# **Green Economy Cluster**

The value of clustering in the South African context

Feb 2021

# **Outline**

- The role and value of a (green economy) cluster organisation
- Cluster functions
- Cluster case studies
- Some key learnings

# The role of a cluster organisation

Cluster organisations enable the whole to be more than the sum of the parts

## **Problem**

• Barriers
preventing
government
from enabling
economic
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from
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# Intervention

 A platform for working together: a memberbased organisation that enables industry, government and academia to co-create and implement solutions to overcome these barriers.

# **Impact**

Thriving
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# **Impact**

 Thriving businesses and growth of the regional economy: (evidenced by **investment** in production and purchase of **green** technology products and services and the creation of *jobs* in green technology value chains)

# **Clusters have many different functions**



Based on: Boltz, M., Brings, S., Funke, M. & Riethausen, M. 2009. *Clustering concepts: Theoretical background and implementation framework.* Stellenbosch University.

# Green economy cluster example: enabling uptake of small scale embedded generation (SSEG)

Helping government, industry and the market adapt to changing technology

## **Opportunity:**

- **industry (supply side):** growth in businesses supplying solar PV products and services
- industry (demand side): energy security, access to clear energy
- **local government:** economic resilience, lower municipal carbon footprint

#### **Barrier:**

- SSEG not allowed on municipal grid / absence of policy and regulations
- Concerns about municipal financial sustainability (loss of electricity sales)

#### Intervention:

- Tariff modelling & optimisation study
- Drafting SSEG policies, regulations, bylaws, and tariffs – made available nationally through partnership (SALGA/AMEU/GIZ/SEA)
- Technical guidelines and standards
- Support to municipalities to adapt and implement.



#### Barrier:

 Uncertainty with regard to business case

#### Intervention:

CEO information pack & business engagements

#### **Barrier:**

Concerns about

- installation quality & reliability
- grid integrity & safely

#### Intervention:

 Raised funding for subsidised installer training & certification (PV GreenCard)

## Business Environment

Human Resources

#### Impact:

- 56/165 municipalities nationally allow SSEG
- Growth in <u>demand</u> and <u>reputable</u> <u>supply</u> of rooftop residential, commercial and industrial solar PV

Source : GreenCape. See: https://www.greencape.co.za/assets/Uploads/20190416-GreenCape-Resilience-Reports-Energy-FA-Interactive.pdf

# Green economy cluster example: drought support to business and government

## **Opportunity:**

**Local & regional government:** 

avoiding social and economic crisis, building long term resilience

#### **Barrier:**

credible information, feedback, human and financial resources, responsiveness.

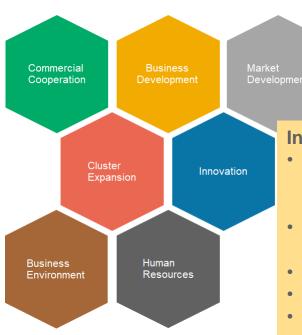
#### Intervention:

- Economic Water Resilience Task Team consisting of provincial & local government (economic development, environment, water and sanitation), industry and support agencies.
- Weekly meetings effective communication and adaptation of response
- Directed action in responsibility areas leveraging strengths and efforts of all partners

### Impact:

- Avoided "Day Zero"
- Reduced city-wide water consumption to 500 Ml/day (from a peak of 1200 Ml/day)
- Contained economic impact and protected jobs

spond to shocks in short



### **Opportunity:**

Industry (demand side): access to appropriate technology to enable water use reductions Industry (supply side): increased market access, opportunity for innovation

#### **Barrier:**

credible and objective information on technologies, business case and reputable suppliers

#### Intervention:

- Clear and accessible information: ""water resilience journey", case studies, benchmarking, business case calculator, FAQs
- Targeted workshops (sector-specific, region, management) and one-to-one meetings
- Legislative and regulatory support
- Supplier database
- Leveraging entrepreneurship: innovation competition, business development support
- Mutual knowledge exchange with academics (leveraging expertise, reflecting on learning)

#### Impact:

- **Short term:** 400 businesses supported directly (primarily SMMEs), survey (58/400): average of 41% water savings, 52 000 jobs safeguarded, investment of R 120 million in drought adaptation measures
- **Longer term:** improved economic resilience (partnerships, networks, uptake of green tech, sharing reflections and learnings publically available case studies, reports, videos)

Source: GreenCape
For economic resilience case studies and drought support,
see https://www.greencape.co.za/library (search term: "resilience")

# Cluster value and success: key learnings

- Clusters offer multiple benefits for members (industry, government, academia)
- Good foundation of experience in South Africa in multiple sectors
- Most successful when driven by industry needs and aspirations
- A focus on moving from Economically viable to commercially viable by removing barriers is the key lesson.
- R42bn 10 000 Jobs over the last 10 years.