

- Vattenfall supports a clear and ambitious EU 2040 climate target that accelerates the decarbonisation path towards reaching climate-neutrality by 2050
  - The EU should set a 2040 climate target consistent with the EU Climate Law and the Paris Agreement that speeds up the transition to net-zero emissions by 2050.
  - Increasing the visibility of the EU's decarbonisation path beyond 2030 will give investors more confidence in the pace and climate actions required ahead.
  - New policy reforms, technological developments, and the geopolitical situation amplify the need and benefits of a fossil-free EU energy supply.
- The important role of Carbon Removals should be reflected in the EU 2040 climate ambition, with a special focus on the removals that lead to permanent storage
  - The EU needs to achieve very large amounts of carbon removals, not only for the 2050 net-zero target, but also as a complement to strong mitigation efforts by 2040.
  - Although the 2040 climate target can be a net-target including carbon removals, a specific target for industrial carbon removals with permanent storage is needed.
- The EU climate and energy policy framework should be strengthened in line with the 2040 ambition and especially carbon removals need stronger incentivies.
  - The adoption of an EU 2040 climate target must be followed up by an updating of relevant EU legislations, ensuring that the right incentives are timely put in place.
  - A careful assessment by the Commission is required on the potential inclusion of Carbon Removal credits in the EU ETS, as well as merging ETS 1 and ETS 2.

Vattenfall firmly supports the EU's long-term goal of becoming a climate-neutral economy by 2050 at the latest. In our daily work, we contribute to this paramount societal goal by making sure that everything we do is driving the society towards fossil freedom and more specifically deliver on our science-based corporate climate targets of -77 % reduced GHG emissions by 2030 (releative to 2017 levels) and net-zero GHG emissions by 2040. In June 2023, Vattenfall got its 1.5 °C-algined 2040 climate targets approved by SBTi¹, with a view to reduce all scope 1 and 2 GHG emissions by 93.5% per kWh until 2040 and all absolute scope 3 GHG emissions from use of sold products by 90% until 2040, compared to the 2017 levels.

Our strategy is focused on both mitigating  $CO_2$  emissions from our own operations, as quickly as possible, and helping our customers to electrify their energy use and processes, thereby replacing fossil fuels directly or indirectly with clean electricity. Next to phasing out fossil fuels in the entire value chain, we are also developing carbon removal activities that can deliver negative  $CO_2$  emissions, as a necessary contribution to the net-zero targets.

<sup>1</sup> https://group.vattenfall.com/press-and-media/pressreleases/2023/vattenfall-first-swedish-energy-company-to-get-net-zero-target-ap-proved-by-sbti





## 1. VATTENFALL SUPPORTS A CLEAR AND AMBITIOUS EU 2040 CLIMATE TARGET THAT ACCELERATES THE DECARBONISATION PATH TOWARDS CLIMATE-NEUTRALITY BY 2050

After the adoption of the important EU climate legislations in the context of the 'Fit for 55' package, it is now very timely to extend the main focus of the EU climate policy making to 2040. By 2025, the EU and all other parties of the Paris Agreement are requested to update their Nationally Determined Contributions (NDC) as informed by the first global stocktake in 2024. For that reason, the EU's Climate Law (Art. 4) requests the European Commission to present a legislative proposal on an EU-wide 2040 climate target, alongside relevant impact assessments, at the latest within six months after COP28 (or more specifically May 2024).

At present, the EU does not have any climate target for 2040, in contrast to many Member States and companies. Therefore, adopting such an EU target, and starting the process to align the EU's regulatory framework in that direction, will make a very important contribution to increasing the visibility of the EU's decarbonisation path beyond 2030 and give investors confience in the pace and drivers of the climate actions that are required ahead.

Most importantly, the EU's new 2040 climate target must be fully consistent with the EU's committment to reach climate-neutrality by 2050 and the Paris Agreement's 1.5 °C goal. It should form the basis for a forward-looking, balanced and cost-efficient transition towards climate-neutrality by 2050. Above all, it is important to avoid postponing a large part of the mitigation effort to the last decade (2040'ies) towards reaching net-zero emissions by 2050, especially since the last remaining emissions will be harder and more expensive to abate. An accelerated decarbonisation path towards 2040 is actually also more feasible compared to before, not least due to new climate policy reforms and technological advancements.

Moreover, the last year has shown that accelerating the move away from fossil fuels is more important than ever. Decarbonization has become important for both security of supply and climate change mitigation goals. Vattenfall believes that the way out of the energy crisis is through investments in fossil free energy and grid build out, as a decarbonized power system is also a system more resilient to external shocks. Over the recent year, the EU has already taken a series of legislative decisions in that direction, through e.g. the RePowerEU initiative and the 'Fit for 55' package. By continuing on this steeper decarbonisation path beyond 2030, the EU will become a more prosperous, resilient and clean society.

## 2. THE IMPORTANT ROLE OF CARBON REMOVALS SHOULD BE REFLECTED IN THE EU 2040 CLIMATE AMBITION, WITH A FOCUS ON TECHNOLOGY-BASED REMOVALS

The EU's long-term climate goal requires a strong focus on phasing out fossil fuels in all sectors of our economy. But in parallel, the EU must also create the right conditions for the removal of very significant amounts of  $CO_2$  emissions from the atmosphere. This will be absolutely key for enabling net-zero emissions by 2050 and negative net  $CO_2$  emissions thereafter, as well as compensating for certain hard-to abate emissions already in the 2030 and 2040 timeframes. The political process for defining a new EU 2040 climate ambition is clearly the right context and moment to pave the way for this necessary integration of carbon removals into the EU climate and energy policy framework.

Vattenfall believes that the use of carbon removals should always be a complementary measure to reach the climate targets and should neither replace nor reduce the efforts to mitigate the GHG emissions by phasing out fossil fuels, especially through a clean and flexible electrification. At the same time, however, it is totally clear that carbon removals will be an indispensable component in achieving the EU's climate objectives. Therefore, it is utmost important that the EU policy framework is designed with a view to provide strong and robust incentives for both types of climate action at the same time.

The EU should set a union-wide 2040 climate target in the form of a net-reduction of GHG emissions which also includes carbon removals. However, considering the importance of mitigating  $CO_2$  emissions in the first place, it could have a limit on how much carbon sinks can be used for the target achievement. To give a clear political signal on the necessary deployment of industrial carbon removals, in the magnitude of 300 million  $CO_2$  by 2050 annually<sup>2</sup>, it is also necessary to define a separate EU target for carbon removals by 2040. A specific target for technology-based (industrial) carbon removals seem particularly useful bearing in mind their unique potential for delivering reliable, high-quality and long-duration (permanent) carbon removals, which the EU depends on for reaching its long-term climate goal.



## 3. THE EU'S CLIMATE AND ENERGY POLICY FRAMEWORK MUST BE ALIGNED WITH THE 2040 CLIMATE AMBITION AND BETTER SUPPORT CARBON REMOVALS

Once the EU 2040 climate ambition has been adopted, it should be followed up by a review and updating of the EU's key climate and energy policy legislations that are put in place to achieve the EU's decarbonisation goals. The 16 years that remain until 2040 is certainly not a long period when considering the large, capital-intensive investments in new production capacities, often characterised by long lead times, partly because of challenging permitting processes and the need of new energy infrastructure (transmission grids, etc.) that is necessary for enabling such a profound energy transition.

The fact that the EU has recently strengthened its climate policy framework through the 'Fit for 55' pacakge, with a special focus on 2030, will facilitate the achivement of a 2040 climate target as well. This includes not least the recently agreed revision of the EU ETS Directive, featuring the establishment of a new separate adjacent EU ETS 2 for the buildings and road transport sectors, and a new Linear Reduction Factor (LRF) of the EU ETS 1 policy that is set on a course to bring down the overall EU ETS allowance cap to zero already by 2039, assuming that the same trajectory is maintained. It does not mean that the EU will reach net-zero emissions already by 2040 with regards to all EU ETS sectors. But it is indeed one of the key policy parameters that define the baseline and need to be considered upon setting the EU 2040 climate target.

Although the LRF might have to be adjusted post-2030, there are also other policy options that need to be considered when aligning the EU ETS policy with the 2040 climate target. For example, the companies could be allowed to use a limited amount of high-quality carbon removal credits for their compliance with the EU ETS Directive. Among the benefits are that it could boost the demand for carbon removals and at the same time allow the industry to release a certain amount of  $CO_2$  emissions between 2040-2050, also in case the new LRF is kept post-2030. However, Vattenfall believes that the EU should take a cautious approach when it comes to importing carbon removal credits into the EU ETS, as it must always be ensured that priority is given to mitigation of  $CO_2$  emissions, by phasing out fossil fuels and electrification. Carbon removals can be used to compensate for the most difficult hard-to-abate emissions, but then it is important to focus on the high-quality permanent carbon removals, especially if they are to be recognised within the EU ETS domain eventually.

Another highly relevant aspect to consider in terms of the EU climate policy developments, which impacts the EU ETS allowance cap trajectory required to meet the EU's 2040 climate target, is the relationship between EU ETS 1<sup>3</sup> and EU ETS 2<sup>4</sup>. A key question will be whether it would make sense to eventually merge these two carbon markets. In principle, that could result in more flexibility and cost-efficiency. However, a final decision on that matter cannot be taken until there is more experience gained from the functioning of EU ETS 2. The next fundamental aspect linked to EU ETS 2 is whether it is necessary to keep the Effort Sharing Regulation (ESR) on its current format after 2030, considering that most of the EU's GHG emissions will then be regulated by one (or two) absolute EU ETS allowance cap(s). But also here it will be relevant to first evaluate how the new ETS 2 policy functions in practice.

Vattenfall is a European energy company with approximately 19,000 employees. For more than 100 years we have electrified industries, supplied energy to people's homes and modernised our way of living through innovation and cooperation. Our goal is to make fossil-free living possible within one generation. Everything we do and the decisions we take shall lead to this goal. This is the basis of Vattenfall's strategy, and we advocate for a regulatory environment that makes this transition possible – in the energy sector and beyond in transport, industry etc

<sup>3</sup> ETS 1=The EU's existing carbon market, covering power & heat, industry & aviation since 2005

<sup>4</sup> ETS 2=The EU's new carbon market, covering e.g. buildings and road transport starting in 2027