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Contribution of VERBUND AG to the consultation on the Green Paper on a 2030 framework for climate and energy policies

VERBUND welcomes the possibility to comment on the Commission's Green Paper for a climate and energy policy framework for 2030.

VERBUND is Austria's largest electricity company. Setting the right energy and climate framework is of utmost importance for our organization.

Please find in the following our answers to the questions set out in the Green Paper.

4.1. General

Which lessons from the 2020 framework and the present state of the EU Energy system are most important when designing policies for 2030?

- The 20-20-20 targets, in particular for CO₂ and RES, have impacted the energy and electricity markets in different ways. While the RES-target has led to substantial investment in new RES-capacities across Europe, the CO₂-target (for several reasons) failed to fulfill its role as a driver towards investments in low-carbon technologies.
- In order to reach their RES-targets, member states have set up subsidy-schemes to incentivize investments. The recent boom in renewable energy capacity investments has been (and still is today) subsidy driven and has had serious negative consequences, the extent of which has not been anticipated by policy institutions and markets:
 - Serious challenges for grid stability due to the high volatility of RES
 - Negative effects on competition between generation technologies: conventional generation units, which are fully exposed to developments on the wholesale market, become increasingly uneconomical due to heavy competition with RES benefiting from support funding.
 - Consequences for security of supply: Due to the economic difficulties of conventional generation, it is under the current framework economically unviable to invest in much needed back-up capacities, such as highly efficient and flexible gas plants.
 - End customers have seen a (in some countries sometimes dramatic) increase in electricity prices. This is mainly due to the costs for RES support which is paid by the end customers.
- The development of CO₂-price levels over the last years prevents the EU Emission Trading System (EU-ETS) from incentivizing investments in low carbon technologies. The over-allocation of CO₂ allowances as well as the current economic and financial crisis are

responsible for this effect. The difficult negotiations in the European Parliament on the temporary backloading of 900 million allowances make the need for a structural reform of the EU ETS even more urgent.

- Member States increasingly seem to think about national measures to mitigate the negative consequences of the RES-boom and the low CO₂ prices. A tendency towards measures such as capacity remuneration schemes, CO₂ taxes and other instruments is evident. These measures seriously undermine the internal electricity market and prevent its participants (including the end customers) from reaping the efficiency gains of a common, liberalized electricity market. When designing the new framework for 2030, a strong focus has to be placed on a functioning internal electricity market.
- When the current 20-20-20 framework was established, the economic climate in Europe was significantly better than it is today. Placing strong emphasis on climate protection measures was much more affordable at the time than it is today. While climate protection still remains the key challenges of our time, more emphasis in the future framework needs to be placed on competitiveness and growth. This should be kept in mind when designing the new energy and climate framework for 2030.

4.2. Targets

Which targets for 2030 would be most effective in driving the objectives of climate and energy policy? At what level should they apply (EU, Member States, or sectoral), and to what extent should they be legally binding?

- The EU ETS should be the central instrument for transforming the European energy system towards a low carbon system. Currently, the EU ETS cannot fulfill this role due to the low CO₂ prices which provide no incentive for market participants to invest in low carbon technologies.
- Strong emphasis should therefore be placed on reforming the EU ETS so that it can deliver this important steering function. VERBUND strongly believes that the EU ETS as a cost efficient market based system is the best option to drive the necessary changes towards a low carbon economy.
- VERBUND advocates an EU-wide, binding and ambitious CO₂ target and supports the necessary adjusting reforms of the EU ETS.
- While the current low CO₂ prices are a strong signal that a substantial reform of the EU ETS-design is indispensable, the market-based character of the system should remain the central element in the future: shocks and ad-hoc interventions which undermine the investment climate should be avoided in order to reinforce the market participants' trust in the system.
- Similarly, VERBUND calls for an EU-wide and legally binding RES-target which should not be broken down into national RES-targets. Instead, a harmonized, EU-wide and market-based support scheme should be set up in order to incentivize investment in renewable energy capacities as well as to integrate these capacities into the market as quickly as possible.
- RES support systems after 2020 should therefore:
 - Allow for a quick integration of RES into the market so that competition is not distorted in a way that conventional power plants are no longer commercially viable - a level playing field for all generation technologies has to be maintained;
 - Shift from guaranteed feed-in tariffs to more market based support schemes (like quotas, market-premiums or investment-grants or even a tender-system);
 - Avoid over-compensation;
 - Do not undermine the internal market because of a purely national, uncoordinated approach;

- Avoid retroactive changes which undermine the investment climate.
- More consideration could be given to the completion of the internal energy market in the new energy and climate framework. Effective targets for the construction of energy infrastructure, such as grids and interconnectors, could contribute to a faster integration of the Member States energy markets.

Have there been inconsistencies in the current 2020 targets and if so how can the coherence of potential 2030 targets be better ensured?

- The coherence of potential 2030 targets should be improved in the new framework. This is best achieved by setting EU-wide (and not national) targets and by implementing supporting measures (e.g. support schemes) also in a harmonized way on EU level – in the end the EU ETS should be the only driver/lever in the energy market.
- There are overlaps between the CO₂ target and the RES-target: Both targets eventually aim at driving down CO₂ emissions. In the new 2030 energy and climate framework, there should be market-based instruments and tools in place for achieving both targets (instead of national subsidy-based RES support on the one hand and the market-based EU ETS on the other hand).

Are targets for sub-sectors such as transport, agriculture, industry appropriate and, if so, which ones? For example, is a renewables target necessary for transport, given the targets for CO2 reductions for passenger cars and light commercial vehicles?

- The transport sector is responsible for a considerable share in of CO₂ emissions which have not yet been targeted. E-Mobility can contribute to CO₂ reductions if the field of transport, provided that power from renewable energy sources is used.

How can targets reflect better the economic viability and the changing degree of maturity of technologies in the 2030 framework?

- Support schemes for renewable energy sources absolutely need to reflect the changing commercial viability of the respective RES-technology. VERBUND advocates technology-neutral, market-based and harmonized support for RES. Quota systems reflect the commercial viability of a technology much more accurately than feed-in schemes which are inefficient given the constant risk of overcompensation and the lack of incentive for market-integration.
- The EU ETS as a market-based instrument is the best and most efficient option to drive down CO₂ emissions, provided that the necessary structural reforms are undertaken so that the EU ETS can fulfill its intended role.

How should progress be assessed for other aspects of EU Energy policy, such as security of supply, which may not be captured by the headline targets?

- An open and functioning internal market with harmonized policy instruments is the best way to deliver security of supply across Europe. Energy policies across Europe should be better aligned in order to benefit from the efficiency gains of a larger internal market.

- Since security of supply is challenged by the growing amount of intermittent RES in the electricity grid, a clear focus should be placed on the development of the European energy infrastructure, in particular on cross border networks and storage. It might be necessary to include these elements into the 2030 framework in order to provide a comprehensive target system on EU level.

4.3. Instruments

Are changes necessary to other policy instruments and how they interact with one another, including between the EU and national levels?

- As already mentioned in the previous questions, some policy instruments need to be reformed in order to fulfill their role in the energy and climate framework.
- This applies in particular to the current RES support systems across Europe. RES support in Europe should be harmonized and move from feed-in tariffs to a market-based RES support systems such as a quota system. This helps to avoid over-compensation and improves the overall system efficiency.
- A major structural reform of the EU ETS is necessary so that the system can fulfill its role as a driver for low carbon investment.

How should specific measures at the EU and national level best be defined to optimize cost-efficiency of meeting climate and energy objectives?

- Cost efficiency should be a central aspect when deciding on policy instruments. Cost efficiency can best be achieved by avoiding national solutions and relying on harmonized and market-based European approaches instead.
- Because of its energy efficiency gains, combined heat and power (CHP) remains an important energy technology. In the future energy system there will be increasing possibilities to deliver heat from low or zero-carbon energy sources into urban areas. Allocation rules in the EU Emission trading framework should take these efficiency gains and emission reductions of CHP into consideration.

How can fragmentation of the internal energy market best be avoided particularly in relation to the need to encourage and mobilize investment?

- National energy policies should be aligned and harmonized, e.g. in the field of RES-support, but also in the field of network tariffs. The objective should be a fully integrated internal energy market that guarantees a level playing field for energy market participants.
- Capacity mechanisms should be kept at a minimum. If they prove to be absolutely necessary, the least distortive option should be chosen – regional or union-wide, technology-neutral, all installations.
- The facilitation of cross border infrastructure is central for the internal energy market.

Which measures could be envisaged to make further energy savings most cost-effectively?

How can EU research and innovation policies best support the achievement of the 2030 framework?

- New technologies that are not yet commercially viable should be supported mainly by R&D support and investment grants. Given the current challenges of RES support schemes, there should be no long-term support in order to keep market distortions at bay and keep the systems as cost efficient as possible.

4.4. Competitiveness and security of supply

Which elements of the framework for climate and energy policies could be strengthened to better promote job creation, growth and competitiveness?

- Given Europe's current economic and financial situation, growth and competitiveness are central objectives of EU policy making. The energy and climate framework can support these goals.
- Cost-efficiency should be a central consideration when deciding upon policy instruments in order to alleviate affordability issues for both industry and households.
- Europe should support the development of new technologies in Europe. In light of the current economic situation it has to be made sure that technology know-how remains in Europe.

What evidence is there for carbon leakage under the current framework and can this be quantified? How could this problem be addressed in the 2030 framework?

What are the specific drivers in observed trends in energy costs and to what extent can the EU influence them?

- The cost of RES support has increased tremendously over the last years. As already mentioned previously, a complete re-design of RES-support schemes is necessary to alleviate the financial burden on end-customers and not to create enormous impairment necessities/sunk costs at existing conventional installations.
- The increasing amount of electricity originating from RES which is fed into the grid at nearly zero marginal costs has driven wholesale electricity prices down considerably. Conventional power plants are unable to compete on this basis and urgently needed back-up capacities for the time as of 2020 are not built. Thus, the RES support systems need to be reformed in order to incentivize the necessary investment.

How should uncertainty about efforts and the level of commitments that other developed countries and economically important developing nations will make on the on-going international negotiations be taken into account?

How to increase regulatory certainty for business while building in flexibility to adapt to changing circumstances (e.g. progress in international climate negotiations and changes in energy markets)?

How can the EU increase the innovation capacity of manufacturing industry= Is there a role for the revenues from the auctioning of allowances?

How can the EU best exploit the development of indigenous conventional and unconventional energy sources within the EU to contribute to reduced energy prices and import dependency?

- Hydropower is one of the most important conventional energy sources in the EU. Hydropower accounts for more than 50% of the EU renewable production and for 16% of the EU-electricity production in general. In the EU-27 there is still a technically-economically feasible hydropower potential of 276 TWh, which could be added to the 338 TWh already in operation.
- Hydropower is the only renewable form which is currently economically viable. Apart from being itself a renewable energy form, it also helps considerably integrating "new" and volatile renewables such as wind and solar to be integrated in the market through pumped storage facilities. Nevertheless, hydropower is not mentioned at all in the current debate about the future of the EU renewable policy, as the "new" renewables are in the centre of the discussion.
- Apart from hydropower's contribution to reaching the EU renewable targets, something not to be forgotten is the multipurpose function of hydropower (it can deliver on a broad spectrum of services, i.e. irrigation, water supply, flood control, recreation, etc.) and the fact that it is a European technology (the hydro equipment industry accounts for more than two-thirds of the world market).
- Thus, there should be more discussions on how to help hydropower deliver its full potential. This includes also to better balance different policy objectives, in particular the objective to use indigenous and renewable energy sources, the objective to avoid climate change and the objective to protect the environment.
- One example where VERBUND feels that environmental objectives and energy / renewables objectives are not well balanced: the water framework directive (WFD). The Directive has its merits for protecting the European waters. However, the implementation of WFD is still a big challenge for hydropower. Costs and benefits should be therefore duly weighted. Pros and Cons have to be evaluated on project level. A strict implementation would result in losses in renewables generation in Europe of 17,5 TWh/year – more than 5% of the total hydro generation in Europe. In addition, investment costs to improve the environmental situation in Europe would amount to 2,5 bn. EUR. For Austria, this would mean investments amounting to 300 million EUR and losses of renewables production of 2,1 TWh/year (the total renewable electricity production in Austria/year amounts to 42,9 TWh/year (2011) – this would mean a reduction of 5% of the total renewables production.

How can the EU best improve security of energy supply internally by ensuring the full and effective functioning of the internal energy market (e.g. through the development of necessary interconnections), and externally by diversifying energy supply routes?

4.5. Capacity and distributional aspects

How should the new framework ensure an equitable distribution of effort among Member States? What concrete steps can be taken to reflect their different abilities to implement climate and energy measures?

What mechanisms can be envisaged to promote cooperation and a fair effort sharing between Member States whilst seeking the most cost effective delivery of new climate and energy objectives?

Are new financing instruments or arrangements required to support the new 2030 framework?

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