Pathways to Impact Plan - Industry Engagement & Economic Impact

The **'economic impact'** of your research needs to be considered in relation to:

- > contributing towards environmental sustainability, protection and impact;
- enhancing the research capacity, knowledge and skill of business and organisations;
- contributing toward wealth creation and economic prosperity i.e. the creation and growth of companies and jobs; enhancing business revenue and innovative capacity;
- > enhancing the efficiency, performance and sustainability of business/organisations;
- > attracting R&D investment from global business;
- contributing to regeneration, economic development;
- the commercialisation and exploitation of scientific knowledge, leading to spin out companies, and the creation of new processes, products and services;
- > the training of skilled people for non-academic professions.

In the 'Impact Summary' section you need to clearly define who might benefit from the research and how might they benefit (this should include relevant companies/industries). In your 'Pathways to Impact' plan you have to set out what will be done to ensure that potential beneficiaries have the opportunity to benefit, outlining mechanism and activities that you will use to reach them.

The following table aims to provide information to help you in writing your 'Pathways to Impact' plan and encourages you to consider:

- how to engage with industry;
- what mechanism you might use to facilitate engagement;
- how this might strengthen your application;
- > and what to include in your application.

It also includes written examples related to each mechanism of potential engagement. The examples provided have either been extracted from successful applications, RCUK guidance documents or PraxisUnico 'High Quality Pathways to Impact' case studies (November 2011)

Further advice and support is available from <u>Carolyn Brock</u>, Impact Manager College of Science and Engineering or <u>Anne Sofie Laegran</u>, Knowledge Exchange Manager College of Humanities and Social Science.

Think about	Why?	How?	What to include in your application	Examples
Involving specific relevant companies during writing your application or from the outset of the project	Involving companies as early as possible will help demonstrate that from the outset your project is aiming to meet the needs of industry. Note : In the 'Impact' section of your application form, naming specific companies/industries demonstrates that you have fully considered the potential of your research in relation to industry (as well as the public sector, government policy, third sector and the general public).	Use existing links you may have. To help identify relevant companies for projects aligned to the CSE and Research Council priorities. Contact Carolyn.Brock@ed.ac.uk (Impact Manager) who will liaise with the appropriate School <u>Business Development</u> <u>Executive</u> (BDE)	Name the specific companies you have been in dialogue with and explain their role in the project. Ask the companies you intend to engage with for letters of support, and include these in your application. Letters of support should state why the companies believe the research will be of benefit. Rules on providing letters of support from companies vary between Research Councils, so check before you send any.	Example 1 - 'Company X is one of a handful of companies worldwide that supplies instruments to speech therapy market. They will collaborate with us to help further develop speech development technology into a product for the assessment, diagnosis and treat of speech disorders in children and adults. e.g. speech and language therapist involved in early stage in planning the project to ensure that the research outcomes will be practical and useful in clinical practise'
How you will reach/engage with relevant companies/industries	It is important to state what you will do to ensure that the potential beneficiaries have the opportunity to engage with your research.	As above - using existing contacts or contact Carolyn.Brock@ed.ac.uk	 Outline the activities you will use to engage with companies/industries, with an appropriate timeline of when these activities will occur in the project. Activities you could include: BDE time as a project specific resource (Carolyn Brock will be able to advice further on this) engagement workshops seminars attendance at exhibitions (nationally and internationally) research visits/secondments to industrial research facilities progress reports targeted at industry video elevator pitches (tailored for 	Example 1 - 'Certain results from the ecology work package may be of interest to JNCC and Ecomonitors Ltd, and we will liaise with them regularly during the project, providing progress reports' Example 2 - 'Contact with environmental agencies and industry will be through the UK Atmospheric Dispersion Modelling Liaison Committee, which holds regular meetings This will provide opportunities to present results of the project as well as scope for possible developments that meet specific user's needs' Example 3 – 'Three workshops will be held. Workshop 1 will aim to define users' main questions and how to answer/integrate with the

			 industry) marketing (information leaflets, exhibition materials such as stands etc. 	research or identify additional work to be undertaken. Workshop 2 will be used to help formulate ways of monitoring ecological variables based upon results to that stage. The final workshop will bring all key stakeholders together. It is anticipated all of the workshops will include industry representatives'
Consider the merits of engaging with various networks and agencies that might be interested in your research from a policy point of view, but may also have links with industry that you can benefit from.	By engaging with such stakeholders you have the opportunity to influence policy and the potential to reach a wide commercial audience and scale up interactions to multiple companies.	There are number of organisations you can link with to widen your engagement with industry at a local, national and European level. Local Engagement Consider engaging with the Edinburgh Chamber of Commerce, who hold events for their members which offers the opportunity to reach local business, as well as to pin point specific companies to engage with,. The Edinburgh Chamber of Commerce have a number of Policy Groups including the; Technology Policy Group - who meet to discuss to tackle issues relating to technology-based businesses, as well as how all Edinburgh businesses can use technology to their advantage. Renewable Energy Policy Group - concentrates on the exciting development opportunities for the sector in the Edinburgh City region.	List who you will engage with, why and how.	Example 1 - 'We will arrange with Government Agency x/and Trade Association y's members, to deliver a briefing on our results. This will take place in the 3 rd year of the project partners the dissemination strategy will target five professional communities for direct dissemination: Architects; the Civil Engineering community; the Fire Safety and Fire Rescue Services; the Tall Buildings community and standards developers and government'

		National & EuropeanEngagementThink about linking to relevantTrade Associations; KnowledgeTransfer Networks, InnovationPlatforms; and clusters(e.g. European and UKbiotechnology clusters,Interactive Scotland –Scotland's digital community,Technet Scotland - network forTechnology businesses inScotland etc), and relevantprofessional communities.Consider which GovernmentAgencies (eg. EnvironmentalAgencies); Local/nationalauthorities (eg. WaterAuthority) might be relevant		Example 3 – 'We will establish links with the Rail Research UK Association that is a partnership between the <u>British Rail Industry</u> and UK Universities. The partnership aims to bring together those who can use and fund railway research with those who do it'
Project management structures Establish a Stakeholder Group/Steering Group/ Advisory Board, including industry members, or an Industry Advisory Panel.	This will add strength to your project management structures, and ensure direct industry engagement.	Approach, seek agreement and name stakeholders who have agreed to be part of a Stakeholder Group/Steering Group/Advisory Board or Industry Advisory Panel. If agreement is impossible at application stage you can identify people or organisations who will be approached once the project is awarded.	Clearly outline your project management structure and where possible name companies that have agreed to be members of any Project/Advisory Board or Stakeholder/Steering Group that you intend to put in place. Include letters of support.	Example 1 'We intend to establish a Stakeholder Group and a Steering Group. The Stakeholder Group will include <u>industry members</u> and policy stakeholders. They will contribute by attending project workshops, participate in through in- depth interviews and respond to ad hoc requests for feedback. The Steering Group , comprised of research, policy and <u>industry representatives</u> will provide more intensive input, review progress and be consulted on major projects changes' Example 2 'We will hold 6-montly stakeholder meetings (which will include <u>members from</u> <u>industry</u>) to steer the project direction, supplemented by regular bi-lateral meetings'

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Industry related publications	To be used as another mechanism to reach industry and new companies.	Articles in non-traditional publications; e.g. enviromental magazines, trade journals	Be specific- if you can, name the publications that are relevant to your project/research rather than stating that you will 'publish in relevant trade/industry journals'	Example 1 - 'At least one article will be submitted to the Royal College of Speech and Language Therapists' Bulletin, (the foremost monthly magazine for speech and language therapists in the UK)' Example 2 – 'We will publish in professional journal publications (the Journal of Water and Environmental Management, Municipal Engineering and others) to ensure that <u>industrial</u> beneficiaries are similarly informed'
Intellectual Property and routes to commercialisation	It strengthens the application to show that you will look for opportunities of application and commercialisation from the start, and are aware of the importance of IP protection in that matter	Liaise with the appropriate Business Development Executive (BDE)	State that you will seek BDE assistance to help pursue long term commercial strategies, (consider spinning out a company, or licensing opportunities) when that looks like a potential opportunity. If it not yet known or if it is not anticipated that new IP or the opportunity to commercialise will arise from the research, it is acceptable to say so - but state what measures you have in place to monitor this (e.g. involving your BDE to conduct market research when and if appropriate)	 Example 1 - 'IP will be protected through patent applications with ERI (Edinburgh Research & Innovation), the University of Edinburgh's research & commercialisation/technology transfer office' Example 2 - 'During the course of this project, we plan to look for specific applications for which our algorithms could make a particular difference. This may involve finding an <u>industrial</u> or research partner institution. Our first port of call in this enterprise is a current collaboration of the PI with GeoSciences at Edinburgh' Example 3 – 'Company x have expressed an interest in the ecological monitoring equipment developed in the lab, our Technology Transfer office will investigate the possibility of filing a patent' Example 4 – 'In the course of the project we will deploy a technology transfer officer resource to engage with company x at their site in xx, and discuss potential collaboration/exploitation'

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Releasing prototype open software	Making available experimental code available to industry may be appropriate to share progress and seek feedback		Outline the prototype software you will be releasing and explain why you think this will beneficial to the project	Example 1 – 'Another important mechanism for <u>industrial</u> engagement is to release prototype open source software that implements the methods developed in the proposal. A prototype implementation is a valuable tool to help external users from industry to understand the characteristics and performance of our new methods'