

Good, green growth; How CCUS delivers Government's goals

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Good morning and my thanks to Mark and Michael for their insights into the truly exciting progress in the CCS industry today.

It's a privilege to stand before you today to speak about one of the most critical missions of our time: the United Kingdom's journey toward a cleaner, more resilient future—and the pivotal role that Carbon Capture, Usage and Storage, or CCUS, plays in delivering it. In my day job, when not holding you back from the critical first coffee break of the day I lead the Morecambe Net Zero CCS cluster for Spirit Energy.

Its particularly poignant to me to be here in Aberdeen, my home, and a city that knows the value of infrastructure better than most. From offshore rigs to rail links, this region has long been a testament to how investment in physical foundations can shape economic destiny.

The UK Government has set ambitious goals: to achieve **net zero carbon emissions by 2050**, to **strengthen energy security and sovereignty**, and to **drive economic growth through green innovation**. These are not just environmental targets—they are national imperatives. And CCUS is not just a technology—it is a cornerstone of our strategy. So what are the key goals that the UK government has targeted:

1. Kickstarting Economic Growth

- Raise living standards across all regions of the UK.
- Deliver the highest sustained growth in the G7.
- Build 1.5 million homes in England.
- Fast-track planning for 150 major infrastructure projects about +20 already this year

2. Opportunity for All

- Ensure **75% of 5-year-olds** are ready to learn when starting school.
- Break down barriers to opportunity in education and employment.

3. Make Britain a Clean Energy Superpower

- Secure home-grown energy and protect billpayers.
- Achieve at least 95% clean power by 2030.
- Accelerate progress toward net zero emissions by 2050.
- Reduce reliance on imported energy by doubling domestic electricity generation capacity by the late 2030s.

Let me take you back to a smoky RAF mess hall in the 1930s, where a young officer named **Frank Whittle** was nursing a cup of tea and a radical idea. While most pilots were debating the merits of piston engines and propeller speeds, Whittle was sketching something entirely different—a machine that could compress air, ignite fuel, and blast it out the back to create thrust. A jet engine.

He submitted his design to the Air Ministry in 1930. They politely declined. Too far-fetched, they said. But Whittle wasn't deterred. With a small team and even smaller funding, he built a prototype in a rented workshop in Rugby. It was noisy, unstable, and barely held together—but it worked.

Fast forward to **May 1941**, and the UK's first jet-powered aircraft, the **Gloster E.28/39**, took to the skies. It was a short flight, but a giant leap. Britain had just become the first country to fly a jet aircraft powered by a turbojet engine—Whittle's engine.

The irony? While Whittle was quietly revolutionizing aviation in Britain, Germany was racing ahead with its own jet program. But Whittle's work laid the foundation for **Rolls-Royce**, **Concorde**, and the UK's enduring legacy in aerospace engineering.

So yes, the jet engine was born not in a high-tech lab, but in the mind of a determined RAF officer who refused to let convention clip his wings.

And why do I mention it, today jet engines and engineers power 25,000 commercial aircraft with a market valued at over £80bn in 2024 and projected to £120bn by 2030. The UK has invention, resilience the ability to create new industries built into its very being...

CCUS enables us to decarbonise our most challenging sectors—heavy industry, power generation, and waste—without sacrificing jobs or competitiveness. In fact, it does the opposite. It also allows us to capture carbon dioxide before it reaches the atmosphere, reuse it in innovative ways, or store it safely underground. This is how we protect our climate while preserving our industrial heartlands.

Through the **Cluster Sequencing Programme**, we are investing in regional hubs like HyNet and the East Coast Cluster. Beyond this we see the Track 2 projects progressing. And outside of the Track process, we see projects like MNZ | Peak Cluster gain National Wealth Fund investment. These clusters will not only reduce carbon—they will **create thousands of skilled jobs**, **stimulate local economies**, and thus the direct link back to economic growth, opportunity for all and clean power.

Let me be clear: we know CCUS is not a silver bullet. But it is an essential piece of the puzzle. It complements our efforts in renewables, hydrogen, and energy efficiency. It gives us options. It gives us time. And most importantly, it gives us hope.

With the weight of technical capability in the room today its easy to see CCUS as a technical hurdle to overcome, but I'd invite you to see CCUS not just as a technical solution, but as a symbol of our commitment—to innovation, to collaboration, and to a future where prosperity and sustainability walk hand in hand.

In oil and gas we often speak of silently keeping the lights on, but energy security isn't just about keeping the lights on. It's about **how** we do it. And that's where **CCUS—steps in**.

CCUS is more than a technology. It's a strategic enabler. It enables the continued use of much-needed domestic natural gas while capturing emissions. It supports the production of low-carbon hydrogen, a fuel that can be stored, transported, and deployed when we need it most. And it gives our industrial heartlands—from the North West, where MNZ is, to the Islands of Scotland and as far south as the English channel—a fighting chance to thrive in a net zero world.

Let's be clear: without CCUS, we risk losing industries, jobs, and investment. With it, we gain a competitive edge. We create thousands of skilled jobs. We unlock export opportunities. And we reinforce Britain's reputation as a global leader in clean energy all of which meet the UK's goals.

The North Sea, once the engine of our fossil fuel economy, is now poised to become a **carbon storage powerhouse**—capable of safely storing millions of tonnes of CO₂ beneath its seabed. That's good science AND good strategy.

Across the UK, we are entering a new era of renewal. The Government's commitment to delivering **150 major infrastructure projects** is not just about bricks and mortar—it's about unlocking growth, opportunity, and resilience.

Big infrastructure projects are the scaffolding of a thriving economy. They **create jobs**—tens of thousands of them—across construction, engineering, logistics, and design. They **train the next generation**, offering apprenticeships and technical skills that last a lifetime. And they **connect communities**, reducing travel times, linking businesses to markets, and making it easier for people to access work, education, and healthcare.

But the impact goes deeper. Infrastructure is the backbone of **energy security**, enabling clean power networks, and carbon capture clusters. It's the foundation of **housing development**, allowing us to build vibrant, affordable communities. And it's the catalyst for **private investment**, giving businesses the confidence to grow, innovate, and stay rooted in Britain, and to attract new investors to build and spend here.

In short, when we build infrastructure, we build futures. We build the conditions for inclusive growth, regional prosperity, and national pride.

With today's fiscal challenges it's even more important that we not see infrastructure as a cost—but as a commitment. A commitment to the people of this country, to the places they call home, and to the promise of a Britain that works for everyone.

The UK has set its sights on net zero by 2050, and the path to get there runs straight through the heart of Carbon Capture and Storage. Not as a footnote, not as a fallback—but as a frontline solution.

We are standing on the shoulders of industrial giants. From the coalfields of Yorkshire, the cement plants of the Peak District, to the rigs of the North Sea, Britain has always led in energy and infrastructure innovation. Now, we must lead again—this time in carbon management.

CCS is not just about capturing emissions. It's about preserving jobs, revitalising regions, and future-proofing our economy. It's about turning the UK's geological assets into climate solutions. It's about proving to the world that decarbonisation and industrial strength can work hand in glove.

But leadership doesn't happen by accident. It demands urgency. It demands unity. And it demands investment—not just in infrastructure, but in belief.

So yes, CCS is good, green growth. We need to continue to shout from the rooftops that

We need bold projects.

We need fast approvals.

We need public trust.

We need this generation's Frank Whittles to persevere with unlocking the solutions that will pave the way to the net zero future.

And above all, we need you—the CCS community—to speak with one voice and act with one purpose.

This is not the time for hesitation. It's the time for acceleration.

Let's build the clusters. Let's scale the technology. Let's show the world what British ingenuity can do when it's backed by ambition.

The clock is ticking. The carbon is rising. And the opportunity is ours to seize.

CCS is not the future—it's the now. Let's deliver it.