

Deloitte Climate & Sustainability Competency Lab

From science to business: providing companies
with the knowledge to turn sustainability into action.

LECTURE N°5 | Industrial policies for Net Zero: short- and long-term energy
scenarios for Europe

Interview with **Simone Tagliapietra**

Simone Tagliapietra is a senior fellow at Bruegel and teaches environmental policy at Università Cattolica del Sacro Cuore and Johns Hopkins University. His research covers issues related to global decarbonization and he is an expert on European Union climate and energy policies. Moreover, he is a journalistic collaborator for BBC, CNN, Financial Times and Corriere Della Sera, among others. Simone is also a member of the Board of Directors of the Clean Air Task Force (CATF).



Q.1

How does the Net Zero journey influence the industrial sector and vice versa?

The industrial sector is at the core of the Net Zero journey, and we're currently witnessing an historical transformation not only of our energy system, but also of our industrial structure and our consumption patterns. The key challenge of policymakers is to turn the climate policies into **industrial opportunities** to create jobs and economic growth. This is why we need a solid industrial policy at a European and national level to spur these green jobs that otherwise might move elsewhere in the world.

Energy scenarios play an important role in this context because **energy is a key factor in determining the industrial competitiveness**. Europe, after last year's energy crisis, has had issues in this regard, as EU energy prices remain, and will continue to remain, much higher than in the United States, for instance.

And this calls for governmental intervention to, on the one hand, support industries in this competitive disadvantage they are facing, and, on the other, try to **accelerate the roll-out of green alternatives** in the industry, which can structurally lower the energy cost moving forward.

Q.2

How does economic security speak to industrial policy?

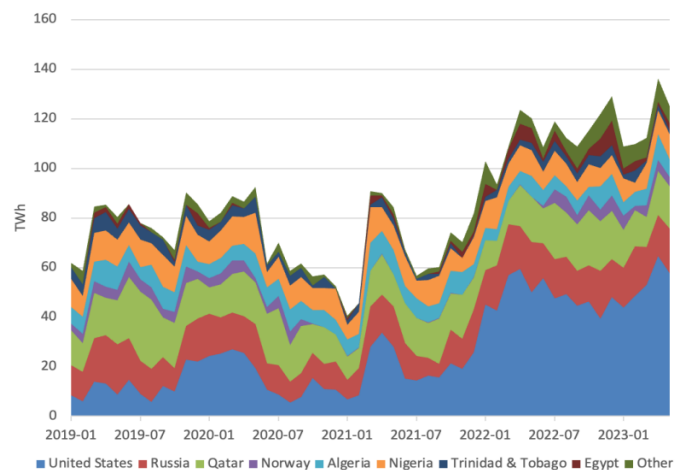
The fact that gas supply got disrupted last year and that it came right after a major shock, i.e. the disruption of supply chains during the pandemic, pushed the topic of economic security at the **top of the agenda in Europe**, in the United States and elsewhere in the world. Economic security has thus become the most important topic in the European economic debate and the major driver of the new industrial policy discussion we're having at the moment. "Economic security" is a concept that is difficult to define, but it is mainly about avoiding that other countries can weaponize their energy relations with us in a way that disrupts our economy and hijack our foreign policies. Economic security is also creating **geopolitical resilience** to external shocks. As far as it concerns the West, this is mainly all about the de-risking strategy from China, because it has gained a massive comparative advantage when it comes to **clean technologies** and critical raw materials.

The only way to pursue economic security is to reinvent our industries, and not just to impose self-sufficiency targets that Europe will unlikely be able to deliver on.

C-TAKEAWAYS

Fast facts for the C-level

- Climate policies need to be turned into industrial opportunities to create jobs and economic growth
- The industrial sector plays an increasingly important role in achieving Net Zero
- Despite the big energy crisis we recently faced, the European green transition has not faltered, quite the opposite
- The Net Zero Industry Act also aims to foster self-sufficiency in Europe when it comes to clean technologies that are considered strategic
- Don't bet against decarbonization and the speed of decarbonization in Europe because you're going to lose
- Invest on innovation and gain from first mover advantages



Source: Bruegel. **EU LNG imports by source country (TWh)**. The blue part shows that U.S. LNG has suddenly become, in the last year and a half, half of the EU LNG, showing the new energy map in Europe. US LNG covers 50% of EU total LNG imports and around 20% of EU total gas imports. US LNG will remain essential for the coming years, especially in a scenario where the remaining volumes of Russian LNG and/or pipeline gas are cut.

Q.3

What's the Net Zero Industry Act (NZIA), why has it been launched, and which are its macroeconomic implications?

The Net Zero Industry Act was presented in March and is an attempted response of the European Union to the Inflation Reduction Act (IRA) of the United States. It predominantly focuses on:

- 1) streamlining of permitting procedures for clean tech factories, listing **clean technologies** that are considered to be strategic in the EU (solar panels, wind turbines, heat pumps, batteries...)
- 2) setting a target that by 2030 at least 40% of the technologies that are going to roll out in Europe will have to be made in Europe (i.e. self-sufficiency/**import substitution target**)
- 3) making a **strategic use of public procurement in Europe to favor EU clean technologies** (15% of the European economy) and diversify the supply coming from the predominant countries
- 4) advancing a **Temporary Crisis and Transition Framework (TCTF)** that basically allows governments to increase subsidization clean projects in their countries and allows governments to do "matching aid".

However, the Net Zero Industry Act doesn't go much far when it comes to putting forward a solid-green industrial policy at the European Union level. This is because Europe is now approaching the end of the institutional cycle and there is not much political capital left to achieve this objective. This will have to be the key priority of the new European Commission.

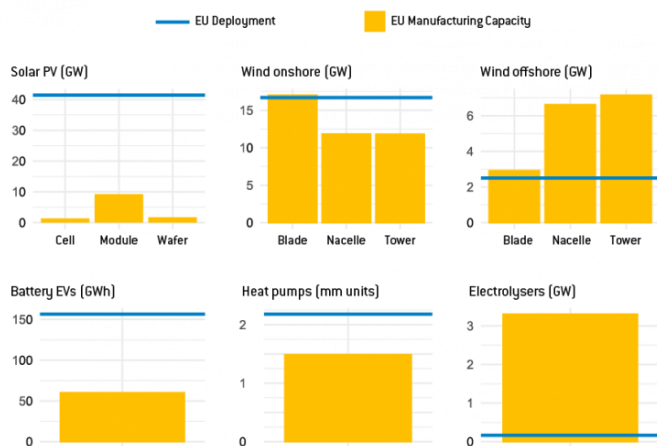
Q.4

What are the missed opportunities for European industries?

At the moment, Europe does not have the solid industrial policy it needs to drive a **green industrial revolution**. In the United States incentives are clear; in China, the incentives have always been clear; in Europe, they are not clear. Consequently, policymakers need to understand that globally we are in a **new era of industrial policy** and Europe needs to find its own way to align to it. This entails a mix of instruments: both sticks and carrots, both incentives and subsidies, but also environmental regulation and of course carbon pricing. It is only through such policy mix that Europe can find its efficient way forward.

When it comes to the sticks, we need to remember that Europe has the largest, and most important by now in terms of price, carbon pricing system in the world (ETS), which has been a very strong tool to drive decarbonization at the industry level. The main problem is that now the **price of the CO2** is high in Europe, being thus a major burden on the industry that will soon be compensated by the Carbon Border Adjustment Mechanism (CBAM). This is the stick that Europe has historically utilized to drive investments towards "green". However, we also need **strong subsidies channeled in the right manner** and to the right companies that are doing the right investments in order to also be able to really catch up on the manufacturing. Otherwise, the industries will just leave the continent.

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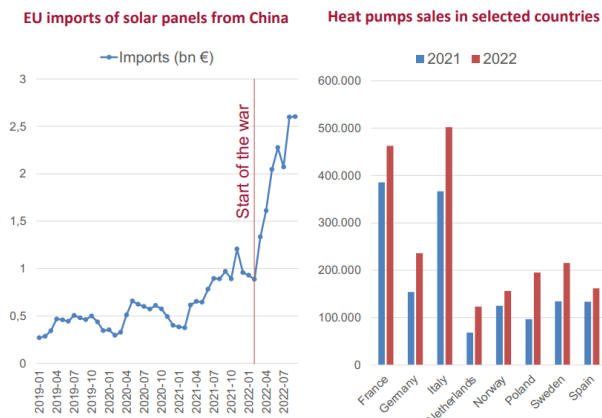
Source: Bruegel. Notes: Import/Export capacities are not illustrated. EU cleantech manufacturing capacities and **domestic deployment levels in selected technologies**, 2021-2022. The figure shows the limited scale of the EU solar PV industry. EU countries installed 41.4 GW of new solar PV capacity in 2022, while EU manufacturers only produced 1.7 GW of wafers, 1.37 GW of cells and 9.22 GW of modules (SolarPower Europe, 2023). EU solar manufacturers would have met only 4%, 3% and 22% of solar deployment needs, respectively.

Q.5

Why is it important that this topic enters the corporate narrative and what benefits can companies get out of it?

There is a strategic interest in being part of this industrial revolution because **this is the future**, and everybody wants to be a part of it. This is a major driver of **long-term growth** and also where **value can be created**.

Europe starts the process with a series of comparative advantages: a lot of European companies are well-positioned, **innovative** and have skills to be part of this transition and find new markets in Europe and abroad. So, the green transition represents an **unprecedented growth opportunity** for European companies, both within the continent and outside.



Source: Bruegel. The energy crisis has been an accelerator, for now, of European green transition. The image shows the speed at which the green transition is developing, notwithstanding the solar panels and heat pumps crisis. This suggests that there can be turbulences but the decarbonization process will keep moving steadily and Europe with it.

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Q.6

What is the role companies need to play and what advice would you give to the C-level?

The advice is to be confident that, notwithstanding eventual temporary turbulence, Europe’s deep decarbonization process is locked in and not reversible. Despite what might happen in one election or another, and the temporary fears of a slowdown, **decarbonization is here to stay and Europe will progress at speed** with this regard (see image on the left). Don’t bet against **decarbonization** because you’re going to lose. Try to be not only a part of that but also its engine: this is how you can take advantage from the whole process.

There’s a triangle made of **industrial competitiveness, decarbonization** and **geopolitical resilience** which is at the core of the thinking of policy makers both on the private and public sector. The solution of this trilemma will define how Europe will look like in 10-30 years’ time. I think the EU will find a way to achieve these targets all together, and the way to do that will really require a strong role of the private sector in terms of **innovation, investments** and bringing the **added value** we need to society. This can be a great challenge and also a great opportunity **for the ones who move first**.

“The green transition represents an unprecedented growth opportunity for European companies, both within the continent and outside.”

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