

Innovation through Smart Specialisation in MENA Countries

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**Safe and Ethical Cyberspace, digital assets and risks:
*How to assess the intangible impacts of a growing phenomenon?***

The World Conference on Intellectual Capital for Communities

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Agenda

- European approach of Smart Specialization
- The French example: Region Nouvelle Aquitaine (INTERREG project P2L2)
- German initiative INSIGHT MENA
- Geodata for cross-sectoral innovation

EU approach: *Research & Innovation Smart Specialization Strategies*

Smart specialisation is all about learning what a country or region does best.

©European regional Development Fund: <http://www.interreg4c.eu/focus-on-smart-specialisation>

The Smart specialisation' approach combines industrial, educational and innovation policies to suggest that countries or regions identify and select a limited number of priority areas for knowledge-based investments, focusing on their strengths and comparative advantages.

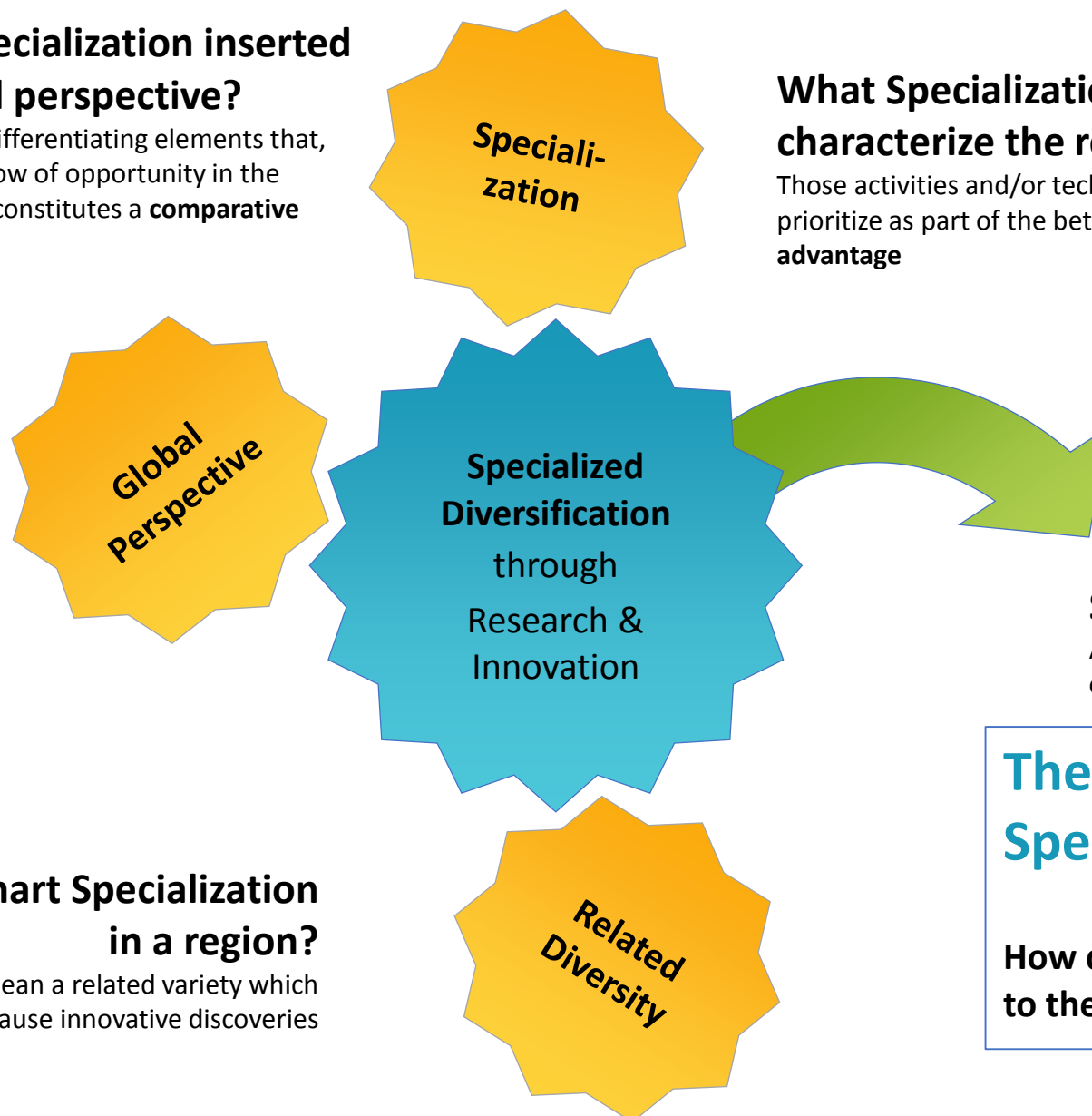
©OECD: <http://www.oecd.org/sti/inno/smartspecialisation.htm>

How is specialization inserted in a global perspective?

Search of the differentiating elements that, given the window of opportunity in the global context constitutes a **comparative advantage**.

What Specialization characterize the region?

Those activities and/or technology domains to prioritize as part of the bet to reach a **competitive advantage**



What is the range of Smart Specialization in a region?

The areas of specialization mean a related variety which intersection may cause innovative discoveries

Smart Specialization

As a continuous process generator of **employment** and **wealth** for the regions

The Mechanism of the Specialized Diversification

How do research and innovation contribute to the process of smart specialization?

2008 – Survey and opportunity study « chemicals and composites industry »

2009 – Adoption of a regional strategic roadmap

Composites and Advanced Materials as a KET

2009-2013 – Action plan in 3 main directions

- Public and private research and development
- SME's and larger companies (technologies or products development)
- Training

2016 – the new deal of the french « NoTRE » law

- A new balance and relationships between economic development and territorial development
- Regions reinforced as main players of the economic development
- EPCI (agglomerations) as main partners

2016 - A New regional scheme for economic development : SRDEII

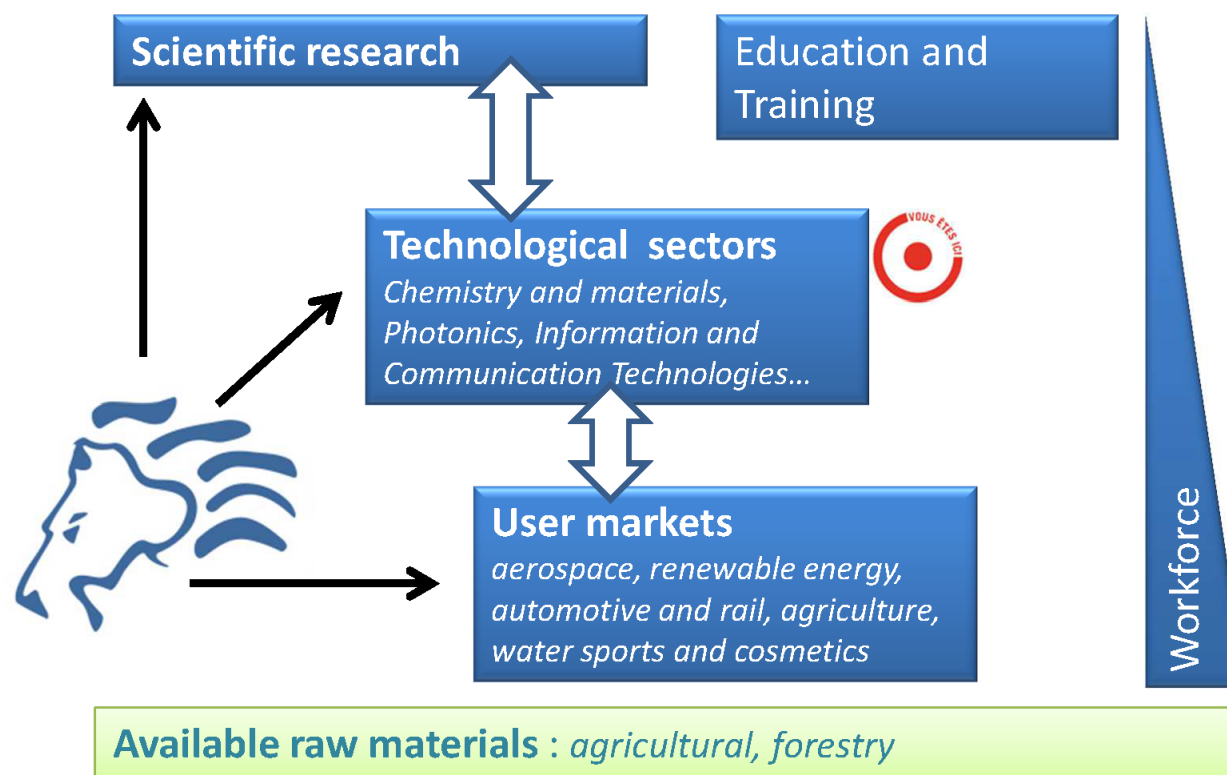
- Sectorial and thematic specialization strategies selected as one of the 9 strategic guidelines

2017 and after - A roadmapping process to be renewed at the new region scale

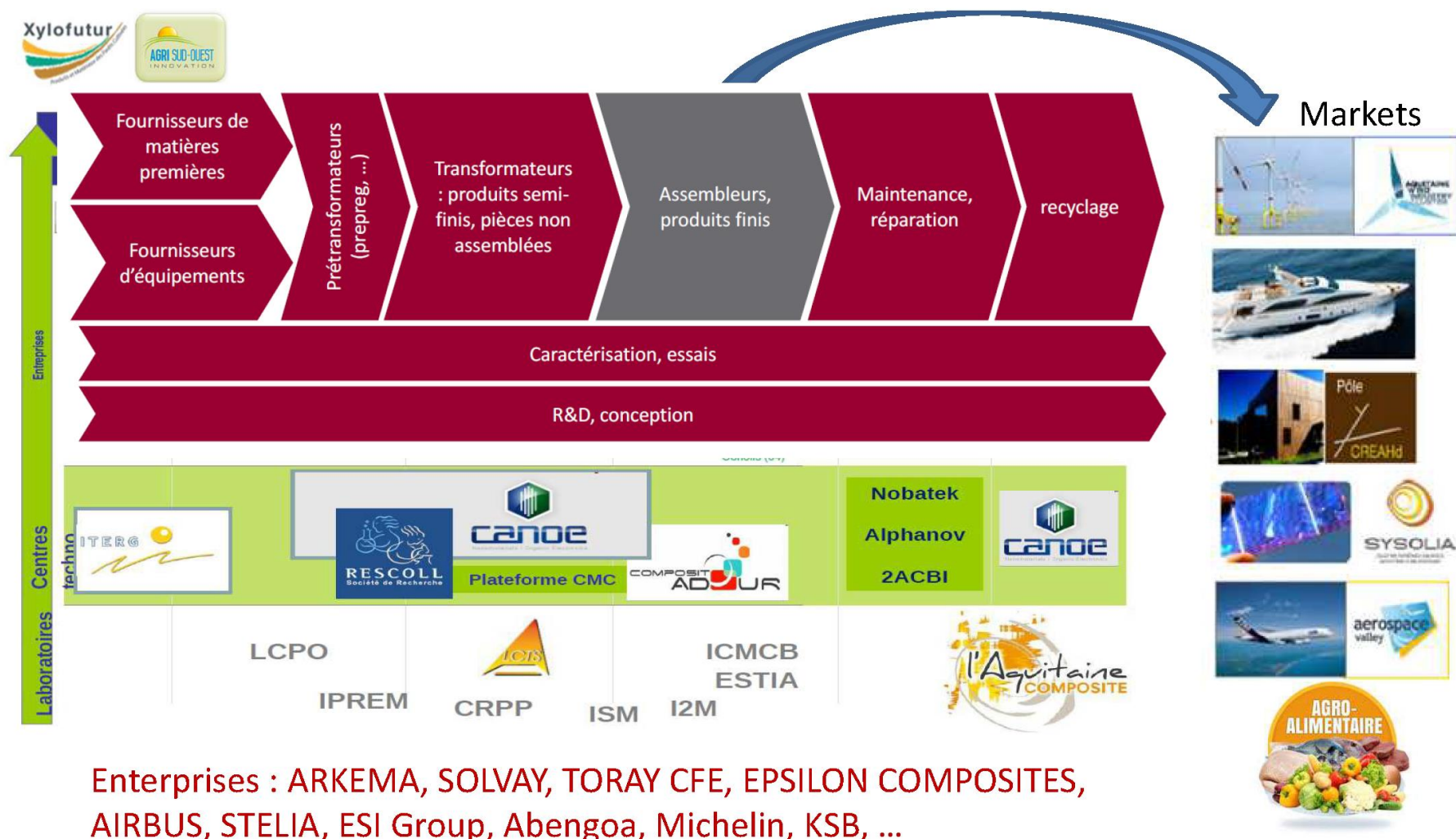
- An opportunity to merge the 3 former RIS3 within the framework of the SRDEII
- A challenge : integrate the RIS3 requirements in terms of governance and monitoring



The strategic choice to consider chemistry and advanced materials as key enabling technologies for Smart Specialization



Value Chain Analysis - Stakeholder



The roadmapping process

Objective 1 – Structure a center of academic and industrial excellence

Create instruments like
technology platforms on
innovative materials

Federate and enhance academic and industrial
research on five key technologies :
nanostructured materials, organic composites,
thermostructural composites, recycling, maintenance

Objective 2 – Generate innovation through technologies of composite materials

Develop the offer of regional
SMEs

Help SMEs which can be
potential users to
appropriate those
technologies

Objective 3 – Organize a training offer for jobs related to composites and advanced materials

Federate a complete
training offer (initial,
continuing,
apprenticeship)

Adapt and enhance
the training offer for
new jobs

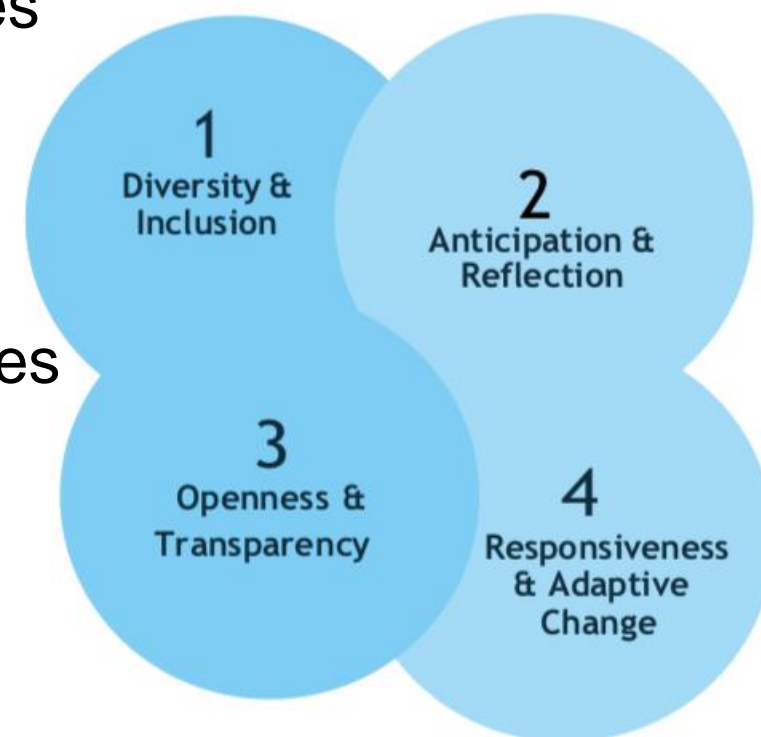
Articulate the training
offer with academic
research and
technology platforms

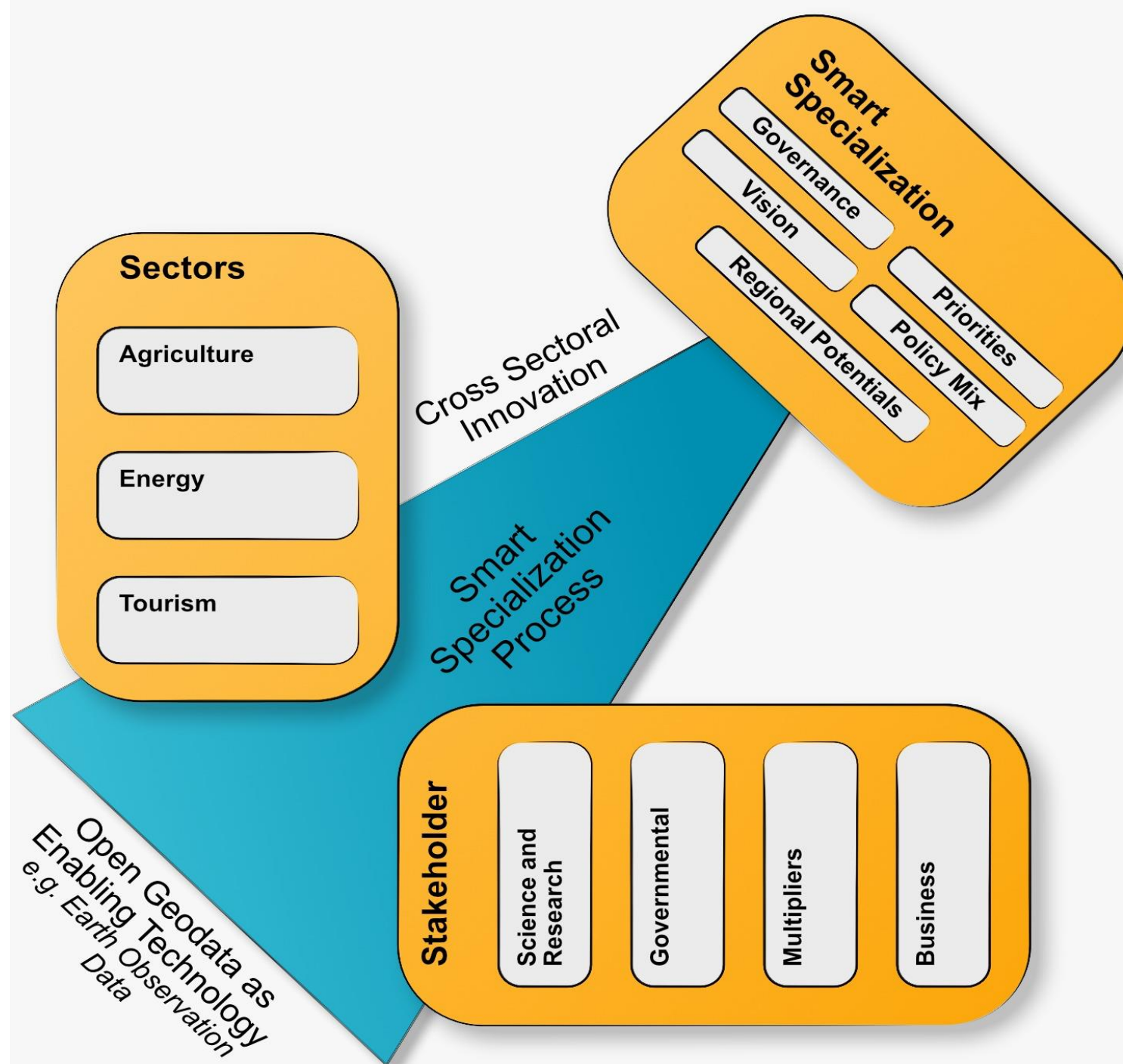
INSIGHT MENA

- Results of research are expected to impact society and economy.
- Investments in public funded R&I shall contribute solving national challenges.
- Smart development is
 - involving **multiple stakeholders** with divergent professional cultures and targets
 - bound to **complex activities**
 - a **creative process**
- Current quantitative input / output measures are insufficient mechanisms to **manage and improve innovation ecosystems stakeholders' contribution.**

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- German BMBF funding from 2018 – 2022
- supporting Tunisian and Moroccan innovation ecosystem-development
- inter-ministerial cooperation and alignment of measures
- improved framework conditions for innovation
- piloting open access georeferenced data as enabler for cross-sectoral value creation
- considering responsible research & innovation principles in the context of digitalization





INSIGHT – develop differentiated capabilities

- **hard capabilities:** infrastructure, technologies, public authorities, budget
- **soft capabilities:** knowledge, management skills like communication, interaction, delegation, cooperation, process controlling/monitoring
- **operational capabilities:** values and competencies to accomplish defined tasks and duties, to solve problems, to define smart goals, to develop stakeholder relations etc.
- **adaptive capabilities:** ways to deal with change