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CaSE
Campaign for Science and Engineering

Scottish elections 2016 – Response from the SNP

Ahead of the 2016 Scottish elections, the Campaign for Science and Engineering (CaSE) wrote to the leaders of all political parties with at least one MSP, inviting them to set out their party's policies on science and engineering.

Below is the response from Dr Alasdair Allan

Dear CaSE,

Many thanks for contacting me. While I have been Science Minister in the last government, I am responding in my capacity as an SNP candidate in the current election.

In government, the SNP has keenly supported the role of science in education, training, work and indeed, life – not least by providing for a Minister for Science. I hope the information set out below answers each of your campaign asks and shows that we have shared aspirations in this area. If re-elected, we would be keen to discuss with you your ideas and proposals for science and engineering, so please do get in touch after May.

1. Ensuring that a high quality science, technology, engineering and maths education is sustainably funded and open to all; at school, in further and higher education

The SNP believes that STEM learning is vital to Scotland's intellectual and economic future, and to the fairer society we want to build. We have invested significantly in educational opportunities relating to STEM and would continue to do so if re-elected in May 2016. In the last government, we invested over £25 million in science-related activity.

Interest in STEM subjects at school is healthy and in government, we maintained investment in support for STEM teachers to raise standards and share best practice, providing £930, 000 p.a. to the Scottish Schools Education Research Centre to up-skill primary and secondary teachers and technicians, funding two Digital Skills Development Officers working to increase links with business and industry, investing £1 million over three years to 2017 in the National Numeracy and Mathematics Hub and network of local authority champions to raise standards and share best practice in the teaching and learning of maths & numeracy for children and young people aged 3-18.

We also supported colleges in the last government to expand STEM courses where there is an identified need and to prioritise STEM subjects when developing new senior phase vocational pathways with local authorities. In 2014-15, there were more than a third more FTE engineering, science and maths students in colleges compared to 2006-07. Under the SNP, universities have also improved take up of STEM degree courses – we provided funding over 4 years to 2016 to support an extra 1200 places for STEM subjects and the number of first degree entrants in STEM subjects at Scottish universities has increased by 15% since the SNP came to power in 2007.

If re-elected, the SNP will continue to focus, invest in and drive forward study of STEM subjects at all levels of education and beyond. For example, our commitment to increase modern apprenticeship starts to 30,000 will boost training in STEM related areas and our Developing our Young Workforce strategy to better develop links between school, college, training and industry so young people get better vocational opportunities will again benefit STEM take up.

2. Improving and embedding the use of research and scientific advice to inform policy-making in government

The SNP in government has been committed to drawing on the very best science advice and expertise and would remain so. Ministers and officials continue to draw upon a range of science advice and expertise across all policy areas including, but not confined to, the Chief Medical Officer, the Chief Scientist (Health), the Chief Scientific Adviser (Rural Affairs, Food and Environment), and the Chief Veterinary Officer. Advice is also routinely available from Marine Scotland and Science Advice for Scottish Agriculture (SASA). Such advice covers developments and issues that affect a range of policy areas.

Additionally, our Science Advisory Committee, SSAC, has recently appointed new members and intends to engage with the wider science based in Scotland as part of future work. And by the time a new government is elected, a new Chief Scientific Advisor should have been appointed. That recruitment process is currently underway.

3. Ensuring, that Scotland has the diverse pool of talented people it needs to drive future success

We are absolutely committed to this, and if re-elected in May 2016, a key priority will be to develop and implement a STEM strategy for Scotland. Research suggests that 65% of children in preschool today will work in jobs or careers that don't yet exist, so it is vital that from the earliest age, children are alive to the opportunities that science, technology, engineering and maths can offer them.

As part of this, we will introduce a new Skills Diploma – a professional baccalaureate - that recognises the achievement of a wide range of vocational and other qualifications taken by young people in senior school and provides a passport to further and higher education qualifications, as well as work based training.

We will also roll out our programme of school STEM clusters and develop a Scottish STEM ambassador network, so that by 2020 every Scottish school is working with a STEM partner from the private or public sector. We will focus in particular on encouraging more girls and women to study STEM related subjects.

4. Nurturing an environment that encourages industries based on science and engineering to locate in Scotland, and that encourages higher levels of investment in research and development

2014/15 was a record year for inward investment in Scotland, and the SNP is committed to encouraging new investment to increase the contribution inward investment makes to the economy

and to maintain our lead position in an increasingly competitive market. Scotland has maintained its position as the 2nd in the UK for attracting investment projects (only beaten by London) and in 2014-15 we secured 91 inward investment projects (16.7% higher than previous year), resulting in nearly 10,000 jobs being created and over 3000 HVA jobs as well.

Technology and advanced engineering accounted for a third of all inward investment projects, with oil and gas accounting for a further 16.5% in 2014-15, indicating that the SNP's approach in government on inward investment has worked to nurture an environment that encourages industries based on science and engineering to locate in Scotland. Clearly there is more to do and we would want to encourage still more through the economy strategy we recently launched for Scotland.

That strategy is built around the 4is of investment, inclusive growth, innovation and internationalisation, which is designed to nurture the sort of environment to encourage science, engineering and technology to locate in Scotland. If re-elected in May 2016, the SNP will continue to fund our eight Innovation Centres to support the commercialisation of world-class research in big data, digital health, industrial biotechnology, sensor technology, construction, stratified medicine, aquaculture and oil and gas. STEM has a role to play in all of these centres.

Since 2007, the SNP in government has maintained research funding for higher education, particularly to enable institutions to maximise draw down from BIS matched funding from the UK Government. Scotland would be ranked 4th in the OECD in terms of Higher Education Research & Development expenditure as a percentage of GDP. We have also seen business R&D expenditure rise from £629 million in 2007 to £905 million in 2014.

We will build on this strength through the Scotland CAN DO Innovation Forum, working in collaboration with industry leaders and academia, to raise ambition, develop a Scottish innovation culture and create stronger connections between key innovators. And we will also launch a new Innovation Prize, with an annual award for the collaborative project that produces the optimum commercialisation from investment activity.

Fostering a culture of entrepreneurship goes hand in hand with innovation. Our vision is of Scotland as a world-leading entrepreneurial and innovative nation – a CAN DO place for business. Highlands & Islands Enterprise, Scottish Enterprise and Scottish Funding Council are now working with business and universities to implement Scotland CAN DO SCALE - an education programme targeted at developing the entrepreneurial skills of people working in a high growth potential business or simply with an innovative emerging business idea.

The SNP sees exciting times ahead for science in Scotland. I hope that the above is of assistance.

Yours sincerely,

Dr Alasdair Allan