Will Gardiner Speech
Japanese Bioenergy Roundtable Event
19 May 2021

Hello everyone. My name is Will Gardiner and I am the CEO of the Drax Group. I am sorry I could not be with you 'live', however it is great to have the opportunity to contribute to your discussion.

Drax successful conversion to biomass

For those unfamiliar with my company, Drax has been at the heart of the UK's energy system for decades. We own a multi-site, multi-technology portfolio of energy production, generation and supply businesses which have played a key role in the decarbonisation of the UK's power sector.

I am here today because I believe that our experience at Drax of becoming the world's leading bioenergy generator and supplier of sustainable biomass can help Japan meet its climate goals faster, more sustainably and at a lower cost to both the consumer and the government.

At the turn of the century, Drax operated western Europe's largest carbon emitting power plant. At the same time, governments and society began to wake up to the catastrophic effects of climate change.

It was at this point that we recognised coal had no future in the energy mix. And so, Drax engineers began research and development work into co-firing sustainably sourced woody biomass with coal.

What began as ground-breaking research fast became a bold ambition to eliminate coal from our fuel mix forever.

We fully converted our first full generating unit to run only on sustainably sourced wood pellets in 2013 and have since undergone a world-leading transformation by converting two-thirds of our coal-fired power station to use sustainable biomass. This has made us Europe's largest decarbonisation project.

In 2020, 92% of the power produced by Drax Power Station was renewable – helping us reduce the Group's carbon emissions by over 85% and making us the UK's largest renewable energy generator by output.

Last month we ended commercial coal generation at Drax power station – a milestone in the history of our company and one that has helped enable the UK government to announce the world's most ambitious carbon reduction target.

What is more, we have built a new global supply chain in green energy.

Every year Drax produces millions of tonnes of renewable biomass from the vast, sustainably managed forests of the United States and Canada where we play a small but important role in helping landowners and governments keep forests healthy.

Our commitment to emissions reductions across our supply chain means we continue to invest in new technologies and processes - like larger ships and more efficient rail infrastructure - to make our biomass production cleaner and more cost effective.

The time is right

Japan has repeatedly demonstrated global leadership on climate change. A commitment in recent weeks to nearly double your emissions reduction target is bold and commendable. The challenge now is to deliver on that ambition.

Our experience shows that there is no better place to start than in the power sector – where technologies like biomass already exist to directly replace coal fired power generation with a renewable source of power.

Biomass is the only renewable technology that is both flexible and a key source of system stability. Crucially, at a time when economic recovery is so important to communities and governments alike, biomass helps retain skilled jobs and transition these into the green economy.

As well as providing a crucial renewable source of power that has replaced fossil fuels, our bold decision to convert to biomass means we support around 6,000 jobs across the North of England – at a time when other coal fired power stations have closed with the consequent loss of thousands of jobs.

The biggest prize

But perhaps the biggest prize of all is not what bioenergy can provide today, but what it will provide tomorrow.

At Drax, we have committed to a world-leading ambition to be carbon negative by 2030.

We will achieve this by making a transformational investment in bioenergy with CCS, or BECCS, which will enable us to permanently remove carbon emissions from the atmosphere while continuing to supply the renewable electricity that millions of homes and businesses depend upon.

The benefits are enormous

BECCS is a vital technology in the fight against climate change. Expert bodies such as the Climate Change Committee in the UK and the IPCC at a global level are clear that we need negative emissions technologies including BECCS to reach net zero.

As the largest, and most experienced, generator and supplier of sustainable bioenergy we are proud to pioneer BECCS at Drax and are ready to share our expertise with partners around the world. The economic, social and environmental benefits are enormous.

BECCS at Drax will permanently remove millions of tonnes of carbon from the atmosphere and help heavy industry in the UK's largest emitting area decarbonise quickly and cost effectively;

It will enable the creation of tens of thousands of green jobs, supporting an economic transition from the terrible effects of the Covid crisis to the healing effects of a green recovery.

A proven technology

We know that BECCS works and that the technology is available now. Looking at cost projections from independent bodies, we also know that it is the best value negative emissions technology [both now and into the future].

We have already successfully run two BECCS pilots at the power station. In 2019 we demonstrated that we can capture CO2 from a 100% biomass feedstock. And in 2020, we began a second pilot working with Japanese technology to further enhance the potential for delivering negative emissions.

We aim to deploy BECCS at scale by 2027. To that end, last month, we kickstarted the planning process for our proposals to build our first BECCS unit, marking a major milestone in the project and putting us in a position to commence building BECCS as soon as 2024.

And we've created a 'Coalition for Negative Emissions', a group of companies that aim to build momentum, shape policy, and develop the market for negative emissions globally. We'd love for you to join our coalition and be part of this exciting journey.

Sustainability at our core

We know that bioenergy and BECCS can only make a meaningful contribution to tackling climate change if the bioenergy is sustainably sourced. This has been fundamental to Drax's transition from coal to biomass, and it remains fundamental as we progress our plans for BECCS.

Biomass is one of our most valuable tools for reaching net zero emissions. So we need the right framework to ensure it is sourced sustainably.

As the world's largest bioenergy producer and generator, we recognise our responsibility to be the world leaders in sustainable biomass too.

At Drax, we have invested in world leading policies, tools and expertise to ensure that our biomass is sustainably sourced. We go beyond regulatory compliance and have set up an Independent Advisory Board, Chaired by the UK Government's former Chief Scientific Advisor, to help us and challenge us on sustainable biomass and its role in Drax's transition to net zero.

Thanks to our independent catchment area analyses, we know more about the forests we source from than ever before. We know and can demonstrate how demand for biomass can support healthy forests. For example, in the South East US, there is more than double the carbon stored in forests than there was 50 years ago. And in Canada, the vast majority of the raw material used for producing biomass is residual in nature, meaning it is a waste stream to the sawmilling industry there.

Our evidence-led approach gives a clear picture of forest health and allows us to ensure that the forests we source from are replanted, continue to store carbon and remain biodiverse and healthy while sustaining jobs and communities.

Our offer is unique

Drax Power Station has a proud history of transformation. Throughout our journey, we have gained a wealth of expertise and capabilities across the entire biomass value chain.

From forest, harvesting and production, to transport, shipping and storage, we have invested to build a sustainable pellet supply chain. Drax operates 17 plants in locations across Western Canada and the US South, trading biomass from North America to Europe and Asia.

Our recent acquisition of Canadian biomass pellet producer Pinnacle Renewable Energy builds on what we have already achieved and reduces our biomass production costs. It also ensures the long-term future of biomass power generation and brings Drax closer than ever to our partners in Japan.

I believe that sustainable bioenergy will play a crucial role in delivering Japan's new Nationally Determined Contributions. As the world's leading sustainable biomass generation and supply business, we are keen to share our expertise.

Our experience converting and operating the largest biomass power station, paired with supply and material handling capabilities, will allow us to support Japan as it phases out or retrofits its remaining coal-fired power stations. From co-firing to full conversions and BECCS, as well as the policy frameworks needed to achieve them, Drax has gained an unrivalled and very in-depth knowledge of the entire biomass value chain.

Let's work together

Our aim is clear: to enable a successful energy transition in the UK and abroad.

At Drax we stand ready to build new partnerships and share our expertise;

To support the global fight against climate change by delivering negative emissions;

And to help create tens of thousands of green jobs.

In November, the world will gather in Glasgow to agree the next steps in meeting our Paris Agreement obligations. I would like to take that opportunity to extend an invitation to all of you to visit us at Drax and to see for yourselves the transformation we have made and our progress towards making BECCS a reality.

In the meantime, I want to thank you very much for listening and to wish you a good and constructive session.