EARMA - Impact

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Mission: Science Foundation Ireland funds excellent and impactful research and talent, and shapes the future of Ireland through anticipating what’s next and widening engagement and collaboration.
Impact and Excellence Concept

Impact can be described as “the demonstrable contribution that excellent research makes to the economy and society”.

Increase focus on applicants demonstrating and delivering impact from research due to an absolute need to demonstrate to government and the public, the value to the Irish economy and society of public funds spent on research.

Ensuring Quality/Excellence both of the person and of the proposed programme via International Peer/Merit Review.

- Short-term or Long-term
- Economic / Non-economic
- Difficult to measure
- Non linear
Economic & Societal Impact

For many SFI programmes scientific excellence is both necessary and paramount but is not sufficient; applications must also demonstrate potential impact. SFI emphasises the importance of the Impact Statement in submitted proposals.

Impact embraces the diverse ways in which research-related knowledge and skills benefit individuals, organisations and nations by:

- Powering an innovative and enterprising economy
- Creating high value jobs
- Attracting, developing and nurturing businesses, scientists and talented people
- Increasing the effectiveness of public services and policy
- Enhancing quality of life, health and creative output
- Developing the country’s international reputation
- Educating and training the population
- Solving major national and global problems and challenges, such as food security and world hunger, climate change, energy security, ageing population, rural sustainability, and other sustainability challenges
Assessment of Impact at Proposal Stage

- Impact is a key Review Criterion for all SFI Programmes

- Criterion: *Potential impact and value to Ireland*

- Required as part of Application - *Impact Statement (max. 3 pages)*
  Including appreciation of how research may be developed and exploited in the medium-to-long term; realistic and convincing evaluation of the benefits that will result from a successful project; areas and fields where impacts are likely to be made etc.

- Detailed SFI Guidance in relation to Impact, including information on how to prepare an impact statement, how metrics and narrative in support of impact are reported on and reviewed by SFI

SFI describe impact in different categories

Health & Wellbeing

Economic

Professional Services

International Engagement

Human Capacity

Environmental

Policy & Public Services

Societal
KEY ACHIEVEMENTS IN RESEARCH EXCELLENCE & IMPACT

Describe the significance and/or impact of up to 3 key achievements per category below. For each example, provide an outline of the stated achievement, what specific role you played, why you think it is important, any benefit to the field and, where relevant, the resulting impact.

Key Achievements in the Generation of Knowledge

Key Achievements in the Development of Individuals

Key Achievements Supporting Broader Society & the Economy

Key Achievements Supporting the Research Community
Assessment of Impact Post Award

❖ Progress Site Reviews
❖ Annual Reports
❖ Impact Declaration Statements
❖ SFI Research Outputs
❖ Impact Case Studies
What Science Foundation Ireland delivers for its annual €200m budget

A research engine of 5,272 people working on SFI supported projects

16 world leading SFI Research Centres spanning several HEIs and industry

744 Active Research Projects

Generating Annually

39,840 jobs in Ireland supported directly or indirectly

4,936 scientific publications

1,860 collaborations with industry (including 596 MNCs, 574 SMEs in all regions)

15 spin out companies formed

84 licensed technologies

103 patents filed

€257m in leveraged non-exchequer funding

2,894 international collaborations in 75 countries

620 primary schools received Discover Primary Science and Maths Awards

2 million people reached in over 1,400 events during Science Week

Research, development, innovation and a highly educated workforce will be key points of differentiation for Ireland and key drivers of our future economic success.
Back up Slides – About SFI
What SFI Does

- Builds infrastructure
- Supports the transfer of Research Outputs to existing and new companies for economic and societal impact
- Leverages other research funding e.g. Industrial / EU / Charitable / Philanthropic / International
- Fosters high levels of collaboration between academia, industry, charity, disciplines, sectors, institutions, people and countries
- Operates in an open, agile and engaged mode with a willingness to seize new opportunities
- Engages the public to grow scientific literacy and citizenship
- Makes grants to Higher Education Institutes (HEIs) in Ireland based on competitive, international merit review for scientific excellence and impact
- Provides a supply of appropriately trained people along the entire science and technology pipeline
- Creates significant industrial collaboration attracting, anchoring and starting companies in Ireland
- Produces scientific results and technology (Research Outputs)
- Trains people
Government National Research Priorities

ICT
- Future Networks, Communications and Internet of Things /Data Analytics, Management, Security, Privacy, Robotics and Artificial Intelligence (including Machine Learning) /Digital Platforms, Content and Applications, and Augmented Reality and Virtual Reality

Health and Wellbeing
- Connected Health and Independent Living /Medical Devices /Diagnostics /Therapeutics

Food
- Food for Health /Smart and Sustainable Food Production and Processing

Energy, Climate Action and Sustainability
- Decarbonising the Energy System /Sustainable Living

Manufacturing and Materials
- Advanced and Smart Manufacturing /Manufacturing and Novel Materials

Services and Business Processes
- Innovation in Services and Business Processes

*Research Priority Areas 2018 to 2023, DBEI*
SFI Portfolio 2019 Analysis

Annual Capital Budget – 188 million Euro
16 world-leading SFI Research Centres of scale and excellence

**€684m** SFI Commitment

- **€466m** Industry Commitment
- **€172.6m** in cumulative Horizon 2020 funding
- 16 HEIs
- > **€700m** EU Funding Target

812 Research bodies across the globe

900 Collaborative Research Agreements with over 470 companies

1,834 Postgraduate students to date *1,174 directly or attributed to SFI Research Centres

**SFI Research Centres have to-date secured**

- **€257m** In non-exchequer, non-commercial funding
- **€193m** from Industry
- 405 Enterprise Ireland commercialisation awards
- 222 licensing agreements
- 36 Spin outs
- 20 Spoke Awards
Annual Reports – Impact Declarations

• The research conducted through my award has enabled me to leverage international funding through industry/collaborative research

• The research conducted through my award has resulted in the start or expansion of a company which has resulted in the creation of high value jobs

• The research conducted through my award has attracted developing and nurturing businesses, through for example, the licensing of technologies

• The research conducted through my award has attracted international scientists and talented people

• The research conducted through my award has resulted in a new policy being implemented and/or an improvement to the delivery of a public service

• The research conducted through my award has enhanced the quality of life and health of Irish citizens

• The research conducted through my award has contributed to environmental conservation and/or enhanced the sustainable relationship between society, industry and the environment

• The research conducted through my award has increased the knowledge, appreciation and understanding of science, engineering, and technology amongst the general public

• The research conducted through my award has developed the country’s international reputation

• The research conducted through my award has resulted in the creation of employment through directly influencing and inspiring the future workforce and/or the production of a highly educated and relevant workforce in demand by industry and academia: