# Response to the consultation on the EU Climate Ambition for 2030 and for the design of certain climate and energy policies of the European Green Deal

23 June 2020

**WindEurope key asks on the 2030 EU Climate and Energy ambition:**

- **At least 55% GHG emission reduction target by 2030.** Pursuing this target will avoid postponing the bulk of climate & energy efforts to the post-2030 period;
- This translates into a **renewable energy target higher** than the current 32% by 2030;
- The new target should be **enshrined in the Renewable Energy Directive and Governance Regulation**.

Setting higher EU targets is important to drive the transition, but to make investments happen robust measures and policies need to be implemented at Member States level:

- **The National Energy and Climate Plans** are ‘investment brochures’ that should spell out ambitious policies and provide long-term visibility to the renewable energy sector;
- **Technology-specific auctions** are crucial to provide certainty to investors and well-designed premiums are essential to reduce the cost of capital. **Two-sided Contracts for Difference are the best model**, paired with corporate renewable **Power Purchase Agreements** where applicable. The revision of the Energy & Environment State Aid Guidelines should fully support it;
- **Short and simplified permitting** for new and repowered wind and other renewable energy installations is crucial to unlock renewable energy investments;
- **Renewable-based direct electrification is essential to decarbonisation.** Direct electrification in most of industry, transport and buildings should come first. Indirect electrification via renewable hydrogen will have a key role to play in decarbonising hard-to-abate sectors;
- Well-designed and robust industrial, trade and R&I policies are key to EU competitiveness and decarbonisation. There are already 300,000 wind jobs in Europe. Half the world’s leading turbine manufacturers are European companies. Europe’s wind exports are €8bn pa. A higher climate ambition means greater social and macro-economic benefits;
- **The Recovery Strategy** and all EU instruments should focus on technologies and projects that support the 2030 and 2050 targets, such as: new and repowered wind energy projects; direct and indirect renewable-based electrification; on- and offshore grid infrastructure. The Just Transition Fund will be key in supporting an equitable and fair transition. Member States should invest in projects that are in line with and will accelerate the delivery of the 2030 National Energy & Climate Plans.
Overall climate ambition for 2030 and Climate and Energy policy design

GHG emission reduction and renewable energy targets

[Ref. to Sections 1 and 2 of the Questionnaire]

WindEurope, representing the entire European wind power value chain with more than 400 members, supports the European Commission for taking the lead in raising the level of the 2030 climate ambition and welcomes the possibility of providing feedback through this consultation.

The COVID-19 emergency has affected the whole European economy. We now have a chance to rebuild a stronger and more resilient Europe through the implementation of an ambitious European Green Deal and through a Recovery Package that has higher climate objectives at its core. Accelerating the green transition will bring local jobs and growth. For that, we need to channel funds towards the technologies that will deliver the energy transition, like wind energy, and provide robust policies that unlock investments. Being ambitious in the design of the 2030 climate and energy policies of the Union is an accelerator to the recovery.

WindEurope strongly supports a target of at least 55% Greenhouse Gas (GHG) emission reduction by 2030 as an urgent measure to comply with the Paris Agreement and its ambition to limit global warming to 1.5°C. Pursuing this target is crucial to avoid postponing the bulk of efforts to the post-2030 period which would create a risk of missing the 2050 climate-neutrality objective. Key elements of the energy transition such as the deployment of renewable energy technologies and grid infrastructure follow long investment cycles and need ambitious upfront long-term investment signals.

A 55% GHG emission reduction target should reflect in a higher renewable energy target and a higher energy efficiency target. The new goals should be fully embedded in the Renewable Energy Directive (in particular Art. 3) and Governance Regulation [see Section on Climate and Energy Policy further below].

Today the energy sector is responsible for more than 75% of the total European GHG emissions. Decarbonising the way we produce and consume energy is of utmost importance to support the 2050 ambition, and renewable sources are best placed to deliver in this process.

Wind energy is a source of clean electricity and is local, reliable and affordable. It adds significant value to the European economy while contributing to the objectives of energy independence and security. With 192 GW installed across the EU-28, wind energy today supplies already 15% of the total European electricity demand and helps save €10bn/year in fossil fuel imports. The sector employs 300,000 people across all regions of Europe. The bulk of wind power is provided by onshore wind farms but 2% of the EU electricity is comes from offshore wind farms.

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1 Data reported in the European Commission Inception Impact Assessment subject to this consultation
3 Local Impact, Global Leadership, WindEurope and Deloitte (2017). Estimates on jobs creation are the latest WindEurope figures.
4 Wind energy in Europe in 2019, WindEurope (2020)
Onshore wind is today the most cost-competitive form of new power generation in many countries in Europe, thanks to technological developments and economies of scale. Offshore wind energy is not far behind: its costs have fallen 60% in three years only\(^5\). It makes economic sense to invest in wind energy.

The sector is ready to deliver on the EU long-term decarbonisation efforts. The International Energy Agency projections show that wind energy is set to be the EU largest source of power generation by 2027. According to the European Commission Long Term Strategy (1.5 TECH scenario) and in compliance with the Paris Agreement, staying below 1.5°C of global warming implies that wind energy alone will provide more than 50% of the European electricity by 2050\(^6\). This would mean five-times today’s capacity installed.

**Renewable-based electrification is the cornerstone for decarbonisation**

[Ref. to Sections 1 & 2 and 5.6.1 & 5.7 of the Questionnaire]

Decarbonising the wider economy means significantly increasing the share of renewable electricity over the next decades. Today electricity covers only 24% of the final energy uses and most of it is fossil fuel-generated. Only 32% of this electricity is provided by renewables in the EU-27\(^7\). Our assessment\(^8\) shows that it is technically feasible and economically viable to increase the share of electricity in the final energy consumption to 62% by 2050, with the bulk of it generating from wind and other renewable energy sources. The European Commission itself pointed in its Long Term Decarbonisation Strategy that electricity will account for half of Europe’s final energy in 2050 and wind energy will supply 50% of the electricity required.

The pivotal role played by renewables in the energy transition should be reflected in the Impact Assessment for the new 2030 GHG emission reduction target expected in Autumn 2020. The underlying assumption should be faster renewable-based electrification across the EU economy. The focus of the analysis should be on onshore and offshore wind as well as solar PV deployment, taking into account recent trends and evolutions – such as the increasing capacity factors of wind turbines and rapid cost decreasing. In the Impact Assessment we expect all scenarios to follow a trajectory towards climate neutrality by 2050 – with at least one of the scenarios following a trajectory towards 100% renewable energy as also requested by the Governments of Austria, Denmark, Ireland, Lithuania, Luxembourg and Spain.

Renewable-based direct electrification is the primary enabler for decarbonizing the economy. Replacing fossil fuels with renewable electricity is a direct, efficient, flexible and sustainable way of reducing CO2 emissions in sectors such as transport, heating and most of industry. Therefore, policymakers should pursue **direct electrification using renewable electricity wherever is available and whenever is possible**.

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\(^5\) The average costs for installing and operating wind farms (LCoE) are around EUR 55/MWh for onshore installations and EUR 65/MWh for offshore ones in several EU countries, according to BNEF estimates. This is cheaper than other sources of renewable and fossil generation and cheaper than nuclear power.


\(^8\) *Breaking New Ground*, WindEurope (2018)
This will deliver the bulk of decarbonisation of the economy⁹:

- Heating and cooling could reach a 64% electrification rate by 2050¹⁰
- Road transport could reach a 51% electrification rate by 2050
- Industrial processes could reach an 86% electrification rate by 2050

In order to reach net-zero emissions, indirect electrification with renewables will play a crucial role in those hard-to-abate economic sectors such as cement, steel, chemicals, heavy-duty road transport, aviation and deep-sea shipping. Renewable hydrogen – i.e. hydrogen produced through electrolysis using 100% renewable electricity - can play an important role here.

After converting electricity to hydrogen, shipping it and storing it, then converting it back to electricity in a fuel cell, the delivered energy can be below 30% of what was in the initial electricity input. Therefore, using electricity directly is more efficient than converting it to hydrogen in order to later use it as electricity. Indirect electrification, besides being intrinsically more expensive, would require more renewable energy capacities than direct electrification¹¹. **The European Hydrogen Strategy and the Strategy for Energy Sector Integration¹²** should fully reflect this. Renewable hydrogen should therefore be prioritized for those hard-to-abate sectors, where it is the end-fuel of purpose, or a building block in creating a derived fuel, such as green ammonia.

The abatement of process-related CO2 emissions in industry requires new production methods and technology. More targeted public support for R&I and demonstration in industrial processes is needed to deliver leaps in technology and transformational changes. The fact that the new ETS Innovation Fund will have more financial resources and will fund decarbonisation of industrial activities through both renewables-based electrification and the uptake of breakthrough renewable energy technologies is therefore a step in the right direction. It is an important supplement to the international CO2 price.

**Prioritising investments in electricity grid infrastructure is essential to the decarbonisation** [Ref. to Section 5.7 of the Questionnaire]

A modern, digitalised and robust European electricity infrastructure is the backbone of a renewable-based energy system. It is also a critical enabler for the competitive decarbonisation of European businesses. A revised TEN-E regulation will need to reflect the EU’s energy and climate targets for 2030 and the 2050

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decarbonisation goals outlined in the European Green Deal. Getting energy infrastructure regulation right is crucial to reach the energy transition objectives. TEN-E should only support infrastructure projects that are fully compatible with the 2050 climate targets.

The Recovery and Resilience instrument (part of the Next Generation EU Recovery Plan), the enlarged Sustainable Infrastructure window under InvestEU and Connecting Europe Facility should prioritise funding for electrification infrastructure: onshore and offshore electricity grids, storage, the scaling-up of smart grids and infrastructure supporting 100% renewable-based hydrogen. Investment in electricity transmission, distribution, interconnectors, smartening and digitisation of electricity distribution networks and storage sites helps to reduce grid connection costs and accelerate the deployment of additional renewable installations. We urge the EU to move towards the distribution of the funding as quickly as possible. TEN-E should include hybrid offshore power plants (i.e. offshore generation and transmission in a cross-country setting) as a new asset category to be listed as Projects of Common Interest (PCIs).

The National Energy and Climate Plans are accelerators for the transition

[Ref. to Sections 1, 2 and 5 of the Questionnaire]

Renewable energy sources are scalable and ready-to-use technologies that will play the most crucial role in the energy transition. To ensure their optimal deployment and grasp all the benefits these technologies bring along, it is fundamental that the EU and its Member States provide regulatory stability, incentives and long-term visibility to investors. Well-designed and implemented policies remain critical to unlock the necessary investments in renewable technologies for delivering the EU Climate & Energy objectives.

This means providing clear information on timeline, volumes and budget of the pipeline of renewable energy installations, following the requirements in the Renewable Energy Directive and through the 2030 National Energy and Climate Plans.

It means also simplifying and shortening the permitting for new and repowered wind energy projects. Permitting rules and procedures remain too complex and lengthy despite the provisions in the reviewed Renewable Energy Directive asking Member States to simplify and shorten them. National administrations are often not properly staffed to process the amount of permits required for reaching the 2030 targets, let alone the 2050 ones. Slow processes prevent the use of the most efficient technologies available which would be able to deliver the transition at the lowest cost for the society. Unclear regulatory frameworks and delays in legislation exacerbate investors’ uncertainty. Without permits the renewable energy volumes spelled out in the National Plans remain academic. This will put at risk the attainment of the 2030 and 2050 targets (ref. also to Section 5.8 of the Questionnaire).

Boosting investors’ confidence also goes through providing the right revenue stabilization mechanisms: two-way Contracts for Difference, paired with corporate renewable Power Purchase Agreements where applicable. Technology-specific competitive bidding processes are the best way to allocate revenue.

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stabilization mechanisms. This is fully in line with Art. 4 of the 2018 Renewable Energy Directive and the revision of the State Aid Guidelines for Energy and Environment should take it into account.

Renewables are key to European competitiveness and global leadership [Ref. to Sections 3 and 6 of the Questionnaire]

A smooth energy and climate transition also translates into having the right trade and competitiveness policies, recognizing renewable energy as an EU strategic value chain, investing domestically in Research & Innovation and having a trade policy that supports the EU’s renewable industry.

The Commission’s 2050 decarbonisation strategy says at least 80% of Europe’s electricity will need to come from renewables to achieve carbon neutrality. Wind and solar are strategic industries: they are not only key to decarbonisation, but they are job creators in their own right. The New Industrial Strategy for Europe and the new EU Recovery Strategy both acknowledge the strategic role of renewable energy value chains.

There are already 300,000 wind jobs in Europe. Half the world’s leading turbine manufacturers are European-based companies. Europe’s wind exports are €8bn pa. A higher climate ambition means greater social and macro-economic benefits: by 2030, and with the right policies sustaining the European industry’s competitiveness, the wind power sector could employ up to 569,000 people. This goes together with benefits for related sectors: every €1,000 invested in wind creates €250 value for the wider supply chain e.g. chemicals, steel, construction.

A well-designed European trade policy should support the European renewables industrial leadership (ref. to Section 6 of the Questionnaire). The European wind industry relies on global supply chains, which means importing materials and components from around the world. Trade defense measures on raw materials and components undermine the competitiveness of Europe’s renewables industries. And they can trigger retaliation measures that undermine market access for European exporters. Tariffs and quotas on the import of e.g. steel and glass are unhelpful for Europe’s wind and other renewable energy industries.

The Green Deal Diplomacy announced in the European Green Deal can boost exports of wind goods and services (ref. to Section 6 of the Questionnaire). The EU needs an Export Strategy for renewables that improves the terms of finance for European players (investors and technology suppliers) to allow it to compete effectively in the context of rising foreign competition. This could include coordination of national export credit agencies while at the same time enabling additional European investments in third countries, or a change to the EIB’s statutes to allow it to offer guarantees to secure loans for projects in third countries.

The COVID-19 emergency has put the whole European economy under severe pressure. It has affected the movement of equipment and workers. The wind sector is currently on track to install 12 GW this year instead of 18 GW expected. COVID-19 is also slowing down investment decisions in new wind farms. The EU Recovery Strategy will be critical to boost the green transition as the main driver of economic recovery and as key to Europe’s future growth and prosperity. If implemented in the right way, the Recovery Strategy could be an accelerator for the European Green Deal.

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15 Local Impact, Global Leadership, WindEurope and Deloitte (2017).
The Recovery & Resilience Instrument can be one of the key drivers for a genuine renewable energy growth. To make sure this happens, the Instrument should be fully aligned with the priorities mentioned above, making sure Member States invest in projects that are in line and will accelerate the delivery of the 2030 National Energy & Climate Plans.

The same goes for the other instruments launched under the Recovery Package and the Multiannual Financial Framework. InvestEU is an important pillar of the package as one of the main EU programmes for investing in infrastructure during the period 2021-2027. It should support flagship onshore and offshore wind energy projects that create jobs and contribute to the faster delivery of Europe’s climate & energy targets. It should support electrification projects that contribute to the decarbonisation of the European economy as well as to infrastructure investments that support the build-up of strong and resilient European energy system.

Making sure nobody is left behind is a prerogative of a socially fair energy transition. And developing the right set of skills is fundamental for Europe to remain competitive globally. WindEurope welcomes the proposed increase in the budget of the Just Transition Fund, which is at the core of the European Green Deal and of the 2030 climate policy (Question 3.2). This fund should prioritise renewable energy deployment and re-skilling of workers in coal-reliant regions. The support should be made immediately available for spending on projects in Coal Regions in Transition, and not only in 2021 as originally planned. A pilot project for a training facility in Jiu Valley, Romania is ready to receive financing and could serve as flagship success story.

If Europe wants to stay at the forefront of the energy transition, not only the Recovery Strategy but all other EU instruments should support renewable technologies and sectors. This is true for existing Funds and for sectorial strategies and policies.

It is the case of the Modernisation Fund (Question 3.2), which should support a fair and just transition to a green economy. In its current wording, Art. 10d of the ETS Directive prevents most of the beneficiary States from using the Modernisation Fund to support projects related to solid fossil fuel deployment. This is not in line with the Union climate targets as it only prohibits funding hard coal and lignite but allows for other fossil fuels to play a major role in those countries, without effectively boosting renewable energy deployment. WindEurope therefore strongly recommends that funding of all fossil fuels is effectively excluded from the implementation of the Modernisation Fund16.

A modern and complete Research & Innovation policy is also crucial to keeping the EU renewable energy sector competitive. The EU has tended to focus Renewable R&D effort on emerging technologies only. But “mature” renewables need support too to remain competitive. Horizon Europe should focus on further incremental improvements to materials and components and not just the big breakthroughs on new technology. For wind this means e.g. segmented blades and new installation and transportation techniques. It also means innovative composite recycling technologies.

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Renewable Energy Directive and Governance Regulation
[Ref. to Section 5 of the Questionnaire – Experts section]

As mentioned above, a 55% GHG emission reduction target should reflect in a higher renewable energy target in the Union’s gross final consumption of energy by 2030 (EU-27). The new target should be enshrined in Art. 3 of the Renewable Energy Directive already as of 2021, without further delay to 2023 as Art. 3 currently states.

The new target should be supported by the enabling framework provided by the Governance Regulation. The 2030 National Energy and Climate Plans are the crucial instrument to ensure visibility and certainty to the renewable energy sector. A high ambition in the Plans and the correct implementation of those are essential to a fast, efficient and cost-effective energy transition. This should start from ensuring that Member States correctly implement the Governance Regulation and its Annex I, using the Plans to provide details on the regulatory measures that will be implemented at the national level to support the climate and energy targets.

Member States must correctly implement the provisions stemming from applicable EU climate and energy law [Ref. to Section 5.6.1 of the Questionnaire in particular]. Importantly, Art. 6 of the Renewable Energy Directive is asking Member States publish a long-term schedule anticipating the expected allocation of support to renewable energy projects, including indicative timing of tendering procedures, expected capacity and budget. Art. 16 of the same Directive is asking Member States to shorten and simplify permitting for new and repowered renewable energy installations. As said, permitting is one of the biggest obstacles to the deployment of wind and other renewable energy projects in Europe. Importantly, the National Energy and Climate Plans are silent on the implementation of these provisions in national law.

EU Emission Trading System
[Ref. to Section 5 of the Questionnaire]

The EU Emission Trading System (ETS) is a fundamental pillar of the Union’s fight to climate change. A well-functioning ETS creates effective price signals for market operators and investors. These signals impact investment decisions as well as the merit order of the wholesale power market - by pricing the externality of emitting CO2 per unit of power produced.

For several years the EU ETS market has suffered from oversupply of EU CO2 allowances and consequently experienced a very low CO2 price. This trend has started to reverse with the revision of its Phase IV and the measures therein, in particular a higher Linear Reduction Factor and the strengthening of the Market Stability Reserve. However, the Covid-19 emergency has caused a temporary yet important drop in the demand for emission allowances with a consequent drop of the carbon price on the ETS market. This has shown that the EU ETS needs to be strengthened to make sure it is resilient to future unforeseen events. An increase in the Linear Reduction Factor would be a good start to strengthen the EU ETS.

The revision of the Guidelines on certain State aid measures in the context of the greenhouse gas emission allowance trading scheme post-2021 (ETS State Aid Guidelines) will also be important to boost the decarbonisation of industry and the wider EU economy. Regulating indirect cost compensation for Energy Intensive Users (EIUs), the ETS State Aid Guidelines have an impact on EIUs choices regarding the sourcing of electricity - including bilateral contracts such as corporate renewable Power Purchase Agreements (PPAs). The newly proposed Guidelines by the European Commission (March 2020) are...
bringing important and positive changes in this domain, introducing conditionality requirements for companies in order to retrieve the indirect costs deriving from the ETS. Importantly, corporate renewable Power Purchase Agreements (PPAs) are listed amongst these conditionalities.

Corporate renewable PPAs are increasingly becoming a key driver for investments in new renewable installations in Europe. They enable large energy consumers in the IT, chemicals, heavy industries and other sectors to secure a supply of clean electricity at a competitive price. They are an important instrument for the energy transition whose uptake should be facilitated by Member States, following the direction of the 2018 Renewable Energy Directive and Governance Regulation. Adding renewable PPAs as one of the conditionality requirements to receive state aid, the new Guidelines are setting steps in the right direction clarifying that indirect cost compensation is compatible with signing these contracts17.