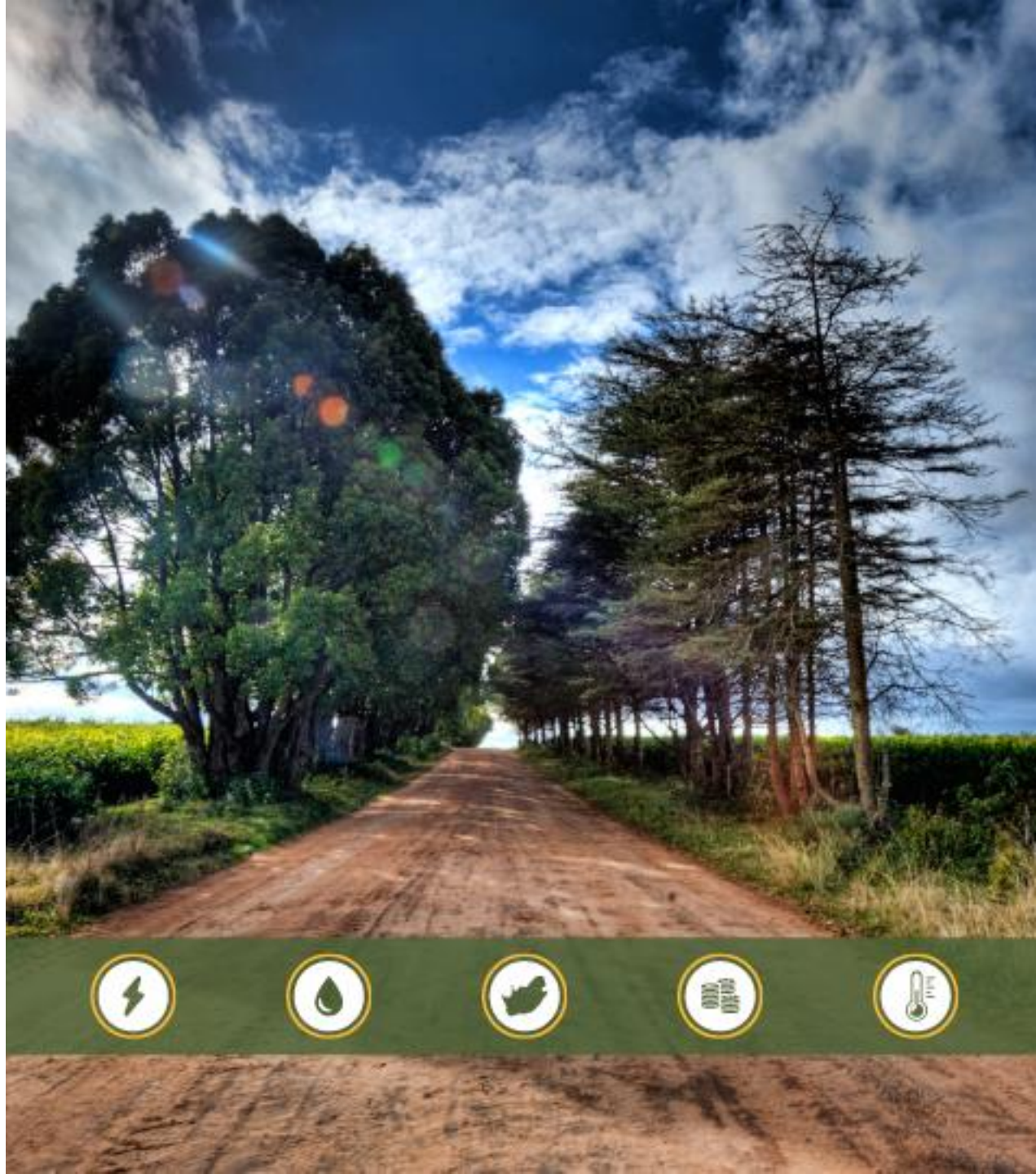


Presentation to the Standing Committee on Finance on the Draft Carbon Tax Bill

14 March 2018

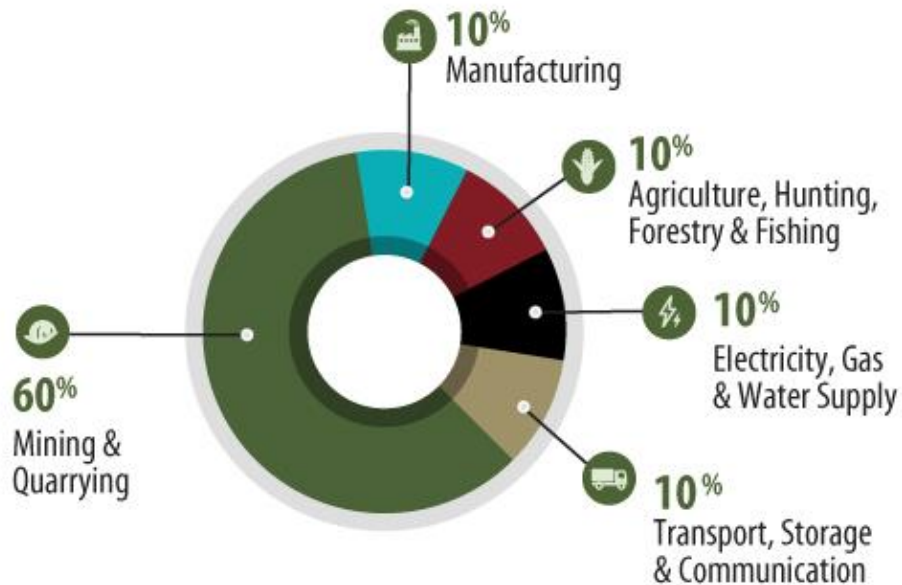


WHO WE ARE

2018

The Industry Task Team on Climate Change (ITTCC) is a voluntary, non-profit association made up of a number of large companies whose activities together play a material part in the nature and scale of South Africa's carbon footprint.

Current ITTCC members represent the following sectors*



There is no sector limitation for membership and we try get a diverse array as possible.

*Some member organisations operate across multiple sectors. Reflects full ITTCC members only.

No of Companies



No of Employees worldwide



No of South African Employees



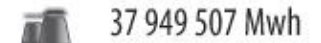
SA Operations Turnover



% of South African GDP



Electrical Energy Usage (SA)



% Members with EE Projects



GHG Emissions (Tonnes CO2e)



Electricity Cost as % of Annual Expenditure

| | | |
|--|--|-----|
| Mining & Quarrying | | 15% |
| Transport, storage and communication | | 11% |
| Electricity, gas and water supply | | 17% |
| Agriculture, hunting, forestry and fishing | | 5% |
| Manufacturing | | 9% |

Purpose of the presentation



- The ITTCC supports the comments submitted by Business Unity South Africa (BUSA).
- Our submission focuses rather on the energy landscape of South Africa, its challenges and the role that the energy mix must play in transitioning to a lower-carbon future.
- We support South Africa's international commitments to address climate change that consider its current national circumstances, developmental state and socio-economic aspirations.
- An analysis was undertaken that demonstrates that the proposed carbon tax is not necessary to meet international commitments within the current national circumstances.
- ITTCC supports a predictable and gradual transition in South Africa to a lower-carbon, resources-efficient economy which must be based on an accurate and up-to-date emissions profile.
- Current trends from analysis of the GHG Inventories indicate that any increase in emissions may be even further into the future. **This is shown in the following slides.**
- In our view, there must be an integrated and aligned approach to the development of emissions reduction and energy planning policies as these issues are inextricably linked.

Overview of the analysis



Objectives:

- Establish likely profiles of future South African greenhouse gas (GHG) emissions.
- Compare emission profiles to the Peak, Plateau and Decline (PPD) trajectory set out by the Department of Environmental Affairs (DEA).
- Assess potential scenarios for emissions growth using existing data and with a bottom-up approach.
- Establish a profile of the GHG emission trajectory relative to the PPD set out by the DEA.

Data Sources:

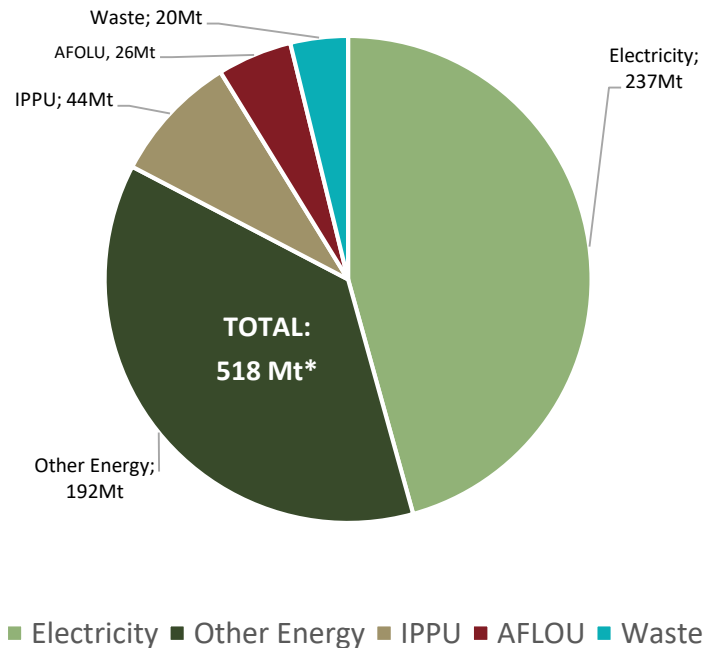
- Using the DEA's Mitigation Potential Analysis report (2014) as the basis, work was undertaken to determine the impacts of the following key developments on SA's GHG projections into the future.
- Updated DEA 2010 GHG inventory update.
- Draft DEA 2012 GHG inventory update.
- Electricity generation profiles for the short-to-medium term.

Slower economic growth coupled with a challenges in the electricity sector and outdated information necessitated a review of South Africa's emissions projection into the future

Updated draft SA GHG inventory indicates muted growth in emissions

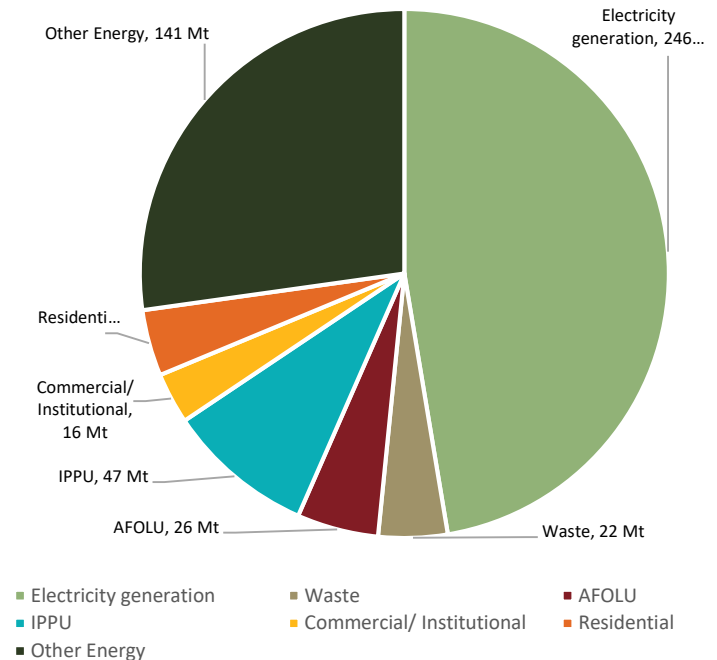


Updated 2010 GHG inventory (Mt CO₂e)



Source: 2010 RSA GHG inventory (September 2014)
* Breakdown adds to 519 Mt due to rounding

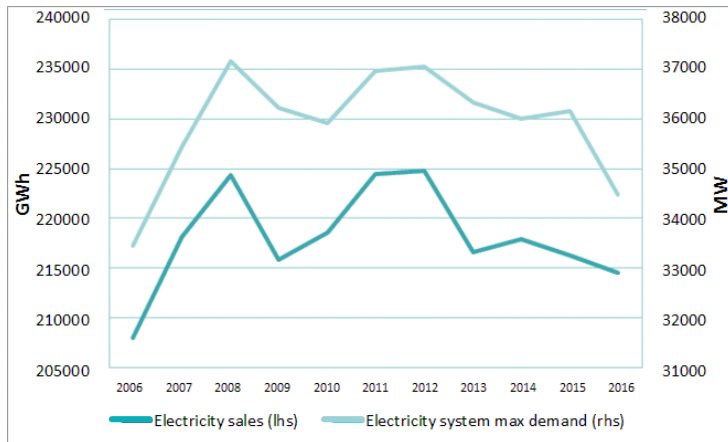
Draft 2012 GHG inventory (Mt CO₂e)



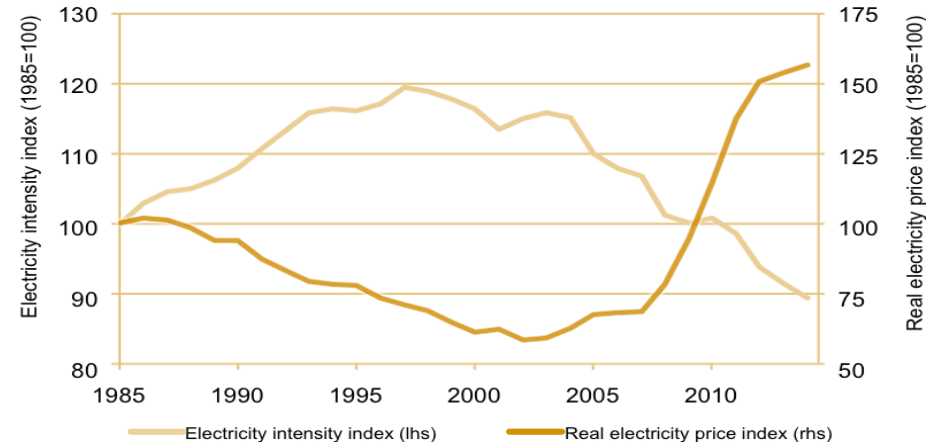
Source: 2012 RSA GHG inventory (Draft - March 2016)
* Breakdown adds to 519 Mt due to rounding

- Comparison of the updated draft inventory and 2012 in relation to 2010 indicate muted growth in GHG emissions
- Based on current national circumstances, this trend is likely to be sustained moving forward for the short-to-medium term

South Africa has seen significant increases in electricity costs and decrease in consumption

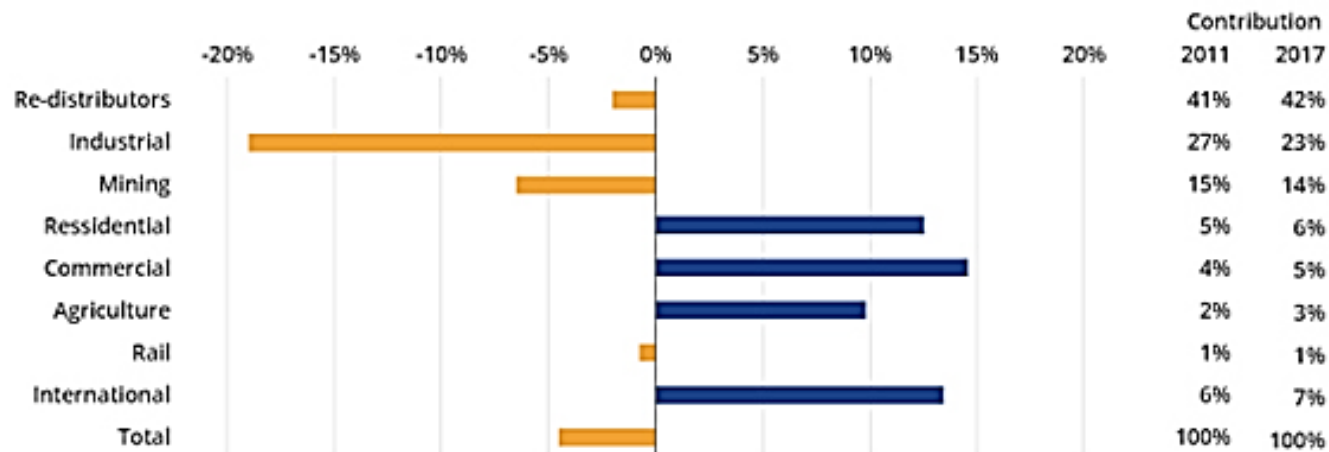


Source: EIUG (2017)



Source: SARB and Stats SA (2016)

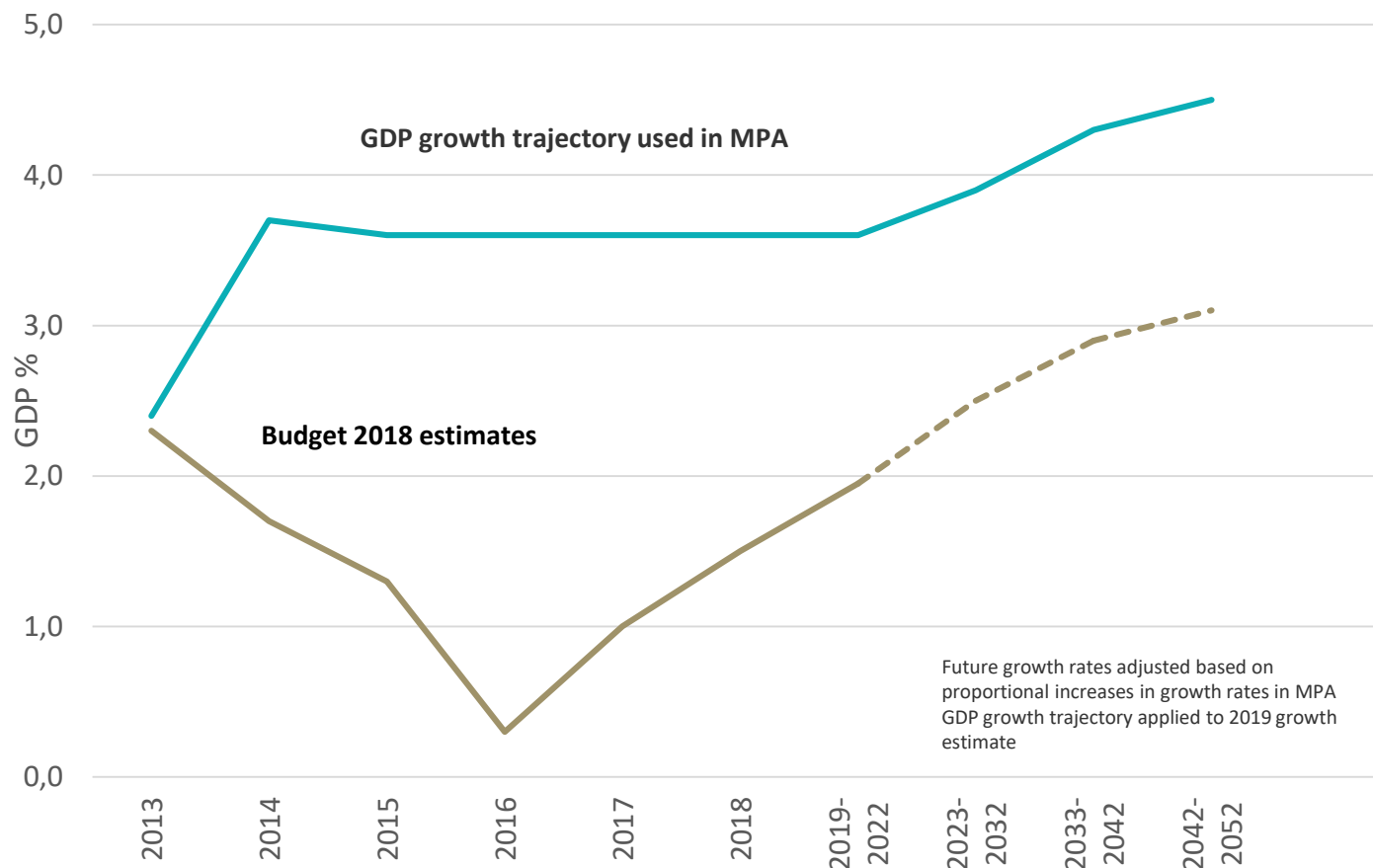
ESKOM SALES GROWTH BY CATEGORY - 2011 TO 2017



Source: EIUG (2017)

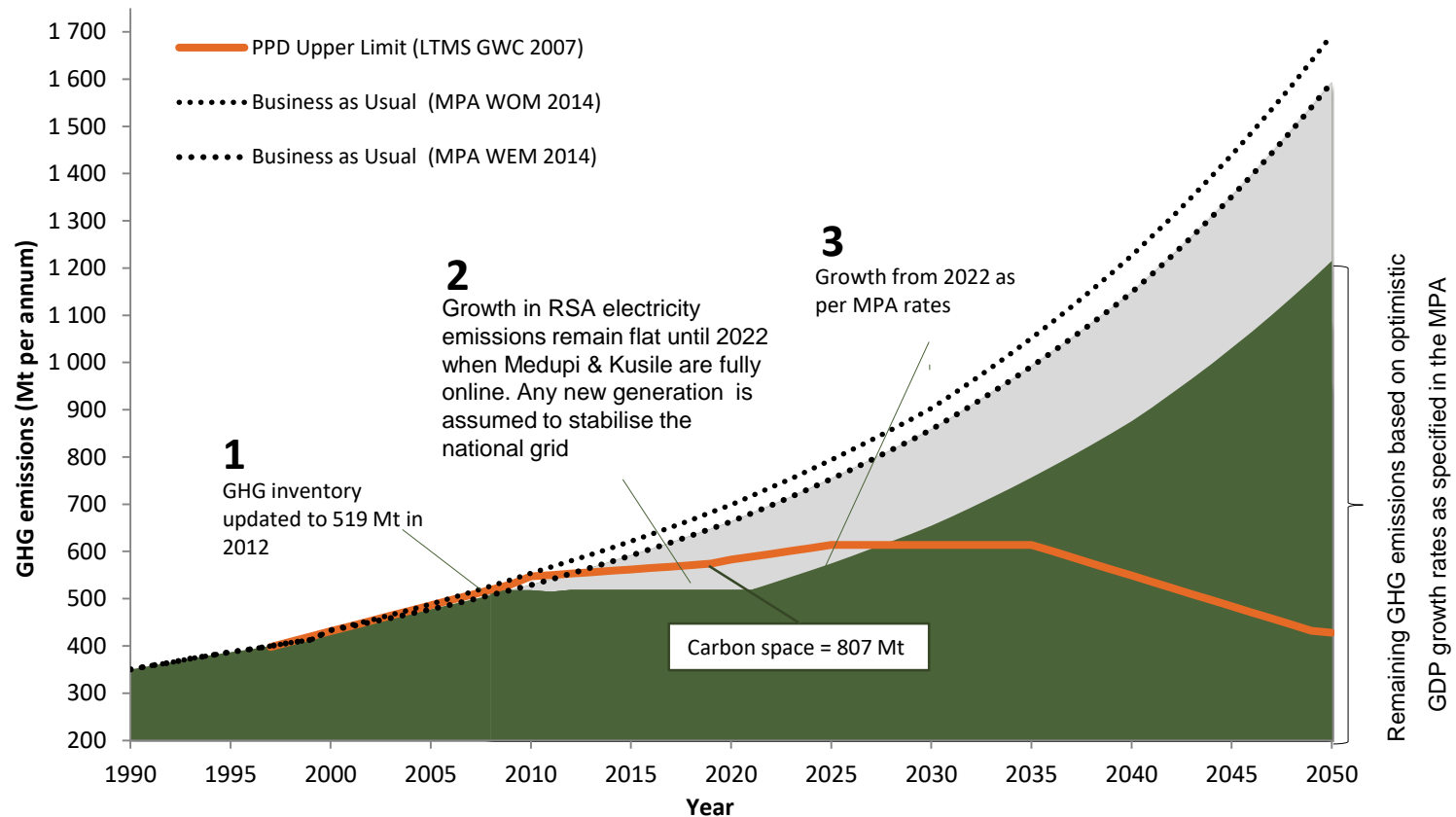
A combination of sharp increases in electricity prices has played a large role in electricity sales volumes contracting by more than 14% below 2011 levels, with the largest contractions in mining and industrial sectors

Projected economic growth has not materialised



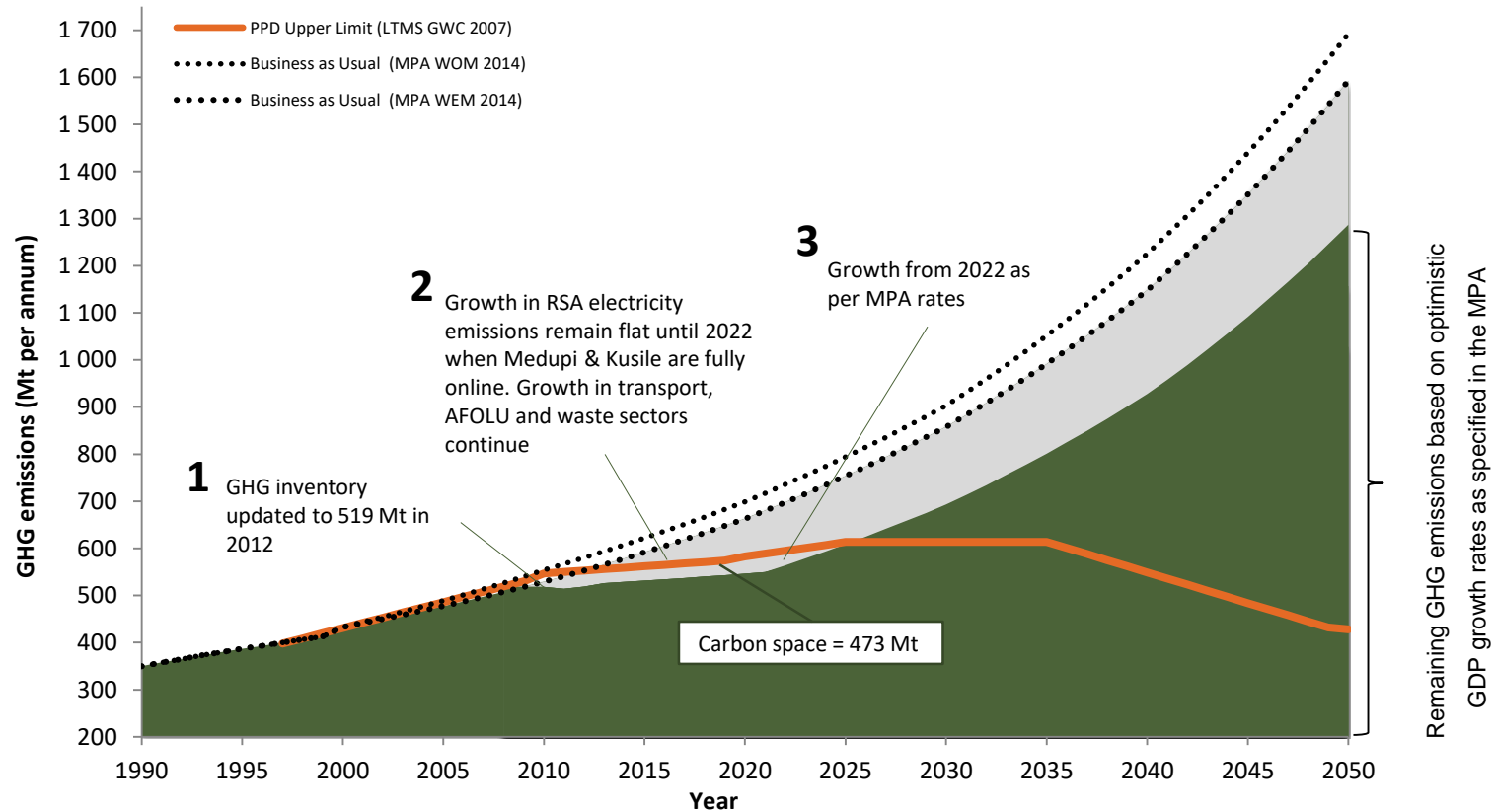
Source: MPA (2014), National Treasury (2018)

Results 1: Emissions muted to 2022



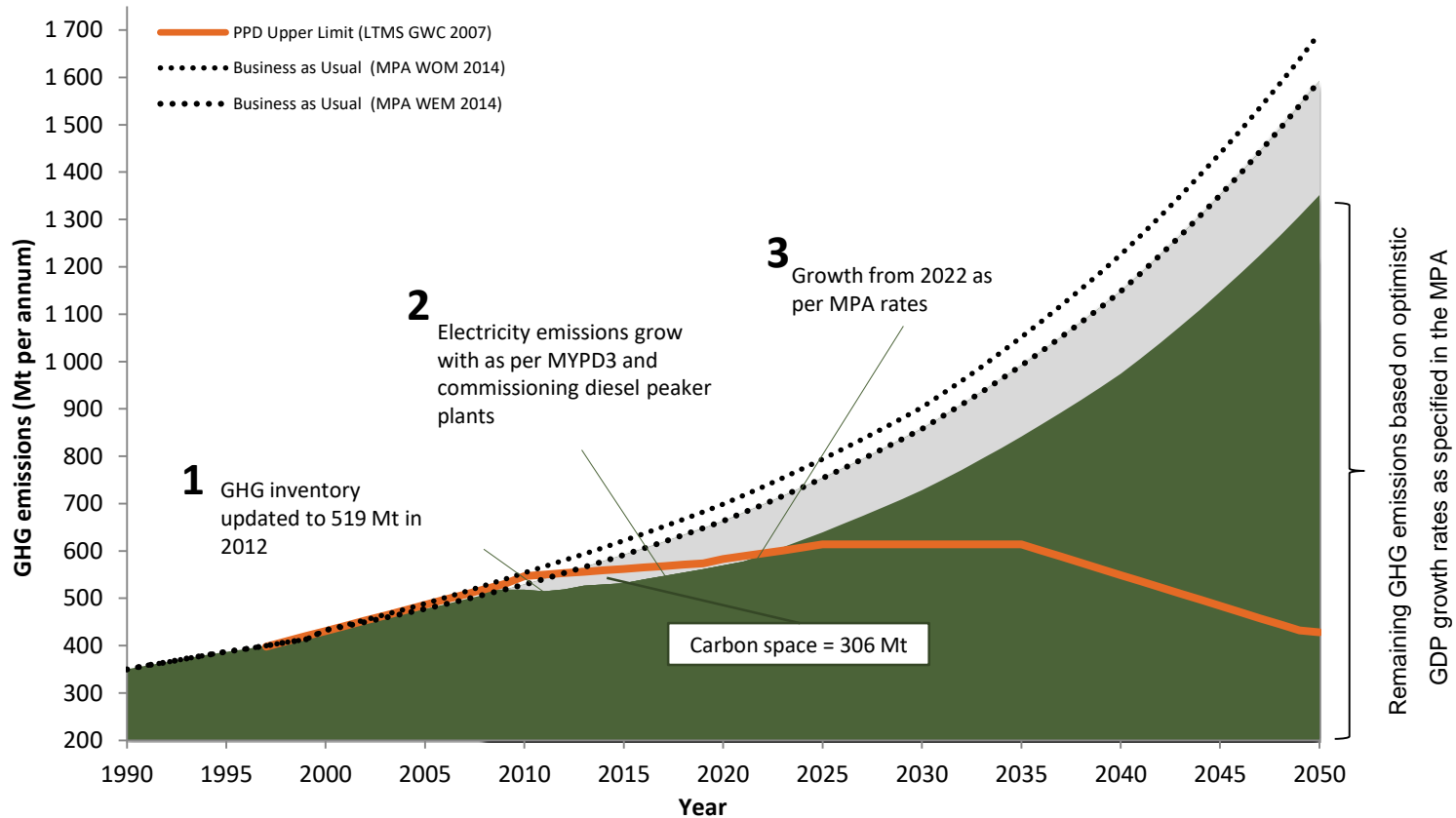
- Emissions from electricity sector only grows post 2022 and are still within the PPD until 2025.
- South Africa's emissions are within the limits of the PPD trajectory and unlikely to increase before 2022-25. The implementation of a carbon tax at this time is not necessary and will only further burden our already strained economy.

Results 2: Growth in Transport, AFOLU and waste sectors to 2022 (probable case)



- If growth is assumed in transport, AFOLU and waste sectors to 2022 with muted growth in remaining sectors, emissions are still within the PPD until 2025.
- South Africa's emissions are within the limits of the PPD trajectory and unlikely to increase before 2022-25. The implementation of a carbon tax at this time is not necessary and will only further burden our already strained economy.

Results 3: Growth in transport, AFOLU, waste and electricity sectors (growth optimistic case)



- Assuming growth in transport, AFOLU and waste sectors with electricity emission growth as per MYPD3 forecast and diesel IPPs commissioned... emissions are still within the PPD until 2022 at least.
- This is an optimistic scenario and it is unlikely that growth in any sector will return to pre-2007 levels.

Conclusions

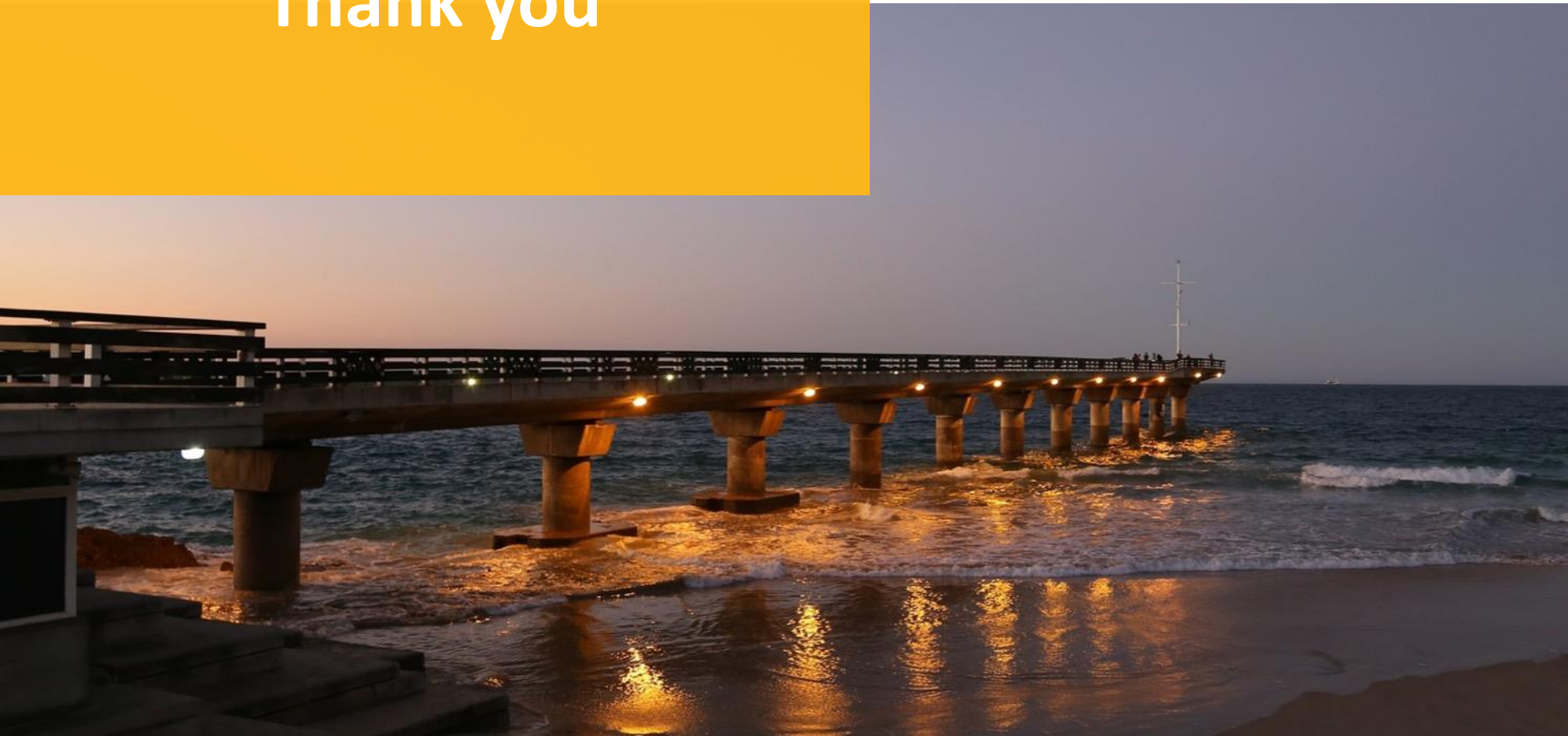


- The country is below the PPD and is likely to remain so for the short to medium-term.
- The electricity crisis, low commodity prices and slow economic growth has muted growth in GHG emissions.
- Emission growth from the electricity sector and most sectors depending on electricity will remain relatively muted with overall emissions remaining under the PPD for an extended period of time.
- The analysis does not reflect the implementation of sector-wide energy efficiency efforts, which if included will further improve this outlook.
- The initial indication of available “carbon space” until 2022 to 2025 allows sufficient time to:
 - Achieve South Africa’s economic growth;
 - Develop an energy mix and price path that allows the country to retain its relative competitiveness and improve investment attractiveness, while transitioning to a lower-carbon economy;
 - Outline preferred energy and industrial pathways to a lower-carbon future that retains such a competitive and investment position; while
 - Still achieving South Africa’s GHG mitigation commitments as aligned to the country’s submitted Nationally Determined Contribution (NDC) and the Paris Agreement

Given the structure of South Africa’s electricity sector, the IRP and mandatory carbon budget regime are more appropriate to driving and enabling structural change of the economy. Therefore, the current focus should be cohesive policy development and consolidation of key policy instruments:

- The proposed carbon tax must be halted (especially as South Africa is within envisaged emissions trajectory) and continue with the first phase of the carbon budget process whilst ensuring alignment with energy and industrial policy.
- Advance progressing the methodology applicable to the second phase of carbon budgets within an integrated climate change mitigation system – aligned to the current approach of the Department of Environmental Affairs.
- This in addition to increasing the role of lower-carbon energy alternatives in the South African economy would strike a balance between achieving climate change commitments with continued and expanded industrial production.

Thank you



Peer Review Statement



An independent peer review of the spreadsheet model developed to update projections of South Africa's greenhouse gas emissions outlook was undertaken by DNA Economics and The Green House during March 2016.

The peer review included:

- Commentary on assumptions about economic growth used in the MPA
- Review and assurance of approach used in the analysis
- Comprehensive data check against original sources to provide assurance that input parameters were correctly recorded
- Interrogation of assumptions used in the model to provide assurance as to their appropriateness
- Providing assurance and a view on the relevance of the findings of the analysis
- Providing recommendations for future work

The peer review concluded the following:

- Actual economic growth rates have been lower than that assumed in the MPA, but significant deviations between modelled and actual emissions as a result of this factor is only expected over the medium to long term
- The modelling approach is defensible given limited access to MPA data
- Model input parameters were correctly recorded
- The assumptions used in the model were considered appropriate at the time
- The findings of the analysis, given the model structure at the time, are considered to provide a reasonable indication of different scenarios for the short term evolution of SA GHG emissions to the early 2020s
- A number of modelling limitations remain due to limited access to MPA data, and warrants a full-scale update of the MPA. These primarily relate to observed changes to emissions partially as a result of economic growth considerations, and a number of errors and inconsistencies identified within the MPA model