

The UK and Taiwan advance collaboration in hydrogen and fuel cell technology

Co-hosted by the British Office in Taipei and the Taiwan Institute of Economic Research, the inaugural UK-Taiwan Hydrogen Forum took place virtually on 21 October, with supports by Taiwan Hydrogen and Fuel Cell Partnership and Scottish Hydrogen and Fuel Cell Association. The Forum brought together more than 100 UK and Taiwanese hydrogen and fuel cell companies with 11 companies presenting at the Forum to explore possible areas for collaboration.

To mark the occasion, the UK and Taiwan's respective hydrogen trade associations, the Taiwan Hydrogen and Fuel Cell Partnership and Scottish Hydrogen and Fuel Cell Association, signed a Memorandum of Understanding (MoU), committing to improving bilateral engagement, supporting skills development, education and outreach activities, and coordinating industry-related information and events. This MoU signing was witnessed by John Dennis, Representative of British Office Taipei, Lord Faulkner, UK Trade Envoy to Taiwan and YU Cheng-Wei, Director General of Bureau of Energy, Ministry of Economic Affairs.

In August 2021, the UK Government published a hydrogen strategy that sets out the approach to developing a thriving low carbon hydrogen sector in the UK to meet its ambition for 5GW of low carbon hydrogen production capacity by 2030. The strategy also includes a chapter on how the UK is working with other leading hydrogen nations to drive global leadership on the development of low carbon hydrogen to support the world's transition to net zero.

John Dennis, Representative of British Office Taipei said:

This is just the right time for the UK and Taiwan to come together and explore closer collaboration on this fuel of the future. UK-Taiwan collaboration is growing fast in low carbon energy development, especially offshore wind. And Taiwan's domestic fuel cell industry which is already a vital part of global hydrogen supply chains is increasingly strong and innovative.

Emerging UK-Taiwan collaboration opportunities include the deployment of hydrogen in medium-to-long distance public road transportation, the production of green hydrogen from offshore wind, and partnering on project opportunities in third markets where the UK and Taiwan share a common interest.

Lord Faulkner of Worcester, UK Prime Minister's Trade Envoy to Taiwan said:

Low carbon hydrogen has a critical role to play in our collective transition to net zero, with the potential to overcome some of the trickiest decarbonisation challenges facing our economy. Today, low carbon hydrogen technologies remain at a relatively early stage of deployment. This makes international collaboration especially important, to help mitigate early-stage development risks and create larger shared markets for the deployment of low carbon hydrogen. We look forward to working with Taiwan on these important efforts.

YU Cheng-Wei, Director-General of Bureau of Energy, MOEA also commented:

Moving from the “energy transition” to the “net-zero transition” by 2050, Taiwan has included hydrogen energy in our decarbonisation plans to effectively reduce carbon emissions in the energy and industrial sectors. In addition, MOEA has established a “Hydrogen Energy Promotion Group” to expand the promotion of the application and development of hydrogen energy. We will continue to pay attention to the global development trend of hydrogen energy and actively promote the decarbonisation of energy and industry.

Nigel Holmes, CEO, Scottish Hydrogen and Fuel Cell Association as said:

With just 10 days to go until the COP26 climate summit in Glasgow, the focus is now clearly on the urgent need to make the transition to zero-emission energy solutions. This MoU between the Taiwan Hydrogen and Fuel Cell Partnership and the Scottish Hydrogen and Fuel Cell Association will help us to share experience from the deployment of zero emission hydrogen fuel cell buses in Aberdeen, the production and local use of hydrogen in Orkney, and the H100 Fife demonstration of hydrogen from offshore wind for heating and cooking, replacing carbon intensive fossil fuels.

Dr. Tso Chunto, Vice President of Taiwan Institute of Economic Research & Convener of Taiwan Hydrogen and Fuel Cell Partnership also commented:

To reach net-zero emissions by 2050, hydrogen would be one of the most crucial projects in the near future. As for Taiwan, we have completed hydrogen and fuel cell technology supply chains, which international collaborations could be greatly promoted. Through today’s UK- Taiwan Hydrogen Forum, it could bring endless possibilities for more mutual collaborations. We believed that Taiwan’s hydrogen industry is well-prepared for the better future.

UK Hydrogen Strategy Executive Summary

Hydrogen is one of a handful of new, low carbon solutions that will be critical for the UK's transition to net zero. As part of a deeply decarbonised, deeply renewable energy system, low carbon hydrogen could be a versatile replacement for high-carbon fuels used today – helping to bring down emissions in vital UK industrial sectors and providing flexible energy for power, heat and transport. The UK's vision, resources and know-how are ideally suited to rapidly developing a thriving hydrogen economy. Our world-class innovation and expertise offer opportunities for UK companies in growing domestic and global markets. The UK Hydrogen Strategy sets out how we will drive progress in the 2020s, to deliver our 5GW production ambition by 2030 and position hydrogen to help meet our Sixth Carbon Budget and net zero commitments. To see [full strategy] (<https://www.gov.uk/government/publications/uk-hydrogen-strategy>)

List of the 11 UK and Taiwanese companies that presented at the inaugural UK-Taiwan Hydrogen Forum:

- UK – Ceres Power, developer of solid oxide fuel cell technology
- UK – Howden, the world's leading provider of air and gas handling solutions
- UK – Petrofac, integrated international energy services company
- UK – Arcola Energy, specialist developer of hydrogen transportation infrastructure
- UK – Alexander Dennis, manufacturer of next generation hydrogen buses
- Taiwan – Linde LienHwa Group, Taiwan's largest industrial gas supplier
- Taiwan – YC Synergy, fuel cell and electric drive system provider
- Taiwan – Asia Hydrogen Energy, developer of solid oxide fuel cell technology
- Taiwan – M-Field Energy, industrial and residential fuel cell system provider
- Taiwan – hiPower Green Technology, hydrogen R&D and services company
- Taiwan – TÜV Rheinland, the world's leading provider of technical

Foreign Secretary travels to India to strengthen economic and tech ties, October 2021

- Foreign Secretary announces a series of tech and infrastructure deals to boost jobs, promote our values and increase global green growth
- As part of the UK-India 10 Year Roadmap, the Foreign Secretary will also announce a new forum bringing together leading figures from the UK and India
- She will meet External Affairs Minister Jaishankar and Environment Minister Yadav

Foreign Secretary Liz Truss will today (Friday 22nd October) announce a series of tech and infrastructure tie-ups with India to boost both economies and help developing countries grow in a clean and sustainable way.

During a two-day trip to Delhi and Mumbai, the Foreign Secretary will outline agreements to deepen investment ties between the two countries and work together on finance and technical support packages for the developing world.

The deals include more tech transfer and knowledge sharing with developing countries alongside heavy capital investment – a model that the UK is looking to replicate with partners around the world. The agreements will help drive forward the Build Back Better World Initiative launched by G7 leaders in June to help meet the huge clean infrastructure need in the developing world.

The Foreign Secretary wants to strengthen the UK's economic, technology and security links with fast-growing economies and like-minded partners and build "a network of liberty" around the globe. Closer ties with like-minded democracies such as India are key to that ambition. In May, the Prime Minister and Indian Prime Minister Modi agreed a new roadmap to strengthen our partnership.

The Foreign Secretary will meet External Affairs Minister Subrahmanyam Jaishankar and Environment Minister Bhupender Yadav in Delhi to outline her vision and discuss areas for closer collaboration, before heading to Mumbai, where she will visit the UK Carrier Strike Group on its most substantial port visit to date.

During the trip she will announce:

- A £11.5m UK investment in two venture capital funds aimed at supporting India's transition to cleaner energy. Both funds will return profit to

the UK taxpayer and make use of UK expertise.

- A \$70m (£50.4m) investment by the Foreign, Commonwealth & Development Office's investment arm CDC to fund green tech infrastructure projects across India through the joint Green Growth Equity Fund.
- £500k UK Research and Innovation (UKRI) investment to build a new virtual network of UK and Indian labs working to promote Net Zero targets in key industries including glass, cement, and metals.

Foreign Secretary Liz Truss said:

I want the UK and India to step-up their partnership in critical areas like technology, investment, security and defence. India is the world's largest democracy, a tech and economic powerhouse and a vital strategic partner for the UK.

Closer ties – including in areas like tech and infrastructure – will deliver jobs and growth in both countries, boost developing world economies and help us promote our values on the global stage.

The Foreign Secretary and Minister Jaishankar will announce a new Strategic Futures Forum, bringing together leading figures from Government, business and academia in both countries to drive closer links in priority areas like tech and security and shape the longer-term, strategic vision for our partnership.

Both the UK and India are known for their tech expertise. Britain has the third largest number of tech 'unicorns' in the world, the name given to a start-up which is valued at over \$1 billion. India has the third highest number of tech start-ups in the world.

The Foreign Secretary is due to meet Environment Minister Yadav later today to discuss climate targets. She will underline the importance of making concrete progress on climate change ahead of the upcoming COP26 Summit and will note that India already leads the world in renewable technology and express her hope that they will commit to a more ambitious Nationally Determined Contribution.

Tomorrow in Mumbai, Liz Truss will speak to Indian business leaders at a Build Back Better World roundtable to help boost infrastructure in the developing world.

[Advertising blitz to urge public to](#)

get flu and COVID-19 vaccines

- Boots, LloydsPharmacy and Asda come together to support largest ever winter vaccine drive
- This year will see the country's biggest flu programme in history with 35 million people eligible for a free vaccine

A nationwide advertising campaign launches today (Friday 22 October) as part of the government's call to the public to get their COVID-19 booster and flu jabs, to protect themselves and their loved ones this winter.

The multimedia campaign will run on outdoor billboards, broadcast and community radio and TV to support the national vaccine drive.

The colder weather traditionally leads to increased transmission of viruses. Experts have warned that this year there could be a significant flu surge coinciding with continuing or rising COVID-19 cases. Immunity to flu is expected to be lower due to lower levels of the virus in circulation last winter.

Vaccines give high levels of protection but immunity reduces over time, so it is vital vulnerable people come forward to get their COVID-19 booster vaccine to top-up their defences and protect themselves this winter. For those not eligible for a booster, the protection from two doses is sufficient.

Vaccines provide the best possible protection against infection and serious disease. The government is pushing the biggest ever winter vaccine campaign for COVID-19 and flu, so people can protect themselves and their loved ones this winter and play their role in reducing pressure on the NHS.

The campaign television advert hits screens today and asks people to "get vaccinated, get boosted, get protected." It features Michelle, an NHS nurse, explaining the benefits of the flu jab and COVID-19 booster vaccine. The new television advert will be seen in primetime spots alongside Emmerdale and Coronation Street as well as daytime shows such as This Morning and Loose Women.

Targeted digital channels will also carry the campaign adverts including social media platforms, digital radio and online video such as YouTube.

People will be invited for the COVID-19 booster jab when it's their turn – if they have not been contacted within a week of reaching 6 months since their second jab they can call 119 or book online. Those who are eligible for a free flu vaccine can book an appointment through their GP surgery or local pharmacy.

The offer of a first and second COVID-19 vaccine remains open to anyone who

is eligible. Vaccines are available for those aged 12-15 to offer the best possible protection this winter in schools, and they will also be available in vaccine centres from this weekend.

This week the country's leading pharmacies have joined forces to encourage people to come forward and get their free flu vaccine and COVID-19 booster jab when eligible. Alongside independent pharmacists, Boots, LloydsPharmacy and Asda – who together have over 4,000 pharmacies across the UK – have backed the call for people to get vaccinated for the best possible protection this winter.

Secretary of State for Health and Social Care, Sajid Javid, said:

Our vaccine programme is building a wall of defence across the country and our booster rollout is now well underway with more than 4 million jabs in arms.

As we go into winter, it is vital that eligible people get their booster jab and their flu jab to protect themselves, their loved ones and the NHS.

This is a national mission and I'm hugely grateful to the public, volunteers and NHS workers rolling out jabs. It is fantastic to see some of our biggest high street pharmacies give their backing to the winter vaccination programme.

Vaccine confidence is high with data from the Office for National Statistics showing nearly all (94%) of those aged 50 to 69 say they would be likely to get their COVID-19 booster if offered, with the figure rising to 98% for those over 70. Similarly, over three quarters (77%) of those 50-69 would be likely to get the flu vaccine and nearly all (94%) of those over 70.

Dr Raj Patel, GP and Deputy National Medical Director of Primary Care for NHS England, said:

Flu is a huge killer and last year GPs and pharmacists jabbed record numbers of people and as we head into what could be one of the most challenging winters yet for the NHS, it has never been more important to get your flu and covid booster jab.

Flu has a serious impact on the health of thousands of people every winter and it has never been easier to ensure you are protected, so I would urge everyone to book an appointment directly with your GP or pharmacist as soon as possible.

Mary Ramsay, Head of Immunisation, UK Health Security Agency said:

This is the first winter when COVID-19 and seasonal flu are

expected to be circulating together, putting more lives at risk. Vaccinations are important to protect against both diseases.

Please book an appointment if you are eligible for the flu vaccine, or get your COVID-19 booster as soon as you are invited – which is due 6 months after a second dose.

Michelle, Nurse who features in the advert said:

As a frontline worker for the NHS, I've seen first-hand the devastating impact both Covid and flu can have in winter. Vaccines offer the best protection and I hope this campaign drives home to the importance of coming forward for your vaccine.

GP and TV doctor, Dr Dawn Harper said:

It's really important that if you are eligible to take up the offer for the different vaccinations – this is both the flu vaccine and COVID-19 booster – you do so.

Thousands of people die from the flu each year and this year we're expecting high levels to circulate as we head into winter. With the added threat of further COVID-19 and our immunity wavering, it's so vital that people get protected against both these deadly viruses.

This is a huge drive and we need everyone do their part by protecting themselves, and those around them. You can get your COVID-19 booster and flu vaccinations at vaccination centres, GPs or community pharmacists so please, make sure to book your appointment as soon as you're invited.

Dr Leyla Hannbeck, Chief Executive Association of Independent Multiple Pharmacies, said:

Community pharmacies are already on track to smash last year's flu vaccination record this season which showcases that patients are keen to get protection against the flu.

Pharmacies, bravely remained open throughout the pandemic despite the risks and are increasingly seen as first port of call for members of the community to meet their basic healthcare needs.

They provide accessibility and convenience for patients to get their flu vaccination. As we are approaching winter and with the potential higher cases of Covid, it is essential that all eligible patients get vaccinated.

Marc Donovan, Chief Pharmacist at Boots, said:

Boots offers free NHS and private flu jabs and are seeing high demand this year. We have already taken over one million flu jab bookings to date but there are still plenty of appointments available at our pharmacies across the UK.

Boots is also supporting the NHS to deliver COVID-19 booster jabs this winter at select pharmacies, offering a free flu jab at the same time to all eligible patients. Having both vaccines offers optimum protection from getting seriously unwell from these viruses in the coming months.

Victoria Steele, Superintendent Pharmacist at LloydsPharmacy, said:

It is very likely that we'll see much greater levels of transmission of the influenza virus this winter. Immunity and protection are increasingly at the forefront of our minds, and we have seen this through the high volume of flu bookings at LloydsPharmacy this year and through increased sales of winter medicines, as many start to take precautions as we head into cold and flu season.

It is important that we all do what we can to protect ourselves and loved ones this winter by getting both the flu vaccine and the COVID booster vaccine, for those who are eligible. I'd encourage people to book as soon as possible, as it does take time for the body to develop its antibodies after any vaccine. You can book your appointment for a flu vaccine online or by visiting your local LloydsPharmacy.

[New pilot to help people eat better and exercise more](#)

- Points awarded for increasing step count and eating more fruit and veg which can be redeemed for gym passes and discounts at selected shops
- HeadUp Systems awarded contract to develop a new app with £3 million in government funding made available for rewards

A new app to help people make positive changes to their diet and physical

activity will launch next year, the government has announced today.

From January 2022, a pilot will see users wear wrist-worn devices that can generate personalised health recommendations, such as increasing their step count, eating more fruit and vegetables and decreasing portion size.

Users will collect points for these healthy behaviours which will unlock rewards, which could include gym passes, clothes or food vouchers and discounts for shops, cinema or theme park tickets.

Following a competitive tender process, HeadUp has been chosen to deliver the new scheme, with £3 million also coming from the Department of Health and Social Care to provide incentives.

Evidence suggests that financial incentives can improve rates of physical activity and inspire healthier eating so HeadUp will work with a range of organisations to provide rewards such as vouchers, merchandise, discounts and gift cards.

The government is committed to helping people lead healthier, happier lives by making it easier for people to make healthy choices.

Health and Social Care Secretary, Sajid Javid said:

I want to ensure we're doing as much as we can to tackle health disparities across the country, and this new pilot will pave the way for developing innovative ways to improve the lives of individuals, and also help to reduce strain on the NHS.

The Office of Health Improvement and Disparities is driving forward our levelling up agenda for health and ensuring prevention is a vital part of everything we do.

This pilot is an excellent opportunity to find how best to inspire people to make small changes to their daily lives that will have a lasting positive impact on their health.

As part of our world-leading healthy weight strategy, the new scheme will be part of the Office for Health Improvement and Disparities' (OHID) drive to use digital technology to improve physical health and prevent health conditions before they develop.

Obesity related illnesses cost the NHS £6 billion a year and the scale of the challenge has been highlighted by COVID-19 disproportionately affecting people who are overweight. With almost two-thirds of adults in England living with excess weight or obesity the programme will focus on incentives and rewards for healthy behaviours, including increasing physical activity and eating better to support people to live healthier lives.

Public Health Minister, Maggie Throup said:

We are committed to improving the health of people across the country.

The HeadUp app pilot will help us better understand how appropriate rewards can motivate people to make positive changes to their diet and physical activity, supporting them to lead healthier lives.

Internationally there are examples of innovative incentives programme showing promising results, such as Singapore's National Steps Challenge, and the government will work closely with international partners to understand what makes these schemes successful to inform best practices in England.

Sir Keith Mills, who has pioneered reward programmes through Airmiles and Nectar points, is advising the Health Incentives Scheme and will support the government in taking advantage of the very best innovation in the public and private sector.

The new app will place user privacy and security at its core and will ensure all personal information is safe and secure at all times.

Sir Keith Mills, Health Incentives Advisor, said:

This scheme is a fantastic opportunity to explore how government, business and the third sector can work together to deliver a new and engaging way of supporting the public to make healthier choices.

Through the pilot we will have exciting and innovative partners on board will help motivate people to want to earn incentives, but also should help them overcome barriers to making healthy decisions in future. I'm looking forward to see how this scheme develops.

David Parfitt, Strategy Director at HeadUp said:

We're thrilled to be working with OHID to design and deliver a truly innovative initiative to support the future of population health in England.

As an evidence-based, data science company focused on people's health around the world, we are immensely proud to be working with the Government and key stakeholders, people in the community, and with the Behavioural Insights Team as our design and evaluation partner, to play a part in piloting an exciting new approach to the urgent and important challenge of helping people engage with their health and improve their health behaviours.

The Health Incentives Scheme was announced as part of a £100 million package of government support to help those living with obesity to move closer

towards a healthier weight and give them the tools they need to maintain this.

The pilot will launch in January 2022 and will run for 6 months in a defined location in England to be announced in due course.

Flood-risk reduced for South Ferriby

- Risk reduced for 150 properties, 3,000 hectares, and vital infrastructure.
- £248 million of economic damages avoided over the next 100 years.
- Communities now protected from floods similar to December 2013 tidal surge.

People in South Ferriby are better protected from tidal surges and sea level rises following the completion of a £14 million flood defence in North Lincolnshire.

The major investment reduces flood risk for 150 properties in the area, as well as 3,000 hectares of agricultural land and vital infrastructure. This includes the A1077 and the Scunthorpe to Grimsby railway line, which carries 20% of the UK's freight.

The reduced risk is predicted to prevent £248 million of potential economic damage over the defences' lifespan.

Starting in April 2019, the project has seen around 3 kilometres of new and raised defences built between Ferriby Sluice and South Ferriby village. That includes embankments, flood walls, de-mountable barriers and flood gates.

The 13 metre flood gates slide across the A1077, closing in just 15 minutes. They are the country's first such defences to operate across an A-road.

The new defences are now higher than the water level seen in the devastating tidal surge of December 2013. That means local communities are now protected from a similar event.

The height also takes account of climate change predictions up to 2050.

Further work is now under way to install 'property flood resilience' measures to around 20 homes in Winteringham. This involves putting in place products that reduce the risk of water entering the home, such as air brick covers and flood barriers for entrance doors.

Low lying communities along the Humber are at risk of tidal flooding and sea level rise, with South Ferriby experiencing significant flooding in 1953 and 1987. But it was in 2013 that the most recent event hit, when the most severe tidal surge in 60 years struck the east coast of Britain.

The resulting flooding affected 129 properties in South Ferriby and 13 in Winteringham alongside 1,000 hectares of agricultural land that took over 6 years to recover. A main route the A1077 was closed for 4 days and the CEMEX cement plant was put out of action for a year. The damage is thought to have cost the economy £50 billion.

As well as reducing the frequency of tidal flooding from the Humber estuary, the new defences protect and enhance habitat. It also boosts both the economy and local wellbeing.

Kate Halka, operations manager for the Environment Agency, said:

This marks an important milestone for the community. 150 properties, vast areas of agricultural land, and key infrastructure on which local people and the economy depend are now better protected. They are protected from both tidal flooding and sea level rise.

We understand the devastation and heartache flooding brings, and have worked tirelessly with our partners to bring this scheme to South Ferriby.

Of course, it's impossible to completely eliminate the risk of flooding. People should always make sure they plan for the worst and sign up to receive warnings but we can manage that risk, as we have here.

The results will benefit people, properties, livelihoods, the environment and the economy for years to come.

Cllr Sara Haddon, Chair of the South Ferriby Parish Council Flood Protection Committee, said:

Residents of South Ferriby Sluice are delighted that the new defences are now complete. Memories of the 2013 floods are still raw and the new defences mean that they can sleep easy as we approach the coming winter.

The Environment Agency urges people to plan ahead for flooding by finding out if their property is in an at-risk area. Signing up for free flood warnings; and knowing in advance what to do. Further information is available on all these steps and more at GOV.UK/Flood and by calling Floodline on 0345 988 1188.

The scheme was completed this summer, and is being officially opened on 22 October by Environment Agency chief executive Sir James Bevan.

It has been designed and built by the Environment Agency. With funding and

support from the government, North Lincolnshire Council, CEMEX, the Regional Flood and Coastal Committee and South Ferriby Parish Council.

Around £7.3 million was committed as part of the Environment Agency's Flood and Coastal Erosion Investment Plan. This programme of defences resulted in better protection to 314,000 homes across the country between 2015 and 2021. The aim now is working to reduce risk for a further 336,000 by 2027.

The improvements to the flood defences at South Ferriby are part of the ongoing investment in tidal flood risk management around the Humber.

The Humber Flood Risk Management Strategy was developed to provide a long-term approach to managing tidal flood risk in an area vulnerable to climate change. Since its publication in 2008, there has been more than £150 million of investment. This investment is helping to manage the risk of tidal flooding to more than 70,000 properties and important infrastructure around the estuary.