Enel's 2024 EU Manifesto

TIME TO ACT

Plugging consumers into the center of the Green Deal

- Strengthening EU industrial competitiveness
- Consumers at the center of the transition
- Power grid infrastructure: more resilient and flexible
- Decarbonize the power sector to achieve energy independence
- Unlocking the potential of electrification
- A just and skilled transition

The imperative for an **energy transition** requires balancing socioeconomic needs and climate goals with a pragmatic approach. Europe must redefine its identity, considering enlargement without compromising stability. The Green Deal, initially responding to the climate crisis, now serves as a strategic solution for challenges like the geopolitical and the related energy crises.

It's time for Europe to turn words into actions. The EU and its Member States must adopt a new vision for a **consumer-centric** energy policy, prioritizing **electrification** and **decarbonization** through increasing reliance on **renewables**, adapting to labor market changes through reskilling, integrating reliable supply chains and supporting the development of more **robust, climate resilient and digitized grids**. Balancing growth, environmental protection, security of supply and **competitiveness** in the industrial sector is crucial for sustainable societal and economic well-being.

1. Strengthening EU industrial competitiveness

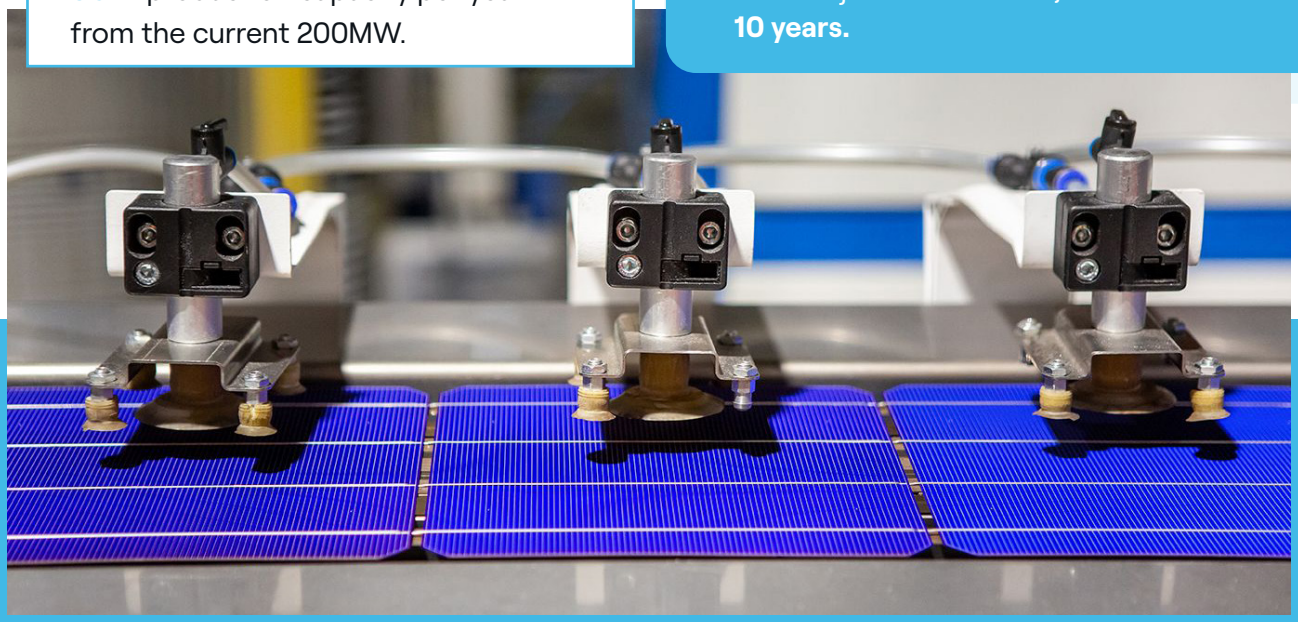
Recent energy and geopolitical crises highlight Europe's energy system vulnerability, posing a challenge in decarbonizing industries for **global competitiveness**. The "Green Deal Industrial Plan" aims to boost Europe's net-zero industry, focusing on sectors like **photovoltaic** and battery production facing inadequate local capacity. Also, key sectors like wind and EV manufacturing are in a competitive crisis, endangering their **economic sustainability**. The EU must **prioritize support for these sectors**, making the Green Deal Industrial Plan the catalyst for a radical transformation of the European economy.

WHAT WE CALL FOR

- Pan-European financial tools to promote the **EU's energy resilience and Industrial competitiveness**. A **European Sovereignty Fund** could offer a structural solution while **avoiding a subsidy race** between Member States that would end up distorting the Single Market.
- Energy tariffs for final customers shall not discriminate against technologies that are part of the solution for decarbonization, and support schemes for energy-intensive consumers shall preserve market price signals.
- **Non–Price Criteria** can be an important tool to incentivize the innovation required for achieving the Green Deal and REPowerEU objectives. Specifically, in the field of solar energy we propose to introduce more than one sustainable criteria for the "EU sustainable PV module".
- Guarantee the advantage of local **European manufacturing production** vs cheaper imports from third countries through adequate mechanisms to subsidize costs, and not just investments, for a minimum of **10 years.**

Enel numbers

Enel 3SUN Gigafactory, Europe's largest gigawatt-scale factory producing **high-performance bifacial PV modules**: potential output up to **3GW** production capacity per year from the current 200MW.



Source: https://www.enel.com/investors/overview

2. Consumers at the center of the transition

Building the future energy system requires a broad and deep collaboration between Utilities and customers based on shared goals. On the one hand, the energy transition will require stronger and digitalized **distributed grids**, **electrification** of final consumption, and improved energy efficiency, with a **greater role** of prosumers. On the other hand, we need to directly transfer the benefit of the energy transition to **final customers (retail and industry)**. In fact, renewables are already the cheapest source of electricity and they do not suffer from price volatility. For this reason, we need to improve, at national level, the mechanisms that allow the full development of Power Purchase Agreements (PPAs) to transfer the long-term economic benefits of renewables to final customers.

WHAT WE CALL FOR

- Implement, at national and EU level, the improvements for **PPAs** identified in the Electricity Market Design reform, reinforcing existing mechanisms to diminish the **volatility of retail prices.**
- Developing **new support mechanisms** for energy communities and other citizen-led initiatives.
- **Funding programs** for consumer education and engagement, putting the spotlight on the economic and social benefits of the energy transition and the clean electrification, as the key way to achieve it.

Enel numbers

Enel Group, as private player, has the **largest retail customer base worldwide**

61
million customers globally

~35
million customers in Europe

Source: https://www.enel.com/investors/overview

3. Power grid infrastructure: more resilient and flexible

The 60% expected surge in electricity consumption by 2030 means that EU grids need to evolve fast, integrating more renewables and accommodating a decentralized system with rooftop solar panels, electric vehicles and green hydrogen production. Too much red tape means renewable projects can face lengthy waits for grid connection: simplification of this process is crucial. **€584 bln** investments in the European grids by 2030 to meet the REPowerEU goals under the Grids Action Plan must be accompanied with the removal of regulatory obstacles to the grid's expansion and digitalization.

WHAT WE CALL FOR

- Fast-tracking the electricity market design reform to **improve DSO and TSO remuneration structures**, to remove possible regulatory barriers which put at risk new investments, to **boost and appropriately fund anticipatory investments, also directed to improve climate resilience to extreme weather events.**
- Fast-tracking the proposed reform on **permitting** and **streamlined access to EU and national funds**, especially for innovative initiatives.
- A relevant portion of the **grids funding system** should be earmarked for **climate resilience efforts, expanding** and **strengthening infrastructures** and deploying **digitalization**.
- **Realize the EU digital twin transition** by mixing the goals of the Digital Single Market and the Energy Union.

Enel numbers

2024-2026 total gross investments of **~18.6 billion euros in Grids**, focusing on **improving quality, resilience and digitalization**, alongside **new connections**.

~1.5
million km electricity grids in Europe

~1.5
million prosumers connected in Europe

~44
million smart meters installed in Italy and Spain

Source: https://www.enel.com/investors/overview

4. Decarbonize the power sector to achieve energy independence

The development of **power generation from renewable and low carbon energy sources** must play a key role in the decarbonization of the energy system and improvement of the EU's energy independence. In fact, renewables not only reduce emissions in the power sector, but contribute to the decarbonization of final energy consumption through the **clean electrification of end-use sectors**.

Moreover, the deployment of renewables reduces the volatility of energy prices to the benefit of consumers. Evolution of energy markets and technological progress are essential to catalyze the achievement of the objective of additional 800 GW of solar and wind by 2030.

Nonetheless, the climate neutrality by 2050 requires **Research&Development activities** in collaboration with private actors and academies to explore novel technologies that may be able to provide clean and reliable energy - such as nuclear Gen IV reactors and Small Modular reactors (SMR) - and to accelerate their competitiveness and industrial maturity.

WHAT WE CALL FOR

- **An EU 2040 climate target consistent with 2050 climate neutrality** and a revised Governance framework fit for the future and able to deliver improved energy and climate planning at national level.
- A timely and transparent **implementation of EU market design measures** by ensuring adequate cooperation platforms on national implementation and necessary support from EU institutions, in particular on renewables and grids permitting and incentive mechanisms for PPAs.
- An EU **Emission Trading System reinforced with measures** aimed at increasing the long term predictability of market signals, **supporting** the **decarbonization of industry** and reducing the volatility of CO2 prices.

Enel numbers

Enel, as private player, is **first** in the **utility ranking** at **EU level** with **~25 GW RES installed capacity** (consolidated).

2024-2026: **gross investments** for RES of **~12.1 billion euros** worldwide, of which in Europe around **7.2 billion** euros, with **+5 GW renewable** generation.

>900
RES plants across Europe

~25
GW RES installed capacity in Europe

World's largest private player with **63GW** of installed RES capacity

Source: https://www.enel.com/investors/overview

5. Unlocking the potential of electrification

The **electrification rate** in the **EU has stagnated at 23%** with no significant progress made in the last decade. Even if electrification technologies are **3 to 5 times more efficient** than fossil fuel alternatives and contribute to circularity, energy security and urban air quality, electrification is not happening at the pace needed for the transition. Urgent attention is required to **address economic and non-economic barriers**, including technology integration, infrastructure issues and insufficient support for electrification solutions.

While direct electrification is cost-efficient for most energy uses, certain sectors face challenges, making renewable hydrogen a crucial complement for the future.

WHAT WE CALL FOR

- An **EU Action Plan** setting a clear path with **ambitious electrification targets** by 2030, 2035 and 2040 in support of pursuing 2030 and 2040 EU climate and energy goals, leveraging on the key role of mainstreaming electrification of the EU economy as a no-regret option for the energy transition.
- **Electrification** should become a **driver** for **National Energy and Climate Plans.**
- Allow for the emergence of a **successful business case for electrification** in industrial, residential and transport sectors by sending the appropriate economic signals, reducing taxes and levies from the electricity bill, remunerating flexibility and ensuring swift implementation of carbon price measures through the ETS2.
- Future policies should also pragmatically face **key social aspects** such as energy affordability, competitiveness, financing gaps, vulnerable citizens and skills.

Enel numbers

Enel handles more than **25,000 public charging stations** for e-vehicles and more than **3 million lights** around the world, providing **~61 million users** with energy and value-added services every day.

~61
million users

25,000
public charging stations for e-vehicles

Source: https://www.enel.com/investors/overview

6. A just and skilled transition

30 million new clean energy jobs will be created globally by 2030 according to IEA's Net Zero Emissions by 2050 Scenario, and **4 million green jobs** are expected by 2030 across the entire EU clean value chain. Addressing this shift requires a focus on education, training and capacity building to **equip** the **workforce** with new skills, as energy jobs may necessitate relocations and different skill sets.

WHAT WE CALL FOR

- **Reinforce** the 'European Skills Agenda' by providing financial and organizational support for some **key industries** involved in the energy transition, including grids, solar, batteries, wind and heat pumps.
- Make the **net-zero academies** a reality.
- Create a "Green Erasmus+" program, a dedicated initiative to stimulate the **mobility of apprentices and trainees** in sectors relevant to the green transition.

Enel numbers

1.3 million
training hours dedicated to **up/re-skilling** in 2022 worldwide (**42%** of **total** training hours)

Source: https://www.enel.com/investors/overview