

Policy Position

The Green Deal agenda beyond Fit for 55 What the EU needs to tackle in 2023

19 January 2023

#GreenDeal

#FitFor55

#Energycrisis

Philipp Jäger, Policy Fellow

The EU's green agenda for 2023 is packed. Beyond finalising and implementing Fit for 55, the EU must react quickly to challenges that emerged recently and which put the climate objectives at risk. This policy position outlines four challenges that are particularly important, urgent and for which it remains unclear what the EU's solution will look like: 1) Avoiding overcapacity of fossil fuel infrastructure; 2) Improving cross-border energy connections; 3) Reforming the electricity market; and 4) Keeping green technologies competitive in the EU.

In mid-December 2022, the EU institutions concluded their negotiations on the major elements of the EU climate package *Fit for 55*. While far from perfect, the package brings the EU's climate trajectory much closer to its Paris climate commitments. While there are still some smaller pieces of Fit for 55 that remain to be negotiated in 2023 (e.g. [on transport](#)), for the most part, the EU is now moving to implement the climate package.

However, implementing and strengthening Fit for 55 is not enough in 2023. Some of the major challenges that have recently emerged for the EU put the climate targets at risk, and are beyond the scope of the Fit for 55 toolkit. This policy brief identifies four such climate issues that the EU needs to address this year and also proposes possible solutions. As outlined in the table below, these issues were selected because:

- They are *important*. Not addressing them puts at risk the EU's climate targets;
- They are *urgent*. The EU needs to respond quickly in order to effectively resolve them;
- They remain conceptually *unresolved*, i.e. while they are already on the EU agenda for 2023, there is no clear roadmap for how they will be tackled.

| | Why is it important? | Why is it urgent? | How could the EU tackle it? |
|---|---|---|---|
| 1) Avoiding overcapacity of fossil fuel infrastructure | Overcapacity can make reaching climate targets more difficult and lead to billions in stranded assets. Infrastructure and long-term contracts are typically put in place for decades | Investment decisions are being made now, in the face of the decoupling from Russia | Increase coordination and transparency of fossil fuel infrastructure build-up via REPowerEU |
| 2) Improving cross-border energy connections | An improved energy grid is a precondition for the energy transition, and the existing plans are not sufficient | Building grid infrastructure takes a long time; plans for 2030 need to start now. Decoupling from Russia also increases and alters grid needs | Increase EU financing for infrastructure with EU-wide benefit, e.g. via the Connecting Europe Facility |
| 3) Reforming the electricity market | A well-functioning electricity market is needed for the energy transition in order to incentivise investment and ensure low prices | A reform can help reduce prices, which are currently a major burden on households and industry. A Commission reform proposal for the electricity market is expected for March, but specifics remain unclear | EU should keep characteristics of the market that work well in normal times; the temporary shortage and crisis is best addressed with temporary remedies |
| 4) Keeping green technologies competitive in the EU | The EU energy transition needs to be economically viable to be successful, but the recent US <i>Inflation Reduction Act</i> (IRA) and high energy prices might put into question the EU's competitiveness | The EU's reaction to the IRA is expected soon, and the Commission and member states are calling for a renewed industrial policy | EU Commission should i) identify the extent of the risk posed by the IRA and high energy prices; ii) relax state aid rules where needed; iii) propose a proper EU industrial policy with targeted financial support |

1. Avoiding overcapacity of fossil fuel infrastructure

In the face of the current energy crisis, it is necessary to build up some additional fossil-fuel infrastructure, such as LNG terminals and some pipelines. However, Europe is [on course](#) to build substantial overcapacity, given the necessary downward trajectory of natural gas use in Europe in the coming years. If this overcapacity is built, it could increase emissions unnecessarily and make it harder to reach the climate targets, or the newly-built infrastructure could turn into stranded assets, wasting billions. Both outcomes are obviously to be avoided, but so far there has been little tangible effort to coordinate the building of new fossil fuel infrastructure at the EU level.

One possible framework to improve coordination is *REPowerEU*, which will disburse some funds to member states via the Recovery and Resilience Plans (*RRPs*, which were initially set up as the EU's joint economic response to the pandemic). As part of the negotiations of the *REPowerEU* chapter in the *RRPs* over the coming months, the EU Commission should push member states to provide comprehensive information on the public and private plans for additional fossil-fuel energy infrastructure in their country.

At first sight, it might seem that *REPowerEU* is not a suitable tool to avoid overcapacity: The Commission's political leverage is limited, given that there is [little new money on the table](#) for most member states. Moreover, the legal basis of *REPowerEU* severely limits the funding available for fossil fuel infrastructure, which means most funding will come from national budgets. Legally, the Commission's sway over member states with respect to building energy infrastructure is limited as well; the Commission cannot prohibit a member state from supporting LNG capacity with its own national funds.

Yet coordination via *REPowerEU* may nevertheless be effective because overcapacity is also not in the member states' own interest. The lack of coordination and lack of clarity regarding infrastructure planning appears to be a significant driver behind the overcapacity. The German government, for instance, seems to [have assumed a much too low LNG import capacity](#) in neighbouring countries when planning its own LNG capacity increase. *REPowerEU* can help here by providing a platform for coordination and transparency, and the Commission should use it to ensure that the natural gas crisis is harnessed in order to accelerate the Green Deal instead of locking the EU into fossil fuels.

2. Improving cross-border energy connections

The green energy transition requires vast amounts of renewable energy to be transported. This will happen mostly in the form of electricity, but also in the form of hydrogen. Consequently, the electricity grid must be expanded and reinforced, and a new hydrogen pipeline network must be built from scratch. The decoupling from Russian energy has significantly increased the speed and extent to which the grid needs to be expanded. Fit for 55 and other existing EU plans will not be sufficient to deliver this. Given how long it takes to plan, approve and build energy infrastructure, this shortfall must be addressed as quickly as possible in 2023.

For cross-border electricity connections, the investments announced or already underway for 2030 only cover [about three quarters](#) of the needed increase in capacity, with a further investment of 15 GW of cross-border connections needed. These figures only comprise cross-border electricity connections, i.e. they do not include the electricity grids that must be built *within* member states, which of course is a pre-condition for effective cross-border transfer. For hydrogen, a large pipeline network will be required to transport renewable hydrogen to industrial plants. The "[hydrogen backbone](#)", a proposal by gas network companies for a

comprehensive hydrogen pipeline network, estimates investment costs at around €80-140 billion by 2040.

For both electricity grids and hydrogen, the case for EU financing is strong: many of the benefits accrue at the EU level, so the costs should be borne at the EU level as well (otherwise, there might not be sufficient national incentives to build the grid). However, EU funding is relatively limited, despite the increasing need. A single cross-border underwater hydrogen pipeline (between Marseille and Barcelona) is [expected to cost over 2 billion euros](#), for which the countries involved are requesting EU funds, indicating that there is not sufficient appetite yet for private sector financing of some important projects. One of the central EU funding vehicles, the Connecting Europe Facility (CEF), has a budget of less than €6 billion for energy projects in 2021-2027. Hence, the EU should make more funding available, e.g. via CEF or REPowerEU, if necessary by diverting existing funds.

Improving energy connectedness makes sense on all fronts: it pays for itself, it is required to reach climate objectives, it increases the EU's energy resilience, and it is a pre-condition for energy solidarity in the EU when energy becomes scarce.

3. Reforming the electricity market

Energy prices had started to rise even before Russia invaded Ukraine, including in other parts of the world. But since it became clear that Russian energy flows to the EU would be dramatically reduced, prices in the EU have skyrocketed. The high prices for consumers and industry, in combination with windfall profits that some companies have been earning, have led to widespread criticism and triggered EU action in two areas. First, the EU has put in place some *temporary* measures to react to the energy crisis. These [include](#), among other measures, capping revenues of electricity producers and a (soft-touch) gas price cap.

Second, the fundamental set-up of the electricity market has been put into question. In her [State of the Union speech](#), von der Leyen called for a “deep and comprehensive reform of the electricity market”. The Commission proposal for this reform is expected in March, but so far it remains unclear what the reform will look like, and in particular how comprehensive it will be. The [Greek reform proposal](#) from last summer, or the [Spanish proposal](#) submitted recently, aim for more deep-rooted changes. In contrast, the [evaluation](#) of the electricity market undertaken by the EU Agency for the Cooperation of Energy Regulators (ACER) instead recommends keeping the fundamental mechanisms mostly unchanged. [Reports on a recently leaked non-paper](#) indicate that the Commission is rather conservative in its reform proposals at the moment, but this could change with the consultation on the reform.

The changing structural conditions – such as the increasing share of renewable energy in the electricity mix – could indeed present a good justification for a reform, potentially even a deep-rooted one. However, it should be clear what a reform can accomplish, and what it cannot. Clearly, the reform cannot substitute Russian energy, nor can it reduce the peaks and troughs in wind and solar power generation, nor the difficulty of storing electricity. It also cannot fix technical problems with nuclear reactors that have to be taken offline in France, nor increase water levels during droughts which result in reduced hydro power generation, as occurred in summer 2022. Most of the heavy lifting for reducing prices and “greening” electricity will have to be done in those areas, and will not be accomplished by a reform of the electricity market. The Commission should therefore make reform proposals that focus on the market's long-term transition towards a higher share of renewable electricity, and not try to fix the problems of the current crisis with wide-ranging structural changes. Importantly, this will include carefully navigating the trade-off between avoiding excessive

profits and keeping high incentives for the deployment of renewables.

4. Keeping green technologies competitive in the EU

Somewhat unexpectedly, the United States adopted in summer 2022 a package to tackle climate change, titled (slightly misleadingly) the [Inflation Reduction Act](#) (IRA). While the EU approach under Fit for 55 relies on a policy mix which chiefly includes putting a price on emissions, the IRA instead only provides financial support. This support is given in the form of tax credits available for many types of green technologies. From the EU perspective, the challenge with respect to the IRA is that this financial support favours US-based production, often rendering EU companies ineligible for support. While it is good news that the US is stepping up its game on climate, the IRA potentially poses a problem for EU competitiveness in the green sector. Consequently, the EU's response to the IRA has become a dominant agenda item in Brussels, with a range of options under discussion.

First, the EU is trying to negotiate with the US administration to include EU-based production in the IRA. However, the US will not reopen the legislative text, so there is limited scope to make this financial support more favourable towards the EU (although a lenient interpretation of the text may provide some help). Second, the EU could bring the issue to the World Trade Organisation, or counter the IRA with retaliatory tariffs. But this avenue also does not seem very promising; the WTO would likely [not be able to resolve the issue](#) satisfactorily for the EU, and engaging in a trade dispute with the US would send the wrong signal both economically and geopolitically.

Third, the EU could increase financial support to European firms in an attempt to copy the IRA. One step on this path is to further relax state aid rules, which the Commission is expected to do in the coming weeks. However, providing subsidies at the scale of the IRA is expensive – too expensive for some of the poorer member states. And if [only rich member states](#) start to heavily support their industries, the level playing field of the EU single market would be slanted. To avoid distortions between member states, some argue that support should be organised at the EU level. Von der Leyen, for instance, is [calling](#) for more common EU financing to respond to the IRA.

However, the waters are still murky. While worries remain high, it is not yet clear how much the IRA actually threatens green industries in the EU. The IRA estimates that its financial support for climate will amount to \$394 billion. Over the spending period of 10 years, this amounts to less than 0.2% of US GDP. At the same time, the EU is also spending significant sums: NextGenEU funding for climate amounts to about 0.3% of EU GDP per year (0.7% of GDP per year in total, of which about 40% is spent on climate). Hence the IRA might not be as significant a threat as it is often depicted (although in-depth analyses of the IRA's impact on the EU are still lacking).

Consequently, more pressing than an IRA-specific response would be setting up a long-term green industrial strategy that improves EU investment and business conditions for green production. Such a strategy might include additional subsidies, like in the IRA, but it must encompass much more in order to position the EU successfully in the international race for emission-free products. The elephant in the room is the EU's innate geographical conditions (i.e. the intensity and distribution of sun and wind), which imply that renewable energy will remain more expensive in some parts of the EU (like Germany) compared to other regions (e.g. Spain) or non-EU countries (such as Australia). This will induce some changes to the composition of EU industry, and where energy-intensive industry will be located in the EU in the future. Any successful strategy must acknowledge that reality and

seek to bring clean electricity prices down over time as much as possible by deploying more renewable energy sources more quickly.

Gefördert durch:



Bundesministerium
der Finanzen

Hertie School gGmbH - Vorsitzender des Aufsichtsrates: Bernd Knobloch - Vorsitzender des Kuratoriums:
Frank Mattern - Akademischer Direktor: Prof. Mark Hallerberg - Geschäftsführer: Dr. Axel Baisch - Sitz der
Gesellschaft: Berlin - Handelsregister: Amtsgericht, Berlin-Charlottenburg HRB 97018 B -
Hertie School - gegründet und getragen von der Gemeinnützigen Hertie-Stiftung