

Vattenfall's position on the post-2020 climate agreement to be reached at the COP21 summit¹

Vattenfall is one of the largest producers of electricity and heat in Europe, active in all parts of the value chain: generation, distribution, trading and sales. Operations are conducted in the Nordics, Germany, the Netherlands and the UK. Vattenfall is firmly committed to delivering carbon-neutral energy in Europe in line with the EU's long-term decarbonization objective for 2050. To support that ambition, Vattenfall has set own CO₂ emission reduction targets, as well as pushed for a structural reform and strengthening of the EU's carbon market (EU ETS). But the EU's drive for a low-carbon economy by 2050 must be embedded in a wider global response to tackle climate change. A new broad, ambitious and truly global climate agreement is absolutely indispensable to effectively put the world on a trajectory towards max. 2 °C global warming and avoid the risk of CO₂ leakage.



1. A new and strong global climate agreement is urgently needed

Climate change is truly a global problem, which needs to be addressed on the global level. In order to return to a path which is consistent with the globally accepted 2 °C target², scientific evidence from the Intergovernmental Panel on Climate Change (IPCC) shows that the rise in global GHG emissions must peak by 2020 and then be further reduced by at least 60 % until 2050 relative to 2010 levels. As also agreed by the G7 leaders in June 2015³, the GHG emissions must then continue to be curbed with a view to fully decarbonize the global economy by the end of this century. Vattenfall fully supports these global long-term climate ambitions.

After the Kyoto Protocol's first commitment period (2008-2012) expired, there has not been a real and effective global climate agreement put in place. Although the period 2013-2020 is not an entirely lost decade in terms of climate policy making (thanks to the individual targets and policies adopted in many regions, including the EU's 2020 package), the global response still falls massively short of what is needed to reach the 2 °C target. It is therefore absolutely crucial that the UNFCCC negotiations do not lose more time, but without delay delivers a broad and ambitious climate agreement with commitments to steeply reduce the global GHG emissions from 2020 at latest.

For Vattenfall which is firmly committed to contribute transforming the energy system towards a low-carbon EU economy by 2050, it is important to have a strong and robust CO₂ price which early on gives a reliable signal for making low-CO₂ investments. The new global climate agreement should back these ambitions and provide investors with certainty about the decarbonisation path. A delay in the investments needed to decarbonize the global economy would come with a risk of significantly driving up the societal costs and, as shown by the IEA, could imply that the remaining CO₂ budget that can be used while keeping the 2 °C target within reach, might be exhausted before 2040⁴.

¹ UNFCCC COP 21 / CMP 11 - Twenty-first session of the Conference of the Parties and the eleventh session of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol – Paris, Dec. 2015.

² All parties to the UNFCCC (except Bolivia) have agreed to the objective of limiting global warming to max. 2°C above the pre-industrial level. Proceedings from COP15 in Copenhagen, 2009, and COP16 in Cancun, 2010.

³ https://www.g7germany.de/Content/EN/_Anlagen/G7/2015-06-08-g7-abschluss-eng_en.html?nn=1282190

⁴ IEA, World Energy Outlook Special Report on Energy and Climate Change, 2015



2. The COP21 negotiations should deliver a legally binding protocol with fair and ambitious contributions from all countries

It is essential for the trustworthiness and integrity of the new global climate agreement that it takes the form of a protocol with legally binding mitigation commitments for all countries. A legally binding treaty would send a clear signal to the business community about the political firmness behind the decarbonisation path and also enhance trust between governments. A strong compliance regime is also crucial, both on governmental level and in the private sector, to enable a functioning trade where certainty is given about emission credits actually representing a real CO₂ reduction or entitlement.

Today's climate negotiations take place in a much different context compared to 20 years ago when the Kyoto Protocol was prepared. The countries which had binding quantitative commitments to reduce GHG emissions under the Kyoto Protocol for the period 2008-2012 only represent 13 % of the global GHG emissions today. It is clear that the 2 °C target could not be reached by limiting the GHG emissions only in these countries. Therefore, a truly global effort is needed where all parties have to contribute to reduce global GHG emissions, although the required effort has to be differentiated according to their respective capabilities. Vattenfall therefore welcomes the fact that the pledges (Intended Nationally Determined Contributions, INDCs⁵) that countries have so far tabled ahead of Paris also come from countries which did not have quantitative targets under the Kyoto Protocol.

To judge from the mitigation pledges which have been tabled until today, as well as from preliminary announcements made by other countries, it is unlikely that the overall GHG emission reduction effort in the Paris Protocol will be sufficient to put the world on a max. 2 °C trajectory. According to the IEA's latest assessment⁴, the current "INDC scenario" would be consistent with increased global temperature of +2.6 °C by 2100 and +3.5 °C after 2200. Therefore, it is important that the remaining countries present their INDCs in good advance of the COP21 summit and that negotiators prepare for increasing their respective contributions, so that the commitments deliver on the common objective.

Vattenfall supports the EU's climate target of reducing the domestic GHG emissions by at least 40 % by 2030 and that EU ETS will play a key role in achieving this target. The European Commission has already started the legislative process for adjusting the long-term ETS allowance cap, which sends an important signal about the EU's commitment to this objective. However, the EU's climate target for 2030 could also be increased beyond 40 % depending on the outcome of the COP21 negotiations.

Since the pledges submitted ahead of the Paris conference collectively fail to align with the globally accepted long-term objective, it is also important that the UNFCCC establishes a process for gradually setting more ambitious targets over time. This should ensure that the gap between commitments and the necessary global GHG emission reductions can be closed in a structured and timely manner. A solution could be the 5-year review cycle that is currently discussed, but the purpose must then be that it makes the respective commitments more ambitious and does not allow for any back-sliding.



3. The Paris Protocol should promote a wider use of carbon pricing as an essential tool for incentivising low-CO₂ action

Vattenfall strongly believes that emitting CO₂ should come at a cost for everyone that is burning fossil fuels and disposing the resulting CO₂ emissions into the atmosphere. By pricing in the cost of

⁵ <http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx>

CO₂, the private sector's investments and operations are steered towards low-carbon technologies and it can also change the behavior among individuals. Carbon pricing is a very effective and powerful tool to drive all forms of low-carbon measures throughout the entire chain from the energy supply side to the end-use side. A uniform CO₂ price which propagates through the economy also leads to a more cost-effective target achievement compared to targeting just a subset of CO₂ abatement categories by public-financed subsidies and command-and-control measures.

Many initiatives have been taken to address climate change by establishing national or regional carbon markets in the world recently. Estimations show that the regions which apply emissions trading account for approximately 40 % of the global GDP⁶ (or 11 % of the global energy-related CO₂ emissions in 2014⁷). This is a positive trend which should be encouraged. It would be of great value to link these schemes with each other, as a stepping stone to build a more global carbon market. Therefore, it is important that the Paris protocol is designed with a view to facilitate for countries to pursue effective climate policies throughout the global economy, including the option to cooperate in reaching their respective CO₂ mitigation commitments through joint cap-and-trade schemes or other transfers of allowed emission allocations.

The EU's emissions trading scheme (EU ETS) should be the main instrument for delivering the EU's joint commitment to reduce GHG emissions until 2030, although supplemented with other policies which target GHG emissions particularly from sectors which are not covered by the EU ETS policy, such as transport and buildings. Should the EU commit to a more ambitious 2030 climate target than -40 % domestic GHG emission reductions (as the ambition is to achieve "at least" 40 % reduction by 2030), in the context of an overall strengthening of the INDCs also from other UNFCCC partners, the higher ambition should also include the possibility to use international credits. This would support undertakings of cost-effective GHG emission reductions in areas which are not yet covered by an ETS and incentivise climate projects which otherwise might not materialise. In order to facilitate the creation of a more global CO₂ price signal, the 2015 climate agreement should also bring forward a reliable and internationally recognized compliance unit.



4. Mobilising the promised large-scale climate financing is dependent on investment flows and revenues generated from carbon pricing

Moving towards a greater utilisation of carbon markets will be crucial, not only for incentivising the necessary GHG emission abatements in an affordable manner, but also for delivering the large-scale climate financing promised to support the least developed and vulnerable countries. While carbon pricing is a particularly effective way of incentivising mitigation, it can also have the dual benefit of generating revenues which can be used for supporting for adapting the society to the adverse effects of climate change. This is also likely to be a prerequisite for being able to reach the globally accepted pledge of annually \$ 100 billion by 2020 to be used in developing countries, of which a significant part should be channeled through the UNFCCC's newly established Green Climate Fund (GCF).



5. Robust monitoring, verification and reporting of GHG emissions from all parties is the backbone of any global climate agreement

Vattenfall believes that it is important that the climate agreement provides a strong and robust framework for an internationally agreed standard for monitoring, reporting and verification (MRV) of

⁶ International Carbon Action Partnership (ICAP), Emissions Trading Worldwide, Status Report 2015

⁷ IEA, World Energy Outlook Special Report 2015, Energy and Climate Change, June 2015

the GHG emissions. Without a reliable MRV mechanism in place, it will be difficult to assess the progress made in fulfilling the commitments and the overall progress on the global scale. Failure to do so could undermine the environmental integrity of the agreed commitments and create mistrust in the global community. Although the countries should have flexibility in choosing the policies to achieve their commitments and the poorest and smallest countries should not face unjustified administrative costs, the monitoring and reporting of GHG emissions must be governed by common high-standard routines. A strong MRV regime is also necessary for guaranteeing that 1 tonne of CO₂ in the form of a transferable allowance or reduction unit always corresponds to 1 tonne of CO₂ emissions, regardless of where it is created or used. This is particularly important when linking emissions trading schemes and other flexible mechanisms with each other.



6. A truly global agreement should alleviate the risk of carbon leakage and promote a level-playing-field for manufacturing industry

It is not only CO₂ emissions that have a global reach. In today's global economy, businesses, investments and trade are moving irrespective of borders. In case the industries in one region face a climate policy regulation which is significantly stronger than what their competitors in other regions are exposed to, there is a risk that not only the competition is distorted, but also that CO₂ emissions simply "leak" from place A to B, instead of being mitigated. That could undermine the global climate policy and, in the worst case, lead to increased global GHG emissions, which would be the case if production is moved to less CO₂-efficient industries.

The new global climate agreement should minimise the risk of CO₂ leakage. To effectively avoid distortions in competition and the associated risk of CO₂ leakage, this must also be considered when deciding on the actual policies which are set to deliver the mitigation targets. Therefore, two success factors for minimising the risk of CO₂ leakage are to 1) ensure a fair and balanced distribution of the GHG reduction effort between the different jurisdictions and 2) apply carbon pricing across as many regions as possible, with linking of emissions trading schemes and commonly recognized emission units as effective ways of building a more global CO₂ price.



7. The new climate agreement should encourage the development and deployment of technologies which reduce GHG emissions long-term

Decarbonising the global economy will require a radical change in many sectors. It is therefore important that the new climate agreement encourages both the development of new low-CO₂ technologies and a large-scale deployment of already existing low-CO₂ technologies.

Vattenfall is convinced that increasing the integration of the power and the heating and cooling sector is of decisive importance in reaching ambitious global climate objectives. Next to this, the transport sector is a key area where there is large scope to replace fossil fuels by low-CO₂ electricity. Excess renewable electricity used via large-scale electric boilers and heat pumps, together with high-efficient CHP, district heating systems and heat buffers are particularly useful in urban areas, both to substantially increase the efficiency of the power system and to increase as the share of renewable energy in the heat supply. At the same time, we must also use the energy more smart, by further exploiting the potential of energy efficiency, recovering residual heat from industries and urban areas, etc.