



Campaign for
Science and
Engineering
in the UK



Science and Engineering Policies and Priorities for Scotland

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Engineering in the UK

About CaSE

- CaSE engages politicians and shape policy as an advocate for science and engineering
- Our members are businesses, universities, learned societies, research charities and individuals
- We were founded in 1986 as Save British Science and changed our name in 2005

CaSE Scottish policy priorities 2007 - 2011

- Do not be complacent about the strength of the research base and to retain the importance of fundamental research
- Address any funding gap that emerges between Scottish and English universities
- Rectify the shortage and retention of science teachers and improve practical work
- Make Scotland an attractive place for business to make R&D investments
- Support universities to generate income from research
- Give greater investment to your own research needs through departmental budgets
- Increase the political profile of science policy issues

SNP election commitments

- Create a science baccalaureate
- Allocate an additional £10 million to support cutting edge research in Scotland
- Support the creation of a Scottish Life Sciences Institute
- Consult on the introduction of Innovation credits
- Launch the Saltire prize - £5 million
- Support energy initiatives – CCS and energy efficiency design awards

Scottish policy framework for science

- Economic Strategy – target to increase % of GDP spent on R&D
- Skills Strategy
- New Horizons – Higher Education
- Innovation Framework
- ***Science for Scotland***

Good points

- It has been published!
- Strong on vision and why science is important for Scotland
- Integration with other policy areas
- Recognition of the importance of UK and EU decisions and international collaboration
- Good background reports

Weak points

- Lack of commitment
 - Goals and timeframes?
 - Funding?
 - New policy initiatives?
 - Measuring progress?
- Led by other policy areas

CaSE policy priorities

- Educate and train skilled scientists and engineers
- Invest in world leading research
- Support innovative business
- *Develop evidence-based policies*

Skilled scientists and engineers

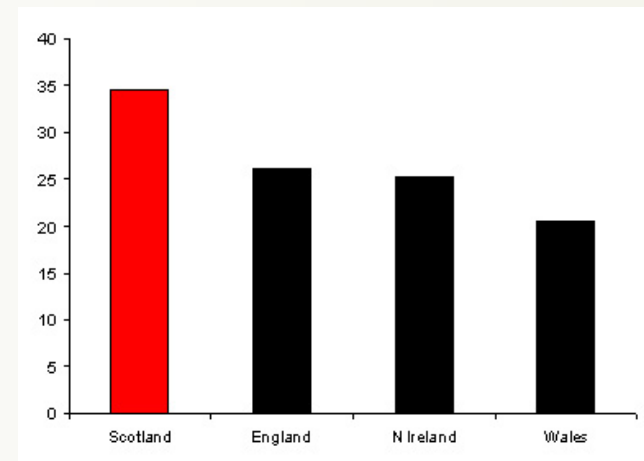
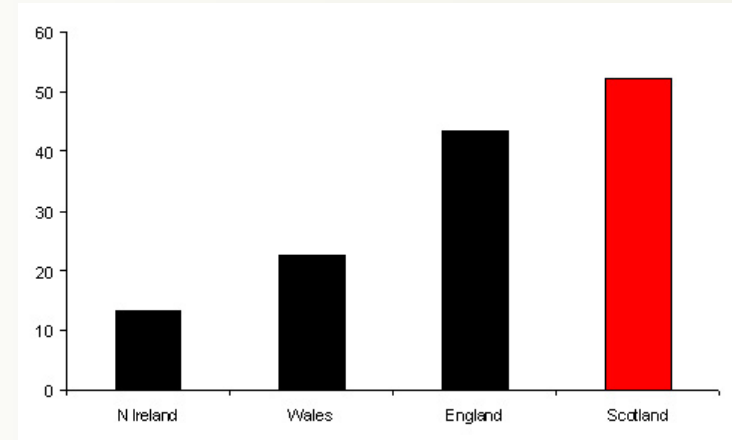
- Ensure that changes to curriculum support the development of science, engineering and mathematics skills and knowledge
- Improve science and mathematics in schools through specialist teachers, increased funding for CPD, greater support for technicians and practical work
- Greater weight given to STEM subjects through adjusting UCAS points

Research funding

- Maintain dual support funding from UK research councils and funding councils
- Sustained increased investment in research through the Scottish Funding Council

UK research funding comparison

- The Scotland's research strength has been supported by a higher-level of investment
- Top figure is Research Council funding and bottom is Quality-Related funding
- Figures are 2005-06 based on £ per head of population



Business R&D

- Scotland has a relatively low percentage of R&D financed by business
- The majority of it is financed by foreign companies

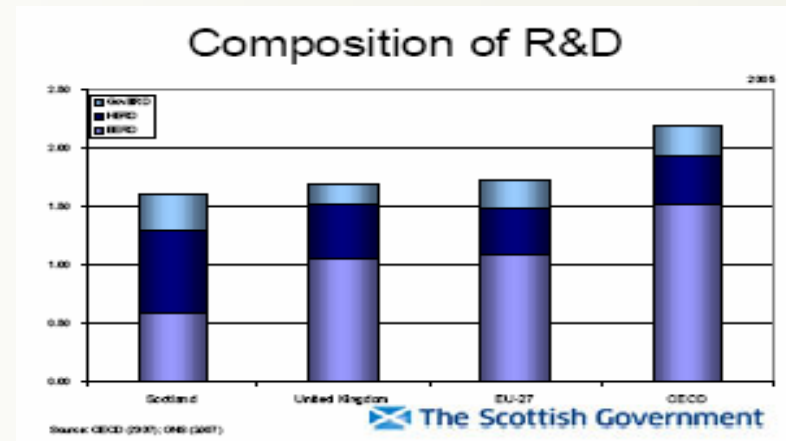
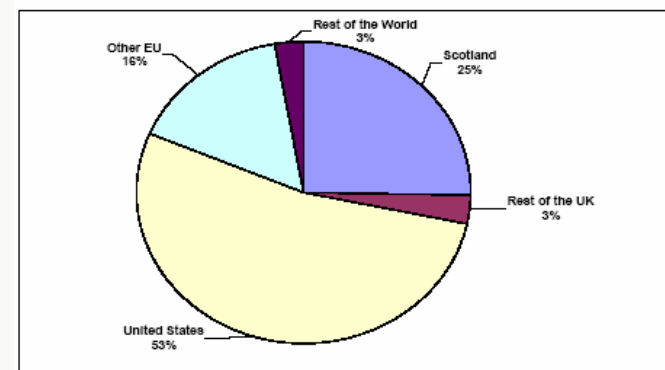


Figure 4: BERD in Scotland by country of ownership, 2006



Policies to support innovative business

- Invest in training skilled scientists and engineers and attract talent from abroad
- Support knowledge exchange between universities and business, but do not become too prescriptive or erode the strength of the science base

Basic versus applied?

- Difference of opinion between the science base and knowledge exchange working groups on how to prioritise public research funding
- *Science strategy*: Prioritise both research excellence and strategic knowledge exchange

Evidence-based policymaking

- Review of government research and new strategies should be used to strengthen the development of the evidence base for policymaking
- Utilise Scottish research institutes
- Develop the scientific advisory system

Science policy and devolution

- UK decisions are still critical to Scottish science – research council funding, R&D tax credits, migration, etc.
- Devolved decisions are also critical for education, business support, some research institutes, etc.
- Greater clarity and co-ordination is needed to ensure strong science and innovation “ecosystem”

Scotland *For* Science

- The Scottish Government should:
 - Increase its investment in research and education
 - Engage with UK and EU science policymakers
 - Make science and engineering a cross-cutting Scottish Government priority
 - Monitor progress and compare against other parts of the UK and other countries
 - Develop new policy initiatives to address problems

CaSE in Scotland

- CaSE will develop its engagement in Scottish science policy debates by:
 - Using the strategy to keep science and engineering on the political agenda and to improve policy and budgetary decisions
 - Examining the interactions between UK, devolved and EU policies

Further information

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