

A Framework for Action - For the Technology and Engineering Sector in Scotland

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Purpose of document	Summarisation of documents of high importance for the Business Case
Project detail (delete row if appropriate)	(project name, project owner(s), dates, organisation(s) involved)
Other detail (delete row if appropriate)	

Related projects	Names and doc reference numbers
Keywords	Technology; engineering; innovation; business; Scotland; skills; Challenges; young people;

Name of Strategy:	A Framework for Action - For the Technology and Engineering Sector in Scotland
Date:	May 2013
URL:	https://digitalhealthinstitute.sharepoint.com/Exploratory/Shared%20Documents/Business%20Case%20-%20Strategic%20Documents/16.%20A%20Framework%20for%20Action%20(Scottish%20Enterprise)/Framework-for-Action-2013.pdf
Key words:	Technology, engineering, innovation, business, Scotland, skills, challenges, young people.
Why does this strategy exist? (what's the problem/opportunity this stems from)	<p>There is a need for the following in the future:</p> <ol style="list-style-type: none"> 1. Secure, clean and efficient Energy 2. Efficient use of resources 3. Safe, secure food supply 4. Smart, green transport 5. Longer and healthier lives 6. Inclusive innovation and secure societies <p>These are the drivers of the technology and engineering industries over the coming years.</p>
Summary:	To unleash the inherent innovation and business potential that exists within the Scottish Technology and Engineering Sector. This will enhance Scotland's global impact and will contribute significantly to GDP growth.
Key goals and means to achieve them:	<p>In order to unleash innovation and business potential, the industry will have to:</p> <ol style="list-style-type: none"> 1. Talent: A constant stream of new engineering talent is required to deliver the solutions of the future highlighted above. Therefore, young people must be

	<p>encouraged to study engineering and talented engineers must be sourced from outside Scotland to enrich our industries.</p> <p>2. Brand: The sector must build a brand which reflects the capabilities of the sector which will encourage young people and parents to explore the opportunities provided herein. It will also provide policy makers with a clearer understanding of the sector's potential and alert international buyers and investors to the richness of Scotland's technology and engineering portfolio.</p> <p>3. Internationalisation: Scotland's limited home market means that more international business is a prerequisite for further growth.</p> <p>4. Supply Chain: A successful cluster must develop close links across the supply chain to ensure a fast moving and flexible response to market demands. There is a need to develop the required competences and fill the gaps I emergent clusters.</p> <p>5. Collaboration: Optimum industry performance in the sector required continuous improvements not only in the linkage between academia and industry, but also within the industry base itself. Focussed collaboration can be a key enabler in making the most of the constrained R&D resources and maximise investments in the UK catapult centres and Scottish innovation centres must be achieved.</p> <p>6. R&D Investment and Commercialisation: Scottish technology and engineering companies currently invest below the OECD and UK average in R&D. Conversely, Scottish university research is relatively well funded and high quality producing many fledging spin-outs. This sector must increase the commercial dividend from this academic seed stock in a competitive world where commodity manufacturing is no longer an option.</p>
<p>Expected outcomes:</p>	<p>This approach of engaging small groups of key stakeholders to address specific issues or opportunities will achieve results more quickly and with less resource than developing an all-encompassing strategy in a single process. Within three years, a comprehensive portfolio of action plans will be driving the Technology and Engineering sector towards strong and sustainable growth. The focus now is to oversee and</p>

	facilitate the delivery of focused action plans in order that Scotland may unleash its inherent innovation and business potential in technology and engineering.
Key quotes:	<ul style="list-style-type: none"> • Technology and engineering are key drivers of the Scottish economy. Engineering, electronics and information technology businesses employ nearly 150,000 people, contributing over £10 billion a year to Scotland’s economy (almost 10% of national output). • Many Scottish technology and engineering companies have a strong international outlook, exporting around £6.5 billion of products and services to international markets each year, based on a reputation for high quality
Parent/child document (of what)?	Follows on from Technology Advisory Group’s Enabling Technologies Strategy for Scotland – “Towards a Brighter Future” (2009).