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Renewable Energy

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- The 2009/28/CE Directive, adopted in Italy by Legislative Decree 28 of 03/03/2011, sheds light on the actual renewable sources, namely the sun, wind, water and geothermal resources, tides, wave motion and biomass;
- The risks for the environment are evident. The distribution of efforts among countries still is uneven, with certain countries pursuing net-zero emissions while others continue to lack policy targets;
- Taking into account the investment flows that are globally directed to this sector, according
 to figures from greenfield investment monitor fDi Markets, the renewable energy sector has
 seen strong and fairly attractive to Foreign and Direct Investments (FDI) since 2007;
- For the first time, Latin America was the world's second most attractive destination for foreign investment in renewables, behind Europe, both in terms of capital expenditure and number of projects;
- Some analysts observed that with oil prices so low, due to the Covid-19 pandemic, governments have today an opportunity to withdraw fossil-fuel subsidies – which account for USD 5000 billion of spending a year, globally – and redirect them into green energy development;
- In Italy, the renewables and energy efficiency sector shows great development potential for itself and for Italy looking at the 2030 targets;
- In Italy these agreements are having a wide spread, thus it will allow in the short term reliable insurance for the financing of many plants. The key to unlock this potential is eventually the demand aggregation;
- Since 2007, several European financial groups have invested in the Italian renewable energy sector contributing to the national GDP for 48.5 million euros;
- Italian attractiveness to business is gaining momentum, due to major changes in both the
 environmental and energetic Italian policies. By 2030, 30% of the energy consumed in Italy
 will have to come from renewable sources. This is one of the objectives of the National
 Integrated Energy and Climate Plan PNIEC, presented by the Ministry of Economic
 Development to the European Commission in January 2019.

Executive summary

This sector analysis was conducted using accredited and accessible online press sources, annual reports and industry studies, as well as databases available to the FDI Partnership and Sector-based Analyses Office of the Italian Trade Agency and other ITA offices. The bibliography used is available in the appropriate section at the end of this study.



Methodology

Introduction

It is by no means easy to give a categorical definition of "renewable energy". Referring to non-exhaustive forms of energy, which are renewable, may be too generic and, from a scientific point of view, not very punctual.

Renewables are those sources of energy whose exploitation does not compromise their availability over time, since they can regenerate at the same rate as they are used, unlike the "non-renewable" energy sources (fossil fuels: oil, coal and natural gas; nuclear sources: uranium and plutonium), which, on the other hand, are characterized by long periods of formation and whose availability is limited in the long run.

In the European context, the 2009/28/CE Directive, adopted in Italy by Legislative Decree 28 of 03/03/2011, sheds light on the actual renewable sources, namely the sun, wind, water and geothermal resources, tides, wave motion and biomass.

Sustainable energy refers to a type of energy production and use that has to do with sustainable development, whose main goal is not to damage the environment. Therefore, renewable energy sources, in particular, are aimed at curbing CO2 emissions, the main culprit for the global greenhouse effect and climate change.

Negative effects of climate change are nowadays becoming more and more evident every year (NASA and World Meteorological Organization (WMO), 2020) and global energy-related CO2 emissions, despite lowering periodically, have risen by 1% per year on average over the last decade.

From the perspectives of what can be done in order to curb this trend, the distribution of efforts among countries still is uneven, with certain countries pursuing net-zero emissions while others continue to lack policy targets. Nationally Determined Contributions (NDCs) within the Paris Agreement framework are in many cases less ambitious than the latest energy plans and market developments. According to the International Renewable Energy Agency (IRENA) estimates, current NDC power targets only cover 40% of the renewable electricity deployment needed by 2030 to set the world on the right direction to finally meet core climate goals (IRENA, 2019).

In this peculiar political framework, a coalition of 40 global companies, including energy majors such as BP, Iberdrola, Total, Orsted and Shell, has recently (March 2020) called on governments to support investment plans on renewable energy sources in developing post-covid-19 economic recovery strategies. Leading the coalition is the Energy Transitions Commission, a global association of companies in the energy, industry and finance sectors.

Further, the COVID-19 pandemic which is leading to health, humanitarian, social and economic crises could eventually turn the current social and economic landscape in two different while equally probable scenarios: either the widening of the gap between reality and political targets, or the acceleration of the decarbonisation of our societies. Inevitably, much will depend on how countries will react in terms of economic stimulus. The challenges of ensuring sustainability, strengthening resilience and improving people's health and welfare will be, from now on, paramount.

I. The international context

The Renewable Energy Market Outlook 2025 published in April 2020 by the International Renewable Energy Agency (IRENA) predicts that global renewable energy market will reach 2,152.9 billion USD by 2025, marking an increase of 4.9% compared to 2017 (+1,486.3 billion USD). The study tells that economic growth will be mainly influenced by three driver factors: the steady increase in government funding in the sector, the continued technological advances and the gradual freeing from fossil fuel exploitation.

According to the same analysis, renewables will cover 36% of the global energy market by 2030, an increase of 19.2% compared to 2014. The trend is also confirmed by data from the Frankfurt School and the United Nations Environment Programme Collaborating Centre, which show that investments in

renewables will increase from 312 billion (measured in 2015) to 392 billion by 2020. Most of these investments will continue to target solar and wind renewables.

According to the Global Wind Energy Council (GWEC), total wind power capacity is likely to reach 792 gigawatts by 2020 (up from 497 gigawatts in 2016) and deliver more than 20% of global electricity by 2030.

The Asia-Pacific macro region will continue to dominate the market due to both government investment and the rapid industrialization and urbanization of new large areas, as well as the increasing demand in energy. Europe will try to stay in the wake and in 2018-2025 it is foreseen to be the fastest growing continent in the sector, mainly as a result of environmental policies that have already been launched by the European Union.

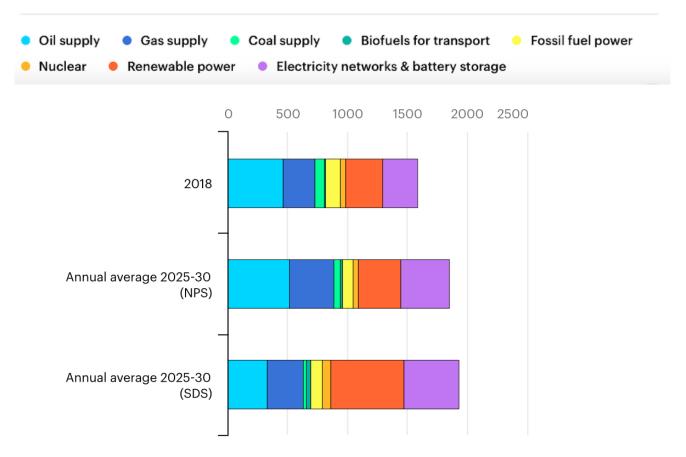
Taking into account the investment flows that are globally directed to this sector, according to figures from Greenfield investment monitor fDi Markets, the renewable energy sector has seen strong and fairly attractive to Foreign and Direct Investments (FDI) since 2007. In 2019, the same dataset shows that investment flows into the renewable sector have witnessed an all-time high, and in the same year renewable energy companies undertook 38% more projects abroad compared to 2018. The total amount invested reached 92.1 billion USD of spending, a new record for Greenfield FDI in the market.

This confirms that investor appetite for green energy projects has never been higher, not least as many new geographies are opening up their markets. This is because clean energy projects typically offer at least some level of revenue certainty through power purchasing agreements. This makes most clean energy projects a low-risk asset with a yield that in general is close to, but still higher than, interest rates in OECD countries.

The largest share of cross-border investment in renewable energy in 2019 went to solar energy, accounting for a little over 50% of all projects, according to fDi Markets. It says foreign investment in the sub-sector has grown almost exponentially since 2004, since solar technology has moved extremely fast in recent decades. At the same time, wind energy – the second top destination for foreign investment in 2019 – has seen more stable and linear FDI over the years. Another clear trend relates to biomass and hydroelectric power, both of which have seen decreasing flows of foreign investment over the past two decades.

In terms of the leading destinations for FDI in renewables, 2019 saw some novel results. For the first time, Latin America was the world's second most attractive destination for foreign investment in renewables, behind Europe, both in terms of capital expenditure and number of projects, thereby disrupting what has been for many years a competition between Asia-Pacific and Europe, according to

fDi Markets and the most relevant markets in Latin America and Central America are, Brazil, Chile and Mexico. All three are among the world's top five destinations for foreign investment in renewables, in terms of project numbers since January 2018, together with Spain and the US.



(Global energy investment by scenario, 2025-2030 - USD (2018) billion - International Energy Agency, IEA, 2018)

As a result, renewable energy infrastructure assets represent a low-risk investment in emerging economies, compared with many other forms of exposure. Like Latin America, Africa also saw unprecedented foreign investment in renewables in 2019, according to fDi Markets. The majority of foreign investment to the two macro regions, and the world for that matter, came from European companies.

It looks likely, however, that the coronavirus outbreak will halt the FDI boom in renewables, and the global transition to green energy more generally. Even if the decline in business, consumer and industrial activity created a short-term drop in greenhouse gas emissions, Covid-19 seems to bring bad news for the environment.

The Covid-19 pandemic represents the biggest shock to the global energy system in times of peace, with this year's decline in demand set to obscure the impact of the 2008 financial crisis, resulting in an unprecedented cut in annual carbon emissions. This is the premise of the International Energy Agency's new Global Energy Review 2020, with which the OECD's energy arm provides an almost real-time view of the extraordinary impact of the health emergency on various energy sources.

The result is an estimate of a 6% decline in energy demand in 2020, a six-fold impact than the 2008 crisis. The biggest declines will be recorded in advanced economies, with declines of 9% in the US and 11% in the EU. It all depends, of course, on the duration and severity of measures to curb the spread of the virus: every month of global lockdown at the levels observed at the beginning of April reduces global energy demand by around 1.5%.

Some projects in the procurement phase will face a huge increase in capital costs, and therefore have to pause, as currencies take a hit from Covid-19. The most impacted are emerging markets in Asia, Latin America, the Middle East and India, where the bulk of solar growth had been expected this year (Rystad Energy, April 2020).

The coronavirus pandemic is also making renewable energy less competitive against fossil fuel alternatives, which are usually more expensive. In most economies that have implemented concerted lockdowns, electricity demand declined by about 15%, largely as a result of factories and businesses halting operations (International Energy Agency, May 2020).

The EU Emissions Trading System shows that coal prices have dropped from about 30 USD per ton in mid-2019, to about 16 USD in March 2020. This puts fossil fuels on an increasingly level playing field with renewables, decreasing demand for the latter. Furthermore, the historic and ongoing drop in oil prices is exacerbating this situation.

On top of this, as billions of dollars from the world's largest energy oil companies are wiped out by the oil collapse, even more of their spending will likely be directed towards the protection of existing oil and gas investments, rather than to renewables.

However, there might be little room for a different scenario. Some analysts observed that with oil prices so low, governments have today an opportunity to withdraw fossil-fuel subsidies – which account for 5,000 billion USD of spending a year, globally – and redirect them into green energy development. In facts, renewable energy has so far proved to be the most resilient source of lockdown measures and is likely to remain for the rest of the year, the only one of all energy sources that will see an increase in demand, albeit modest.

The share of renewables in global electricity production jumped to 28% in the first quarter of 2020, from 26% in the first quarter of 2019. Variable renewables (i.e. photovoltaics and wind) accounted for 9% of total demand, compared to 8% in the first quarter of 2019.

By the end of the year, despite bottlenecks in supply chains that blocked or delayed the construction of new plants in several key regions, the growth of photovoltaic, wind and hydroelectric generation will increase renewable electricity generation by almost 5% in 2020 (Global Energy Review 2020, International Energy Agency, IEA). In this way, renewables will account for almost 30% of electricity supplies globally. Along with nuclear, they will reach 40%, beating far from coal (35%) extending the advantage already established in 2019.

In absolute terms, the Agency predicts that wind energy will increase generation capacity among all renewables the most, thanks in part to a windy first quarter in many regions.

Hydropower production remains the biggest uncertainty this year, accounting for almost 60% of all renewable energy production globally and depends on rainfall and temperatures, which could be medium-high and associated with a shortage of rain. Solar is set to grow faster than other sources in terms of installations, although uncertainty remains over the growth of small photovoltaic systems.

In 2019, one-fifth of all globally distributed renewable capacity was installed by individuals or small and medium-sized enterprises on their homes or business sites. At present, however, the installation of distributed photovoltaic systems has stopped or has slowed down dramatically in many countries, due to measures to block economic activities. The total installation of the year, the Agency points out, will also depend on the scope and timing of the release of economic stimulus packages in response to the economic crisis.

II. Renewables in Italy

As for the Italian national context, the trend of greenhouse gas emissions of the last 28 years is positive: in 2018, emissions are down by 17% compared to 1990, (a registered decrement from 516 to 428 million tonnes of CO2) and -0.9% if compared to 2017. The decrease is due to the growth of renewable energy production (hydroelectric and wind) and the increase in energy efficiency in industrial sectors. The data were provided by two reports on the Italian emissive state of the art: the National Inventory Report 2020 and the Information Inventory Report 2020, presented by the Higher

Institute for Environmental Protection and Research (ISPRA), which paints the big and detailed picture of the Italian situation on the registered trends of greenhouse gases and air pollutants from 1990 to 2018.

In fact, the renewables and energy efficiency sector shows great development potential for itself and for Italy looking at the 2030 targets.

According to the GSE (Gestore dei Servizi Energetici, the Italian Energy Service Provider Agency) 2019 Activity Report, presented on 6 May 2020 live streaming, 2.6 billion investments in the green sector have been activated in 2019 and 14.8 billion will be invested in sustainability. The GSE's costs for the incentive for the use and the withdrawal of renewable electricity from power plants amounted in 2019 to 12.9 billion (down from 13.4 billion reached in 2018).

11.4 billion out of these 13.4 were covered by the bills paid by the Italian taxpayers with the so-called Asos component (down slightly from the 11.6 billion level registered in 2018). The Asos component is, from 1 January 2018, the component of the expenditure on system charges intended to cover the general costs related to the support of renewable energy and CIP 6/92 – the Provision n. 6 of the Interministerial Price Committee (1992) which sets the prices by which individuals could sell electricity produced from renewable sources to the Enel Company).

The costs, GSE explains, are partly offset by revenues from the sale of the energy withdrawn from national power plants. In 2019, GSE placed 28.6 Terawatt-per-Hour (TWh) on the electricity market, achieving a revenue of 1.5 billion - a little contraction compared to 2018 due to the contraction of volumes (-2 TWh) and the decrease in the average price of energy.

For what concerns the resources aimed at fostering sustainability (i.e. the costs incurred by consumers and those obliged for this purpose), the GSE calculates an economic value of 14.8 billion: 11.4 billion for the incentive of electricity produced from renewable sources, 1.3 billion attributable to energy efficiency and thermal renewables, 0.8 billion for biofuels and 1.3 billion attributable to the proceeds from the placement of emission allowances in the European platform.

In 2019, a total of 2,974 plants per 1,137 MW were in operation as of December 31. Most of them are wind farms (85%), followed by hydroelectric (8%) bioenergy implants (6%). The energy incentive in 2019 is 2,365 GWh, at a cost of 184 million.

The decree adopted on 23 June 2016 has deployed today much of its effects, but there are still plant projects in a useful position that must enter into operation, amounting to 187 MW.

For the sixth year in a row, in 2019 Italy has exceeded the 17% threshold of energy consumption met by renewable sources, a goal set by the "Green Deal" produced by the European Union in the first trimester of 2020. According to the GSE, preliminary assessments of last year lead to an estimate for 2019 of around 18%. It is also estimated that in 2019 GSE's activities helped to activate about 2.6 billion of new investments.

The European Green Deal

After the US Green New Deal – a package of measures proposed in 2019 by US legislation to tackle climate change – the European Union also released its own "green deal".

The EU Parliament approved on 14 January 2020 a massive investment plan aimed at turning Europe into a macro region with a "zero climate impact" by 2050.

The European Green New Deal aims to decarbonise the energy sector across the continent, to restructure buildings, to support industry in a green economy process and to make the transport system cleaner.

All EU member States will receive a financial aid package to start the transition: total investment is around1 trillion EUR over ten years. In addition, a number of funds will be activated, which member states need to begin economic, productive and labour conversion.

Renewable energy and the energy savings boosted in the last year are estimated to have avoided the emission into the atmosphere of 43 million tonnes of CO2 and the consumption of 111 million barrels of oil, while at least 50,000 units of annual work (full-time equivalent) are estimated to be employed in all the initiatives supported in 2019.

In terms of electric renewables, the report says, more than 1.2 GW of additional power have been put in place at the end of 2019, of which about 750 MW photovoltaics, most of which (more than 400 MW) are related to new generation plants, parts of them are attributable to non-incentivized interventions. Further, more than 400 MW of wind farms have been set, encouraged by the ministerial decrees of 23 June 2016 and 6 July 2012.

With regard to thermal renewables, the first estimates of 2019 indicate data substantially in line with the previous year, with consumption around 10.7 Mega-tons of oil equivalent (Mtoe), of which 7.8 Mtoe from bioenergy and 2.5 Mtoe from heat pumps, corresponding to almost half of the total use of renewable energy sources (about 22 Mtoe).

As for transportations, the first reports indicate an increase in the consumption of biofuels in 2019 compared to 2018 (around +5%), due to the increase in the mandatory share of mixing. For the Italian Agency GSE the results achieved so far and the 2020 targets are the basis from which to achieve the 2030 targets.

The Covid-19 pandemic and the Italian renewables

Italians consume less but consume "greener". The effects of the Coronavirus crisis on the Italian energy system could be summarized in this way. According to a report published by some analysts of the Italian business consultancy Althesys, the slowdown in production activities, following the lockdown measures implemented due to the Covid-19 emergency, has sharply cut electricity consumption all over the country.

Analysts confirm estimates that were already been published in May 2020 by the Ember think tank (an independent climate think-tank based in London and focused on accelerating the global electricity transition), observing that since mid-March 2020 national electricity demand has fallen by more than 20 percent. A significant curb in the demand that, given the current recovery forecasts, could easily turn into a major loss, at the end of the year, up to 302 billion kWh less.

But as demand declines, renewable energy is growing. Thanks to the dispatch priority, clean energy was able to meet 42% of the national needs, compared with a gross installed power of about 54 GW. This is an increase of 2% compared to the pre-coronavirus period.

In line with the recent performance and according to the Althesis survey, investment resilience in the sector is not currently at risk. These are, in fact, operations with a long-term horizon, well beyond the presumed effect of the Covid-19. On the contrary, the fossil sector and the reactivation of thermal power plants are the energy sectors more at risk.

• The Italian renewables sector and the foreign direct investments (FDI)

Due to its natural characteristics, Italy has a territory with high solar radiation and a good windiness, especially on the high grounds, therefore showing all the best characteristics in order to accommodate a wide range of production settlements from renewable sources, present and active throughout the country.

In addition, the drivers of the growth of renewable sources in Italy are mainly attributable to investments in medium or large-sized plants, with specific reference to the most mature technologies: photovoltaics and wind. The main players in the supply chain are both utilities and investment funds, but also private and mixed companies.

The so-called Power Purchase Agreements (or long-term contracts of at least 10 years) will gather particular relevance in Italy, allowing the bargaining and the definition of the sale of electricity from the producer to the buyer, ensuring (through the provision of suitable guarantees) the obligations assumed in the contract.

In Italy these agreements are quite common, allowing a reliable investment in the majority of plants in the short term. The key to unlock this potential is demand aggregation.

As for the investment flows that are globally directed to the Italian renewables sector, according to figures from Greenfield investment monitor fDi Markets, since January 2012 to December 2019, 12 investment agreements touched the Italian renewable sector.

Mainly coming from other member States of the EU, these investment flows provided Italy with more than 570 created jobs and an overall amount of invested capital of 644 million EUR. Investments targeted in particular the Southern regions (especially Apulia and Basilicata), while addressing Northern regions as well. From an observation conducted through the fDi Market dataset, over a period from 2012 to 2019, Portugal and Germany are the two source country which have invested in Italy the most.

It should be underlined, outside Europe, the growing interest in investing in the Italian sources of renewable energy from non-European countries. Since 2012, Canada and China revealed to be the biggest investors for the Italian green power. For example, in 2018 Italy's Enel Green Power sold 1.8 gigawatts of green energy facilities to Canadian pension fund CDPQ for 1.35 billion USD (Enel Green Power, 2018, Sept. 28).

Project date	Investing company	Source country	Destination state	Jobs created	Capital investment
dic 2019	Octopus Renewables	United Kingdom	Sardegna	55	64,0464825

set 2019	EDP Renewables	Portugal	Basilicata	55	64,0464825
set 2019	EDP Renewables	Portugal	Basilicata	55	64,0464825
mar 2019	BayWa Re	Germany	Campania	55	64,0464825
feb 2019	Canadian Solar Inc (CSI)	Canada	Sicilia	55	64,0464825
nov 2018	Lightsource BP (Lightsource Renewable Energy)	United Kingdom	Lombardia	9	1,612359
mar 2013	WSB Neue Energien	Germany	Liguria	9	1,612359
feb 2013	EDF EN Italia	France	Toscana	55	64,0464825
dic 2012	EDF EN Italia	France	Puglia	55	64,0464825
dic 2012	EDP Renewables	Portugal	Puglia	55	64,0464825
mag 2012	Talesun Solar Germany	China	Calabria	55	64,0464825
gen 2012	German Pellets	Germany	Not Specified	62	64,0464825

(Data Jan.2012- Dec.2019 from fDi Markets)

Furthermore, there is a huge number of companies and investment groups which decided to settle in Italy. The lion's share of these initiatives is about Greenfield investments among which a huge part comes from European countries. According to the Reprint dataset (observation conducted over data Jan. 2007- Mar. 2019), investors' appetite for the Italian renewable energy sources and plants is high and the number of foreign-participated companies has been increasing across the last decade.

Group	Country	Rev. mn EUR (2018)
ALTERTEC RENOVABLES S.L.	Spain	0.7

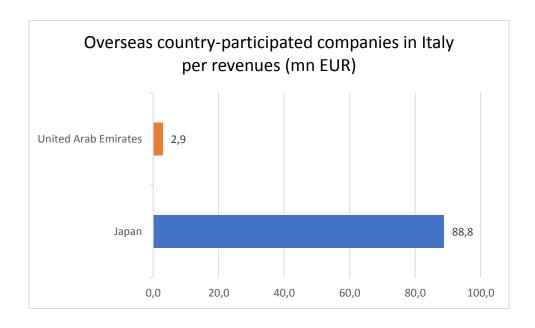
ELECTRICITE' DE FRANCE S.A EDF	France	32.7
ENGIE S.A.	France	3.1
EVOTEXX GMBH	Cormany	3.8
EVOTEAN GIVIDIT	Germany	3.0
WHITERIDGE INVESTMENT FUNDS SPC LTD	United Kingdom	0.1
ALLIANZ SE	Germany	1.1
	,	
EDP - ENERGIAS DE PORTUGAL, S.A.	Portugal	1.2
KARRO DV RETEILIOUNICO CMRU	C	0.4
KARPO PV BETEILIGUNGS GMBH	Germany	0.4
SOLARIG HOLDING S.L.	Spain	0.1
SONNEDIX B.V.	Netherlands	2.8
RITTER ENERGIE- UND UMWELT- TECHNIK GMBH		
& CO. KG	Germany	2.5

(Data from Jan. 2007- Mar. 2019 – European country-participated companies in Italy; Reprint data source)

Since 2007, several European financial groups have invested in the Italian renewable energy sector contributing to the national GDP for 48.5 million EUR. Investment flows established brand new plants and energy infrastructures throughout the country, touching a good portion of the regions from the South as well as in the North of Italy, therefore contributing to a wider distribution of industrial knowhow and financial resources.

European foreign direct investments – Greenfield or acquisitions – contributed to the creation of more than 560 jobs with paramount impacts, in particular, on smaller communities across the country.

In parallel with European investors, Italian opportunities on renewables have attracted funds from overseas and, according to data provided by the Reprint dataset, the two main sponsors (until March 2019) are Japan and the United Arab Emirates. Groups from these two countries have decided to relocate part of their productive process in Italy generating a global amount of 91.9 million EUR in revenues and 415 jobs opportunities.



(Data from Jan. 2007- Mar. 2019 – Overseas country-participated companies in Italy per revenues; Reprint data source)

Italian attractiveness to business and investments is gaining momentum, due to major changes in both the environmental and energetic Italian policies. By 2030, 30% of the energy consumed in Italy will have to come from renewable sources. This is one of the objectives of the National Integrated Energy and Climate Plan – PNIEC, presented by the Ministry of Economic Development to the European Commission in January 2019.

The document – the final text of which was published on 21 January 2020 – collects the guidelines to follow and the objectives to be achieved in our country on energy and environmental protection, for the period 2021-2030.

This marks the beginning of a strategic change in Italy's energy and environmental policy, which is thus moving towards decarbonisation.

In particular, the lines of action include decarbonisation, energy efficiency and security, the development of the internal energy market, research, innovation and competitiveness.

Financial incentives for investments in Italy (Last update May 2020)

In Italy, public incentives for the installation of renewable energy plants are characterised by different mechanisms, which take into account, for example, the type of source, the size of the plant or the date of construction. Here below is provided a short description of the incentive national programmes currently applied.

Energy Account 2020

The Energy Account was introduced thanks to the implementation of the EU Directive 2001/77/EC, through the Legislative Decree 387/2003. Its goal is to improve the energy efficiency of buildings, premises and homes by installing photovoltaic systems: those who produce electricity using solar energy, will receive an amount of money proportionate to the electricity produced by their plant. The incentive is based on a period of twenty years.

As of 2020, the legislation in this area refers to the Ministerial Decree of 4 July 2019, also called the FER Decree (where FER stands in Italian for "Fonti di Energia Rinnovabile" or "Renewable Energy Sources"), in which it is established that only certain types of plants can have access to such incentives: in particular those whose components are newly built and those whose nominal power is not less than 1 kW. The essential condition is that the photovoltaic systems installed are connected to the electricity grid or to small isolated networks.

Thermal Account 2020

The Thermal Account 2020 – whose fund is managed by the Italian Gestore dei Servizi Energetici (GSE), the Italian Energy Service Provider Agency – allocates economic contributions to improve energy efficiency through the production of thermal energy from renewable sources.

It provides economic bonuses equal to 65% of the expenditure incurred for improving the efficiency and energy savings of buildings and for the production of renewable energy, both for public administrations and private entities (businesses or residences).

The State makes available 900 million EUR per year: 200 for public administrations, 700 for private entities. The GSE reimburses 65% of the expenditure incurred within two months of the agreement being concluded.

Individuals can submit expense claims at the end of the energy efficiency works. Public administrations, on the other hand, can also use the so-called "booking" mode, taking advantage of the incentives before the start of the energy efficiency works.

FER Decree 1

In force since 10 August 2019, the FER 1 Decree (Renewable Energy Sources) provides requirements to access incentive mechanisms aimed at supporting the production of energy from renewable sources. In particular, it facilitates small renewable energy plants (up to one megawatt of energy produced) such as photovoltaic, wind, hydroelectric and gas purification plants.

Incentive tariffs are up to 150 euros per MWh for wind, 155 euros for hydroelectric, 110 euros for gases produced by sewage processes and 90 euros for small photovoltaic solar systems.

National Energy Efficiency Fund

Established by the Ministry of Economic Development, the National Energy Efficiency Fund is regulated by the Decree 22 December 2017. It supports the energy efficiency interventions carried out by companies – including the Energy Service Company – and the public administration, on real estate, plants and production processes

The financial resources provided amount to 310 million EUR, divided in this way: 30% guarantees, 70% subsidized financing. Facilities granted to companies can be combined with contribution or financial relief provided by other EU, national and regional regulations. Facilities granted to the public administration can be combined with other incentives, within the limits of a maximum total funding equal to 100% of the eligible costs.

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