



"Biomass represents a prime solution to complement the intermittency of wind and solar"

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The COVID-19 pandemic has forever changed how societies, businesses, and governments view the world around them. Now more than ever, we understand that we are a part of a global community, a community that must come together to address our most important challenges. Whether those challenges are related to social, health. or economic concerns, a united global community can tackle them head on. This mindset also applies to climate change, one of the most pressing issues of our time.

Amid an unprecedented year battling a pandemic, we are still working towards reducing GHG emissions and building a better, more sustainable world. Over the last year, we've seen the share in demand for renewable energy rise as the demand for traditional power, driven by fossil fuels such as coal, has dropped.

For any sceptics on whether or not we are prepared to address the climate challenge, I would point them to the steps Europe and Asia have taken to implement policies to reduce GHG emissions by 2030 and decarbonise their respective economies by 2050. These policies will depend on a blend of GHG emissions reduction strategies, including wind, solar, hydrogen, and perhaps most importantly, biomass.

In 2021, sustainably sourced biomass will play an increasingly important role for governments and industries looking to reduce emissions while ensuring CHP and system critical capacity is available across the grid as they develop plans for an eventual carbon-negative world.

## Investments in biomass and other renewable fuels

As a dependable and dispatchable renewable fuel, sustainably-sourced biomass represents a prime solution to complement the intermittency of wind and solar and reduce carbon emissions by more than 85% on a lifecycle basis. More importantly, biomass is the only renewable fuel on the market that is readily available today and — unlike wind and solar — can replace fossil fuels for heat generation. In heavy industries such as steel, aluminium, and cement, sustainably sourced woodbased biomass offers a carbonneutral, CHP fuel replacement for coal and gas-fired furnaces.

In 2020, the UK went a record-breaking 67 days without burning coal, and it would not have been possible without biomass. Over the last 12 months, we saw the costs of balancing the power system surge by 40%, and without additional investment in dispatchable renewables (such as biomass) we expect this to rise further.

When it comes to developing and deploying dispatchable renewable energy alternatives - such as geothermal, biogas or woody biomass (or indirectly through storage options like pumped hydro, hydrogen, or lithium-ion batteries) the optimal solution would likely be a mixture of them all. To implement these carbonneutral and carbon-negative renewable alternatives, governments must continue to incentivise heat and power generators to continue to do right by our planet today, tomorrow, and into the future.

We believe that biomass can make a great contribution. It is available to deploy at scale without the need for huge infrastructure investment or geographical constraints as it can leverage existing stranded coal assets, while utilising fuel derived as a by-product of a healthy forest products industry.

## Innovation and technology

In 2021, we expect to see the implementation of innovative programmes and new technologies – such as carbon offset programmes and BECCS – to take centre stage. When it comes to carbon offsets, the climate proposition and financial exchanges are readily available for businesses to utilise in an effort to neutralise their carbon footprint immediately, while laying the groundwork for more complicated technological and operational improvements in the near future.

As for new technologies on the horizon, BECCS is one of the very few options on the table for completely removing carbon out of the atmosphere. Once matured, BECCS could mark the beginning of a new era for biomass applications that will meet and/or exceed international net-zero targets.

I believe 2021 will be a landmark year for climate progress, policies, and technologies. With increasingly ambitious targets, biomass will continue to be an immediate and practical solution to replace coal in power and heat systems. The future for biomass is more promising with the development of new technologies and applications that will enable various industries to take more active measures to fight climate change today and into the future.