



Territorial Innovation Policies & Smart Specialisation: a promising area for Africa-EU cooperation

Towards Africa-led Innovation Strategies for Smart Specialisations?: opportunities and challenges for an innovation-led, sustainable and inclusive development

June 8th, 10h45-12h



European
Commission

eudevdays.eu | 7-8 June 2017 | Brussels

CONTEXT

- ❑ Sustainable Development Goals (SDGs) → D4: Industry, Innovation & Infrastructure (SDG9)
- ❑ 5th Africa-EU Summit (November 2017)
- ❑ Joint Africa-EU Strategy (JAES), *“For the renewed impetus of the Africa-EU Partnership”*
- ❑ DG Joint Research Centre (DG JRC): international cooperation for Smart specialisation
- ❑ Africa R&I: cf. Background note for the debate (@ S3 Platform <http://s3platform.jrc.ec.europa.eu> → Section Events EDD)

AIM

- ❑ African Territorial Innovation Policies (TIPs)
- ❑ Lessons from European & International TIPs/RIS3 experiences
- ❑ **Towards Africa-EU collaboration/mutual learning for TIPs/RIS3 → Place-based policies for a sustainable and inclusive development**

Few definitions

- ❑ **Innovation Policies** : public intervention for the generation & diffusion of innovations
(*new or improved products, processes, marketing/organizational methods, new collaborative modes*)
- ❑ **Territorial innovation policies (TIPs):**
 - Foster **capabilities of local actors** - e.g. national/regional learning & innovation systems - + Sustainability in economic, social, environ. & cultural aspects (CEMAT def.)
 - (Innovative) firms, universities & research centres, RTOs, Public policy/institutions, etc.
 - **Examples of Instruments** : Funding and Training for innovation, Clusters, Access to knowledge and innovation sources/networks, support to IP protection
(**Compendium of Evidence on Innovation policy; Innovation Policy Platform of the World Bank and OECD**)

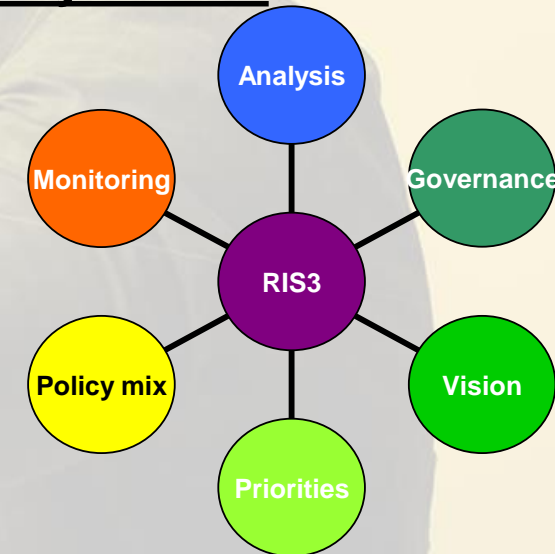
Research and Innovation Smart Specialisation Strategies (RIS3/S3)

❑ Industrial and Innovation frameworks

- Guide organisation of R&I resources for industrial & socio-economic transformation
- Place-based strategies, Mobilization of local resources & entrepreneurs, Learning process
- Unique comparative advantages

❑ The steps **(RIS3 Guide, 2012)**

- Step 1 – Analysis Territorial context/potential (SWOT), entrepreneurial dynamics
- Step 2 – RIS Governance
- Step 3 – Vision for the future of territorial development
- Step 4 – Identification of priorities (mixed approaches)
- Step 5 – Tailored Policy mix
- Step 6 – Monitoring & evaluation



RIS3 cooperation: beyond the EU and worldwide

- ❑ RIS3 beyond EU / Enlargement countries : <http://s3platform.jrc.ec.europa.eu/s3-beyond-eu>
- ❑ RIS3 worldwide : <http://s3platform.jrc.ec.europa.eu/s3-worldwide> (2 studies)
 - *Innovation and regional specialisation in Latin America*
 - *Smart Specialisation in EU and Chile, challenges and opportunities. Towards a transcontinental policy learning dialogue methodology*
- ❑ **RIS3 & Africa ?** Introductory Note *Smart specialisation in Sub-Saharan Africa: opportunities and challenges* (@ S3 Platform → Events / EDD) – **We debate !!!**

Questions for debate D4

1. Which governance structures or approaches are needed to guide an effective mobilization of domestic (and non-domestic resources) for the development of Africa-made innovations?
2. Which lessons could be drawn from the RIS3/TIPs experiences in the EU & worldwide for TIPs in Africa?
3. How can the RIS3 approach help African policy makers to leverage on the existing community-led initiatives to design a better tailored support to local entrepreneurs & innovations in Africa?

Special Lab debate D4* - Sustainable Development Goal question (SDG question) :

How to enhance the collaborative and mutual learning initiatives between African and European innovation policy stakeholders for the achievement of the **SDG 9**?

Questions for Audience (3 MCQs & 3 One-word answer Questions) → check the EDD APP

Positional analysis of scientific production in the African Union

- Positional analyses were used to aid in the interpretation of relative strengths and weaknesses of the African Union in science by combining three indicators (**volume, quality and effort**) of science production in a two-dimensional space.

Horizontal axis = specialization index (SI, effort)

Vertical axis = quality of publications (ARC)

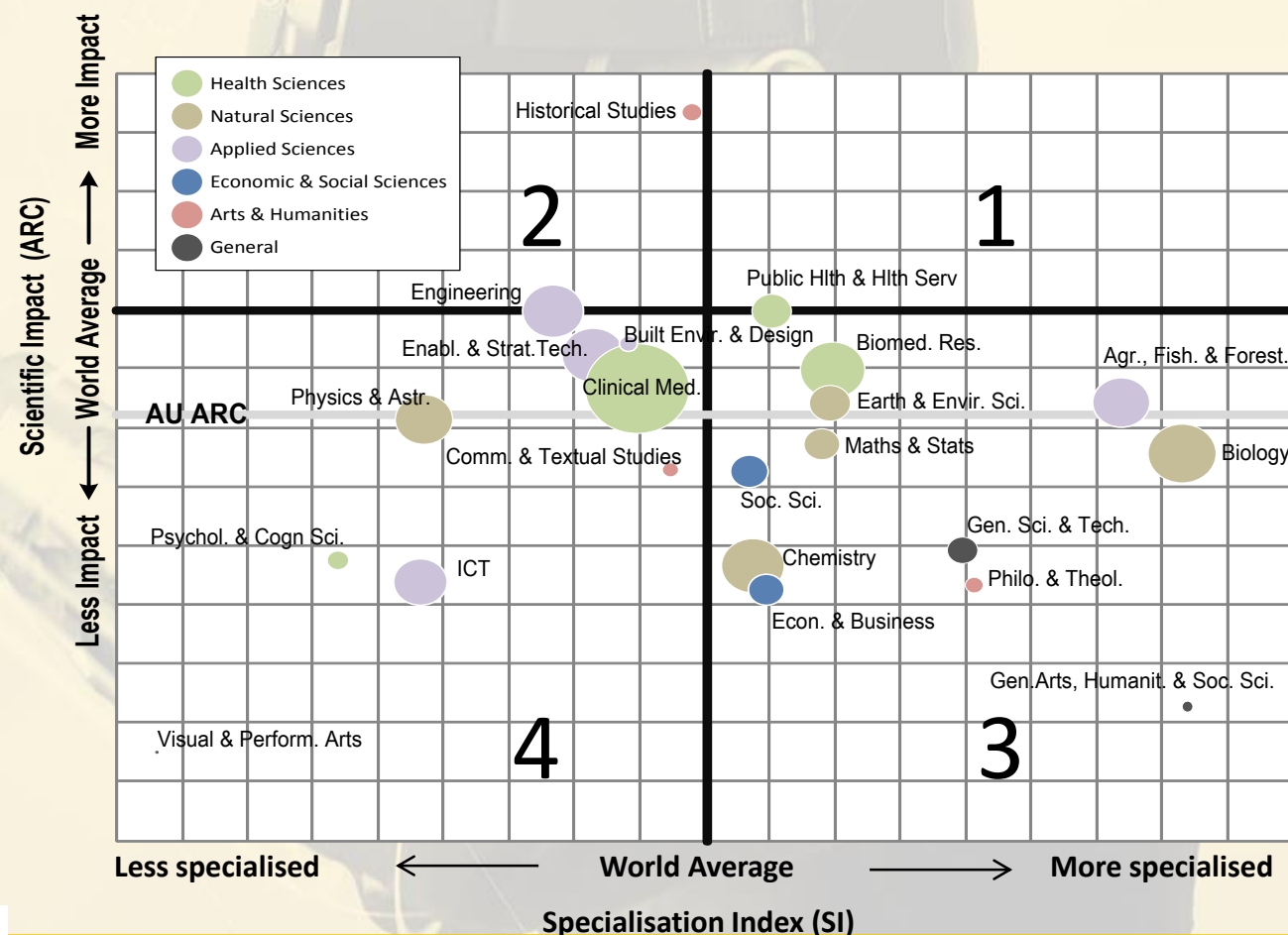
- Thus, the position of the AU in a quadrant can be interpreted :

- Quadrant 1** (Top right): specialised and high impact
- Quadrant 2** (Top left): high impact but not specialised
- Quadrant 3** (Bottom right): specialised but low impact
- Quadrant 4** (Bottom left): not specialised and low impact (worst case scenario)

Bubble proportional to level of activity in that field (# papers)

→ Such analyses allow to detect strengths and weaknesses, and to address gaps.

AU profiles in ICT and Enabling and Strategic Technologies is located in the worst quadrant 4 => It calls therefore for urgent actions due to the strategic importance of these fields for today's economies.



CHALLENGES IN AFRICA AS DRIVERS OF RIS3

- Climate change impact
- Population Growth and progressive urbanization
- Lack of jobs and forced migration
- Political instability
- Lack of confidence and trust in the Public-Private Partnership

OPPORTUNITIES OFFERED BY TIPs

- Focus on a few regional assets
- Possibility to integrate the SDGs and the Sustainable Environment (low carbon economies) in a single strategy
- Human capital development focused on the regional priorities
- Clustering of the four Helix components
- Adapting the managerial practices to the new logic of co-participation and co-ownership

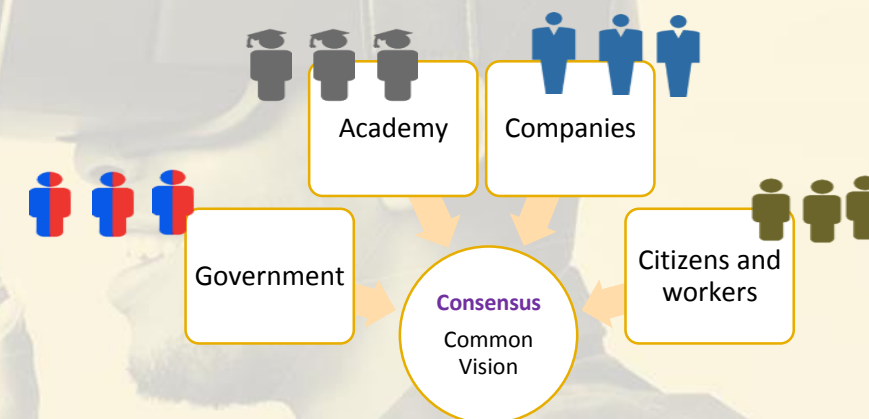
Smart Specialisation Strategic Programs

Selection
Criteria



Scope

- National
- Meso-Regional
- Regional/Local



The quadruple helix

Key success
factors

- Building trust and commitment
- Common vision
- Technology Roadmap
- Social capital
- Public agencies alignment

Chilean Smart Specialisation Strategy

Sectors & Platforms





REKNEWABLE

Example A) South Africa's RE IPPPP (2011-16)

Renewable Energy Response to National Crisis

- Poor power supply: blackouts (2007-15)
- Limit SA's GDP growth
- Detriment to SSA regional economy
- Pressure to decrease CO2 emissions

Achievements: Energy

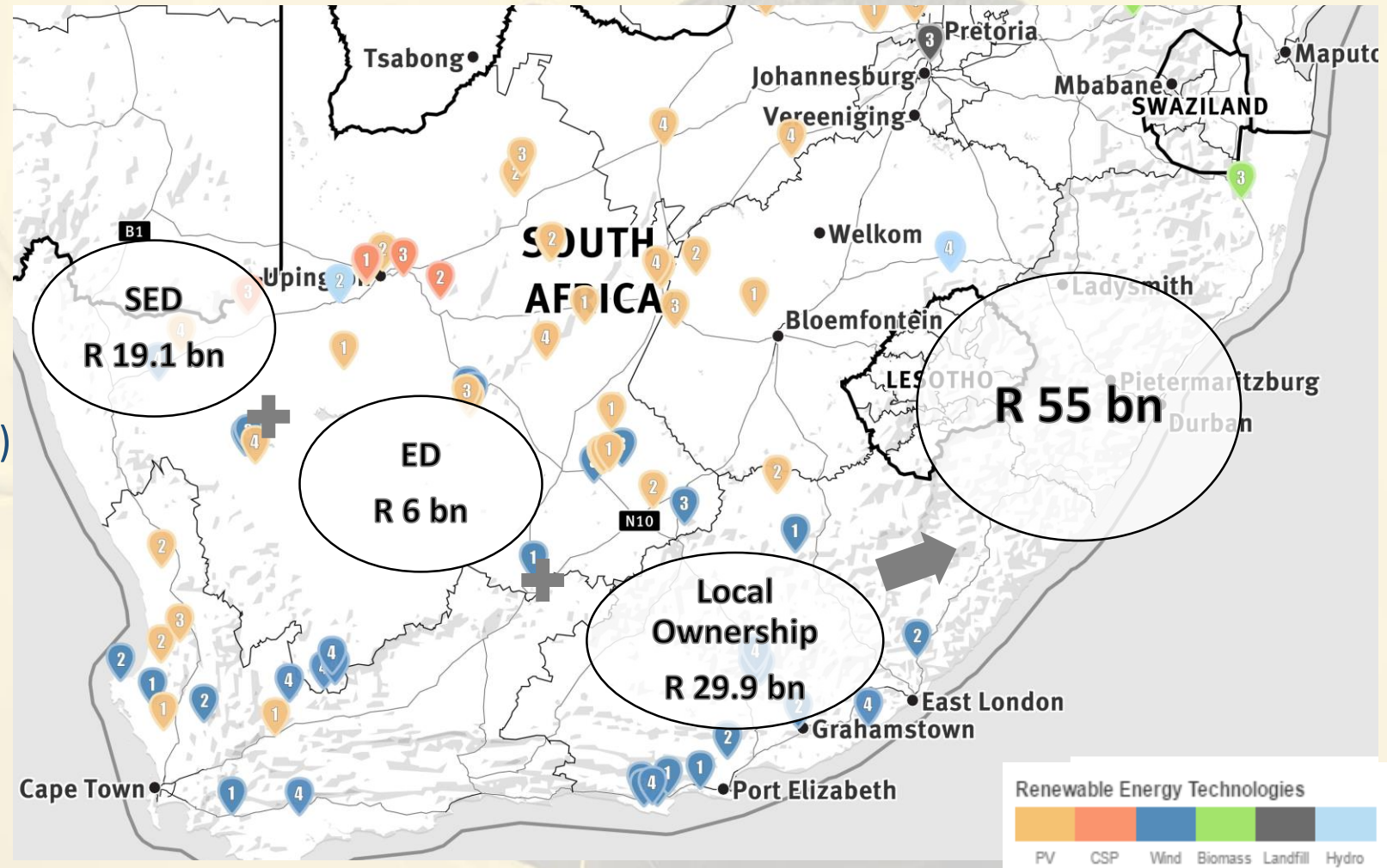
- ✓ **5 years:** 0%-5% RE (to be 20%)
- ✓ R194b invested in 92 projects (6376 MW)
- ✓ Answered multiple policy objectives

Achievements: Socio-economic

- ✓ Attracted 56.9% of total FDI to SA (2014)
- ✓ 70% (cost): 30% (SED)
- ✓ R 55 billion (over 20 years) allocated to local communities

Achievements: Innovation and knowledge

- ✓ Globally drove RE technology development and brought down costs
- ✓ Growth in RE education+ RTD+i
- ✓ Positioning SA in SSA to supply power, skills and components, "PPP flagship" (WWF)





REKNEWABLE

Example B) Zenzeleni Networks

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Responds to rural needs*

- 93% unemployed, 1USD p/d, low literacy
- High urban migration - split families
- Communication essential
- But spend 22% of income on communication
- Poor access to basic infrastructure and commodities
- Scarcity restricts improvement of community life, education, health, business potential...



*Mthatha river valley

Innovation and socio-economic growth

- Aim to create cheaper voice, internet and phone battery charging system for communities, schools, hospitals, SMEs
- Zenzeleni: partnership of PhD student and community (5 years)
- University provides technology, expertise and RTD+I
- Local community provides essential contextual know how

Achievements

- ✓ Direct employment and training of locals
- ✓ Indirect multipliers - supporting community growth
- ✓ Community led management & reinvestment (i.e. education)
- ✓ Cost reductions: Internet (1/10), calls (1/3 & free), battery charging (40%)
- ✓ Objective 2019: 10 community, 50 000 people, 20 schools, SMEs

- Two success stories
 - Coordinated national infrastructure intervention addressing multiple policy objectives
 - Localised intervention tailor-made to context and driven by participants
- Innovation can alleviate key development challenges & catalyse new opportunities
 - Developing a competitive advantage
 - Provide for basic needs
- Examples from SA can inform approaches in many parts of Africa (but one size does not fit all - context matters)

Thank you for your attention!



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