



# The Net Zero Industry Act

Setting the right priorities for the climate and cleantech

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In the face of growing international competition in green technology, the launch of the Green Deal Industrial Plan (GDIP) is welcome. By focusing on the regulatory environment for clean technologies, financing, skills and trade, the GDIP is a building block towards an ambitious green industrial policy at the EU level.

The Commission's proposal can contribute to transforming European industry and increase its competitive sustainability. Strong support is needed to capture the growing value chain of cleantech in Europe, at the benefit of climate, employment and economic resilience.

**But the EU's Net Zero Industry Act (NZIA), which is supposed to cover the regulatory and skills pillars of the GDIP, is not yet fit for purpose. It lacks well-designed targets and appropriate resources to truly speed up and scale up the manufacturing of clean technologies across Europe.** To be effective Europe's response should mirror the United States' IRA in focus, simplicity and visibility.

## 1. Beefing up the Net Zero Industry Act with ambitious production targets in key sectors

**The Act should call on the industry to scale up development and production of clean technologies.**

Clean technologies play a crucial role in steering ambitious climate action for the EU to reach its 2050 decarbonisation objectives. Ramping up renewable energy and green technologies, at speed and an unprecedented scale, is a precondition if we are to limit global warming to well below 2°C.

Clean technologies are increasingly part of the foundational industries on which other economic sectors, and jobs, are relying on. Setting the direction of travel with goals for industrial capacity by 2030 is a necessary step for the decarbonisation of industry and rapid deployment of green products. The NZIA should also identify strategic projects along supply and value chains which will be priority for investments and public support. We need **climate and environmental considerations to be at the core of the GDIP.**

1.1 **Focus the NZIA on truly clean technologies** in line with the EU objectives on climate, circular economy and zero pollution. The technological scope should not be widened further, but rather strengthened around a limited set of sectors:

- Battery cells, cell components and critical metals processing for electric vehicles batteries.
- Renewable energy sources and technologies such as wind power, geothermal and heat pumps. The following list of technologies for green hydrogen and e-fuel production for aviation and shipping should be included in the list of strategic NZIA technologies: plants to produce e-ammonia, e-methanol, e-liquid H<sub>2</sub> and e-kerosene. Any financial support for these projects should be limited to the financing through the revenue generated from *polluter-pays-principle* under the EU ETS as mentioned below.
- Grid technologies should cover transformers and fast and bi-directional charging technologies enabling EV (bi-directional) charging, in order to avoid bottlenecks in the development and connection of charging infrastructure across Europe and to unlock the massive energy storage potential of the existing and future light and heavy duty vehicles fleet.
- Exclude from the Act all fossil fuel related technologies, as well as environmentally harmful technologies, including biogas and non-renewable hydrogen. No support should be granted to fuels, notably biofuels, that would only increase Europe's dependence on imported biofeedstock.

1.2 The NZIA needs to set **ambitious targets for domestic production and clean tech manufacturing**:

- Maintaining the overall 40% domestic capacity production by 2030 on a set of priority technologies
- Develop production goals for each technologies and components, based on robust impact assessments.
- Better define the key components of priority technologies covered by the 40% production target, so that not only final products are covered, but also most strategic intermediates and components.
- Close to 50 lithium-ion battery factories are planned for Europe by 2030. T&E [analysed](#) how much of Europe's 1.8 TWh battery factory potential is at risk:
  - 68% of potential battery production capacity in Europe (1.2TWh) is at risk of being delayed, scaled down or not realised if further action is not taken
  - Tesla in Berlin, Northvolt in northern Germany and Italtvolt near Turin stand to lose the greatest volumes of their planned capacity
  - Germany, Hungary, Spain, Italy and the UK have the largest shares of battery cell capacities at risk
- For batteries, set more ambitious and binding objectives:
  - Produce at least 80% of Li-ion battery cell demand from 2027.

- Define specific objectives for cells, cathodes, cathode precursors and anodes. For example, produce two-thirds of all the cathode active material in Europe by 2027.
- Reinforce the focus on small and medium enterprises and startups (and not only large corporations) by revamping Article 27 of the NZIA and enabling the InvestEU Advisory Hub to provide support to SMEs.
- Introduce flexibility regarding the geographical location of Net Zero Strategic Projects. For specific technologies such as green hydrogen and e-fuels for aviation and shipping, strategic projects could also be located outside of the EU provided they meet EU sustainability requirements, as domestic production in Europe may not meet 100% of domestic demand in the near future. The Critical Raw Materials Act proposal introduces such a possibility, opening the door to new international partnerships on clean technologies between the EU and partner countries.

## 2. Towards a sound investment agenda

An investment pillar needs to be urgently developed under the GDIP. Production targets for clean tech will not be met without dedicated public and private funding backing them. At the moment, the GDIP is neither expanding joint EU public funding, nor mobilising private finance through sustainable finance instruments and policies. As a consequence, a blatant financial gap risks making the future green industrial policy of the EU toothless.

The Commission estimates that to reach the objectives of the NZIA, €88 bn investments are needed by 2030 (€68bn of which for battery cells) for wind, solar, battery cells, heat pumps and electrolyzers. In terms of public funding, this means at minimum €16-18bn from 2023 to 2030 which are not yet covered under the current EU budget and financial instruments available at European level.

Reforming the EU state aid rules can help scaling up green technologies, but will not benefit all member states equally. Joint EU funding is necessary to ensure a level playing field and finance the clean technologies in countries where governments have limited fiscal capacity. The risk is that a patchwork of national subsidy programmes further develops in the coming years, while a European approach to back the objectives of the European Green Deal is more needed than ever.

**In the short term**, T&E recommends a number of measures:

1. **Use resources of the Recovery and Resilience Facility (RFF)** to scale up production and help reinforce administrative capacities to deal with accelerated permitting processes at national level.
2. **Mobilise the EU Innovation Fund (IF)** by rapidly expanding the **EU Auction system** to cover wind energy and manufacturing of battery cells and components. First auctions on hydrogen will start in the second half of 2023 in the framework of the new EU Hydrogen Bank. This should be swiftly replicated to other technologies such as batteries. The IF should also offer **Contracts for Difference and Carbon Contract for Difference** to support the production of clean technologies.
3. **Earmark a percentage of national Emission Trading Schemes (ETS) revenues** to support clean technologies identified in the NZIA, following the *polluter-pays-principle*. We recommend **earmarking 25% of revenues generated by the Emissions Trading Scheme (ETS) for shipping and aviation** for Member States to support the production of green hydrogen and derived e-fuels on the condition of direct offtake of the produced fuels by the aviation and shipping sectors.

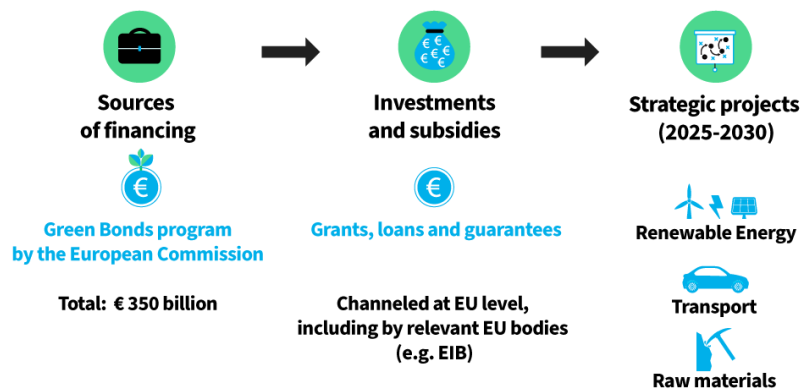
For the shipping sector, the proposed 25% national earmarking represents about €14.5 bn from the national shipping ETS revenues between 2024 and 2030. For the aviation sector, the proposed 25% national earmarking would channel €10.25 bn from the national ETS revenues between 2024 and 2030. If the ETS is extended to all departing flights as of 2027, the total revenues would reach €72bn by 2030, of which €18bn would fund green hydrogen and e-fuels production.

4. Include provisions in the NZIA to **allocate extra resources for skills for workers**, local infrastructure supporting the NZIA investments, and administrative capacity to implement fast-tracked permitting.
5. Launch a solid assessment of investment needs for clean tech in the EU, and of the options that could be taken under the GDIP (local component requirements, public procurement, etc).

### Mid-term: new joint EU funding for a European industrial policy

Set up a European Sovereignty Fund based on additional funding under the mid-term review of the EU Multiannual Financial Framework or on the development of a new bond issuance program at EU level.

## European Sovereignty Fund (ESF), proposed design



Enable the ESF to support Capital Expenditures (Cap-Ex) and Operational Expenditures (Op-Ex). Contracts for Difference should support Op-Ex when barriers to production scale-up are identified.

**Long term: develop a larger climate investment plan at EU level to implement the European Green Deal.** This should cover buildings insulation, charging infrastructure, electricity grids and support to demand-side measures and households.

**Sustainability conditions for companies:** the NZIA will create a status of Net Zero Strategic Projects (NZSP) which should benefit from accelerated permitting procedures and public support. We propose the following set of conditions for companies and promoters to get their projects labeled as NZSP (Art. 10):

- Manufacture products having a lower carbon and material resources footprint than the industry’s average.

- At project level, carry out activities fully in line with the Do No Significant Harm criteria so that all environmentally harmful activities are excluded from the scope of the GDIP. At the corporate level, public commitment to not invest anymore in any harmful activity and to gradually retrofit or decommission any harmful activity in its operations according to an ambitious timeline aligned with a 1.5°C pathway.
- At the corporate level, have in place public science-based decarbonisation and transition plans and targets (2050, 2030 and 2025), which are consistent with forthcoming requirements in the Corporate Sustainability Reporting Directive. In the case of fossil fuel dependent companies, the 2025 plans should make clear that CapEx plans do not include any new fossil fuel expansion and are linked to clear phase out plans to close all fossil fuels assets.
- Use a minimum percentage of recycled materials in the manufacturing of renewables, batteries, electric vehicles, etc.
- Demonstrate compliance with ILO conventions, including on forced labour, and have strong human rights due diligence procedures in their full supply chain. Respect the principle of Free Prior and Informed Consent, social legislations, offer decent wages, promote trade unions and employ a minimum percentage of local employees in their production sites.
- Have developed just transition plans and allocate more than 10% of their annual budget for employees' reskilling and upskilling.
- Are transparent on the use of public funding and disclose information on their climate, environmental, social and governance risks and impacts under relevant EU and national legislation.
- Allocate a minimum percentage of capital expenditure (CapEx) to Research and Development.
- Limit stock buybacks, dividend payments and executive pay.
- On batteries: prioritise sustainable companies leading the pack by implementing the carbon footprint, circularity and due diligence provisions ahead of the deadlines in the new EU Battery regulation.
- On electric vehicles production: prioritise companies which manufacture at least 20% of "affordable" vehicles (segments A, B and C and with a cost of under €30,000).
- The EU should mobilise the InvestEU advisory hub for technical assistance to NZSPs (under Art. 14 and 15 of the NZIA) to reinforce their technical, economic, environmental and social viability.

### **Public procurement and diversification of supply chains**

The NZIA proposes to focus on diversification of supply chains for clean technologies in public procurement. This is a welcome step in the direction of breaking away dependencies from single suppliers of key clean technologies.

The Article 19 on public procurement introduces new criteria in relation to the award of contracts for

the purchase or the use of net-zero technology. The proposed rules would ensure that the environmental impacts of the tender and its contribution to the security of supply are taken into account. Member states could disqualify overly dominant players (suppliers having a >65% market share within the EU) from public procurement and subsidies. The sustainability and resilience contribution of tenders will be given a weight of “*between 15% and 30% of the award criteria*”, so that the applications of these suppliers can be penalised.

In order to better reflect the global concentration of supply chains and avoid an approach disconnected from international dynamics, we recommend modifying the supply security criteria. Ultimately, if a supplier is responsible for over 65% of annual supply **at global scale** (rather than in the EU as proposed by the Commission), its bid under a tender can be penalised.

Articles 20 and 21 replicate this approach to the deployment of renewable energy sources and for member states, regional or local authorities when setting up “*schemes benefitting households or consumers which incentivise the purchase of net-zero technology final products*”.

Still, no impact assessment of these proposed measures has been undertaken to date. Therefore, while supply chain segments of solar and battery are likely to fall under this category, the potential impact of these provisions remains unclear.

These requirements would not automatically apply in cases when tenders have costs 10% (or more) higher than competing bids. Hence, the Commission proposes to diversify the EU’s supply of clean technology, but not at all costs. Given the potential higher prices of clean technologies produced in Europe - at least in the short run - this could weaken these new provisions intended to boost demand for EU clean technologies. In comparison, under the IRA a higher ceiling of 25% is set.

Even if these new criteria in the NZIA are far from echoing the straightforward local content requirements established by the Inflation Reduction Act in the USA, they are a welcome step in the direction of breaking away dependencies from single suppliers of key clean technologies. We recommend further development of the “Made in Europe” requirements under the GDIP.

### **3. A green simplification agenda preserving the nature and environment**

The NZIA proposes a simplification and fast-tracking of approval for permitting processes for new clean tech industrial production sites. This is a welcome step, as Europe needs to reduce the length of permitting processes, digitalise and simplify the approvals. As a principle, it should be easier to build a battery plant in Europe than a coal or gas plant. Therefore, we recommend to:

- Maintain ambitious deadlines for approval of permitting processes, and the rule of “positive silence”.
- Set sector-specific deadlines, for instance shorter deadlines for wind power or battery cells production than for mining projects.

- All social and environmental safeguards must be ensured (including respect of the Do No Significant Harm) and local communities properly engaged.
- Speeding up permitting procedures must be achieved through better implementation of existing environmental legislation protecting ecosystems and biodiversity. Stacking different processes to be carried out in parallel - e.g. under the water and waste framework directives - should be incentivised but the actual requirements never compromised.
- Administrative capacity to deal with permits should be reinforced. The NZIA should foresee direct financial support to one-stop-shops, and include a provision enabling member states to allocate RRF resources to the hiring of staff. Finally, allocate increased resources from the EU Budget for the Net Zero Skills Academies to establish a proper training programme for one-stop-shops.

### **Skills for clean tech, not there yet**

A major challenge for the European industry to embrace the development of cleantech is a skilled workforce. For instance, the European Battery Alliance estimates that 800 000 re- or up-skilled workers are necessary to reach the manufacturing objectives of the automotive sector. A [study](#) commissioned by the Platform for E-Mobility finds that by 2030, 2.4 million workers in the sector will require retraining.

But the NZIA only provides a minimal solution to this staggering challenge: it proposes to create a Net Zero Industry Academy to train a clean-tech workforce. €3 million in seed funding is dedicated to set these academies up, just enough for the Commission to run a secretariat hosting the initiative.

The European Parliament should design a specific timeline for launching these Academies, and ensure that extra resources from the EU budget are dedicated to them. Otherwise the Academies are not going to deliver. The Academies should quickly develop training programmes centralised at EU level, and provide support to national or regional programmes developed across Europe.

The NZIA should spell out clear social conditionalities for companies benefitting from public support under the GDIP. For instance, these companies should have developed just transition plans for their workforce, and allocate more than 10% of their annual budget for employees' re/ and upskilling.

Creating long-term quality jobs should be a priority, as the benefits of placing jobs and skills at the heart of a revamped green industrial policy are potentially massive. In the USA, six months after the IRA was launched, [Climate Power](#) highlights that 100 000 jobs have been created in the clean energy sector for electricians, construction workers, technicians, support staff, and many others.

The mid-term review of the MFF is an opportunity to amplify the key EU programmes available for green skills and jobs: the European Social Fund plus (ESF+), European Regional Development Funds (ERDF) and the Just Transition Fund.

## Conclusions

Europe needs to put in place a robust green industrial policy to capture the economic, technology and jobs value from the energy transition. Above all, to be effective Europe's response should mirror the US IRA in focus, simplicity and visibility.

In this regard, the Green Deal Industrial Plan is a promising initiative. But it needs to be reinforced and largely improved. In particular, the Net Zero Industry Act, which is supposed to cover its regulatory and skills pillar, requires drastic strengthening. Importantly, a well-targeted investment pillar has to be set up to provide financial back up to the production objectives for clean technologies in Europe.

Beyond the NZIA regulation, there is much more that the EU could and should do to transform its industry and make it live up to the challenges of the 21st century:

1. The Green Deal Industrial Plan should leverage Europe's strengths such as **strong climate regulations** on electric cars, vans and trucks to create investment certainty.
2. Given limited resources, **prioritisation** should be on battery value chains (notably cells, components such as cathodes and processing of critical metals into those), renewables such as wind, heat pumps, grid technologies for smart and fast, bi-directional charging infrastructure, and green hydrogen for offtake in the aviation and shipping sector.
3. A **major impact assessment** should be initiated at EU level, and lead to the **identification of granular targets per sector for clean technologies**. Part of this exercise should be to distinguish between justified industry claims of companies calling for public support to roll-out cleantech, and those simply doing subsidy shopping.
4. Europe won't compete at global scale without a robust **European financial framework** (e.g. via the European Sovereignty Fund and reallocation of EU recovery and other funds in the short-term) that has sufficient money, focuses on **production scale-up** and is easy to access by companies. A **longer-term European climate investment plan** should be set to bring visibility and predictability to citizens, investors, companies and decision makers.
5. Introduce a **green simplification agenda** to allow for faster approvals for best-in-class projects - e.g. more staff, better expertise and digitalisation - without undermining environmental safeguards.

## Further information

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