



Built Environment Climate Change Indaba 2024

Date: 7-8th November 2024

Time: 08h00-15h30

Venue: Sibusisiwe Community Hall, Mandeni Local Municipality, KwaZulu Natal

SUMMARY OF THE SUMMIT

1. ATTENDANCE REGISTER – PRESENTERS/SPEAKERS

Name	Portfolio/Institution	Present	
		Yes	No
Cllr Thabani Mdlalose	Executive Mayor; Mandeni Local Municipality	X	
Ms Amelia Mtshali	Chairperson; Council for the Built Environment	X	
Ms Bernice Swarts	Deputy Minister; Forestry, Fisheries and the Environment	X	
Mr Sihle Zikalala (MP)	Deputy Minister; Public Works and Infrastructure	X	
Dr Msizi Myeza	Chief Executive Officer; Council for the Built Environment	X	
Mr Bheki Phungula	KZN Provincial Disaster Management Centre	X	
Dr Patrick Ntsime	Capital Raising and Transaction Advisory Services; Wits University	X	
Ms Mikateko Sithole	Director; Climate Change M&E: Impact and Adaptation. Department of Forestry, Fisheries and the Environment	X	
Ms Emmah Monyanga	Technical Specialist: National Regulator for Compulsory Specifications	X	
Mr Clinton Heimann	Deputy Director General of Spatial Planning and Land Use Management. Department of Land Reform and Rural Development	X	
Professor Molusiwa Ramabodu	Head of Department Construction Management & Quantity Surveying. Durban University of Technology	X	
Mr Bongani Dladla	Chief Executive Officer; Construction Industry Development Board	X	
Ms Vere Shaba	Director; Greendesign	X	
Mr Lebogang Pasha	Executive Manager; Construction Education & Training Authority	X	
Dr Coralie van Reenan	Research Group Leader; Council for Scientific and Industrial Research	X	
Mr Thuthuka Mbhele	Director: Projects KZN Regional Office; Department of Public Works and Infrastructure	X	
Mr Gundo Vhusani Maswime	Lecturer: Department of Civil Engineering; University of Cape Town	X	
Professor Pilate Moyo	Director: Department of Civil Engineering; University of Cape Town	X	
Professor Felix N Okonta	Professor-Geotechnical Engineering. Department of Civil Engineering Science; University of Johannesburg	X	

Professor Wellington Thwala	Dean: Engineering, Built Environment and Information Technology; Walter Sisulu University	X	
Dr Phakamani Buthelezi	Chief Executive Officer; Overberg Water Board	X	
Ms Koketso Malmela	Manager-Strategic Partnerships & Projects; Construction Education & Training Authority	X	
Mr Malusi Shezi	Chief Executive Officer; Construction Education & Training Authority	X	
Mr Pranveer Harriparsadh	Manager-Skills Development Construction Industry Board	X	
Ms Nondumiso Mazula	Manager-Human Settlements and Building Control; Mandeni Local Municipality	X	
Ms Pati Kgomo	Chief Executive Officer; Municipal Infrastructure Support Agent	X	
Cllr Dolly Shandu	iLembe District Municipality	X	
Cllr Thobani Shandu	Mayor; iLembe District Municipality	X	
Mr Sizwe Khuzwayo	Municipal Manager; Mandeni Local Municipality	X	
Ms Motlalepula Pitso	Director-Disaster Preparedness, Response and Recovery Coordination; National Disaster Management Centre	X	
Cllr Nkosinathi Myeni	Chairperson-KZN Provisional Working Group on Environmental Planning & Climate Resilience (and Jozini Local Municipality EXCO Member responsible for Planning Portfolio)	X	
Mr Rabelani Tshikalanke	Senior Manager; Environment & Climate Change (National)	X	
Ms Sibusisiwe Goba-Sigawuke	Senior Manager: Disaster Management & Fire Services (National)	X	
Ms Xolile Dube	Senior Advisor; Municipal Sustainability (KZN Province)	X	
Professor Khangwelo D Musetsho	Professor of Practice at the University of Venda. Environmental Scientist at Naledzi Environmental Consultants	X	
Ms Sekadi Phayane-Shakhane	Chief Executive Officer; South African Institute of Civil Engineering	X	
Dr Sunjay Munno	Chief Business Development Officer; Federated Employers Mutual Assurance	X	
Mr Ndumiso Rolomane	Director-Infrastructure Research, Planning and Systems. Eastern Cape Department of Public Works and Infrastructure	X	
Mr Dumisani Mbongwa	Director-Economic Development, Planning and Human Settlements; Mandeni Local Municipality	X	
Cllr Lawrence Magwaza	Deputy Mayor; Mandeni Local Municipality	X	

2. Purpose of the Indaba:

In light of the looming threat and impact of climate change experienced globally, the Built Environment Climate Change Indaba was to create a platform for professionals, policy makers, and the community to discuss and resolve issues pertaining to climate change in South Africa. It aimed to facilitate, coordinate and drive efforts to formulate a programme of actions to reduce and mitigate the impacts of Climate Change in the South African Built Environment and communities at large.

3. Background/Context of the Indaba

Climate Change in South Africa is evidently laden by the heavy floods experienced in some parts of the country, predominately KwaZulu Natal, the wild fires caused by heatwaves in the Western Cape, as well as the recent snowfall experienced in the summer season in the Eastern Cape, Western Cape, KwaZulu Natal and Free State.

“No one can deny the looming threat and plausible damages from the changing climate, not only in the country but globally”, Ms Amelia Mtshali, Chairperson of the Council for the Built Environment. Climate Change has many impacts on the country including extreme weather events, water shortages, damage to infrastructure, loss of biodiversity, loss of life, and decline in the economy. At a micro scale, climate change affects communities in various ways. Adverse weather conditions such as floods damages infrastructure, destroys businesses, kills livestock, takes human life, and leaves the community in worsen conditions. Low land areas such as Mandeni are severely affected by floods. The impact of these natural disasters is further worsened by poor water drainage, electricity/power shortages, poorly designed and built buildings in informal settlements. These are challenges that speak to the Built Environment; how climate change is affecting the built environments in different ways with extreme weather events causing direct damage and deterioration, and reducing access to the infrastructure and buildings.

4. Discussion

Addressing the challenges and constraints presented by climate change to communities and the Built Environment calls for collaboration efforts between and amongst government bodies, businesses, professional bodies, research facilities and communities. The call of action includes but is not limited to the implementation of the following measures:

A) Built Environment

- Planning, designing and construction of resilient infrastructure. Institutions, businesses and communities located in affected areas are to prioritise the planning, designing and construction of resilient infrastructure
- Enhancing green economy through infrastructure design, building and implementation
- Exploring and leveraging innovation and technology in the design and implementation of infrastructure
- Using sustainable, locally sourced construction material
- Being conscious of the built industry's consumption of natural resources and be cognitive of sustainable ways of using these natural resources.
- Creating construction guidelines that are sensitive to sustainability needs and community demands.
- Investing in skills development of professionals in the Built Environment to equip the complete professional spectrum with the design and implementation of resilient infrastructure
- Integrating climate resilience into spatial planning and land use. In planning for land use and development, collaboration with municipalities and other stakeholders must be taken into consideration
- Considering redesigning the functionality requirements included in tender documents to align them to sustainability goals
- Planning for and implement disaster risk reduction
- Carrying out the legislated mandate of providing quality, functional and safe infrastructure

B) Government Bodies

- Regulating carbon budgets to hold the business community accountable for their carbon emissions
- Imposing carbon tax to the business community
- Designing and implementing support programmes to support municipalities in the implementation of sustainability programmes

- Creating and availing a Climate Change Response Fund. To this end, blended finance, Corporate Social Investment, Infrastructure South Africa, and other funding instruments are available for projects that tackle climate change challenges. **To note, Infrastructure South Africa (ISA) has called for proposals for infrastructure funding. Proposal to be submitted by the 5th of December 2024**
- Consider the introduction of a special clause/legislation provision for the procurement of goods and services during natural disaster times
- Supporting initiatives by communities and SME's involved in recycling and upscaling of used material

C) Business and Regulatory Bodies

- Ensuring that manufactured and supplied products are safe for use and consumption
- Providing product testing and preapproval services for products such as cement
- Assist local government in capacity building programmes and with funding of innovation programmes that addresses climate adaptation and enforcement

D) Research Facilities

- Look into technologies and solutions that harvest and treat snowfall into usable water
- Collaborate with engineers, project managers, town planners and other Built Environment professions in working together towards innovative solutions that addresses climate change

E) Professional Bodies and Education Sector

- Engage scholars in climate change conversations at early education level
- Research subject matter at higher education level
- Explore collaboration opportunities between industries, TVET Colleges and Universities on solutions that addresses climate change

F) Communities

- Capacity building for vulnerable communities including
-education on climate change

-skills development (first-aid training, health & safety training, etc.)

-self-sufficiency capacitation

-resource dispersion

- Introduce climate change ambassadors in local communities whose role would be to address environmental and climate change issues on a daily basis
- Localise climate change conversations where climate change issues are addressed through community-based platforms, with communities taking the forefront and ownership in proactive and reactive actions.
- Engage, educate and empower Amakhosi and Izinduna or any local decision maker on sustainable land use management and planning
- Build structures that can withstand natural disasters (wildfires, floods, winds, storms, etc.)

5. Case Study Perspective from Public Works Projects that Responds to Climate Change

In response to a call to design and build sustainable infrastructure, two Public Works projects have been implemented in KwaZulu Natal following guidelines that are sensitive to sustainability needs and community demands. These are the Sisonkhe District Office Project and the Mandeni Local Municipality Court. The Sisonkhe District Office Project has reached practical completion while the Mandeni Local Municipality Court has just passed the design stage. Reference to the Sisonkhe District Office Project highlights the following sustainable measures taken into account in the design and construction of the building;

- No HVAC ducts in the building but natural ventilation
- Water harvesting
- Natural plants planted on the roof
- Double glazing windows to screen off direct sunlight while achieving natural lighting
- Use of indigenous plants as landscaping
- Use of grey water in ablutions (off the grid system except for consumption water)
- Clear skyline to allow penetration of sunlight for natural lighting

6. Conclusion and Recommendations

Solutions to climate change should address two key areas; prevention (a look at how not to further disrupt nature) and cure (how do we respond to the extent to which the damage has been done). The catalyst to this is collaboration efforts between and amongst government bodies, businesses, professional bodies, research facilities and communities. It cannot be business as usual. The information shared and learned from the Indaba must translate to action in the form of policy development, policy implementation and monitoring.

A special call was made to the Built Environment to mitigate the impact of climate change by:

- Ensuring that infrastructure is designed and built to be climate proof.
- Factor climate change into designs, specifications and standards, construction material, construction methods, etc.
- Integrate climate resilience into spatial planning and land use
- Align functionality requirements in tender documents to sustainability goals
- Creating construction guidelines that are sensitive to sustainability needs and community demands
- Creating/availing a maintenance budget for proactive maintenance of infrastructure as to render resilient infrastructure
- Collaboration with other institutions and government bodies assigned with the responsibility to promote a resilient built environment in capacity building programmes, funding programmes and implementation and monitoring programmes.

7. Matters Arising/Items of Interest

7	MATTERS ARISING		
7.1	<p style="text-align: center;">TVET Colleges Funding Proposal</p>	<p>The President of the SACPCMP, Mr Lufuno Ratsiku has expressed interest in sourcing infrastructure funding for TVET Colleges in partnership with HEFMA. Proposed project to be</p>	<p style="text-align: center;">Note</p>

		discussed and reviewed by the HEFMA EXCO	
7.2	Infrastructure South Africa (ISA)'s Budget Infrastructure Fund	Infrastructure South Africa (ISA) has called for proposals for infrastructure funding. Proposals to be submitted by the 5 th of December 2024 by organ of States/national departments and public entities.	Note
7.2	Learnerships for TVET Colleges	The director of Infrastructure Research, Planning and Systems at Eastern Cape Department of Public Works and Infrastructure, Mr Ndumiso Rolomane in partnership with the Council of Built Environment, are looking to offer training opportunities for TVET students in the Built Environment. More details on this to be shared and a possible meeting invitation to follow to discuss collaboration opportunities with TVET Colleges. Exco to evaluate if this would be a relevant collaboration for HEFMA	Note

