NELSON MANDELA UNIVERSITY

Advancing the SDGs at Nelson Mandela University

Dr Thandi Mgwebi

Deputy Vice-Chancellor

Research, Innovation and Internationalisation

NMU positioning

Six research themes

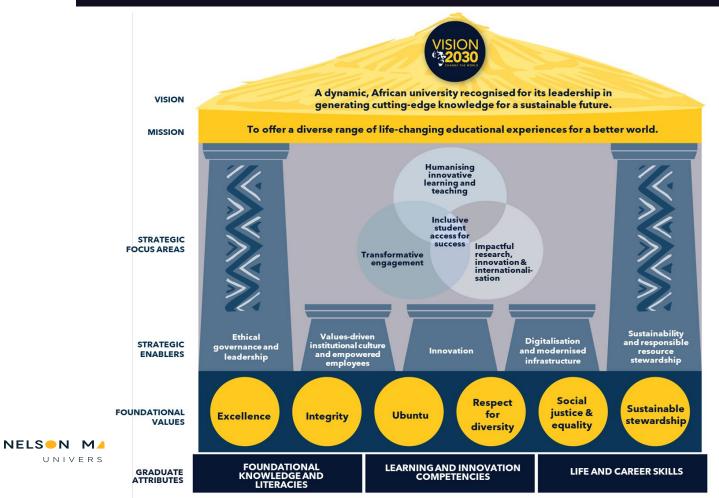
- Ocean and coastal sciences
- Social justice and democracy
- Environmental stewardship and sustainable livelihoods
- Innovation and the digital economy
- Origins, culture, heritage and memory and
- Humanising pedagogies

Strategic Trajectories

- Medical School
- Ocean Sciences
- Revitalization of the humanities and fostering transdisciplinarity

NELSON MANDELA UNIVERSITY

Vision 2030 strategic framework



Sustainability Research: an encompassing theme

Background

- institutional vision of sustainability
- Institutional theme alignment
- Vision 2030
- Global alignment



Strategies that advance SDGs

- Incorporating the SDGs into the curriculum/student activities
- Research and innovation: Universities are hubs of research and innovation, and they can contribute to the SDGs by conducting research that directly addresses the goals. This involves interdisciplinary research collaborations that tackle complex sustainability issues, such as climate change, poverty, inequality, race, gender and memory; and environmental degradation. encouraging research that explores new technologies, policies, and strategies for sustainable development.
- **Partnerships and engagement:** partnerships with governments, NGOs, businesses, and local communities to collaborate on projects that advance the SDGs.
- **Campus sustainability:** leading by example and striving to become sustainable
- Entrepreneurship and social innovation
- Advocacy and policy influence
- Global collaborations & networks

SDGs and the University

implement a coordinated approach to the SDGs within the university. Building on existing **sustainable development 'connecting points'**, such as sustainability institutes, sustainability managers, sustainability committees, or Corporate Social Responsibility coordinators, etc

STEPS

- 1. Mapping what is already being done
- 2. Building internal capacity and ownership of the SDGs (including early career researchers and students)
- 3. Identifying priorities, opportunities and gaps
- 4. Integrating, implementing and embedding the SDGs within university strategies, policies and plans*
- 5. Monitoring, evaluating and communicating actions on the SDGs



Sustainability Science Initiative

- Position Nelson Mandela University: leadership, impact, contribution to knowledge, economy and youth development
- An encompassing Sustainability Science Research Platform for Nelson Mandela University
- Parallel processes
 - SDG report
 - the current alignment of NMU's research with the SDGs
 - Impact Rankings





Times Higher Education Impact Rankings

- Impact Rankings first global attempt to measure university progress around the SDGs
- Serve as a catalyst for action, a mechanism for holding universities to account, and an opportunity for universities to highlight their work

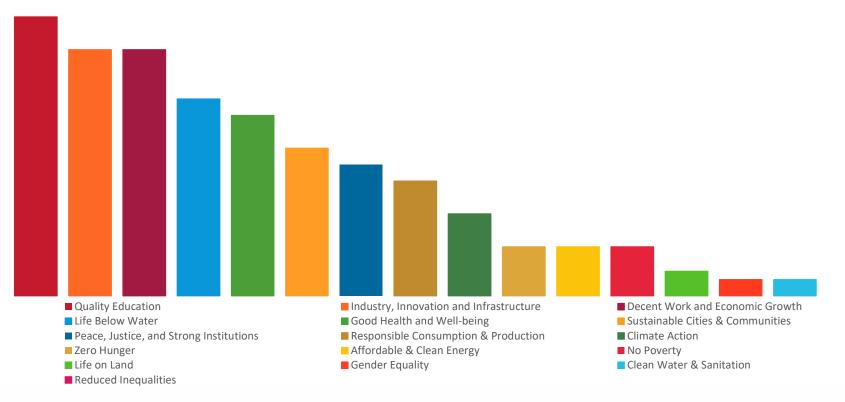




NELSON MANDELA UNIVERSITY

Institutional Research Alignment Mapping Project – highlighting SDG alignment

Extent to which NMU research activities are aligned with SDGs



NELSON MANDELA UNIVERSITY

Emerging points of intersections: Transdisciplinary Research Hub

Environment

- Climate change and adaptation

- Biodiversity and preservation of natural resources

- Ocean and marine science

Health ecology (social dynamics)*

- Social and behavioural change

- Ethics

- Ocean and cultures

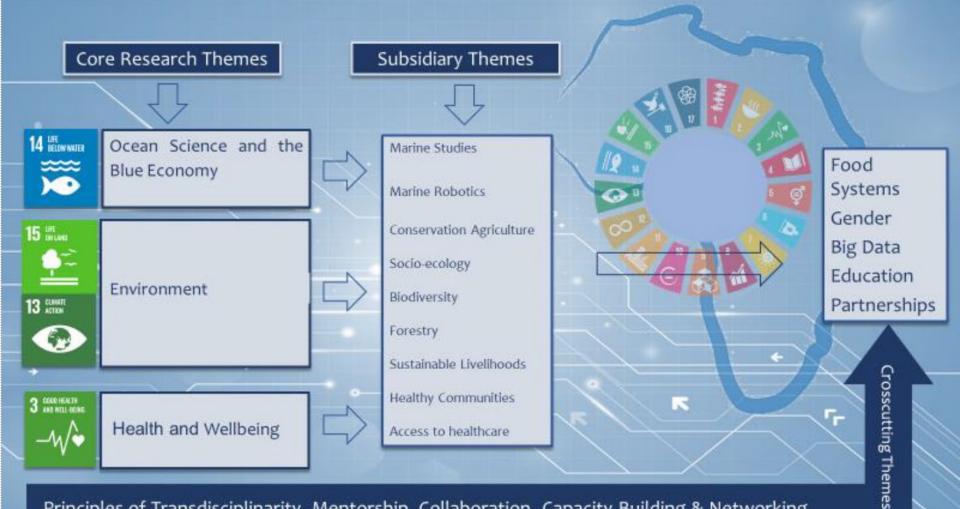
- Human development
- Future & systems thinking

Economy

 Materials and technology
Policy and

governance





Principles of Transdisciplinarity, Mentorship, Collaboration, Capacity Building & Networking

Mandela Institute for Sustainable Futures is Nelson Mandela University's institutional institute for research that works across the sciences and with society for societal impact thereby advancing the SDGs. The fundamental purpose is to develop and unleash the transformative potential of NMU excellence to inform and inspire a future of thriving societies.

Our work at MISF: a platform for convergence

- Reducing climate risks
- Energy transitions
- Increasing food security
- Advancing One Health

Global Challenges Research

- Climate change mitigation:
- Energy & energy transitions:
- Food security
- One health

Reducing climate risks/mitigation

 Marine spatial planning; human settlements; sustainable livelihoods; improved financial securities; innovation technologies,

Our Anchors

• ACE; MARPRU, SRU; CMR, AEON

Energy & energy transitions

Supporting research and building linkages for energy research and just energy transitions

 renewable fuel sources, smart technologies, demand-response programs, distributed controls, accessibility, co-optimized systems, and education.

Our anchors

eNtsa, uYilo, Centre for Energy Research; InnVenton; Wood Science; Centre for Energy Research

Increasing food security

Aquaculture, marine food security; oceans and cultures;

Our anchors

CMR; Hubs of convergence;



One health agenda

The health and wellbeing of humans are closely intertwined with the wellbeing of wildlife, livestock, and the environment. It is crucial to prioritize the development of better infrastructure for food, water, and energy to safeguard the natural ecosystems that offer recreational, hunting, and fishing opportunities. Additionally, this will help reduce the risk of human exposure to parasites, pathogens, and pollution.

Our anchors

ACE; CMR, FishForce; SRU; Heritage and Memory aligned research;



Strategies

- Incorporating the SDGs into the curriculum/student activities
- **Research and innovation**: Universities are hubs of research and innovation, and they can contribute to the SDGs by conducting research that directly addresses the goals. This involves interdisciplinary research collaborations that tackle complex sustainability issues, such as climate change, poverty, inequality, race, gender and memory; and environmental degradation. encouraging research that explores new technologies, policies, and strategies for sustainable development.
- **Partnerships and engagement:** partnerships with governments, NGOs, businesses, and local communities to collaborate on projects that advance the SDGs.
- **Campus sustainability:** leading by example and striving to become sustainable institutions
- Entrepreneurship and social innovation:
- Advocacy and policy influence
- Global collaborations & networks

Strategic partnerships & networks

- Australia Africa University Network (AAUN)
- Association of Commonwealth Universities (ACU)
- South Africa Swedish Forum (SASUF)
- South Africa Canada University Network
- Global Challenges University Alliance





Developing an Open science programme for Mandela



Benefits

- Open research data
- Open scientific publications
- Open access
- Open peer review
- Open collaboration

Change the World

mandela.ac.za