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South African National Energy
Development Institute (SOCI) Ltd.



SANEDI and Solar energy

STERG symposium 2016

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South African National Energy
Development Institute (SNC) Ltd.



SANEDI overview

ENERGY INNOVATION FOR LIFE

SANEDI structure



Focus on Primary
Energy Needs

Renewables

RECORD, WASA, REEEP

Working
for
Energy

Energy
Efficiency

Smart Grids and
Energy Data
Management

National Targets;
Monitoring &
Verification

**SANEDI
Management**

Smart
Grids &
CESAR

Green
Transport

Carbon Capture and Storage; Clean
Coal Technologies; Oil & Gas

Cleaner
Fossil
Fuels

LPG, CNG & Electric
Vehicles

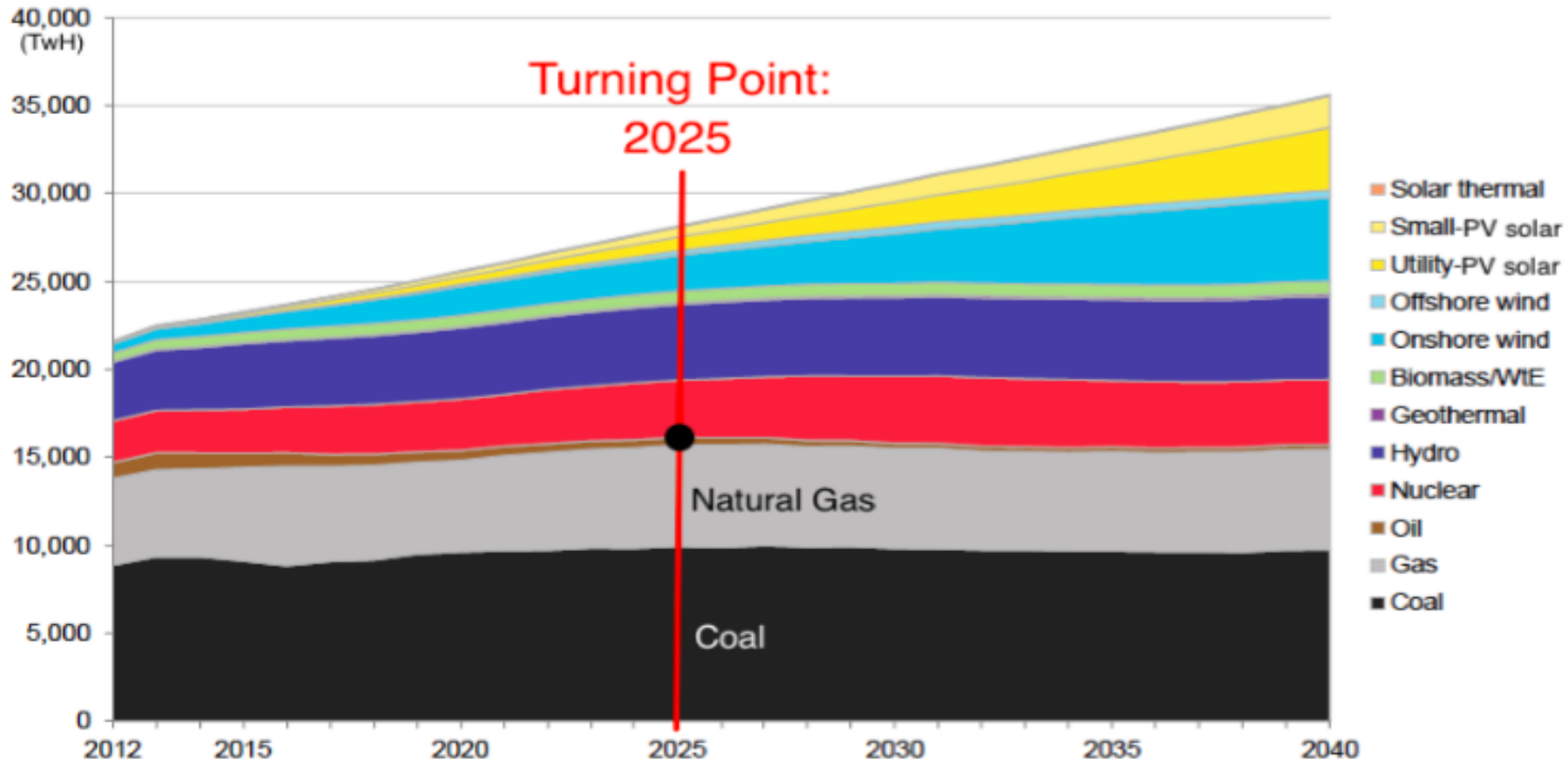
ENERGY INNOVATION FOR LIFE

Future predictions



Electricity Is Approaching Peak Fossil Fuels

Power generation has never looked so clean



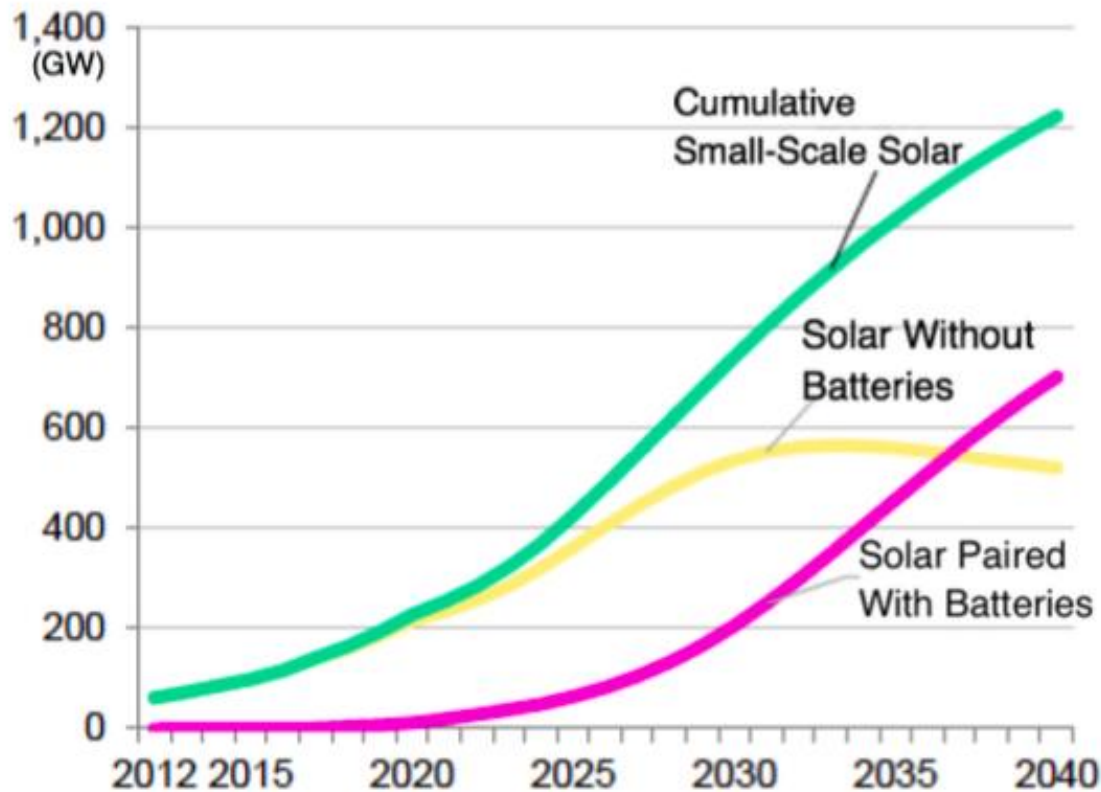
@Bloomberg New Energy Finance

Future predictions



Here Come the Batteries

Electricity storage will come standard with rooftop solar by the 2030s



@Bloomberg New Energy Finance



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RECORD

ENERGY INNOVATION FOR LIFE

RECORD work packages



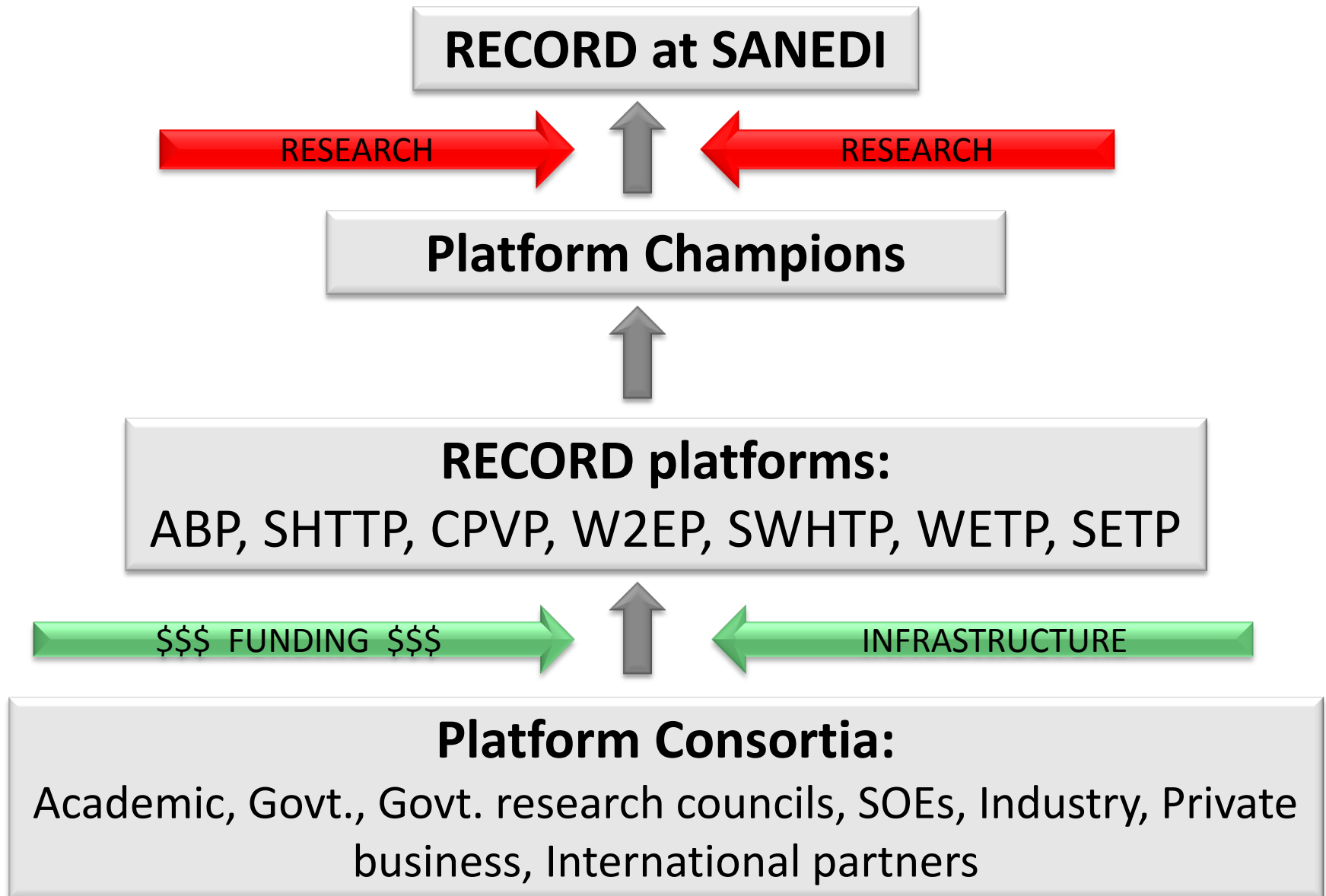
RECORD Operational

- Stakeholder Relations
- Industry engagement
- Reoccurring marketing
- Government representation for RE sectorial activities

RECORD Implementational

- Collaboration and coordination
 - International and national collaboration
 - Resource mapping
 - Solar cooling study
- RE Skills development and training

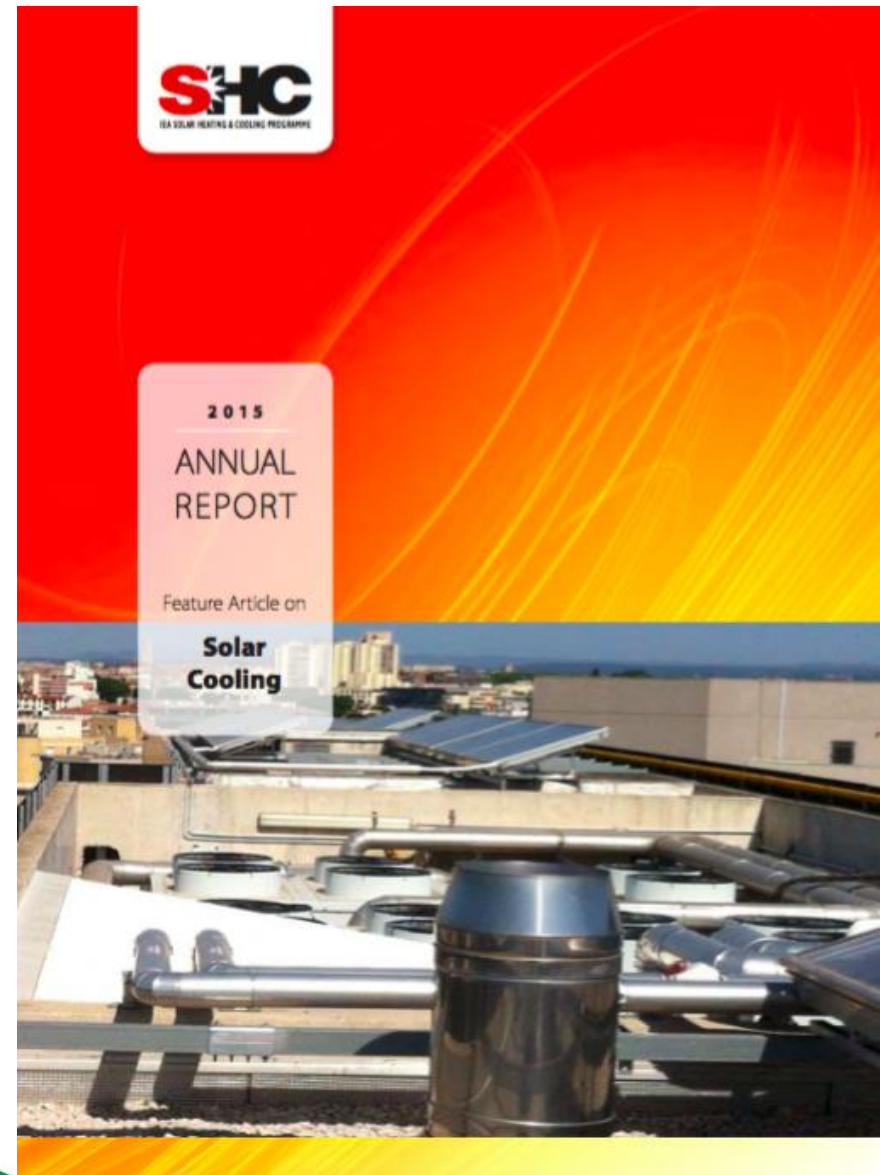
RECORD platform operation plan





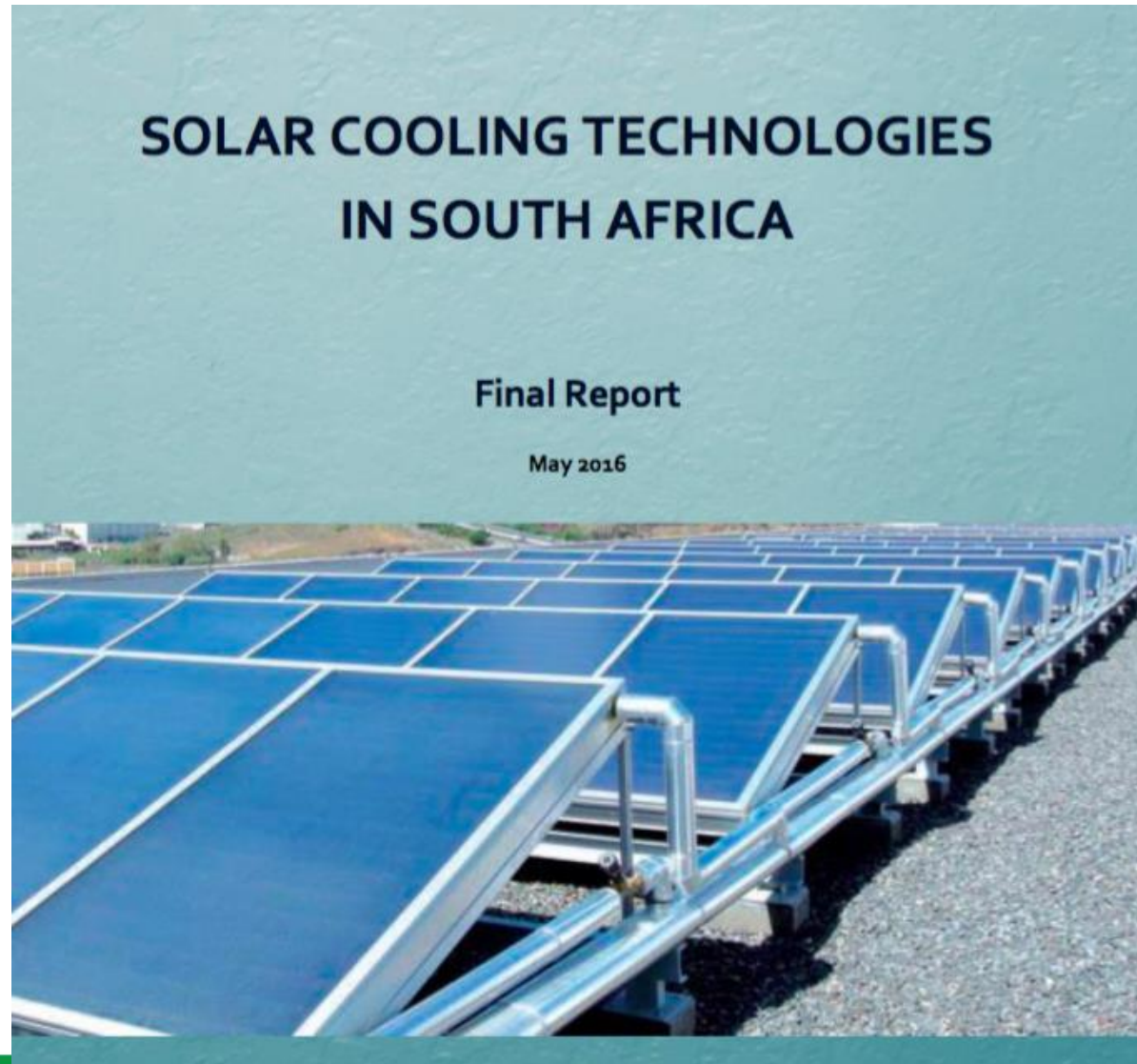
IEA SHC

- Membership
- Global knowledge base
- International interaction
- Collaborative projects



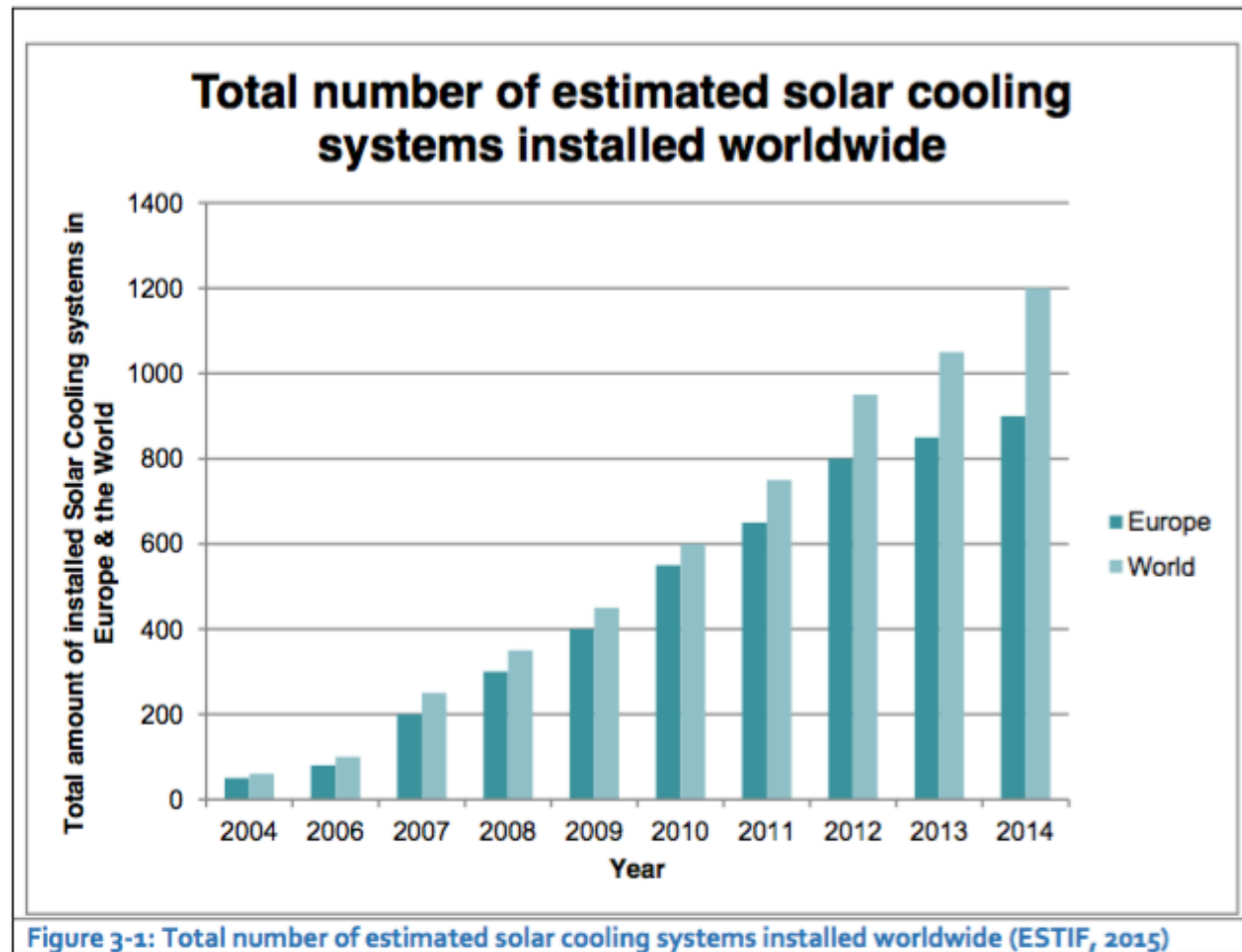


- 🌱 Solar Cooling
 - SA market
 - Current status
 - SA potential





Solar Cooling





Solar Cooling

Cost development of solar cooling Kits (2007-2012)

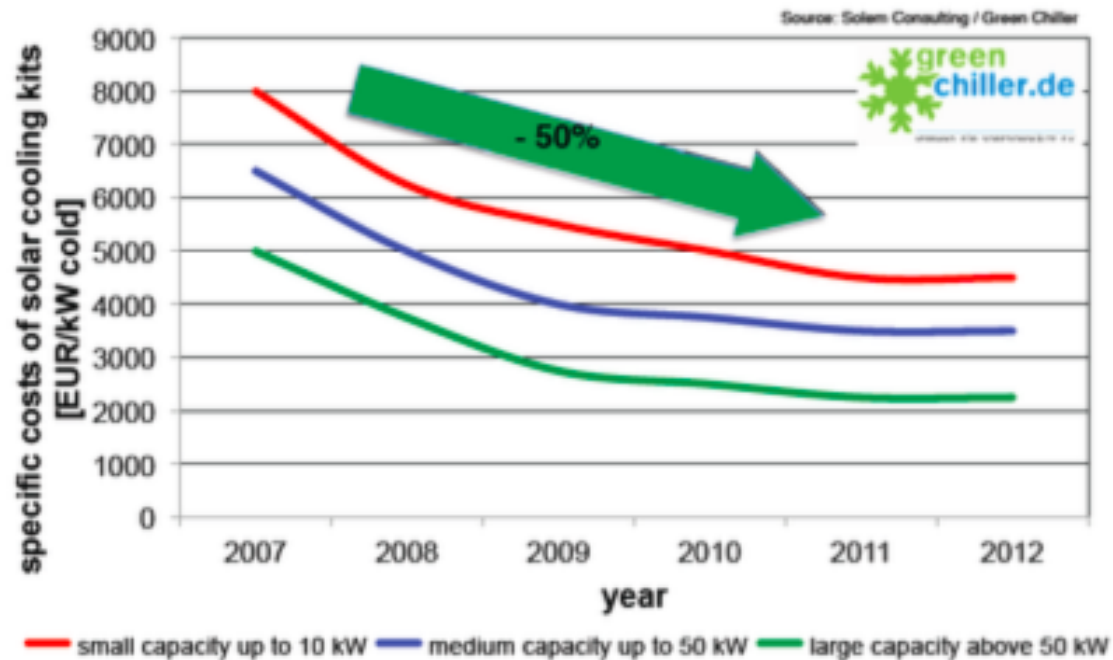
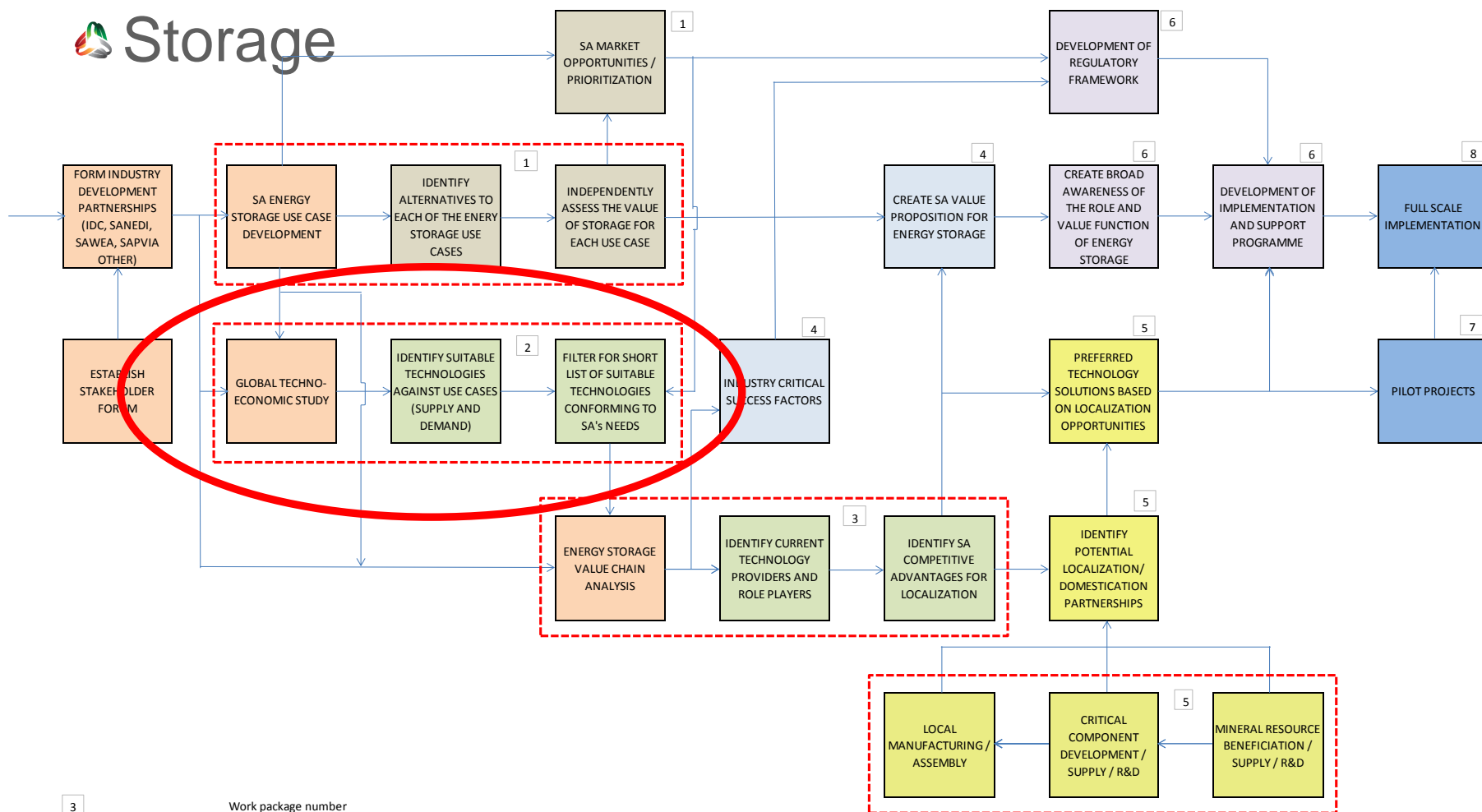


Figure 3-3: Cost development of Solar cooling kits 2007 to 2012 (Solem Consulting, 2014)

SANEDI focus



Storage





SOLTRAIN



SOLTRAIN



The overall goal of SOLTRAIN is to contribute to the switch from a fossil fuel based energy supply to a sustainable energy supply system based on renewable energies in general but based on solar thermal in particular.

WITH FUNDING FROM
AUSTRIAN
DEVELOPMENT
COOPERATION



www.aee-intec.at AEE - Institut für Nachhaltige Technologien



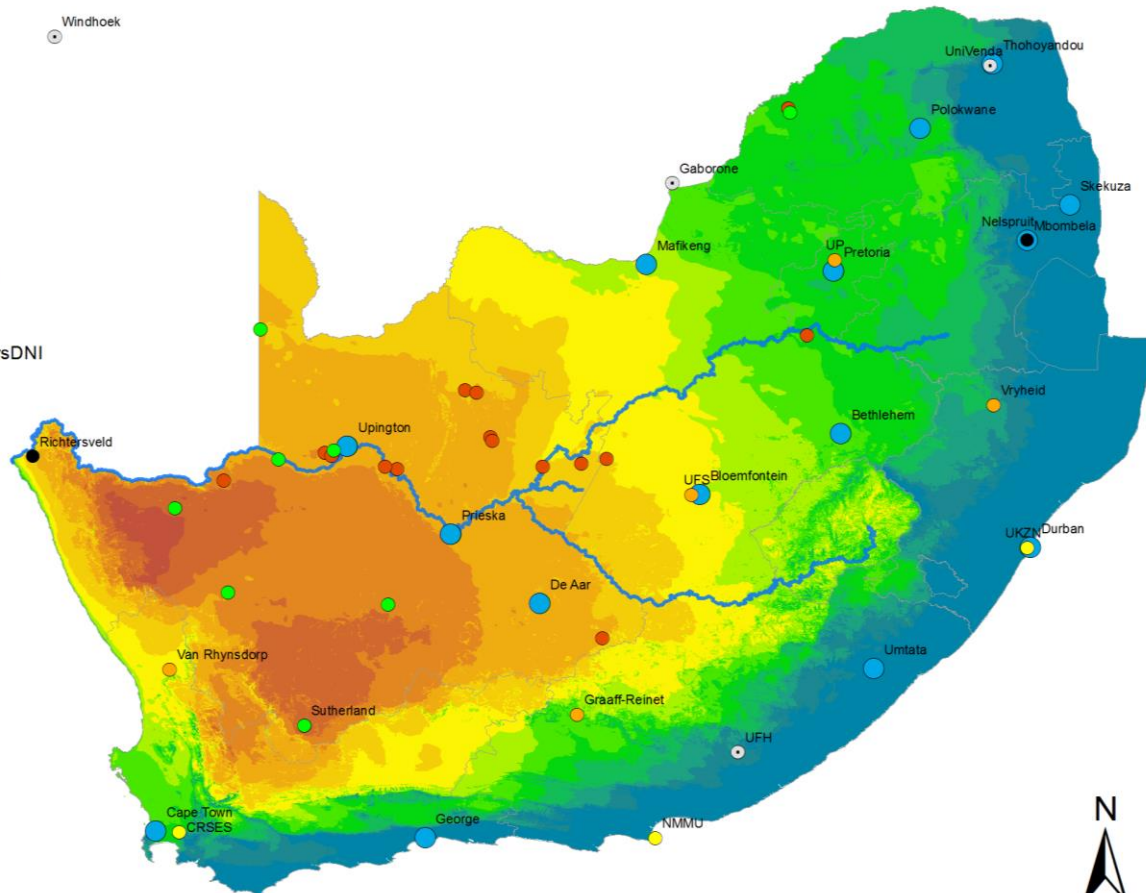
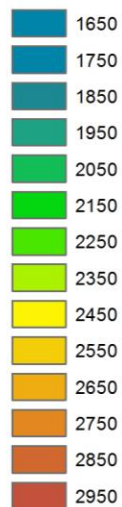
Solar MET - SAURAN

Legend

- GIZ1to3
- GIZ4to5
- GIZ6
- Eskom DNI
- Universities
- USAid
- SAWS Sites
- SAWS Installed
- EskomPublic
- SolarDevelopersDNI

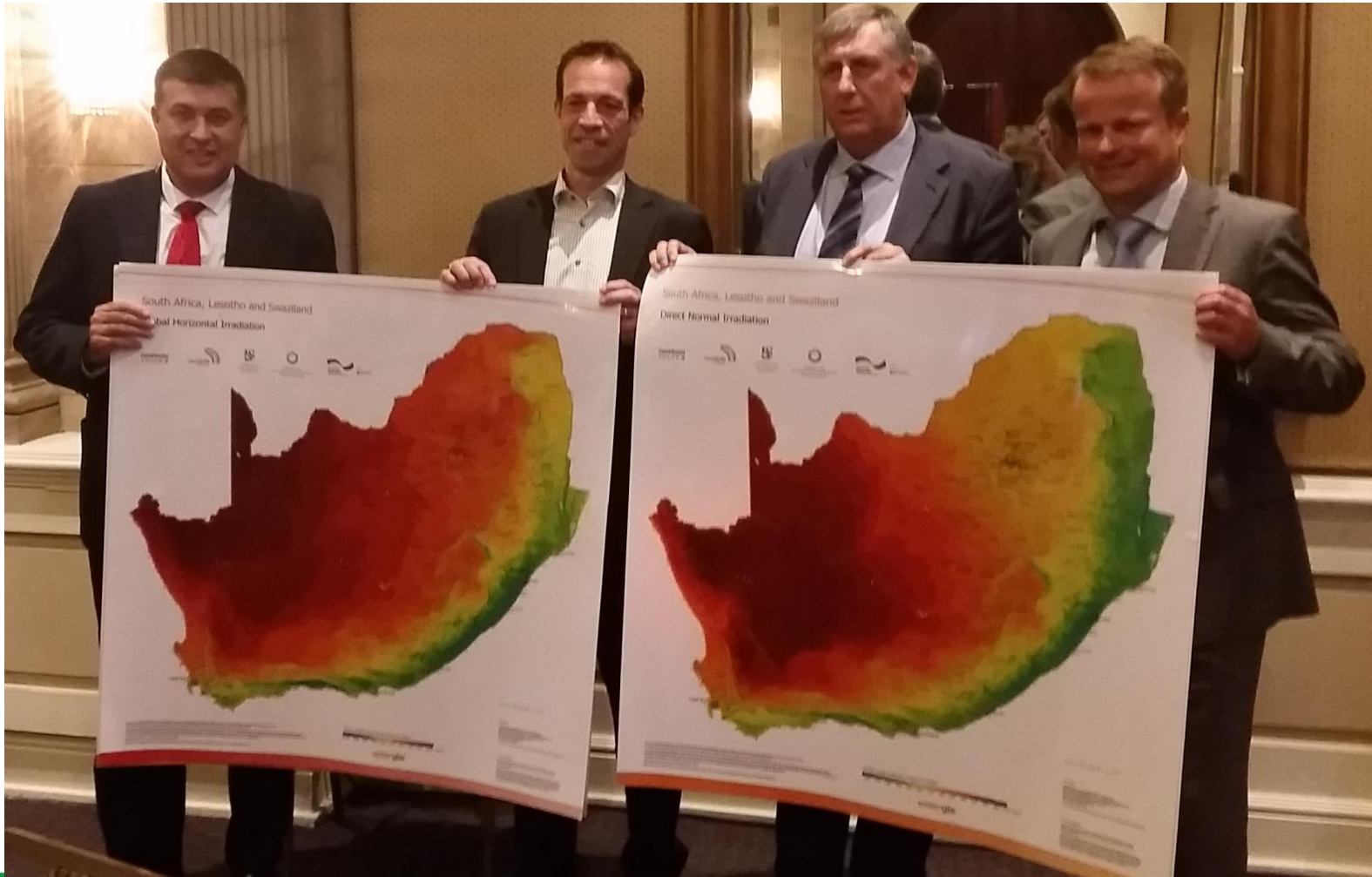
DNI (SolarGIS)

kWh/m²/a





Solar MET - SAURAN



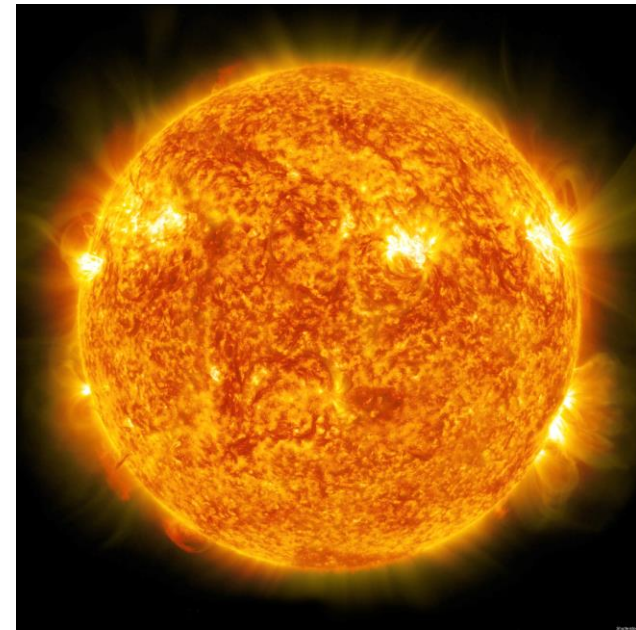


Renewable Energy Fossil Fuel hybridisation

- Scan
- Technology agnostic
- International collaboration



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🌱 SA priorities > Government strategic objectives

- Energy security
- Job creation

🌱 Logistics of implementation

- Costs
- Maintenance
- When, where, how, how much?

🌱 Re-Search



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**THANK
YOU**