

Parallel Session (K.13)

National / Regional Inter-sectoral collaboration
structures



Societal Impact of Social Sciences,
Humanities & Arts Conference
2- 4 November, Stockholm

National / Regional Inter-sectoral collaboration structures

Michael Jacobson

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National/Regional Inter-sectoral Collaboration Structures

Michael Jacobson

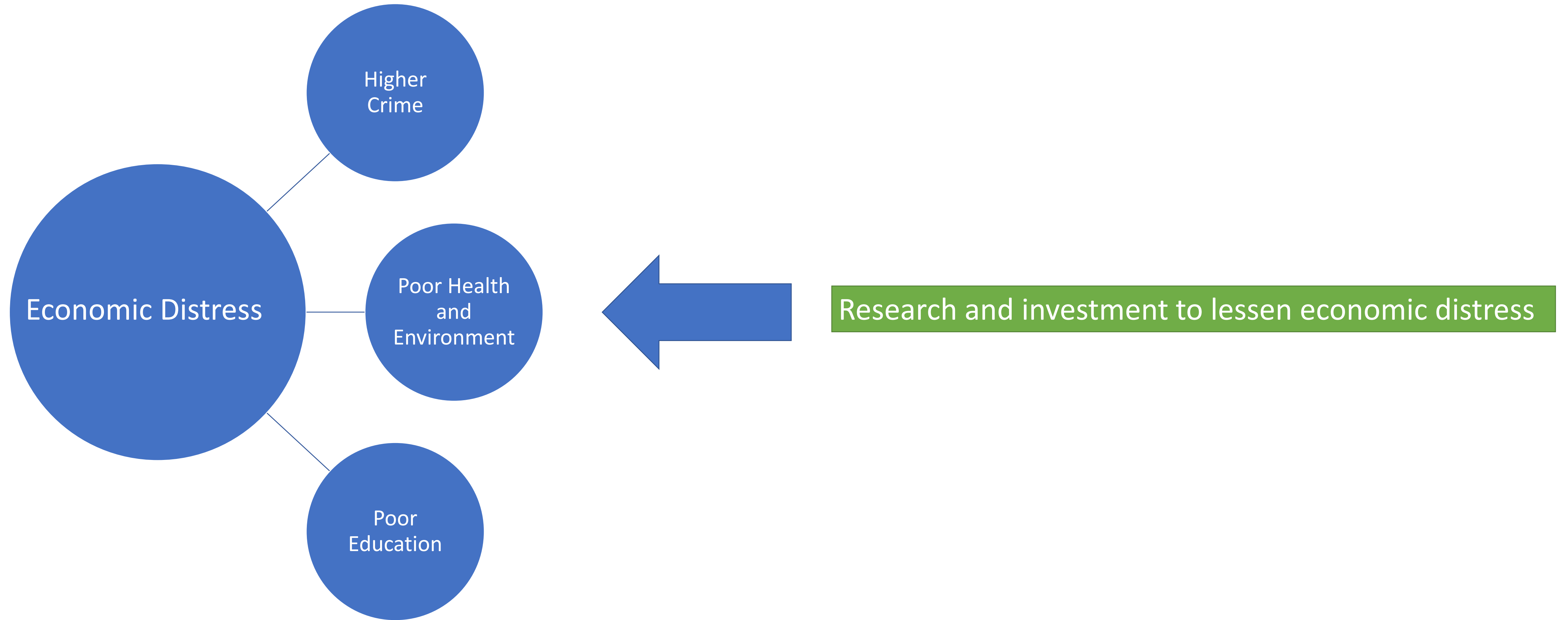
Binghamton University

Session Introduction

AESIS- Societal Impact of Social Sciences, Humanities and Arts

November 2, 2022

Research and Development and Economic Growth



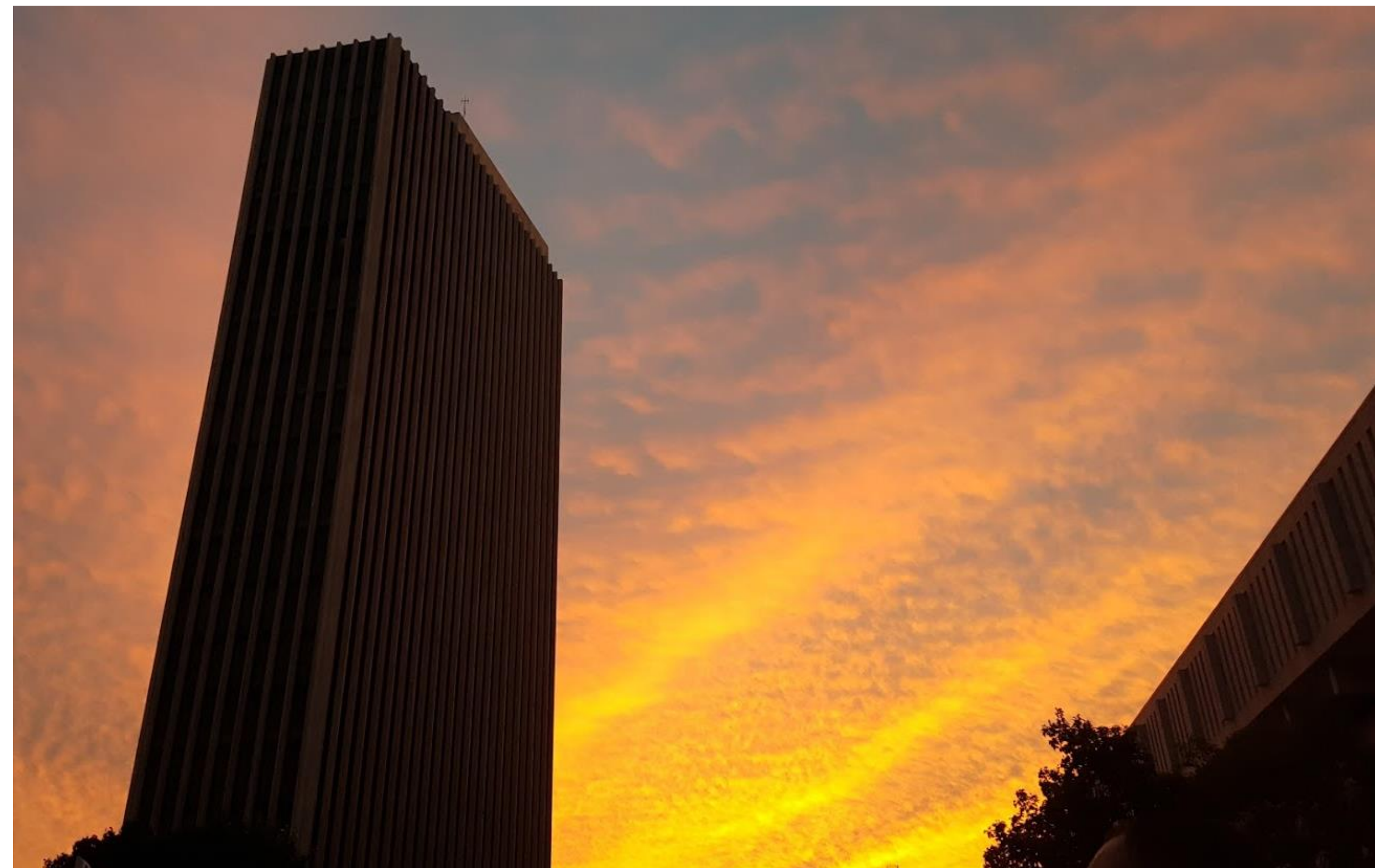
Previous Approaches to Economic Development

- Tax incentives, Enterprise/Opportunity zones, Block Grants
- Incentivize businesses to invest in high needs areas
- Top-down approach- superficial view of place
- Businesses move to chase incentives
- Consolidation of resources in specific regions



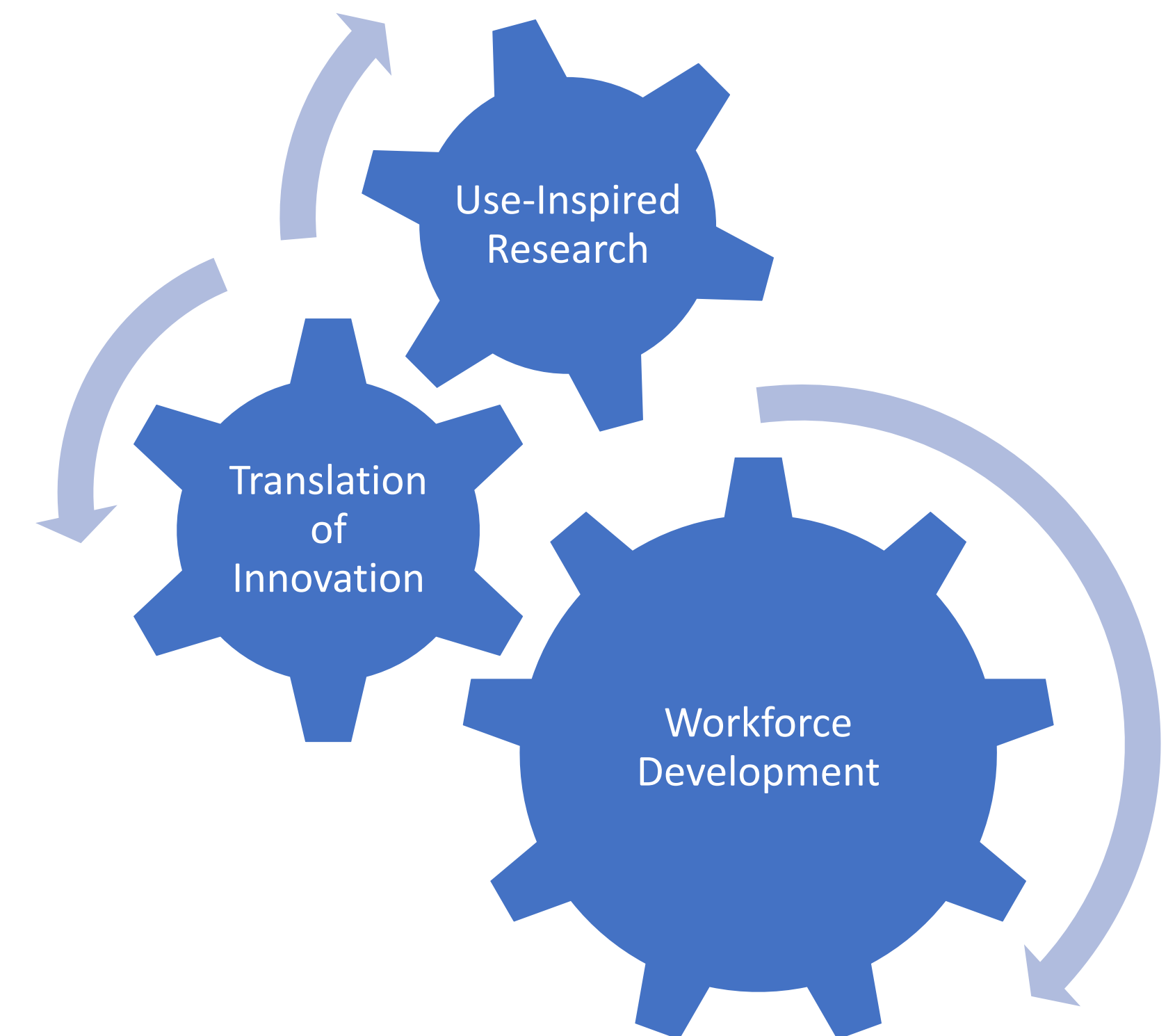
Place-Based Economic Development

- Bottom-up approach
- Build up the region's assets and resources
- Contingent on the region's sense of place or community identity
- Build jobs around workers



National Science Foundation- Expanded Mission

- New Directorate- Technology and Innovative Partnerships (TIP)
- Flagship Program- Regional Innovation Engines
 - Advance critical technologies
 - Address national and societal challenges
 - Foster partnerships across industry, academia, government, nonprofits, civil society, and communities of practice
 - Promote and stimulate economic growth and job creation
 - Spur regional innovation and talent

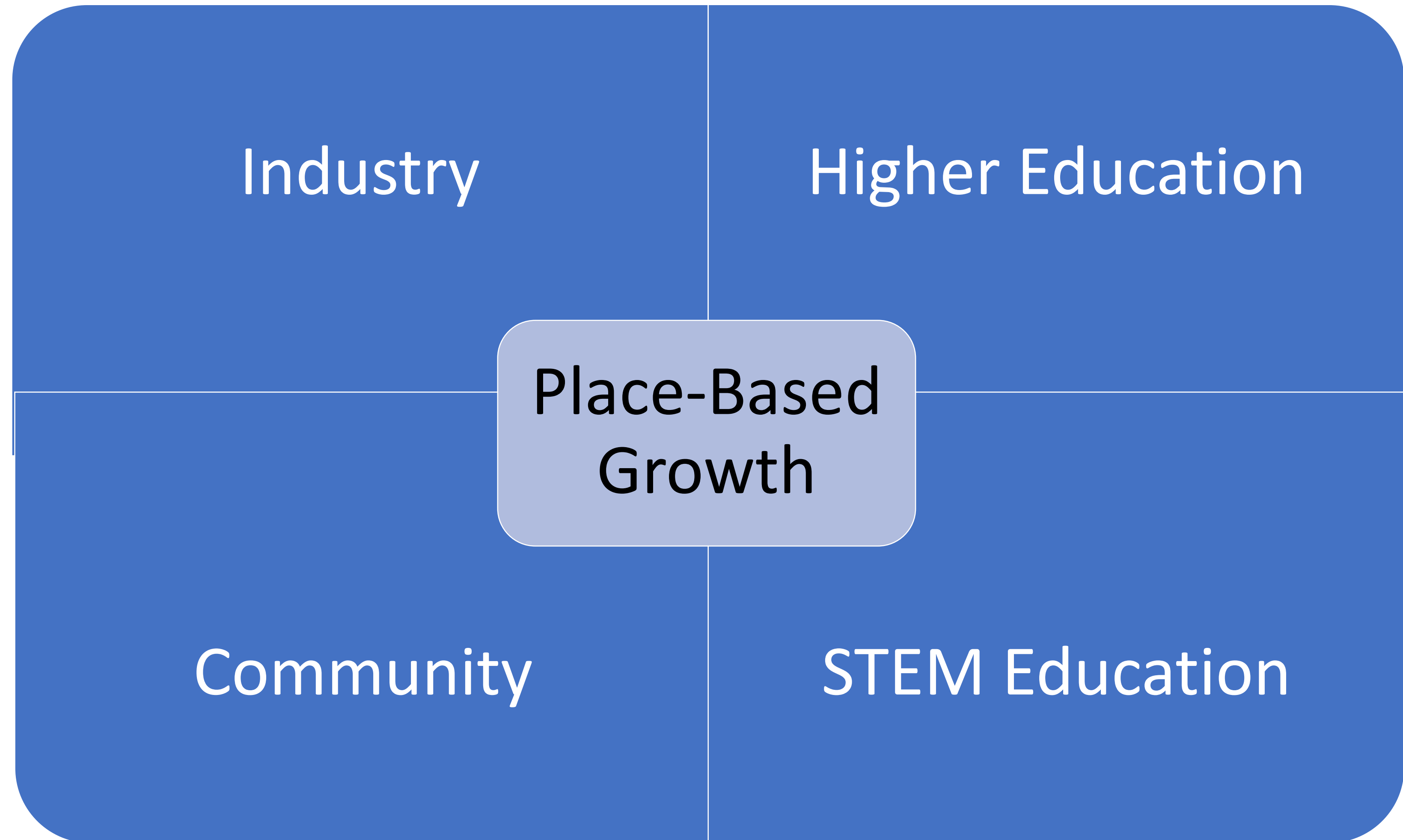


Questions and Challenges

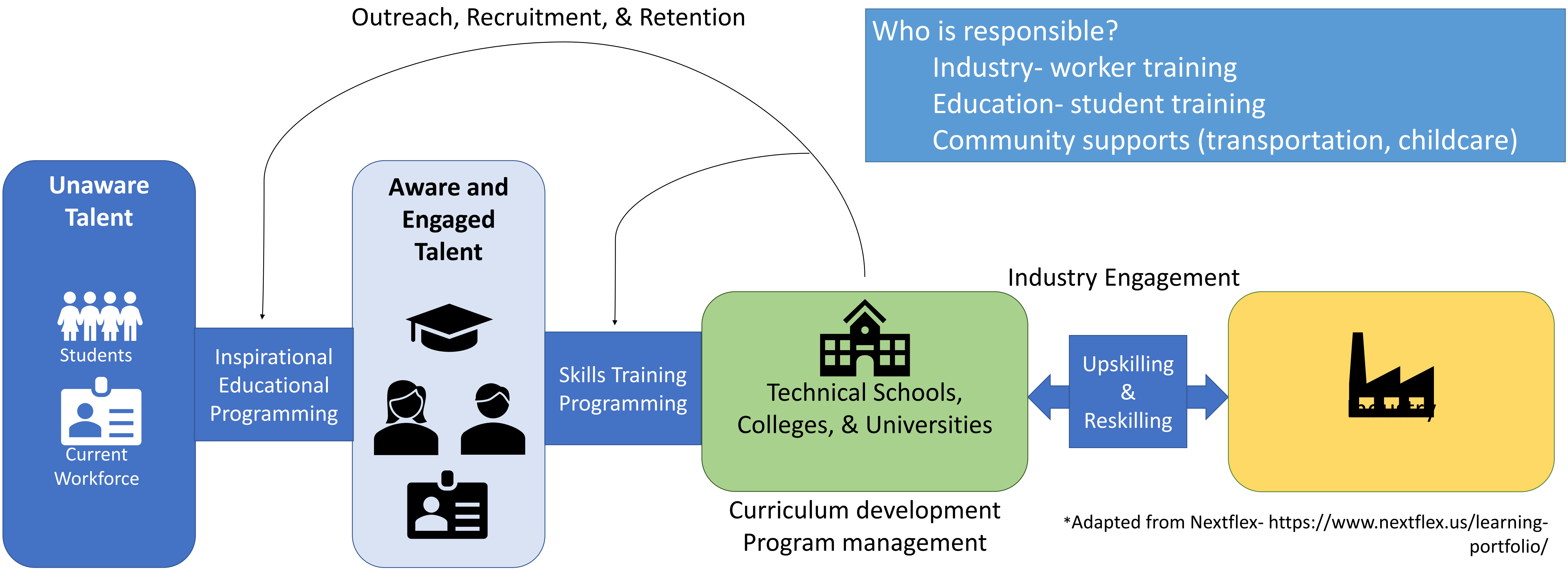
- What is a region and who decides?
- How does a place-based approach merge national and local interests?
 - Grand societal challenge versus local needs
 - Addressing diversity, equity, access
- What happens when they are in conflict?
- How can economically distressed areas or high-needs institutions compete equally with highly research-active ones?
 - Do they have the infrastructure to implement plans?

Effective Partnerships

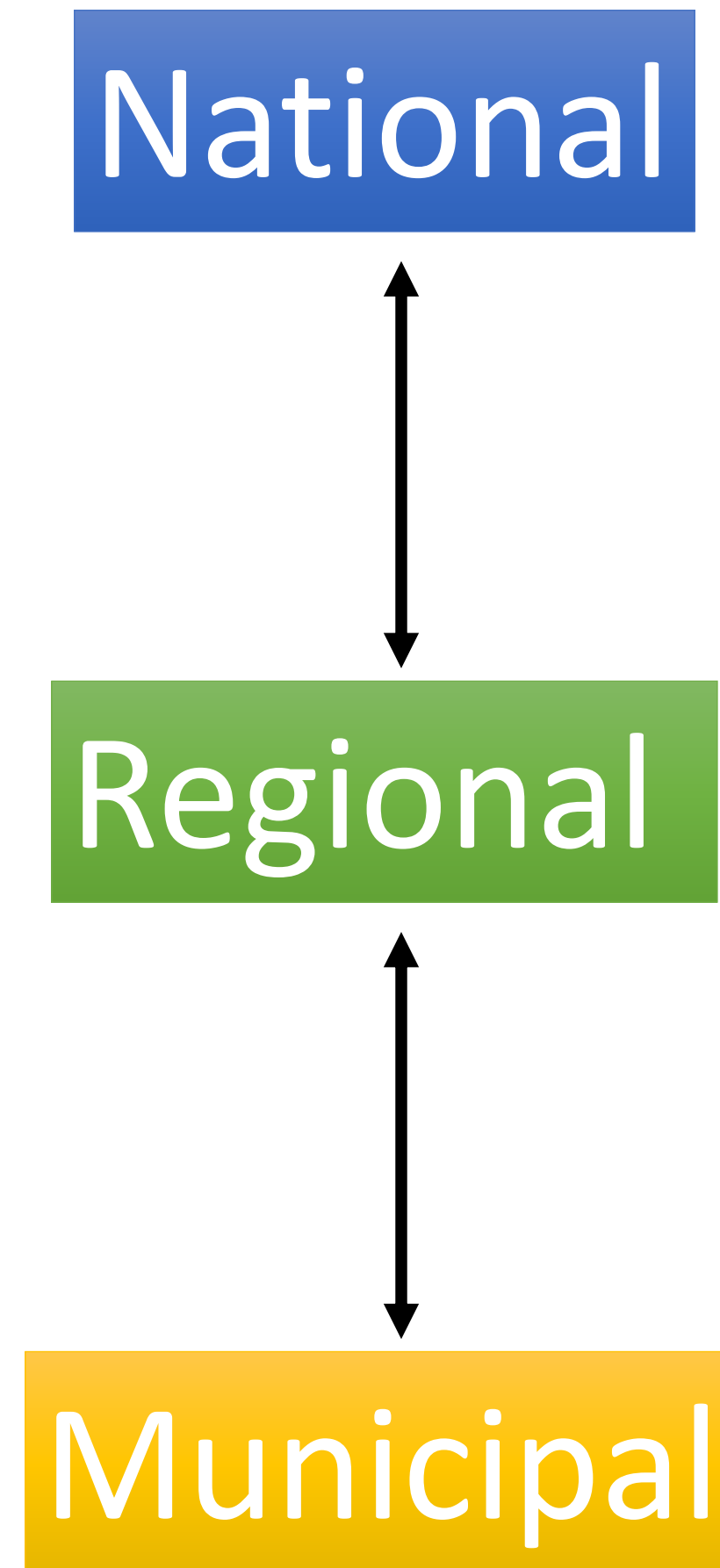
- Who needs to be involved?



Workforce Development



Scaling Programs



Technology versus Social Sciences

- What are the impacts or unintended consequences of technological development?
- Who leads such a project- engineers, natural scientists, social scientists?
- Who defines use-inspired research?



Speakers

- **Rick Delbridge**, Professor of Organizational Analysis & Co-convenor of the Centre for Innovation Policy Research, Cardiff University, Wales, United Kingdom
- **Stefania Pesce**, Senior Research Advisor, Politecnico di Milano, Milan, Italy



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National / Regional Inter-sectoral collaboration structures

Rick Delbridge

*Professor of Organizational Analysis & Co-convenor of the Centre for Innovation
Policy Research, Cardiff University, Wales, UK*



**Cronfa
Her
Prifddinas
Ranberth
Caerdydd**

**Cardiff
Capital
Region
Challenge
Fund**



Centre for Innovation
Policy Research

Canolfan Arloesi
Ymchwil Polisi

Partnering to Deliver Mission-Oriented Innovation: The Cardiff Capital Region Challenge Fund

**Professor Rick Delbridge
Cardiff University**

National / Regional Inter-sectoral Collaboration Structures
AESIS Stockholm 2022

Overview

- Introducing mission-oriented innovation
 - Societal challenges at subnational level
 - Taking a place-based 'ecosystems' approach
- Introducing the Cardiff Capital Region
- Introducing the CCR Challenge Fund and Infuse
- Lessons and reflections

Mission-oriented innovation

A mission-oriented approach uses **specific challenges to stimulate innovation** across sectors. Through well-defined missions—focused on solving important societal challenges related to climate change and environmental quality, demographic changes, health and well-being, mobility issues, etc.—**governments** have the opportunity to determine the direction of growth by **making strategic investments** throughout the innovation chain and creating the potential for greater spillovers across multiple sectors including low-tech sectors

Mazzucato 2018



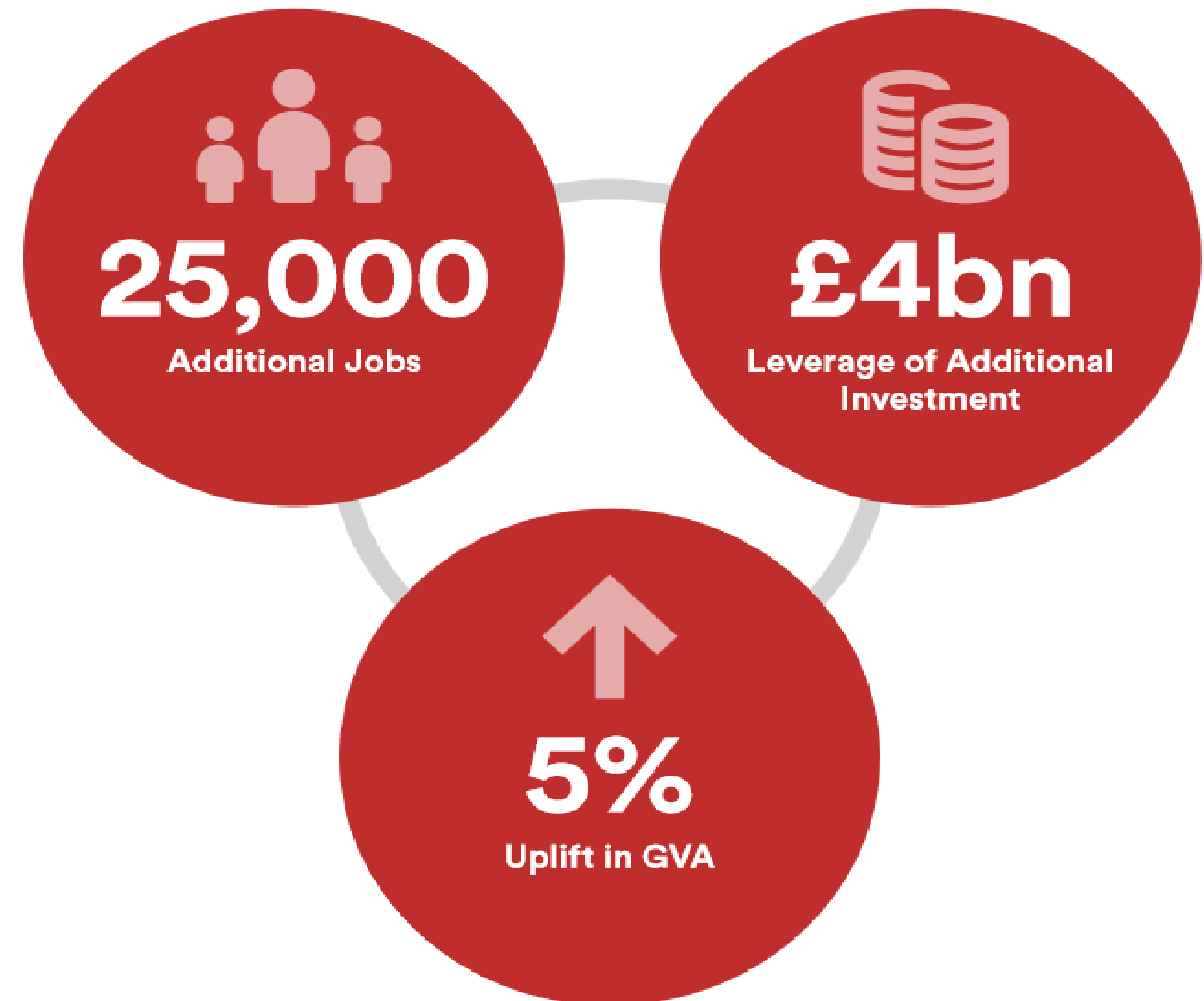
Bringing the state back in?

- A common thread of the **new books on public sector innovation is to change the way we talk about the state** – the state as co-creator, market-maker, risk-taker, innovation catalyst, network convenor etc... rather than of command and control centre (a fatal conceit because it never had the competence to play such a role)
- Increasing role for national and regional public sector actors in their innovation ecosystem
- Increasing recognition of a more capacious socio-ecological view of innovation and the importance of the ‘innovation commons’

Introducing the Cardiff Capital Region

- Cardiff Capital Region triumvirate partnership across 10 local authorities, UK Government and Welsh Government
- Oversees £1.3BN City Deal
- Responsible for regional transport, land-use planning and economic wellbeing
- Not about hitting targets that miss “the point” ...
- Inclusive growth is key when most & least prosperous places co-exist
- Pandemic & economic fallout reminds us R&I not solely for generating economic benefits – but anticipating & responding to social problems
- Innovation in and for tradeable & foundational economies, public services & civic society

Core Objectives of the Cardiff Capital Region City Deal



An *Interventionist* Capital City Region

- Wariness over ‘big ideas’ ...
- What does good look like?
- World’s first Compound Semiconductor Cluster, Centre for Insuretech, Medical Diagnostics, Media & Creative & USPs on renewable energy generation
- Clusters & eco-systems in conventional high-growth/high value added industrial sectors
- But innovation-rich too – skills/ talent, patient risk capital for R&I, supply chains for local wealth building & new entrepreneurial policy experiments i.e. ‘Strength in Places’
- Challenges not predicated on a few big macro variables & ‘picking winners’
- ‘No longer about ‘supply side’ policies – but understanding the dynamics of demand-led innovation...



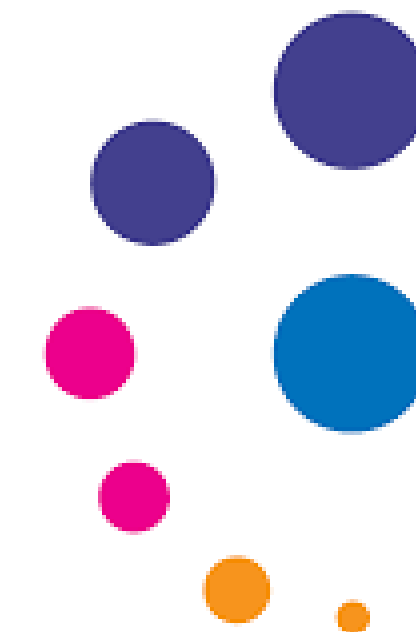
...and so, why mission-led innovation?

- Social sciences key to understanding modern economy and social-political-economic interactions
- Need economic benefits to work *with* progressive social policies
- Influencing rate, distribution and direction of innovation - & how we make it more sustainable and equitable
- Directed missions have a purpose on Day 1 and go beyond 'checkbox' CSR indicators and ESG
- Coming together to build entrepreneurial ecosystem
- Seen as 'risky' because uncertainty & disequilibria
- So we have to decide if we'd rather 'have a go' or fail by omission?



We choose to 'have a go' - Local Wealth Building Challenge Fund & InFuSe

- Public sector convenor of £16M seed fund...
- Leveraging public balance sheet for public good
- New form of collective action between public/ private/ University to integrate social challenges into R&I
- Covid continues to have acute impact on everyday economy – high street, food security, hospitality & rapid decarbonisation...
- ...and failing to mobilise 'civic regarding' innovation to solve problems is too high an opportunity cost
- Innovative Future Services – unshackling public servants
- Growth and social value at the same time
- Role of science & tech still critical – but now requires different collaborations/ disciplines, different approach to wellbeing and different actors on the innovation scene...
- Changing capability for innovation from the bottom-up



Centre FOR
Civic
Innovation

CCR Challenge Programme

£10m
CCR Challenge Fund

£5.6m
Capacity Building Innovative Future Services
(InFuSe)

- 3.5 year programme, new form of collective action between public/ private/university to integrate social challenges into R&I
- Stimulate economic benefits for the region and local wealth building, in part a response to the pandemic
- Role for public sector in convening around societal challenges
- Produce radical improvements in service delivery
- Innovation in Procurement and Procurement of Innovation
- Creation of new markets & commercialisation of new products and services
- Building capabilities and nurturing an innovation 'ecosystem'

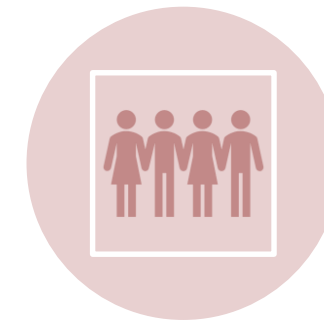
Cardiff Capital Region Challenge Fund

What is the CCR Challenge Fund?

£10m Challenge Fund is aimed at building local wealth and creating jobs

Bringing together the region's public and private sectors to develop and deliver novel solutions, and provide a route to market for the solution

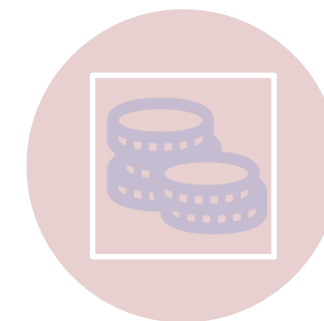
CCR Challenge Fund aims:



Solve big societal challenges



Create innovative solutions



Deliver economic impact for the region



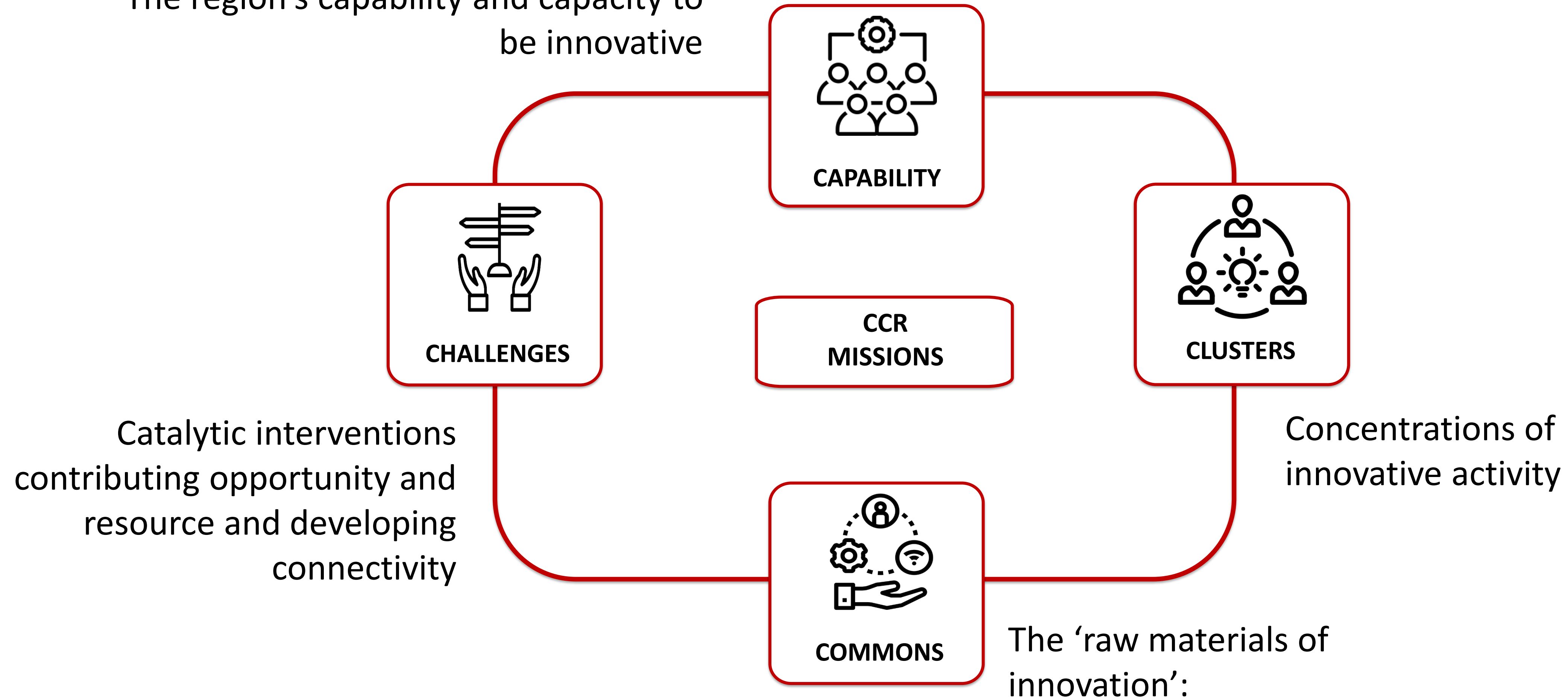
Drive commercially scalable opportunities

Three priority themes:

- Decarbonisation
- Improving health and wellbeing
- Transforming communities

The 4 Cs of Innovation Policy in the CCR

The region's capability and capacity to be innovative



Some early practical lessons

- Capacity and capability to identify and define challenges needs to be nurtured, public sector actors have ‘day jobs’
- Local projects can generate good practice, but good practice is a bad traveller
- Key challenge: how do we spread and scale local innovation and create market opportunities?
- Public procurement has become fashionable, but it is stymied by a combination of professional skills shortages and the lack of political leadership in public bodies
- Importance of an innovation ecosystem approach

Some more fundamental issues

The mission-oriented innovation literature needs to address 3 deficits

- **spatial deficit:** the lack of a spatial sensibility tends to devalue the role of cities, regions and municipalities, all of which are key to the implementation of innovation policy; ‘micro-missions’ may be key
- **social deficit:** the lack of citizen engagement creates a democratic deficit in most mission perspectives and local + regional innovation policies are not exempt from this criticism
- **scalar deficit:** the lack of attention to the “spread + scale” dilemma. What are the mechanisms through which good practice is adopted beyond the local or regional context? Are our institutions fit for purpose?



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National / Regional Inter-sectoral collaboration structures

Stefania Pesce

Research Grant Officer, Politecnico di Milano, Italy

Impact of Social
Sciences,
Humanities & Arts
2022 – AESIS

2 November 2022
Stockholm

National/Regional Inter-sectoral collaboration structures

Stefania Pesce
Politecnico di Milano



POLITECNICO
MILANO 1863

Who I am

I am Stefania Pesce

I am Senior Research Advisor at the
Research Office of Politecnico di
Milano

I am here because I love turning
ideas into actions that make a
concrete impact on society



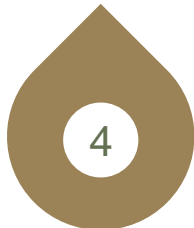
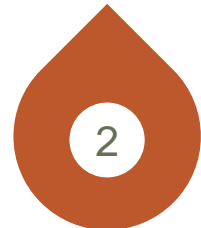
OUR PATH TO IMPACT

Starting point

Case studies



IMPACT



Key components

Take home lessons

1#The starting point

- ✓ How can **collaborative structures** at the **national or regional** level better allow for **inter-sectoral** working across science, business, and policy in order to facilitate **impact of science** in society?
- ✓ What opportunities for collaborations with societal stakeholders are there, and how may **co-creation of knowledge with other disciplines and sectors** play a role in stimulating impact?

2#Key components

Collaboration
Structures

Regional level

co-creation of knowledge

National level

Inter-sectoral working

Collaboration Structures

- **Framework Agreements;**
- **Public-Private Partnerships** (es. Project Financing);
- **Structured Partnerships in Research&Innovation:**
 - ❑ **(National/Regional) Technology Clusters:** structured aggregation of businesses, universities, research centres and other public or private entities, **focused on a specific field** and having a legal personality and a **model of governance;**
 - ❑ **National Centres:** envisaged by National Recovery and Resilience Plan (NRRP), Component “From research to business”, Mission “Education and Research”, they are **aggregations** of universities, public and private research organizations and companies located across the country, dedicated to five **thematic areas**

National-Regional level

Key level to promote **experimentation and mobilize local actors** for sustainable, smart and inclusive strategies

European Policies supporting the importance of Regional/local level

ERA Policy Agenda 2022-2024:

- Build-up Regional and National R&I Ecosystems to **improve Regional/National excellence and competitiveness**

A New European Innovation Agenda:

- creation of **regional innovation valleys**;

Smart specialization strategy (S3)

- Member States and regions support a limited number of **well-identified priorities for knowledge-based investments**;
- Partnerships for Regional Innovation (PRI): a new strategic approach to **innovation-driven territorial transformation**;

Strategic National Plan for Research 2021-2027 (ITALY)

- Continuity with **strategic development paths of the territories**

Inter-sectoral working

- ❑ Contemporary societal challenges are not confined to the boundaries between sectors or scientific disciplines: inter-sectoral working as well as inter- and trans-disciplinary research are an imperative need;
- ❑ Key role of the collaboration of Social Sciences and Humanities (SSH) with non-SSH disciplines (such as natural and physical sciences, health sciences or technology);

Co-creation of knowledge

- ❑ Enabling factor for the enhancement of innovation;
- ❑ opportunity to learn alternative ways of doing things;
- ❑ opportunity for actors supporting different knowledge systems to generate empathy for each other, enhancing mutual trust and confidence. Trust and confidence are essential to create long-term relations;
- ❑ citizens become both critics and creators in the knowledge production process as part of an extended peer community.

3#Case studies

1

Environment
River Contracts

2

Territorial policies
Urban Local Groups

3

Research & Innovation
Research & technology
Infrastructures

Case study1# Environment

River Contracts

- in early 2000s : start as **bottom up initiative** following the former French experience of Contrats de Rivière which began in the 80s;
- In 2007: creation of a National Board of River Contracts (TNCdF);
- In 2015: recognition on a national scale by Environmental legislation;
- National Observatory of River Contracts established by the Italian Ministry of the Environment (MATTM);

- instrument for **rivers management**;
- innovative approach to enhance the **participatory governance** of the river basin;
- **shared responsibility across levels**;
- contribute to the **design and implementation of European water policies**

I FIUMI: ORGANISMI VIVENTI COMPLESSI & DIVERSIFICATI

● I tanti interessi intorno ad un fiume e tanti conflitti ?!



Sectors
involved
within River
Contracts

DESCRIPTION OF IMPACT (MARKET OR IMPLEMENTATION POTENTIAL) *



+ 200 River Contracts processes

+ 40 Contracts already reached the signing of the commitment



VITALcities
MAKE YOU ACTIVE

URBACT
Driving change for
better cities



Case study2# Urban policies

URBACT Local groups
Rieti Municipality

- ❑ URBACT funds and supports networks of cities for developing action-oriented strategies, co-created and implemented with local people;
- ❑ Starting from a topic of joint interest for the network, each city develops a **Urbact Local Action Plan** focused on selected topics able to answer to urban needs



From a European project ...To a wide urban strategy and a huge urban renewal project supported by National Funds

Key steps:

1. Setting up the collaborative structure: the Urbact Local Group;
2. Drafting the local Action Plan in a structured way (URBACT Method) with citizens and stakeholders;
3. Call for expressions of interest for public and private entities to adhere to the overall strategy;
4. Translating the action plan into concrete actions for urban development;
5. Exploiting the plan as leverage for public and private investments

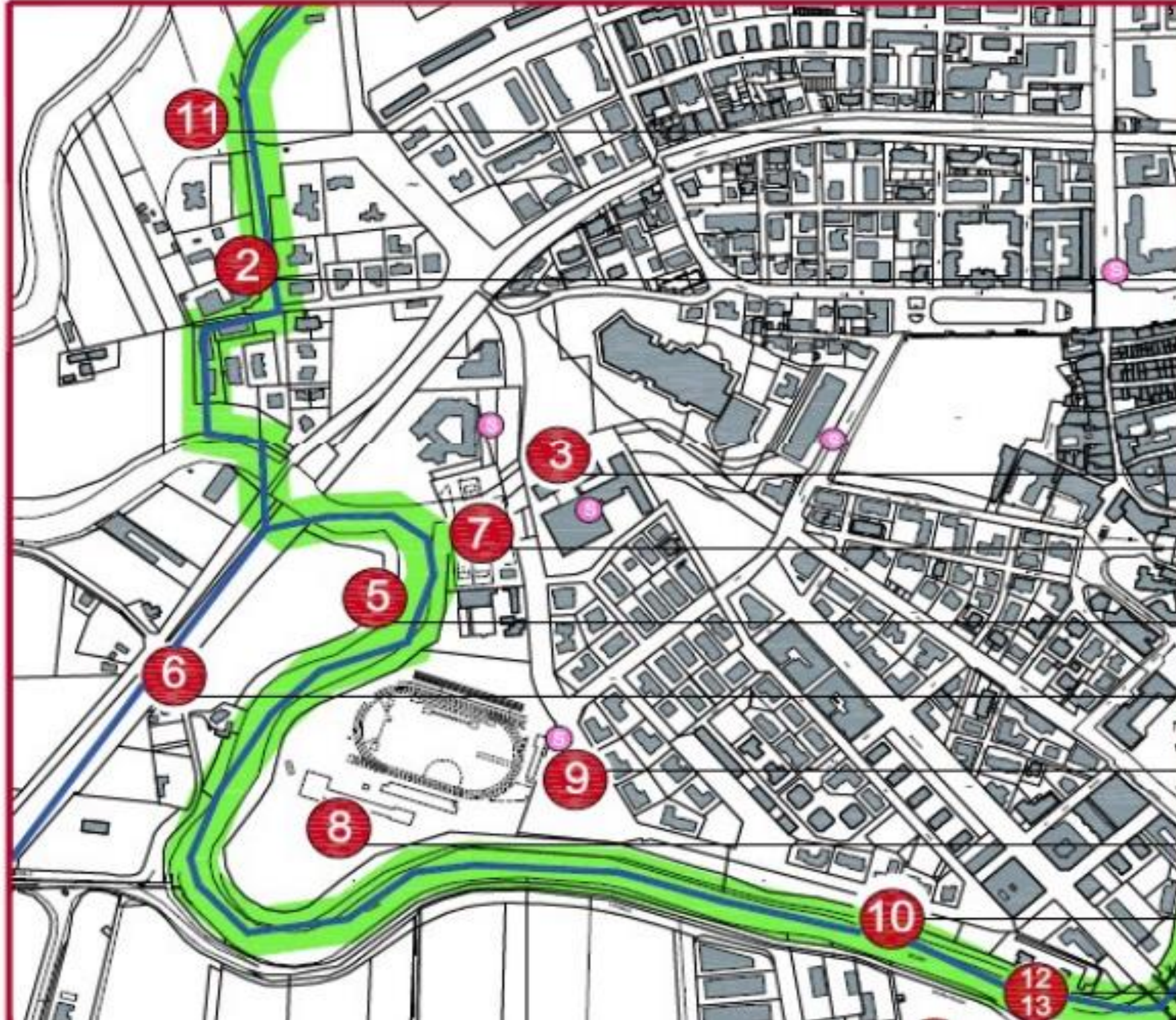
RIETI 2020 "IL PARCO CIRCOLARE DIFFUSO"

TAVOLA 02

Masterplan degli interventi



— Percorso Parco Circolare Diffuso
— Area target Interventi proposti



LEGENDA

- Int. 11 "Campo Gadini"
- Int. 01 "Progetto monitoraggio sismico"
- Int. 02 "Decoro Urbano"
- Int. 03 "Food corner - Istituto Costaggini"
- Int. 07 "Impianto natatorio comunale"
- Int. 05 "Nuova pista ciclabile e bike sharing"
- Int. 06 "Completamento percorso pista ciclabile"
- Int. 09 "Potenziamento del Palacordoni"
- Int. 08 "Pistino camposcuola Guidobaldi"
- Int. 10 "Parco verde urbano dello sport"
- Int. 12 e 13 "Centrale Idroelettrica e recupero sponde Velino"

RIETI 2020

"Rieti 2020" è il progetto composto dall'Amministrazione comunale di Rieti in risposta al bando per la riqualificazione delle aree periferiche (DPCM 25 maggio 2016). La proposta si inserisce nella "vision" generale Rieti 2020 - Parco Circolare Diffuso (D.G.C. n.155 del 27.07.2020), di cui costituisce un segmento significativo. L'arco temporale di realizzazione degli interventi proposti coincide con la data di programmazione dei Campionati Europei di Atletica Rieti-Temi 2020. Il progetto si compone di proposte che permettono l'individuazione di investimenti atti a garantire la buona riuscita dell'evento in sé, ma che si inseriscono pienamente in scenari strategici di più ampio respiro, cioè si definiscono come obiettivi volti al più generale benessere futuro della cittadinanza tutta. La proposta dell'Amministrazione si articola sull'individuazione di azioni conformi agli strumenti urbanistici vigenti, che non presuppongono ulteriore consumo di suolo e volti soprattutto a completare e recuperare un'area urbana degradata soggetta soprattutto a pericoli di vulnerabilità ambientali quali rischi idraulici e sismici. Il progetto, partendo dalle eccellenze e vocazioni del territorio (tradizione culinaria e sportiva), rispondendo all'esigenza di ricucitura della periferia con il centro urbano e capitalizzando il lavoro avviato con il progetto europeo "Vital Cities-Urban sports promotion for social inclusion, healthy and active living", intende implementare la strategia generale attraverso la riqualificazione e recupero di edifici e spazi pubblici, il potenziamento

Case study 3# Research & Innovation policies

Research & Technology Infrastructures
POLIFAB case study

- ❑ Increasing importance of **Research Infrastructures as a way to boost excellence in research**, develop the scientific integration of Europe and attract the best researchers from around the world;
- ❑ **Technological infrastructures** are considered **accelerators and facilitators to build bridges between excellence research and the market** and key element to support the **FromLab'toFab** process;
- ❑ ERA Policy Agenda establishes the need to increase the overall impact of the investments made in **research infrastructures** on economy and society (Action 8).

It identifies also a specific activity (Action 12) to develop a coordination **mechanism to provide technology infrastructures to industry** to test, validate and upscale innovations

Polifab cleanroom expands in partnership with STMicroelectronics



22 December 2021

On Tuesday 14/12/2021, representatives of Politecnico and ST Microelectronics inaugurated the the cleanroom expansion for additional 210 m² that will host new equipment and joint research projects in Micro Electro-Mechanical Systems (MEMS) and motion control, as well as in power electronics and galvanic isolation.



With the core of ST's global MEMS R&D operations located in Lombardy, close to Milan, the cooperation with PoliFab aims at setting up a center of excellence for studies and research on advanced materials for MEMS in the region.

The ongoing collaboration also encompasses investments in staff and programs, with ST supporting scholarships and the recruitment of professors and researchers, as well as financing joint research projects.

“We are pioneering a new model for “fast technology transfer” based on the realization of a joint research and innovation infrastructure where top-class semiconductor equipment, the very same used in a semiconductor fab, is made available to researchers and students,”

said **Riccardo Bertacco**, Former Director of Polifab.

“Polifab 2.0 is a physical site where exciting scientific ideas can meet state-of-the-art semiconductor technology, thus speeding-up both fundamental research and its technology transfer.”

4# Take home lessons

1. Strive to address problems in a holistic way;
2. Think how you can shift from interventions of sectoral type to integrated solutions;
3. Connect with existing collaborative structures in your local context;
4. Look for synergies among funds and for collaboration among different levels of governance;
5. Don't forget to check the framework conditions at national/regional level
6. And...above all: know your local context!



References

- [European Research Area Policy Agenda \(europa.eu\);](#)
- [COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS “A New European Innovation Agenda”](#)
- [Home - Smart Specialisation Platform \(europa.eu\);](#)
- [Cluster tecnologici nazionali | Ministero dell'Università e della Ricerca \(mur.gov.it\);](#)
- [Clusters \(regione.lombardia.it\);](#)
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- [River Contract summary rev.pdf \(riverwatch.eu\);](#)
- [https://urbact.eu/toolbox-home/](#)

Thanks!

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Panel discussion and Q&A

Michael Jacobson (Chair)

Rick Delbridge

Stefania Pesce

Up Next

13.00- 14.00	Lunch Break	K Foyer
14.00- 15.30	Plenary session: AESIS Family Feud & Impact Debate	K.11
15.30- 16.00	Refreshment break	K Foyer
16.00- 17.00	City tour of Stockholm Old Town The bus depart from Stockholmsmässan 15.45	