

The Irish policy mix for technology transfer and IPR for public-private research

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Global Ambition
**If you've got the ambition we'll
help you take it global.**

What we do

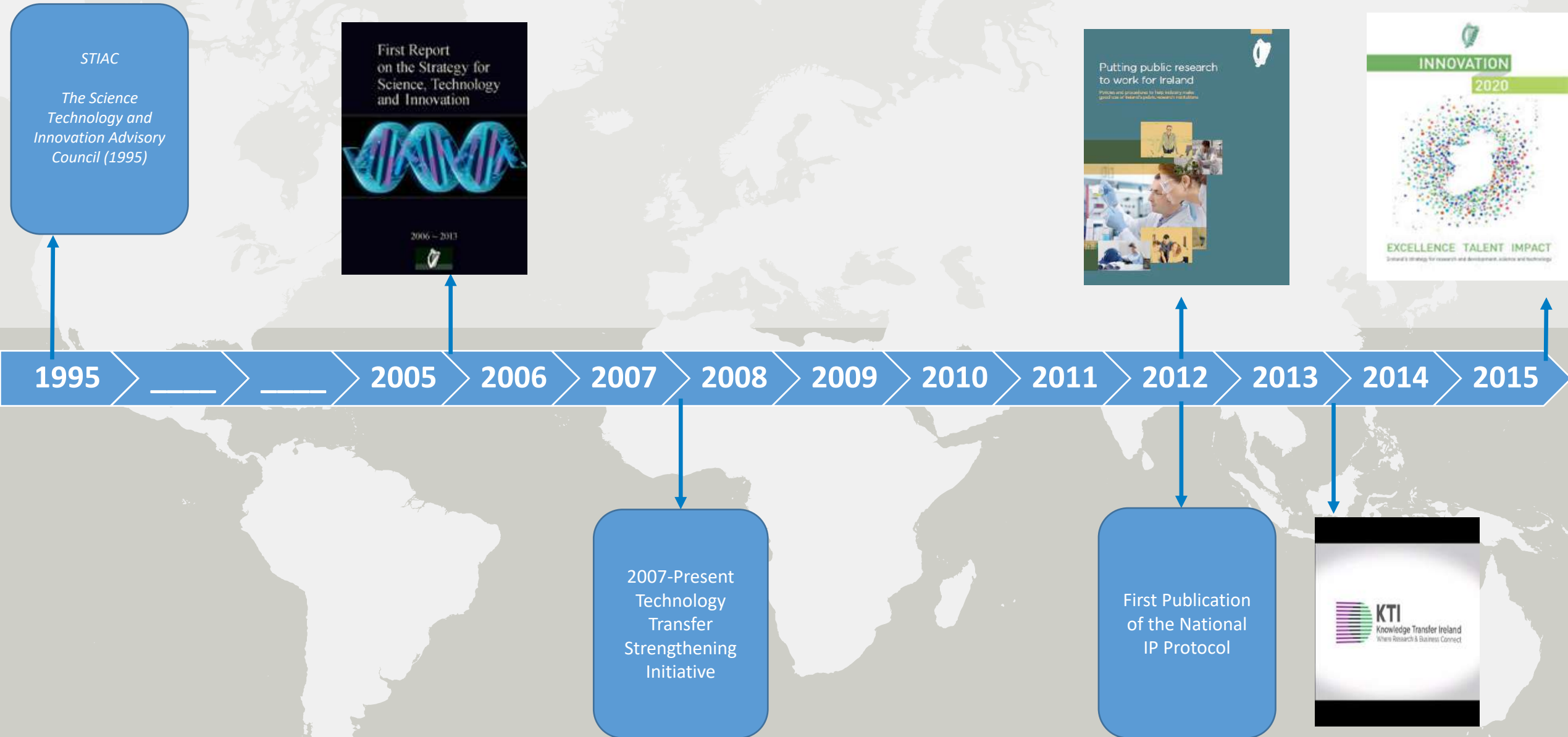
- Enterprise Ireland helps companies start, innovate and scale internationally
- Work with 5,000 Irish owned businesses across all sectors of manufacturing and internationally traded services, approximately 200 of which are large companies
- Annual budget of €343M
- Offer leadership, competitiveness, innovation, networking and financial supports made to match ambition at every stage of company development
- Mandate to drive collaboration and commercialisation of state-funded research and National H2020 participation mandate.
- Innovation activities across all Irish industry (Micro SME, SME, Large Indigenous, Foreign MNC)
- 32 international offices; 10 offices throughout Ireland
- Key focus is the development and growth of Irish companies in global markets
- Responsibility for FDI in food

Why Enterprise Ireland supports Innovation?

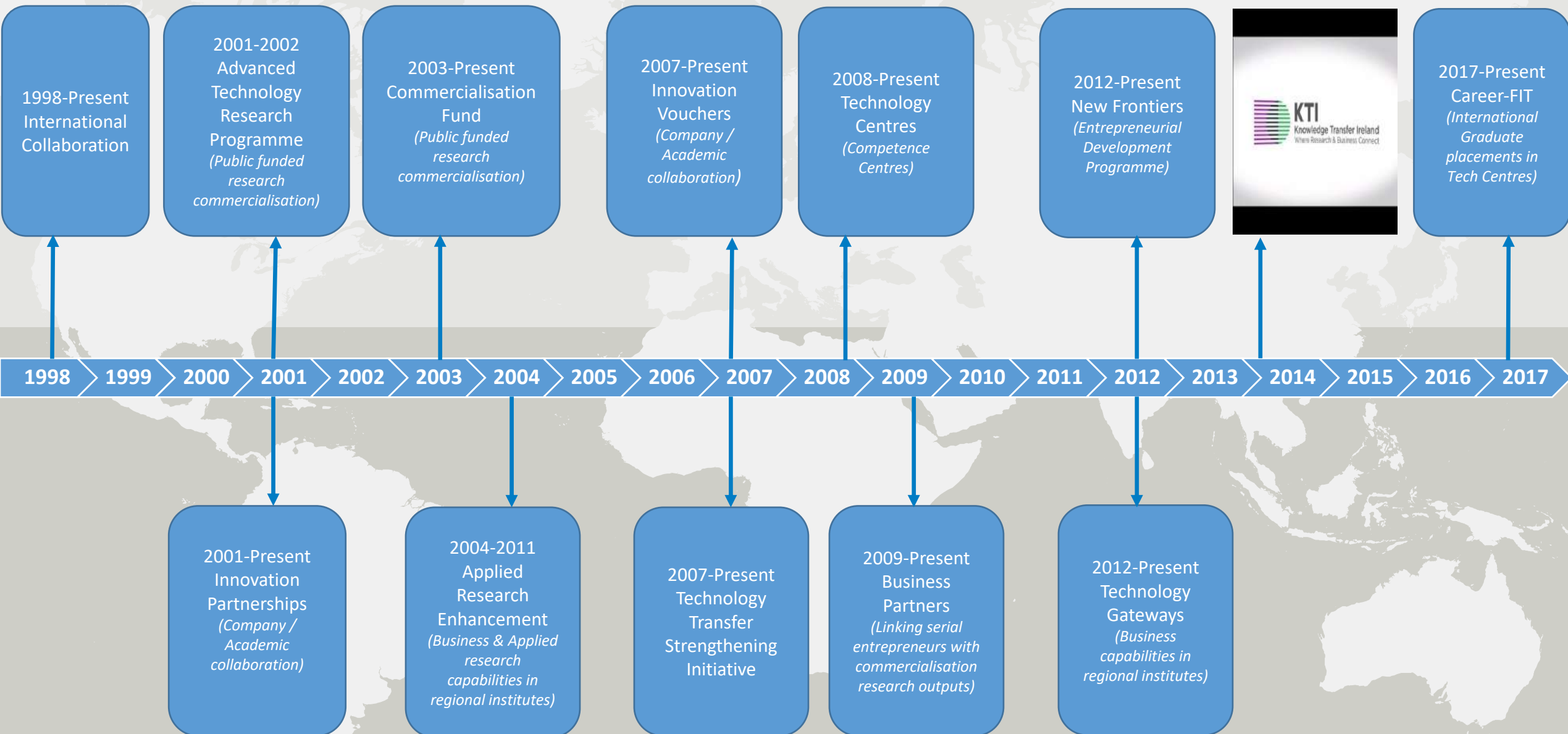
- Innovation is a strategic imperative for Enterprise Ireland
 - It is core to our toolkit of responses to global challenges and opportunities, such as those posed by Brexit
 - 68% of Brexit affected clients have indicated that they plan to invest in RDI as a direct response to the dangers posed by Brexit.
- EI's Innovation supports are about **product, process and service development**: key activities for any development agency
- EI have the commercial, market & technical skills, strong leveraged relationships with the Higher Education Sector, fellow agencies (IDA, SFI etc.), VC community, EU Commission & international agencies and a strong track record of delivering economic impact.
- **Legislation:** Science & Technology Act 1987 (*'promote the application of science and technology to economic (..) development'*)
- **Government Policy:**



Policy Timelines



Programme Timelines



Last Mile (Technology Development & Diffusion)



COMMERCIALISATION AND COMPANY CREATION

COLLABORATION AND INNOVATION

€70M Budget



MENTORS



COMMERCIALISATION SPECIALISTS



BUSINESS PARTNERS



INTRODUCTIONS TO VENTURE CAPITALISTS

MARKET
PRODUCTS SERVICES JOBS

STARTUP FUNDING

INVESTMENT AND SALES

INNOVATION VOUCHERS

MARKET ACCEPTANCE

COMMERCIALISATION FUND

DERISKING AND MARKET PREPARATION

INNOVATION PARTNERSHIPS

COMMERCIALISATION

COMMERCIAL FEASIBILITY

TECHNOLOGY DEVELOPMENT

COMMERCIALISATION FUND

KTI
Knowledge Transfer Ireland
Where Research & Business Connect



TECHNOLOGY TRANSFER OFFICES



Industry Focused TECHNOLOGY CENTRES



TECHNOLOGY GATEWAYS

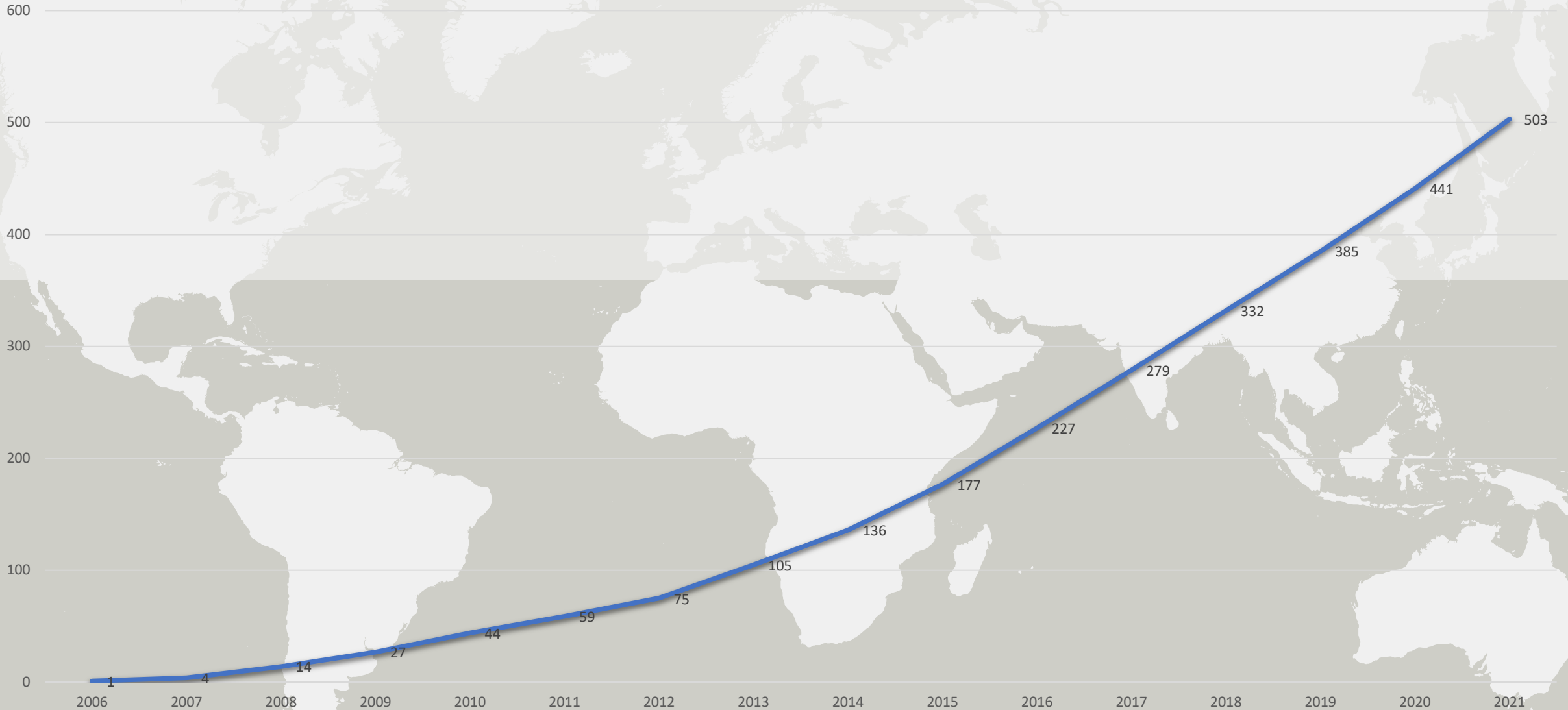
FUNDAMENTAL AND APPLIED RESEARCH



€700M FUNDING + HORIZON 2020
SCIENCE | INDUSTRY | SOCIETY

Commercialisation Fund EVA

Cumulative EVA Impact of the Commercialisation Fund Programme 2006-2021 (EVA, €million)



Impacts



More than **200 new start-up businesses** establish with EI help each year

90 are HPSUs

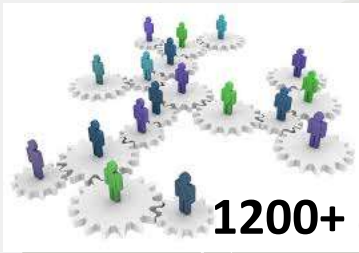


Rigorous Independent Evaluations have proven Large Returns on Investment in R&I

Innovation Partnerships: 6.6X Turnover
Innovation Vouchers: 7X Turnover
Technology Gateways: 5.5X Turnover
Technology Centres: 2X Turnover (to date)
Campus Incubation: 3.6X Turnover



30 Spinouts p/a via KTI
(15+ are HPSUs)



1200+ companies supported to undertake market focused research collaborations each year



€12M for companies in 2016
3X Turnover multiplier



1200 Market focussed researchers supported p/a
(19% of researchers in State)



130 entrepreneurs hone their ideas on campus in EI's 'New Frontiers' program



€475M from H2020 to date towards target of €1.25B, a third of which has been to companies.
1st in Europe for SME Instrument



265 researchers and investors brought together to develop new start-ups in 2017



40,000 visits to KT industry portal p/a
10X ↑ Licences
5X ↑ Spinouts
No 1 in Europe for KT



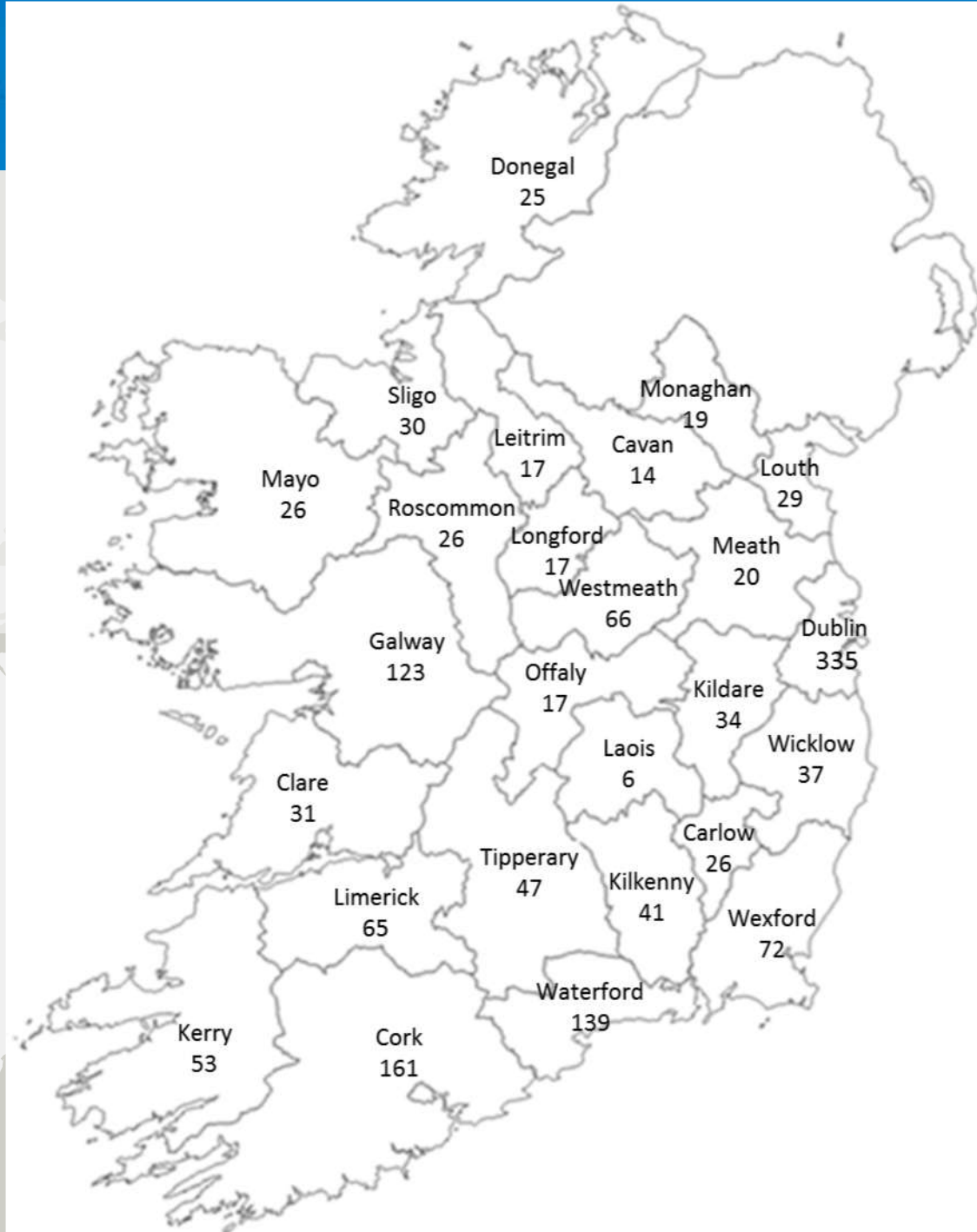
Start-up Incubation facilities on every HEI Campus:
360 companies
1870 employees

Other Impacts

Regional Impacts

- 85% of the Entrepreneurs who receive pre-start-up entrepreneurial training via New Frontiers receive their training outside Dublin
- Most of Enterprise Ireland's campus Incubation facilities are based in the regions and as such 70% of the companies & 68% of the employees in these facilities are 'incubated' outside Dublin.
 - 94% of companies remain in the same region after they leave the incubation space.
- With regard to collaborative industry-academic Innovation projects:
 - 76% of Innovation Partnership projects are delivered outside Dublin
 - 83% of Technology Gateway Projects are delivered outside Dublin
 - 73% of Innovation Vouchers are delivered outside Dublin
 - 44% of companies in Technology Centres are located outside Dublin
- 61% of Commercialisation projects (funding to commercialise research in colleges aimed at developing new technologies for industry or at forming the basis of new spinout companies) were undertaken outside Dublin.
- 41% (€65M) of Horizon 2020 funding was delivered outside Dublin in 2017

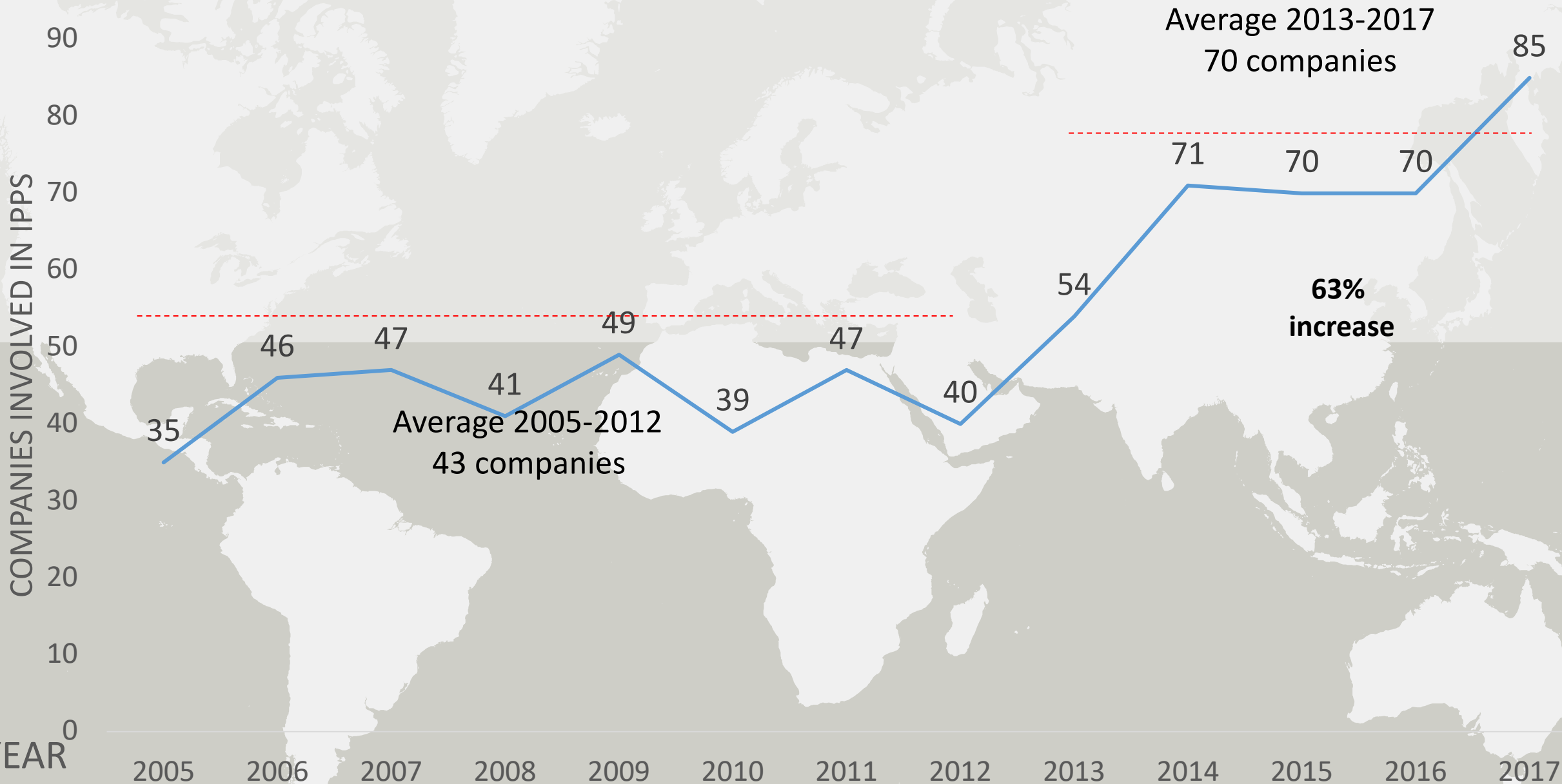
Numbers of 1:1 company projects delivered per county p/a:





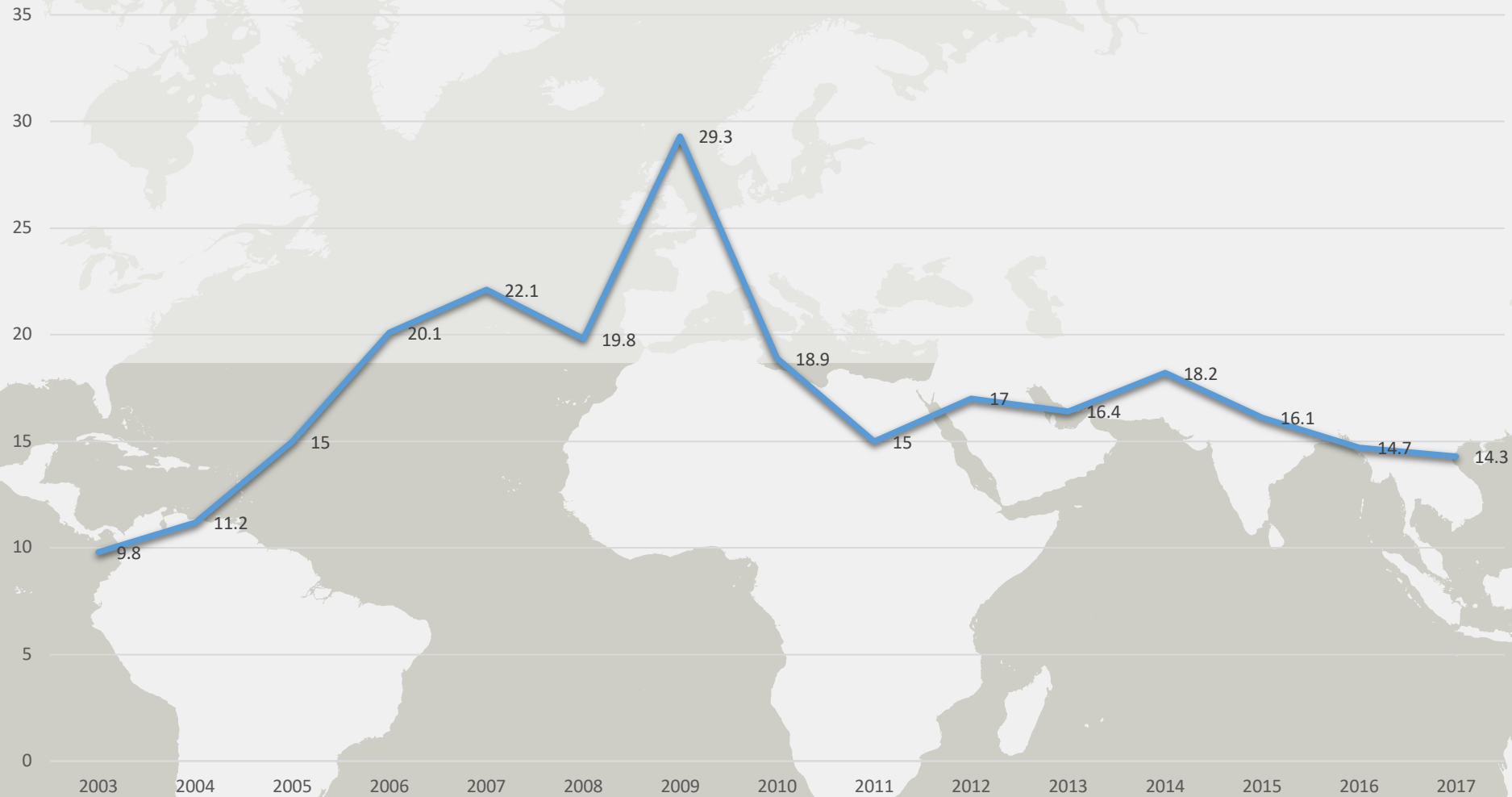
- **Societal impacts:** EI supported Companies & Technologies that can improve or save lives
 - Anti-microbial coatings developed in DIT & TCD to fight MRSA in Hospitals etc.
 - Early identification of Pre-eclampsia solution developed by research spinout ('Metabolomic Diagnostics') – opportunity to address 70,000 maternal deaths and half a million infant deaths each year.
 - EI supports have helped 'Radisens Diagnostics' win European funding (SME instrument) to begin development of enhanced diagnostic testing for diabetes which will improve the accuracy and reduce the time taken with diagnosing this pernicious condition.
 - Tinnitus treatment developed by research spin-out ('Mutebutton') – opportunity for 40M Tinnitus sufferers worldwide
 - Research support to 'Mincon', a Clare based SME, to significantly enhance their drill bits. 'Mincon' made international headlines for their involvement in the 2010 Chilean miners rescue where a 'Mincon' drill bit was used to drill the rescue bore hole for the trapped miners
 - Revolutionary energy-neutral wastewater treatment developed via EI support by 'Oxymem'
- **Spillovers** – 1200 industry/commercial focused researchers supported per annum (1/5 of all researchers in the system) with immeasurable benefits for the Irish economy.
 - E.g. One such researcher (Mark Hughes) subsequently became Director of Artificial Intelligence (AI) for the world's largest healthcare company, United Health Group. Mark was then headhunted by Identiv and was responsible for the decision to set up the company's AI business unit in Dublin with an initial 20 very highly paid AI engineering jobs.

Number of companies involved in approved Innovation Partnerships 2005-2017



Commercialisation Fund Payments

Commercialisation Fund Drawdown €M



Research & Innovation Budget 2017

	Activities	Company Creation	1:1 RDI Solutions	1: Many RDI Solutions	Enabling the system to work with industry
Budget OUT €122M Actual R&I Budget	Types of Supports <ul style="list-style-type: none"> HPSU Equity Commercialisation Fund New Frontiers 	<ul style="list-style-type: none"> In -company Supports National Collaborative supports (Innovation Vouchers, Innovation Partnerships, Technology Gateways) Enterprise Europe Network Small Business Innovation Research (SBIR) 	<ul style="list-style-type: none"> Technology Centres International Collaborative supports 	<ul style="list-style-type: none"> Technology Transfer Strengthening Campus Incubation Knowledge Transfer Ireland Developing key RDI people for industry 	
	Types of Outputs p/a <ul style="list-style-type: none"> 90 HPSUs 30 Spinouts 110 Competitive Start Funds 100 New Frontiers Start-ups 	<ul style="list-style-type: none"> 1100 product, process, service development projects 700+ industry contacts made to the EEN p/a 	<ul style="list-style-type: none"> ~800 companies involved in Technology Centres 130+ companies supported under Horizon 2020 	<ul style="list-style-type: none"> 40,000 visits to KTI portal P/a 1,250 New collaborative agreements 830 New consultancy services agreements 180 Licenses with industry 50 new key RDI staff developed for industry 360 incubated startups with 1870 employees 	
	% of budget	33%	41%	18%	8%
IN €252M Leveraged funding	International Sources of Funding	H2020 SME Instrument: €15M	ESA: €12M	Horizon 2020: €145M	n/a
	Leveraged Private national funding from our activities	HPSUs: €38M	Industry Cash to: Innovation Partnerships:€2.1M In-company RDI: €30M Technology Gateway Projects: €3.9M Total: €36M	Technology Centre Industry Cash: €6M (+€6M in-kind)	n/a