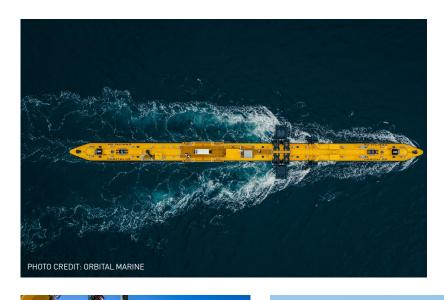


2024 Manifesto

CLEAN ENERGY FUTURE: THE TIME IS NOW









Foreword

Scotland has helped establish the UK as a worldleader in the pursuit of clean energy for generations: from the world's first electricity-generating turbine to the world's first floating offshore wind farm and the world's first facility for demonstrating and testing wave and tidal energy converters.

These Scottish milestones and more have enabled the UK to become the first major world economy to halve its carbon emissions. As the country where the industrial revolution was ignited, this is a major achievement which makes the UK well-placed to lead the renewables revolution.

However, with international competition in the global race for clean energy picking up pace, we cannot afford to forfeit our early-mover advantage. Now is the time to build upon our successes to enable a multi-decade pipeline which bolsters our energy security, creates thousands of high-value jobs, boosts the competitiveness of businesses and delivers affordable, clean energy to households.

The imperative for our prosperity is clear. Amidst economic stagnation, the net-zero economy across the UK is bucking the trend. Scotland's renewable energy industry supports more than 42,000 jobs and an economic output of over £10.1 billion whilst the net-zero UK economy is worth more than £74 billion.

The imperative for our planet is also clear. 2023 was the warmest year on record and carbon emissions from fossil fuels are at their highest ever level – bringing devastating consequences for our precious natural environment and most vulnerable communities.

The Glasgow Climate Pact agreed by the international community at COP26 in the home city of Scottish Renewables resolved to limit global warming to 1.5°C. Scotland can and should showcase to the world how to deliver the successful clean energy transition needed to meet that agreement – combining our strengths of bringing creativity together with expertise and innovation through collaboration.

By enabling the deployment of home-grown renewable energy at the right pace and in the right place we can foster sustainable economic growth which benefits all communities – bringing fresh investment to our shores, regeneration to our industrial heartlands and high-value jobs to the next generation.

Moreover, by accelerating the transition away from fossil fuels with our plentiful renewable energy resources we can enhance the UK's energy security and protect households from volatile gas prices permanently.

To do this, the next UK Government must ensure policy stability, regulation agility and visibility of support to drive the positive outcomes we need on net-zero delivery to establish the UK as the most competitive and trusted destinations for lucrative early investment.

This will enable the delivery of essential new infrastructure, in particular our electricity networks and ports, give confidence to our supply chains and empower industry to get on with the job of delivering the renewable energy projects in Scotland which will power our future prosperity.

Above all, the next UK Government must be ambitious and take on the make-or-break decisions about how to fully unlock the unrivaled socioeconomic potential of our world-class renewable energy resources.

If we approach them collaboratively, with clarity of purpose and honesty through clever, thoughtful and targeted interventions, we can deliver the first energy transition to leave no one behind.

In renewable energy, the UK sits on the cusp of a golden social, economic and environmental opportunity. If there is to be a world-leader in the race to net-zero, why not Scotland? Now is the time to redouble our efforts and secure the clean energy future.

On behalf of our members, this manifesto outlines the steps the next UK Government must take to secure the investment, infrastructure and innovation needed for success. Our message to all parties at this General Election: join us together in this era-defining mission to become a net-zero superpower.



Claire Mack Chief Executive



Investment

With an early-mover advantage across many renewable energy technologies, the UK is well-placed to become the global crucible of the energy transition. However, amidst fierce international competition for investment on the race to netzero, the UK will need to do more to maintain our competitive edge on delivering decarbonisation in the crucial years ahead.



To achieve this era of growth, we need to urgently accelerate the deployment of renewable energy, delivery of enabling infrastructure and development of supply chains. That will depend on demonstrating that the UK is open for business and committed to long-term policy and regulatory stability to secure greater levels of essential private investment to our shores.

As the Climate Change Committee has outlined, the private sector will provide the majority of the £50 billion worth of investment required each year to achieve net-zero by 2050. This underpins the importance of a strong, collaborative partnership between industry and government to maximise private capital and effectively target public funding to crowd in further investment.

We cannot afford the cost of inaction. Accelerating our clean energy transition is not only driven by the urgency of the climate emergency, but the need to create a stronger, more prosperous economy which delivers energy affordability and security for everyone.

The supply chain bonus from offshore wind is worth around £92 billion in UK GVA¹ by 2040 with the offshore wind industry holding the potential to employ over 100,000 in the UK by the end of the decade.² The industrial opportunities in floating offshore wind alone could boost UK GVA by £18 billion by 2040, bringing enormous benefits to communities across Scotland.³

With net-zero offering the potential to have a UK economy £240 billion larger in 2050⁴ and renewable energy saving the UK the need to buy nearly £12.5 billion during the gas price crisis of 2022⁵, as well as save UK households the equivalent of £221 per household in 2021⁶ by displacing gas, the need to invest in renewable energy is clear.

¹ UK Supply Chain Capability Analysis: Summary Report (OWIC & OWGP, 2023)

² Offshore Wind Skills Intelligence Report (OWIC, 2023)

³ Floating Offshore Wind Taskforce: Industry Roadmap 2040 (Royal Haskoning DHV, 2023)

⁴ Energy Matters (EnergyUK, 2023)

 $^{5\,} Analysis: Why\, UK\, energy\, bills\, are\, soaring\, to\, record\, highs\, -\, and\, how\, to\, cut\, them\, (Carbon\, Brief,\, 2022)$

⁶ Renewed Importance: How investing in renewables cuts energy bills (Onward, 2022)

Creating an attractive business environment which enables greater levels of investment to support the acceleration of our clean energy transition can be achieved by:

Modernising Contracts for Difference

The next UK Government must ensure that the Contracts for Difference (CfD) scheme, which has been instrumental in securing investment in the majority of the UK's renewable energy capacity, retains its effectiveness by setting more market reflective parameters which maximise the capacity needed to achieve net-zero.

- Adopting an evolutionary, not revolutionary, approach to market reform

 The next UK Government must apply an evolutionary approach to reform of electricity market arrangements and address the unpredictability of the transmission charging regime to de-risk investment, particularly for vital Scottish projects which are disproportionately affected.
- Ensuring efficient planning and consenting

 The next UK Government must deliver efficient processes and resources for our planning system to facilitate timely consents of projects and adopt a holistic, strategic approach to planning the future energy system to give confidence to industry and investors.
- Delivering joined-up net-zero leadership

 The next UK Government must work collaboratively with industry and between all layers of government across the four nations to better coordinate our journey to net-zero and ensure local communities both understand and benefit from the clean energy transition.

PRIORITY ONE: Contracts for Difference making the difference

- Commit to ensuring that future Contracts for Difference (CfD) Allocation Round parameters, including Administrative Strike Prices, reference prices and load factors, are market-reflective to maximise investment in renewable energy projects.
- Produce an "Allocation Round Roadmap", with ambitious target volumes, to provide clarity on future pipelines which will ensure we maximise investment in supply chains and deliver the volumes needed to meet technology-specific targets across future allocation rounds.
- Support emerging technologies to deploy at scale, such as introducing a ringfenced budget for floating offshore wind and increasing the budget ringfenced for tidal stream to maintain a consistent route to market for these technologies vital to Scotland.
- Ensure reforms to modernise CfD maintain competitive tensions and enable large volumes of renewable energy to clear at each allocation round, delivering economies of scale and investor confidence. Reforms to modernise CfD should remove barriers to co-location of renewable energy projects with flexible technologies, support the repowering of existing wind farms and move dispatch incentives to real-time whilst retaining revenue certainty.
- Ensure that the Sustainable Industry Rewards (SIRs) framework clearly supports strategic ahead-of-time investment in key infrastructure, in particular ports, and supply chain development to enable offshore wind. This should reflect the objectives of the Industrial Growth Plan as applicable alongside the work of other initiatives, such as the Strategic Investment Model.

PRIORITY TWO: Incentivising investment

In collaboration with industry, the next UK Government should:

- Adopt an evolutionary, not revolutionary, approach to electricity market reform to ensure that the ongoing Review of Electricity Market Arrangements (REMA) prioritises investor confidence and lowering the cost of capital so that the required pace and scale of renewable energy deployment can be achieved whilst delivering best value to UK consumers.
- Implement urgent short-term measures to reduce volatility and improve predictability of Transmission Network Use of System (TNUoS) charges, whilst committing to long-term reforms which ensure transmission network charges are more predictable and proportionate. This will provide a useful signal to developers and better value for consumers by enabling the delivery of vital Scottish projects for net-zero which are disproportionately impacted by current arrangements.
- Expand tax and levy reliefs to incentivise investment in renewable energy projects, enabling infrastructure and supply chains, such as by expanding reforms to Capital Allowances and reforming the Electricity Generator Levy to ensure tax treatment of renewable generators is on a level playing field with fossil fuel generators.
- Create ambitious interim targets and delivery roadmaps for all renewable energy deployment towards net-zero by 2045 for Scotland and 2050 for the UK, which should closely co-ordinate with the Strategic Spatial Energy Plan and work in collaboration with the Scottish Government, National Energy System Operator (NESO) and the Crown Estates.
- Reform the role of Ofgem to allow for anticipatory investment in the electricity system to deliver the best overall value to present and future UK consumers, rather than basing expenditure on short-term cost considerations.



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PRIORITY THREE: Efficient planning and consenting

In collaboration with industry, the next UK Government should:

- Ensure relevant government departments, local authorities and statutory consultees are appropriately resourced, with a fresh drive to attract, upskill and retain key professions needed to prevent unnecessary delays in key planning and consenting processes for renewable energy projects.
- Closely coordinate with the Scottish Government on key consenting considerations, such as Habitats Regulations Assessments which are essential to enabling the timely delivery of the Scottish offshore wind pipeline.
- Facilitate dialogue between the renewable energy industry and relevant departments that relate to aviation to develop best practices and clear requirements which ensure that planning objections from aviation to the deployment of renewables are dealt with transparently.
- Classify the importance of enabling infrastructure, including new transmission infrastructure, ports and energy storage assets, and all key technologies as critical national infrastructure across the UK, such as through updated National Policy Statements.

PRIORITY FOUR: Joined-up net-zero leadership

- Maintain the UK's 2050 net-zero target and all climate commitments, in tandem with carbon budget timelines, and ensure high-level accountability for net-zero delivery through a long-term, coordinated and whole-of-government strategic approach.
- Establish a collaborative four nations taskforce to ensure close coordination on strategic issues and the development of appropriate policies to accelerate the deployment of renewable energy in alignment with Scotland's 2045 net-zero target and the UK's 2050 net-zero target.
- Ensure National Energy Systems Operator (NESO)
 is properly resourced and empowered to deliver the
 best outcomes for consumers and engage with key
 stakeholders on issues such as the Carbon Border
 Adjustment Mechanisms, green hydrogen standards,
 accelerated grid delivery and spatial planning.

- Review and update the National Policy Statements (NPS) to support the rollout of new transmission infrastructure across the UK, recognising its importance as critical national infrastructure for energy security and tackling the climate emergency.
- Commit to host a series of UK-wide public information campaigns which seek to recognise the importance of net-zero for our prosperity and planet by demonstrating the benefits of energy efficiency and clean heat installations, careers in renewable energy and new transmission infrastructure.



Infrastucture

Amidst globally turbulent conditions and with electricity demand set to rise by up to 65% over the next decade, we must maximize the UK's abundant renewables resources to produce more home-grown energy which will deliver security, sustainability and affordability to our energy system.



Whilst the UK has made significant strides towards decarbonising our electricity system, our outdated grid is reaching capacity with is holding back vital investment across many sectors of the economy and curtailing valuable home-grown renewable energy for millions of UK households every year.

That is why we must prioritise the accelerated delivery of the once-in-a-generation transformation of our electricity networks, including the Pathway to 2030 projects as part the £10 billion investment to the North of Scotland, which should bring tangible benefits to host communities.

Successfully delivering the projects in the ScotWind leasing round, which are vital projects set to invest £1.4 billion each and £1 billion per gigawatt deployed into the Scottish economy, depends on the timely delivery of new transmission infrastructure.

Upgrading the capabilities of our ports, which will be the engines of economic regeneration to coastal communities, through a multi-billion

pound investment will also be essential in the year ahead to ensure we can secure the enormous opportunities on the horizon from floating offshore wind for Scotland's supply chains and energy workforce.

Every home and business in the UK will also have a role to play in the journey to net-zero with heating contributing to around 20% of the UK's total carbon emissions. That is why we must accelerate the rollout of clean heat and improve the energy efficiency of our homes which are amongst the leakiest in Europe.

Delivering the infrastructure needed to support our clean energy transition all depends on developing a thriving, skilled and diverse workforce supported by a strong supply chain. We must urgently incentivise training, retraining, apprenticeships and tertiary education for renewable energy, as well as doing more to scale-up the capabilities of our supply chains to expand here in the UK and export net-zero globally critical solutions.

Creating efficient regulatory frameworks which drive positive outcomes on the accelerated development of strategic infrastructure, supply chains and skills to support our clean energy transition can be achieved by:

Electricity networks for net-zero

The next UK Government must take a holistic and strategic approach to planning the future energy system which minimises uncertainty and delays in the deployment of strategic transmission infrastructure, in particular Scottish grid projects which will be the backbone to our economy.

Supporting our ports

The next UK Government must prioritise investment in our strategic ports and harbours to ensure upgrades to their infrastructure are constructed and operational in time to enable the delivery the Scottish offshore

Scaling-up supply chains and skills

The next UK Government must enable a competitive and successful supply chain with targeted interventions to support the scaling-up of their capabilities alongside cultivating a robust skills base across the country through a collaborative partnership with industry

Accelerating heat decarbonisation

The next UK Government must prioritise the acceleration of heat decarbonisation through widening support for energy efficiency measures and installation of heat pumps and district heating networks to

PRIORITY ONE: Electricity networks for net-zero

- Deliver the Transmission Acceleration Action
 Plan (TAAP) at pace, including targeted reform to
 modernise the Scottish consenting regime for energy
 infrastructure, to rapidly reduce the time it takes to
 build vital new transmission infrastructure to ensure
 harmonised regulatory reform that does not delay the
 urgent delivery of emission reductions.
- Deliver the Connections Action Plan (CAP) at pace, ensuring all long-term, regulatory policy reform aligns with the 'first ready first connected' approach, to reduce connection times for all clean energy projects and unlock crucial investment into the UK.
- Ensure a clear and flexible approach to community benefits, complementing clear communication on the need to accelerate the rollout of essential new transmission infrastructure, leaving a positive legacy to host communities whose views should be heard in a proportional way.

- Support timely development of a Strategic Spatial Energy Plan (SSEP) that both delivers the development pipeline of offshore and onshore renewable projects and maximises future opportunities for clean energy generation in Scotland.
- Ensure the National Energy Systems Operator (NESO) is fully resourced to deliver the new Centralised Strategic Network Plan (CSNP) to secure transmission investments and pipeline capacity needed to stay on track for net-zero whilst delivering a long-term pathway to reduce costs for consumers permanently.
- Build on the success of the Accelerated Strategic Investment (ASTI) framework by working with Ofgem to ensure the next regulatory price control for Transmission Owners (TOs) is financeable, ambitious and flexible enough to stay ahead of rapidly increasing and changing demand.

PRIORITY TWO: Supporting our ports

In collaboration with industry, the next UK Government should:

- Investigate and consult on revenue support and investment models, including guarantee schemes, to help overcome market barriers to investment in ports and similar facilities and ensure this key infrastructure is constructed to operational in time to enable the buildout of the offshore wind pipeline in Scotland.
- Coordinate and align relevant government bodies, devolved administrations and armslength agencies to boost timely investment in ports, including through crowding in of private investment through activities by the UK Infrastructure Bank, Scottish National Infrastructure Bank, UK Export Finance, Enterprise Agencies and the Crown Estates.
- Fast-track potential port and manufacturing developments as strategically important projects through planning, providing targeted consenting seed funding support.
- Continue to support the Green Freeports
 programme and the Strategic Investment Model in
 Scotland, ensuring all strategic ports and harbours
 receive the financial support needed to access
 opportunities from offshore wind development,
 operations, maintenance and decommissioning.

PRIORITY THREE: Scaling-up supply chains and skills

- Deliver a long-term green industrial strategy
 to support the development of clean energy
 manufacturing in the UK at scale, building on
 funding packages such as the Green Industries
 Growth Accelerator and Floating Offshore Wind
 Manufacturing Scheme which should be closely
 coordinated with the delivery of funding streams by
 the Scottish Government.
- Promote collaboration between sectors, local and national government, academia, trade unions and training providers to address strategic skills requirements and incentivise training, retraining, apprenticeships and tertiary education through tax reliefs, incentive payments and public-private partnerships to unlock a thriving workforce.
- Reform the Apprenticeship Levy to ensure it is fit
 for purpose in addressing skills gaps and providing
 flexibility to meet employers' needs in all four nations,
 with any incentives applying to both the educators and
 employees as well as the students and trainees.

- Provide targeted grant funding to support SME suppliers to enhance their capabilities, competitiveness and capacity by investing in the facilities, skills, equipment and business improvements they need to scale-up at home and expand abroad.
- Continue to support the development of an Energy Skills Passport, as set out in the North Sea Transition Deal and Offshore Wind Sector Deal, to enable highly skilled people to find new career opportunities in the just transition to clean energy.
- Support the growth of the UK's offshore wind supply chain through a multi-year funding settlement for the Industrial Growth Plan which will support development in areas of UK competitive advantage.
- Improve the immigration system to support the economy and address skills and labour shortages through stable policymaking which takes into account regional and sector needs, such as reversing the detrimental impact caused by the cessation of the Offshore Wind Workers Immigration Rules Concession 2017.

PRIORITY FOUR: Heat decarbonisation acceleration

- Commit to a transformational national mission of supporting households and businesses to adopt clean heat and energy efficiency improvements, including solar energy.
- Maintain ambitious targets for clean heat, including energy efficiency measures, heat pumps and district heating, alongside investment at scale in programmes to accelerate installation which prioritise existing buildings and vulnerable communities.
- Provide urgent policy certainty on rebalancing gas and electricity bills to ensure that heat pumps are no more expensive to buy and run than gas boilers, stimulating investment in heat pump manufacturing in the UK and delivering the impetus required to upskill the generation of tradespeople who will be needed to meet net-zero.

- Prioritise the decarbonisation of heat as an infrastructure investment and create clear routes for investor engagement in clean heat across the UK which seeks to maximise public-private partnerships.
- Commit to exploring the incentivisation of waste heat from industry to be used in district heat networks, to enhance affordability and reduce end costs for consumers.



Innovation

The UK has a modern economy which is respected on the global stage for its entrepreneurship and competitive industries, our clusters of excellence in education, science and technologies, as well as our abundant natural resources and attractive places to live, work, visit and study.

For generations Scotland has been a pioneer in clean energy technologies, combining our strengths of bringing creativity together with expertise and innovation through collaboration between industry, academia and government. We must continue to foster an environment where innovations are swiftly scaled-up, retaining their benefits for our economy and exporting their solutions around the world.

However, research and development (R&D) expenditure has fallen as a share of GDP over the past 30 years and is lower than in many leading developed economies with business R&D especially low in Scotland. Amidst increasing international competition for the financing, skills and people needed to harness the emerging green opportunities of the future, the UK needs to do more to maintain our early-mover advantage.

Scotland and the UK have many strategic strengths and assets which mean we are well-placed to support the deployment of a diverse range of renewable energy technologies and enable the development of emerging technologies and solutions of the future. Key opportunities on the horizon include the development

of our green hydrogen capabilities, long duration energy storage technologies and most significantly our world-leading pipeline of floating offshore wind.

As we seek to secure energy supply in the years ahead with a renewables-based energy system, we will need to take steps to secure the supply chains these technologies depend on. As part of our commitment to the environment, it is important we embed sustainability at the heart of these supply chains. Building the capabilities to refurbish wind turbine components in the UK could generate more than 20,000 full-time equivalent jobs by 2035 and prevent more than 800,000 tonnes of parts from being scrapped, with access to a European-wide market worth £10 billion to UK GDP.8

Compared to previous energy transitions, the rollout of renewable energy offers significant opportunities to deliver tangible benefits to our natural environment. With the UK being one of the most nature-depleted countries in the world, the renewable energy industry is committed to working in harmony with the natural environment with our technologies being the biggest contributor to the UK's reduction in carbon emissions since 1990.

Alongside the tens of millions of pounds in community benefit funds from onshore wind every year, the renewable energy industry has also funded many nature recovery schemes such as restoration of peatlands. As we look to expand offshore wind, the renewable energy industry remains committed to advancing conservation of our marine environment.



Maintaining the UK's early-mover advantage in clean energy development, research and innovation alongside the delivery of technologies and solutions which bolster our energy security and natural environment can be achieved by:

Boosting energy storage and hydrogen

The next UK Government must rapidly deploy long duration energy storage, including pumped storage hydro in Scotland, and green hydrogen production technologies to bolster our energy security, deliver cost savings and boost our economy.

Enabling emerging technologies and sectors

The next UK Government must support the development of emerging technologies, in particular floating offshore wind and marine energy, alongside the development of home-grown circularity capabilities to boost our economy through the development of new supply chains.

Nurturing nature recovery

The next UK Government must deliver clear environmental policies to support the growth of the offshore wind industry while meeting our nature and biodiversity targets, helping to deliver marine net gain for the benefit of future generations.

Resourcing research and development

The next UK Government must prioritise green industrial policies and financial support for our research, development and innovation which leverage the strengths of our clusters across the country,

maintaining the UK as the global crucible of the clean energy transition.

PRIORITY ONE: Boosting storage and hydrogen

- Urgently implement an investment mechanism to support the deployment of large-scale, long-duration electricity storage in the form of a 'cap and floor mechanism', helping to unlock vital investment in Scottish pumped storage hydro projects which will offer significant benefits to delivering a cost effective, reliable energy system.
- Continue work to refresh the Smart Systems and Flexibility Plan with a strategy for long duration energy storage delivery and accelerate the development of a green hydrogen market, including the Hydrogen Business Model, and delay a shift from bilateral agreements to competitive auctions.
- Develop policies and strategies for demand-side hydrogen, including its role in long duration energy storage and the siting of pipelines, as well as pathways for production, transmission and export to ensure a liquid market is available to producers at home and abroad.
- Ensure the planning system is equipped to deal with hydrogen projects in a way that reflects the importance of hydrogen infrastructure as nationally significant developments and allows decisionmakers to expedite project planning submissions.
- Ensure the role of hydrogen, as well as other new technology opportunities that need significant electricity demand, is considered in the SSEP, with coordination between UK and Scottish policies to ensure the long-term opportunity in Scotland is realised.

PRIORITY TWO: Enabling emerging technologies and sectors

In collaboration with industry, the next UK Government should:

- Set ambitious targets for wave and tidal energy deployment, supported by uplifted revenue support for innovation and routes to market which will help to unlock investment in early array development sites and ensure the UK continues to lead in this area.
- Support the development of a dedicated Floating
 Offshore Wind Testing Centre in Scotland,
 complementing the world's first Floating Offshore
 Wind Innovation Centre in Aberdeen, which will help
 to ensure that the UK captures the benefits of our
 innovation and cements its world-leading position in
 this vital technology.
- Develop a clear policy framework and mechanism to support the life-extension, refurbishment and repowering of all renewable energy to cement our commitment to sustainability with appropriate waste management and unlock the economic opportunities of a circular economy for renewable energy components, creating more resilient supply chains.

PRIORITY THREE: Nurturing nature recovery

In collaboration with industry, the next UK Government should:

- Develop and implement strategic approaches to environmental compensation and conservation that can quickly be adopted, including a suitable suite of compensation measures for offshore wind farms.
- Launch a UK Marine Recovery Fund with sufficient speed and flexibility, ensuring it is designed to deliver the best outcomes for marine recovery alongside the rapid deployment of offshore wind in close coordination with the Scottish Government.
- Continue to develop a strategy to enable the industry to deliver Marine Net Gain by developing an approach that will ensure that the renewable energy sector can confidently continue to contribute to the improvement of the marine environment in a proportionate way.

PRIORITY FOUR: Resourcing research, development and innovation

- Increase investment in specialist UK hubs for research, development and innovation (RDI) in clean energy, such as ORE Catapult, European Marine Energy Centre (EMEC), Net Zero Technology Centre and Net Zero Industry Innovation Centre to foster growth in these world-leading facilities.
- Expand the UK Regional Innovation Fund (UKRI) to deliver long-term ambitious regional programmes, building on successes by Scottish universities and institutions which had been supported by EU development funds, and expand R&D tax credits to include capital expenditure and social sciences.
- Build on recent place-based investment initiatives, such as Investment Zones and City/Regional Deals, to foster regional economic growth and accelerate efforts to tackle the climate emergency which should continue to be delivered in partnership with the Scottish Government and local authorities.
- Set an ambitious national target for the UK to lead the G7 on R&D intensity by 2030 and beyond to support an increased focus on levering of private R&D investment, underpinned by strong public R&D spend.

