CSIR Overview

Mkhulu Mathe

ESMAP – CSIR, ICC South Africa
21 January 2020
Strategic pillars

Mandate
Scientific Research Council Act 46 of 1988,

Vision and Mission

Research, develop, localise and diffuse transformative technologies
Contribute to re-industrialisation
Support the development of a capable state
Diversify income, maintain financial sustainability and good governance
Build and leverage human capital and infrastructure

Strategic clusters

Priority sectors
Industry competitiveness

Priority technologies
R&D opportunities

Advanced Agri & Food
SMART Places
NextGen Enterprises & Institutions
SMART Logistics

Future Production
Chemicals
Manufacturing
Mining

NextGen Health

Defence & Security

NextGen Enterprises & Institutions

SMART Logistics

4IR Capability embedded in all clusters

Enabling capabilities

Industry advancement clusters
CSIR international collaborations

ANGOLA:
- Disaster fire monitoring

ZAMBIA:
- Botanical remedy against HIV

BOTSWANA:
- Indigenous food products; frequency spectrum management

TANZANIA:
- Transport research

AUSTRALIA:
- Climate change modelling
- Coal dust explosions
- Strategic environmental assessment of shale gas in the Karoo

CHINA:
- Sustainable water use
- Test, evaluation, modelling and simulation systems for defence R&D institutes

SWEDEN:
- Synthetic biology

GERMANY:
- Wind and solar energy
- Biopharming

FRANCE:
- Climate change

USA:
- Transport research
- High-throughput proteomics; cancer research
- Biopharming
- Monitoring of dust exposure

SAUDI ARABIA:
- Established programme with KACST to enhance research capabilities in radar and electronics
- Collaborate on aeronautics and optronics
- Testing of road materials through heavy vehicle simulation

MEXICO:
- Testing of road materials through heavy vehicle simulation

COSTA RICA:
- Testing of road materials through heavy vehicle simulation

TANZANIA:
- Transport research
Thank you