

Help R&D thrive in Perthshire North

79% of people in your constituency think it is important for the Scottish Government to invest in Research & Development in Scotland

Start a conversation about what R&D means for your constituency and the wider nation



Congratulations on your success in the Scottish Parliament election. Over the last few months, I'm sure you have been thinking about the political platform from which to represent your constituents and your nation. This booklet sets out why Research and Development (R&D) should be a part of that plan.

Campaign for Science and Engineering (CaSE) provides impartial expert advice to decision-makers about the role R&D can play in solving the problems facing people in your constituency, your nation and around the world.

R&D is the gathering of knowledge to understand the world around us, to solve problems, and to create new products and services. Investing in R&D creates new jobs and future industries, new educational opportunities, and the economic growth that helps fund our public services.

Working with sponsors in Scotland, we have developed this Welcome Pack to introduce R&D and why it matters to both your constituents and the nation.

It includes evidence from CaSE's extensive polling of public attitudes to R&D in Scotland and case studies showcasing the breadth of R&D happening in your area and across the nation.

I invite you to explore the ideas and evidence within this booklet and meet with me to discuss how you can become an R&D champion for your constituents and Scotland.

Dr Alicia Greated FIET FRSE

Executive Director

Campaign for Science and Engineering (CaSE)



Where R&D happens

NHS



Universities



Industry



Public sector



Charities



Find out about R&D taking place in Scotland

Scotland has a wealth of excellence in R&D, with organisations across the nation expanding our understanding of the world, tackling society's biggest challenges and engaging different audiences.

This booklet has been sponsored by organisations with deep rooted expertise in Scottish R&D. With bases across the nation, these organisations can help you learn more about the R&D taking place in your area and connect you to both the researchers doing it and the people it benefits.

Our sponsors



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About CaSE

Campaign for Science and Engineering (CaSE) is a non-partisan charity and the leading independent voice for UK R&D. CaSE collaborates with our members, partners and the public to provide clear, expert advice to decision-makers about R&D.

This booklet builds on CaSE's extensive research into public attitudes to R&D and seeks to raise awareness in Holyrood of R&D, its benefits for Scotland and the appetite among constituents for supportive action.

You can learn more about how we work on our website:
www.sciencecampaign.org.uk

How do people in Scotland feel about R&D?

CaSE commissioned nationally-representative polling of 2,707 people in Scotland to explore how the public thinks and feels about R&D. People in Scotland:



1

Want to know more about R&D

Eight in ten people have heard of Research & Development and 54% were interested in hearing about R&D in the run up to the Holyrood elections in May.

2

See R&D as an asset to their communities

Most (66%) would be proud if their area became well known as an important R&D hub in Scotland and half (53%) would support an R&D laboratory being built in their area.

3

Want to see sustained R&D investment

Half (55%) think the Scottish Government should increase or maintain the amount of public money it invests in R&D in Scotland.

4

Value R&D investment, regardless of their political leanings

A strong majority think it is important for the Scottish Government to invest in R&D, irrespective of which political party they intend to vote for.

5

Want all of the R&D sector to be supported

More than two thirds think that it should be a priority for the Scottish Government to support research carried out in Scottish universities and research organisations (74%) and to attract leading multinational research companies to bring R&D centres and jobs to Scotland (69%).

What do your constituents think?

CaSE commissioned further constituency-level analysis to model your constituents' expected attitudes to their representatives, or the Scottish Government, taking actions to support R&D both locally and nationally. In Perthshire North:

79%



Think it is important for the Scottish Government to invest in Research & Development in Scotland.

77%



Would support their MSP campaigning for more R&D to improve NHS patient experience, diagnosis and treatment.

56%



Would support their MSP campaigning for more government support for R&D businesses in Scotland.

67%



Would support their MSP championing Scottish universities to help them attract research funding and talented researchers.

56%



Would support their MSP campaigning for more R&D jobs to be created in their local area.

56%



Would support their MSP campaigning for more R&D to improve environmental sustainability and biodiversity in Scotland.

How R&D is improving lives and livelihoods in Perthshire North



A Digital Twin to help people and nature thrive



UK Centre for Ecology & Hydrology (Edinburgh)

 **Location:** Cairngorms National Park

 **Type of R&D:**
Environmental and digital research

The Cairngorms National Park is the biggest National Park in the UK, attracting 2 million visitors each year and contributing an estimated £419 million to the local economy. Famed for its natural landscapes and ecological diversity, interactions between people and nature across the park can present both challenges and opportunities.

Biodiversity Digital Twin (BioDT) was an EU-funded research project exploring high-performance computing to model and predict how ecosystems respond to environmental and human pressures. As a key partner, the UK Centre for Ecology & Hydrology (UKCEH) has worked with the Cairngorms National Park Authority and others to develop the park as a flagship case study. UKCEH researchers have led the development of a prototype digital twin – which is a virtual replica of a physical system – linking features valued by park users to the probability of viewing biodiversity. This enables researchers to explore how nature-based recreation and biodiversity can coexist.

In addition to empowering recreationists, the Cairngorms case study demonstrates how a digital twin can support land managers in balancing tourism with ecological needs. It offers a tool to explore how recreational visitors and nature can coexist, particularly in areas experiencing increased visitor pressure. Overall, the work shows the potential for digital twins to inform sustainable tourism and conservation strategies in protected areas, helping people and nature thrive together.

Challenging engineering stereotypes in childhood



Royal Society of Edinburgh and Heriot-Watt University



-  **Location:** Across Scotland
-  **Type of R&D:** Social sciences (education)

Research funded by the Royal Society of Edinburgh has supported development of new methods to examine how gender, ethnicity and social class stereotypes influence young children’s perceptions of engineering. Professor Helen Bridle’s (pictured) research showed that career attitudes form as early as age four and informed new educational resources and engagement approaches. This work, carried out at Heriot-Watt University and funded through a Personal Research Fellowship, supports widening participation in science, engineering, technology and maths (STEM) and contributes to tackling long-term engineering and technology skills shortages.

Tay Health Tech: driving medical technologies



Tay Health Tech

-  **Location:** Tayside
-  **Type of R&D:** Reducing health inequalities through tech

Tayside represents a diversity of rural and urban populations, presenting challenges to accessing healthcare facilities that are often centralised. However, with a range of GP practices, community hospitals, and two large hospitals, there are also opportunities. Working with regulators, researchers and the NHS, Tay Health Tech is driving innovation and adoption of health and care technologies, reducing barriers to healthcare to reduce health inequalities. The £2.5 million consortium is co-led by the University of Dundee and Heriot-Watt University, with research partners in the Universities of Glasgow and St Andrews, Edinburgh Napier University and NHS Tayside, in addition to regional civic partners such as BioDundee, SHARE and Dundee & Angus College.

Become a champion for R&D

In Perthshire North

- Speak to local residents and start a conversation about what R&D means for your area. CaSE has a range of practical resources to help you.
- Engage with research organisations in your area to see R&D in action – we can put you in touch with local R&D businesses, research centres or universities.

In the Scottish Parliament

Urge the Scottish Government to take the following actions to support the R&D sector in Scotland:

1. Adopt an ambitious, joined-up, cross-party approach that delivers sustained R&D investment in Scotland.
2. Align education and training pathways with R&D skills requirements to help create Scotland's jobs and industries of the future.
3. Partner with universities and research organisations to develop sustainable funding models that enable long-term research and innovation.
4. Build on and leverage Scotland's diverse, local strengths in R&D to maximise the nation's share of UK and international funding.
5. Collaborate with Scottish businesses and entrepreneurs to drive investment in innovation and ensure research-led growth.
6. Incentivise collaboration across universities, the NHS, businesses and other research organisations to accelerate adoption of research.

Get in touch for more information

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