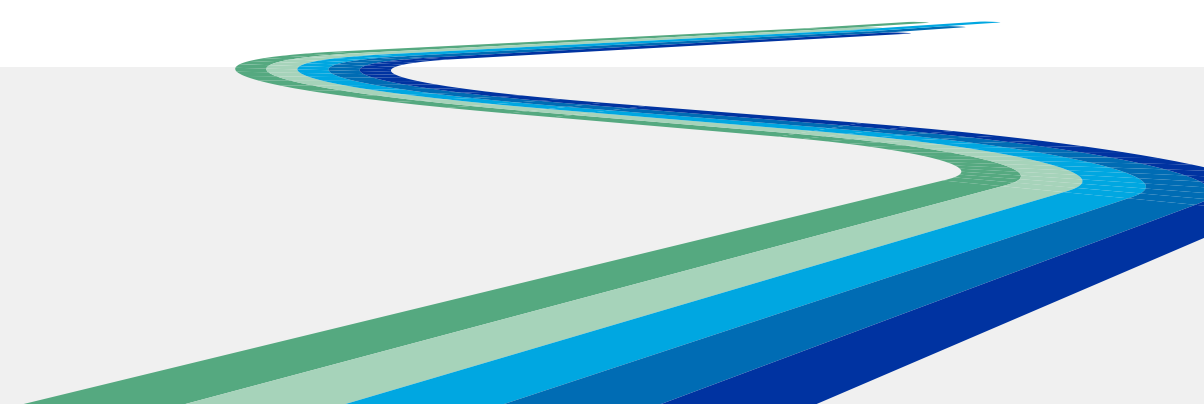





Presented on the 8th February 2023

The 2030 Italian electricity sector plan: crucial opportunities for Italy

Agostino Re Rebaudengo
President





Eletricità Futura is the leading association of companies operating in the Italian electricity sector, representing over 70% of the Italian electricity market.

Eletricità Futura represents companies operating in the Italian electricity sector. We provide **concrete proposals for their development** and assist them in the sector's transformation with specialised intelligence and networking services.

Over **500 companies** have chosen Eletricità Futura. Our members are of all sizes, active in the production and marketing of electricity from conventional and renewable sources, in distribution, and in the supply of services to the sector.

Climate crisis is worsening in Italy

Between 2018 and 2022, annual extreme weather events more than tripled compared to the previous five years.

Italy is the 2nd European country for damage caused by climate change.

2022 was the hottest year in Italy over the last 30 years: +1.15 °C above the average.

Number of extreme weather events recorded in Italy from 2013 to 2022 (annual average)

2013
2017 **70**

2018
2022 **230**

Accelerating decarbonisation is a top priority for national security.

The Mediterranean area is among the most vulnerable to climate change globally.

91% of Italian municipalities are at hydrogeological risk.

A record drought in 2022, the most severe in 70 years: rainfalls were 46% below the average of the last 30 years.

The year 2023 is starting out worse: about 70% of the water stored in the snow nationwide is missing, a larger deficit than last year.

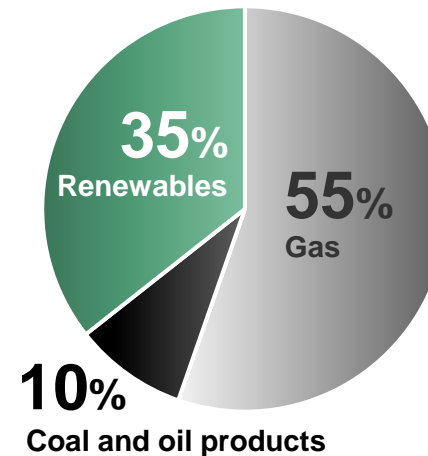
Italy keeps on being in an energy emergency due to its excessive dependence on foreign countries to satisfy its energy needs.

65% of electricity in Italy is still produced from fossil fuels, mostly from gas (95% being imported).

Renewables are the cheapest energy source.

In addition, 14% of our electricity consumption is covered by imported electricity.

Electricity generation in Italy in 2022



Italy can become more independent and competitive by exploiting the only national resources that produce sustainable electricity, being available in abundance and in a short time.

The severe energy emergency shows that the transition to renewables is a roadmap to independence and national security, in addition to decarbonisation.

With the electrification of consumptions, more electricity is needed

It is only by increasing the share of renewables in the electricity mix that electrification will result in greater energy independence and lower emissions.

We forecast that **electricity demand will reach 360 TWh** in 2030 (net of increased consumption efficiency) driven mainly by economic growth, the spread of heat pumps for air conditioning, electric cars, and induction hobs.



Permits: we are the worst in Europe in terms of time and costs!

Several simplification measures and the efforts of the «PNRR-PNIEC» and «VIA-VAS» Commissions have improved a dramatic situation but have not solved the problem. This is because:

After obtaining the EIA, projects still have to go through a long and complicated chain of permits, in some cases even more than 30 approvals are needed.

Many projects are rejected by the regions or the cultural/landscape protection authorities in the name of landscape protection: if we do not cut CO2 emissions - quickly - we will no longer have any landscape to protect.

It still happens that the same rule is interpreted differently by different public entities, which makes it very difficult for companies to choose the correct course of action.



In order to produce more renewable electricity, it is urgent:

Update the NECP - National Integrated Energy and Climate Plan by June 2023 as planned by the European Commission, setting a target for the electricity sector to install at least 85 GW of new renewable power by 2030.

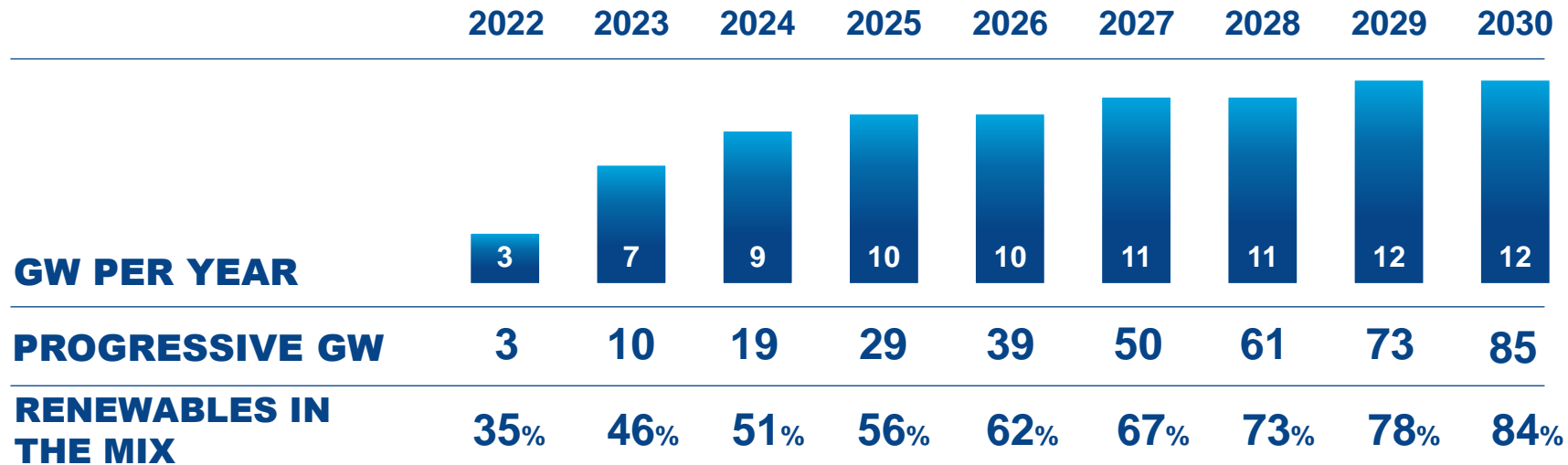
Make regions and landscape protection authorities responsible for reaching the new renewable target: delays at regional level are largely underestimated because they are measured compared to the renewable target of the NECP in force (drafted in 2018).

Strengthen the staffing of the offices responsible of granting of authorisations (at national and territorial level), also expanding their competences and technical equipment.

Adopt a Consolidated Normative Act that reorganises and simplifies the authorisation framework for the electricity sector.

TIME FOR ACTION

The Electricity Plan 2030 aims at connecting 85 GW of new renewables to the grid



With additional 85 GW, 84% of electricity will come from RES

(also taking into account the increase in electricity consumption)

The Plan also targets 80 GWh of new large-scale storage capacity.



In achieving the 2030 Plan target, Italy will be able - over the next 8 years - **to reduce gas imports by 160 billion m3 with a saving of €110 billion** (at the average gas price of January 2023)

Note: The savings of 160 billion m3 of gas were calculated assuming that 1 GW of new renewable power (producing on average 1.8 TWh of new renewable energy each year) would reduce gas imports by 450 million m3. The €110 billion in savings over the next eight years was calculated by taking the average value of the TTF in January 2023, which is about 65 €/MWh. Applying a standard conversion factor of 0.0107, this equates to €0.7 per standard m3 of natural gas. If we instead took the average gas price in 2022 (135 €/MWh) as a reference, Italy would save more than 230 billion euros over the next eight years.

The 2022-2030 Electricity Plan for Italy

Benefits for Italy

320
Billion €

INVESTMENTS
in the electricity
sector and its
value-chain.

360
Billion €

ECONOMIC BENEFITS
in terms of added value for
the supply chain and
related industries, and
growth in national
consumption.

-270
Million t CO_{2eq}

LESS CO_{2eq} EMISSIONS
from the electricity sector
over the 2030 Plan period.

540
Thousand

NEW JOBS
in the electricity sector and its
value-chain in 2030, which will
be additional to the current
120,000.

The benefits of the 2030 Plan are consistent with Bloomberg and IEA global forecasts

320Bn€ of investment in 2022-2030 amount to 1% of what Bloomberg New Energy Finance (BNEF) and the International Energy Agency (IEA) estimate for the global energy transition.

540,000 new jobs in 2030 represent 2% of the IEA's estimated total world job growth related to the energy transition.

Italy's 2022 GDP is 2% of the world's GDP.

Energy Transition Investment Trends 2023

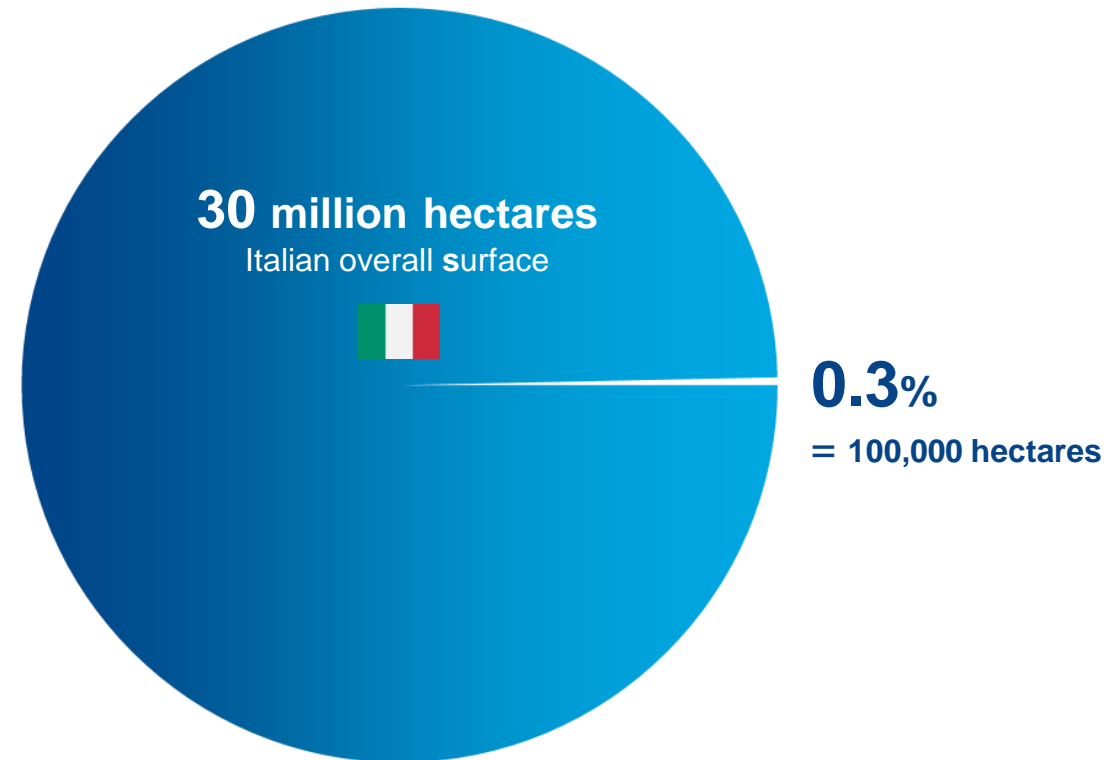
Tracking global investment in the low-carbon energy transition

January 2023



Installing 85 GW of new RES will require merely 0.3% of the Italian territory

We deem all areas not being subject to morphological, regulatory or land-use constraints as areas potentially suitable for the installation of renewables. According to the Terna-Snam study, these areas are about 27% of the Italian surface area.





The electricity industry is working to make Italy more secure, independent and competitive!

Agostino Re Rebaudengo
President

