

# SA Universities – Mapping the Sustainable Development Goals



**University of the Free State,  
in collaboration with  
Universities South Africa**

# Study context

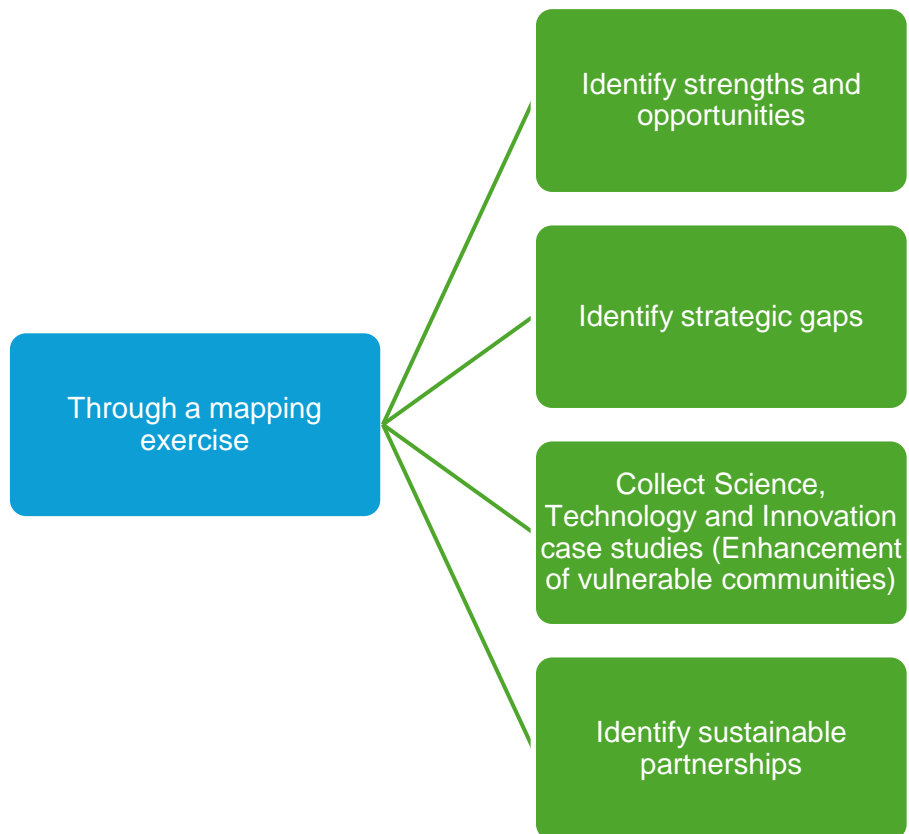
Universities South Africa (USAf) commissioned a call.

The University of the Free State (UFS) is uniquely positioned due to its pivotal role in addressing sustainable development challenges in the South African context – a particular focus on food security and sustainable food systems.



# Aims and Objectives

---

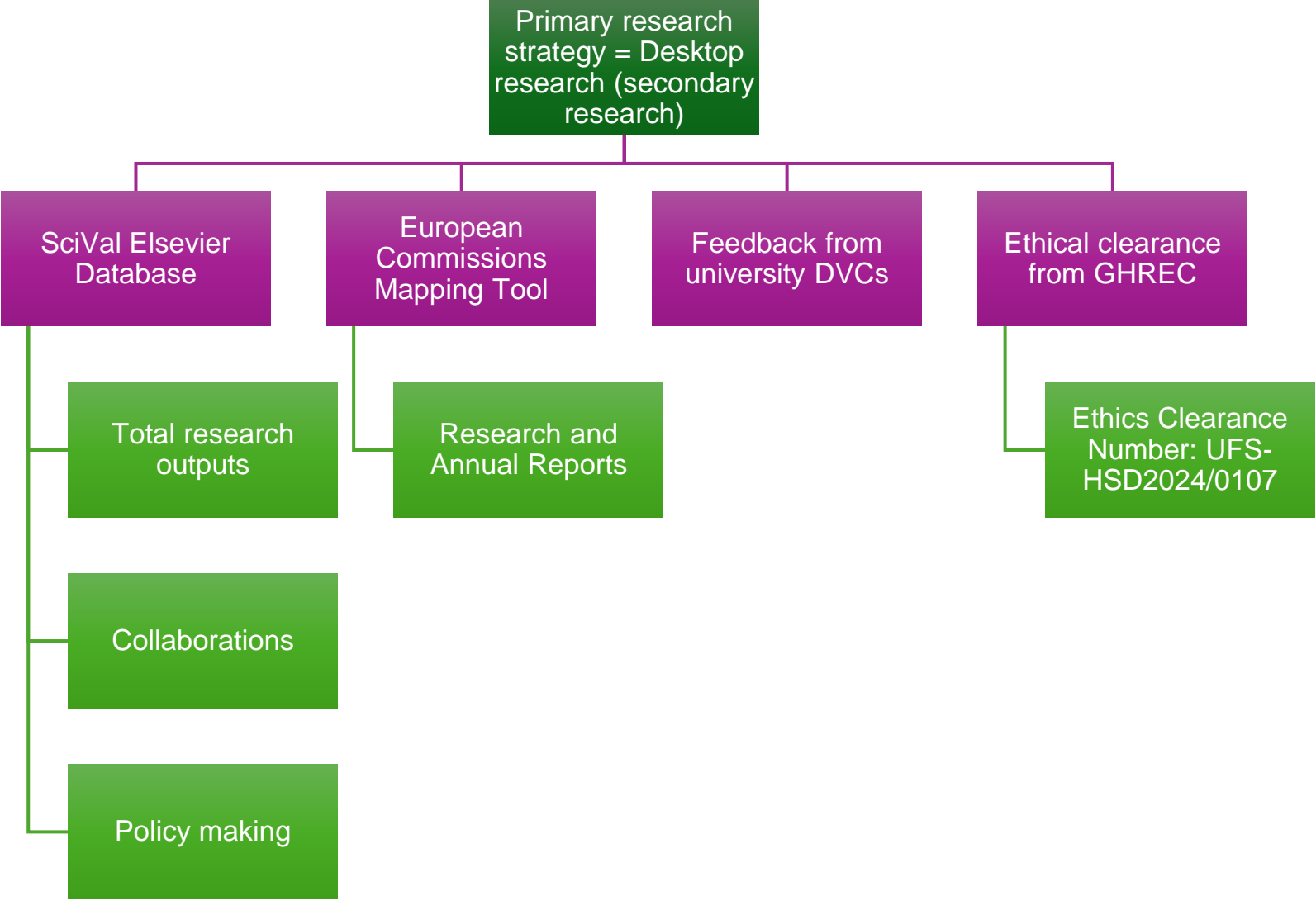


# Literature

- Sustainable development is currently at the forefront – extreme challenges faced.
- Agenda 2030 – a global call to action
  - 17 Sustainable Development Goals to reach.
- Higher education institutions play a pivotal role in reaching these goals
  - Education
  - Outreach
  - Research
  - Policy development



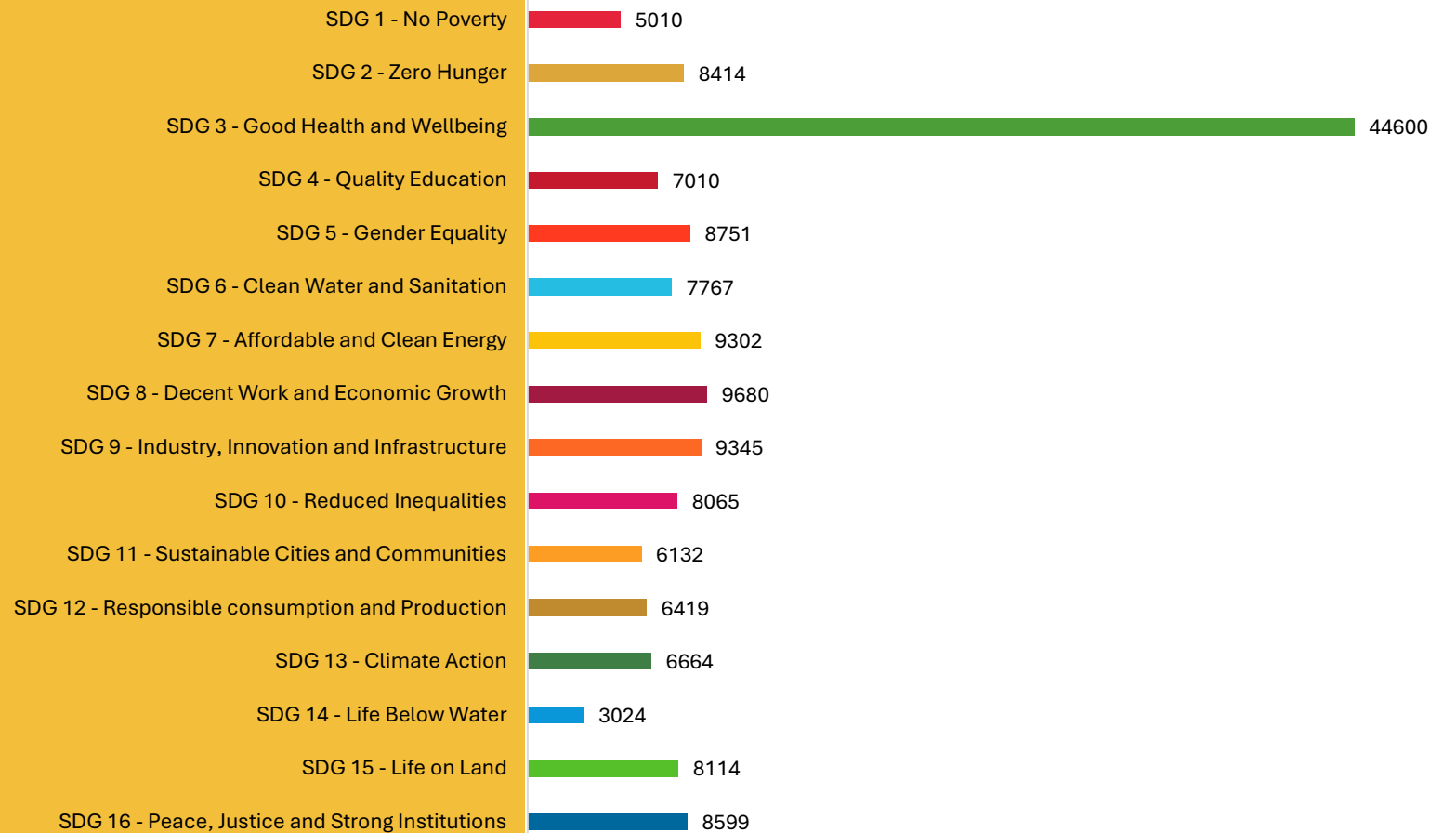
# Methodology - Desktop Study





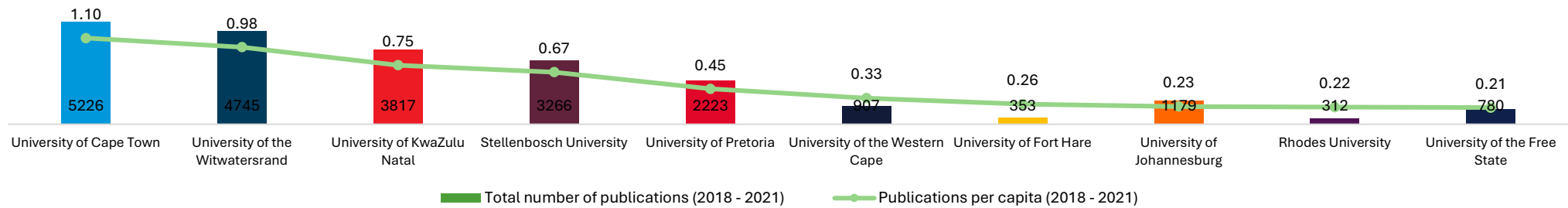
Results

# Total contributions to the SDGs through total research outputs by South African Universities.

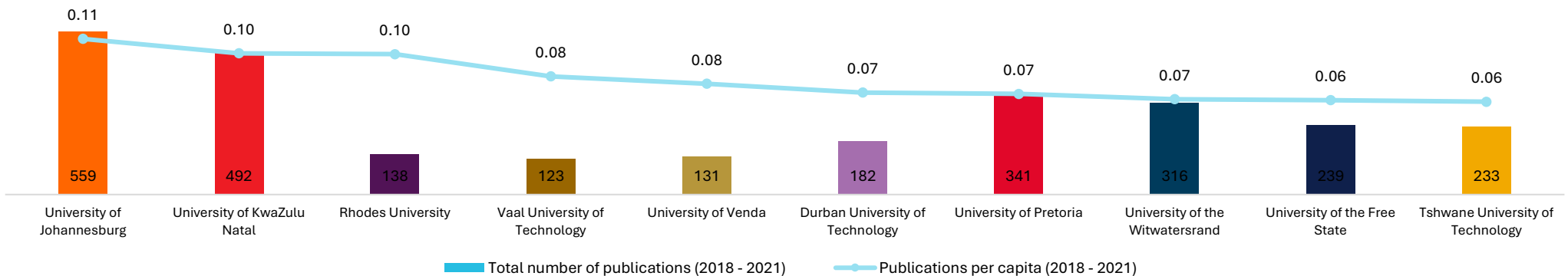


# Total research outputs per university for each of the first 17 SDGs for the period 2018 to 2022.

**SDG 3: Good health and well-being**  
**Total number of publications | Publications per capita**  
**2018 - 2021**

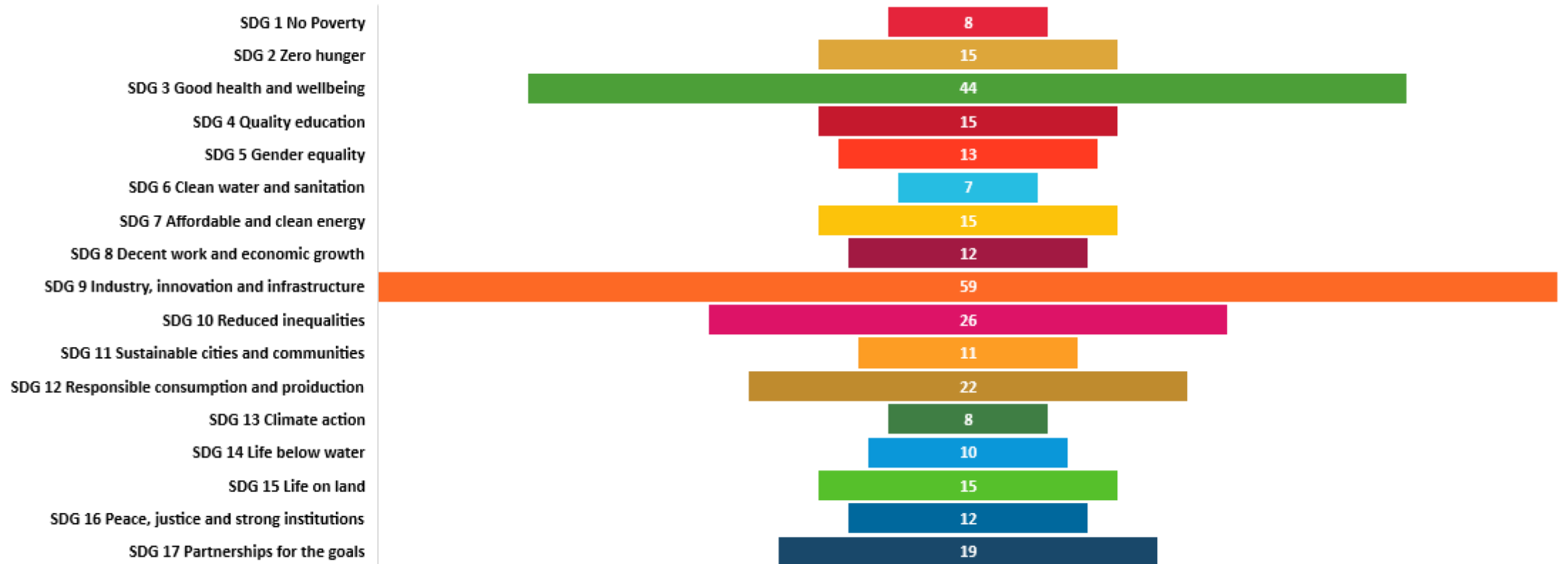


**SDG 6: Clean water and sanitation**  
**Total number of publications | Publications per capita**  
**2018 - 2021**





# Sustainable Development Goals addressed by SARChI Chairs



# Centres of Excellence

- ***Predominant focus of these centres***

- SDG 3 *Good Health and Well-Being*
- SDG 9 *Industry, Innovation, and Infrastructure*

- ***SDGs not directly represented:***

- SDG 4 *Quality Education*
- SDG 5 *Gender Equality*
- SDG 6 *Clean Water and Sanitation*
- SDG 7 *Affordable and Clean Energy*
- SDG 10 *Reduced Inequalities*
- SDG 11 *Sustainable Cities and Communities*
- SDG 13 *Climate Action*
- SDG 14 *Life Below Water*
- SDG 16 *Peace, Justice and Strong Institutions*

DSI-NRF Centre of Excellence for Integrated Mineral and Energy Resource Analysis (CIMERA)

DSI-NRF Centre of Excellence in Human Development (CoE Human)

DSI-NRF Centre of Excellence in Food Security (FS)

DSI-NRF Centre of Excellence in Scientometrics and Science, Technology and Innovation (STI) Policy (SciSTIP)

DSI-NRF Centre of Excellence in Mathematical and Statistical Sciences (MaSS)

GENUS (DSI-NRF Centre of Excellence in Palaeosciences)

The National Institute for Theoretical Physics (NITheCS)

DSI-NRF Centre of Excellence in Epidemiological Modelling and Analysis (SACEMA)

DSI-NRF Centre of Excellence in HIV Prevention (CAPRISA)

DSI-NRF Centre of Excellence in Plant Health Biotechnology (CPHB)

DSI-NRF Centre of Excellence for Biomedical Tuberculosis Research (CBTBR)

DSI-NRF Centre of Excellence in Catalysis (C\*change)

DSI-NRF Centre of Excellence Birds as Keys to Biodiversity Conservation

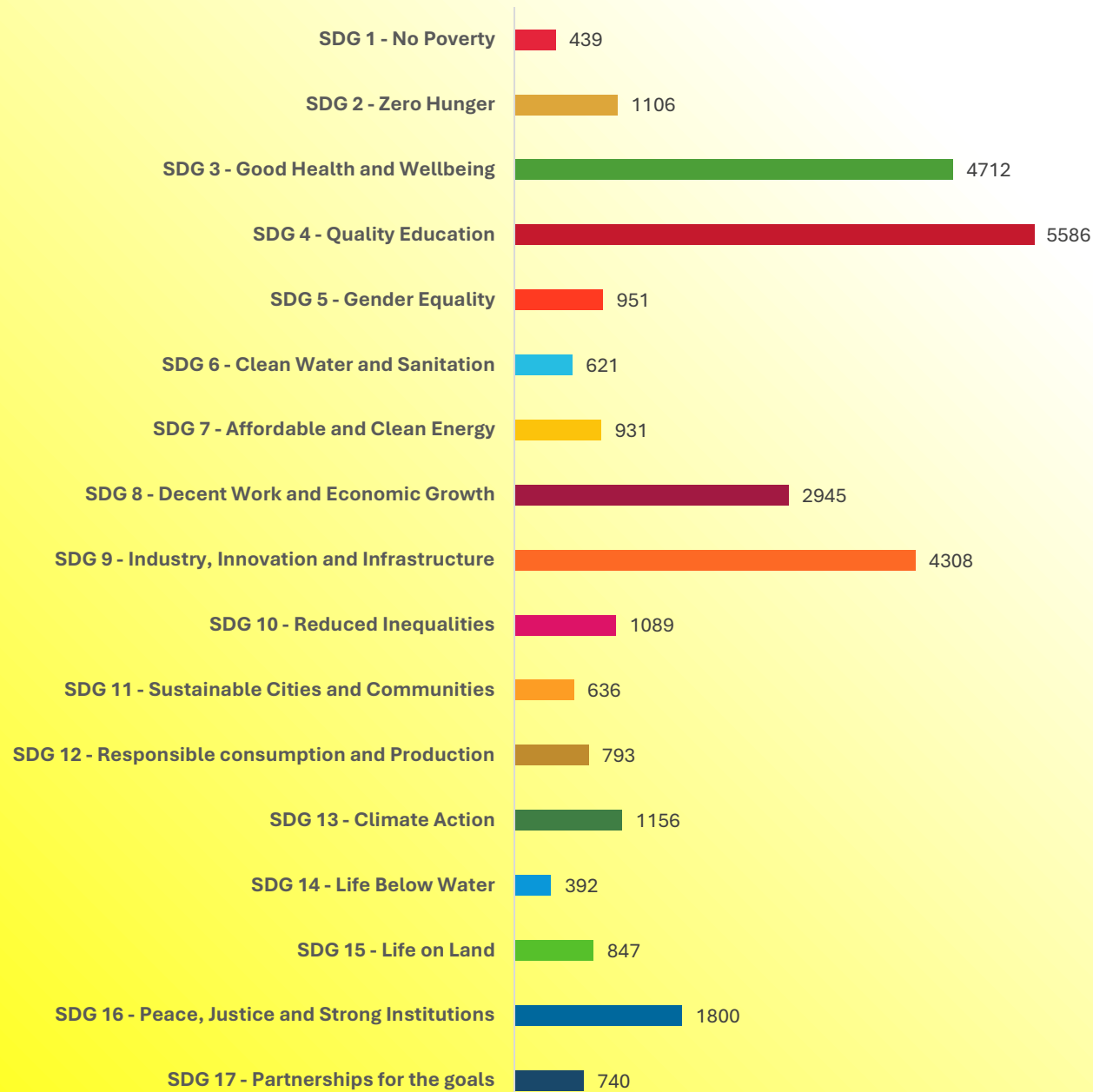
DSI-NRF Centre of Excellence in Strong Material (SM)

DSI-NRF Centre of Excellence for Invasion Biology (CIB)

# Publication Impact

*Publications in the Top 25% Journal Percentiles by CiteScore Percentile*

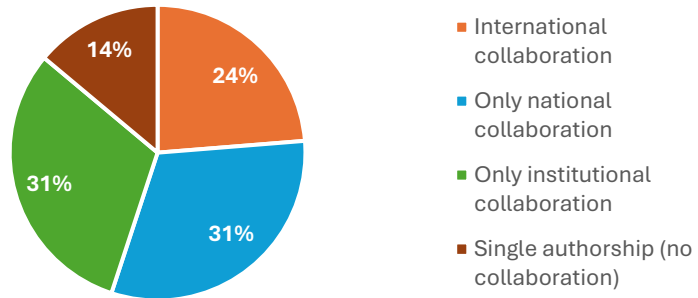
Institution	Scholarly Output	Publications in Top 25% Journal Percentiles by CiteScore Percentile	%
<b>SDG 3 - Good health and well-being</b>			
University of Cape Town	7955	5007	63%
University of the Witwatersrand	7587	4317	57%
Stellenbosch University	5186	2858	55%
<b>SDG 4 - Quality education</b>			
University of Cape Town	595	242	41%
Stellenbosch University	527	192	36%
University of the Witwatersrand	542	196	36%
<b>SDG 6 - Clean water and sanitation</b>			
University of Cape Town	391	232	59%
University of South Africa	732	384	52%
University of Fort Hare	150	78	52%



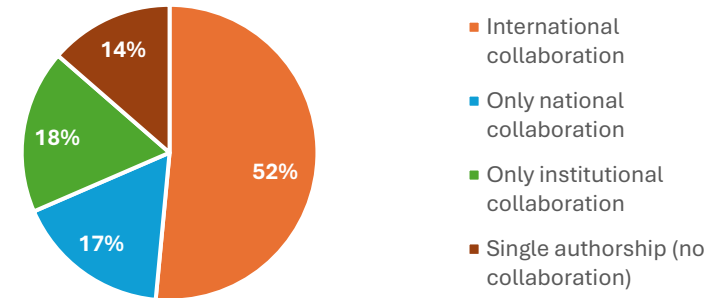
# Total contributions to the SDGs as presented in annual and research reports by South African Universities

# Collaborations

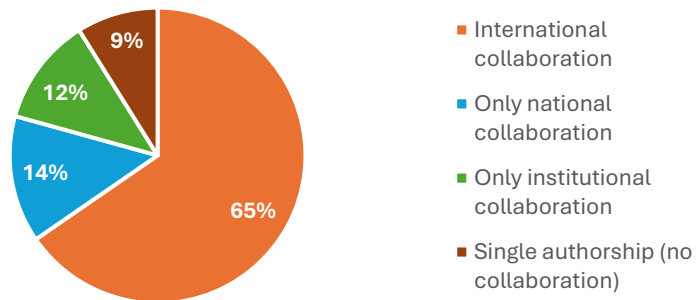
## Central University of Technology



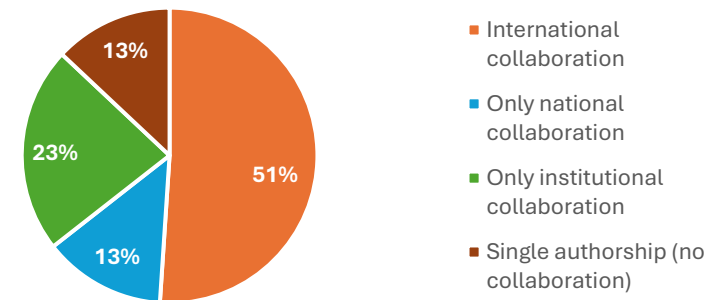
## Rhodes University



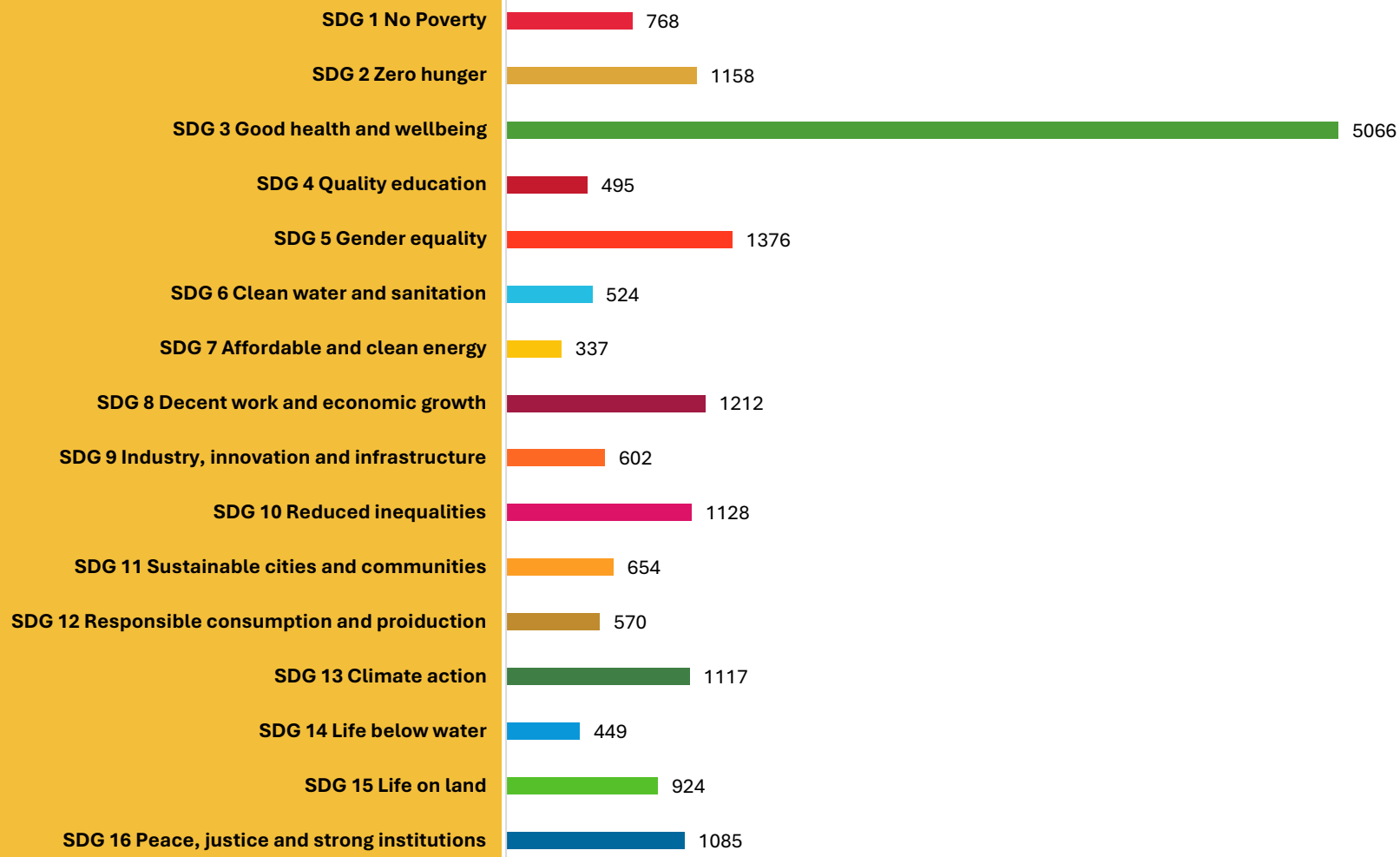
## University of Cape Town



## University of Johannesburg

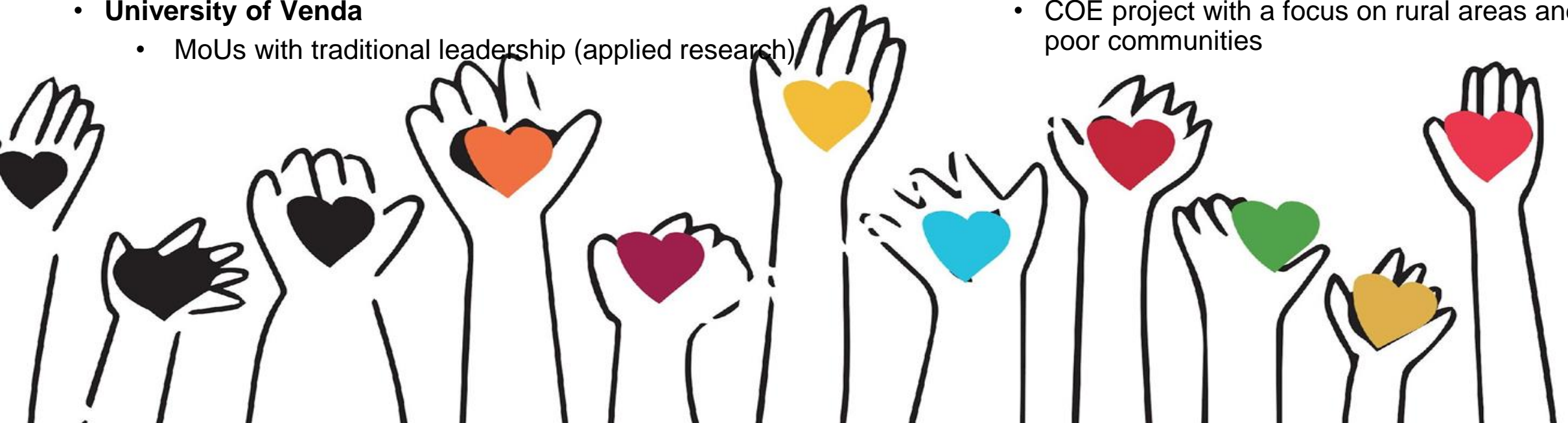


# Societal Impact - Total number of outputs cited by policy documents nationally and internationally

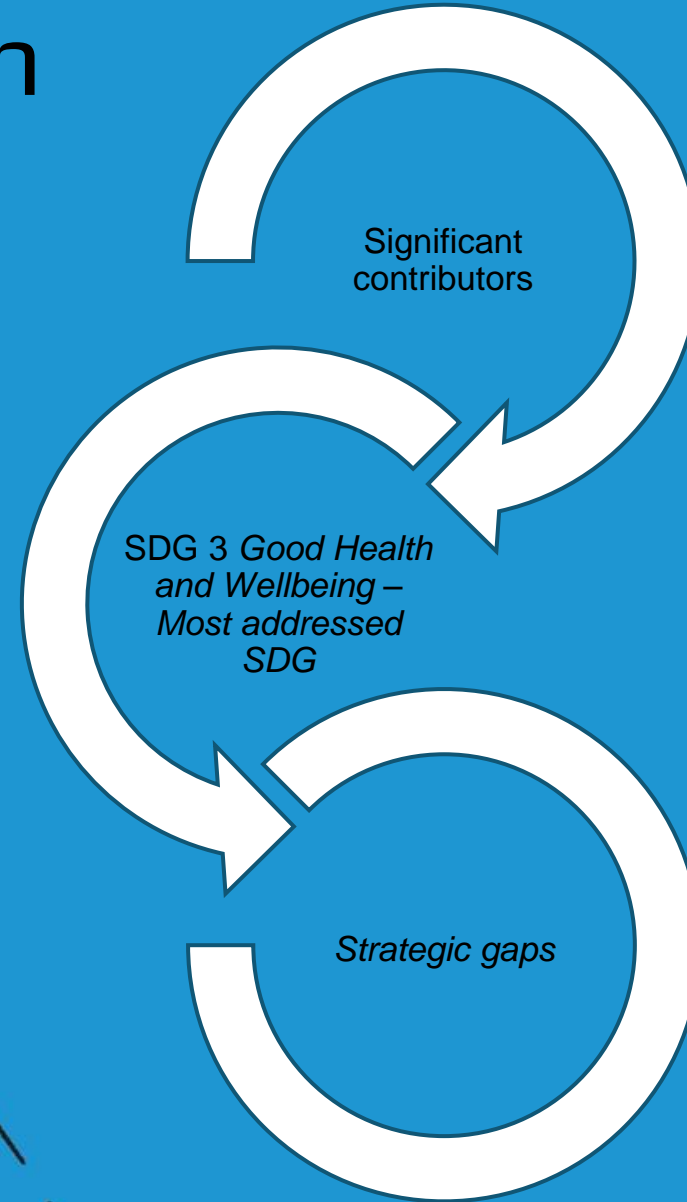
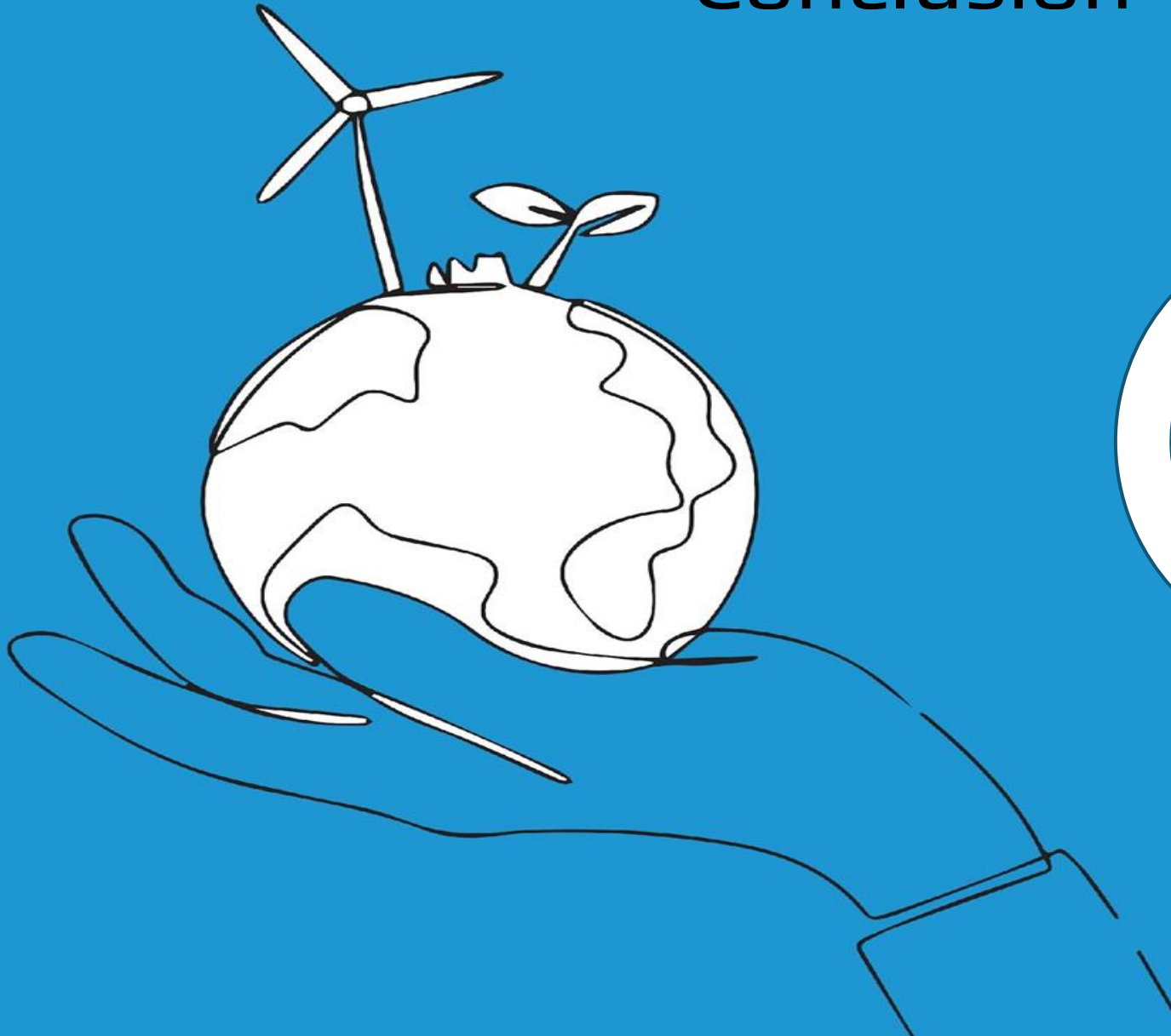


# Examples of STI's addressing SDGs and enhancing vulnerable communities

- **University of Johannesburg's multinational outreach project**
  - Sustainable clean water supply
  - Electricity supply
- **The University of Witwatersrand – Peco Power**
  - Reliable electricity
- **University of the Free State**
  - Early warning systems
- **University of Venda**
  - MoUs with traditional leadership (applied research)
- **North-West University**
  - Innovations to combat hunger
- **Stellenbosch University**
  - Research for impact platform
- **University of Zululand**
  - TTO manager
- **University of the Western Cape**
  - COE project with a focus on rural areas and poor communities



# Conclusion



- University of Johannesburg (UJ)
- University of Cape Town (UCT)
- Rhodes University (RU)

- SDG 1 *No poverty*
- SDG 14 *Life below water*





# Thank you!

Professor Corli Witthuhn  
Professor Johan van  
Niekerk  
Mrs Mariska Vermeulen

