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Country: Sweden

Biomass Energy in Sweden Position Paper

Sweden has a history of backing sustainable solutions—including the introduction of biomass as a viable alternative to fossil fuels. We believe biomass has potential as a small piece in the larger climate-solution puzzle. As a country rich in biomass resources, implementing biomass energy will not only reduce our emissions, but also generate employment opportunities—particularly in rural areas.

We have already facilitated a transition towards biomass energy, which has included both direct policies as well as general climate initiatives. We founded the Swedish Climate Policy Council in 2017 and established a set of climate goals—including reaching net zero emissions by 2045. Each year, the council independently reviews our government's progress towards these goals and produces a detailed report. We were also the first country to implement a carbon tax, which charges organizations with high-carbon footprints for their impact on the environment. Between 1990 and 2014, we managed to reduce our greenhouse gas emissions by 25%—this reduction is mainly due to our investments in and use of bioenergy. In addition to domestic initiatives, we have been a member of the International Energy Association (working towards sustainable energy solutions) since 1974 and The Paris Agreement since 2015. In 2020, our

parliament (the Swedish Riksdag) approved a bill to implement the UN's 2030 agenda which includes climate action.

Currently, we are working towards our goal to reach net zero emissions by 2045, which will mean increasing our use of biomass energy. We have also set a midpoint goal—to cut emissions by 59% by 2030 (compared to 2005). Sixty percent of our total energy supply is sourced from renewables, around thirty-five percent of which is drawn from biomass. Bioenergy is currently the leading energy source in Sweden. Still, we are looking to increase investments in biomass energy over the next few years. We believe that biomass is a particularly attractive sustainable energy solution as it simultaneously reduces emissions whilst supporting our climate policy's emphasis on global health and equality. Our sizable biomass assets, particularly in rural areas of the country, will provide employment opportunities among job deserts as well as localize energy supplies. This, in turn, will allow rural communities to increase self-sufficiency.

Additionally, we are ramping up investments on the other end, offering grants to organizations across all sectors through The Climate Leap. The Climate Leap provides monetary compensation to organizations who agree to lower their carbon emissions. This includes switching to sustainable energy sources such as biomass energy and biofuels. In 2019, a law was proposed which would require airlines to reduce their carbon emissions through blending biofuel and traditional fuels. Producing biofuels is not difficult in Sweden due to the abundance of biomass resources. While we already provide tax exemptions for biofuels used in transport, we are hoping to pass this movement in the near future.

Our hopes for the coming years include increasing investments in biomass as well as expanding the infrastructure required to synthesize energy and biofuel from raw material. We

also hope to be leaders as the science around carbon-capture technologies and opportunities to further lower the impact of biomass energy on the environment advance. Finally, we hope that our success in implementing biomass energy can help pave the way for other countries to initiate a shift away from fossil fuels.

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