

# Portfolio Committee on Forestry Fisheries and the Environment

Climate Change Bill: Public Hearings  
Oral Presentation – 16 May 2023

**Pedal Power Association**  
and  
**SEE Sustainability**

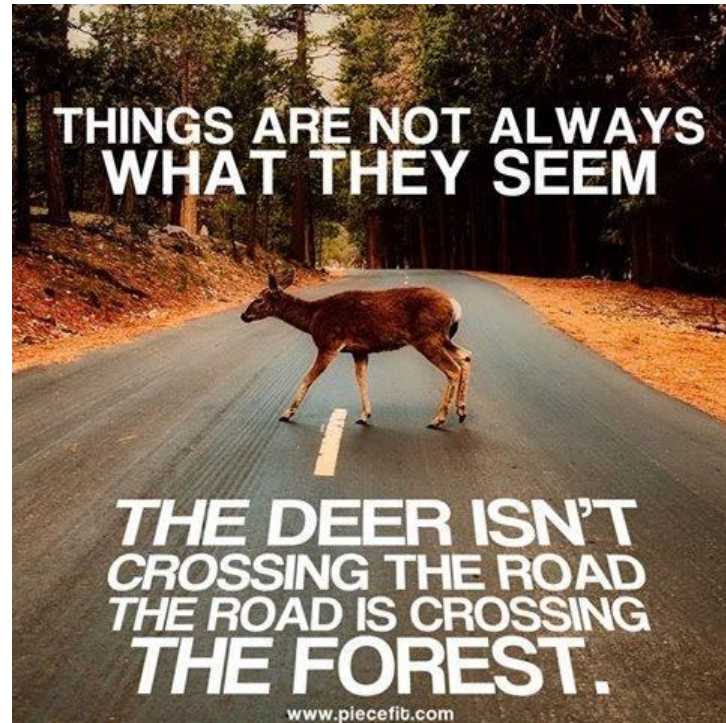


# Topics

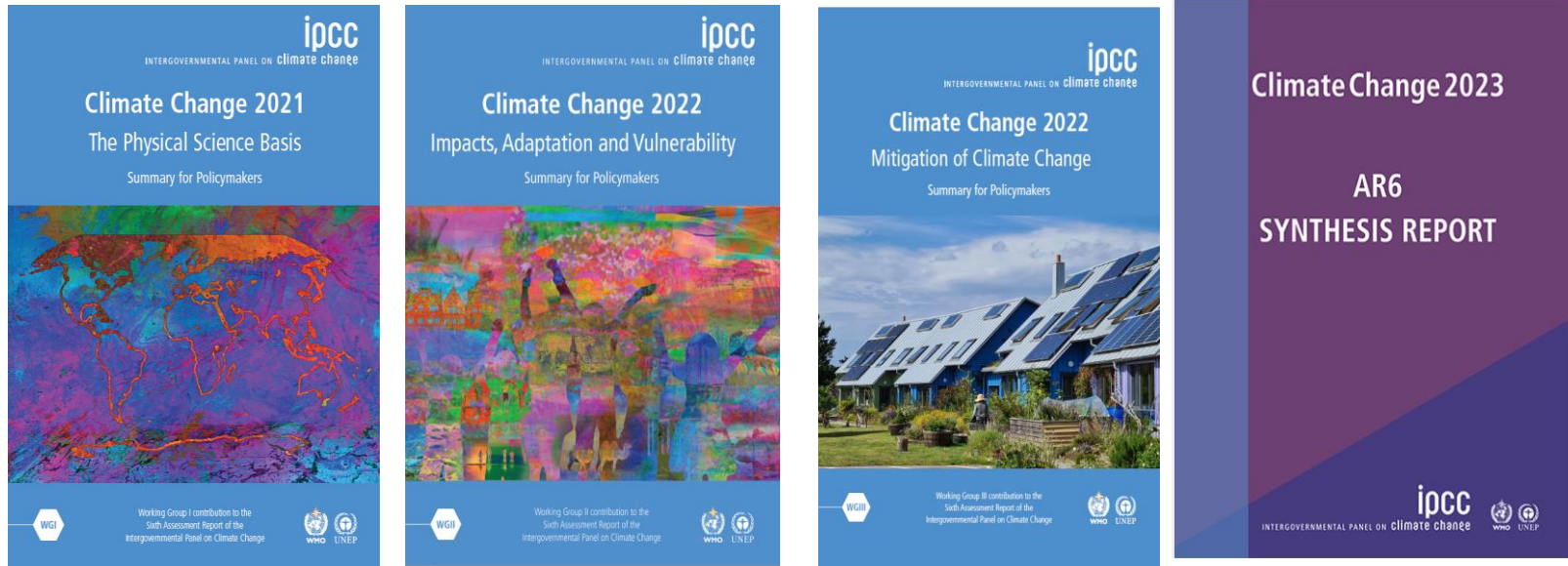
- 1. Introduction and background**
- 2. Sustainable Transport – shifting the paradigm**
- 3. Comments specific to B9-2022**



# Perception / Reality



# Existential Crisis: Recognition



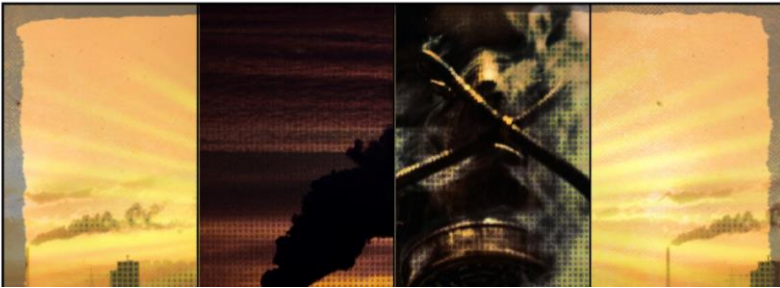
“This important report on mitigation emphasises the urgency of acting on mitigation, globally. For South Africa, we take a developmental approach to climate action, and this report provides valuable scientific information to guide our Just Transition,”  
Minister of Forestry, Fisheries and the Environment, Ms Barbara Creecy.



# Existential Crisis

EDITORIAL  
**Our Burning Planet: The Earth is on fire, it's time to start worrying**

By Daily Maverick • 6 November 2018



QUARTZ AFRICA

## The Indian Ocean is spawning stronger and deadlier tropical cyclones

By Jennifer Fitchett, University of the Witwatersrand • May 9, 2019



Environment ► Climate change Wildlife Energy Pollution

Biodiversity

## Human society under urgent threat from loss of Earth's natural life

Scientists reveal 1 million species at risk of extinction in damning UN report

Jonathan Watts  
Global environment editor

@jonathanwatts



Cape Town's highways are said to be SA ...  
capetalk.co.za



# Urgent Interventions Required

SIXTH ASSESSMENT REPORT

Synthesis Report

ipcc  
INTERGOVERNMENTAL PANEL ON climate change



## Urgency of near-term action

- The **choices and actions implemented in this decade will have impacts now and for thousands of years.**
- All global modelled pathways that limit warming to 1.5°C (>50%) with no or limited overshoot, and those that limit warming to 2°C (>67%), involve **rapid and deep greenhouse gas emissions reductions in all sectors this decade.**
- As adaptation options often have long implementation times, **accelerated implementation of adaptation in this decade** is important to close adaptation gaps.

Dr Christopher Trisos - Synthesis Report Core Writing Team:  
Presentation to PCC 05 May 2023



# Key Considerations

- Climate Change induced weather events more extreme and affect transport systems
- Transport significant contributor to GHG emissions in SA (11%) and cities (up to 40%)
- Require Net Zero emissions by 2050, significant shifts leading up to that (45% reduction by 2030)
- SA's sprawling spatial development structure requires significant change
- Walking remains dominant mode , Cycling has significant potential;
- Safety a key issue
- Policies support sustainable transport intent but little effect given
- Transport planning long run – 30 year+ horizons ~ avoid locking out required solutions



# What is Sustainable Transport?

## SOCIETY

Facilitates equitable, safe access to opportunities

## ECONOMY

Affordable.  
Supports a vibrant economy and inclusive growth

## ENVIRONMENT

Limits impact on the environment

### *Sustainable Transport is:*

*The planning and provision of services and infrastructure for the mobility of people and goods in a manner that:*

- *Is **safe, accessible, and affordable** for all;*
- *Is **efficient and resilient**, while **minimising environmental impact**;*
- *Advances **economic and social development** to benefit today's and future generations; and*
- *Aligns fully with key imperatives of **poverty alleviation & reduced inequality**.*

**i.e. Transport that is Socially and Environmentally Just**





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## **ENVIRONMENT**

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Integration of urban and land-use planning with transport

Non-Motorised Transport

Public Transport

Travel Demand Management

Transit-Orientated Development



# SDGs and Transport



Source: United Nations.

Transport fully recognised as key:

- Reducing emissions
- Improving equity
- Reducing poverty
- Building inclusive economies and settlements

*“Sustainable transport is essential to achieving most, if not all, of the Sustainable Development Goals (SDGs) and the 2030 Agenda for Sustainable Development. Although sustainable transport is not represented by a standalone SDG, it is mainstreamed across several SDGs and targets, especially those related to food security, health, energy, infrastructure and cities and human settlements.”*

Source: UN Knowledge Development Platform



# Sustainable Cities

## 11 SUSTAINABLE CITIES AND COMMUNITIES



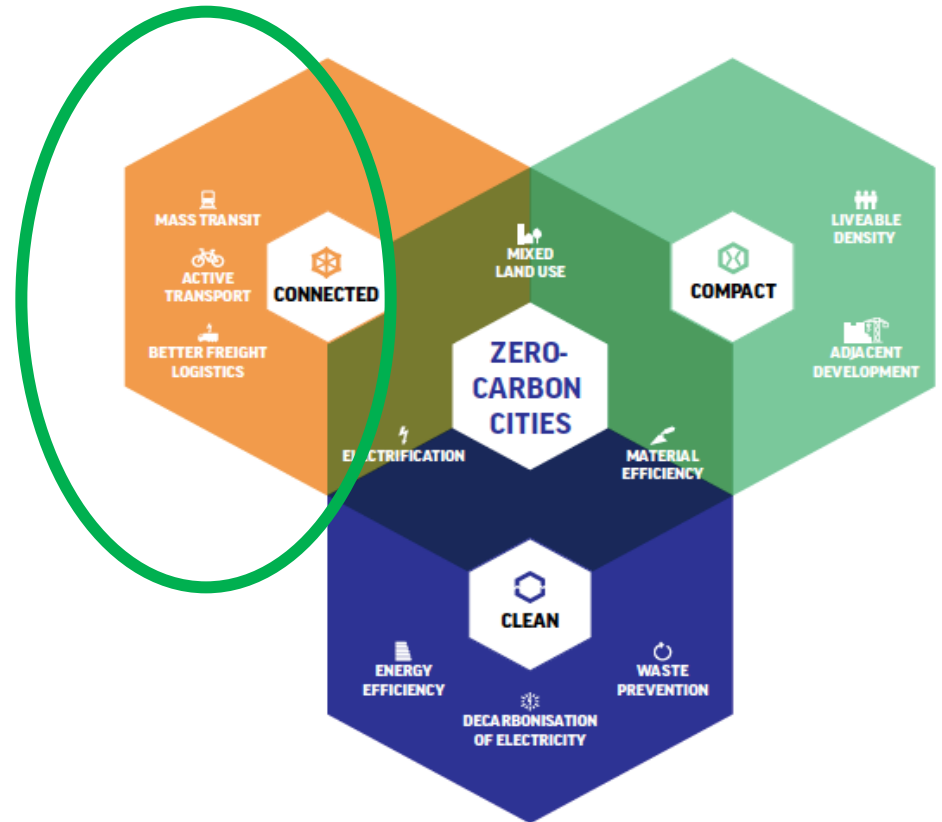
**Make cities inclusive, safe, resilient and sustainable**

- World increasingly urbanized - [more than half the world's population has been living in cities](#) projected to rise to 60 per cent by 2030.
- Powerhouses of economic growth—contributing about 60 per cent of global GDP.
- 70 per cent of global carbon emissions and over 60 per cent of resource use.
- Rapid urbanization causing significant pressure on infrastructure and services (incl transport), worsening air pollution & unplanned urban sprawl.
- SA - Transport contributes up to 40% of cities' carbon emissions (Eskom, 2018).



# Sustainable Cities

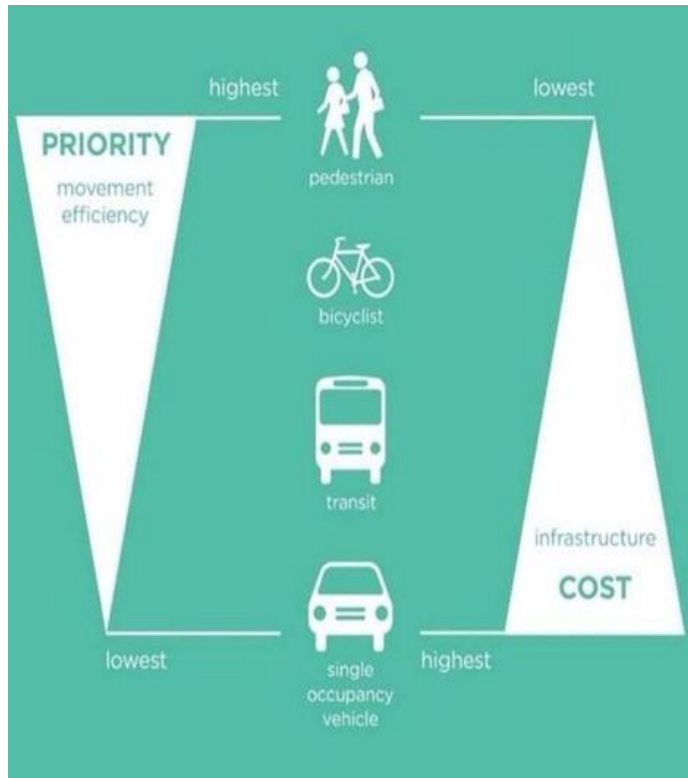
Sustainable Transport a key aspect of Sustainable and Resilient Cities



Source: Coalition for Urban Transitions



# Sustainable Transport: Key Aspects



- Inclusive & equitable – socially just
- Affordable
- Environmental preservation
- Regenerative impacts and major improvement to urban realm
- Promotes liveability & well-being
- Major health benefits of active travel
- Catalyst to & supports sustainable spatial, social & economic development

***Requires turning current focus on vehicle based planning upside down***



# Avoid Shift Improve

Reflects the opportunities for socio-cultural, infrastructural and technological changes. In transport terms:

- **Avoid** –reduction / removal of need to travel based on changing accessibility & proximity ~ changes in urban form & remote working;
- **Shift** – utilising less carbon-intensive modes:
  - personal mobility from private vehicles & flight to walking & cycling, public transport & shared mobility,
  - freight from vehicles & aircraft to water-based freight, electrified road-rail freight, pipelines & cargo bikes for first/last-mile collections and deliveries.

Less car dependent infrastructure & travel demand initiatives are considered key here;

- **Improve** - Improving vehicle design & energy efficiency & developing clean energy sources for freight & passenger vehicles. Hydrogen considered with a caveat of the challenges facing its effective commercialisation.

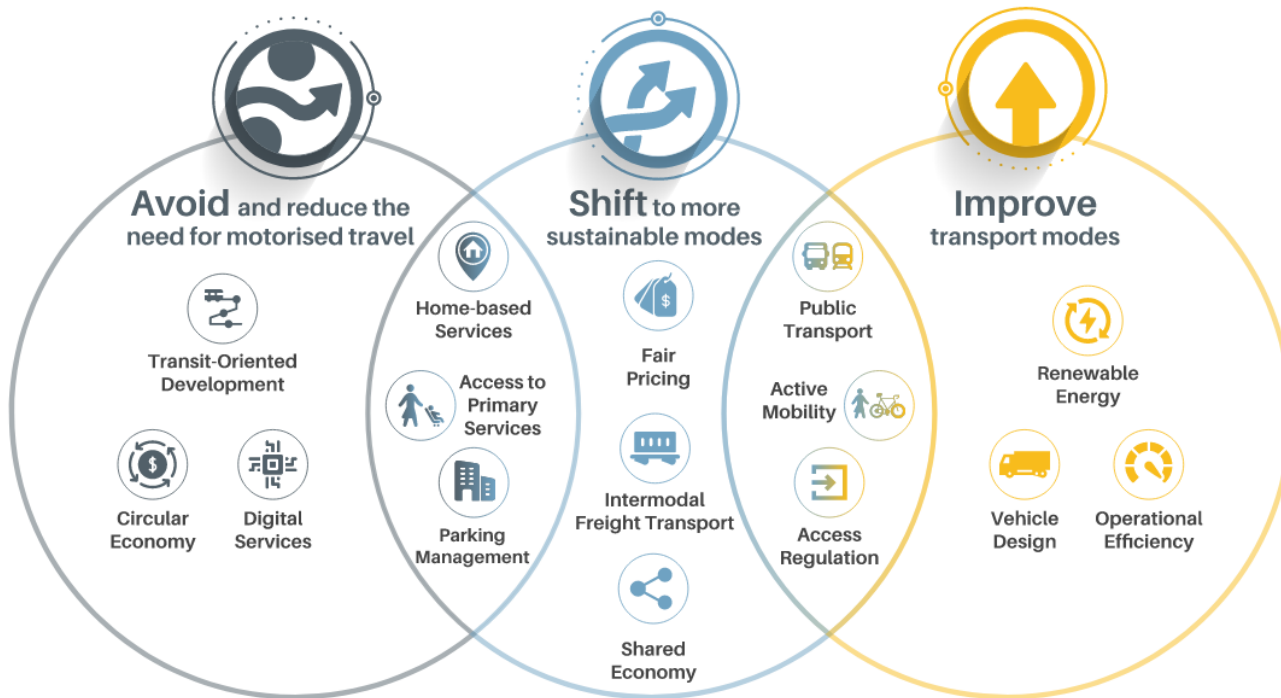
“Demand side mitigation and new ways of providing services can help avoid, shift and improve final service demand. Rapid and deep changes in demand make it easier for every sector to reduce GHG emissions in the short and medium term” (Supply Chain Management)

The report recognizes that, regarding transport aspects, the greatest potential comes from reducing long haul aviation and providing short-distance low carbon infrastructures and systems (avoiding), prioritizing car free mobility by walking, cycling, and the use of public transport (shifting) and adopting electric mobility (improving). It further recommends that **full life cycle analyses of transport projects** be implemented.

IPCC AR6 WGIII Chapter 05



# Avoid Shift Improve



\*The A-S-I diagramme presents a non-exhaustive list of measures for illustrative purposes only.

**Avoid** and **Shift** strategies can account for **40-60%** of transport emission reductions, at lower costs than **Improve** strategies.

The updated [Nationally Determined Contributions \(NDCs\)](#) under the Paris Agreement continue to focus strongly on **Improve** measures (**52%** of all measures). **Shift** and **Avoid** measures account for **38%** and **10%** respectively.



# SA's Transport Realities

- Long distances, low densities, low affordability implies poor cost recovery and poor coverage of public transport services
- Stranded populations and unmet access needs
- Fiscal constraints and high personal expenditure requires lower cost solutions / better management of travel demands – even more so post COVID
- Significant congestion due to high car usage – *drives car based bias in transport planning*
- Extensive need for urban reform (utility cycling?)





# SA's Urban Transport Realities

Number of Mentions in IDPs of SA's 4 largest cities					
	NMT	Cycling	Active Mobility	Sustainable Transport	Travel Demand Management
City 1	1	1	0	0	0
City 2	2 (in same para)	1	0	0	1
City 3	2 (in same para)	3 (2 in same para)	0	0	0
City 4	5 (in same para)	0	0	2	2



# Sustainable Transport – Final Thoughts

*Whilst COVID-19 provided opportunities for reflection, recognition that change is possible, and the need to reconsider priorities responsible planning and implementation requirements have only become more important*

- NMT (and PT) must be the departure point for any transport planning & delivery process and the trip considered as “door to door”
- Land use and transport planning have to be integrated to deliver higher density mixed used precincts
- NMT’s (explicitly cycling’s) importance as a fundamental component of well functioning cities must be recognized and embraced at all levels
- Private motor vehicles can no longer enjoy priority – shift from “Predict and Provide”
- Full Benefit Cost Analyses

**Key Issues to  
be addressed**



# 15 Minute Neighbourhoods (Cities)

## ***Complete Neighbourhoods***

- Compact & Mixed Use – active travel & local services & transport infrastructure
- Proximity & Decentralisation of City Life & Services
- Activation of Ground Floors
- Adaptable Spaces – avoid single use spaces

## ***Places for Everyone***

- Socially inclusive
- Active Community Engagement
- Cohesive communities
- Equitable

## ***People centred streets & mobility***

- Walking & Cycling mode of choice
- Reclaim city spaces from private motor vehicles
- Tactical Urbanism & Temporary Activation
- Greening Public Spaces

## ***Connected Places***

- Physically Connected
- Digitally Connected
- Digitalized Utilities and Services

*Affordable Access to Opportunity for All  
whilst addressing Climate Change*



# Comments Specific to B9-2022

Bill welcomed but:

- **Critical Urgency – not mentioned in B9-2022**

- Adaptation objectives only required within one year of promulgation;
- National Adaptation Strategy & Plan only required within two years; and
- Provinces & metropolitan/district municipalities only required to conduct climate change needs & response assessment & within another two years develop & implement climate change response plans
- 5 year review period required

*Recommendations:*

- All provinces, metropolises & district municipalities should be immediately proceeding with their processes & not waiting on Act
- All sectoral & government institution plans / strategies should be reviewed on no more than a 2 year time horizon



# Comments Specific to B9-2022

- **Phased Approach**

- significant danger of leaving other non energy sector aspects to be focussed on only in and post the 2030s as discussed in the NDC
- carbon intensive systems and behaviours further locked in, particularly so for capital intensive projects with long run horizons such as urban settlements and transport infrastructure. (Green Transport Strategy 2018 – 2050 has 2030 commencement timelines for certain activities)

*Recommendation:*

- Essential that the Bill addresses this & action taken to ensure any projects or programmes (including transport & urban development programmes) require that ability to achieve GHG reductions is not “locked out” through current planning approaches.



# Comments Specific to B9-2022

- **Emissions Trajectory**

- Bill outdated in terms of Nationally Developed Contribution targets

*Recommendation:*

- Ensure that Bill requires that all sectoral and provincial and municipal targets be updated accordance with evolving NDC targets

- **Presidential Climate Commission**

- The Bill refers to the possible establishment of a Presidential Climate Commission (PCC).

*Recommendation*

- The Bill be changed to reflect the existence and current functioning of the PCC



# Comments Specific to B9-2022

- **Education**

- Climate Change awareness and literacy a significant issue in the South African population
- Requires that information regarding Climate Change, its impacts and the status of current processes and programmes be easily understood and readily available.

## *Recommendations*

- Public Participation process approach be expanded to specifically include education and awareness campaigns as part of sectoral requirements.
- Department of Basic Education be included as sector with specific mandate of ensuring education of the youth regarding Climate Change impacts and mitigation and adaptation.



# Comments Specific to B9-2022

- **Enforcement & Compliance**

- Given the urgency of the situation and need to rapidly reduce emissions the very little provision for offences and deterrence with the only penalties to be imposed through the National Environmental Management Act.

*Recommendation:*

- Immediate attention be given to appropriate GHG emission limits and suitable and appropriate deterrence measures





# Conclusion

- Urgent interventions required to enable adequate mitigation and adaptation
- Sustainable Transport and appropriate urban planning have a vital role and meet two key needs:
  - Addressing Social Equity issues, and
  - Reducing GHG emissions;
- but
  - requires a paradigm shift and far broader and integrated approach
- The Climate Change Bill requires urgent promulgation to address GHG emissions and ensure a Just Transition is achievable



# Thank You

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**Thank You**

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