An Roinn Fiontar,
Trádála agus Fostaíochta
Department of Enterprise,
Trade and Employment

White Paper on Enterprise Symposium

Monday, 3rd October 2022

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STRATEGY GROUP

Small advanced economies in a changing world: implications for Ireland's industrial & enterprise policy

David Skilling

October 2022

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Small advanced economy context

- Small advanced economies have out-performed larger economies over a sustained period.
  - This is partly due to the external environment, but largely due to policy choices

- Industrial & enterprise policy is central to economic strategy in small advanced economies because of their distinctive characteristics
  - Externally-oriented firms/clusters are the productivity growth engines of small economies, with competitive advantage based on innovation, knowledge
  - Competitive advantage can only be built in a limited number of areas

- Small advanced economies are deeply exposed to external economic and political dynamics, in three key ways:
  - Variation in global aggregates (world trade, GDP growth)
  - The global economic & political order
  - Idiosyncratic shocks (competition, technology, policy choices) because of relatively concentrated economic/export structures

Small advanced economies have out-performed larger economies since 2005; Ireland is catching up after the global financial crisis

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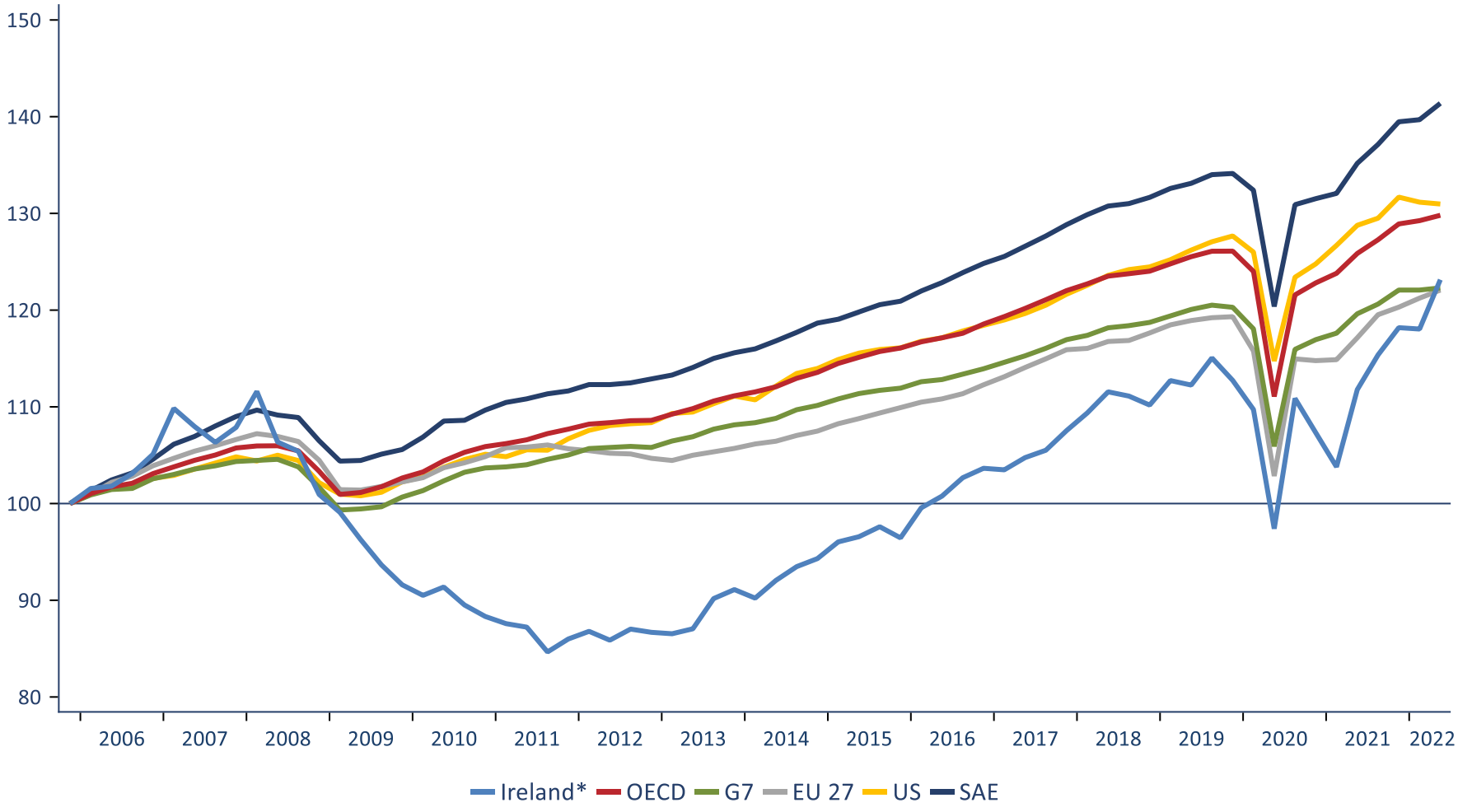
Real GDP growth (sa), %, Q1 2005 = 100, Q1 2005 – Q2 2022



Source: Macrobond; National sources; OECD; Landfall Strategy Group calculations. Note: uses modified final domestic demand for Ireland.

Most small economies have significantly higher export shares than larger advanced economies; Ireland has a very high share

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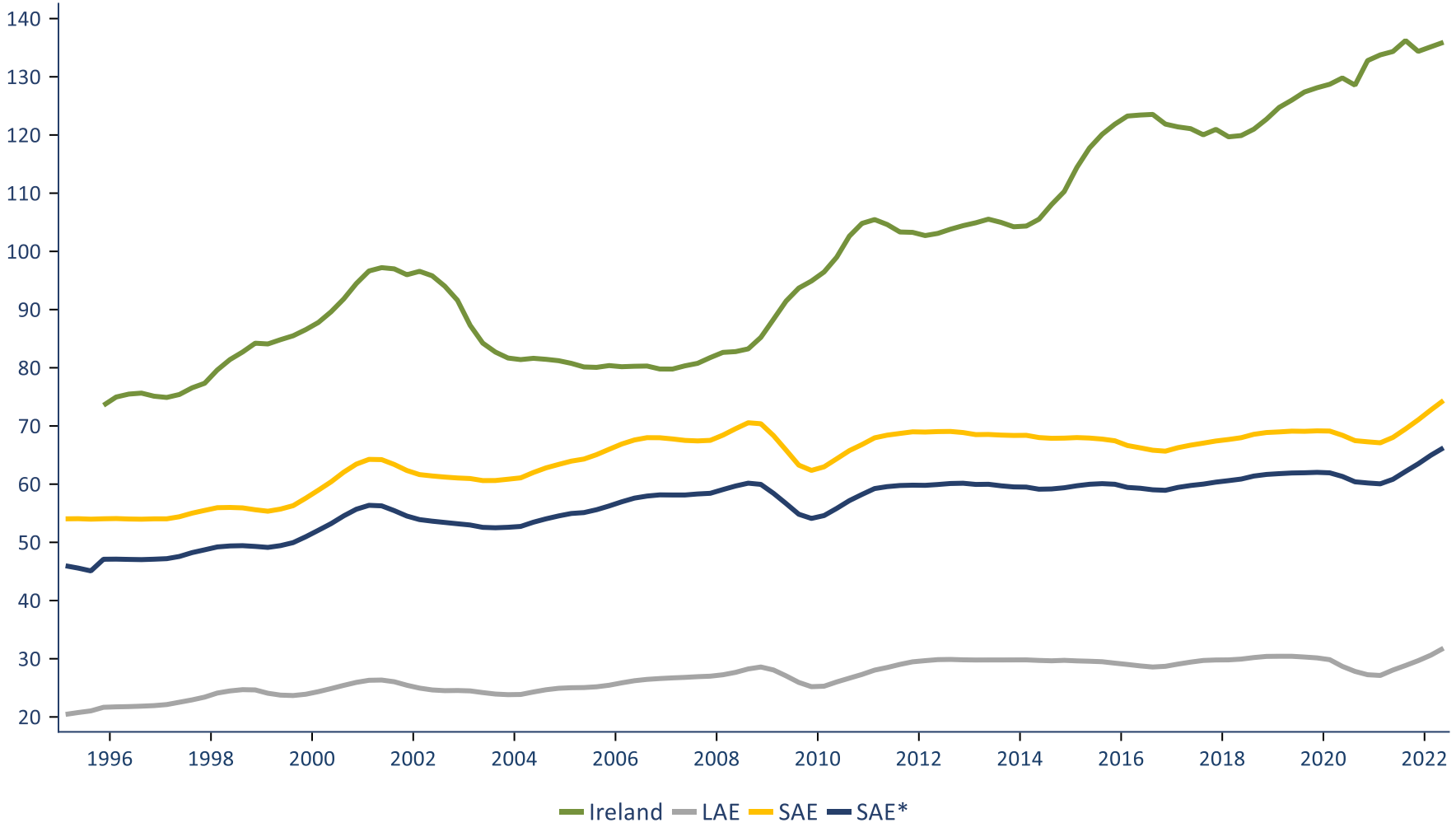
Exports of goods & services, % of GDP, year to Q2 2022



Source: Macrobond; National sources; Landfall Strategy Group calculations.

R&D spending is higher in small advanced economies than in larger economies; Ireland lags

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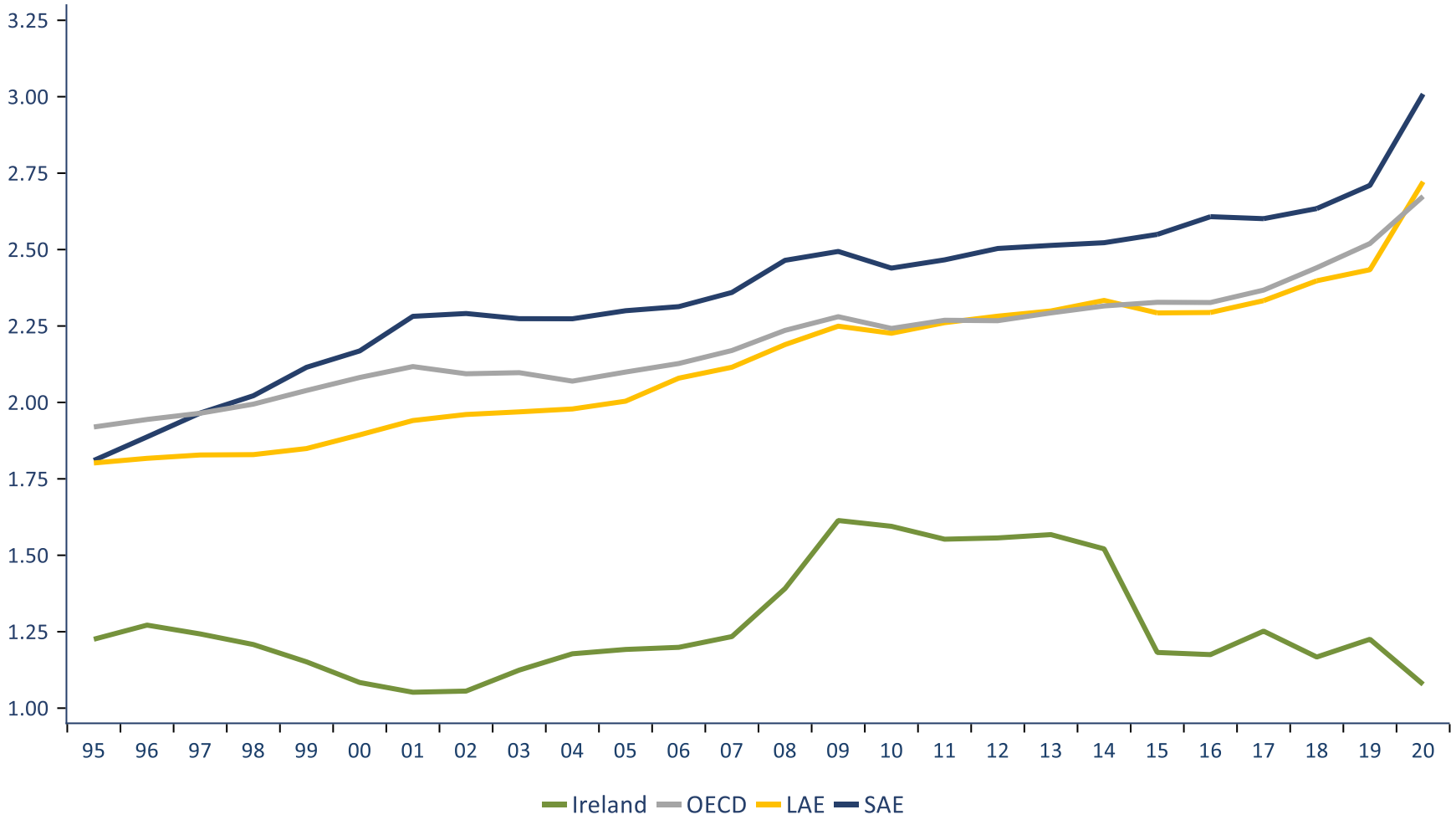
R&D as a % of GDP, 1995 - 2020



Source: Macrobond; OECD; Landfall Strategy Group calculations.

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There is disruptive change in the global environment, to which small advanced economies are exposed

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A There is regime change in the global economy

- Globalisation is not reversing, but there will be more frictions and a more fragmented global economy is emerging along geopolitical lines

B Disruptive changes in technology and business models are underway

- This will change the nature of growth sectors and location of competitive advantage; although many small economies are relatively well positioned

C The net zero transition will generate substantial transition costs, but also big economic opportunities for small economies that can reduce emission intensity

- Consumer/investor preferences are shifting quickly

D The pandemic has reinforced comfort with high public debt levels, and an expanded role for the state

E Domestic and international geography is changing in a post-Covid world, enabled by technology (people moving out of cities, 'digital nomads')

Many current economic developments indicate regime change underway

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- Surging inflation
  - Partly an excess demand story, partly due to higher energy and food prices, but also due to labour market frictions in a post-Covid changing economy. Supply-side responses are needed, not just macro policy.

- Energy prices
  - Intersection of geopolitics and economics; there is a need for energy independence, accelerating the renewables transition. High energy prices are creating hardship, pushing some economies towards recession.

- Industrial policy
  - Governments are moving quickly to establish positions in the commanding heights on concerns re geopolitical competition, supply chain vulnerability

Contents

There are some common themes in the policy response by small advanced economies

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- Responding to changing globalisation
  - Strengthen competitive advantage (investment in skills, innovation); strengthen domestic capabilities (enterprise policy, migration policy)
- Developing positions in emerging growth sectors, and supporting the reallocation of labour across the economy: skills and training, labour market policy
- Aggressive investments in the net zero transition
  - Reduce emissions intensity, expand renewable energy and green technology potential, develop positions in new low carbon growth sectors
- Strengthening national economic resilience
  - Supply chains (goods, energy, commodities), fiscal sustainability, external posture
- Capturing opportunities around a changing economic geography
  - Attract mobile talent, support a more distributed profile of domestic economic activity

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Contents

1. Strengths & weaknesses of the Irish economy

- Ireland's economic model continues to generate good outcomes, but there are some weaknesses – some of which are a direct function of Ireland's strengths

- Domestic value capture is relatively weak, because of the lack of integration of MNCs into the domestic economy
  - A very large primary income deficit; and weaker opportunities for innovation/knowledge spillovers across backward/forward linkages

- There are also negative spillover from the very strong, productive activities of MNCs: a Dutch Disease phenomenon
  - MNCs attract labour, capital from other parts of the economy
  - Highly productive MNCs increase the economy-wide wage and cost structure, which constrains the competitive strength of other externally-oriented firms; and constrains incentives to invest, innovate

- Ireland has vulnerabilities in terms of its high emissions intensity: over time, this could weaken Ireland's competitiveness as firms locate in low emissions locations – and consumers prefer goods and services with low embedded emissions.

2. Ireland's exposure to global economic and political developments

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- Despite Ireland's deep international economic engagement, Ireland is not very sensitive to variation in global flows or the global economy. However, Ireland's concentrated export structure means that it is sensitive to sector/firm-specific shocks in key sectors.

- Ireland's Europe and US-heavy portfolio of export markets also means that Ireland is not highly exposed to geopolitical developments
  - However, it is exposed to US domestic political risk (MNC location) as well as geopolitical risks around the China market

- Ireland has an acute exposure to net zero commitments – and particularly changing consumer/investor/firm preferences on emissions intensity. Ireland's high emissions intensity creates risk re FDI attraction, competitiveness of Irish firms

- There are opportunities from new technologies (Ireland has strong capabilities); as well as from changing domestic and international economic geography (greater ability to attract people, a more distributed model of economic activity).

3. Thoughts on strategic priorities for actions (1)

1 Develop strategic clusters

- Ireland should strengthen its high-potential clusters of activity: these are the productivity and growth engines of the Irish economy
- Choices need to be made in (broadly defined) priority clusters: small economies are doomed to choose – this needs to be done in a disciplined way.
- Increased investments in research, innovation are needed to develop competitive advantage in these clusters
- Policy should actively support movement of labour towards high growth/priority clusters in a post-Covid world (skills policy, active labour market policy)

2 Strengthen domestic value capture/rebalance enterprise policy

- Enterprise policy should create a stronger 'Irish core'
- Integrate MNCs into clusters, deepen supply chain linkages, and strengthen local supply chain capabilities
- Focus enterprise policy on creating at-scale innovation driven enterprises: using innovation policy instruments, export promotion, firm-level capability building

3. Thoughts on strategic priorities for actions (2)

3 Integrate the net zero transition into economic strategy

- Front-load the emissions reduction process, build out renewable energy capacity
- Ireland should move quickly to capture economic opportunities from low emissions activity: use for attracting FDI, develop/attract activity in growth areas in the low carbon economy

4 Set Ireland's external posture to manage external risks

- Ireland is not as exposed to external economic and political risks as some
- Ireland needs to manage some its exposure to emerging political risks: US domestic political risk re MNC activity; geopolitical risk re China; and supply chain risks (food, energy).

5 Institutional strengthening to support strategic policy coherence

- High-performing small advanced economies build strong institutional capabilities to drive a coherent, sustained policy agenda across multiple policy domains (from innovation and climate change policy to core parts of the economic agenda)
- Strategic foresight capability is important in a disruptively changing world

Landfall Strategy Group

Landfall Strategy Group is a research and advisory firm that provides insight and advice on economic, policy and geopolitical issues that face small advanced economies. Our unique focus on understanding the behaviour, performance and outlook across small advanced economies provides the basis for distinctive perspectives on issues facing specific small advanced economies, as well as on emerging international economic and political developments.

Landfall Strategy Group's clients are governments, firms, and financial institutions in small advanced economies, as well as those in other countries that value a small country view on the global outlook.

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Subscribe to my regular notes on global economic and political issues at: https://davidskilling.substack.com

The Challenges and Opportunities of the Green Transition

3rd October 2022

Who We Are

Climate Change Advisory Council	Adaptation Committee	Secretariat
14 Members **Chair:** Marie Donnelly	**12-14** Members **Chair:** Prof. Peter Thorne	**Manager:** George Hussey

Marie Donnelly ***(Chair)***

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Jillian Mahon

Sinead O'Brien

About Us

*Established in 2015 under the Climate Action and Low Carbon Development Act, the **Climate Change Advisory Council** will work to provide contributions in critiquing, informing and shaping Ireland's response to climate change.*

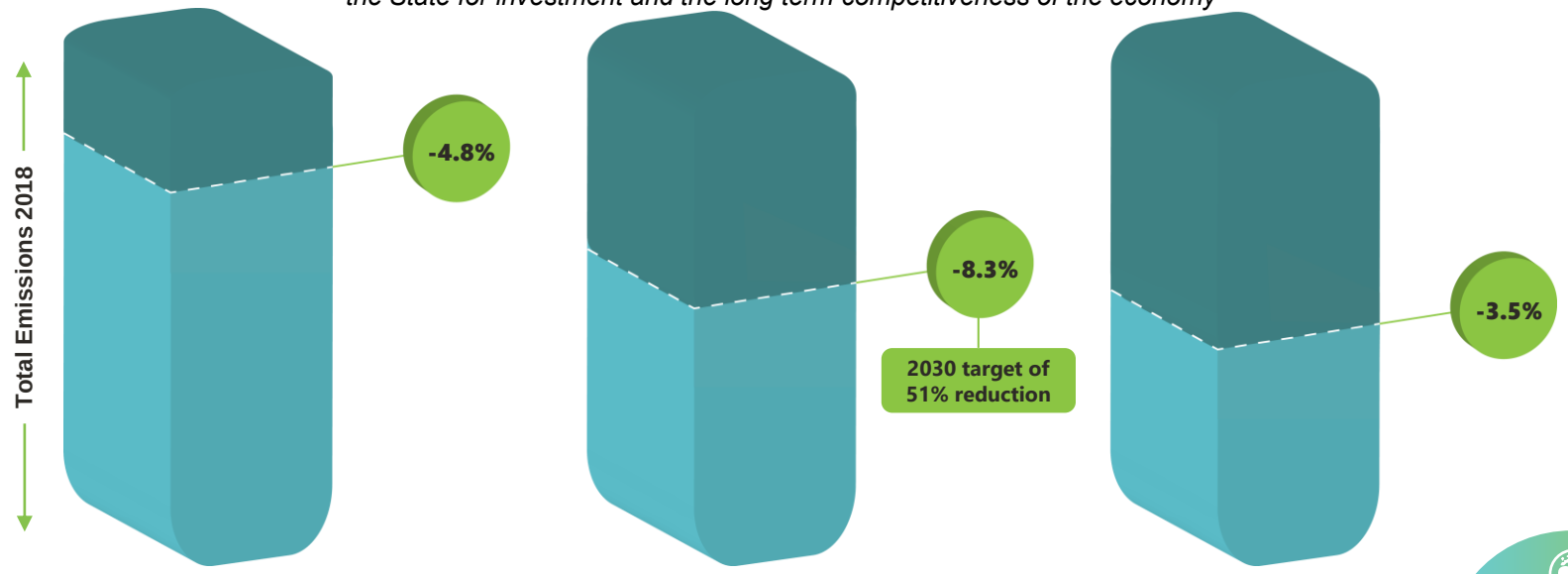
*We provide **independent** and **science-based** advice to Government and policy makers on what Ireland needs to do to achieve a climate-resilient, biodiversity rich, environmentally sustainable and **climate neutral economy by 2050**.*

*Taking into account of, in so far as practicable, the need to maximise **employment**, the attractiveness of the State for **investment** and the long term **competitiveness of the economy** and having regard to **climate justice** when carrying out its functions.*

Current targets: Carbon Budgets

*A **carbon budget** represents the total amount of emissions that may be emitted in the State during a **five-year period**, measured in tonnes of carbon dioxide equivalent. It is calculated on an economy-wide basis.*

Under the Act, the preparation of carbon budgets must take account of; 'in so far as practicable, the need to maximise employment, the attractiveness of the State for investment and the long term competitiveness of the economy'



*295 Mt CO2 eq. to an average of **- 4.8%***

First Budget Period

*200 Mt CO2 eq. to an average of **-8.3%***

Second Budget Period

*151 Mt CO2 eq. to an average of **-3.5%***

Third Provisional Budget

All greenhouse gas emissions and all relevant sectors are included in the carbon budgets

Current Targets: Sectoral Emissions Ceilings

Table - Sectoral Emission Ceilings[3]

(Figures for $MtCO_2eq$ for 2018 and 2030 have been rounded. This may lead to some discrepancies)

	2018 Baseline (MtCO2eq.)[4]	Sectoral Emission Ceilings for each 5-year carbon budget period (MtCO2eq.)		Indicative Emissions in Final Year of 2021-2025 carbon budget period (MtCO2eq)	Indicative Reduction in Emissions in Final Year of 2021-2025 budget period compared to 2018	Emissions in final year of 2026-20230 carbon budget period (MtCO2eq)	Reduction in Emissions final year of 2026-2030 carbon budget period compared to 2018	Agreed CAP21 Ranges
Sector	**2018**	**2021-2025**	**2026-2030**	**2025**	**2025**	**2030**	**2030**	**2030**
Electricity	10	40	20	6	~40%	3	~75%	60 – 80%
Transport	12	54	37	10	~20%	6	~50%	40 – 50%
Built Environment - Residential	7	29	23	5	~20%	4	~40%	45 – 55%[5]
Built Environment - Commercial	2	7	5	1	~20%	1	~45%	
Industry	7	30	24	6	~20%	4	~35%	30 – 40%
Agriculture	23	106	96	20	~10%	17.25	~25%	20 – 30%
LULUCF[6]	5	XXX	XXX	XXX	XXX	XXX	XXX	40 – 60%
Other (F-Gases, Waste & Petroleum refining)	2	9	8	2	~25%	1	~50%	N/A
Unallocated Savings[7]			*-26*			*-5.25*		
TOTAL[8]	*68*	*XXX*	*XXX*	*XXX*	*XXX*	*XXX*	*XXX*	*N/A*
Legally binding Carbon Budgets and 2030 Emission Reduction Targets[9]	-	**295**	**200**	-	-	**34**	**51%**	-

[3] Table reflects what was agreed by Government on 28 July 2022

[4] Million tonnes of carbon dioxide equivalent.

[5] CAP21 outlined 45-55% range for all buildings i.e. it did not split out residential and commercial buildings

[6] Finalising the Sectoral Emissions Ceiling for the Land-Use, Land-Use Change and Forestry (LULUCF) sector has been deferred for up to18 months to allow for the completion of the Land-Use Strategy

[7] Unallocated savings on an economy-wide basis in the second 5-year carbon budget period from 2026-2030, before factoring in net LULUCF sector emissions

[8] Following finalisation of the Sectoral Emissions Ceiling for the Land-Use, Land-Use Change and Forestry (LULUCF) sector, total figures will be available

[9] As provided by section 6A(5) of the Climate Action and Low Carbon Development (Amendment) Act 2021

Current Targets: Sectoral Emissions Ceilings

- The industry sector has a target of 35% reduction in emissions by 2030 and a pathway, via carbon budgets, to reach this.
- Under current EPA WAM projections, only a 12.8% reduction in Industry emissions is forecast by 2030.
- Further measures will need to be identified in order to progress emissions reduction targets.

Sector	2018 Baseline (Mt CO2 eq)	2021-25 Sectoral Emission Ceiling	2026-30 Sectoral Emission Ceiling	2030 Ceiling	% Reduction by 2030
Industry (Manufacturing Combustion and Industrial Processes emissions)	7	30	24	4	~35%
Built Environment (Commercial)	2	7	5	1	~45%

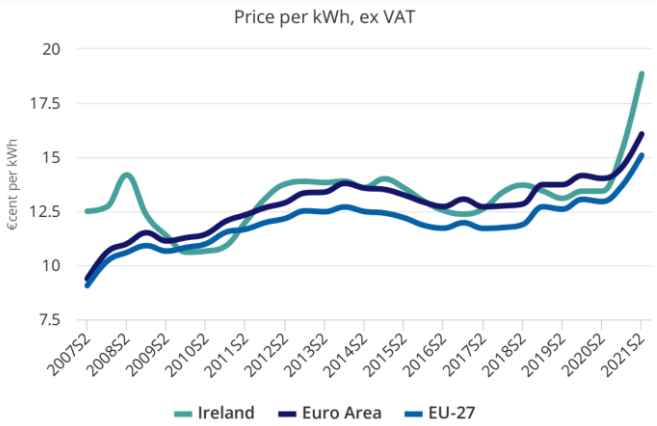
Challenges and Opportunities: Energy Crisis

Significant challenges and opportunities for enterprises;

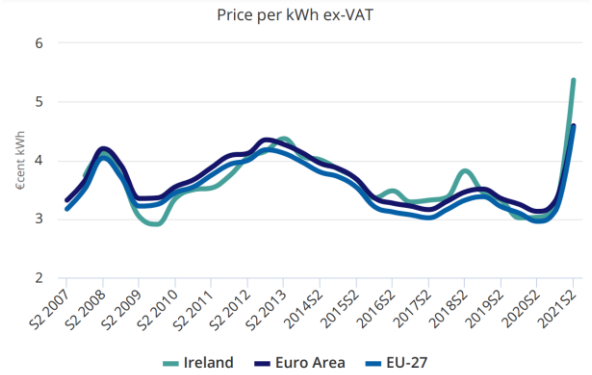
- Increased and volatile energy prices impacting on communities and businesses across Ireland due to dependence on imported fossil fuels.
- Short- and medium-term risks to security of energy supply.
- Window for effective action on climate change, linked to fossil fuel use, is rapidly closing.

Actions to address the energy crisis can also support our objectives on climate change.

Average Electricity Price to Businesses (SEAI)

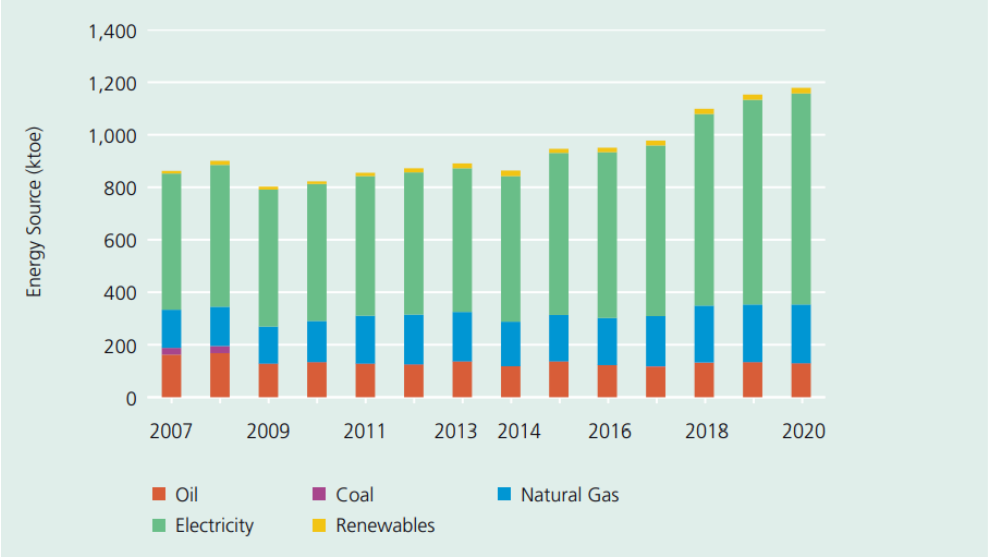


Average Gas Price to Businesses (SEAI)



Challenges and Opportunities: Energy Efficiency

- In 2020, 14.2% of commercial buildings were A and B BER rated.
- The two main strategies for reducing emissions in this sector are energy efficiency and fuel switching.
- To support small businesses to invest in their premises, access to low-cost finance will be crucial.
- Recent DECC consultation showed examples of payback periods of ~9-15 years for industry and commercial solar PV (including supports), importance of removing barriers to installation.
- Demand management for energy efficiency.
- Importance of public sector buildings leading by example.



Commercial sector energy sources ktoe (Source: SEAI 2021)

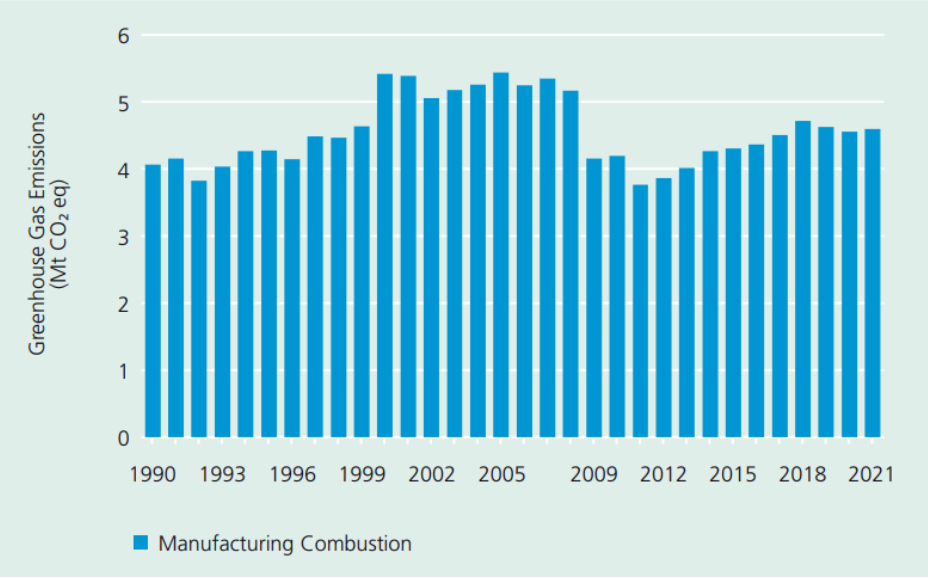
Challenges and Opportunities: Waste Heat & District Heating

- SEAI's National Heat Study: District Heating and Cooling report found that low carbon district heating, predominantly from biomass boilers and air source heat pumps, has the potential to supply up to 50% of residential heat demand across Ireland.
- Tallaght District Heating Scheme (TDHS), will be the first large-scale district heating network of its kind in Ireland. Waste heat from the nearby Amazon data centre will supply the heat to the network.
- Power stations, industrial sites and data centres produce large amounts of waste heat suitable for heat networks.
- Government support will be critical in terms of governance and support for infrastructural development for district heating.

Heat extraction/recovery sites and district heating sites in Ireland (Source: SEAI National Heat Study)

Challenges and Opportunities: Manufacturing Combustion

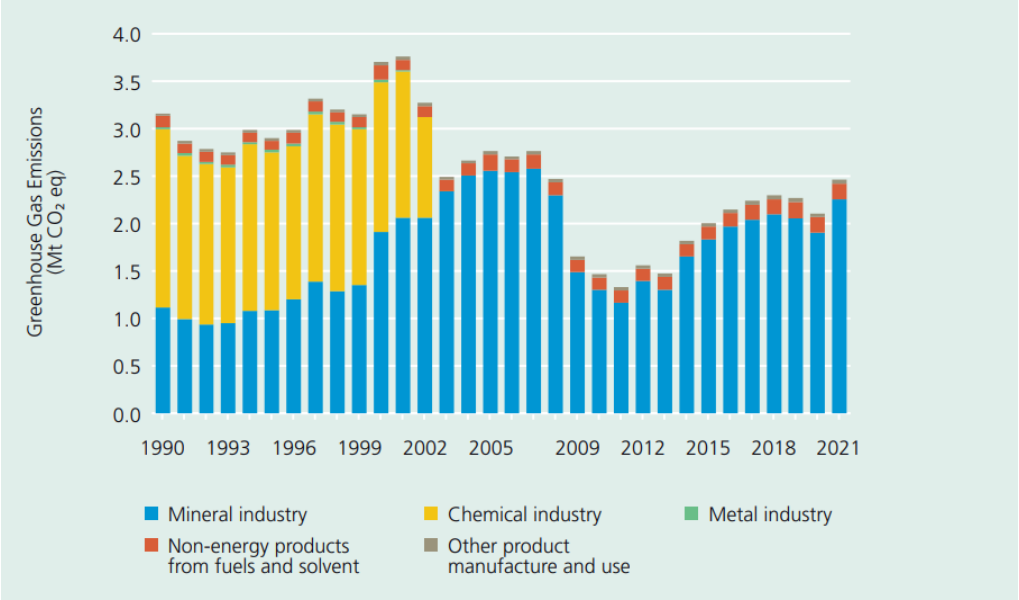
- Emissions from manufacturing combustion increased by 0.9% in 2021.
- Current projections suggest that significant further measures will need to be identified in order to meet emissions reduction targets.
- Significant industrial heat demand can be decarbonised through technology changes or fuel switching via electrification or low carbon fuels.
- Policies must be tailored to investment decision timelines for enterprises.



Trend in Manufacturing Combustion Emissions 1990-2021 (Source: EPA)

Challenges and Opportunities: Industrial Processes

- Industrial processes emissions are forecasted to increase, driven by increased activity in the cement production industry.
- The CCAC AR notes that in addition to low carbon fuel substitution, opportunities exist to increase cement use efficiency in construction and replacement with lower carbon materials.
- Detailed approaches for abatement measures in relation to embodied carbon reduction and carbon capture must be developed for NCAP23.



Trend in Industrial Process Emissions 1990-2021 (Source: EPA))

Challenges and Opportunities: Employment and skills

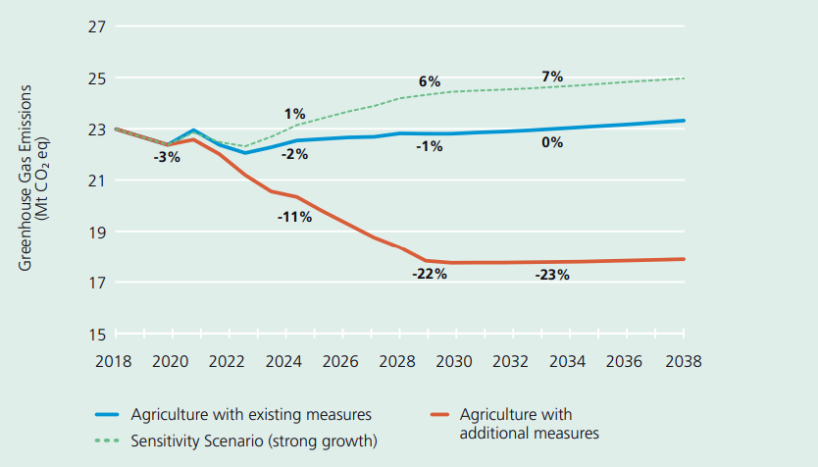
- Scale of change will impact on all sectors of the economy and could have significant positive implications in terms of employment and innovation opportunities.
- New opportunities in green economy – including retrofitting, renewable energy, circular economy, clean mobility, agriculture and the bioeconomy.
- Need for workers in certain sectors to be supported through upskilling, reskilling and redeployment.
- Challenges of skills gaps and supply chains in emerging sectors.
- Risk management for SMEs and farmers requires preparation and policy support.

Sector	Occupation	Scale of skill shift	Description of upskilling requirement
Transport	Passenger and commercial vehicle mechanics		New expertise required in electric powertrains, rather than conventional ICE powertrains
Buildings	Plumbers		New expertise required in range of new heating technologies i.e. district heating, heat pumps, electric boilers
	Construction		New expertise required in low-carbon design and implementation (e.g., using new materials like CLT)
Agriculture	Extensification		New expertise required for how to reduce farming inputs (e.g., fertilizer) and the alternative techniques that can be used
Power	Grid operators (TSO/DSO)		New expertise required in the new technologies that are increasing their share of energy generation (e.g., renewables) and balancing technologies (e.g., batteries)
Other	Professional services		New expertise on ESG topics in range of professional services (e.g., knowledge of new regulations for lawyers and knowledge of green finance for financial professionals)

Analysis carried out by McKinsey for CCAC Carbon Budget Proposals

Challenges and Opportunities: Agriculture, employment and skills

- Significant action is required for a transition that supports low-emissions agriculture and land use, sustainable rural development, and a reversal in the decline in water quality status and biodiversity.
- Challenging targets for the sector, but also opportunity to develop export markets in alternative proteins and the bioeconomy.
- Green exports and international reputation.
- Role of new technologies and innovation.
- Addressing climate change through deployment of technologies and diversification of activities should be enabled through design, resourcing and implementation of policies. These need to present viable and attractive options for farmers and support rural communities.



Projections of emissions from agriculture (Mt CO_2 eq) under 'with existing measures' and 'with additional measures' based on NCAP2021 (Source: EPA)

Conclusions

- Current EPA projections to 2030 indicate that the first two carbon budgets present a significant challenge based upon existing and planned measures, with significant gaps to meeting targets.

- Sectoral emissions ceilings will be challenging to meet, but it is critical that planning and implementation of measures across all sectors is advanced urgently if we are to close the substantial gap between ambition and action.

- Ireland is well placed to take advantage of opportunities, for example through our vast renewable resource and there are opportunities for innovation and new technologies to play a significant role.

Contact

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https://www.climatecouncil.ie/

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ENTERPRISE IRELAND

Making the Digital Transition

Ruairí Ó hAilín
03-10-2022

Rialtas na hÉireann
Government of Ireland

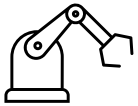
#GlobalAmbition



Digital – Expectations?

Digital – Expectations?

Visibility



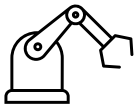
Automation

Insight

Excellence

Digital – Expectations?

Visibility



Automation

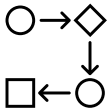
Insight

Excellence

Just add Robots and some AI??

Digital – Critical Success Factors?

Design around customer value

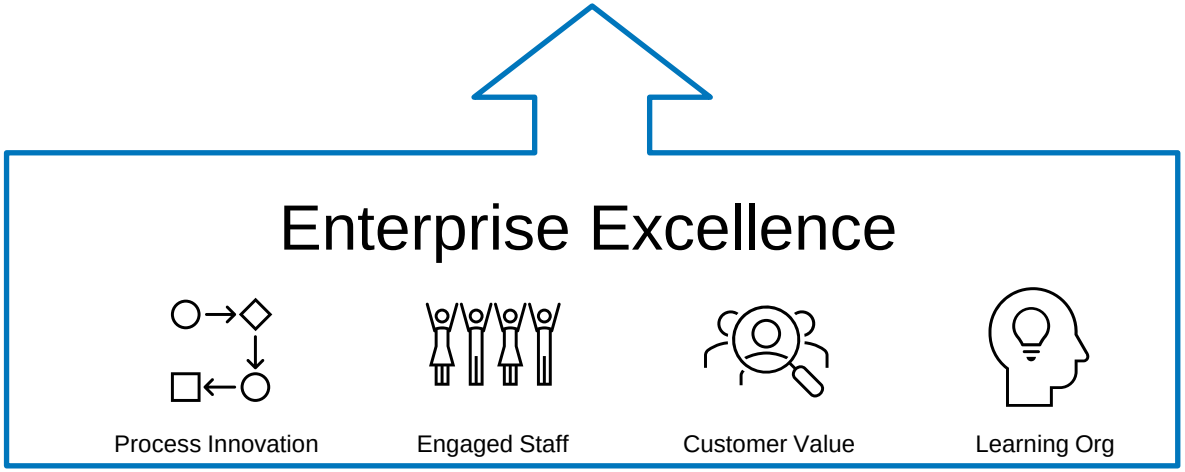


Process Innovation

High Engagement

Learning organisation

For Digital Gain – Need Foundation of Excellence



Enterprise Excellence – Models?

Customer value

Process Innovation

High Engagement

Learning organisation

Mór Enterprise Excellence

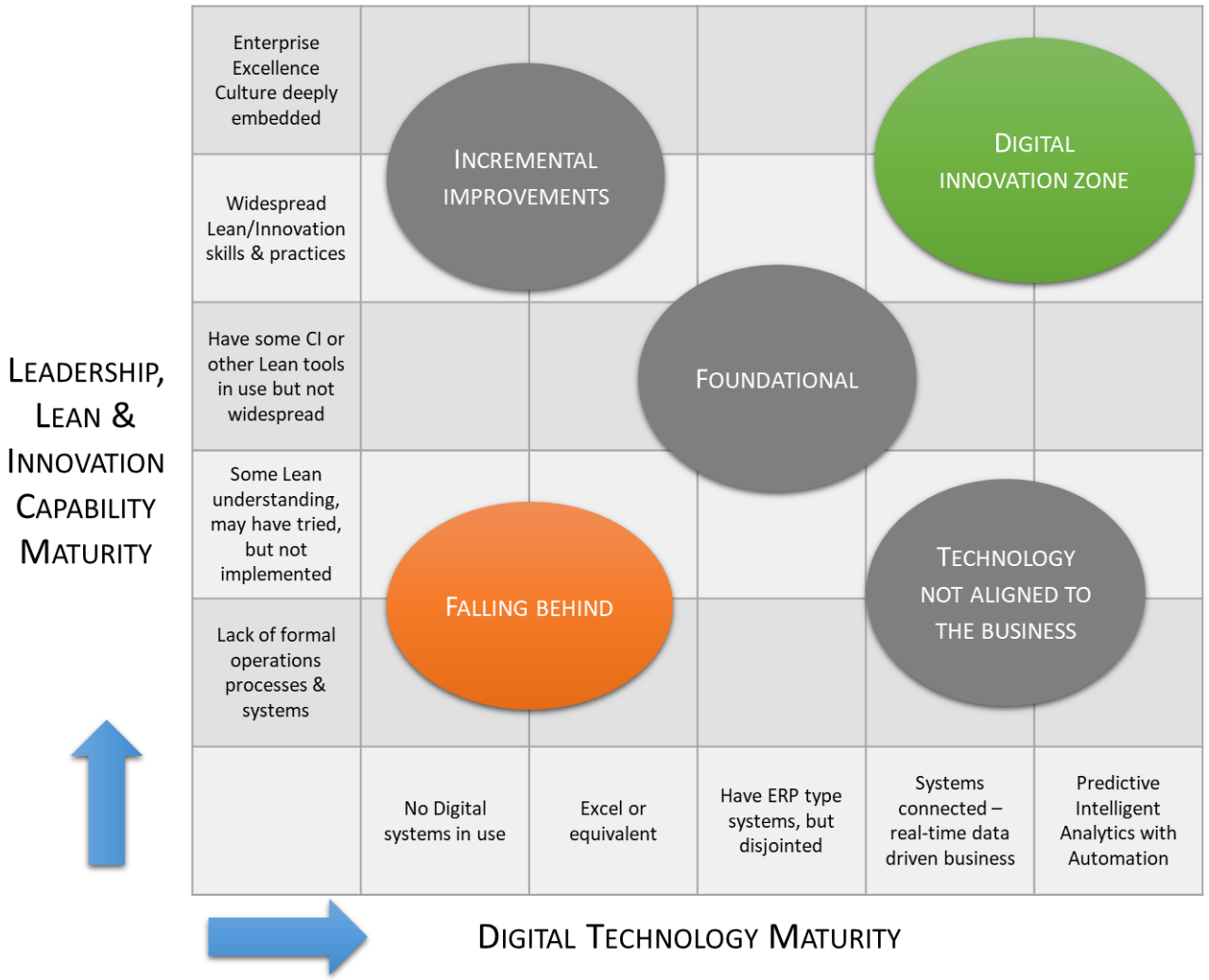
Shingo Model

Lean Management

Total Quality Management

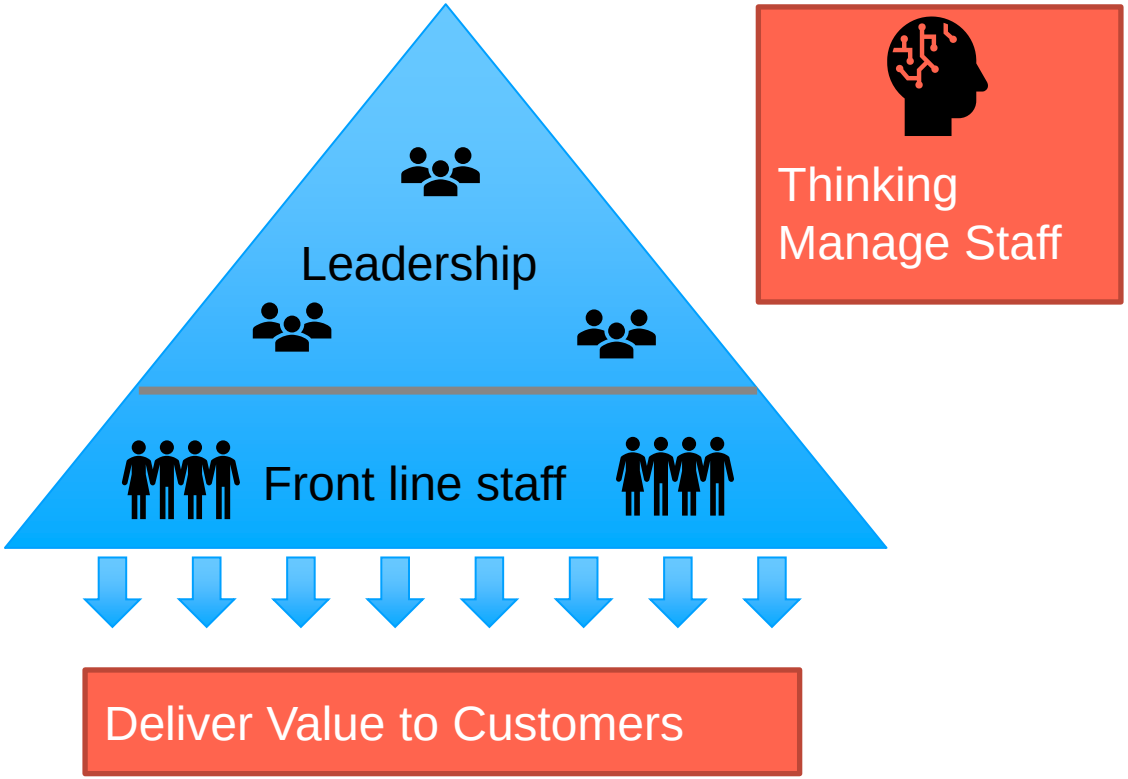
Toyota Production System

World Class Manufacturing


Enterprise Excellence Culture deeply embedded
Widespread Lean/Innovation skills & practices
Have some CI or other Lean tools in use but not widespread
Some Lean understanding, may have tried, but not implemented
Lack of formal operations processes & systems
INCREMENTAL IMPROVEMENTS
DIGITAL INNOVATION ZONE
FOUNDATIONAL
FALLING BEHIND
TECHNOLOGY NOT ALIGNED TO THE BUSINESS
No Digital systems in use
Excel or equivalent
Have ERP type systems, but disjointed
Systems connected – real-time data driven business
Predictive Intelligent Analytics with Automation
LEADERSHIP, LEAN & INNOVATION CAPABILITY MATURITY
DIGITAL TECHNOLOGY MATURITY

Enterprise Excellence Culture deeply embedded					
Widespread Lean/Innovation skills & practices			5		
Have some CI or other Lean tools in use but not widespread	1	11	15		
Some Lean understanding, may have tried, but not implemented		7	6	2	
Lack of formal operations processes & systems	1	5	1	1	
	No Digital systems in use	Excel or equivalent	Have ERP type systems, but disjointed	Systems connected – real-time data driven business	Predictive Intelligent Analytics with Automation

EI client data 2022 – Operational Excellence & Digital - pre-project


Leadership
Front line staff
Thinking
Manage Staff
Deliver Value to Customers

Q: who believes this?

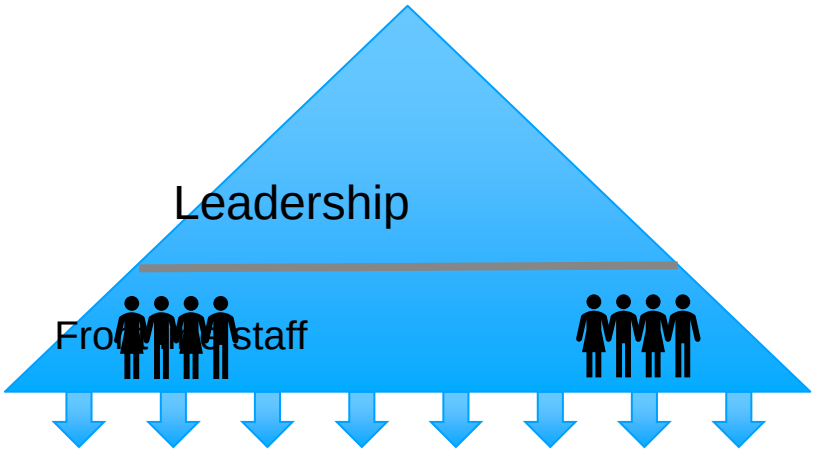
“Our People are our most important asset”

Q: who believes this?

“Our People are our most important asset”

But

“We have a Talent and Skills deficit”



Complex control systems

Co-ordination difficult

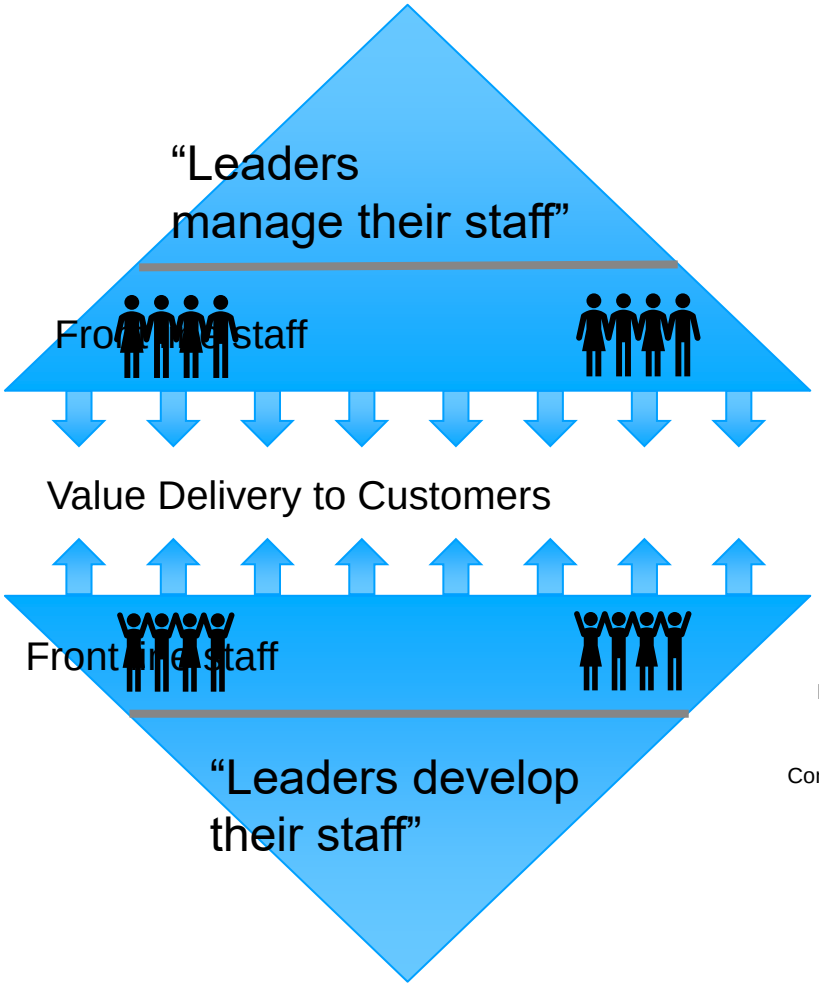
Inflexible, brittle processes

Lack of Innovation

Talent Wasted

Traditional Management

"Human Centred" Lean model



Co-ordination difficult
Lack of Innovation
Complex control systems
Inflexible, brittle processes

Talent Wasted

Measure Customer Value
Clear Purpose
Aligned to Purpose
Empowered
Strong Processes
Continuous Improvement

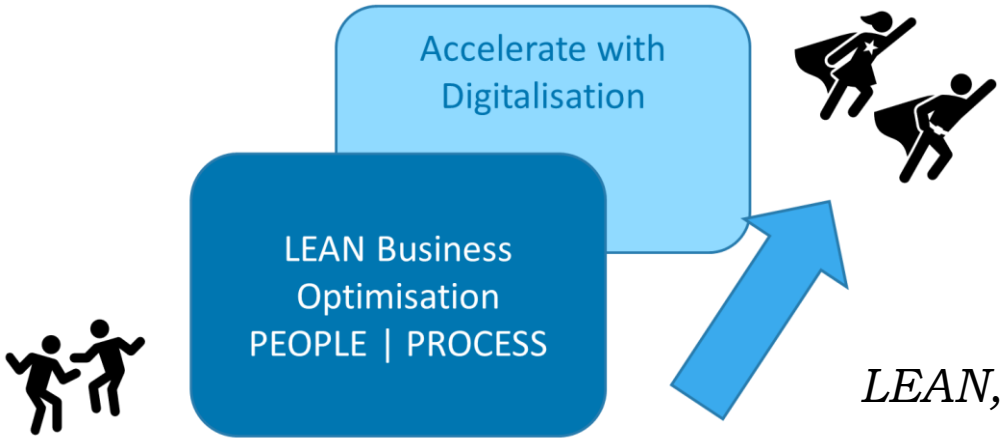
Ready for Digital

Challenge to Policy makers

Embed Lean into our Digital & Green Strategy – a national priority

Emphasise new paradigms of leadership

Focus on SMEs (the successful large companies get this already)



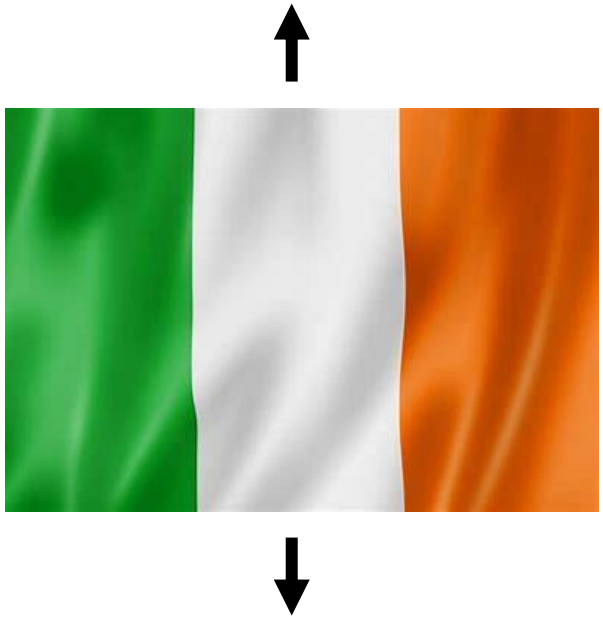
LEAN, GREEN & DIGITAL

Cluster-Based Enterprise Policy: A Tool for Ireland?

Dr. Christian Ketels
Harvard Business School

Symposium on Enterprise Policy Whitepaper
Dublin, Ireland
3 October 2022

Strong Clusters



Weak
Cluster Organizations

Is this a problem?

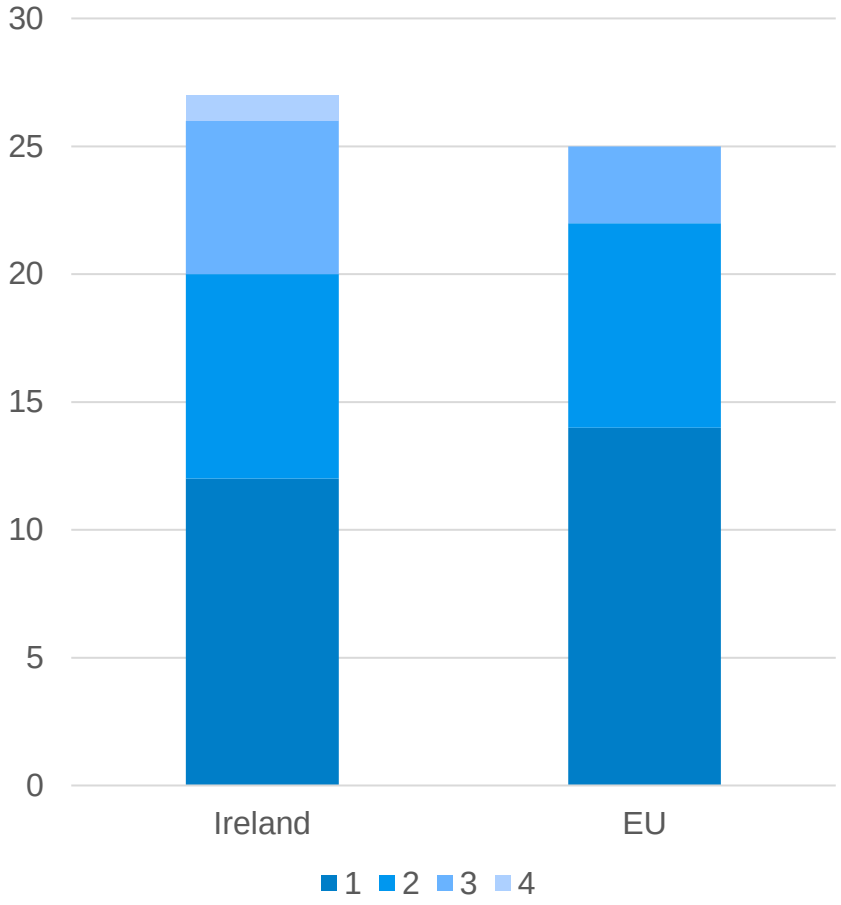
A missed opporunity?

Strong Clusters in the Irish Economy

International Cluster Competitiveness Profiles

Export Value by Cluster | **Export Value by Subcluster** | Specialization by Cluster

Clusters by Stars per Region



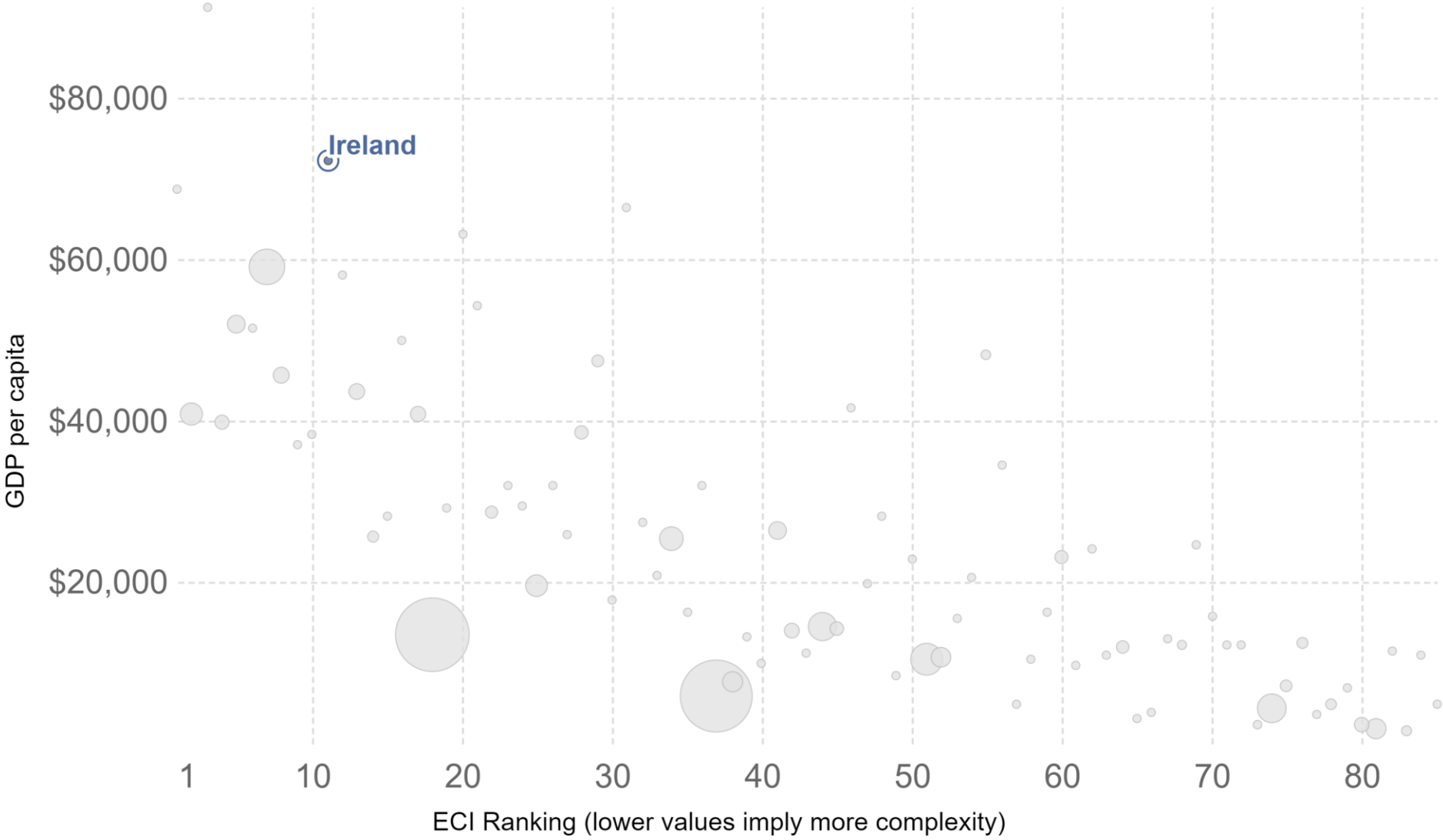
Stars indicate strength on size, specialization, productivity, and growth; higher # = stronger performance

Ireland Exports by Subcluster, 2019

Source: European Cluster Panorama, 2016; ISC, Harvard Business School

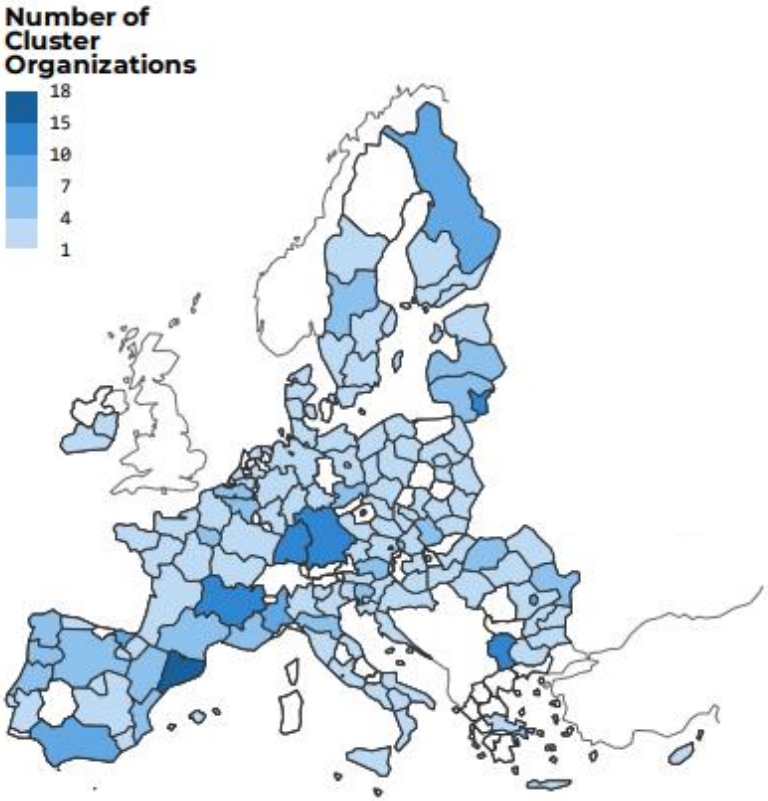
Economic complexity rank vs. GDP per capita, 2016

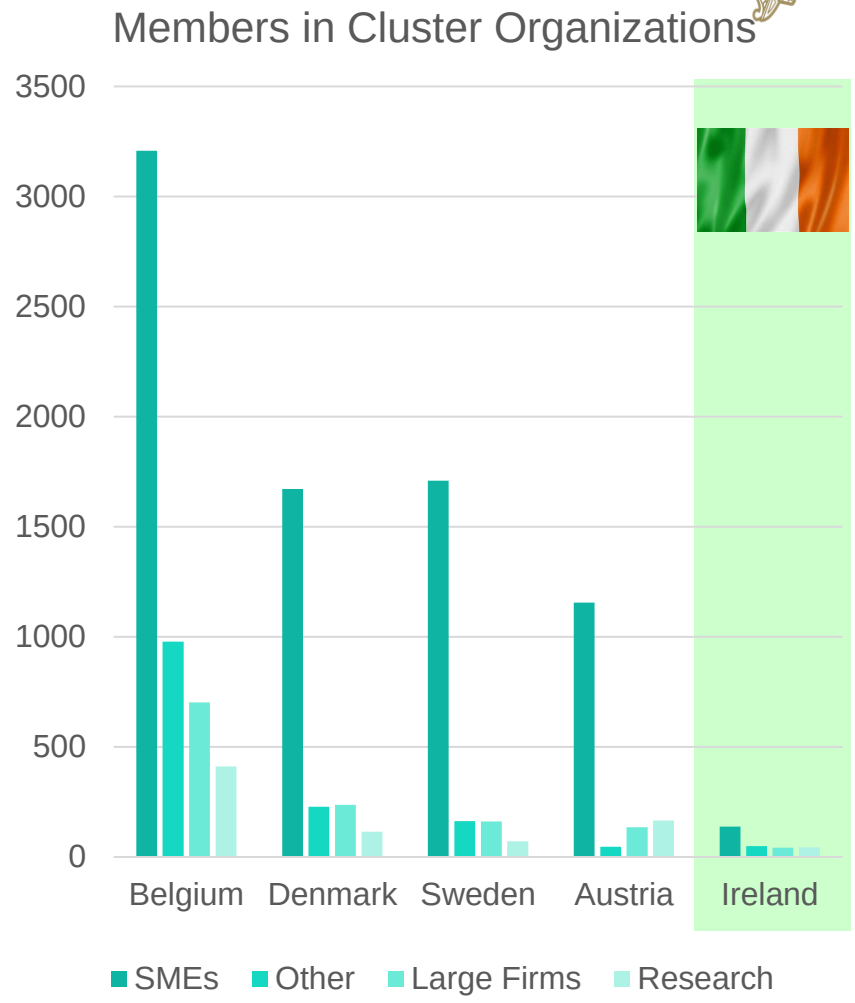
Economic complexity corresponds to ranking in the Economic Complexity Index (ECI). The ECI ranking orders countries from the most to the least economically complex. GDP per capita is adjusted for inflation (at constant international prices) and accounts for differences in purchasing power.



Source: Observatory of Economic Complexity, Our World in Data

Shallow Reach of Irish Cluster Organizations



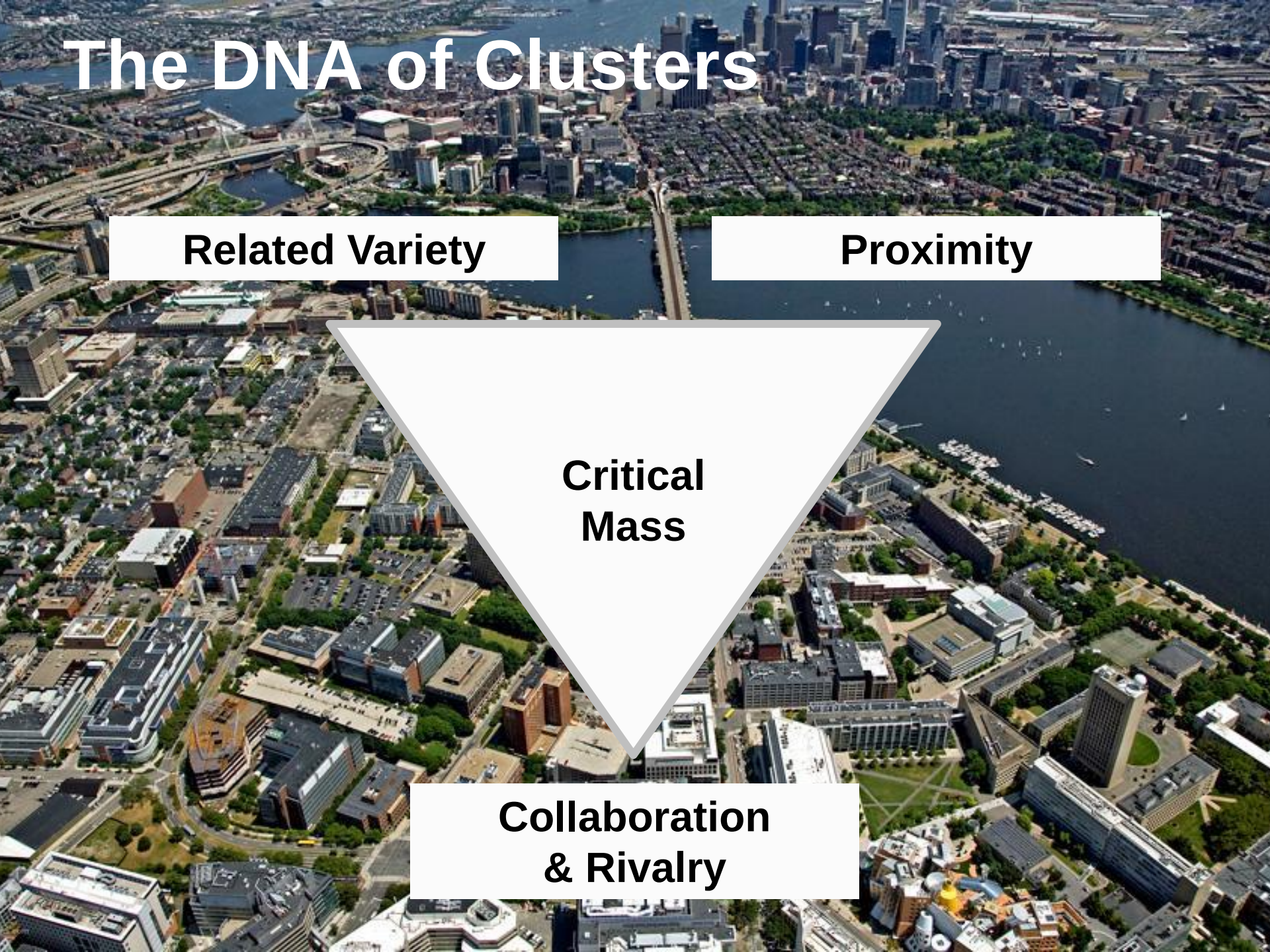


Source: European Cluster Panorama, 2021

What is the Rationale for Cluster-Based Enterprise Policy?

What Issues should Irish Cluster-Based Enterprise Policies focus on?

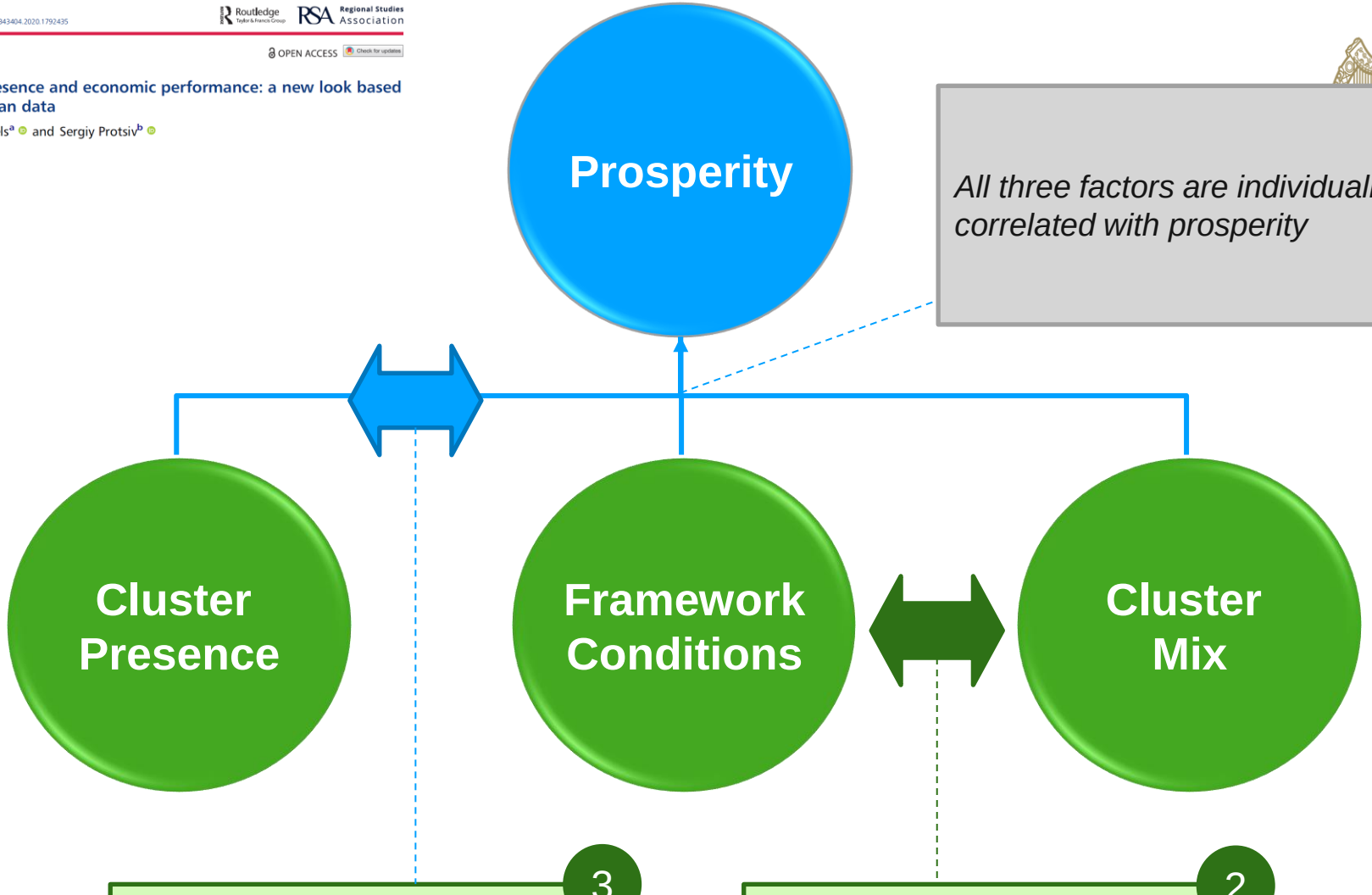
The DNA of Clusters



REGIONAL STUDIES
https://doi.org/10.1080/00343404.2020.1792435
Routledge Taylor & Francis Group RSA Regional Studies Association
OPEN ACCESS Check for updates

Cluster presence and economic performance: a new look based on European data

Christian Ketels[a] and Sergiy Protsiv[b]



1

All three factors are individually correlated with prosperity

2

Cluster Mix is endogenous to *Framework Conditions*, while *Cluster Presence* is not

3

Framework Conditions have the strongest impact on prosperity, but *Cluster Presence* matters as well

Clusters **emerge naturally**

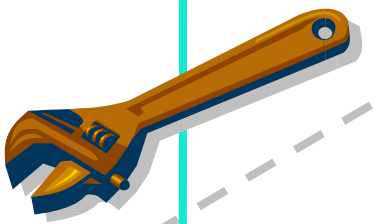
What role for policy?

Two Visions on Cluster Policies

BETTER (Competitiveness)

- *Long-term, systemic impact*
- *Low risk*

LEVERAGING CLUSTERS



Business Environment

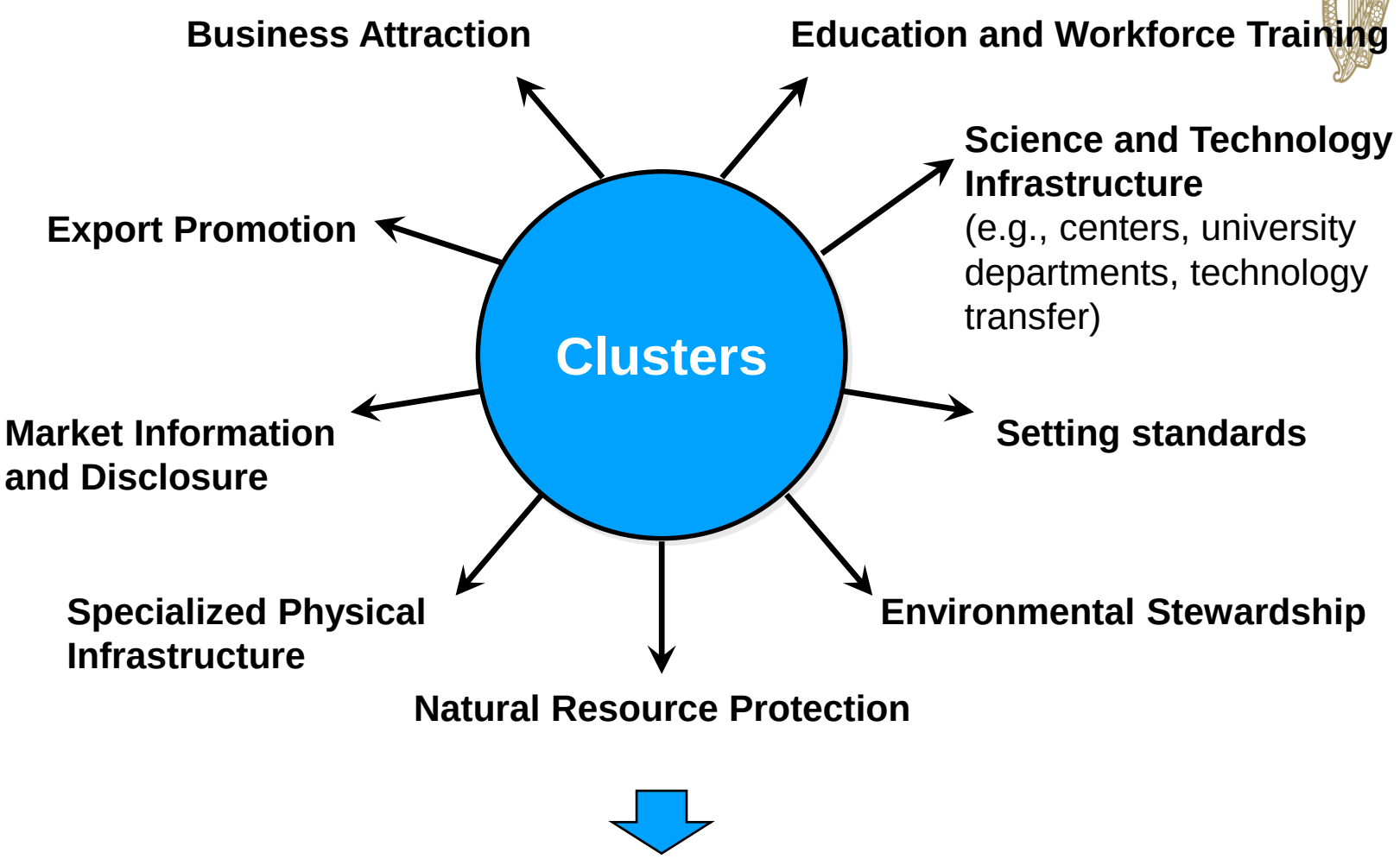
- *Short-term, narrow impact*
- *High risk*

CREATING CLUSTERS

MORE (Agglomeration)

Clusters

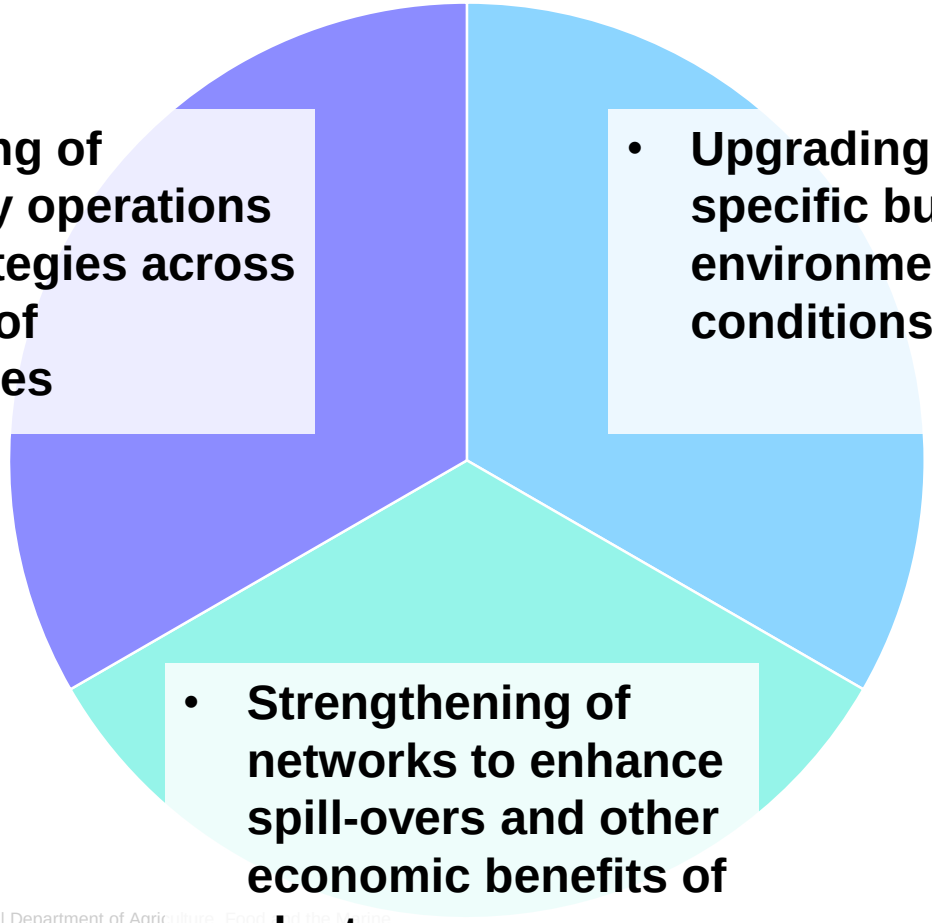
Organize Public Policy around Clusters



- Clusters provide a framework for **organizing the implementation** of public policy and public investments towards economic development

What are Cluster Initiatives?

*Cluster initiatives are **collaborative activities** by a **group** of companies, public sector entities, and other related institutions with the objective to improve the competitiveness of a group of **interlinked economic activities** **in a** **specific geographic region***

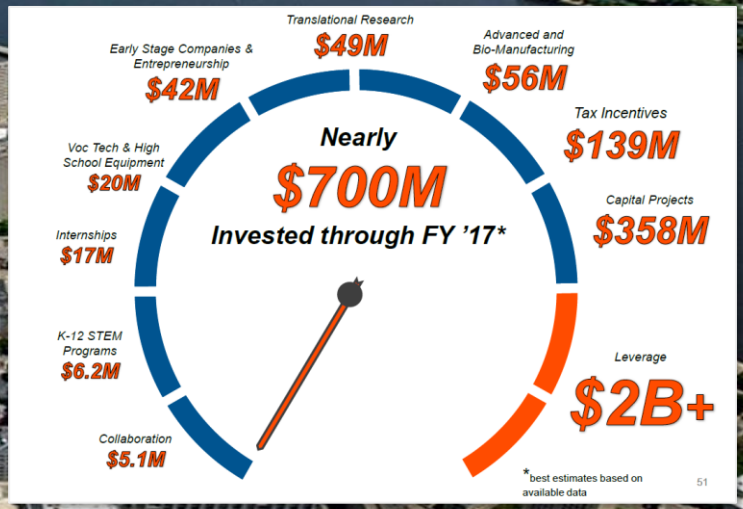


- **Upgrading of company operations and strategies across a group of companies**
- **Upgrading of cluster-specific business environment conditions**
- **Strengthening of networks to enhance spill-overs and other economic benefits of clusters**

Cluster Initiatives: From Action to Strategic Campaign

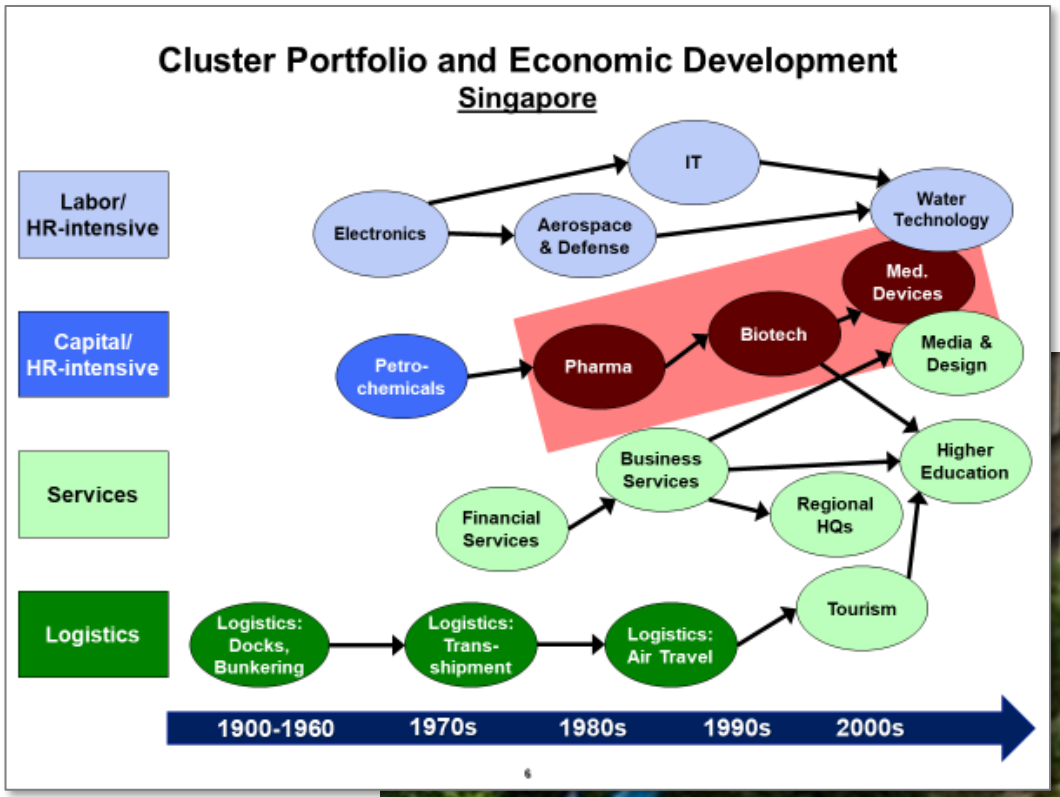
Life Sciences Cambridge, MA

- Traditional global hub of biomedical research pursuing world-class commercial activity
- Cluster diagnostics revealed gaps in the cluster structure and business environment
- Targeted action agenda developed under leadership of public-private cluster initiative, leveraging significant state investment

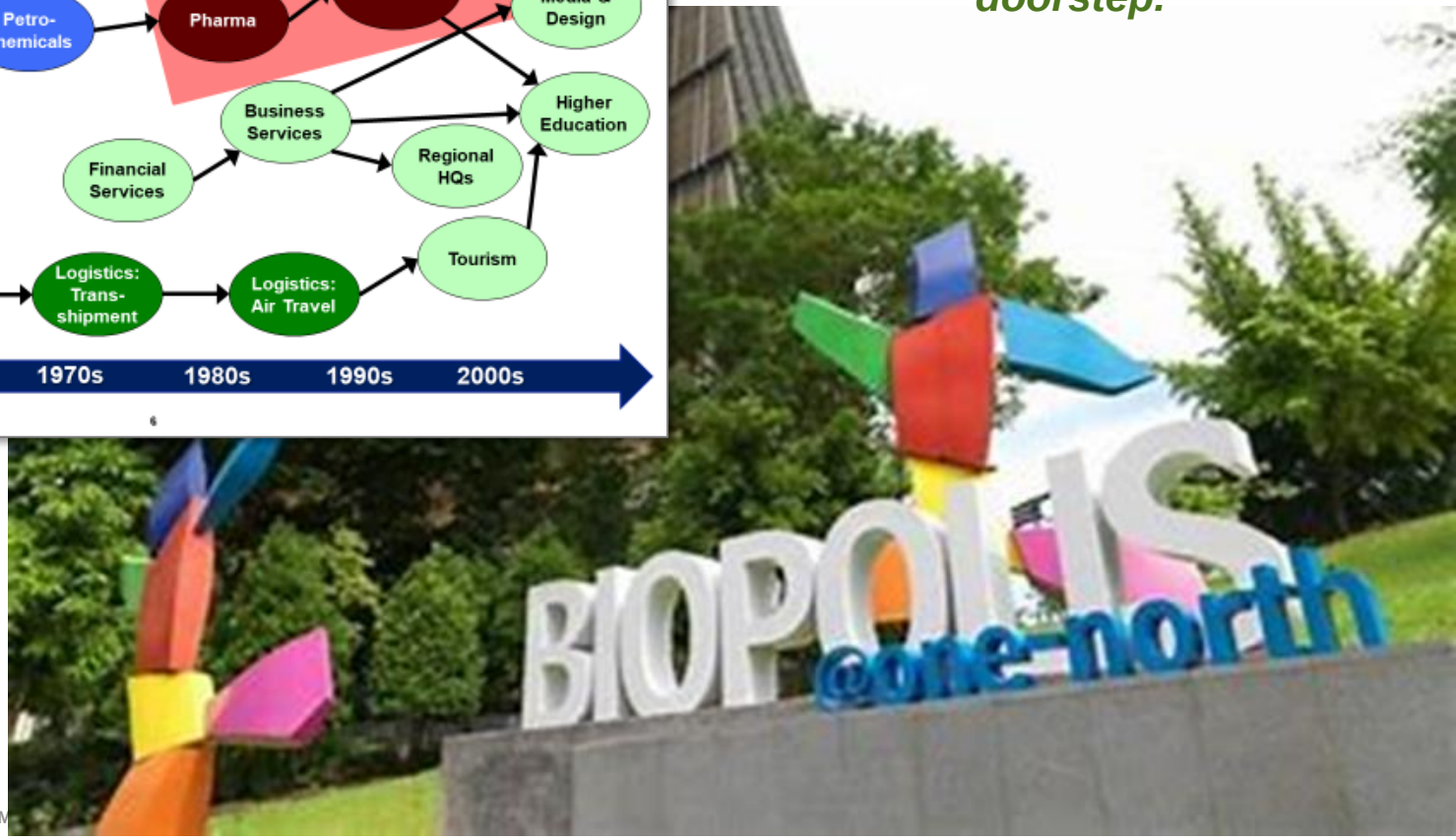


Source: Susan Windham-Bannister

From Cluster Initiative to Regional Growth Strategy

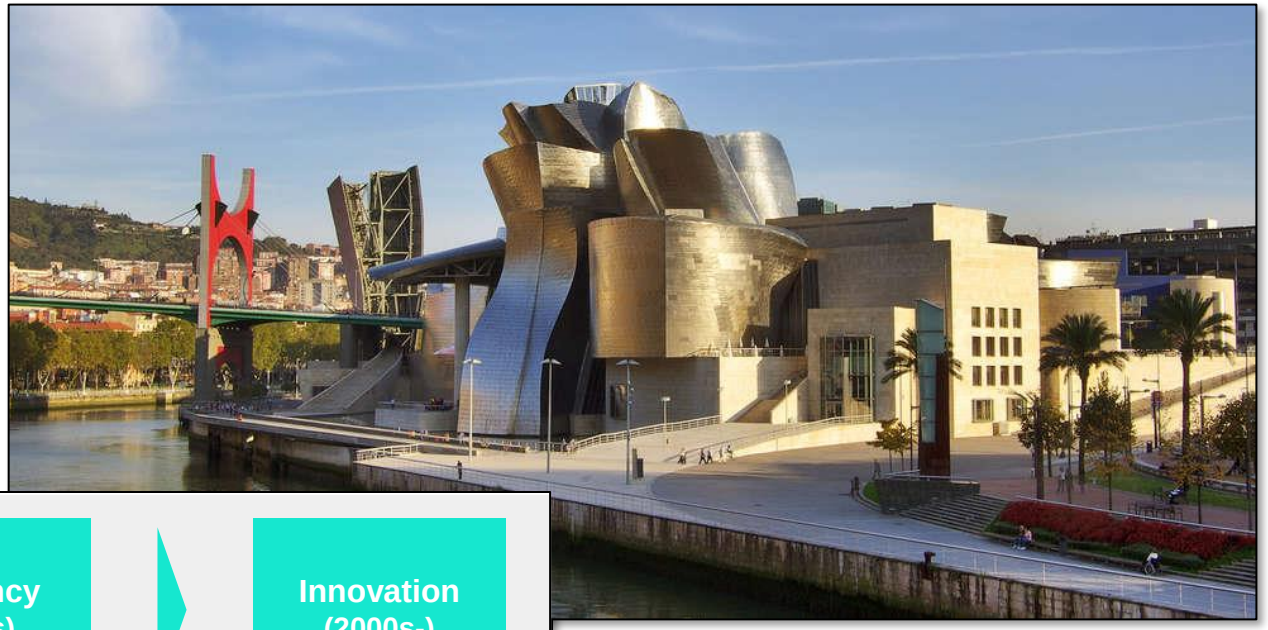


"An OECD business environment with Emerging Market dynamism and Asia's market at its doorstep."



Cluster-Based Regional Development

Basque Country, Spain



Cluster Initiatives

Institutions (1980s) → **Efficiency (1990s)** → **Innovation (2000s-)**

- Machine Tools AFM, 1992
- Appliances ACEDE, 1992
- Automotive ACICAE, 1993
- Port Logistics UNIPORT BILBAO, 1994
- Environmental Services ACLIMA, 1995
- Electronics, Computing and Telecom GAIA, 1996
- Energy CLUSTER ENERGIA, 1996
- Aeronautics HEGAN, 1997
- Maritime Industry ORO MARÍTIMO VASCO, 1997
- Paper CLUSTER PAPEL1998
- BioBasque, 2002
- Audiovisual EIKEN, 2004
- Transport and Logistics CLUSTERTIL, 2005

Transformative Place-Making

And other cross-cutting policies

Irish Cluster-Based Enterprise Policy
Choices

Ireland-specific choices to make

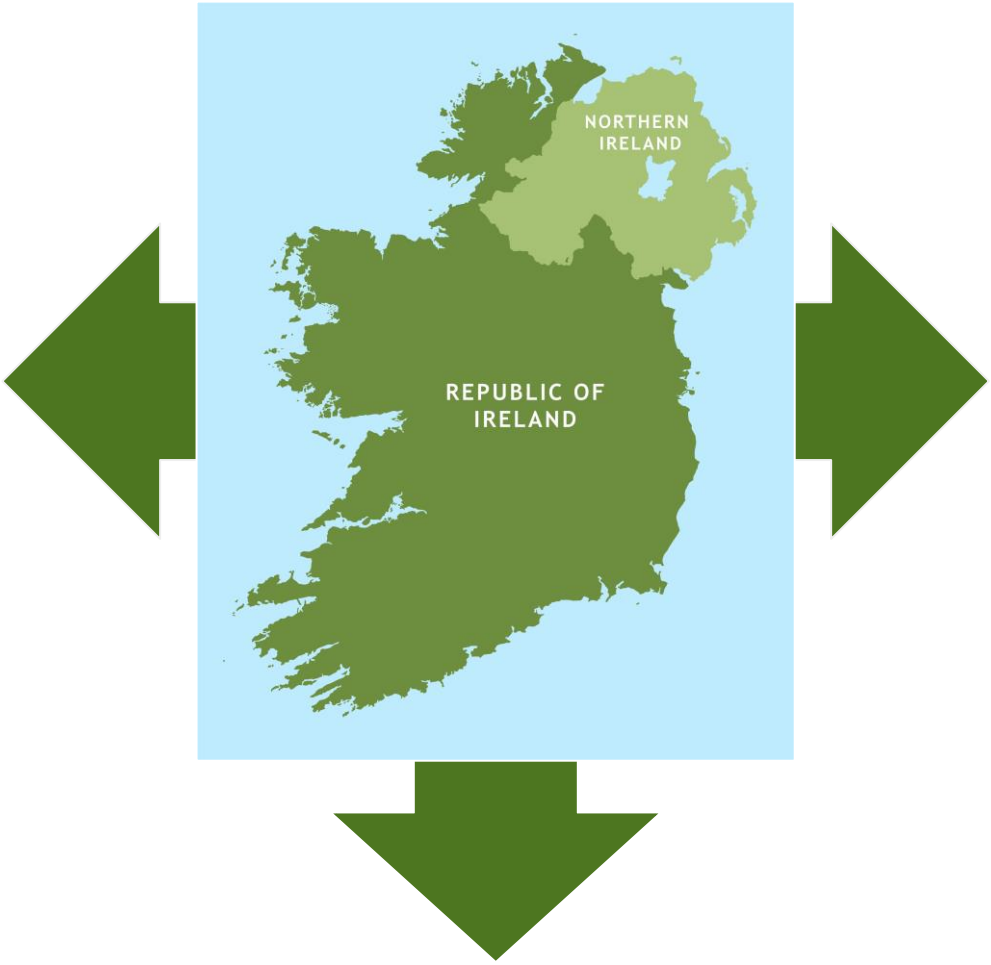
- Tasks
- Tools
- Structures
- Funding
- Training

Broad international experience for Ireland to draw on

Irish Cluster-Based Enterprise Policy

Key Tasks

Develop
Irish firms
in clusters
dominated by
MNCs



Upgrade
productivity
in clusters
dominated by
Irish firms

Accelerate Ireland's
Green Transition

An Roinn Fiontar,
Trádála agus Fostaíochta
Department of Enterprise,
Trade and Employment

Clustering: An underutilised enterprise policy tool and a prospective approach for Ireland

John Hughes, Department of Enterprise, Trade & Employment

3 October 2022

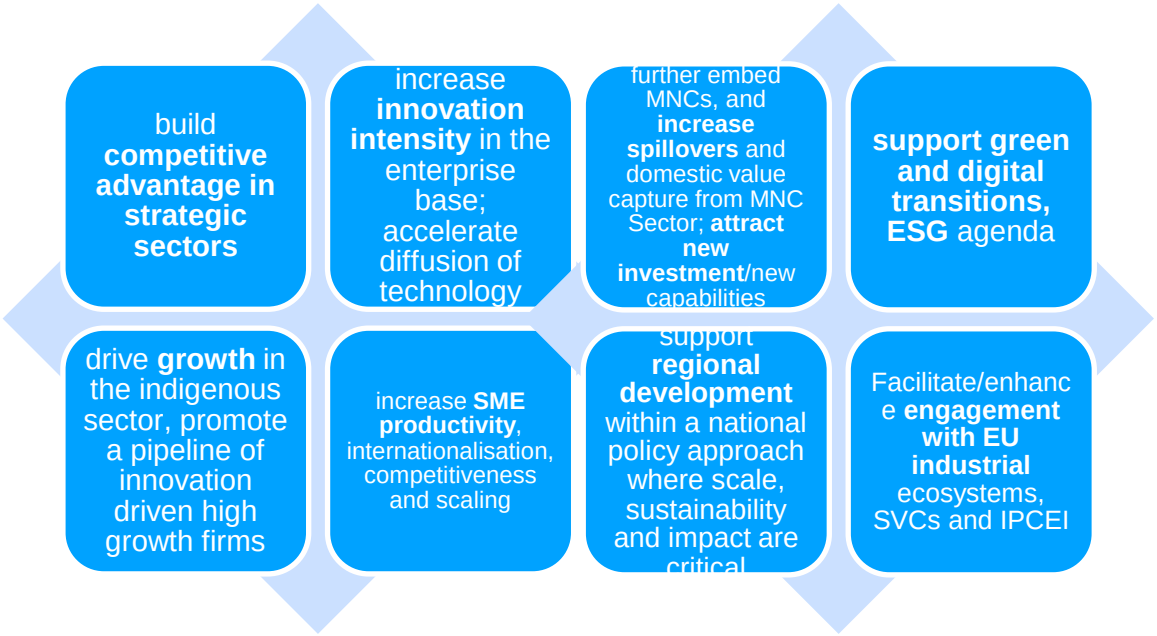
Context & Rationale

Ireland's enterprise and innovation policy – fosters collaboration, cooperation and linkages as well as sectoral ecosystem development

Research has confirmed Ireland's high profile concentration/agglomeration/specialisms in key sectors & a growing landscape of clusters and networks

National clustering policy approach will aim to ensure a strong impact from existing and future clusters in Ireland

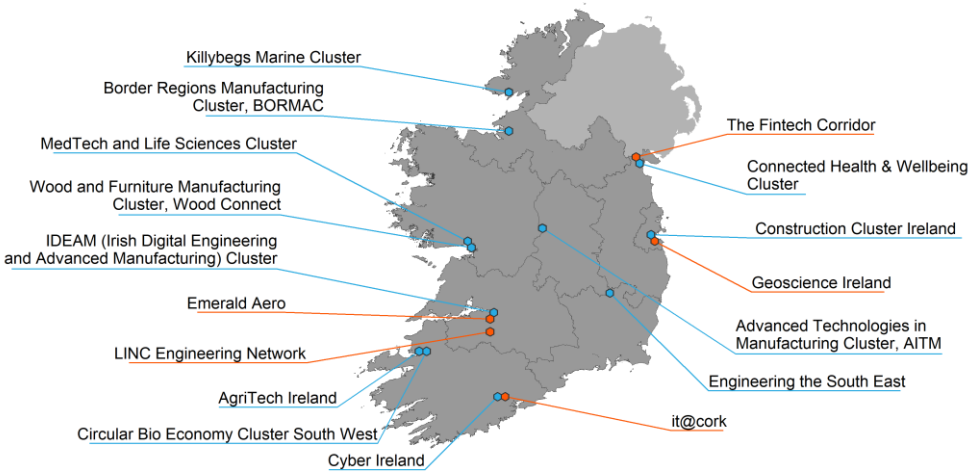
We see an increased emphasis of clustering as a tool to



Recognising that the goals and objectives will differ amongst different clusters

Ireland's existing cluster landscape

Nascent but developing landscape of 'clusters' in Ireland with a much larger number of industry associations, networks, specialisms, sectoral agglomerations.



Challenges now

- Lack of coherence
- Ireland's cluster landscape is relatively nascent, small scale and fragmented
- Developed quite organically relative to the policy-driven approaches internationally
- Underutilisation of EU funding and international networks

Policy challenges

Defining clustering objectives for the Irish context

Clustering in areas of current or potential competitive advantage

Maximising scale while harnessing benefits of proximity and regional development

Ensure established clusters stay current and relevant

Sustainability of cluster organisations - long-term funding commitment & industry co-funding

Integration of a strengthened national clustering approach within existing effective structures and policies

Strengthening Clustering as a tool of Irish Enterprise Policy

Deliberate selective approach to cluster identification

- Aligned with national enterprise policy priorities – including productivity, skills (employee and management), innovation etc.
- Portfolio approach & competitive advantage priorities
- Build on existing clustering and enabling infrastructure

Simpler and stronger cluster landscape

- Limited number of strategic clusters - tiered and flexible approach
- National clusters - headquartered regionally, as appropriate
- Considerations for institutional-strengthening – professionalisation, governance, & resourcing etc.

National Clustering Programme

- Aims and objectives articulated
- Medium– to long-term funding commitments; regular performance review
- Policy monitoring and evaluation

An Roinn Fiontar,
Trádála agus Fostaíochta
Department of Enterprise,
Trade and Employment

White Paper on Enterprise Symposium

Monday, 3rd October 2022