

[Discover healthy soils and thermal imaging with SRUC at Edinburgh International Science Festival](#)

SRUC staff will be running interactive family activities based around thermal imaging of animals and healthy soils at this year's Edinburgh International Science Festival.

[China unveils leading research vessels to boost marine survey](#)

China unveiled two domestic state-of-the-art marine geological survey vessels in Shanghai Tuesday.

One ship, Haiyang Dizhi-8 (Ocean Geology No.8) uses world-leading techniques to create high-resolution three-dimensional images of the seabed's geological structure.

Haiyang Dizhi-8 is 88 meters in length, can cruise for up to 16,000 nautical miles and has a maximum speed over 15 knots per hour.

The other ship, Haiyang Dizhi-9, comes with the world's best deep-water drilling system, able to dig 160 meters into the seabed at a water depth of 2,500 meters.

"The launch, one year ahead of schedule, will boost the fleet of long-serving ships," said Zhong Ziran, head of China Geological Survey.

The new ships are also a great boost to China's marine exploration for oil and gas.

Both ships are seaworthy in all kinds of waters.

China now has six marine geological research vessels in service, launching Haiyang-6 in October 2008.

It plans to unveil Haiyang Dizhi-10 at the beginning of May and put the three new vessels into service by the end of October.

[News story: Oscar success: UK cutting-edge music technology in the mix](#)

La La Land – awarded Best Original Music Score – features a next-generation synthesizer, developed by ROLI with support from Innovate UK.

The Dalston-based music company's innovative Seaboard GRAND has gained widespread attention with La La Land, dominating the film and television awards season for its soundtrack.

[ROLI](#) has revolutionised the piano keyboard by replacing white and black keys with a continuous, touch-responsive surface. Its 'keywaves' are sensitive to initial strike force, pressure and left-right finger placement.

The instrument is used in a seminal scene with Ryan Gosling's character, Sebastian, joining a band fronted by musician John Legend. It marks the upturn of his career as the jazz purist comes to accept that the music he loves needs to evolve to gain a broader audience and survive.

As well as the Oscar, the film won a Golden Globe for Best Original Score and British Academy Film Award for Best Film Music.

Innovate UK has a long history with ROLI. We first supported the company on research and development for the technology that underpins the Seaboard. ROLI has also received grants from Innovate UK for further projects, including proof of concepts and prototyping. We continue to work with the team today.

[News story: Spotlight on the Accelerator Enduring Challenge](#)

The Defence and Security Accelerator recently launched the Enduring Challenge.

At the event Harriett Baldwin MP, Minister for Defence Procurement launched the Innovation Initiative's £6 million Accelerator Enduring Challenge and invited suppliers with innovative ideas to apply to our fast-track route to research funding.

[Harriett Baldwin interview](#)

Accelerator advantage

Innovation Partner, Jim Pennycook, explained how the MOD's new Defence and Security Accelerator selects the best ideas and supports and nurtures them through to exploitation.

Our aim is to help suppliers translate their research into products which we can ultimately use to keep the UK and its Armed Forces safe and secure.

[Jim Pennycook interview](#)

Defence and Security application

We asked our military advisers what they hope the Accelerator will bring to front line services and what they want the suppliers to keep in mind when developing their new product or service.

(Military Advisers interview <https://www.youtube.com/watch?v=Pv3pntJ6gVE>)

Find out more about the [Enduring Challenge](#).

[John McDonnell speech to the British Chamber of Commerce](#)

*****CHECK
AGAINST DELIVERY*****

Thank
you very much for the invite to speak here today.

We're
meeting at a time of upheaval not only for British businesses, but for our
whole society.

The
vote to Leave the EU has created fundamental and unexpected challenges for us
all.

It
is forcing all of us to think more deeply than in the past about what kind of
society and country we want to be.

Businesses
are a critical part of that national conversation.

Particularly

as the Brexit negotiations get underway, it is essential their voice is heard loud and clear – and listened to by government.

Action

is needed now on business rates, and I'll come on to Labour's own plans and demands shortly.

But

more fundamentally, there needs to be a change of direction on the economy.

Too

often, governments have focused on the short-term gains, when they should have been thinking about the future.

This

has meant cuts in government investment over the last six years, when the economy has been crying out for essential investment spending.

It

meant that research spending by government fell by £1bn in real terms, at a time when the gains from the application of science are so obvious.

Decisions

like these do not happen in isolation.

They

are the product of a Westminster political system with a short-term culture and an excessive focus on what just a few economic hotspots can deliver.

And

the belief that government can do nothing for businesses and the economy has damaged businesses and the economy.

Fundamental

mistakes in policy have helped lead us to a situation in which the productivity of our economy now lags far behind similar countries.

It

now takes a typical British worker five days to produce what a typical German or French worker produces in five.

Without

productivity growth, consistent improvements in most people's standard of living will be difficult to achieve.

That

failure on productivity means that we have lived through what Mark Carney has called a "lost decade" for earnings as wage growth stagnates.

And

the forecasts currently indicate another lost decade ahead.

If we are to turn this situation round, it will require government to take a lead.

But too often on Brexit, Ministers have given the impression of placing their narrow political positioning above the good of the whole country.

The vote was to Leave and Labour respects that decision.

But that vote to Leave is not the same as an excuse to damage the whole economy.

It is simply not true that no deal with the EU is preferable to a bad deal.

No deal *is* a bad deal – it's the worst possible deal, with all the dangers of WTO-only trading rules.

Labour has always called for full, tariff-free access to the Single Market.

Nor do we think that the Government should be using EU migrants as a bargaining chip.

EU migrants have made and will continue to make a huge contribution to this country, whether in our businesses or in keeping our public services running.

But those 3m migrants have been subject to a terrible uncertainty as this government has failed to guarantee their rights.

It is simply not acceptable to place people under that sort of pressure.

It's not even a convincing bargaining position to take, since there are 1.5m UK citizens resident in other EU countries whose rights can also be placed on hold.

Our European partners know this, and won't be swayed by attempts at tough talk from London.

The sooner the situation is resolved with a clear and unambiguous statement that

EU migrants currently resident here will have their rights protected, the sooner the negotiation process can move on.

That's not only the principled position to take. It's also popular.

And it's economically the most sensible, since it guarantees those currently in work can remain in work, and plan for the future.

This years' Budget could be an opportunity for government to address the fundamental issues of low investment and a lack of industrial strategy.

Unfortunately, the signs are that this opportunity will be missed.

A small amount of additional funding was pledged for public investment by the Chancellor at the Autumn Statement.

With interest rates for government at close to all-time lows, the economic case for a major programme of government investment in infrastructure and research is overwhelming.

A consensus amongst business organisations, economists, and trade unions now exists on this point.

However, the increase in capital spend currently offered by this government does not properly address the pressing need to overhaul our infrastructure across the whole country, including new investments in road and rail.

Our broadband provision, meanwhile, remains inadequate for a modern, developed economy.

Labour has committed to the delivery of a fully-fibre optic broadband connectivity, across the whole country.

As part of our commitment to invest, we will in government deliver the funding needed to accelerate fibre to the premises, prioritising areas of clear business need.

Labour welcomed the publication of this government's industrial strategy green

paper.

It's
a first move towards correcting previous mistakes.

Labour
want to see an industrial strategy with broad, cross-party support because
this
would ensure the long-term stability such a strategy needs.

The
most successful economies now have governments that are prepared to act to
support them and their businesses.

That
doesn't just mean protecting essential industries, like steel or chemicals.

It
also means moving to support new sectors and smaller businesses.

And
it means moving beyond some of the mistakes of the past and putting place and
regional development at the centre of our approach.

The
Government has to address, first and foremost, the regional disparities in
investment, and support for smaller businesses.

It
can't be right that more than half the UK's transport investment is made in
London.

Labour
will put in place a legal mechanism for public investment that will allow
Parliamentary oversight on regional capital spending per head.

We
want to see not only London, but the whole country, raise their game and the
huge disparities closed.

So
Labour will commit the £10bn investment needed to build a "Crossrail for the
North", linking up the great northern from Liverpool right through to
Newcastle
and Hull.

We
need also to unblock our financial system and put in place the mechanisms
needed to deliver loan capital to our businesses.

The
next Labour government is committed to establishing a National Investment
Bank,

backed up by a network of regional development banks.

This will be charged with delivering long-term capital to smaller and medium-sized businesses in particular.

The inability of smaller firms to access the finance they need for growth has held back their potential.

And the concentration of lending by our existing financial system in London has meant the rest of the country has lagged behind.

Labour will correct this bias.

We want to see smaller firms succeed across the whole of the country.

But there is essential action for businesses that can be taken right now, on business rate revaluation.

The growth of online retail is of course welcome for consumers who have benefitted from price competition. However, we cannot let our high streets become a wasteland of boarded up shop windows.

The government risk letting our high street shops wither on the vine, and just so they can play politics with their business rates.

The revaluation of business rates due on 1 April has quite rightly caused uproar.

Whilst few would disagree that a revaluation is long overdue, it has been handled atrociously.

It was delayed not for the best economic reasons, but for the best interests of the Tories ahead of a General Election. It cannot be allowed to continue this way.

And it also cannot be right that whilst the average small shop will be hit by an extra £3,663 in their business rates over the next five years, some large retailers and online retailers will see a substantial fall.

The

revaluation doesn't reflect how our economy has changed since the last one.

And

nor does it take account of the particular cost pressures smaller businesses are now under.

Labour

have responded to fears about the impact of looming business rate hikes for some businesses by calling on the Government to set up an emergency transitional relief fund and take a series of measures to ease the business rate burden for business.

Yesterday,

we hosted an urgent meeting with leading business organisations, including representatives from the Chamber of Commerce, to discuss a radical shakeup of business rates in the longer term.

We

believe that government action now is vital to reduce the impact on smaller businesses, and move towards making the local business taxation system fairer and closer to the real economy.

We've

called for a £150m a year for three years transitional relief fund to be established, available to local authorities to distribute to businesses facing a "cliff edge" in their rates bills.

We

want the shift from RPI to CPI uprating in rates to be brought forward three years.

We

think, like yourselves, that this would soften the immediate blow to businesses.

But

looking ahead, we think it is essential that plant and machinery are removed from the business rates system.

It

cannot be right that companies seeking to do the right thing, and investing for the future, are then penalised for doing so.

This

is the exact opposite of how the tax system is supposed to function, and clearly out of line with best practice elsewhere.

For

a country facing the productivity slump that Britain is now experiencing, additional taxation on investment like this cannot be justified.

Alongside

more regular revaluations, removing periodic and unmanageable hikes, Labour is calling for a fundamental overhaul of the business rates system.

I

am calling on the Chancellor today to provide real and genuine support for those business struggling next week.

We

cannot go ahead in the way we are if it could mean many businesses go to the wall, and the jobs destroyed.

Businesses

in London have been particularly hard hit.

London's

property values have been racing ahead of the rest of the country for years.

That

means small businesses in London are being hit with particularly heavy rates hikes, and some no longer qualify for transitional relief.

Labour's

emergency relief fund offers a lifeline to those businesses.

Labour

wants to support these businesses that are a cornerstone of our economy.

And

it's becoming clear day after day, that Labour is the only party that is truly on the side of small and medium sized business.

The

years ahead could be challenging for this country, and for its businesses.

I

believe that what the Chambers of Commerce represent is an essential voice for businesses across the whole country.

By

taking on and representing the views of businesses in every community, you can make a decisive contribution to how we address the challenges ahead.

That's

not just about what's good for the economy.

It's

about being genuinely civic businesses – able to act locally to support their communities.

But

that can only happen when there is also a genuinely supportive government.

Action

is needed immediately on business rates, ahead of the revaluation coming in to force.

The

Chancellor must take the opportunity of bringing forward a programme, backed up with money, that will address the immediate problems caused by revaluation.

But

over the longer term it means coming forward with a clear plan of action for our economy.

One

that recognises the support businesses need and the essential role they play

—

and that will break with the mistakes of the past.