Reply to the Consultation on the EU's 2040 Climate Target

Bioenergy is a major contributor to the significant progress the EU has made in the energy transitions and must continue to play an important role. In 2020, bioenergy represented over half of the EU's renewable energy (56.8%) and provided 12.4% of the EU's total energy. Bioenergy provides clear benefits to all energy needs of the EU: heating and cooling, transport, and electricity.

HEATING AND COOLING

Bioenergy is the preeminent source of renewable heat which represents nearly half of the EU's energy use. Bioheat provides over 80% of all renewable heating in the EU and can continue playing a key role by replacing fossil fuels for heating. Bioenergy can be used in residential small-scale applications as well as middle and large-scale in district heating networks, even in large cities (including Copenhagen, Stockholm, Helsinki, and Vilnius). It can also displace fossil fuels in low, medium, and high temperature heat applications, which is vital to decarbonize EU industry.

TRANSPORT

Bioenergy can also play an important role in transport where it is possible to refine biomass into high energy density liquid and gaseous fuels which can provide a low-carbon alternative to fossil fuels. As a 'drop-in' solution the use of these Advanced Biofuels has the added benefit of requiring no or minimal changes to existing infrastructure in order to be employed. Advanced biofuels can be produced from numerous feedstocks including from agriculture, forestry, and biogenic waste streams. Biofuels can be used in all transport modes, heavy duty road transport aviation and maritime where it will be challenging to decarbonize and there are major technological barriers to any electrification.

ELECTRICITY

Biopower can play an important role in the electricity market either as a base load or a storable and dispatchable source which can be used to balance other intermittent renewable electricity sources, or to guarantee local electricity capacity. Electricity can also be cogenerated with heat in combined heat and power (CHP) plants which can increase their efficiency and fulfill multiple energy demands.

CARBON REMOVALS

Having large-scale applications of bioenergy solutions in district heating, biofuels production, and industry, is a prerequisite for cost-effective carbon dioxide removals (CDR) through bioenergy with carbon capture and storage (BECCS). According to the Sixth Assessment Report of the IPCC, most of the emission reduction pathways that limit global warming to 1,5°C with no or limited overshoot, as well as those that limit warming to 2°C, will require a significant scale-up of carbon removals. As such, BECCS and negative emissions technologies will be essential to reach net zero targets and afterwards to reduce the amount of CO_2 in the atmosphere to healthy levels. To achieve this, it will be crucial to determine the scale of necessary removals, create binding EU targets, and develop roadmaps for scaling-up carbon removals in Europe.

REGULATORY CERTAINTY

In order for the bioenergy sector to thrive, it will be essential to ensure a stable regulatory framework which will provide the certainty needed to enable new investment. A constantly changing regulatory environment makes it difficult, if not impossible, to invest in sustainable bioenergy projects due to fears of sudden increases in administrative burdens which can change or eliminate a profitable

business case. In particular, the biomass sustainability criteria in the Renewable Energy Directive should be left unchanged for the time being. From a good governance perspective, we regret that there were so many delays in implementing REDII and that REDIII is likely to be agreed before all Member States will have finished their transposition process of REDII. The regulatory uncertainty these rapid changes have caused has negatively impacted the sector by reducing the investment in and deployment of renewables. As such, no further changes should be made to these criteria until there has been a chance to analyze the efficacy of the REDIII criteria in practice.

RENOVATION

In addition, the EU should support projects to replace and retrofit old heating appliances which are often not only inefficient but also polluting. Modern bioenergy appliances can provide more heat with less biomass by dramatically increasing efficiency. These appliances can also take advantage of digitalization to provide additional benefits and savings.

ENSURING A FOSSIL FREE FUTURE

Finally, the last thing that must be considered in any 2040 energy policy is a clear exit strategy for fossil fuels. The EU must clearly and unequivocally ban any subsidies that are granted to fossil fuels and prevent any Member States from providing any non-financial assistance as well. In addition, the EU should cap fossil fuel use to ensure that there is no backsliding and establish a trajectory to progressively phase out their use.