4th Learning Pillar: Evaluation of Policy-mixes

Welsh Government
Greg Green
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

- General Strategy
- Specific Strategies (RIS3, Environmental, ...)
  - Vertical priorities
  - Horizontal priorities
- Policy-mix: instruments & programmes

Strategy Evaluation (for strategy learning)

Policy Evaluation (for policy learning)
UK Regional data analysis – Science and Innovation audit (SIA)

South West England and South East Wales Science and Innovation Audit

A Science and Innovation Audit Report sponsored by the Department for Business, Energy and Industrial Strategy

Figure 5. Advanced Engineering and Digital Innovation inter-connected hubs and linked assets (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

Economic Contract: Investment with a Social Purpose

Prosperity for All
- Wealth and Well-being
- Reducing Inequality

Economic Action Plan
- Supporting People and Driving Prosperity
- Skills for a Changing World
- Focus on Long-term Sustainable Growth
- Ambition and Lifelong Learning
- Stronger Regional Voice
- Modern Connected Infrastructure
- Wales in the World

Strategy
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

**Step 1**
Pre-qualification Stage

Businesses must demonstrate commitment to the four requirements of the Economic Contract:
- Growth potential
- Fair work
- Promotion of health (including mental health) skills and learning in the workplace
- Progressing in reducing carbon footprint

**Economic Contract**

**Step 2**
Full Application Stage

Businesses must demonstrate delivery against one of the Calls to Action:
- Decarbonisation
- Innovation, entrepreneurship and headquarters
- Exports and trade
- High quality employment, skills development and fair work
- R&D, automation, and digitalisation

**Calls to Action**

**Step 3**
Project Appraisal

Application submitted for consideration

**Economy Futures Fund**
UK Strategies – ‘Places’ example

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

- **AI & 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

MATCHING

DATA PROCESSING + MATCHING

DATA OUTPUTS
- Maps
- Charts
- Statistics
- Reports
- Data
- ... (Agenda setting, policy design and implementation, monitoring and evaluation, decision-making outside of government.)

USE

MANUMIX
Interreg Europe
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