

A photograph of three wind turbines on a green, rolling hillside under a cloudy sky. The image is partially covered by a semi-transparent blue overlay that contains the title text.

A 5-point plan for EU Industrial Policy

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Authors

Jakob Hafele, Jonathan Barth

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A five-point plan for EU Industrial Policy

Introduction

EU Industrial Policy has shot to the top of the political agenda. The European Commission has published a proposal for a Green Deal Industrial Plan, with a Net-Zero Industry Act and the Temporary Crisis and Transition Framework at its core. The proposal has been discussed by the European Council which so far called on the Commission to move forward.

The main objective of the Commission's proposal is to ramp-up net-zero technologies in Europe, and to ensure their competitiveness. Two questions are key: **How to mobilise funding at sufficient speed? And, what to fund?**

With this unprecedented move towards industrial policy, the Commission is responding to the challenge that a tremendous amount of clean technologies is urgently needed to deliver the green transition and get Europe on track to achieve net-zero. McKinsey estimates that to build the needed economic structures to achieve net-zero by 2050 the EU needs [additional investments of €28 trillion, which is €933 billion per year](#). Industrial Policy can help with mobilising these investments.

However, industrial policy can also go wrong. Concerns abound that subsidising businesses will keep unproductive firms in the market, result in profit capture, lead to more regional inequality serving Member States which are well-off and can capitalise on support, and generally be inefficient. All these concerns are justified. If done badly, industrial policy can have a host of negative ripple effects.

So, how to get it right? To contribute to discussions about the Commission's proposal, this five-point plan for EU Industrial Policy makes recommendations on methods to design industrial policy that efficiently speeds-up the necessary production of green technologies, and avoids profit-capture and the survival of unproductive firms, whilst also fostering socio-economic cohesion in the EU.

Why the EU needs industrial policy to overcome market lock-ins

Many see the case for industrial policy in the EU's security concerns. There is also an economic case to be made: regional and technological lock-ins hinder the shift of investments into the regions and sectors that are important for the EU's journey towards climate-neutrality.

Past economic development has shaped national industrial ecosystems. As such, it heavily influences in which direction a country's industry and economy can develop in the future. Not all countries are equally equipped to join the value-chains for net-zero technologies.

A country with strengths in pharmaceutical production, example, would not have achieved these automatically. Supporting ecosystems are the pre-conditions for this production model: universities conducting pharmaceutical research, labs training people who can work

in the sector, well-functioning connections between universities and pharma industries so that new innovations can get to the market, specialised service sectors (e.g. advertisement) for products, and infrastructure. For a market investor there is no incentive to invest in a country without these ecosystems. A major pharma-producing country is likely to remain that. This is called 'path dependency'. It is this path dependency that limits the ability to shift the economy of a country towards sectors where similar technology does not already exist. However, in this example, it is relatively easy for a pharmaceutical-producing country to start the production of products that need related technology, e.g. cosmetics, because similar skills, technology and infrastructure are required. It is a very different thing to start the production of, e.g. electric vehicles, for which the technology is unrelated.

The same logic that hinders the shift of investments for clean tech between regions, applies to shifting investments between sectors – from the production of carbon-intensive to clean technologies. Many established actors which produce carbon-intensive technologies have advantages over clean tech alternatives. Industries producing those technologies can draw from a supportive ecosystem, with an equipped skills base, existing supply chains, retail networks, massive scale-effects and infrastructure that suits their needs. Producers of clean technologies would need to be willing to bear high risks for capital intensive investments to create industries that can compete with this. Without government support, they would have to equip workers with new skills, establish new supply chains and invest into a new ecosystem of supportive organisations including universities, service providers, entrepreneurial support structures and infrastructure.

Building all that typically does not have a business case, making it unattractive for private investment. The business case emerges when there is enough credible commitment of all actors involved to create an ecosystem. Governments play a key role in mobilising commitment. Market based instruments like the Emission Trading System (ETS) help to flatten the differences in competitiveness with carbon-based technologies, but they are not equipped to sufficiently support the establishment of new industrial ecosystems. Hence, government support is needed.

In short, not all Member States can join in the race towards net-zero equally. Market actors tend to invest where ecosystems are best developed and where investment risks are lowest – both regionally and technologically – because deviating from there is expensive. If the Commission is serious about building more production capacities for clean technologies in all Member States, not just some, industrial policy that includes a combination of subsidies and regulations can help by kicking-off clean technology ecosystems. It can provide strategic guidance that takes technological relatedness into account.

A five-point plan for EU Industrial Policy

1. Use industrial policy to foster socio-economic cohesion

For many EU countries and regions, the green transition is an opportunity. For others, it appears more challenging to reap the full benefits of the green transition, because their economic development model is carbon-emissions intense. Hence, opposition to stricter EU climate regulation from the latter group is more likely. Without adequate policies to support countries to develop net-zero compatible economic models, the EU Green Deal risks fuelling economic polarisation.

One of the main concerns about EU industrial policy proposals is that smaller Member States may not have enough fiscal capacity to support their industries, leading to potential economic polarisation. In fact, this risk is already materialising. In the last years, Germany, which is home to 27% of industrial production in the EU, has received 54% of all state aid agreed, while France, with 11%, has received 24%. This distribution is disproportionate to their industrial production levels. It underlines how smaller and economically less powerful Member States may struggle to compete with powerhouses like Germany and France.

With the adaptation of the Temporary Crisis and Transition Framework (TCTF) the EU Commission has relaxed state aid rules for technologies of strategic importance. It aims for both developed and less developed regions to benefit from the deployment of net-zero industries through the promotion of strategic projects and industrial partnerships across value-chains.

However, the relaxation of the state aid rules as part of the TCTF does not put enough emphasis on the key question of where investments will take place. So far, the TCTF accompanying the Net-Zero Industry Act envisions a tendering process for each Member State to allocate state aid towards net-zero sectors. The admission of tenders includes maximum ceilings for state aid on a per- project per- Member State basis, which are differentiated between regions. On the positive side, [less developed regions can receive higher state aid than already highly developed ones](#). But, while this is an important step to steer investments into less developed regions, it doesn't address the risk of disproportionately high subsidies within fiscally powerful Member States. Neither the TCRF nor the NZIP mention upper limits on the level of Member States as a whole, which risks creating an uneven playing field across the Union benefiting those with bigger fiscal space.

To ensure socio-economic cohesion across the EU, policymakers have two options. First, **state aid permissions and tender confirmations could be combined with national ceilings for state aid, which differ between Member States**. State aid ceilings per country could be calculated from GDP per capita, unemployment rates, their position in the [Transition Performance Index or the Resilience Index](#), with lower values enabling more state aid permissions. This would limit the fragmentation risk between economically powerful countries (Germany and France etc.) and less powerful ones in Southern, Central

and Eastern European countries.¹ The risk of socio-economic fragmentation, however, remains, if less powerful countries don't have additional fiscal space. So it will be key, that future revision of [the EU's economic governance provides additional fiscal leeway](#) for Member States, who are struggling to finance the Green Transition.

In addition, funds for industrial policy need to be made available on the EU level so that countries with limited capacities to borrow money on financial markets can still support green industries financially. This is why the risk of socio-economic fragmentation will strongly depend on the success of the EU's Sovereignty Fund, which is expected to be negotiated as part of the Multiannual Financial Framework (MFF) review throughout 2023. The ideas discussed include funds such as from REPowerEU, InvestEU or the EU's Innovation Fund. This will be a major factor in addressing Member State imbalances.

For countries with limited fiscal space, priority needs to be given to instruments, which aren't dependent on fiscal spending. The proposal already mentions various options like tax exemptions and tax cuts as well as regulatory sandboxes.

2. Employ carrots and sticks for efficiency and effectiveness

Incentives like subsidies or tax exemptions are at the core of the NZIP. One of the main counter arguments for using incentive instruments within industrial policy is the concern about supporting inefficient industries which will, in turn, increase the costs of achieving the net-zero transition.

The countries that used industrial policy most successfully in the past combined incentives (carrots) and regulations (sticks). In the latter half of the 20th Century East Asian nations granted tax cuts or subsidies for industries, making them conditional on the achievement of performance goals. The companies in the sectors that did not achieve the goals did not receive any further subsidies and were allowed to die out. This way only the most productive firms survived, and profit capture was minimised.

The Commission proposal suggests to only rank applications according to a price-quality ratio and the sustainability and resilience contribution of the tender. In doing so it risks repeating mistakes of the past in industrial policy.

We suggest tying support to the achievement of production-related performance goals.

These could be the productivity of the company in producing clean technologies. To achieve this tender's need to be time-limited and distributed in multiple tranches, companies which have received subsidies would be subject to an ex-post evaluation of their performance goals. Support would only continue if the pre-defined performance

¹ The downside with this approach is that it creates a moral hazard. Countries would have an incentive to not improve performance to ensure future access to funds. This can be addressed by adding conditionalities to the policy mix, as described in point two.

targets were achieved. In this way public support would benefit the most productive companies, and the list of companies receiving support would narrow down to the most productive and efficient.

Furthermore, admissions should be tied to the achievement of product-specific performance goals. For instance, there are huge differences when it comes to the energy efficiency of heat pumps, depending on the product. To relax the energy markets, reduce energy scarcity and mitigate price hikes it is of importance for the Union to limit the total energy demand of clean technologies as much as possible. Consequently, admissions of more efficient technologies should receive preferential treatment when selecting tenders.

And lastly, sticks can help to address some of the political challenges arising from the transition. For example, trade unions have major concerns that clean tech industries are weakening labour conditions and social security protections. **Eligibility for continued support should not only be judged by economic and sustainability criteria, but by social aspects too.** Similar to performance goals, companies would only receive continued support if they achieved pre-defined social targets, e.g. by monitoring trade union organisation, tariff contracts and gender equality plans.

3. Take countries' capabilities into account

It is essential to build on existing economic capabilities and consider technological relatedness to foster industrial development. As explained in the introduction, for a pharmaceutical-producing country it is relatively easy to start the producing products that require related technology, e.g. cosmetics. However, it is a very different challenge to start the production of e.g. batteries, because the necessary technology is unrelated.

As required technologies are related, so are required skills. For example, a construction worker from a lignite mine would need a lot of re-training to find a job as a researcher in battery production, but with little retraining they might be able to find a job assembling wind turbines. Considering countries' existing capabilities is essential to make the green transition just and create future-fit jobs for the employees of brown tech industries. Countries need proper industrial development plans that make best use of existing capabilities. In the spirit of a common framework for the EU, industrial policy should put special emphasis on how to deal with barriers posed by technological and skill relatedness.

To achieve this, we suggest that Member States consider aspects of technological relatedness as part of the submission of the National Climate and Energy Plans, which will summarize net-zero projects of Member States. This would incentivise countries to think strategically how their economy can work its way towards competitive manufacturing of clean technologies, starting from the existing technological capabilities of a country.

Subsidy permissions would in turn need to be consistent with the strategic technological priorities of a Member State.²

This would ensure that all Member States invest into sectors which can be sustained and in doing so benefit the deployment of future key industries in the long-term. Furthermore, this strategic approach to industrial policy would maximise efficiency across the Union when shifting to a net-zero economy.

4. Balance interests by involving multiple stakeholders

One of the main challenges in implementing subsidies is the information asymmetry between public and private sectors. It is difficult for public sector actors to assess which are the best projects to support. In point two and three we proposed strategies to address this. Another lever to avoid profit capture lies in involving the right stakeholders who bring key information to the table.

The Commission has proposed that support for projects will be allocated through the Net-Zero Industry Platform – a group of government officials meeting regularly. To assess proposals and discuss progress of the EU’s industrial policy, the Commission plans to invite experts and other third parties to Platform and sub-group meetings, or to provide written contributions to decisions. In the previous version of the NZIP proposal, leaked in the weeks before the publication, the Commission only referred to representatives of the net-zero industry as organisations representing the interests of the net-zero industry, which raises concerns about broader participation of actors.

While the new version deleted this section, the leak pointed out who the Commission is considering for involvement. The Commission should be aware that mainly involving industry representatives will lead to biases and potentially inefficient decisions. We suggest conducting negotiations in a more transparent, collective forum. What is needed is an extensive multi-stakeholder dialogue with multiple players from the same industry to balance opinions as well as other experts from civil society and science who can assess lobbyists’ claims.

² South Korea, a successful example of Industrial Policy, for instance, applied this strategic approach to industrial policy. In doing so, they effectively worked their way up from an agricultural economy to becoming an international high-tech production superstar.

5. Share both the risk and future profit

While de-risking investments via industrial policy could be favourable from a financing perspective and can attract investments, it can be problematic from a societal perspective. When risks are socialised and defaults are paid by taxpayers, while the profits are privatised, it creates a societal burden. The state is essentially investing public money into private ventures that may or may not be successful. If these ventures fail, the state's investment is lost, and the public money cannot be recouped.

The adaption of the TCTF acknowledges this problem. It states, “state aid must be granted on terms that afford the State a reasonable remuneration such as an appropriate share of future gains in value of the beneficiary”. One way to achieve this is for the state to acquire shares in the companies it has supported. By doing so, the state becomes a part-owner and stands to benefit from any future successes of the company. It is very common in the EU for the state to be part of important technological companies and sectors. For example, the French government owns 15% of Renault, and the German government owns 12% of Volkswagen.

By owning shares, the state can better monitor the companies they support while also benefiting from their profits. **To achieve this, the NZIP needs to be more consistent with the TCTF to allow for the state to participate in the companies it supports, not just through procurement but also through share acquisition instruments.** This approach will enable the state to participate in the profits and successes of the companies, which will incentivise them to support innovative and productive businesses. It will also help to balance the societal burden of de-risking by providing an opportunity for taxpayers to benefit from the profits of successful companies.