## MANUMIX Interreg Europe



# 4th Learning Pillar: Evaluation of Policy-mixes

**Welsh Government** 

Greg Green

4th Learning Journey in Cardiff

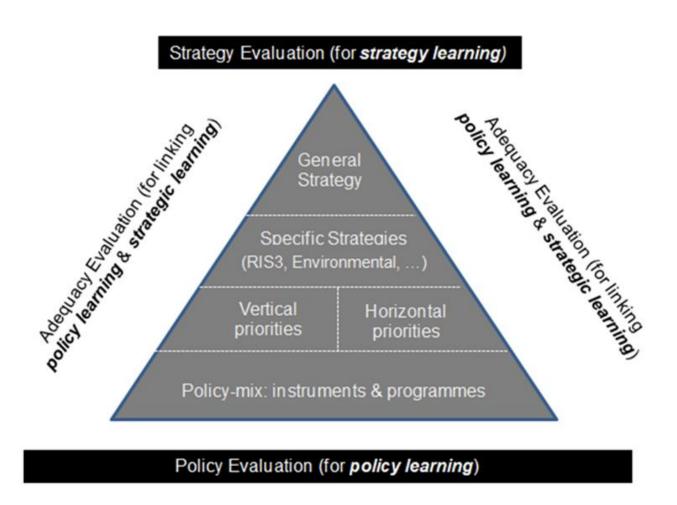


Integrating data gathering and analysing systems for policy mix evaluation framework

To share how they would create an integrated data gathering and analysis system from individual instrument's evaluation systems towards a mix (for avoiding duplicities in information gathering and create synergies) through their own examples



## Strategies and policies overview



## UK Regional data analysis – MAN Science and Innovation audit (SIA)





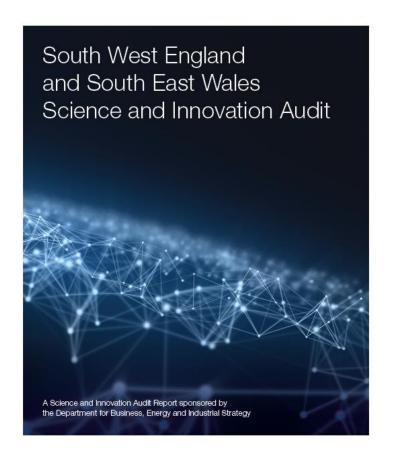




Figure 5. Advanced Engineering and Digital Innovation inter-connected hubs  $\bigcirc$  and linked assets  $\bigcirc$  (Note: schematic – size does not reflect scale.)



## Process of regional analysis



Figure 2. SIA 6-step process

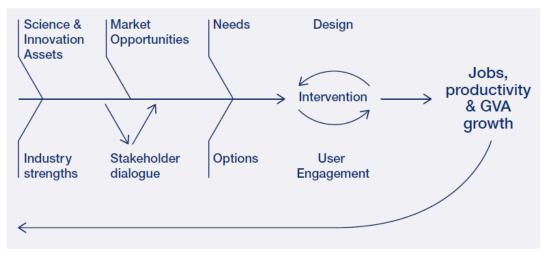


Figure 3. Identifying our proposed opportunities for investment



## Data analysis = Regional strengths

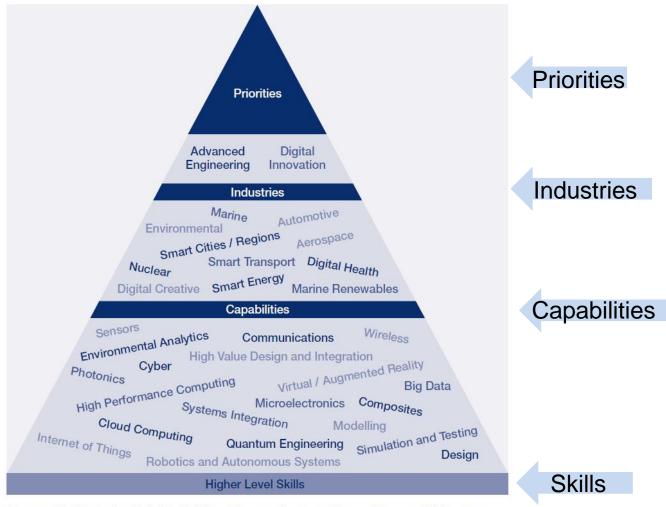
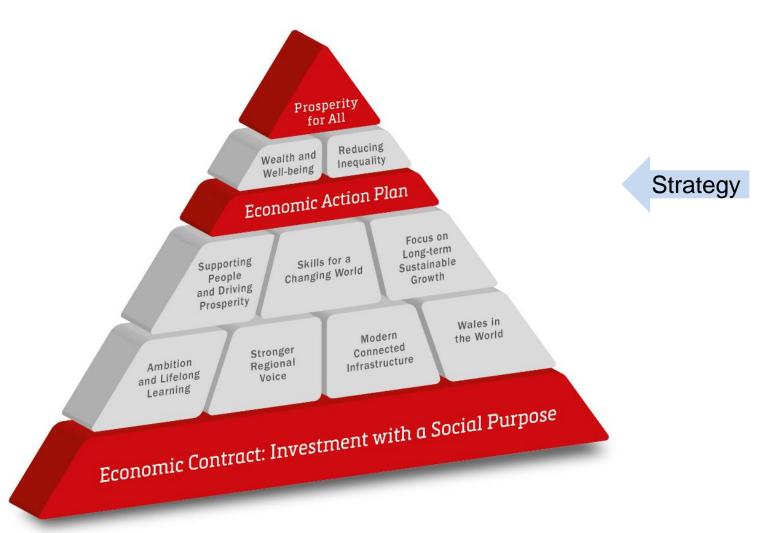


Figure 4. Underpinning high level skills and core science and innovation capabilities to support industries in two priority areas: Advanced Engineering and Digital Innovation.

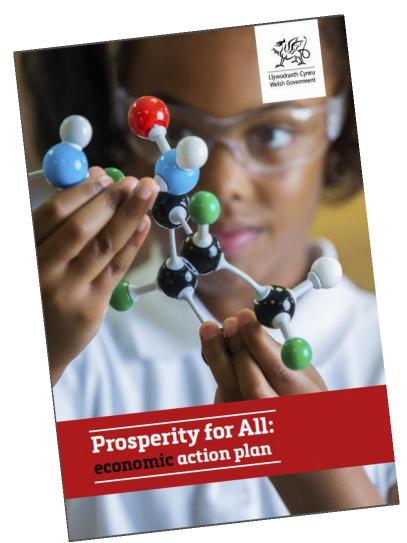
## Wales – New Regional Policies





### New -Economic action plan MANUMIX





The Plan drives the twin goals of growing the economy and reducing inequality.

Economic Contract to our direct financial support to business

#### First Stage:

Growth potential / Fair Work /Promotion of health/ Reducing carbon footprint

#### Second Stage:

target at least one Calls to Action:

Decarbonisation/ Innovation,

Entrepreneurship and Headquarters/ Exports and Trade /

High Quality Employment, Skills Development, and Fair Work/ R&D, Automation, and Digitalisation



Other aspects:

Economy Futures Fund: streamline and simplify our approach into a single, consolidated **Economy Futures Fund**.

National Thematic Sectors: Tradable Services/ **High Value Manufacturing**/ Enablers

Foundation Sectors: Tourism / Food/ Retail/ Care

#### **Regional Economic Development**

Skills and Lifelong Learning

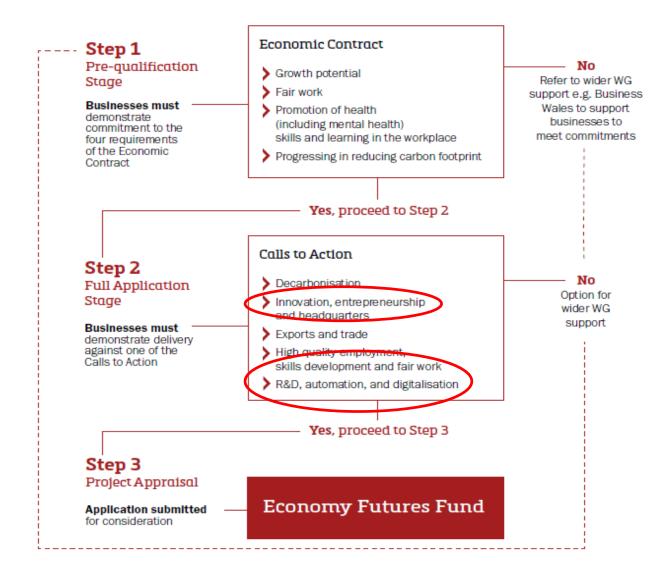
Infrastructure

**Procurement** 

Working together

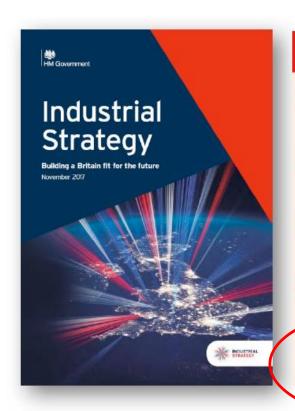


### **New focus of support aligned to Economic Contract and Calls to Action**



## UK Strategies – 'Places' example Places'





#### Our five foundations



#### Ideas

the world's most innovative economy



#### People

good jobs and greater earning power for all



#### Infrastructure

a major upgrade to the UK's infrastructure



#### **Business Environment**

the best place to start and grow a business



#### **Places**

prosperous communities across the UK



#### Al & Data Economy

We will put the UK at the forefront of the artificial intelligence and data revolution



#### **Future of Mobility**

We will become a world leader in the way people, goods and services move



#### Clean Growth

We will maximise the advantages for UK industry from the global shift to clean growth



#### **Ageing Society**

We will harness the power of innovation to help meet the needs of an ageing society

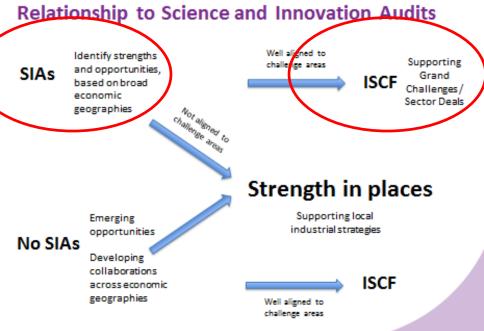
## Targeted UK support – based on data analysis and evidence



Competitive £115m UKRI Strength in Places Fund (to drive clusters)

"to support collaborative programmes based on research and innovation excellence in places right across the UK .......which can demonstrate a strong impact on local productivity .......and enhance collaboration between universities, research organisations, businesses, local government and LEPs in England and relevant agencies in the devolved nations."







## Different intervention layers

#### Firm level:

Businesses, clusters and communities of innovators need different resources and benefit from different interventions depending on the stage they are at, and policymakers are keen to identify high-growth potential (scale-up) businesses where support is likely to have the strongest impact.

#### **Tech/Sector level:**

"General-purpose" technologies and boundary-spanning sectors can boost productivity across many parts of the economy. Investing on them early has the potential to generate long-term competitive and regional advantages, but policies designed with older sectors and innovation models in mind may not help promote them.

#### **Network level:**

Certain innovation and product network configurations are particularly resilient and conducive to growth – developing them requires accurate and timely maps of collaboration and networking; inward investors, on their part, are attracted to local ecosystems with specific capabilities, value chains and skills.



## Data gathering and analysis

Starting point: We want to measure & understand innovation to support it better

### Some important questions:

- -Where it is happening
- -How is it happening?
- -What are the barriers?
- -Do our interventions to support it make a difference?

Why is it hard to do this with official data?

Rear-view of the economy based on existing industrial codes

Data in silos, lacking a relational dimension,

Anonymised data: we care about outliers but learn about averages

What is the policy problem?

Hard to identify new industries, new technologies, new clusters

Fragmented, incomplete view of innovation systems

Imprecise targeting across the policy cycle

What's the solution?

Use unstructured data to create our own categories

Combine datasets, use social network data

Use public data



DATA GATHERING Business data

Web data Official data

Open data

Gov't data

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DATA PROCESSING -MATCHING

Matched dataset

DATA OUTPUTS Maps

Charts

**Statistics** 

Reports

Data

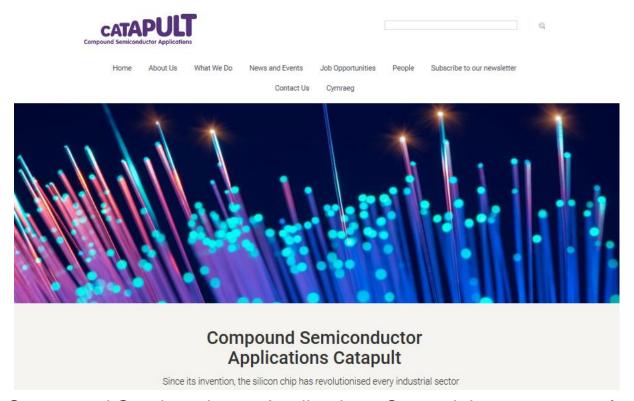
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USE

Agenda setting, policy design and implementation, monitoring and evaluation, decision-making outside of government.



## Example outcome



The Compound Semiconductor Applications Catapult is a new grant funded organisation set up in South Wales focused on helping industry exploit the significant advances made by UK researchers over the past two decades to make future advancements in technology a reality. The UK has invested in pure and applied research in Compound Semiconductors, through £750m funding in EPSRC and Innovate UK programmes over the last 10 years and more recently with £130m in a cluster in South Wales.



### Thank you