

# Speech: Sam Gyimah: Green GB Week Clean Energy Innovation Summit

Good afternoon everyone. It's great to see so many people, from so many different places, all gathered here today.

It may be strange to open a speech about the future by looking to the past. But I'd like to begin by asking you to cast your minds back in time to January 1882.

A time when horse-drawn Hackney Carriages clattered across cobbled streets, the tube was in its infancy, and lamplighters went around at dusk, illuminating the city streets with gas flames.

And now, imagine the excitement you'd feel when you heard the news: The world's first coal-fired power station was up and running in London.

The Edison Electric Light Station was named for its designer, Thomas Edison – one of the great innovators of the nineteenth century, who invented the phonograph, improved the telephone, and commercialised the incandescent bulb.

And while the Light Station lit fewer than 1000 bulbs, and closed a few short years later, it had changed the landscape, and in 1889 the first central power station was opened in Deptford.

While we may debate whether it was Edison, or Swan, or someone else who designed the lightbulb first I think we can all agree that this profound shift – over just seven years – was triggered by an innovator; a person with an idea, the means to test it, and the ambition to see it through.

Since then, we've become acutely conscious of the damage that has been done by inefficient and polluting products, whether they're old lightbulbs, coal-fired power stations, or the cars which replaced those horse-drawn carriages.

So now, as Edison did, we need to improve on what came before.

If we want to see another major shift like the one he brought about – but this time a shift towards the clean technologies of the future – then we need more innovators like Edison.

We need you.

And we need you to be able to do what Edison did: have an idea, create a product, and share it with the world. This is where government can come in – we can make sure that you're able to do these things.

Take the example of YASA Motors. This year they opened a new production factory in Oxfordshire, which is supporting 150 high-skilled jobs and aiming to produce 100,000 units by the year's end.

But the company started with just one man: Tim Woolmer, a graduate from the University of Oxford, one of our fantastic universities, if I may say, represented in the room today.

In 2009, Tim's DPhil research gave him an idea for a new type of motor, capable of significant carbon emission reductions and, with the help of the university, YASA Motors was founded as a university spinout.

This sort of thing will only become more frequent, because back in January of this year we pledged more than 180 million pounds from the Engineering and Physical Sciences Research Council to fund science and engineering research.

Next, Tim needed to test out his ideas in the real world, and scale up, and Innovate UK – now part of UK Research and Innovation – were there to lend a hand, helping YASA to develop their Y750 motor.

Now YASA are an international company, and they're ready to innovate again, with an Advanced Propulsion Centre grant helping them to develop their next products alongside a host of others, including Hofer Powertrain UK and the Warwick Manufacturing Centre.

And they could benefit further still – for example, from the BEIS Energy Innovation Programme, committing more than 500 million pounds to help accelerate the commercialisation of innovative clean energy technologies and processes.

All part of our commitment to spending 2.4 percent of GDP on R&D in the next three years.

Of course, when I speak of international companies, it's with a keen awareness of the international nature of research too. Edison, after all, is one of America's greatest historical figures, but he chose to build his first power station in London.

The UK may be home to some of the brightest minds in the world, but it doesn't have a monopoly on great ideas. Nor is climate change a solely British concern. So we're working with friends around the world to ensure that innovative approaches can flourish in every corner of the globe.

Back at the start of the year, my colleague the Energy Minister, Claire Perry, launched the UK-South Korea Bilateral Collaboration on Smart Energy Innovation.

Central to this was a competition, where UK companies and teams would partner with companies and organisations in South Korea to develop and demonstrate innovative, low-carbon technologies and approaches, including demand-side response, vehicle-to-grid technologies, flexibility markets, system integration and energy storage systems.

My department committed up to three million pounds to the competition, and our counterparts in South Korea offered roughly the same to the South Korean groups involved, and today I am pleased to announce the winners of that funding:

- Doosan Babcock Ltd, who have developed a novel energy storage approach based on liquifying air;
- GridDuck, who are looking at smarter ways to charge and discharge electric vehicles; and Electron, for their work to develop a trading platform in South Korea to incentivize the flexible use of energy.

Not only will these developments help in the global fight against climate change, they'll also mean more business for the winners and, we hope, new trade and investment opportunities between our two nations.

The same is true in on the other side of the world, where we are embarking on a new collaboration.

Today, I'm pleased to launch the Power Forward Challenge, which we're taking on alongside the Canadian Government. We'll be bringing together innovators from both countries to demonstrate our shared ability to aggregate and manage distributed generation, energy storage and flexible loads in future energy systems so that we can learn to respond to greater demand, complexity and volatility that our future energy grid will face.

Soon you'll be hearing from Janice Charette, the Canadian High Commissioner to the UK, and, by video, from Amarjeet Sohi, the Canadian Minister of Natural Resources so I'll leave it to them to say more about this.

These two projects show the high demand that there is for our expertise all around the world. And with the stakes so high, and the potential rewards so big, we are keen to show that expertise.

Today, alongside the Department for International Trade, we're launching a [brochure](#) which highlights the impressive breadth and depth of the capability which British companies offer, allowing potential partners from around the world to see where they might be able to complement UK expertise and experience, bringing together the brightest and best from around the world to work in partnership with UK firms.

In all this collaboration, others nations are designing their own products and services to make the world that bit greener. This is great news. But, of course, I want to see the people of this country prospering – which means that I want us to stay ahead of the pack.

That's why we're continuing to invest in our fantastic entrepreneurs.

Today, we are publishing the winners of the latest phase of our Energy Entrepreneurs Fund. Our funding to date totals around 60 million pounds and has supported over 130 projects.

Lastly, with clarity and simplicity in mind, today we launch a data visualisation tool which will show the different clean energy projects funded by our innovation funding programmes.

It will also allow users to see which projects are in the same technology area, or which ones are based locally to them so that potential collaborators, investors and developers can easily identify opportunities to

add value.

All of this work will support innovations in the clean tech of tomorrow, helping our world and helping our people.

When Thomas Edison set out his vision for a coal power station all those years ago, that was what he wanted to do. In many ways, he did.

Now it's your turn to take that vision forward. In this [Green GB Week](#), it's time to put pen to paper. It's your turn to take that idea you've always kept at the back of your head and start bringing it into the real world.

100 years from now, it could be your name that people associate with invention, and your innovations which shape the world.

Thank you.