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RENEWABLE ENERGY DIRECTIVE AND ENERGY EFFICIENCY DIRECTIVE PUBLIC CONSULTATION

The European Union is currently undergoing one of the most ambitious and systemic shifts on production and consumption patterns, to align our economic growth with our climate objectives for the upcoming decades. The energy system will represent the backbone of our commitment to climate neutrality by around mid-century. BusinessEurope is fully committed to its long-term objectives and acknowledges the importance of these directives for its achievement.

The publication of the 2030 Target Plan supported by its Impact Assessment upgraded the provisions for the renewable and energy efficiency shares, in view of Europe's path to climate neutrality, and the new commitments derived from the European Green Deal.

Considering the narrow timeframe for industrial investment cycles required to deliver any changes by 2030, BusinessEurope will focus on identifying the initiatives and measures needed to bridge the 2030 transition and the long-term commitment of climate neutrality by around 2050. Europe's industry will require a robust regulatory framework to provide the level of certainty needed to attract the required investment and with the right kind of support to match the ambition. Even more so considering that the Renewable Energy Directive (RED II) and the Energy Efficiency Directive (EED) were revised only recently, and that 2030 is already less than an investment cycle away. Further innovation efforts will be required to meet our medium and long-term commitments, as some of the new low-carbon processes in industry are on track to become commercially available only by 2030-35¹.

RENEWABLE ENERGY DIRECTIVE (RED II)

Following the increased ambition deriving from the Green Deal in greenhouse gas (GHG) emissions, Europe will need an inevitable increase in renewable energy development and consumption for 2030 and beyond. The growth of renewable energy sources so far is positive, only wind and solar cumulative capacity grew from 110 GW to 261 GW between 2010 and 2018 in the European Union², partly due to the sharp decline in their electricity investment costs. The trend will continue to grow as the estimates for 2030 according to the National Energy and Climate Plans (NECPs) assessment reflect a 33.1-33.7% in renewable energy share, surpassing the 32% originally foreseen.

- **Securing an ambitious and stable policy framework:** No evaluation of the current renewable energy directive (RED II) is expected since the Directive has not yet been transposed and implemented by Member States (deadline is 30 June 2021). No substantiated claim can be therefore done on its "inadequacy" to deliver. We would therefore suggest maintaining the existing responsibilities on targets between EU/Member States as it is and focus the revision on essential

¹ <https://www.iea.org/reports/tracking-industry-2020>

² Eurostat 2020: EU energy in Figures



aspects for the implementation of the EU's increased ambition and to accelerate the necessary investments linked to it, particularly when the 2030 timeline is so close in time.

To achieve our climate ambitions as part of our long-term commitment significant uptake of renewable and low-carbon energy sources is required. It is crucially important to secure an ambitious and stable policy framework and policy continuity with long term visibility to provide investor certainty. Further it will be key to ensure full sector integration to enable RES to provide the necessary grid services.

- **Scope of renewable energy** will need to incorporate low-carbon technologies in particular for hard-to-abate sectors, which will be key to reach our medium- and long-term objectives.

All sustainable energy sources through a technology neutral approach should be promoted to meet ambitious climate targets, the presence of both electrons and molecules will be necessary to meet the long-term energy demand of industry and other sectors. Both renewable and low carbon fuels should be used in sectors or processes in an economically and energy efficient manner. Next to biomass, new energy carriers such as low carbon hydrogen should be sought as possible low carbon energy carriers to fuel a competitive Europe. Therefore, the definition of renewable energy and/or the scope of article 3 and 5, the binding overall union target, should be extended so all forms of low carbon energy sources produced in or imported in Europe are included.

The development of hydrogen production capacities has been widely recognised as a measure to decarbonise the energy, industry, transport and building sectors. It will contribute to the rapid development of energy storage and thus to sector coupling (hydrogen can be used as a fuel for transport, or as feedstock for industrial processes). Just like any other technology, the capacity required will hardly be achieved without economies of scale which could be obtained through low carbon hydrogen production. For this reason, the Commission should take a holistic approach to the revision of the RED II on transport, ensuring a coherent approach with other legislative reviews currently taking place. It should promote sustainable mobility in its decarbonisation path with a technology-neutral approach. One focus should be on the most efficient forms of transport in terms of GHG emission reduction.

- **Cross-border cooperation:** Three Member States are at risk of not meeting the 2020 renewable energy target, and other two are at moderate risk of not meeting them³. Undeniably, some Member States due to their characteristics have a better access to some of the renewable and low carbon technologies, cross-border collaboration and the use of cooperation mechanism will be an important asset and presents interesting options to achieve their targets. These mechanisms (joint projects, statistical transfer, joint support schemes) should be open to cover all renewable energy sources and could also consider other low

³https://ec.europa.eu/energy/sites/ener/files/renewable_energy_progress_report_com_2020_952.pdf



carbon fuels (like hydrogen). Only four agreements are counted to date⁴, further stepping up EU's and Member States efforts will need cross-border cooperation.

- **Reinforcing renewable and low-carbon energy support:** Abundant renewable electricity at competitive prices is key to achieving climate neutrality in all sectors, whether in its direct use or as hydrogen and its derivatives in gaseous and/or liquid form. Therefore, the European Commission should intensify its efforts in expanding the installation of renewable energy plants in combination with demand-driven technology support across the EU and in bringing down the costs of renewable electricity. These efforts should go in parallel with the development of a European import strategy of renewable energy carriers, which should become an integral part of the new EU Hydrogen Strategy.

Many companies look to corporate sourcing options to differentiate themselves from other players in the market. Some of the reasons why companies do not shift to corporate sourcing when technically feasible are: lack of renewable energy volumes available for industry uncertainty on timely and adequate development of infrastructure, higher costs compared to more traditional sources, regulatory barriers, uncertainty linked to supporting schemes and the societal acceptance of low-carbon energy sources.

RED II and the relevant energy legislation should fully support mechanisms providing long term price signals which are necessary to promote capital intensive investments (such as RES, storage systems, etc.) which would not be made if investors had to rely only on spot market price signals but are essential assets for the energy transition.

Power purchase agreements (PPAs) ensure a long term supply of sustainable energy to a lot of energy-intensive industries. However, the PPA is not yet sufficiently developed and can lack of transparency for some companies. Financial energy markets and multi-technologies sourcing should be further developed to mitigate the PPA's risks (balancing/shaping costs, volume risk and long-term fixed price risk)

As for the likely surge of renewable gaseous fuels, a regulatory framework enabling long term purchase agreements of renewable and low carbon gas should also be considered.

- **Permitting rules** remain one of the main bottlenecks for the uptake of renewable energy projects in the European Union, as well as the large-scale development of energy-infrastructure needed to transport renewable energy from decentralised locations. National administrations have met an increased influx of project requests which seem to have overwhelmed the system in place. Likewise, delays can occur due to lengthy legal proceedings. Measures should be considered to reduce these issues, perhaps through a one-stop-shop including streamlined procedures based on maximum durations of procedural steps, where all these formalities could be expedited.

⁴https://ec.europa.eu/energy/sites/ener/files/renewable_energy_progress_report_com_2020_952.pdf



The simplification and shortening of the permitting process and the streamlining of public acceptance initiatives is key not only for RES, but also for the related grid infrastructure projects. The grids will fundamentally enable the transition by integrating a significant increase in renewable energy in the European energy system and by putting the energy efficiency first principle into practice. The legislative framework for RES deployment should therefore keep a holistic view, considering the overall system needs.

- **Certification and verification systems:** A framework based on standard life cycle emission basis is necessary to validate the origin (renewable, low carbon) of energy carriers. Improving the trust in Guarantees of Origin (GO) is essential for businesses to consider them, therefore regulatory barriers derived from the transfer of guarantees of origin to off-takers could be removed. Under RED II, Member States are required to ensure the possibility of issuing GO for renewable electricity, gas, and hydrogen, whereas this is optional for sources such as low-carbon hydrogen.

Currently, different national schemes coexist which is hindering the transferability of low carbon gases across the Member States. There needs to be a harmonised approach, removing any competitive disadvantages between Member States. The use of GO should also be recognized for accounting purposes of GHG-reduction in industrial processes.

End users need a well-functioning accounting system for CO₂ origin for renewable and low carbon sources emitting CO₂ that is consistent by the Monitoring and Reporting Regulation (ETS) recognised for accounting purposes. An effective certification scheme for renewable electricity and zero/low-carbon gases and fuels is key for enabling the necessary liquidity of a cross-sectoral renewable energy trade. It should include the whole process from GO issuing, transfer and claim/cancellation to guarantee market transparency and credibility.

Whereas an EU-wide system of GO already exists in the electricity sector, a comparable certification system based on the EU-wide legal classification for low carbon sources can be established. In our view, the certification system should go beyond the currently known GO scheme by including the CO₂ content of certified renewable and low carbon sources.

- **Financing renewable and low carbon energy support:** Europe needs to lead and accelerate the scale up of the low-carbon and renewable energy sources if it wishes to achieve its new climate targets. To do so, today's renewable energy support mechanisms and low carbon technology support mechanism for consuming sectors require adjustment.

In particular, the RED II revision needs to be supported by the Energy and Environmental State Aid Guidelines (EEAG). The EEAG, which are currently being revised should continue to support low-carbon and energy-efficient technologies while also preserving the global competitiveness of Europe's energy-intensive industries. In this regard, it is crucial that renewable support schemes continue to be based on market principles and technology neutrality, in order to ensure cost-efficiency. This will enable these industries to continue 'greening' their production, while also effectively contributing to emission reductions on both European and global level. Additionally, the demand for more



low-carbon energy will contribute to the decarbonization of the energy system. For information: see [here](#) BusinessEurope position on EEAG.

- **Security of energy supply** is vital for the proper functioning of industrial activities. The development of renewable energy could harm the reliability of energy networks. Intermittent renewable electricity, like wind and solar, have big impacts on the stability of the electricity grid. For the gas network, injection of renewable fuels like biogas or hydrogen generates significant fluctuations of the gas quality delivered to the consumers. The revised RED shall ensure that the development of renewable energies will not harm the reliability and the efficiency of the transport and distribution networks and of industrial activities. The increasing deployment of renewable electricity needs to be accompanied by an equally ambitious infrastructure development policy, in order to ensure grid stability and broader energy system security.
- **Innovation** is needed to expand the potential production and use of renewable gases/fuels and electricity (both directly and indirectly via hydrogen) in larger quantities of industrial processes, particularly for high-temperature heat as well as other sectors. It will increase cost-competitiveness and reduce energy costs for the investment on less mature technologies.

ENERGY EFFICIENCY DIRECTIVE (EED)

According to the latest progress reports by the European Commission, the 2020 energy efficiency targets were not on track to be achieved, had it not been for the economic impact of the COVID-19 crisis: *“The partial and preliminary data for 2020 indicate that the impact of the COVID-19 crisis has significantly affected energy demand. As a result, the 2020 energy efficiency targets may be met [...] this is expected to be a temporary situation, because the reduction of energy consumption has not been driven by structural measures”*⁵. The European Commission had already set up a Task Force with Member States, to identify why the 2020 targets were at risk of not being met. Similarly, the national energy and climate plans by the Member States, despite having formulated ambitious ways forward, show that the currently set EU 2030 energy efficiency target will not be reached, making the limits and usefulness of the current target’s design apparent.

Energy efficiency has been at the heart of every business plan before the Green Deal and will continue to play a key role in the future. Industry has been delivering in this front, as energy efficiency is a key measurement for constant improvement in industrial processes and thus industrial competitiveness. There has been a 26.8% drop in energy Intensity of the industry sector in the period 2000-2017⁶. The industrial sector will remain committed to further implementing cost-effective improvements on energy intensity as contribution to the wider energy efficiency goals. Significant hurdles to continue progressing on energy efficiency remain. If the EU wants to structurally tackle energy

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⁶https://publications.jrc.ec.europa.eu/repository/bitstream/JRC120681/energy_consumption_trends_2000-2018september_final_br.pdf



efficiency, renewables and clean energy vectors, the barriers that are hampering the adoption of the most efficient energy vectors should be removed.

The role of other sectors that have not been as involved or contributed in the same manner should be reconsidered in achieving Europe's objectives, in particular through instruments such as the Energy Performance of Buildings directive and, as a general approach, to consider the "energy efficiency first" principle throughout the fit for 55 package.

Energy intensity as leading parameter

For the past years, the industrial energy consumption in Europe has been in constant decline⁷ thanks to improvements in efficient use, but also due to a decline in production as consequences of the financial crisis. Considering caps on energy consumption could come at a cost in industrial output, whereas the energy gains in the industrial sector should come from a reduction in energy intensity.

The 2018 revision of the EED estimated that EU energy consumption should not exceed 1128 Mtoe of primary energy, and no more than 846 Mtoe of final energy. Moving forward, requiring a linear reduction in energy consumption could have undesired consequences in Europe's growth strategy, which is aligned to the Green Deal. There are alternative ways to reflect the efficiency of the technologies used by industry and ensure that the energy used (in the required quantities) is aligned with our climate objectives. After all, our ultimate objective is to reduce GHG emissions, which should be the leading target for climate and energy policies in Europe, not energy as such, which will be increasingly low-carbon or decarbonised. Deep reductions of greenhouse gas emissions can result in occasion to an increase need of energy. A cap on the energy consumption would therefore hamper industry to implement new low carbon technologies. The energy efficiency target will need to take into account future needs and consider the potential trade-offs between decarbonisation and energy intensity. Ideally by reformulating the EU's energy efficiency target along the aspect of 'energy intensity', being the input of energy per economics output.

Industrial decarbonisation closely linked to availability of energy

By setting a cap on energy consumption in Europe, we are setting indirectly a cap on the number of renewable energy units that we can have in Europe and consequently limiting the industrial decarbonisation. We need to ensure that all these products and technologies we will need are produced with the lowest possible carbon footprint, which usually means producing them in Europe. For example, the carbon footprint of aluminium production in Europe is, on average, two times lower than the global average and three times lower than the footprint of producing the same aluminium in China.

Innovative technologies for decarbonisation can be energy intensive, we should focus on ensuring enough capacities for renewable and low-carbon energy.

⁷ Industry final energy consumption in the EU-28 has fallen by 14.6% in the period 2000-2018



Potential from other sectors

Beyond industry, there is a wide range of **sectors** that **could present a considerable untapped potential** in terms of energy efficiency through the implementation of other legislation.

Buildings are the single largest energy consumer, around 40% of the energy consumption in the EU and it has the potential to reduce EU's total energy consumption by 5 to 6%⁸. Member States must increase efforts on renovation and develop incentives to increase their energy efficiency through the renovation wave. Non-residential buildings are on average 55% more energy intensive than residential buildings. Specific support schemes for the energy renovation of all non-residential buildings could be introduced to incentivize their upgrade. Beyond addressing the structural issues with dedicated initiatives stemming from the Renovation Wave and the future EU legislation for energy efficiency, it remains necessary the creation of an enabling framework of public funding to increase investments into the energy efficiency sector.

There is a large energy savings potential to be exploited through synergies among end-uses of energy in the different sectors. One good example is the synergy between the transport and the buildings sectors, where both sectors can support each other to increase energy savings.

Hurdles remain for 2030.

The result of the 2020 efficiency targets is perhaps a reflection of the struggles to meet the requirements as they have been designed in the past. Numerous Member States acknowledged their inability to reach the established 2020 efficiency targets, had it not been for the economic impact of COVID-19.

Some elements and nuances to consider moving forward:

- **Energy savings obligations:** One of the main reasons why member states are not reaching their targets is a complicated set-up of obligations under art 7. We believe that a further tightening of these provisions, for instance by introducing monitoring and verification systems, will increase the administrative burden without assurance that it will improve the impact of the scheme. It is essential to keep the focus on the real efforts, which are on energy efficient solutions. Additionally, MS should ensure that obligated market parties under art. 7 can voluntarily contribute to the required energy savings through certified market actions across their customers' portfolio -beyond the use of fiscal measures and mere economic contributions to National Funds-.
- **Energy audits:** the current directive has managed to implement a balanced system of energy audits, we strongly encourage to maintain the voluntary

⁸ https://ec.europa.eu/energy/topics/energy-efficiency/energy-efficient-buildings/energy-performance-buildings-directive_en



approach. Mandatory obligations linked to support schemes should be avoided as it would pre-condition companies' investment plans.

Further, the deployment of Energy Management Systems (such as ISO50001) has proven to be a cost-effective alternative to energy audits for those who wished to follow this procedure. It provides long-term energy savings: on average, a 12% reduction in energy costs within 15 months of beginning implementation⁹. The EMS is a long-term strategy dedicated to continuous improvement and energy efficiency.

- **Secondary heat:** The EED role in supporting the decarbonisation of district heating should be promoted. In suitable areas, the connection to networks of high-efficient and decarbonized district heating and cooling, coupled with the installation of the necessary devices for its use should be promoted via the revised EED.

Buildings both in urban and rural areas are a natural site for sectoral integration between heat and electricity, various combinations of which may fit different local needs and require the necessary grid planning, i.e. deploying big heat pumps in existing district heating systems, utilising waste heat coming from industry, integrate heat coming from all carbon neutral sources. Art 14 of the directive introduces the possibility to utilise secondary heat through initiatives like district heating. The potential to link up these activities should be done under strict economic and business cases for both parties (producer /user).

- **Stable framework for energy efficiency investments:** To show the same support for energy efficiency efforts, the EED should introduce stability of support principles for energy efficiency investments. In doing so it would align the EED with Article 6 of RED II.

⁹ [EnergyGov, 2020](#)