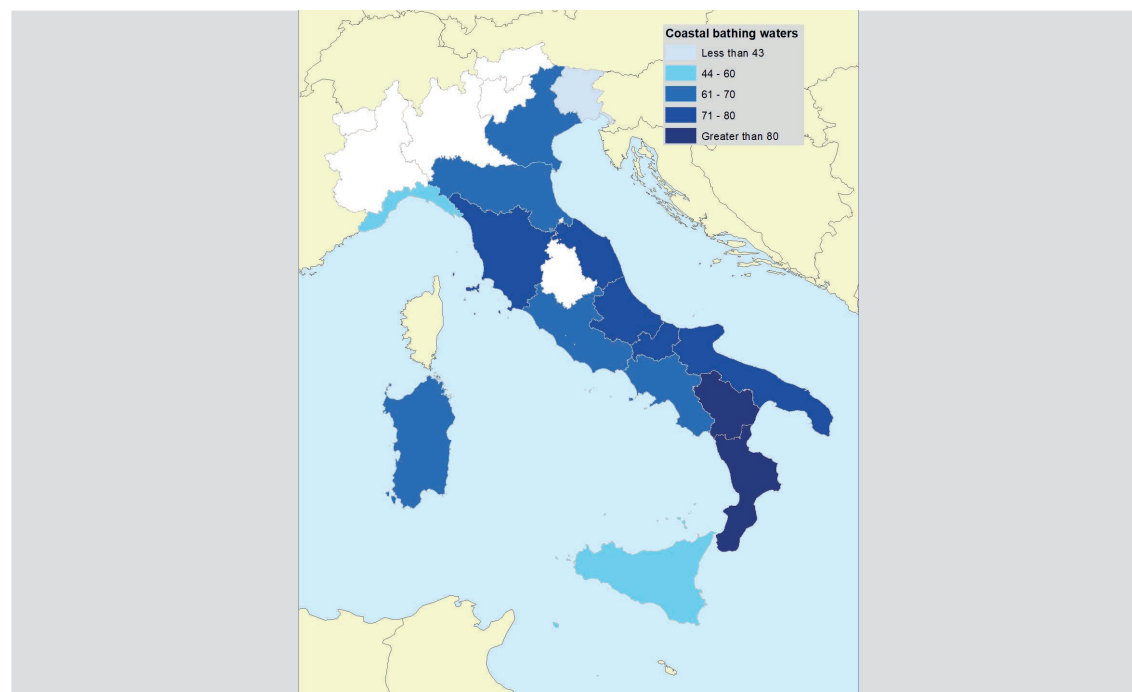
7 Goal 14 includes the targets adopted in 2010 with the COP10, the so-called "Aichi Biodiversity targets", and maintains the deadline at 2020.

8 It includes Marine Protected Areas (MPAs) on the Official List of the European Union (EUAPs), National Parks (NPs), Regional Nature Reserves (RNRs) and Other National Protected Areas (NPAs).

9 Bathing waters are defined according to the "Bathing Water Directive" (Directive 2006/7/EC), implemented by Legislative Decree 116/2008, followed by the Implementation Decree of 30 March 2010, amended by Ministerial Decree of 19 April 2018.

10 The microbiological parameters sought are, according to the current regulation, intestinal enterococci and escherichia coli. The constant observation of other factors of health interest is also foreseen which, although not examined for classification purposes, can determine preventive measures in the event that values considered a health risk are detected.

Figure 14.2 - Coastal Bathing waters. Year 2019 (percentage values)



Source: Istat, processing on Ministry of Health data

At regional level, Basilicata (90.8%) and Calabria (85.3%) had the highest shares of bathing coastline; Friuli-Venezia Giulia (42.2%) and Sicilia (50.8%) were those with greater restrictions (Figure 14.2). Sicilia (from 55.4% to 50.8%) and Abruzzo (from 77.5% to 75.5%) worsened compared to 2018. Campania, Sardegna and Calabria showed a slight increase in the availability of the bathing coast.

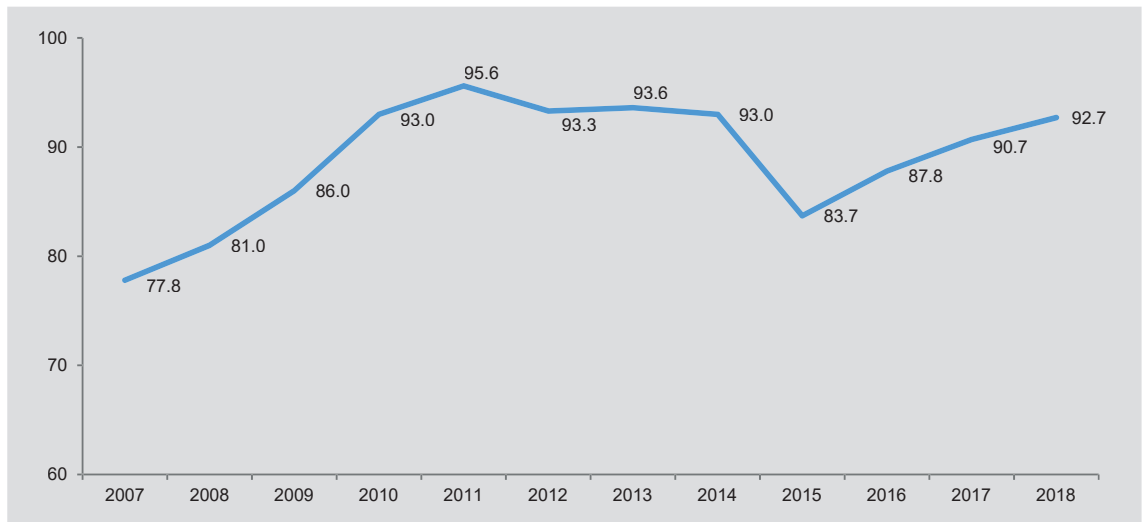
Especially Sicilia had 4,0% of monitored coastline interdicted to bathers for the entire 2019 bathing season, mainly due to pollution phenomena, safety reasons or for the presence of port areas. Calabria also recorded a high percentage of interdicted monitored coasts equal to 3.5%.

Fish stocks suffered from overfishing in the Western Mediterranean Sea

Intensive fishing leads to an overexploitation of fish stocks compared to their regeneration capacity, with negative effects on ecosystems and on the productivity of fisheries-related economic activities. The phenomena induced by climate change, such as acidification¹¹, warming of waters and rising sea levels, have an impact on marine ecosystems too. It exacerbates unsustainable conditions. The exploitation of fish stocks must be within biologically sustainable levels to ensure their reproduction¹² in order to ensure fish regeneration. In the Western Mediterranean Sea, fishing occurred under conditions of overfishing. In 2018, 92.7% of stocks were assessed as overfished, with an increase of two percentage points from the previous year (Figure 14.3).

11 The oceans normally absorb between 25% and 30% of the carbon dioxide released into the atmosphere each year. If the concentration of CO₂ in the atmosphere increases, the chemical balance is altered causing a process known as ocean acidification.

12 https://annuario.isprambiente.it/sys_ind/54

Figure 14.3 - Fish stocks in over exploitation (Western Mediterranean) (a). Year 2019 (percentage values)

Source: Ispra

(a) From 2014 to 2019, the estimate was conducted using total and -stock catches in 2014 as reference values.



GOAL 15

PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS¹

In brief

- The forest coverage in Italy continued to increase (31.7% in 2020), although the global trend, which mainly affects the less developed countries, did not stop.
- The growth of forest areas improves carbon sequestration, but it entails risks of degradation, being connected to the abandonment of inland areas. Moreover, Italy transfers abroad an increasing share of the pressure generated by the domestic demand for wood and wood products (+13.6% of inputs from abroad in the period 2015-2019).
- In 2019, the growth of forest areas certified for the sustainability of production processes continued. However, their extension compared to the area of Italian forests remained very limited (7.6 hectares per 100, against an EU average of 45).
- Soil consumption has slowed down, although not enough to achieve the zero consumption goal by 2030. In 2019, further 51.9 km² of artificial cover (about 14 hectares per day) were added for a total share of artificially sealed surface, equal to 7.1%. Land fragmentation has increased and affected 36.1% of the national territory (almost one percentage point increase respect to 2017).
- In the period 2017-2019, soil sealing increased mostly in Veneto, Lombardia and Puglia, while fragmentation increased mostly in Marche and Sicilia.
- In 2019, in Italy there were more than 650 alien animal and vegetal species. Their presence, that is a threat to biodiversity, is increasing. In 2010-2019, on average, more than 13 new species were detected every year.

The statistical measures released by Istat for Goal 15 are twenty-one and refer to ten UN-IAEG-SDGs indicators (Table 15.1).

¹ This section was edited by Luigi Costanzo.

Table 15.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
15.1.1	Forest area as a proportion of total land area				
	Forest area as a proportion of total land area (FAO-INFC, 2020, percentage values)	Identical	31.7		
	Forest area index (Istat-ISPRA, 2020, percentage values)	National context	37.8		
15.1.2	Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type				
	Average proportion of Terrestrial Key Biodiversity Areas (KBAs) covered by protected areas (BirdLife International, IUCN and UNEP-WCMC, 2019, percentage values)	Identical	77.3		
	Average proportion of Freshwater Key Biodiversity Areas (KBAs) covered by protected areas (BirdLife International, IUCN and UNEP-WCMC, 2019, percentage values)	Identical	84.7		
	Protected natural areas (Istat, 2017, percentage values)	National context	21.6	--	
15.2.1	Progress towards sustainable forest management				
	Forest area net change rate (FAO, 2020, percentage values)	Identical	0.58		
	Above-ground biomass in forest (FAO, 2015, tonne per hectare)	Identical	110.6	(a)	--
	Proportion of forest area within legally established protected areas (FAO, 2020, percentage values)	Identical	35.1		
	Forest area certified under an independent verification scheme (Istat-ISPRA, 2019, thousand hectares)	Identical	903		
15.3.1	Proportion of land that is degraded over total land area				
	Soil sealing from artificial land cover (ISPRA, 2019, percentage values)	Proxy	7.10	(b)	
	Fragmentation of natural and agricultural land (ISPRA, 2019, percentage values)	National context	36.1	--	
15.4.1	Coverage by protected areas of important sites for mountain biodiversity				
	Average Proportion of Mountain Key Biodiversity Areas (KBAs) covered by protected areas (BirdLife International, IUCN and UNEP-WCMC, 2019, percentage values)	Identical	78.1		
15.4.2	Mountain Green Cover Index				
	Mountain Green Cover Index (ISPRA, 2018, percentage values)	Proxy	88.2	(b)	--
15.5.1	Red List Index				
	Proportion of species threatened with extinction, by level of the threat: Vertebrates, terrestrial species (ISPRA, 2013, percentage values)	Proxy	31.2	--	--
	Proportion of species threatened with extinction, by level of the threat: Dragonflies (Odonata) (ISPRA, 2014, percentage values)	Proxy	11.2	--	--
	Proportion of species threatened with extinction, by level of the threat: Saproxyllic Beetles (ISPRA, 2014, percentage values)	Proxy	21.0	--	--
	Proportion of species threatened with extinction, by level of the threat: Butterflies (Lepidoptera Ropalocera) (ISPRA, 2016, percentage values)	Proxy	6.3	--	--
	Proportion of species threatened with extinction, by level of the threat: Bees (IUCN - Italian committee, 2018, percentage values)	Proxy	24.1	--	--
15.7.1 15.c.1	Proportion of traded wildlife that was poached or illicitly trafficked				
	Checks done in application of the CITES (ISPRA, 2016, N.)	Proxy	67,683	(a)	
	Offences detected in application of the CITES (ISPRA, 2018, N.)	Proxy	992	(a)	
15.8.1	Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species				
	Spreading of alien animal and vegetal species (ISPRA, 2019, N.)	National context	659		

Legend

- IMPROVEMENT
- STABILITY
- DETERIORATION
- NOT AVAILABLE / NOT SIGNIFICANT

Notes

- (a) Variation compared to 2010
- (b) Variation compared to 2012

In the world deforestation did not stop. Italy went opposite to the global trend

In the period 2015-2020, although at a global level the negative trend of the previous five years continued, the forest coverage in Italy increased by almost one percentage point (from 30.8% to 31.7%), more than in any other EU country. The inclusion of the “other wooded land” with a less dense tree cover² increased the share to 37.8%.

Forests have constantly grown although certified forest areas were still few

Although indicators about the sustainable management of forests show positive signals, some caution is needed in the Italian context. Between 2015 and 2020, the growth rate of forest areas has remained nearly unchanged compared to the previous five-year period (nearly 0.6% per year). Moreover, Italian forests have grown faster in the last twenty years (Figure 15.1) and were richer in biomass (110.6 respect to 86 tonnes per hectare)³ than the average of Southern Europe. Finally, in Italy, the share of forest areas covered by the system of protected areas was among the largest in the EU (35.1%) and well above the average of Developed regions (7.5%) (Figure 15.2).

The growth of forest areas have significant benefits, primarily for carbon sequestration⁴, although it does not grant the good health of woodland ecosystems, and is only partially related to the management and protection policies. In Italy, the forest growth is related to the abandonment of traditional agricultural and forestry practices caused by the depopulation of inland areas and left vast land areas to spontaneous renaturation (not necessarily positive for the environment). Moreover, the low exploitation of forest resources transfers abroad a large part of the environmental pressure generated by our economic system. Thus, in the period 2015-2019, Italy imported 12.2 million tonnes of timber per year (+13.6% over the whole period) compared to a domestic timber production of 4.1 million tonnes, (+0.9% substantially stable over the whole period)⁵.

2 According to the definitions adopted by FAO for the Global Forest Resources Assessment, *forest* must have more than 10% of tree cover, while *other wooded land*, considered in the Forest area index, must have from 5 to 10% of tree cover, or more than 10% of mixed cover. For both categories, the minimum size is 0.5 hectares.

3 2015 data (Source: FAO, Global Forest Resources Assessment). Value referring to the epigeous plant biomass (all organic matter living above the forest soil), which is the main forest reservoir for absorbing carbon (carbon stock). Biomass density is associated with the renewal capacity and ecological functionality of forests.

4 FAO estimates for Italy indicate a 5% increase in carbon absorption capacity over the 2010-2020 decade. The trend is also positive for the balance between emissions and removals of GHGs (carbon sink) of Italian forests, increasing by about 3% between 2009-2013 and 2014-2018 (comparison between period averages; Istat processing on ISPRA data).

5 Istat, Material flow accounts. On low wood removal in Italy, see also National Rural Network - NRN 2014-2020. 2020. The state of Italian forests. Rome: RRN. <https://www.reterurale.it/flex/cm/pages/ServeBLOB.php/L/IT/IDPagina/21600>.

Figure 15.1 - Forest area net growth rate. Years 2000-2020 (percentage values)

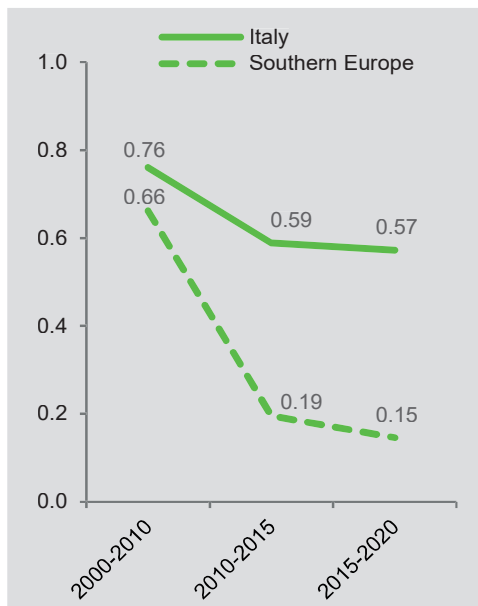
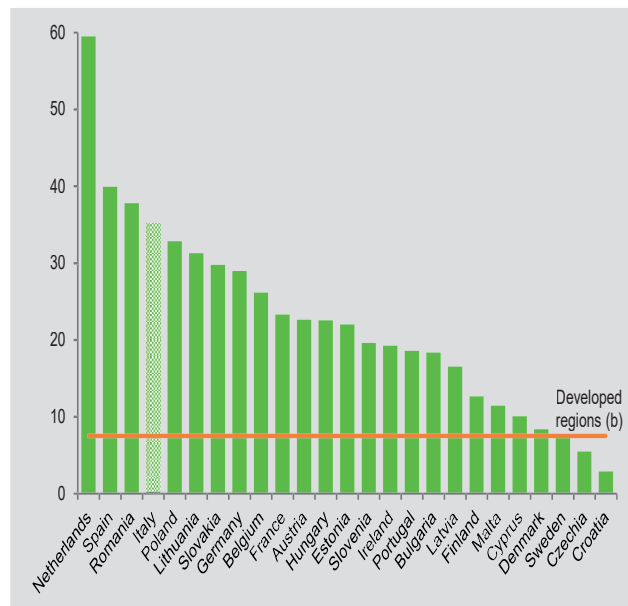


Figure 15.2 - Proportion of forest area within legally established protected areas in EU countries and Developed regions. Year 2020 (a) (percentage values)



Source: FAO (Italy: Istat, processing on FAO data)
 (a) Year 2015 for Belgium and Portugal, year 2016 for Spain, data not available for Greece and Luxembourg.
 (b) Europe (including the Russian Federation), Israel, the United States, Canada, Japan, Australia and New Zealand.

Figure 15.3 - Forest area certified under an independent certification scheme. Years 2010-2019 (thousand hectares)

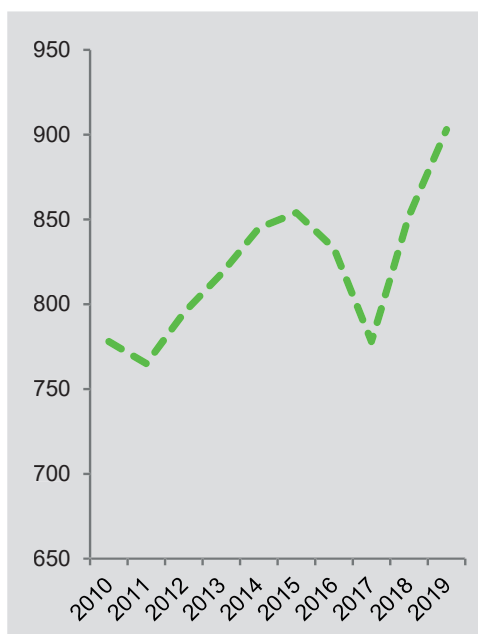
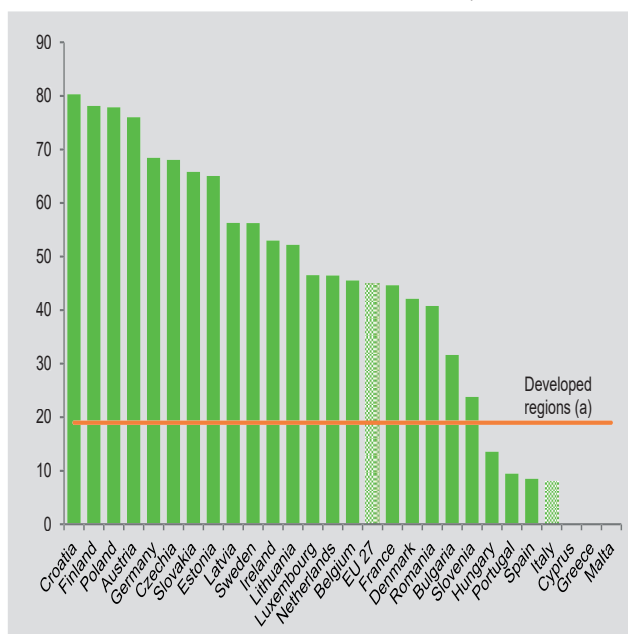


Figure 15.4 - Forest area certified under an independent certification scheme in EU countries and Developed regions. Year 2019 (hectares per 100 hectares of forest area and other wooded land)



Source: Istat, processing on FSC Secretariat, PEFC Secretariat and FAO data (Italy: Istat-ISPRA, processing on FSC-Italy and PEFC-Italy data).
 (a) Europe (including Russian Federation), Israel, United States, Canada, Japan, Australia and New Zealand.

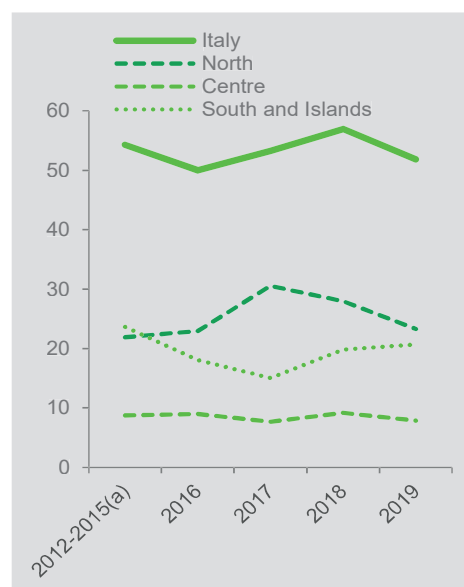
2. Analysis of statistical measures by Goal

The picture on sustainable forest management is completed by forest certification data⁶. In Italy, in 2019, certified forest areas for sustainable management increased for the second year in a row (+17.2% from 2017), recovering the decline of the previous two years (Figure 15.3). Nevertheless, the proportion of certified areas on the total woodland area was lower (7.6 per 100 hectares) than the average values of the EU (45.0) and Developed regions (19.0) (Figure 15.4).

Soil consumption slowed down but land fragmentation increased

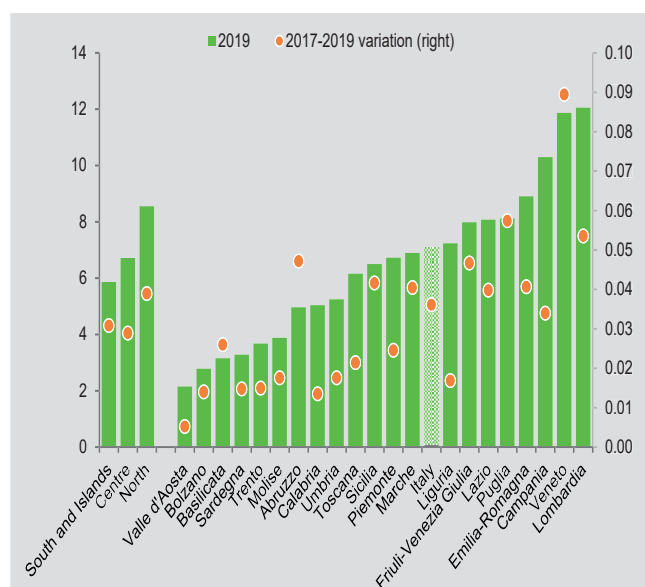
Land degradation, intended as loss of ecological functionality, is monitored through the dynamics of soil consumption, that Italy has committed to reduce to zero by 2030 through the National Strategy for Sustainable Development (2017). The soil is “consumed” when occupied by urbanization, and made impervious to water by artificial coverages (soil sealing)⁷. Also an excessive fragmentation of open spaces is a factor of degradation, since the barriers made by buildings and infrastructures break the spatial continuity of ecosystems. In this case unoccupied spaces not large enough are turned into ecologically inert and unproductive land. Moreover, in a fragile territory like Italy’s, soil consumption is also a relevant factor of hydrogeological risk and landscape degradation.

Figure 15.5 - Soil sealed by artificial land cover, by geographical area. Years 2012-2019 (km²)



Source: Istat, processing on ISPRA data
(a) Annual average.

Figure 15.6 - Soil sealing from artificial land cover, by region and geographical area. Year 2019 and 2017-2019 variation (percentage values and variation in percentage points)

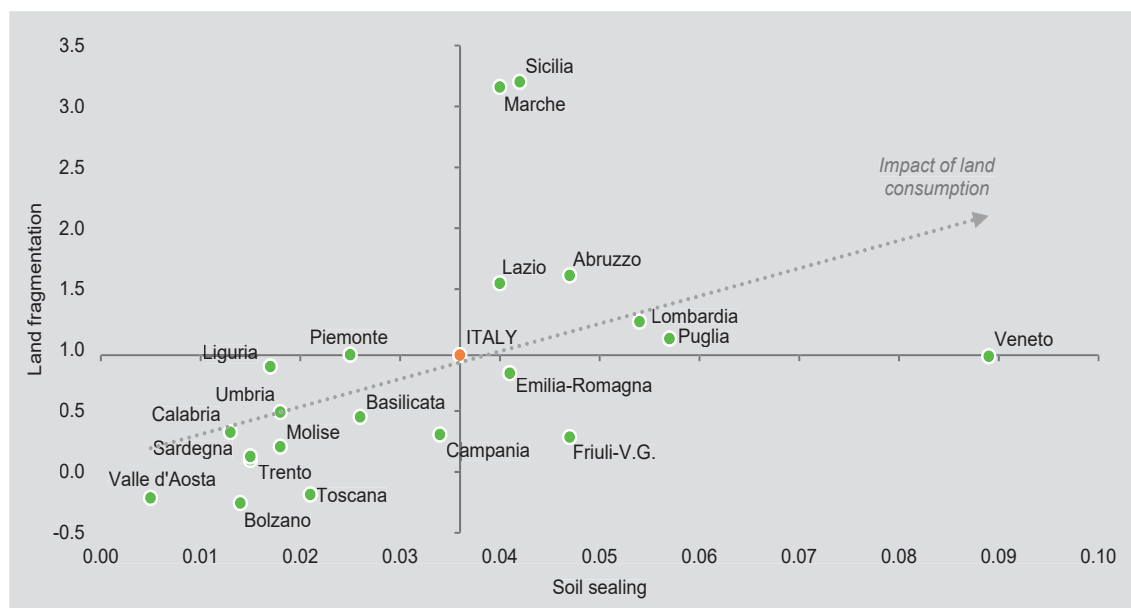


- 6 Forest certification is a voluntary procedure, through which forestry sector’s companies can obtain from accredited bodies the certification of the compliance of their production processes with the standards of environmental protection, social equity and economic efficiency. The two certification bodies in Italy require different schemes: the Programme for Endorsement of Forest Certification schemes (PEFC) and the Forest Stewardship Council (FSC).
- 7 Built-up, asphalted or paved surfaces prevent the underlying soil from performing its natural functions (production of plant biomass, carbon sequestration, regulation of climate and the cycles of water and other elements essential to life, such as phosphorus and nitrogen). Soil is also an important reservoir of biodiversity.

In 2019, the soil sealed by artificial coverage was 7.1% of the national territory (8.6% in the North, 6.7% in the Centre, 5.9% in South and Islands)⁸. In the last year soil sealed by artificial coverage was equal to 51.9 km² (about +14 hectares per day), a value significantly lower than the average of the period 2016-2018 (equal to 53.4 km²). Nevertheless, the goal of zero soil consumption is far from being achieved. Especially in Lombardia and Veneto the situation is concerning, because those region recorded the highest shares of soil sealed (around 12%) and recorded, along with Puglia, the largest increases in the last two years (Figures 15.5 and 15.6).

According to ISPRA estimates, 36.1% of the Italian territory (39.9% in the North, 35.5% in the Centre, 32.7% in South and Islands) shows a high or very high degree of fragmentation⁹. Fragmentation has increased by almost 1 percentage point since 2017, but by more than 3 points in Marche and Sicilia. A joint representation of the changes in fragmentation and soil sealing over the last two years summarizes recent trends in soil consumption and their impact on the environment and landscape (Figure 15.7). The most concerning situations are not related only to the regions mentioned above. Also Lazio and Abruzzo showed increases above the Italian average for both indicators.

Figure 15.7 - Fragmentation of natural and agricultural land and soil sealing from artificial land cover, by region. Years 2017-2019 (variation in percentage points)



Source: Istat, processing on ISPRA data

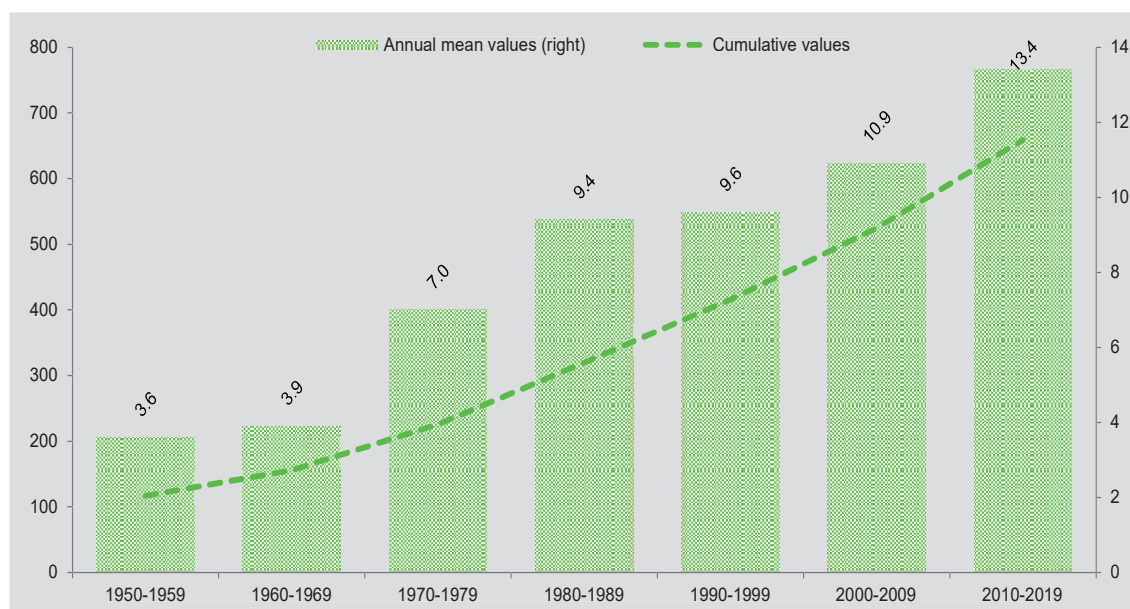
8 Munafò, M. (ed.). 2020. Consumo di suolo, dinamiche territoriali e servizi ecosistemici. Edizione 2020. Rome: SNPA. <https://www.snpambiente.it/2020/07/22/consumo-di-suolo-dinamiche-territoriali-e-servizi-ecosistemici-edizione-2020/>.

9 Munafò, M. (ed.). 2020. Consumo di suolo, dinamiche territoriali e servizi ecosistemici. Edizione 2020. Rome: SNPA. <https://www.snpambiente.it/2020/07/22/consumo-di-suolo-dinamiche-territoriali-e-servizi-ecosistemici-edizione-2020/>.

Invasive alien species have still increased

Another threat to biodiversity comes from the spread of invasive alien species that is related to the intensification of international trade and tourism. Invasive species imbalance ecosystems in which they settle and may extinguish native species. The recent update of the ISPRA database of alien species (2021) confirms, for the decade 2010-2019, a further acceleration in the spread of alien species in our country. In Italy there were 659 plant and animal species introduced either intentionally or accidentally by man since 1900 (more than half of which appeared after 1990)¹⁰. In the last decade, the number of alien animal and vegetal species in Italy has increased more than 13 units per year (Figure 15.8).

Figure 15.8 - Spreading of alien animal and vegetal species, by period of introduction (a). Years 1950-2019 (cumulative absolute values and annual averages)



Source: ISPRA.

(a) Only the species for which the year of introduction is known are considered.

¹⁰ The data refer only to species for which the year of introduction is known, and therefore provide an underestimation.



GOAL 16

PROMOTE PEACEFUL AND INCLUSIVE SOCIETIES FOR SUSTAINABLE DEVELOPMENT; MAKE ACCESS TO JUSTICE AVAILABLE TO ALL AND CREATE EFFECTIVE, ACCOUNTABLE AND INCLUSIVE BODIES AT ALL LEVELS¹

In brief

- In 2019, in Italy 345 voluntary homicides were committed in Italy, corresponding to 0.5 per 100,000 inhabitants. The homicide rate decreased significantly.
- At 31 December 2020, there were 8,685 pre-trial detainees, equal to 16.3% of the prison population. A decrease in the number of pre-trial detainees was matched by a larger incidence on the total number of detainees. In 2020, the crowding index of adult penitentiary institutions decreased significantly compared to the previous year, due to the measures adopted to prevent the spread of Covid-19 in prisons. Data showed a reduction in the number of inmates per 100 available places, from 119.9 to 105.5
- In 2020, the duration of civil proceedings in ordinary courts decreased marginally compared to the previous year (from 421 to 419 days), slowing down the reduction process that characterised the years from 2012 to 2019 (61 days).
- In 2020, the percentage of households complaining of difficulties in reaching at least three essential services diminished slightly (from 6.9% to 6.1%).

The statistical measures released by Istat for Goal 16 are eighteen and refer to nine UN-IAEG-SDGs indicators. (Table 16.1).

¹ This section was edited by Alberto Violante with contributions by Giovanna Tagliacozzo, Barbara Baldazzi, Maria Giuseppina Muratore and Franco Turetta.

Table 16.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators, last available value and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous years
16.1.1	Number of victims of intentional homicide per 100,000 population, by sex and age				
	Intentional homicide rate (Ministry of the Interior, 2019, per 100,000 inhabitants)	Identical	0.5		
16.1.3	Proportion of population subjected to (a) physical violence, (b) psychological violence and (c) sexual violence in the previous 12 months				
	Proportion of persons victims of robbery in the previous 12 months (Istat, 2015/16, percentage values)	Partial	0.2	--	--
	Proportion of persons victims of physical assault in the previous 12 months (Istat, 2015/16, percentage values)	Partial	1.2	--	--
16.1.4	Proportion of population that feel safe walking alone around the area they live				
	Perception of safety walking alone in the dark (Istat, 2020, percentage values)	Identical	61.6		
16.2.3	Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18				
	Proportion of persons aged 18-29 years who experienced sexual violence by age 18 (Istat, 2015/16, percentage values)	Identical	Women 4.1 Men 0.7	--	--
16.3.1	Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms				
	Reporting rate of victims of physical assault for population aged 14-65 years old (Istat, 2015/16, percentage values)	Partial	27.0	--	--
16.3.2	Unsentenced detainees as a proportion of overall prison population				
	Unsentenced detainees as a proportion of overall prison population (Ministry of Justice - Department of Prison administration, 2020, percentage values)	Identical	16.3		
	Juveniles unsentenced detainees as a proportion of overall prison population (Ministry of Justice - Department of Prison administration, 2018, percentage values)	Identical	72.8	(a)	
	Prison density (Istat, processing of data from Ministry of Justice- Department of Prison administration, 2020, percentage values)	National Context	105.5		
16.5.1	Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months				
	Households who have received requests for money, gifts or favours in exchange of facilitations or services in the previous twelve months (Istat, 2015/16, percentage values)	Proxy	1.2	--	--
	Households who have received requests for money, gifts or favours in exchange of facilitations or services in the previous three years (Istat, 2015/16, percentage values)	Proxy	1.7	--	--
	Households who have received requests for money, gifts or favours in exchange of facilitations or services during the life (Istat, 2015/16, percentage values)	Proxy	7.9	--	--
16.6.2	Proportion of population satisfied with their last experience of public services				
	Trust in judicial system (Istat, 2020, mean score)	Partial	4.8	(b)	
	Trust in police and fire brigade (Istat, 2020, mean score)	Partial	7.5	(c)	
	Composite index of service accessibility (Istat, 2018-2020, percentage values)	Partial	6.2	(d)	
	Length of civil proceedings (Ministry of Justice - Judicial organization department, 2020, number of days)	National Context	419	(c)	
16.7.1	Proportions of positions in national and local institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary, compared to national distributions, by sex, age, persons with disabilities and population groups				
	Women and political representation in Parliament (Istat, processing of data from Chamber of Deputies and Senate, 2018, percentage values)	Identical	35.4	(f)	
	Youth and political representation in Parliament (Istat, processing of data from Chamber of Deputies and Senate, 2018, percentage values)	Identical	42.2	--	--

Legenda

	IMPROVEMENT
	STABILITY
	DETERIORATION
--	NOT AVAILABLE / NOT SIGNIFICANT

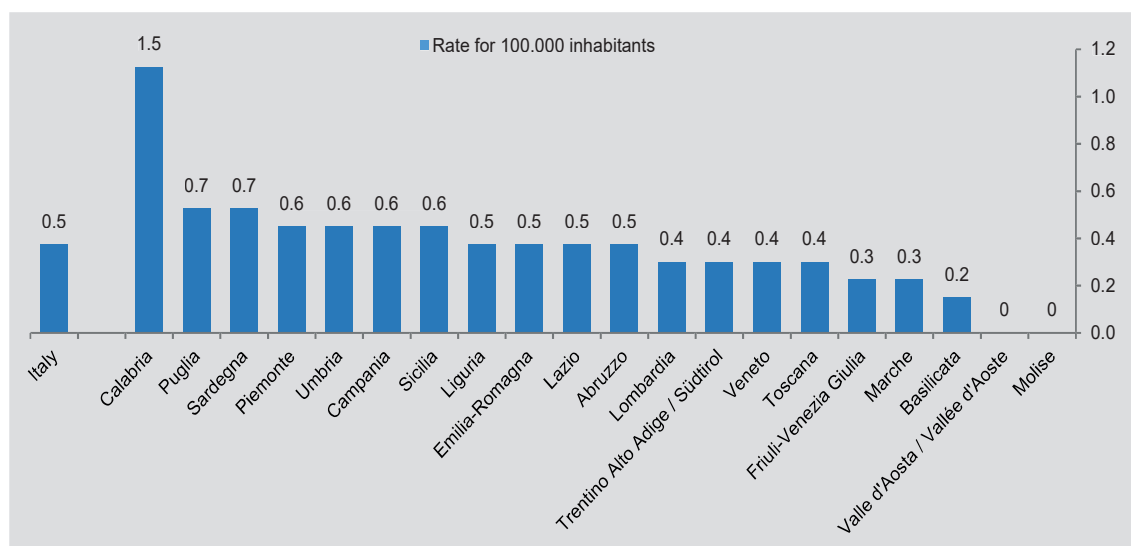
Notes

- (a) Variation compared to 2013
(b) Variation compared to 2011
(c) Variation compared to 2012
(d) Variation compared to 2008-2010 average
(e) Variation compared to 2017-2018 average
(f) Variation compared to 2008
(g) Variation compared to 2014

Intentional Homicides recorded a further reduction

In 2019, in Italy there were 345 intentional homicides (0.5 per 100,000 population). From 2018 to 2019 homicide rate has reduced by 13 homicides. The fall concentrated in the South, that had the highest rate of homicides per 100,000 inhabitants. In 2019, 52% of homicides were committed in the South and the Islands: namely 29 in Campania, 26 in Calabria, 21 in Sicilia and 20 in Puglia. Calabria recorded the highest value of homicide rate, with 1.5 homicides per 100,000 inhabitants. In Calabria the downward trend interrupted with rates even higher than in 2015. The other regions of the South and Islands area, stood at rates around 0.6-0.7 per 100,000 inhabitants, with the exception of Basilicata and Molise, which were below the national average (Figure 16.1).

Figure 16.1 - Intentional Homicide rate, by region. Year 2019 (per 100,000 inhabitants)



Source: Ministry of the Interior

In 2019, victims per 100,000 inhabitants were more often males (0.7) than females (0.4). Homicides of men were perpetrated mainly in the South, because of crimes due to mafia-type criminal associations were more intense. In 2019, the Database of the Central Directorate of Criminal Police classified more than 10% of homicides of men as mafia-type. It has not detected any homicides for terrorist purposes. Homicides of women, which occur mainly in the domestic environment, did not show a prevalent geographical location.

The largest contribution to the fall in homicide's prevalence in 2019 came from the population between the ages of 18 and 24 years, among whom the rate of the crime of voluntary manslaughter halved, from 0.8 to 0.4 per 100,000 population².

² For more details, see Istat. 2021. "Perpetrators and victims of homicide. Years 2018-2019." Statistics Report. Rome: Istat. <https://www.istat.it/en/archivio/254589>.

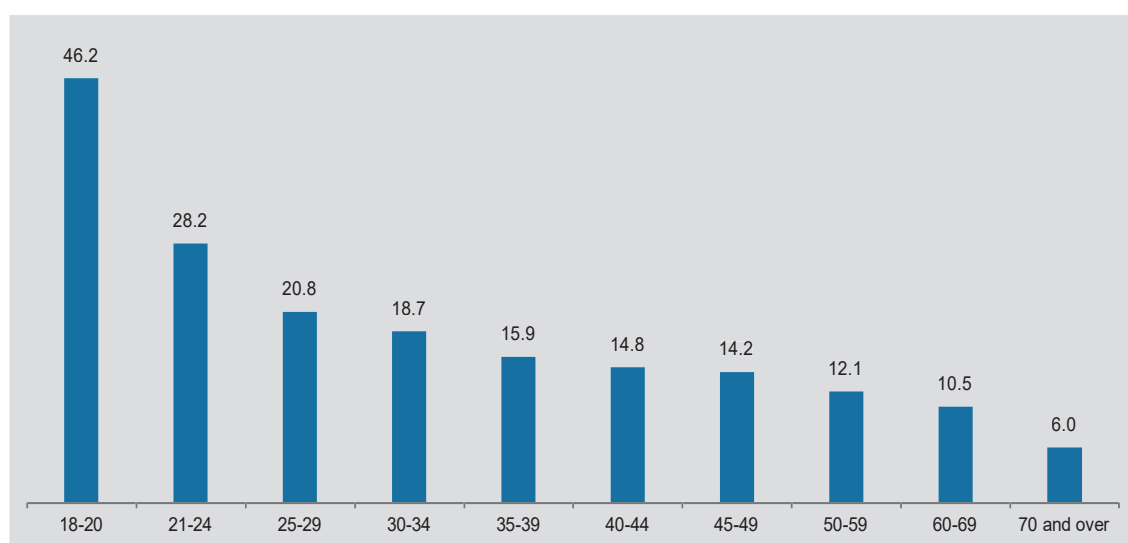
Prisoners with a conviction decreased slightly

As of 31 December 2020, the Ministry of Justice recorded 53,364 people detained in adult correctional institutions (in 2019 they were 60,769), of whom 51,109 were men and 2,255 were women. There were 8,685 inmates awaiting first trial, equal to 16.3% of the whole convicted population, which is marginally higher than in 2019.

The overall decrease in the number of detainees (-12.1%) was due to a wider implementation of some measures, already included in the Penal code, such as home detention and deferment of the sentence, that were amended to prevent the spread of Covid-19 in prisons³.

The incidence of pre-trial detainees was higher among young detainees. They recorded a lower benefit than the other detainees from the emergency measures, since they are often reserved to final convicts and to detainees in poor health conditions. 46.2% of 18-20 year old detainees were unsentenced, compared to 39.4% in the previous year (Figure 16.2).

Figure 16.2 - Unsentenced detainees as a proportion of overall prison population, by age class. Year 2020 (percentage values)



Source: Ministry of Justice - Department of Prison administration

In 2020, thanks to the decrease in the number of inmates, the prison density index (calculated as the number of inmates per 100 regulatory places) dropped to 105.5 (it was 119.9 in 2019), but still indicated overcrowded conditions.

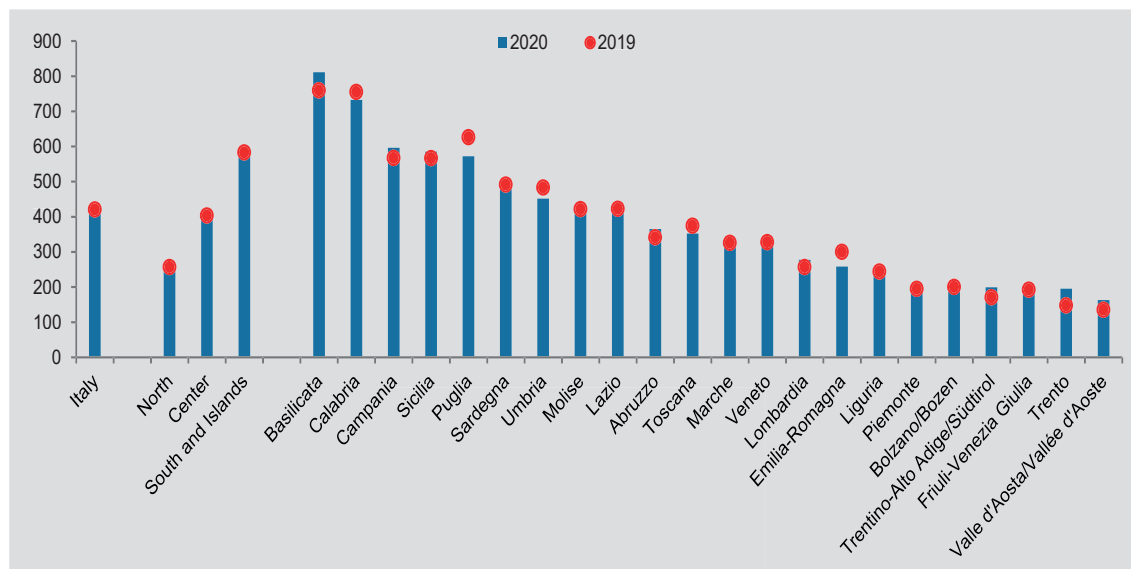
Decrease in the duration of trials stopped. Accessibility to services improved

The pandemic has slowed the process of reducing the length to complete civil proceedings by ordinary courts. The average trial duration in 2020 was 419 days, two days less than the previous year (Figure 16.3). Days decreased from 2014 (505 days).

³ Decree-Law 28 of 30/04/2020 and Decree-Law 29 of 10/05/2020.

In 2020 regional disparities remained deep. Basilicata (765 days) and Calabria (760 days) recorded the longest durations. The judicial districts of Emilia-Romagna and Puglia shortened significantly the average duration of trials (by 13 and 8 days respectively) even in presence of administrative structure activities slowdowns due to the restrictions imposed by the pandemic crisis.

Figure 16.3 - Length of civil proceedings, by region. Years 2019 and 2020 (number of days)



Source: Ministry of Justice

In 2019, the share of households complaining of difficulties in reaching at least three essential services decreased slightly, from 6.9 in 2018 to 6.1%. Essential services were identified among pharmacies, emergency rooms, post offices, police, municipal offices, kindergarten, nursery schools, primary schools, junior high schools, grocery stores, markets, supermarkets.



GOAL 17

STRENGTHENING MEANS OF IMPLEMENTATION AND RENEWING THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT¹



In brief

- In 2020, government revenues amounted to 43.1% of GDP with an increase of 1.5% compared to 2019 and 4% compared to 2010. The increase in the last year was due to several factors such as the fall of GDP at current prices (-7.8%), the increase of direct taxes revenues (+6.1%) and a simultaneous reduction for indirect taxes revenues (-3.7%).
- In 2019, the ratio of Official Development Assistance (ODA) to gross national income (GNI) was 0.22%, 0.03 percentage points compared to 2018. Indeed the ratio of ODA to GNI allocated to Least Developed Countries (LDCs) remained unchanged from previous years. Italy still remained far from achieving the targets set by the 2030 Agenda.
- In 2020, foreign workers' remittances in Italy amounted to about 6.7 billion euro with a growth of 12.5% compared to 2019. During 2010-2020, the average outflow of remittances was 0.36% of GDP and reached 0.41% in 2020.
- In 2020, the percentage of households with fixed and/or mobile broadband was 77.8% (+3.1 percentage points compared to 2019 and +34.4 compared to 2010). Regular Internet users (aged 6 years and over) were about 70%. In 2020, distance learning led to a significant increase of Internet users among the very young age classes (6-10 year old increased of 11.5 percentage points compared to 2019 and of 35.9 points compared to 2010). Among regular Internet users, the 16-74 age class 31.4% ordered goods or services online (+3.3 percentage points compared to 2019 and +22.2 p.p. compared to 2010) and almost 40% made banking transactions or searched for account information (Internet banking).

The statistical measures disseminated by Istat for Goal 17 are nine and refer to five UN-IAEG-SDGs indicators (Table 17.1).

¹ This section was edited by Carmen Federica Conte with contributions by Maria Liviana Mattonetti, Laura Zannella.

Table 17.1 - Statistical measures released by Istat, taxonomy compared to SDGs indicators and variations compared to 10 years before and to the previous year

Ref. SDG	INDICATOR	Compared to SDG indicator	Value	VARIATIONS	
				Compared to 10 years before	Compared to the previous year
17.1.2	Total government revenue as a proportion of GDP, by source				
	Total government revenue as a proportion of GDP, by source (Istat, 2020, percentage values)	Proxy	43.1	--	--
17.2.1	Net official development assistance, total and to least developed countries, as a proportion of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors' gross national income (GNI)				
	Official Development Assistance as a proportion of gross national income (Ministry of Foreign Affairs and International Cooperation, 2019, percentage values)	Identical	0.22	 (a)	
	Official Development Assistance to Least Developed Countries as a proportion of gross national income (Ministry of Foreign Affairs and International Cooperation, 2018, percentage values)	Identical	0.06	 (a)	
17.3.2	Volume of remittances (in United States dollars) as a proportion of Total GDP				
	Foreign workers' remittances (Istat processing on Bank of Italy data, 2020, Millions of Euros)	Proxy	6766		
	Foreign workers' remittances (Istat processing on Bank of Italy data, 2020, percentage values)	Proxy	(*)	--	--
17.6.2	Fixed Internet broadband subscriptions per 100 inhabitants, by speed				
	Households with fixed and/or mobile broadband connection (Istat, 2020, percentage values)	Proxy	77.8		
17.8.1	Proportion of individuals using the Internet				
	Individuals aged 6 years and over who used the Internet in the last 3 months (Istat, 2020, percentage values)	Identical	70.5		
	People who have ordered/purchased goods or services for private use on the internet in the last 3 months (Istat, 2020, percentage values)	National context	31.4		
	People who have carried out online banking transactions (internet banking) in the last 3 months (Istat, 2020, percentage values)	National context	39.5		
Legend		Notes			
	IMPROVEMENT	(a) Variation compared to 2013			
	STABILITY	(*) Please refer to the table on www.istat.it			
	DETERIORATION				
--	NOT AVAILABLE / NOT SIGNIFICANT				

The ratio of general government tax revenues to GDP continued to increase in 2020

The intensity and quality of the tax collection system is a fundamental element to ensure a balanced economic development and to favour a fair redistribution. In 2019, the EU27 area recorded an intensity of tax revenues of the government on GDP equal to 41.1%, essentially stable compared to 2018. France (47.4%), Denmark (46.9%), Belgium (45.9%) and Sweden (43.7%) were the countries with the highest tax revenue to GDP ratio. Bulgaria (30.3%), Romania (26.8%) and Ireland (22.7%) were the countries with the lowest tax intensity.

In 2020 in Italy the tax revenue to GDP ratio was 43.1% (+1.5 percentage points compared to 2019 and +4 percentage points compared to 2010). The increase in the last year was due to several factors. On the one hand, the GDP reduction at current prices (-7.8% compared to 2019), on the other hand, a revenue dynamic that showed an increase in direct taxes revenues (+6.1%)² and a simultaneous reduction in indirect taxes revenues (-3.7%)³. In 2020, there was also a marked increase in contribution revenues (+2.2% for actual social contributions and +13.8% for imputed social contributions)⁴. The downward trend in capital tax revenues (-17% compared to 2019) that started in 2016⁵ was confirmed for 2020.

Official Development Assistance to gross national income declined

The 2030 Agenda sets specific targets for total Official Development Assistance (0.7% of gross national income) and for ODA directed to LDCs (between 0.15% and 0.20% of gross national income). In 2019, globally, net ODA flows from OECD Development Assistance Committee (DAC) member countries were approximately 147.4 billion USD, essentially unchanged from 2018. Net bilateral aid to Africa and LDCs increased in real terms by 1.3% (37 billion) and 2.6% (33 billion) compared to 2018⁶. Among EU27 countries, Luxembourg, Norway and Sweden recorded a total net ODA to GNI ratio above the Agenda 2030 target in 2019, conversely most EU countries were still below the target. (Figure 17.1)

In 2019, Italy recorded a share of total ODA to GNI of 0.22%, a reduction of 0.03 percentage points compared to 2018 and 0.08 points compared to 2017, the year that recorded the highest value (0.30%) in the last seven years.

In 2018, Luxembourg (0.46%), Sweden (0.34%), Norway (0.27%) and the United Kingdom (0.23%) marked values higher than the Agenda's commitment of the share of ODA allocated to LDCs. Conversely, Denmark (0.20%) and the Netherlands (0.15%) were within the target range. In 2018, Italy recorded an ODA flow for LDCs relative to GNI of 0.06%, essentially unchanged from previous years.

2 The positive variance of direct taxes is the result of higher IRPEF revenues and an improved performance of withholding and self-assessment taxes. Revenues from self-assessment of IRES also showed a positive difference, sustained by higher payments recorded on the occasion of the second advance payment.

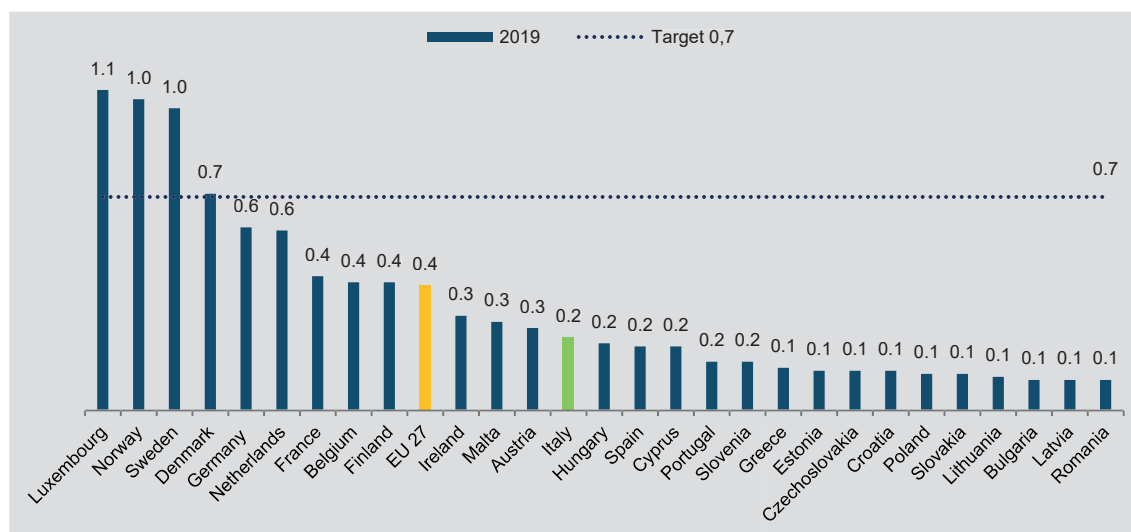
3 The negative variance in indirect taxes is mainly related to lower revenues from gaming activities and VAT (both the domestic trade and import components), only partially mitigated by higher revenues from stamp duty.

4 Contribution revenues were higher than estimated. A significant contribution to this result was made by the recording on an accrual basis in 2020 - in accordance with the registration criteria of the National Accounts - of the social contributions subject to the measures to suspend and postpone the payment of the amounts due for the years 2021 and 2022, provided for by the various legislative measures.

5 The lower revenue from capital taxes is mainly due to lower EU inflows.

6 <https://unstats.un.org/sdgs/report/2020/goal-17/>.

Figure 17.1 - Total ODA, by country. Year 2019 (percentage of gross national income)

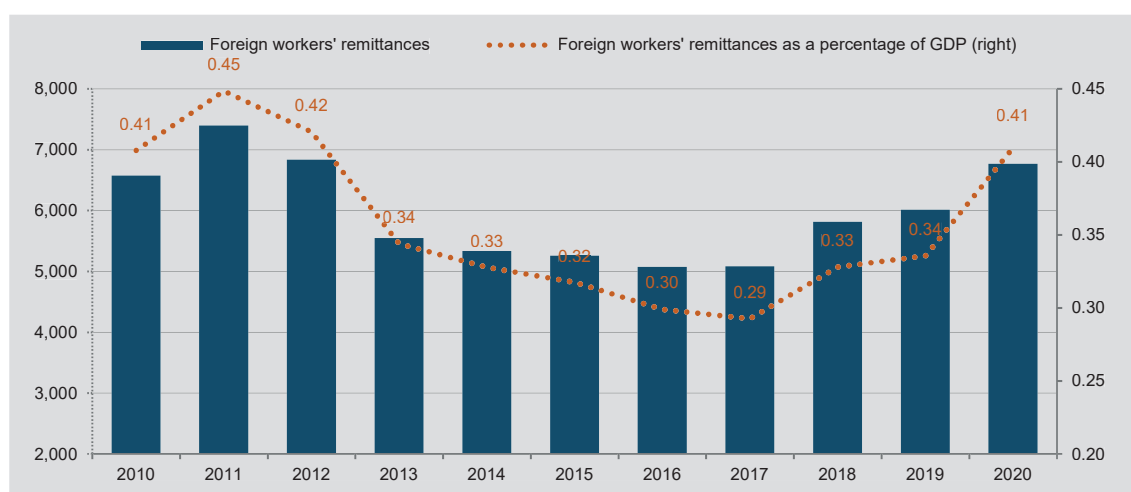


Source: Eurostat

In 2020, the flow of foreign workers' remittances increased

Remittances represent that part of income saved by a foreign worker and sent to the country of origin. In 2020, foreign workers' remittances in Italy amounted to approximately 6.7 billion euro with an increase compared to the last year of 12.5%. This trend might come from the policy measures for pandemic mitigation that imposed mobility restrictions to the countries of origin⁷. In the 2010-2020 period, the average flow of remittances was equal to 0.36% of GDP, reaching 0.41% in 2020 (Figure 17.2).

Figure 17.2 - Foreign workers' remittances and percentage of remittances on GDP. Years 2010-2020 (million euro current prices, percentage values)



Source: Istat, processing on Bank of Italy data

⁷ Outgoing remittances, yearly estimated from specialised operators transfers, do not represent the only channel of transfer for foreign workers. Some studies estimated that the amount of outgoing remittances from Italy through so-called informal channels (i.e. travellers or trusted persons who deliver money directly to families of origin) could represent between 10 and 30% of total flows. See Croce A., Oddo G., 2020, "Il saldo delle rimesse dell'Italia: alcuni appunti per una corretta lettura delle statistiche". *Metodo e fonti: approfondimenti*, Banca d'Italia.

However, the total amount of remittances was still below the maximum level recorded in 2011 (7.4 billion euro)⁸. In 2020 another significant increase was recorded (+12.5% compared to 2019, respect to +3.5% of 2019 compared to 2018).

The amount of remittances, which is related to the foreign residents, was higher in Lombardia, Lazio and Emilia-Romagna. In 2020, the annual growth of outgoing remittances was highest in Umbria, Emilia-Romagna and Campania (25.6%, 24.3% and 22.3% respectively).

In 2020 Bangladesh was the primary country of destination of Italian remittances since it recorded a share of 10.5% of the total remittances, followed by Romania, the Philippines, Pakistan and Morocco (respectively 8.9%, 6.6%, 6.5% and 6.3%). In 2020, outflows increased significantly towards Nigeria (+118.9%), Ukraine (+71.7%) and Moldova (+40.7%), conversely flows towards Bangladesh (-13%), Brazil (-9.1%), France (-7.6) and Poland (-7.1%) decreased.

Digitisation: the new challenge for Italy

The Covid-19 pandemic and the subsequent economic crisis pushed the European Union to formulate a coordinated response across countries through the implementation of the Next Generation EU (NGEU)⁹ programme with the aim of promoting sustainable and equitable recovery.

With the adoption of the National Recovery and Resilience Plan (NRRP), Italy identifies digital transition as one of the three strategic axes for economic recovery. The objective is to improve digital performance as summarised by the Digital Economy and Society Index (DESI)¹⁰. In 2019, Italy ranked at the 24th position out of the twenty-seven EU Member States, showing an overall delay, more accentuated with reference to the human capital dimension (Figure 17.3).

The statistical measures adopted for Italy for digitisation and included in some Goals are also used for the calculation of the DESI Index¹¹.

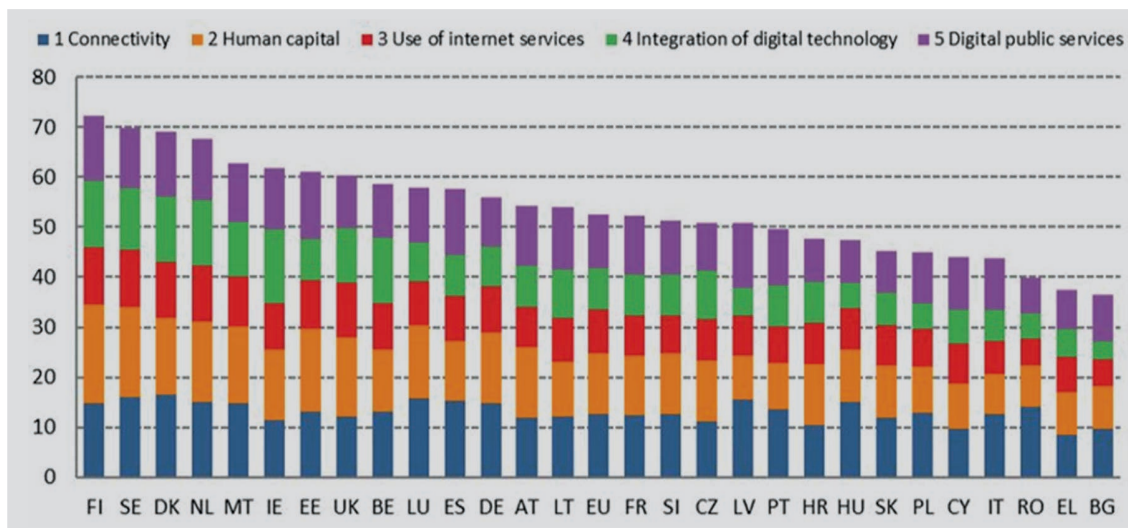
8 The increase in remittances recorded in 2018 is also related to regulatory amendments involving money transfer institutions that turned data provision from voluntary to mandatory to the sector operators.

9 The NGEU programme includes two instruments to support Member States. The EACT-EU is designed with a shorter-term perspective (2021-2022) to help countries in the initial phase of revitalising their economies. The RRF has a six-year duration, from 2021 to 2026, and covers six major areas of intervention (pillars) on which the National Recovery and Resilience Plans should focus. The areas are: green transition; digital transformation; smart, sustainable and inclusive growth; social and territorial cohesion; health and economic, social and institutional resilience; and policies for new generations, children and youth.

10 The DESI Index summarises several digital performance indicators grouped into five dimensions: connectivity, human capital, Internet use, integration of digital technology, digital public services. The Index is yearly calculated by EU countries to measure the degree of digitalisation achieved by each country in the reference year. Desi 2020 Index refers to 2019.

11 The Istat-SDGs measures of ICT for targets 9.5.1 and 9.c.1, targets 17.6.1 and 17.8.1 and target 4.4.1 are included in the set of indicators to calculate the DESI Index as well.

Figure 17.3 - Digital Economy and Society Index (DESI), by country. Year 2019



Source: Eurostat

Along with the percentage of households with a fixed and/or mobile broadband connection and regular Internet users (aged 6 years and older), Istat introduced in Goal 17 two other statistical measures to monitor the evolution of online shopping and Internet banking.

In 2020, broadband reached 77.8% of households, an increase of 4.1 percentage points compared to 2019 and around 79 p.p. compared to 2010. The average percentage increase over the last decade has been +6.1 p.p., with a peak in 2013 when the percentage increased from 48.6% to 59.6%¹²(Figure 17.4).

The spread of broadband was higher in the North-East (81.1%) and Centre (80.8%), while in the South and Islands the share dropped significantly (72.5%). Lazio was the region with the highest percentage of households with broadband access (83.8%; +5.8 percentage points compared to 2019), while Calabria recorded one of the lowest value (66.3%; -1 p.p. compared to 2019).

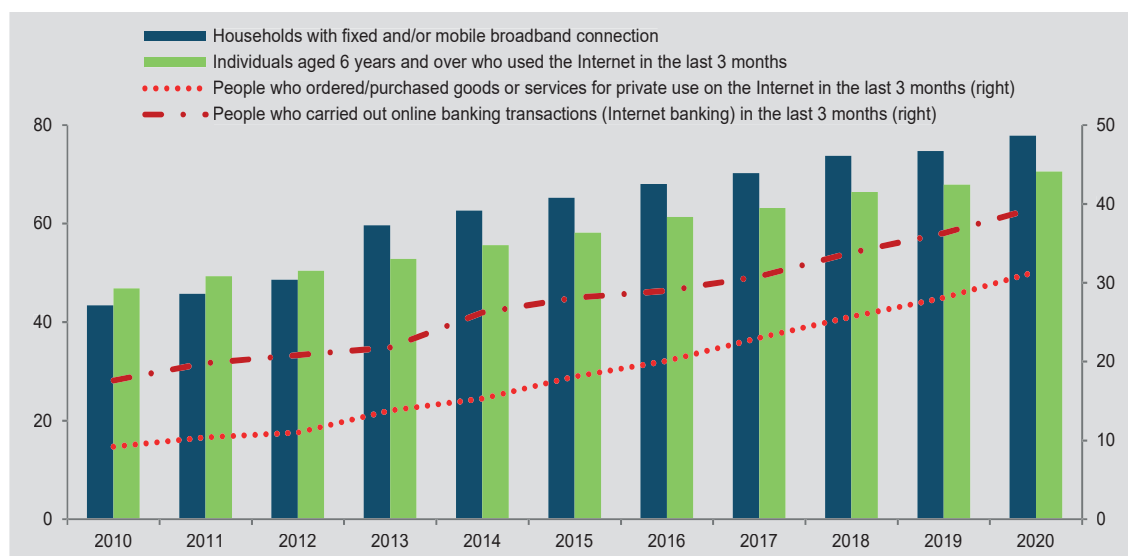
In 2020, the percentage of people aged 6 and over who regularly used Internet was 70.5% (+2.6 percentage points compared to 2019 and +23.7 p.p. compared to 2010). There was a significant increase for the 6-10 age class (+11.5 p.p.) due to distance learning. Internet was more widespread among people with a high educational level (91.7%), compared to those with a low educational level (55.9%) and among men than women, although the gender gap has declined over time (from 10.7 points in 2010 to 6.7 in 2020).

In 2020, among regular Internet users, in the 16-74 age class, 31.4% ordered goods or services online (+3.3 percentage points compared to 2019 and + 22.2 p.p. compared to 2010). Mainly young people made online purchases (47.1% in the 20-24 age group and 44.2% in the 25-34 age group). Males made more online purchases than females (33.8%, compared to 29.1%) although females recorded a higher increase (+3.6 percentage points for women, +2.9 p.p. for men).

¹² In Italy, the implementation of the European Digital Agenda started with the introduction in 2009 of the “Plan for broadband in rural areas” and the “National Broadband Plan”. In 2015, the Italian Ultra Broadband Strategy updated the previous planning and set as a goal, by 2020, the coverage of at least 85% of the Italian population (as well as all public buildings, schools and industrial areas of major economic interest) in 100 Mbps band (later updated to 1Gbps).

In 2020, almost 40% of regular Internet users made banking transactions or searched for money account information. The prevalence of Internet banking is in line with other indicators. It increased by almost 22 percentage points over the last ten years. More males (44.3%) than females (34.7%) used Internet banking, and more people with high education (66.9%) and in the 25-44 age class (53.2% in the 25-34 age class and 51.8% in the 34-44 age class). Territorial disparities were still relevant. In the North the percentage of users of Internet banking was 47.1%, in the South and Islands it was 27.4%.

Figure 17.4 - Households with broadband connection, individuals who used the Internet, people who ordered/purchased goods or services on the Internet, people who carried out Internet banking. Years 2010-2020 (percentage values)



Source: Istat, Survey on Aspects of daily life

STATISTICAL MEASURES BY TARGET AND TYPOLOGY

1 NO
POVERTY



2 ZERO
HUNGER



3 GOOD HEALTH
AND WELL-BEING



4 QUALITY
EDUCATION



5 GENDER
EQUALITY



6 CLEAN WATER
AND SANITATION



7 AFFORDABLE AND
CLEAN ENERGY



8 DECENT WORK AND
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



10 REDUCED
INEQUALITIES



11 SUSTAINABLE CITIES
AND COMMUNITIES



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



13 CLIMATE
ACTION



14 LIFE
BELOW WATER



15 LIFE
ON LAND
























16 PEACE, JUSTICE
AND STRONG
INSTITUTIONS












17 PARTNERSHIPS
FOR THE GOALS


















Goal 1

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day.			
1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.	 	  	
1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable.			
1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.		      	
1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.		   	
1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions.	 		
1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions.			

















Goal 2

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.			
2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.			
2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment.			
2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.			
2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed.			
2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries.			
2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round.			
2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.			

Goal 3









TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births.			
3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.			
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.			
3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being.			
3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.			
3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.			
3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.			
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.			
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.			
3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate.			
3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.			
3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States.			
3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks.			

Goal 4


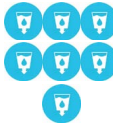





TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.			
4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.			
4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.			
4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.			
4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations.			
4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy.			
4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of cultures contribution to sustainable development.			
4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.			
4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries.			
4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.			

(*) The parity indices are 21 and refer to 15 statistical measures of Goal 4.









Goal 5

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
5.1 End all forms of discrimination against all women and girls everywhere.			
5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation.			
5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation.			
5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.			
5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.			
5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences.			
5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.			
5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.			
5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.			





























Goal 6

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all.			
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.			
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.			
6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.			
6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.			
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.			
6.a By 2030, expand international cooperation and capacity-building support to developing countries in water-and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.			
6.b Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management.			












Goal 7

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
7.1 By 2030, ensure universal access to affordable, accessible, reliable and modern energy services.			
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.			
7.3 By 2030, double the global rate of improvement in energy efficiency.			
7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.			
7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support.			









Goal 8

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries.			
8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.			 
8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.			
8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead.	  		
8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.	 		      
8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training.			
8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms.			
8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.			
8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.			
8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.		  	
8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries.			
8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization.		 	














Goal 9

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.			
9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.			
9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.			
9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.			
9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.			
9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States.			
9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities.			
9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.			















Goal 10

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.			
10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.			
10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.			
10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.			
10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations.			
10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions.			
10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies.			
10.a Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements.			
10.b Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes.			
10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent.			






Goal 11

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.			
11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.			
11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.			
11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage.			
11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations.			
11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.			
11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.			
11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.			
11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.			
11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials.			



Goal 12

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
12.1 Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries.			
12.2 By 2030, achieve the sustainable management and efficient use of natural resources.			
12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.			
12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.			
12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.			
12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.			 
12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities.			
12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.			
12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.			
12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.			 
12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities.			











Goal 13

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.			
13.2 Integrate climate change measures into national policies, strategies and planning.			
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.			
13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible.			
13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities.			

Goal 14



















TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
14.1 By 2025, prevent and significantly reduce marine pollution, in particular from land-based activities, including marine debris and nutrient pollution.			
14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans.			
14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.			
14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics.			
14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information.			
14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation (c).			
14.7 By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism.			
14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries.			
14.b Provide access for small-scale artisanal fishers to marine resources and markets.			
14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want".			

Goal 15










TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.			
15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.			
15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.			
15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development.			
15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.			
15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed.			
15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products.		 (*)	
15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species.			
15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.			
15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems.			
15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation.			
15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities.		 (*)	

(*) The measures referred to target 15.7 are identical to those referred to target 15.c.

Goal 16

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
16.1 Significantly reduce all forms of violence and related death rates everywhere.	 	 	
16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children.			
16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all.	 		
16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime.			
16.5 Substantially reduce corruption and bribery in all their forms.		  	
16.6 Develop effective, accountable and transparent institutions at all levels.		  	
16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels.	 		
16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance.			
16.9 By 2030, provide legal identity for all, including birth registration.			
16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements			
16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime.			
16.b Promote and enforce non-discriminatory laws and policies for sustainable development.			

Goal 17

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection.			
17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries.	 		
17.3 Mobilize additional financial resources for developing countries from multiple sources.		 	
17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress.			
17.5 Adopt and implement investment promotion regimes for least developed countries.			
17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.			
17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed.			
17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology.			 
17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation.			
17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda.			
17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020.			
17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access.			
17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence.			
17.14 Enhance policy coherence for sustainable development.			
17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development.			

Goal 17 continues

TARGET	STATISTICAL MEASURES		
	Identical	Proxy / Partial	National context
17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries.			
17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.			
17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.			
17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries.			

3. INTERNATIONAL PROCESSES AND NATIONAL EVOLUTIONS IN SDGS STATISTICAL INFORMATION SYSTEMS¹

3.1 The global process of implementation of the 2030 Agenda and the indicators defined by the United Nations in the IAEG-SDGs

The 2030 Agenda for Sustainable Development² represents, as is well known, the United Nations (UN) global plan of action for achieving sustainable transformation by 2030. The Agenda has a revolutionary character because the four dimensions of sustainable development - social, economic, environmental and institutional - need to be considered in an integrated manner, pointing to the interconnections³ between sustainability, climate change, hazardous events and disasters (Sendai Framework), inclusion and well-being of people.

Human well-being is intrinsically connected to the health of natural ecosystems: their failure to be protected is in turn a threat to the long-term prosperity of development. Moreover, addressing inequalities in the distribution of development benefits is fundamental to global sustainable development. According to the United Nations, Goals cannot be classified as economic, or social or environmental, because their targets can also have very different values. Goal 2, for example, deals with targets linked to food, health, biodiversity and agriculture, thus it includes social, economic and environmental issues. Goal 8 deals with social targets related to labour quality and economic targets related to GDP as well.

The High-level Political Forum on Sustainable Development (HLPF) is the body deputed to monitor the implementation of the 2030 Agenda and the impact of the policies. HLPF in 2020 and 2021 emphasised the need for a constant review of national sustainable development plans and financing frameworks, to ensure the necessary resources for the change required by the Agenda, especially in the current situation strongly affected by the pandemic. Ensuring that “no one is left behind” and building sustainable social, economic and environmental infrastructures is necessary to achieve the SDGs. Countries are required to submit Voluntary National Reviews (VNRs), which devote a substantial portion to monitoring and measurement. HLPF’s July 2021 meeting encouraged transformations towards inclusive and sustainable economies (SDGs 1, 2, 8, 17), towards a consumption and production pattern integrated into climate change mitigation (SDGs 12, 13, 17), towards inclusive and less unequal societies (SDGs 3, 10, 16, 17), with a special focus

1 This chapter was edited by Angela Ferruzza with contributions, for the graphic part, by Paola Patteri, and, for paragraph 3.2, by Barbara Baldazzi, Luigi Costanzo, Giovanna Tagliacozzo, Paola Ungaro.

2 The Agenda was adopted by the United Nations General Assembly in September 2015: it outlines at the global level the directions of activities for the coming years (UN Resolution A/RES/70/1, New York September 2015). In the same year, in coherence with the 2030 Agenda, the Paris Climate Agreement (UN Decision 1/CP.21, adoption of the Paris Agreement) and the Sendai Framework for Disaster Risk Reduction (adopted at the Third UN World Conference on Disaster Risk Reduction in Sendai, Japan) were also adopted.

3 <https://unstats.un.org/unsd/statcom/50th-session/documents/>, The interlinkages for the Agenda 2030, UNSD, 5-8 march 2019.

on subnational and local dimensions. The pandemic has increased inequalities within and between countries and the climate crisis persists globally.

Such action plans also depend on the availability of high quality data and standardised statistical information including geostatistical aspects, which are essential for sustainability issues. Indeed, the 2030 Agenda presents a constant call for concreteness and statistical measures. The Inter Agency Expert Group on SDGs (UN-IAEG-SDGs), established by the UN Statistical Commission, has identified a shared framework of statistical information as a tool to monitor and assess on progress towards the Agenda's Goals.

After the 2016 version, the UN-IAEG-SDGs set up two revisions scheduled in 2020 and 2025, to ensure the update of indicators, the necessary advancements in their classification into Tiers⁴ and the preparation of necessary metadata⁵. The 2020 UN-IAEG-SDGs revision⁶ made available 231 indicators⁷. They⁸ are currently classified according to two Tiers⁹, more than half, 130, are in Tier I, 97 (42%) are in Tier II¹⁰. The activities for the revision of indicators and metadata have been initiated and will be concentrated in the forthcoming months, aimed at considering the impacts of the pandemic in terms of Goals measurement. Istat is an active member of UN-IAEG-SDGs. Particular attention is devoted to the increasingly intensive use of administrative data for the definition and production of SDGs statistical measures and to the need to implement data disaggregation, especially with reference to territory and gender. The key indicators to be available by gender are 57 (Figure 3.1).

The use of geo-statistical information and GIS for the production, visualisation and dissemination of SDGs statistical measures has also led to the identification by UN-IAEG of a sub-set of indicators that should be disaggregated by geographic location (60), or for which geospatial information for the SDGs can be used for the production of the indicators themselves (39) (Figure 3.2). At national level, it is feasible to include other sub-sets of indicators by gender and by territory, as in the case of Istat SDGs Information System¹¹.

The actions to implement to achieve one Goal may be reinforced or, conversely, counteracted by those to implement for another Goal. For this reason, UN requested an integrated approach based on the analysis of the interconnections between Goals, targets and indicators.

UN-IAEG-SDGs focused on the statistical measurement and on the complex relationship between pandemic and sustainability¹², in order to encourage National Statistical Offices to identify and make available a measurement reflecting the high impact of the pandemic in the achievement of the Goals.

4 The first level includes all indicators with consolidated standards and methodologies and regularly produced by countries. The second level includes indicators that, despite a consolidated methodology and standards, are not regularly produced. The remaining indicators belong to several levels, because of their heterogeneity.

5 UN-IAEG-SDGs metadata define the proposed monitoring indicators and describe the methodologies for their implementation.

6 The Global indicator framework was adopted by the General Assembly in resolution 71/313 and proposed for revisions at the 51st session of the Statistical Commission in 2020 and the 56th session in 2025.

7 <https://undocs.org/A/RES/71/313>

8 https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202021%20refinement_Eng.pdf

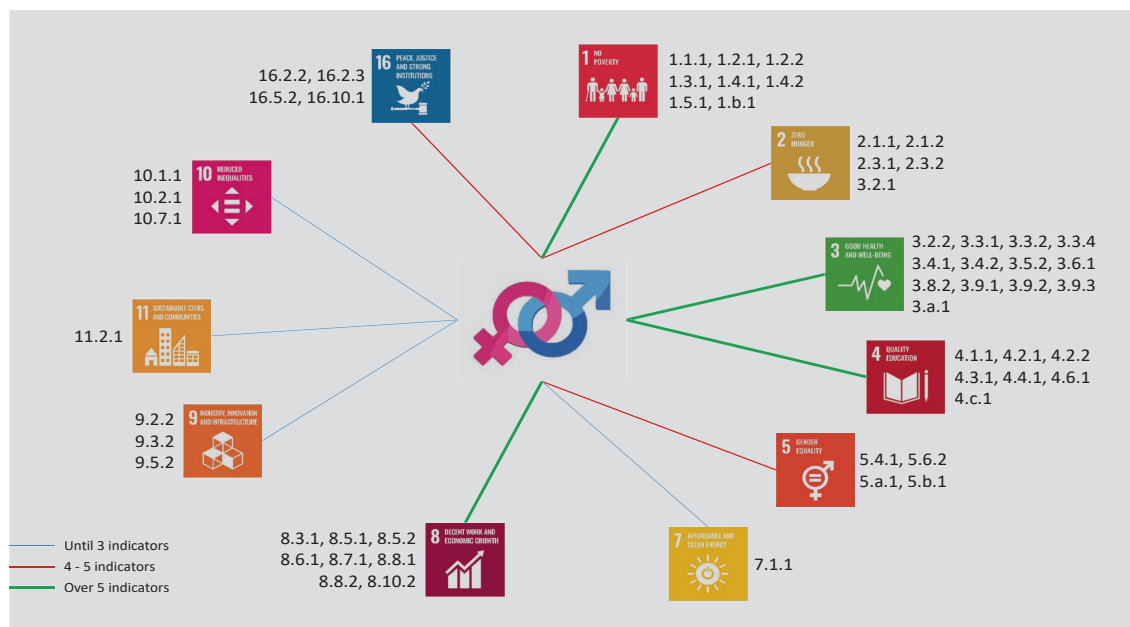
9 <https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/>

10 Given the heterogeneity of their constituent components, 4 indicators belong to several levels.

11 See paragraph 3.4.

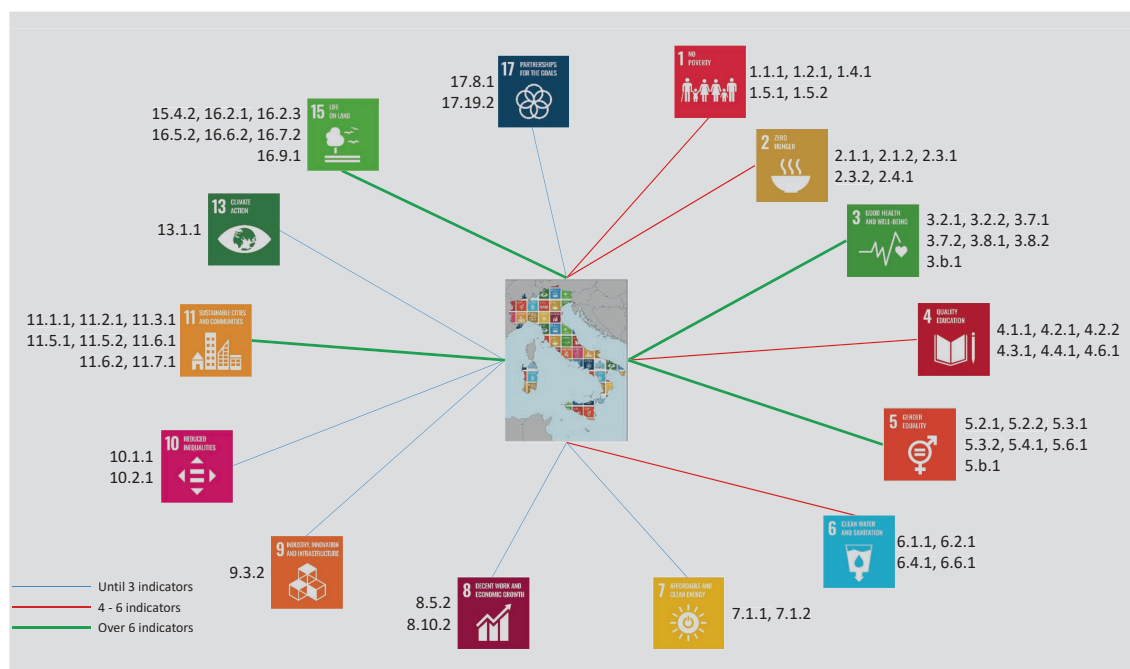
12 Each indicator has been considered in its possible interrelationships, but with the awareness that impacts may vary depending on the regions considered and on national and local priorities and circumstances.

Figure 3.1 - UN-IAEG-SDGs indicators with gender breakdown



Source: Istat

Figure 3.2 - UN-IAEG-SDGs indicators with territorial breakdown



Source: Istat

UN-IAEG-SDGs identified 74 indicators to measure the systemic crisis caused by the pandemic and its implications for sustainability, especially with reference to vulnerable and marginalised groups. Some of these indicators measure the impact related to the country expenditures to deal with the economic crisis, labour market issues, income support and GDP. In addition, there are indicators measuring education, food insecurity, access to public services, family and gender-related violence, mental health, access to

care, Internet connections, as well as environmental aspects related to air and water quality, waste generation.

The Figure 3.3 illustrates the indicators hypothesised by UN-IAEG. The statistical measures already available for our country, included in the Istat information platform, are indicated in bold.

In July 2021 UN released a report based on available data on global dynamics¹³; the Global SDG Indicators Database¹⁴ is available as well. It provides statistical information and is updated at least on a six-month basis.

Figure 3.3 - UN-IAEG-SDGs Indicators interconnected to the pandemic available on Istat Platform



Source: Istat

3.2 Global statistical measures: some examples

The systemic crisis generated by the pandemic has made even more clear that all countries are vulnerable and require global prevention and development measures; hence the need to include actions integrating a long-term perspective (the commitments of Paris Climate Agreement and the 2030 Agenda), as well as the potential spill-over effects, for example the European actions on other countries. By way of example, below there is a reference to some indicators to look at the Italian situation in a global framework.

¹³ <https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf>

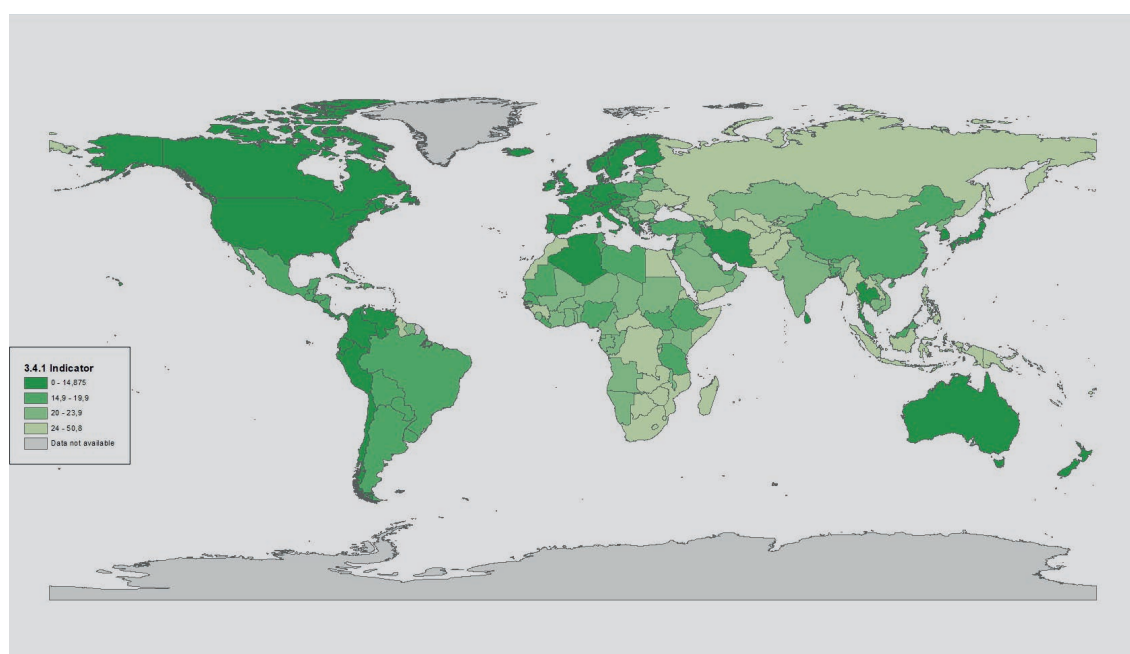
¹⁴ <https://unstats.un.org/sdgs/indicators/database/>



Slow decline in mortality from 4 major non-communicable diseases. Disparities between countries remained high

In 2019, most deaths were caused by non-communicable diseases, especially cardiovascular disease, cancer, diabetes and chronic respiratory disease. There were approximately 33 million deaths due to these diseases worldwide, although the probability of dying from these causes between 30 and 69 years of age decreased from 19.9% in 2010 to 17.8% in 2019.

Figure 3.4 - Probability of dying between 30 and 69 years of age from cancer, diabetes, cardiovascular and respiratory diseases. Year 2018 (percentage values)



Source: <https://unstats.un.org/sdgs/indicators/database/>

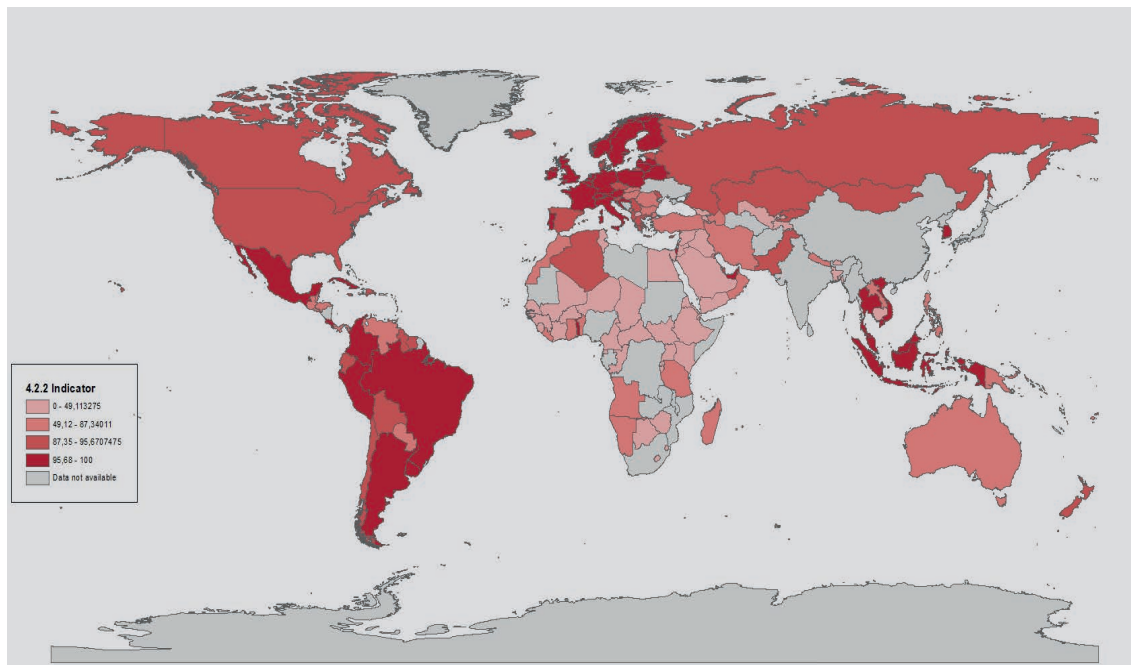
Disparities between countries remained high (Figure 3.4). Especially during a critical period of time for health systems to face with the pandemic, the care for people with non-communicable diseases became an even more valuable resource. Indeed, people with pre-existing non-communicable diseases, who are the most vulnerable, have higher risk to become seriously ill with coronavirus and suffer most from the disruption of prevention and treatment services.



Access to school at 5 year old is important to reduce the risk of drop-out and social exclusion, there are still too many children excluded in the poorest countries

A good quality early childhood education is one of the best investment for the society and for children. It is essential for cognitive development, it provides a solid foundation for future learning, with a lower risk of drop-out and social exclusion, in high-income than in low-income countries. The participation rate into structured learning one year in advance than the official primary school entry age has increased steadily in recent years.

Figure 3.5 - Participation rate in educational activities (kindergarten and first year of primary) for 5 year old children. Year 2019 (percentage values)



Source: <https://unstats.un.org/sdgs/indicators/database/>

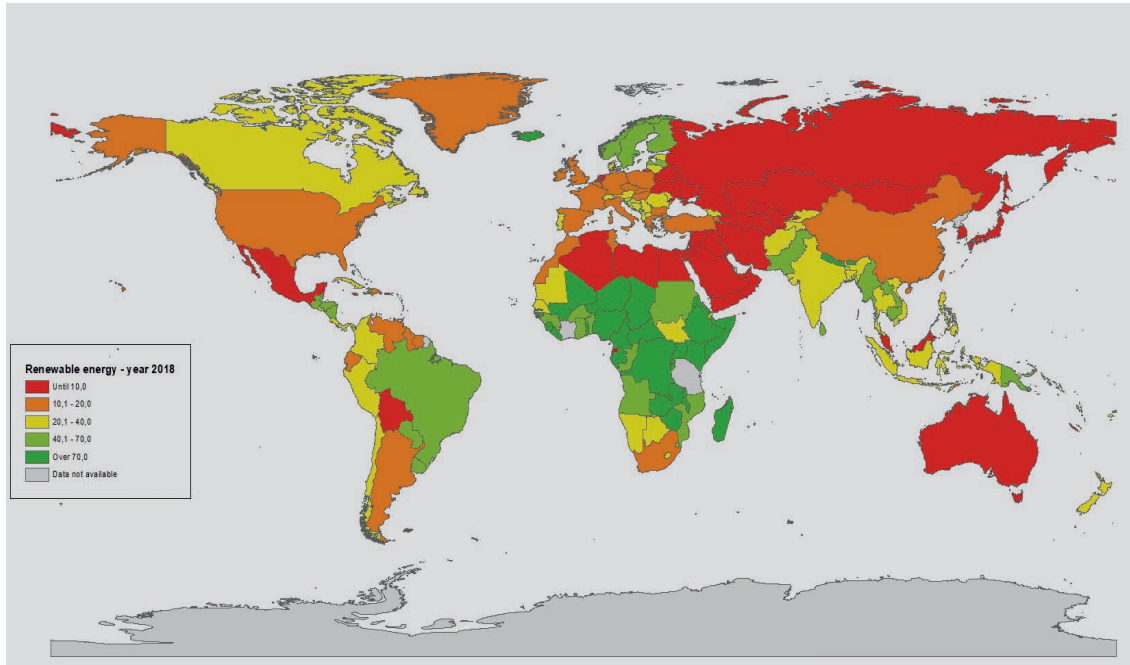
Globally, the participation rate in early childhood education was 73 percent in 2019 higher than 64.8 percent in 2010 (Figure 3.5). However, there were significant disparities between countries, with rates ranging from 4 percent to nearly 100 percent. The participation rate in early childhood education was only 43 percent in the least developed countries. For example, in Sub-Saharan Africa the ratio was 4 children out of 10, in North Africa and West Asia 5 children out of 10, compared to 9 children out of 10 in Europe, North America, Australia, New Zealand, Latin America and the Caribbean. In 2019 in Italy, preschool participation for 5 year-old children remained at very high levels (96.5%).



Global variability for renewable energy sources

In 2018, renewable energy sources (RES) covered, globally, 17.1% of final energy consumption, a stable share compared to last year with an increase of only 0.8 percentage points compared to ten years ago.

Figure 3.6 - Renewable energy sources. Year 2018 (percentage values)



Source: <https://unstats.un.org/sdgs/indicators/database/>

The contribution of renewable sources to energy consumption showed a high variability at the geographical level, because of different availability of environmental and climatic resources and because of disparity of local support and investment policies. Emerging countries widely use RES (in particular biomasses, mainly spread in rural areas), especially due to investments addressing significant infrastructural issues and access to energy services, through the release of self-sufficient renewable and small-scale (off-grid and mini-grid) energy plants. In developed regions the share of renewables was 12.3%, in developing regions it rose to 22.0%, reaching 44% in landlocked developing countries (LLDCs) and 70% in least developed countries (LDCs).

Despite the constant reduction (-0.8 percentage points compared to 2017 and -2.5 compared to 2008), Sub-Saharan Africa stood out for the significant incidence of consumption from renewables, equal to 67.7% (Figure 3.6), for the high contribution from Democratic Republic of Congo, Somalia and Uganda (with a RES share of over 90%), Ethiopia, Gabon, Rwanda, Burundi, Chad and Zambia (between 85 and 90%). Latin America and the Caribbean (30.1%) and South Asia (27.8%) also had an important share of renewables in their overall energy needs.

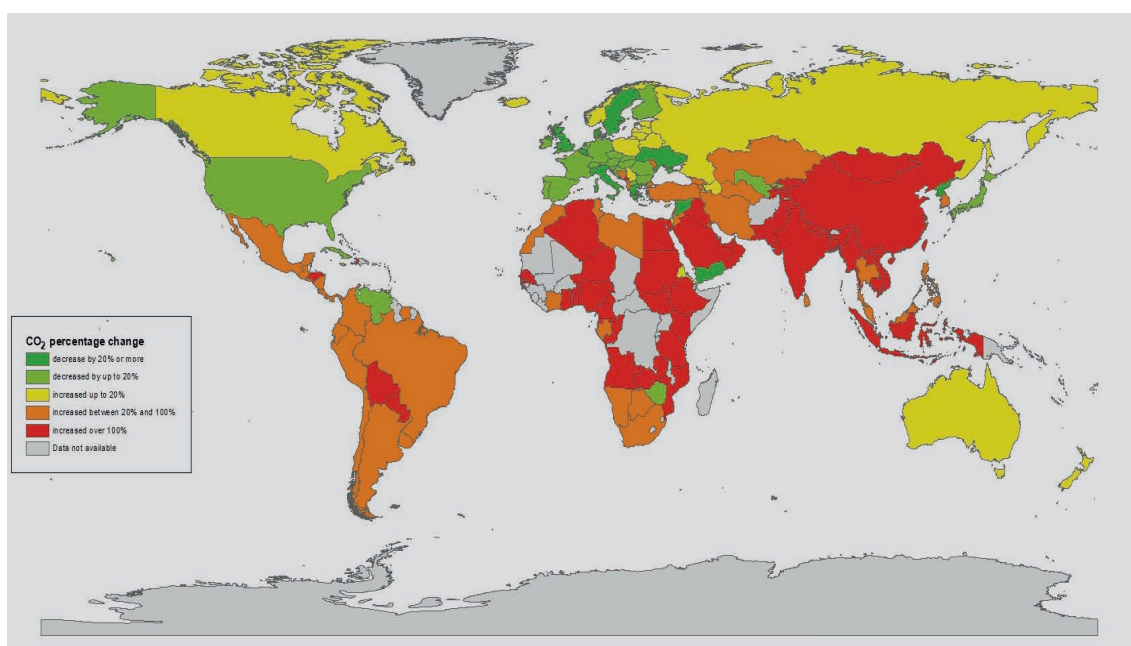
Conversely, the contribution from renewable sources in Central Asia (3.4%) and Western Asia (3.7%) was particularly low and substantially stable over time. Europe and North America, although below the global average, has recorded the highest increase in the incidence of consumption from renewable sources in the last decade (+3.5 percentage points). On the other hand, South-East Asia, although above the global average (22.6%), has seen a large decline in the use of RES over the last ten years (-10.2 percentage points).



Carbon dioxide emissions increase on a global scale

In 2018, carbon dioxide emissions from fossil combustion continued to increase globally, with 33.5 billion tonnes of CO₂, corresponding to a 44% increase over 2000 values¹⁵. If developing countries (with 19.7 billion/ton CO₂ in the last year) have significantly increased their emissions in the period under review (by about 120%), developed countries¹⁶ (with 12.2 billion/ton CO₂) have decreased them by about 10.0%, although with an increasingly reduced rate of decline over the years (Figure 3.7).

Figure 3.7 - Carbon dioxide emissions from fossil fuel combustion. Year 2000-2018 (percentage changes)



Source: <https://unstats.un.org/sdgs/indicators/database/>

Greenhouse gas emissions decreased in most European countries, the United States of America, Japan and the Democratic Republic of Korea. In the African continent, emissions are increasing in almost all countries (for which data are available). The increase in CO₂ emissions was also substantial in several South-East Asian countries, such as China, India and Mongolia. On the other hand, the increase was more contained in Russia, Oceania and Canada.



Deforestation in the world does not stop, Italy is in countertrend

The conservation of terrestrial biodiversity depends crucially on the preservation of forest areas, which account for around three-quarters¹⁷. Forests also perform many other functions

¹⁵ The concentration of carbon dioxide in the atmosphere continued to grow, exceeding the threshold of 400 parts per million (ppm) in 2016 and reaching 418.8 ppm in 2021 (source: NOAA National Oceanic and Atmospheric Administration).

¹⁶ Europe, Cyprus, Israel, North America, Japan Australia and New Zealand.

¹⁷ See FAO (2019), *The State of the World's Forests 2018*.

essential to life on earth, such as water and soil conservation and carbon sequestration, and play an important role in mitigating climate change. All of these functions are at risk of being compromised by deforestation and forest degradation processes fuelled by an increasing demand for land, for agriculture and livestock, by advancing urbanisation and by various other factors, including large-scale fires and illegal or uncontrolled exploitation of forest products.

In 2020, according to FAO estimates, forest areas covered 31.2% of the earth's surface and their extension decreased by 1.2% compared to 2010. The decrease that may appear modest, though is equivalent to an average loss of about 47,000 km² per year (almost twice the area of Lombardia). Therefore, the negative trend that target 15.2 aimed to stop by 2020 went on (the rate of change is identical to that of the period 2000-2010). There are, however, important differences related to the level of development (Figure 3.8). In developed countries, where protection policies have been set up from some time and the forest heritage is less exposed to the pressure of the economic system, the objective can be assessed as substantially achieved, since forest coverage was slightly higher than in 2010 and was unchanged since 2015 (37.6%). On the other hand, the incidence of forest areas continued to decrease in developing countries where the large rainforests that guard much of the Earth's biodiversity are located (from 28.0% in 2010 to 27.3% in 2020) and with greater intensity in the least developed countries, which are the most affected by the impact of deforestation (from 28.2% in 2010 to 26.3% in 2020).

Figure 3.8 - Variation of forest areas, by level of development. Years 2000-2020 (million hectares)

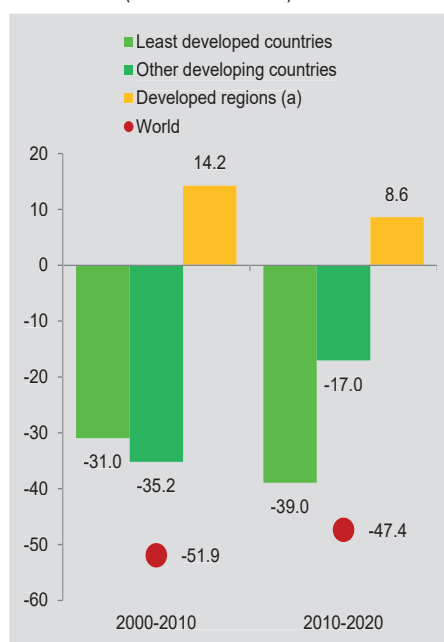
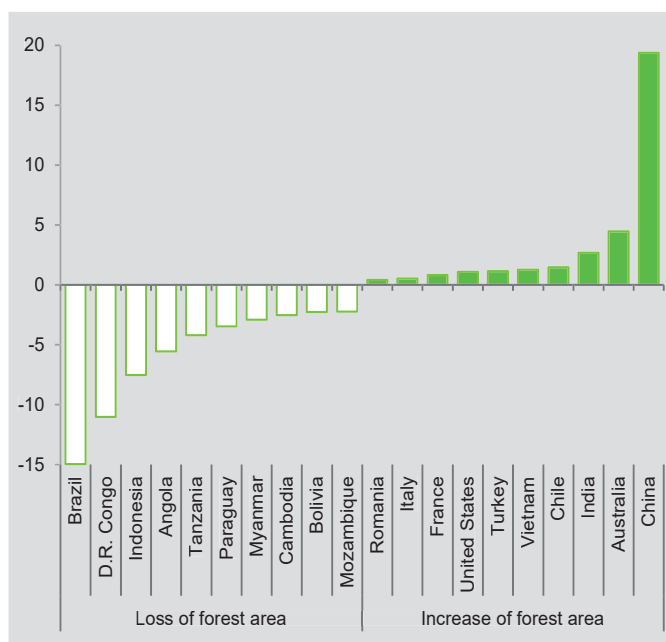


Figure 3.9 - Variation of forest areas, by country. Years 2000-2020 (million hectares)

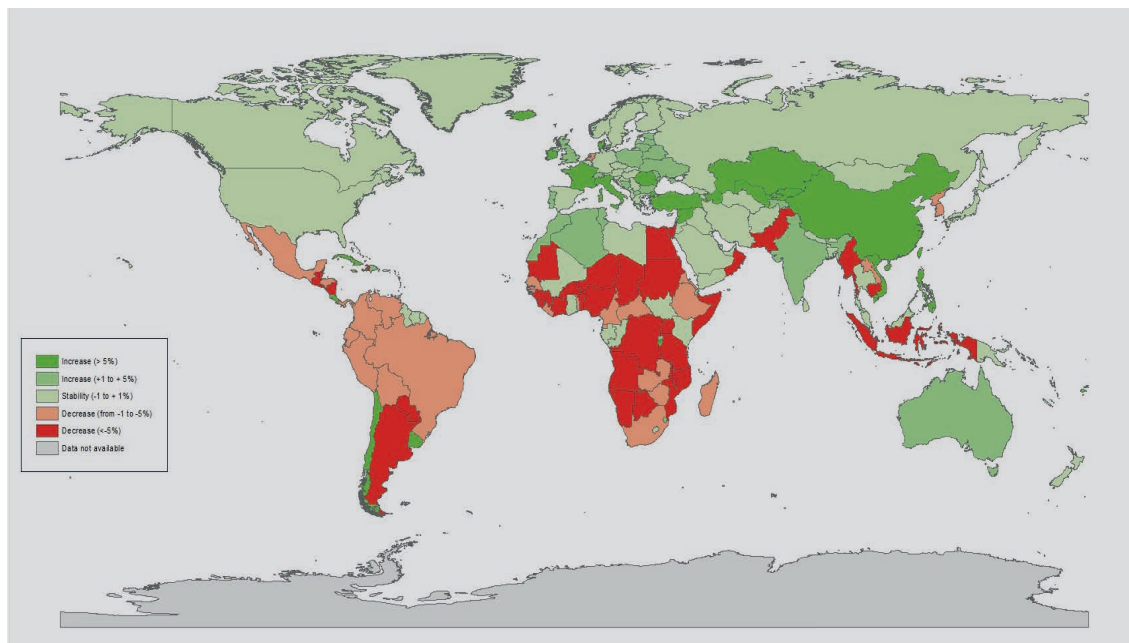


Source: FAO, Global Forest Resources Assessment
(a) Europe (including the Russian Federation), Israel, United States, Canada, Japan, Australia and New Zealand.

In the 2010-2020 decade, forest area losses concentrated in Sub-Saharan Africa, Latin America and South-East Asia, while almost all the countries that show a significant increase in forest areas (more than 5%) were located in the northern hemisphere, where, in general, stable or moderate growth situations prevail (Figure 3.10). The countries that, in absolute

terms, have lost the largest forest area in the 2010-2020 decade are Brazil (almost 15 million hectares, equal to 2.9% of the area surveyed in 2010), the Democratic Republic of Congo (-8% compared to 2010) and Indonesia (-7.6% compared to 2010). The largest increases were recorded in China (+19.4 million hectares, +9.7% over 2010), followed far by Australia (+3.4%) and India (+3.8%; Figure 3.9).

Figure 3.10 - Dynamics of forest areas. Years 2000-2020 (percentage changes)



Source: Istat processing on FAO data, Global Forest Resources Assessment

3.3 European initiatives for achieving the 2030 Agenda

The 8th Environment Action Programme (8th EAP)¹⁸ of the European Commission (EC) details the vision for a long term programme to achieve “citizens live well, within the planetary boundaries”. It is based on the assumptions that a healthy environment is necessary for the well-being of citizens, biodiversity and ecosystems must be protected to enable resilience to climate change and other environmental hazards, the circular economy must be ensured through zero waste and greenhouse gas production and economic growth leading to decoupling between resource use and environmental degradation. The EC has been an active participant in the implementation path of the 2030 Agenda¹⁹, focusing on the need for regular monitoring of the SDGs at European level.

The need to articulate European policies and decision-making processes by considering a development model increasingly oriented towards sustainable development principles has become clear in the policy guidelines of the EC for the years 2019-2024. EC reiterated the need for a European Green Deal (EGD)²⁰, complementing the vision of the 8th EAP and

18 See <https://ec.europa.eu/environment/pdf/8EAP/2020/10/8EAP-draft.pdf>

19 See SDGs Report 2019 and SDGs Report 2020, Chapter 2.

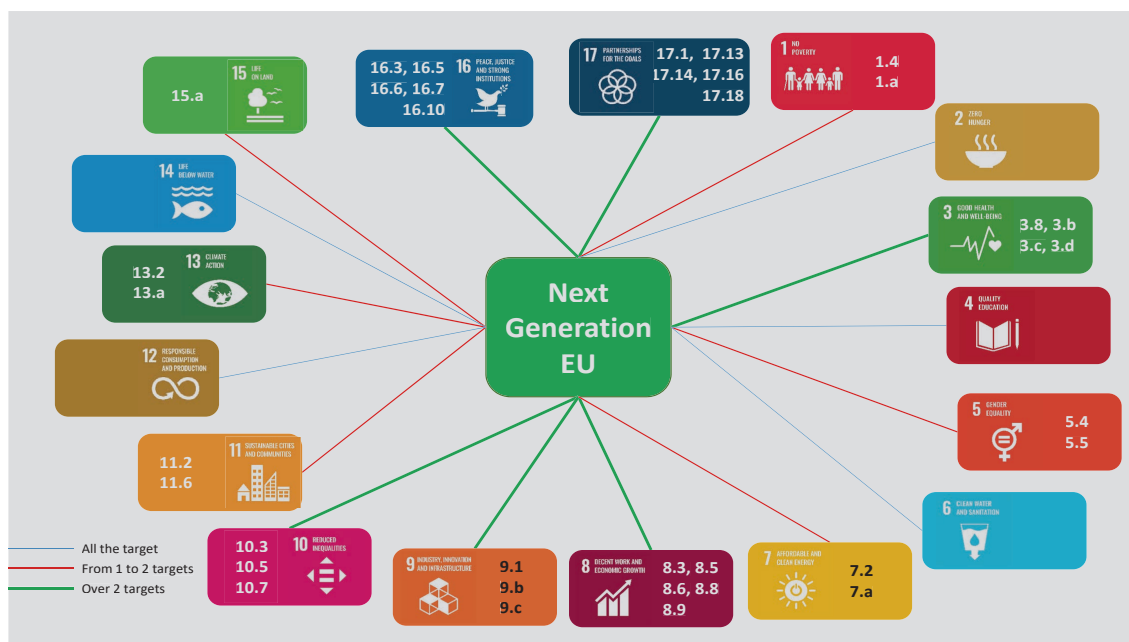
20 See <https://eur-lex.europa.eu/legal-content/IT/TXT/?qid=1596443911913&uri=CELEX:52019DC0640#document2>

aiming to achieve the UN Sustainable Development Goals, to minimise hazardous events and disasters, to shift climate and environmental challenges into opportunities and to make Europe the first climate neutral continent by 2050.

The EGD, which constitutes a key axis for Europe's growth strategy²¹, implies a holistic approach that look transversally at the traditional statistical domains, such as energy, environment, finance, agriculture. Interconnections of statistical clusters of statistics with reference to climate change adaptation and mitigation, biodiversity, circular economy are crucial elements.

The pandemic crisis has necessarily affected the actions of the EC, which in the Next Generation EU (NGEU) plan²² has reinforced the importance of sustainability for future policy development.. The NGEU promotes economic and employment growth according to six major pillars, namely, green transition, digital transition, sustainable and inclusive smart growth, territorial and social cohesion, health and social economic and institutional resilience, and policies for the new generations. The basic principles of the 2030 Agenda – “no one left behind” and interlinkages between Goals - constitute the cornerstones of the document and there are cross-cutting references to the constituent elements of the 17 Goals (Figure 3.11).

Figure 3.11 - Next Generation EU and SDGs targets



Source: Istat

EC asked to Member States to develop National Recovery Plans (NRPs) based on the investment and reform priorities indicated in the framework of the European Semester,

21 The gradual reduction of atmospheric emissions, a continuous progress to increase adaptation and resilience and reduce vulnerability to climate change, a regenerative growth model that accelerates the transition to the circular economy, aiming at zero-pollution for a toxic free-environment, the attention to biodiversity and natural ecosystems, ensuring sustainability from producer to consumer; issues related to the energy of the future, buildings and mobility, attention to the agri-food system, investments in the social sphere to ensure inclusion, gender equality, employment, education, health care, are the areas of intervention confirmed in relation to the Green Deal.

22 Cfr. <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1590732521013&uri=COM%3A2020%3A456%3AFIN>

in line with national energy and climate plans, plans for a fair transition, partnership agreements and operational programmes under EU funds. In order to ensure the optimal use of its potential, it is of paramount importance that the NGEU plan leads the transition towards²³ a clean, circular²⁴, competitive and climate neutral economy. At the same time NGEU should be a driver for job²⁵ creation. The green transition is crucial and comes directly from the EGD and from the objectives to achieve climate neutrality by 2050 and to reduce greenhouse gas emissions by 55% in 2030 respect to 1990 emissions. Funds will be aimed to support economic activities, health systems, green and digital transitions and they should be available in all sectors, from tourism to culture and agriculture.

The monitoring of the 8th EAP, the EGD and the Next Generation EU necessarily look at the SDGs statistical indicators as fully integrated, since they are included in the objectives and targets of the different action plans. In this context, the role of the European Semester will further evolve in the implementation of the Recovery and Resilience Facility, as also specified in the Annual Sustainable Growth Strategy of 2021. Each NRP must meet the requirements of the overall priorities and, it has to allocate at least 37% of expenditure into green transition, taking into account climate change, and at least 20% into digital transition. National plans must, therefore, demonstrate the simultaneous contribution of different SDGs, including their interconnections and the benefits produced by their integration into policies.

Complementary to the EGD there is also the renewed attention to the issues that look at the connection between environment and health, reaffirmed in the Healthy Planet for All and therefore in the EU Action Plan (2021-2024) named ‘Towards Zero Pollution for Air, Water and Soil’²⁶, based on the principles of the 2030 Agenda as well.

Eurostat releases annually the report “Sustainable development in the European Union - Monitoring report on progress towards the SDGs in an EU context” in which it updates the analysis of the EU situation with respect to the objectives of 2030 Agenda, monitored by 100 indicators²⁷. An Action plan for statistics for the European Green Deal is currently under study. It should allow an increase in the statistical information to monitor the SDGs, focusing

23 COM(2019) 650 final of 17 December 2019; Annual Sustainable Growth Strategy 2020.

COM(2020) 21 final of 14 January 2020; Green Deal Investment Plan.

COM(2020) 22 final of 14 January 2020; Proposal for a Regulation of the European Parliament and of the Council establishing the Just Transition Fund.

COM(2020) 14 final of 14 January 2020; A strong social Europe for Just Transitions.

COM(2020) 67 final of 19 February 2020; Shaping Europe’s Digital Future.

COM(2020) 80 final of 4 March 2020; Proposal for a Regulation of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law).

COM(2020)_112 final of 13 March 2020; Coordinated Economic Response to the COVID-19 Outbreak.

Working Document of 17 April; First “ERAvsCORONA” Action Plan. COM(2020) 152 of 5 March 2020; A Union of Equality: Gender Equality Strategy 2020-2025. COM(2020) 102 final of 10 March 2020 on a new industrial strategy for Europe

24 With the transition to climate neutrality, dependence on fossil fuels could be replaced by dependence on other raw materials. Active waste policies, promotion of recycling will help to reduce this dependence.

25 This transition must unlock the investment for the transition to renewable energy and sustainable energy infrastructure, sustainable transport infrastructure and clean urban mobility, and must be based on sustainable finance. Climate legislation, the EU Strategy for the Protection and Restoration of Biodiversity and Natural Ecosystems, the forthcoming EU Forestry Strategy, the Common Agricultural Policy and the Farm to Table Strategy are essential to strengthen resilience.

26 Cfr. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0400&qid=1623311742827>

27 Cfr. <https://ec.europa.eu/eurostat/documents/3217494/12878705/KS-03-21-096-EN-N.pdf/8f9812e6-1aaa-7823-928f-03d8dd74df4f?t=1623741433852>

on the potential use of geostatistical information, the set up of new indicators, especially with reference to climate change, agricultural and forestry statistics, mobility and energy.

The notion of policy coherence is mentioned in the 2030 Agenda (target 17.14) as a means of implementation that countries must use, along with financing and statistical monitoring, to achieve the Goals. Policy Coherence for Sustainable Development (PCSD)²⁸ refers to the ability of governments to pursue a public policy goal taking into account the impact on other Goals, on future generations and on the development opportunities of other countries. The Organisation for Economic Co-operation and Development (OECD) approved in December 2019 a new analytical framework (PCSD), PCSD defines the institutional mechanisms to achieve coherence, to set up a strategic and long-term planning that builds a multilevel network between sectors and government actions. OECD also stresses the importance of the monitoring and statistical measurement systems and it makes a citation about the Italian system of monitoring.

3.4 The evolution of the process of producing national statistical measures for the SDGs

National Statistical Offices play a key role for the production of accessible and transparent quality statistical information at national and intra-national level, aimed at monitoring the SDGs, also in function of the forthcoming Voluntary National Review²⁹ to be submitted to the HLPF and the National Reports for the European Semester.

The process of setting up national statistical measures adopts the current version of the 2020 revision of the indicators suggested by the UN-IAEG-SDGs. The synergistic work of inter-institutional comparison and enrichment of the wealth of information³⁰ related to the SDGs indicators has produced the current Statistical Platform, built together with the various institutional actors belonging to the National Statistical System (Sistan) and beyond: ISPRA (Italian Environmental Agency), GSE (Gestore dei Servizi Energetici), ISS (Istituto Superiore di Sanità), MITE (Ministry of Ecological Transition), MAECI (Ministry of External Affairs and International Cooperation), Ministry of Justice, Ministry of Interior, Ministry of Education, Ministry of Economy and Finance, Ministry of University and Research, Invalsi, Asvis .

The national statistical measures for monitoring the SDGs have been made available progressively in the dedicated³¹ Istat Information Platform, as part of multiple releases since 2016, in order to release continuous updates and enrichments. In December 2016, the platform made available 95 national measures for 66 UN-IAEG indicators released; the current release makes available 354 statistical measures for 135 indicators including the update of 119 statistical measures (Figure 3.12).

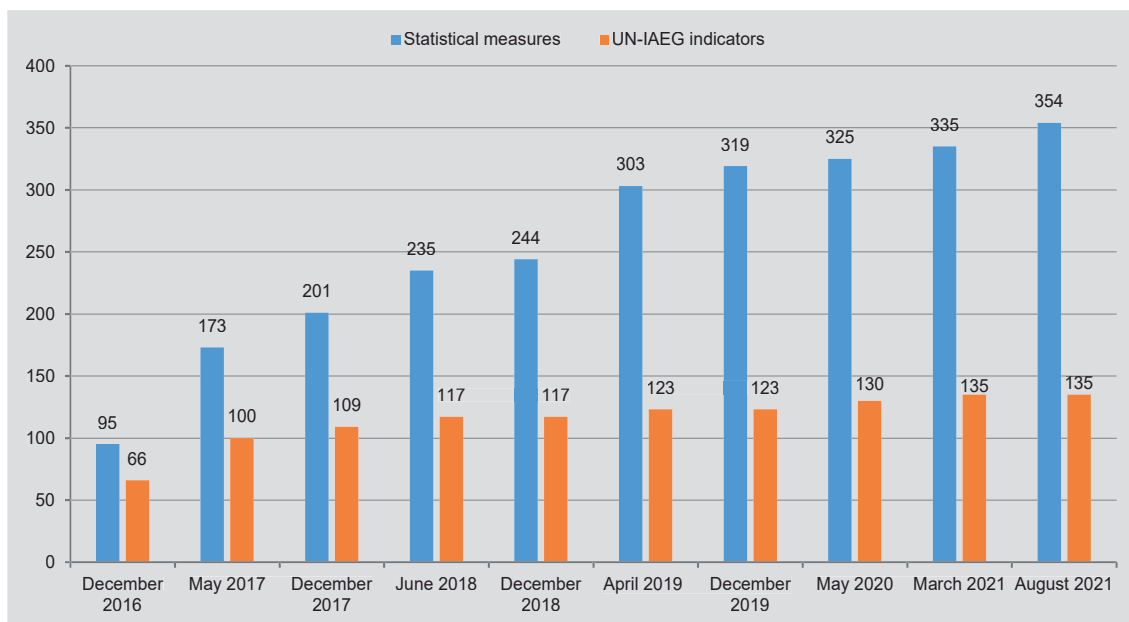
28 See <https://www.oecd.org/gov/pcsd/oecd-recommendation-on-policy-coherence-for-sustainable-development.htm>

29 The next Italian VNR to be submitted to the UN-HPPF United Nations is currently scheduled for 2022.

30 In order to guarantee the quality of the statistical information, the following eligibility requirements were included in the selection and development of the indicators within the evolutionary construction of the information platform dedicated to the Sustainable Development Goals: transparency of the methodologies, frequency of dissemination, timeliness, geographical coverage and comparability, comparability over time and length of time series, ease of interpretation. Each Goal has been analysed in accordance with the targets and indicators required and in accordance with an approach that included type of indicator (statistical or not); metadata and data of the United Nations, relevance for Italy, data sources (Istat, Sistan or other), availability of time series and of territorial disaggregations, interrelationships between variables.

31 See: <https://www.istat.it/en/well-being-and-sustainability/the-measurement-of-well-being/bes-report>

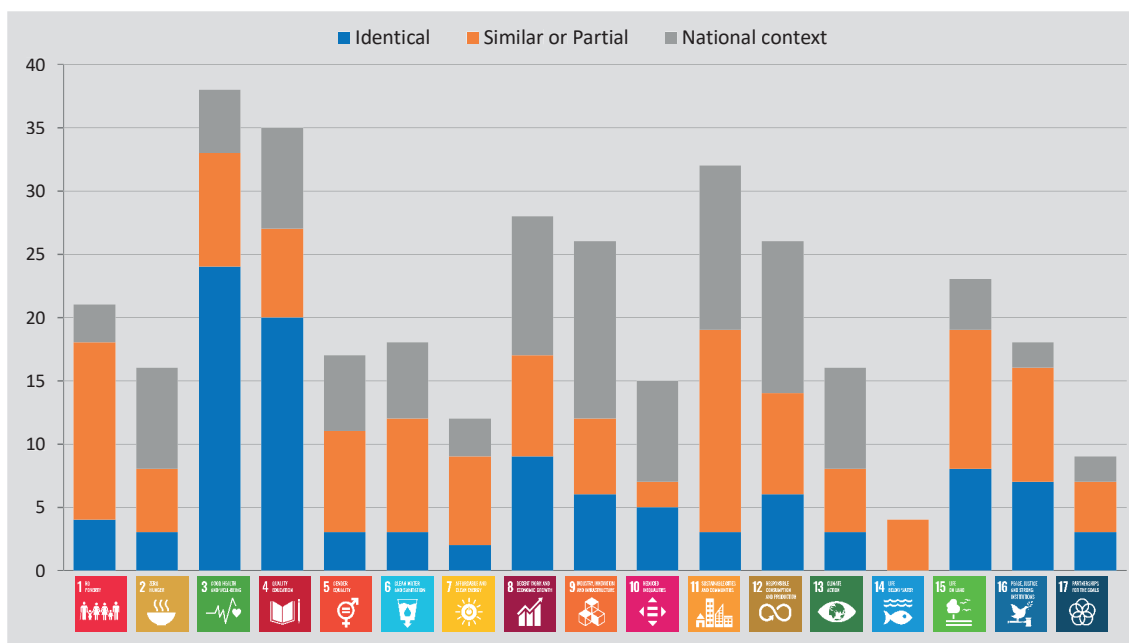
Figure 3.12 - Istat SDGs statistical measures and UN-IAEG-SDGs indicators, by date of dissemination



Source: Istat

The implementation of the information platform defines national statistical measures identical to the indicators required by the UN-IAEG in its 2020 revision; in other cases, the measures are either similar or partial³²; moreover the platform makes available additional statistical measures specific to the national context. 109 statistical measures are identical, 132 are proxy or partial and 113 are national context specific (Figure 3.13).

Figure 3.13 - Istat SDGs statistical measures, by taxonomy compared to SDGs indicators



Source: Istat

³² In this case not all data are available or not all are available in the specificity required by the UN-IAEG-SDG.

In accordance with the principle “no one left behind” and in order to meet the requirements of global, national and territorial information informative needs, the platform focuses especially on regional breakdowns, level of urbanisation breakdowns, as well as to gender, citizenship, and disability breakdowns (Figure 3.14).

Figure 3.14 - Istat SDGs statistical measures, by available breakdown

Classification variable Statistical measures SDGs ISTAT	Statistical measures SDGs ISTAT	Goal
Degree of urbanization / Municipalities / Municipality type	64	
Regions	200	
Provinces	15	
Gender	120	
Age class	79	
Citizenship / Nationality	54	
Presence of disability	17	






















Source: Istat

SDGs statistical measures record large communalities and interconnections with the system of Equitable and Sustainable Wellbeing indicators (Benessere Equo e Sostenibile - BES)³³ and with the BES indicators used in the Economic and Financial Document (DEF)³⁴. 64 SDGs statistical measures are included also in the BES system. (Figure 3.15).

33 See <https://www.istat.it/en/well-being-and-sustainability/the-measurement-of-well-being/indicators>

34 See <https://www.istat.it/en/well-being-and-sustainability/the-measurement-of-well-being/bes-in-the-economic-and-financial-document>

Figure 3.15 - BES indicators and Istat SDGs statistical measures, by Bes domain and SDGs Goal

BES		SDGs	
1. Health	7 indicators	7 in Goal 3	
2. Education and training	8 indicators	7 in Goal 4 1 in Goal 8	 
3. Work and life balance	10 indicators	2 in Goal 5 8 in Goal 8	 
4. Economic well-being (*)	7 indicators	5 in Goal 1 3 in Goal 10	 
5. Social relationships			
6. Politics and institutions (*)	8 indicators	4 in Goal 5 5 in Goal 16	 
7. Safety	3 indicators	1 in Goal 5 2 in Goal 16	 
8. Subjective well-being			
9. Landscape and cultural heritage	2 indicators	1 in Goal 11 1 in Goal 13	 
10. Environment (**)	11 indicators	1 in Goal 1 2 in Goal 6 1 in Goal 7 1 in Goal 8 3 in Goal 11 2 in Goal 12 2 in Goal 13 1 in Goal 14 2 in Goal 15	        
11. Innovation, research and creativity	3 indicators	3 in Goal 9	
12. Quality of services	5 indicators	2 in Goal 1 1 in Goal 6 2 in Goal 11 1 in Goal 16	   

Source: Istat

(*) 1 indicator in more than one goal.

(**) 6 indicators in more than one goal.

3.5 Statistical measures for monitoring the National Sustainable Development Strategy

The National Sustainable Development Strategy (NSDS) is evolving thanks to the activities of the Ministry of Ecological Transition³⁵ (internal dimension) and of the Ministry of Foreign Affairs and International Cooperation (external dimension). They are coordinated by the Presidency of the Council of Ministers and by the actions and policies for the implementation of the Strategy, and by the ministry specific policies. In September 2020 the activities of revision of the Triennial Review of the Strategy began³⁶. In this context, the Sustainable Development framework has become the framework to orient and guide the necessary transformation of the post-Covid-19 reconstruction.

The SDGs statistical measures represent the key input for the measurement of the NSDS.

35 <https://www.minambiente.it/notizie/sviluppo-sostenibile-relazione-2020-e-avvio-del-processo-di-revisione->

36 The “2020 Report on the State of Implementation of the NSDS” was presented by the Ministry of Ecological Transition the first meeting of the CIPESS (Interministerial Committee for Economic Planning and Sustainable Development),.

During 2018, at the initiative of the Ministry of the Environment and Protection of Land and Sea (today Ministry of Ecological Transition), the Working Table on Indicators for the implementation of the National Strategy for Sustainable Development was established, with the aim of defining a narrow and representative core of monitoring indicators³⁷. It established to use statistical measures available in the Istat-Sistan Platform, preferably identical to UN-IAEG-SDGs indicators and coherent with the BES indicators, to ensure that the measures respect the requirements of statistical admissibility too. Therefore, the working table adopted criteria of parsimony, feasibility, timeliness, extension and frequency of the time series, sensitivity to public policies, territorial dimension, focusing on statistical measures that had the best available territorial disaggregation, in order to identify a first experimental subset of statistical measures referable to the National Strategy. This approach was shared and implemented in the analyses for the Regional Sustainable Development Strategies and Urban Agendas. It consists of 43 SDGs statistical measures³⁸, many of which are also included into BES.

In accordance with the OECD PCSD recommendation, which indicates the need for the aforementioned institutional mechanisms³⁹, coherence is recommended between the budget law (that must also be compliant with environmental constraints), the cohesion policies and the objectives of the NSDS, including also the correspondences between the priorities in the National Plan for Recovery and Resilience and in NSDS, in order to include the long-term impact of new policies as key elements in the progress towards the SDGs.

The 43 indicators selected for NSDS constitute a systematic framework for indicators about sustainability and well-being, that include jointly SDGs, BES, especially BES indicators used for the DEF (Figure 3.16). This subset should be revised, at least in order to benefit from the larger informative availability of the current SDGs statistical platform, but also to meet the requirements of the ongoing revision of NSDS.

Istat and Sistan will continue to enlarge the information mosaic, including, as usual, the ongoing evolution of international and national information systems and also analysing the interconnections between statistical measures in order to consider synergies and trade-offs.

37 Representatives of the Ministry of the Environment and Protection of Land and Sea, the Ministry of Economy and Finance, the Ministry of Foreign Affairs and International Cooperation, Ispra and Istat participated to the activities of the Table. The Table defined and agreed on the criteria for the selection of indicators and the methodological approach necessary to identify a first set of relevant indicators for the monitoring of NSDS. It was, in fact, agreed to refer to the Methodological Criteria adopted by the BES Committee, established pursuant to Article 14 of Law 163/2016, adapting and expanding them to incorporate a further criterion of spatial disaggregation of reference data, at least at the regional level.

38 Crf.2019 Implementation Status Report of the National Strategy for Sustainable Development, March 2020. <https://www.minambiente.it/pagina/la-strategia-nazionale-lo-sviluppo-sostenibile-monitoraggio-e-valutazione>

39 See paragraph 3.3.

Figure 3.16 - Istat SDGs statistical measures for the National Sustainable Development Strategy

Goal 1 - No poverty		Goal 9 - Industry, innovation and infrastructure			
BES	Absolute poverty (incidence), 2020	9,4%	CO ₂ emission per unit of value added, 2019	159,76 t/million €	
DEF					
BES	Severe material deprivation rate, 2019	7,4%	Product and/or process innovative enterprises (per 100 enterprises), 2018	55,6% with at least 10 employees	
Goal 2 - Zero hunger					
	Overweight or obesity among minors from 3 to 17 years of age, 2018/2019	25,6%	Researchers (in full time equivalent), 2018	25,2 /100 thousand inhab.	
	Earnings before interest, taxes, depreciation and amortization of farms (EBITDA) - Less than 15,000 euros, 2019	1.393 €/year			
	Share of utilized agricultural land under organic farming, 2019	15,8%			
Goal 3 - Good health and well-being		Goal 10 - Reduced inequalities			
BES	Healthy life expectancy at birth, 2020	60,9 Years	BES	Disposable income inequality, 2018	6,0
DEF			DEF		
	Age standardised death rate due to road traffic injuries, 2019	5,1 /100 thousand inhab.	BES	People at risk of poverty, 2019	20,1%
BES	Alcohol consumption (raw rates), 2020	16,4%	Goal 11 - Sustainable cities and communities		
Goal 4 - Quality education					
BES	Early leavers from education and training, 2020	13,1%	BES	Public expenditure per capita spent on the preservation of the cultural and natural heritage, 2019	34,5 € (current prices)
DEF			BES	Landfill of waste, 2019	20,9%
BES	People having completed tertiary education (30-34 years old), 2020	27,8%	BES	PM2.5 Annual average concentration in the municipalities capital of the province / metropolitan cities 2019	3 cities beyond the legal limits
Goal 5 - Gender equality					
BES	Ratio of employment rate for women aged 25-49 with at least one child aged 0-5 to the employment rate of women 25-49 years without children, multiplied by 100, 2020	73,4%	BES	Incidence of urban green areas on urbanized area of the cities, 2019	9,0%
DEF			Goal 12 - Responsible consumption and production		
BES	Women and political representation at regional level 2020	22,0%	BES	Domestic material consumption per capita, 2019	8,0 t/inhab.
Goal 6 - Clean water and sanitation					
BES	Sewage treatment, 2015	59,6%	BES	Domestic material consumption per GDP, 2019	0,28 t/1000 €
	Percentage of water bodies that have achieved the objective of ecological quality (high or good) on the total water bodies of surface waters (rivers and lakes) 2010-2015	41,7%	BES	Separate collection of municipal waste, 2019	18.452.091 Tons
BES	Urban water supply network efficiency, 2018 [≠]	58,0%	Goal 13 - Climate action		
Goal 7 - Affordable and clean energy					
BES	Renewable energy share in the gross final energy consumption, 2019	18,2%	BES	Emissions of CO ₂ and other greenhouse gases, 2019	7,1 t eq./inhab.
	Electricity from renewable sources, 2019	34,9%	Goal 14 - Life below water		
	Energy intensity, 2019	91,61%	BES	Marine protected areas EUAP, 2019	3.076,2 km ²
Goal 8 - Decent work and economic growth					
BES	Annual growth rate of real GDP per capita, 2019	0,5%	Goal 15 - Life on land		
DEF	Non-participation rate, 2020	19,0%	BES	Protected natural areas, 2017	21,6%
BES	Employment rate (20-64 years old), 2020	62,6%	BES	Soil sealing from artificial land cover, 2019	7,10%
BES	People not in education, employment, or training (NEET), 2020	23,3%		Fragmentation of natural and agricultural land, 2019	36,1%
				Goal 16 - Peace, justice and strong institutions	
			BES	Intentional homicide rate by gender, 2019	Male 0,7 /100 thousand inhab.
				Female	0,4 /100 thousand inhab.
				Unsentenced detainees as a proportion of overall prison population, 2020	16,3%
			BES	Length of civil proceedings, 2020	419 Days
			DEF		
			Goal 17 - Partnerships for the goals		
			BES	Official Development Assistance as a proportion of gross national income, 2019	0,22%

Source: Istat