

Autumn Statement 2023

IOP Perspective

Introduction

The Autumn Statement, delivered on the 22nd November 2023, is one of the Chancellor's two annual opportunities to set out the economic and fiscal agenda for the government. The statement is delivered to the House of Commons, accompanied by [a lengthy document](#) detailing the specific policies announced in the Chancellor's speech.

The announcements covered many areas across the whole economy, but there were some specific announcements that are more relevant to IOP members. We have condensed down the information physicists might need to know and commented from the IOP's perspective.

One thing to note is that the announcements come with varying levels of commitment: from 'the government has spent £x on a specific project or policy' to 'the government will consult with stakeholders on this issue and decide whether to act on it at a later date', so the latter announcements should be treated with appropriate caution. Finally, the announcements that promise initiatives or policies in the medium- to long-term future must also be held lightly, as there is due to be an election in the next calendar year which could bring a different party to power – the new government would not be expected to take forward the current Chancellor's announced policies.

Announcements

Pensions

The Chancellor announced several measures to help funnel more capital from pension and insurance funds into domestic investments. These build on work over the past year to encourage more pension and insurance funds to invest in unlisted firms in the UK. Announcements included:

- 1) Reforms to Solvency II regulations in the insurance sector, incentivising funds to invest in productive assets, with industry committing to investing over £100 billion over the next decade.
- 2) Local Government Pension Schemes (LGPS) in England and Wales will be revised to implement a 10% allocation ambition for investments in private equity, which is estimated to unlock around £30 billion.
- 3) The government will commit £250 million to two successful bidders in the Long-term Investment for Technology and Science (LIFTS) initiative, creating new investment vehicles tailored to the needs of pension funds enabling them to invest in UK science and tech companies.
- 4) Announcing a new joint-investment initiative 'Growth Fund' with the British Business Bank designed to make it easier for pension funds to invest in smaller, high-growth UK companies.
- 5) Setting out a path forward to consolidate different segments of the pension industry to increase efficiency following the outcomes of several reviews.

IOP response: We welcome an increasing focus from government on innovation and unleashing investment in UK science and technology. This is a positive announcement: by working with investors and addressing policy barriers, we should ensure more money flows into scaleups from institutional investors.

Full expensing

In March, the Chancellor enabled companies to deduct 100% of the cost of investment in certain equipment and machinery from their taxable profits between April 2023 and April 2026. The temporary nature of the policy was problematic as it incentivised businesses to bring forward capital investment but not necessarily to increase overall investment in the long term. Recognising this, the Chancellor has made this full-expensing policy permanent.

IOP response: This is a significant move to increase business confidence to invest in the UK. And will be particularly beneficial to physics-based businesses that rely on expensive machines and equipment. The measures are not targeted at specific business sectors, but instead aim to increase capital investment across the economy – an area in which the UK has been comparatively weak and which has contributed to flagging labour productivity growth.

Net Zero

The Autumn Statement included a range of announcements intended to boost investment in measures that can help deliver net zero:

- 1) The government will look to reduce unnecessary planning constraints on electric vehicle charging points, and to remove the blanket restriction on building heat pumps closer than one metre from a property boundary in England.
- 2) Speeding up grid connections, reducing connection delays from five years to six months.
- 3) Green industrial subsidies worth £4.5 billion between 2025-31 to help manufacturing sectors transition to cleaner manufacturing.
- 4) £960 million Green Industries Growth Accelerator (GIGA) to support investments in strategic clean energy sectors – hydrogen, offshore wind, nuclear, carbon capture utilisation and storage, and electricity networks.
- 5) A new Carbon Border Adjustment Mechanism (CBAM)

IOP response: As highlighted in the IOP's ['Physics Powering the Green Economy'](#) report, as the move is made to decarbonise the whole energy sector, emphasis will grow on energy efficiency and switching all energy towards electricity, hydrogen and alternative fuels such as synthetic fuels. To fully decarbonise will require a massive scale-up in electricity generation, use of hydrogen and alternative clean fuels, and widescale deployment of electric vehicles and heat pumps.

But 83% of IOP members responding to a survey conducted for our report do not think the UK is on track to reach net zero by 2050, and 68% of members responding think the current level of investment in R&D is an obstacle to growing the green economy.

The announcements show that the government has been listening to feedback from green energy projects that have been hampered by connection delays, and is looking into some common sense improvements to regulations on technologies that are supposed to become commonplace across homes in the UK. While the subsidies for green manufacturing are welcome, they fall far short of the subsidies that the US has provided for the transition to a green economy in the order of hundreds of billions of dollars. It remains to be seen how many of these announcements come into force and the impacts they have on deployment of green technologies in British homes and businesses.

R&D Tax Credits

The Autumn Statement confirmed that the SME and RDEC R&D tax credit schemes will be merged to simplify the policy. This will effectively reduce the rate that SMEs were receiving and increase the rate of

credit that large firms receive on R&D investment. To mitigate the impacts on start-ups in particular the Chancellor included a special relief for loss-making, R&D intensive, SMEs. This was initially open to SMEs that spent more than 40% on R&D but as of this statement the threshold has been lowered to 30%, with a one year grace period allowing companies to remain eligible for the relief if they dip under that threshold. Loss-making SMEs, which were calculated to come out the worst off as a result of the reforms also received a concession of a lower tax rate applied to the tax credit.

IOP Response: While the announcements show that the government has been listening to industry concerns, and should make the amount of tax credit more predictable for SMEs, it falls short of the clarity of purpose and eligibility that the [IOP has called for](#). The decrease in generosity of the credit for SMEs is likely to have a negative impact on R&D investment in the UK, although the increase in generosity for large firms will have the opposite effect stimulating greater investment in R&D.

Startups

The government will extend the Enterprise Investment Scheme (EIS) and Venture Capital Trusts (VCT) to 2035 and extend the British Business Bank's Future Fund: Breakthrough programme with an additional £50 million for promising R&D intensive companies.

IOP Response: The increased focus from government on innovation and unleashing investment in startups that are driving UK science and technology advances to the market is positive.

Fellowship programmes

Amid concern in government that Britain too often fails to exploit scientific breakthroughs, the chancellor has announced plans for a fellowship programme that will train a new generation of science and technology venture capitalists. The £3m scheme will offer up to 20 places and will be developed by the Department for Science, Innovation and Technology. It follows a recommendation from the Council for Science and Technology that the UK's venture capital industry needs to continue to develop deep science and technology expertise if the government is to achieve its aim of making the UK a science superpower.

The government has provided £250 million to fund Faraday Discovery Fellowships administered by the Royal Society aimed at supporting mid-career researchers. It is anticipated that there will be at least 30 awards in total, over at least 6 years. The value of each Fellowship will be up to £8 million to support individual researchers and their teams. Awards will be open to applicants from around the world who want to pursue their research in the UK. The scheme will be open to all STEM areas, including the Government's priority science and technology areas, with two broad themes – Frontiers of Science and Science for Resilience and Prosperity. The Fellowship is funded by an endowment from money left over from the UK's delayed association to the Horizon Europe programme.

IOP response: Both fellowships and the related investment are welcome additions that will help attract and retain outstanding talent, and develop science and technology expertise where it currently needs to be strengthened. The IOP has consistently said that the UK must retain its position as a destination of choice for scientific talent, and these schemes will contribute to this aim.

Education and skills

The government is funding a down payment of over £600 million over the next two years. This will give teachers in key shortage academic and technical subjects – who are in the first five years of their career – a payment of up to £6,000 per year tax free, including further education colleges for the first time; support students to achieve their maths and English GCSEs where they did not pass first time; improve

the quality of maths teaching; and build a deeper understanding of what works in 16-19 teaching and training with a £40 million capital investment into the Education Endowment Fund.

The government is supporting plans to catalyse growth sectors by committing £50 million to deliver a two-year apprenticeships pilot to explore ways to stimulate training in these sectors and address barriers to entry in high-value standards

IOP response: We support anything that is likely to reduce the significant attrition rates in the first years of physics teaching careers. Evidence shows that additional funding for teachers in the first few years of their career can increase retention, as shown by studies on the current policy that pays new teachers in shortage subjects (including physics) up to £3000 a year. However, we also continue to advocate for measures to help make new physics teachers' workloads more manageable, as this is a key factor driving attrition, alongside factors such as pay competitiveness. These measures include greater subject specific support, as well as timetables that allow teachers to spend as much time as possible teaching within their specialism. The £40 million capital investment into the Education Endowment Fund would appear likely to be a re-announcement of funds announced in October.

The £50 million new funding for apprenticeships has the potential to be a welcome boost for engineering, physics-powered industries, and other areas that face skills shortages. We must now ensure that funding reaches all high-growth and innovation sectors which are powered by physics and held back by the skills shortage. In order to unleash the potential of apprenticeships within physics-powered industries, it will however be vital for Government to address the systemic barriers holding them back, as detailed in our [Solving Skills report](#).

Manufacturing

Among the various announcements supporting advanced manufacturing was the refocused Investment Zones programme. This has been extended from 5 to 10 years and three new zones in Greater Manchester, West Midlands and East Midlands have been announced, each focused on advanced manufacturing.

IOP response: As many physics-based businesses make use of advanced manufacturing, the increased support and greater certainty of support provided by the extended timescale of Investment Zones, is welcome.