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South African National Energy
Development Institute (SNC) Ltd.



Renewable Energy Technology Advancements and South Africa

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ENERGY INNOVATION FOR LIFE



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SANEDI overview

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SANEDI project involvement



Concept

Pre-
feasibility

Feasibility

Detailed
design

Demo/Pilot

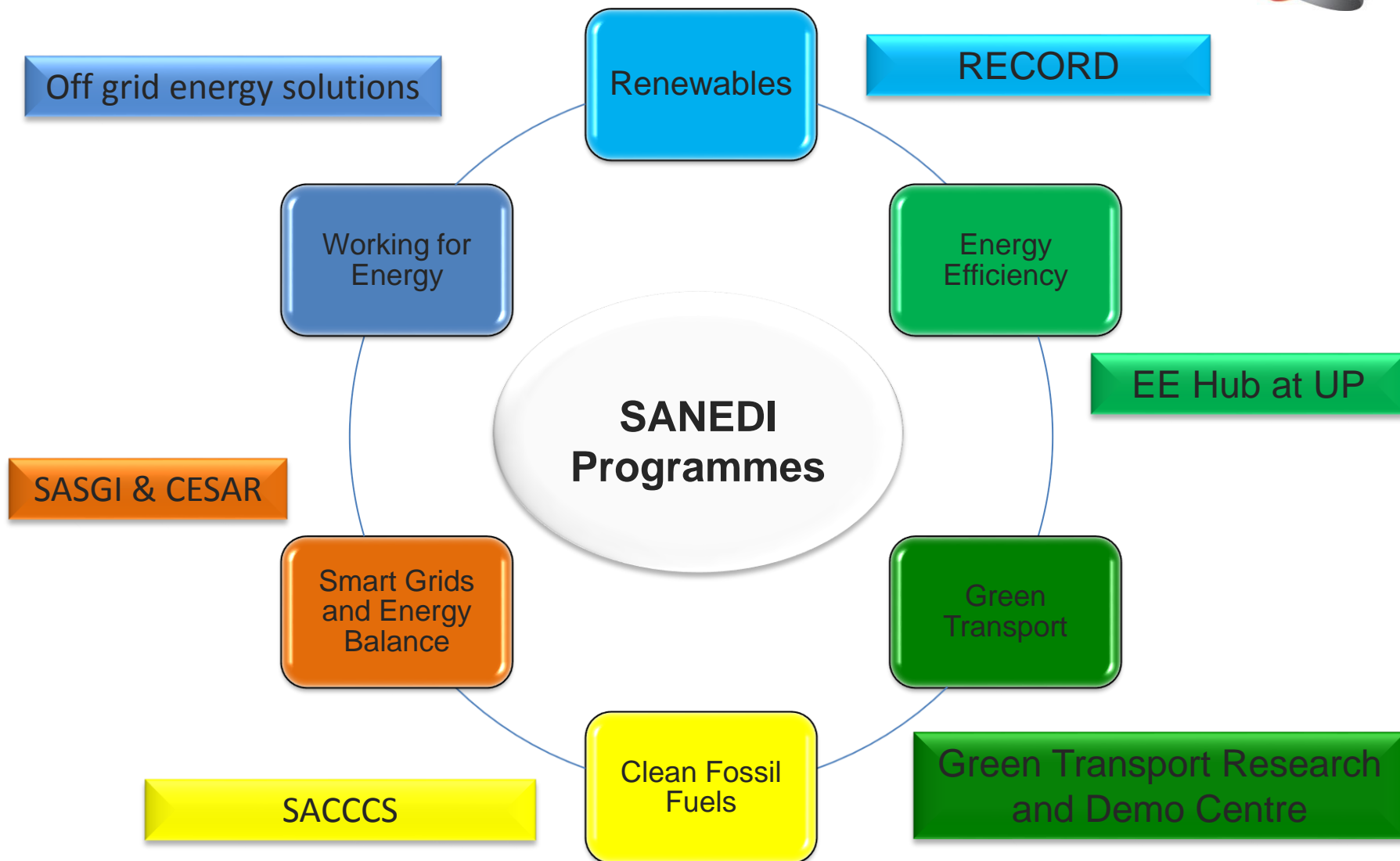
Commercial

SANEDI

SANEDI/Private
sector

SANEDI/State
owned
entity/Private
Sector

SANEDI structure





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SANEDI Renewables Programme

WASA

REEEP

RECORD

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What is needed for technology advancement in the renewable energy sector of South Africa?



- 🌱 Coordination of Renewable Energy Research and Development
- 🌱 Mapping the way forward for technology in different sectors
- 🌱 Address Renewable Energy skills development
- 🌱 Marketing and support to Renewable Energy business development

How will technology advancement in the renewable energy sector of South Africa proceed?



- 🌱 South Africa has abundant natural resources that can be harnessed for energy production.
- 🌱 The contribution of a green economy to economic growth and job creation is promising and South Africa is preparing to play a leading role in renewable energy deployment.
- 🌱 This is being driven by industry development, currently based on importing skills and hardware, towards establishing South Africa in the implementation, manufacturing and minerals beneficiation sector.

How will technology advancement in the renewable energy sector of South Africa proceed?



- 🌱 Drive towards fostering collaboration between renewable energy research and skills development stakeholders having common goals.
- 🌱 Eg. the South African Government, through the Department of higher education and Training (DHET), has substantially supported the establishment of the South African Renewable Energy Technology Centre (SARETEC)
 - Wind and PV technician curriculum development and training

How will technology advancement in the renewable energy sector of South Africa make a difference?



- 🌱 Peak-shaving, where commercial and industrial customers could satisfy a portion of their peak power demands with various technologies that “charge” during low demand and are used during peak load hours.
- 🌱 At the grid level, renewable energy technology needs to be able to maintain grid stability to ensure a secure supply.

So what about impact?



- Localising components for Renewable Energy and clean energy technologies
 - PV/CPV home grown technology being commercialised
 - CSP to provide energy to processes other than electricity generation talking to grid stability and peak shaving concerns if implemented by the Energy Intensive Users Group (EIUG)
- Developing and deploying our Renewable Energy skills
- Develop roadmaps that further define the pathway to be followed towards a sustainable development of particular technologies



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**THANK
YOU**

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