The reduction of the EU’s dependency on Russian gas should lead to a new 
impulse in renewable energy deployment and implementation of energy 
efficiency measures. In this briefing we explore the potential consequences of EU 
plans to phasing out Russian gas, especially for the EU power sector, and how 
this can open a new chapter in the EU’s climate ambitions and geopolitical 
position.

Increasing ambition to phase out Russian gas dependency

The EU imports 150 bcm of gas from Russia, corresponding to 38% of the EU’s 
gas imports. To reduce this dependency, the EU Commission is preparing a set of 
measures, which will be included in the forthcoming RePowerEU plan. The roll-
out of clean energy solutions alone can lead to a reduction of 101 bcm, which is 
equivalent to two thirds of Russian imports, already by 2025, as shown by a 
Ember/E3G/Bellona/RAP study. These measures include the implementation of 
the Fit for 55 package combined with increased efficiency, electrification, heating 
decarbonisation and higher renewable energy investment.

Ahead of the presentation of the RePower EU plan, there has been growing 
political support for increased ambition of the Renewable Energy Directive (RED), 
linking this ambition to the need to phase out Russian gas imports. In the 
European Parliament most political groups have come out in favour of raising the 
ambition of the renewable energy share in gross final energy consumption from 
40 to at least 45% in the RED. The European Commission is working on an Impact 
Assessment on increasing the renewable energy share to 45% as well as 
And within Council, normally the most conservative EU lawmaking body, a group of 11 Member States led by Denmark has now called on all EU countries to unite behind an overall lift in ambition of the Fit for 55 package. Another group of Member States has called for a 1 TW target for solar energy deployment by 2030, which would mean that solar power alone would deliver an 80% share of renewables in the power sector and 45% of renewable share in the EU energy mix. This is making it increasingly likely that the EU will propose a new target of at least 45% in the RED as part of the RePowerEU package as well as an, as yet, uncertain raise in ambition in the EED.

**Phasing out Russian gas imports is bringing higher RES and energy efficiency targets within reach**

The initial Fit for 55 proposal from the EU Commission includes a 40% target in the RED. Reducing EU’s dependency on Russian gas will need to be delivered through an increased deployment of renewable energy capacity in combination with higher energy efficiency and demand electrification. This will put the EU on track to achieve a higher RES share in its energy system than foreseen in the original proposal.

The renewable energy sector has already confirmed that a deployment capacity beyond the one assumed in the Fit for 55 proposal is feasible. Solar Power Europe (SPE) for example has indicated that in its business-as-usual scenario it expects the solar sector to be able to deploy an additional 150 GW by 2030 compared to the capacity assumed in the Fit for 55 modelling. All else being equal, this means that the EU, just considering solar industry’ effort in a business-as-usual scenario, could be at around 42% of RES share by 2030. Under SPE’s accelerated deployment scenario to respond to the new EU energy context of the Ukraine war, an additional 460 GW of solar would lead to approximately 80% RES share in the EU’s power mix by 2030. The wind industry in turn has indicated that reaching the installed capacity assumed in the FIT-4-55 modelling is feasible, but additional policy measures - especially regarding streamlined permitting - are required to get deployment back on track.

Demand side measures to improve energy efficiency will be equally important to reduce Russian gas dependency, as it reduces energy costs exposure to global energy markets volatility and permanently reduces energy costs for consumers. Investing in energy efficiency and increasing the ambition of energy consumption reduction targets in the EED will also contribute to a higher RED share as it will lead to an overall energy consumption reduction.

How much of the EU’s increased ambition will be delivered through solar, wind and energy savings deployment will depend on the Commission’s proposals for
both new RES and EE ambition and how robust the overall implementation framework will be.

Overall, the measures being rolled out to reduce EU dependency on Russian gas, whether from the supply or demand sides, will necessarily lead to an increased share of renewable energy in the EU’s energy system. This should give all EU governments the confidence in committing now to higher targets in the RED and the EED files as the Commission is expected to propose in the RePowerEU plan.

**Phasing out Russian gas imports can boost EU’s global leadership**

The above discussed increase in renewable energy capacity to phase-out Russian gas imports is making a RES share of 80% of the EU’s power system more likely, putting the whole of the EU on a pathway to a fully decarbonized power system by 2035. This would align the EU with the energy transition goals recently set by other advanced economies like the **United States of America**, **UK** or **Canada**. It would also level-up the entire EU ambition to the benchmarks set by EU frontrunners like Denmark, Finland, Austria, Portugal, Netherlands and Germany, who are all aiming for, at least, 80% of renewable energy in their respective power mix by 2030. At the global stage, this would mean the EU could demonstrate it is on course to overshoot its National Determined Contribution, as required by the Glasgow COP26 declaration and setting ambitious expectations for the NDCs of other major global economies.

Together with the RePower EU plan the EU will be presenting a new International Energy Strategy, a new strategic engagement framework that will shape the EU’s future energy diplomacy and the external dimension of the European Green Deal. It should be used to build new alliances to accelerate the global energy transition and address current geopolitical challenge. It should also help the EU to pursue new strategic partnerships with third countries to secure supply chains and strike the right balance between cooperation and re-developing a domestic RES industry.
The reduction of the EU’s energy system exposure to Russian gas will require a solid implementation framework in the new RES and EE Directives

A new EU Commitment to higher targets will need to be complemented by a strong implementation framework that should consist of the following key elements:

> Sectoral targets: Mandatory sectoral targets for the integration of renewables are key to ensure a lower gas exposure pathway and investment predictability. This is especially important in countries more dependent on Russian gas imports.

> Permitting: Renewable energy capacity deployment is facing constraints. Leaner permitting processes are a cornerstone to reduce the EU’s gas dependency on Russia. A ‘frontloading’ obligation that would require Member States to improve permitting procedures and set out how much of planned growth in new RES capacities and energy savings they will achieve in the 2022-2025 period would help ensure that the benefits associated with solar’s massive growth path will be reaped early.

> Market design: High renewable energy integration will require a debate on the market design functioning and an understanding on its preparedness to deliver in the 2030s a decarbonised power system that works for consumers.

> Grids digitization: An investment and regulatory framework to deploy the smart demand flexibility equipment and energy storage is needed to digitize grid operations, enabling the integration of high shares of renewables.

> Resource and infrastructure coordination: Cross-border grids and longer-term storage investment coordination can ensure renewable resources are shared efficiently across wide geographic areas, meeting future electricity consumption for different seasonal demand scenario’s.

About E3G

E3G is an independent climate change think tank with a global outlook. We work on the frontier of the climate landscape, tackling the barriers and advancing the solutions to a safe climate. Our goal is to translate climate politics, economics and policies into action. More information is available at www.e3g.org

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