

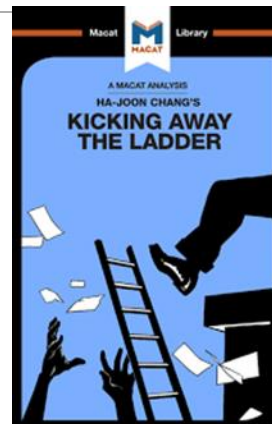
SAIIA CONFERENCE ON NEW DIMENSIONS OF GROWTH AND DEVELOPMENT IN AFRICA: TRADE, INFRASTRUCTURE AND THE FOURTH INDUSTRIAL REVOLUTION.

Carbon Pricing in South Africa and SADC

TRADE OFFS BETWEEN DEVELOPMENT AND CLIMATE ACTION

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19 NOVEMBER 2019, (SHERATON HOTEL IN ARCADIA), PRETORIA



Outline

1. Background and introduction.
2. South African GHG emissions.
3. South African Climate action: why carbon tax?
4. Trade offs:
 - a) International agreements
 - b) Domestic policies
5. Potential outcomes of carbon tax.
6. Concluding remarks



Background and introduction

- The UN SDG 13 calls for an urgent action to combat climate change.
- Climate change is disrupting economies and affecting lives, costing people, communities and countries dearly today and even more tomorrow.
- Threats to food production, health, and use of land and environment.
- Infrastructure: roads, airport runways, railway lines and pipelines will require increased maintenance and renewal.
- The poorest countries and people will suffer earliest and most.
- If temperatures rose by 4°C, global GDP will decline by 30% relative to 2010.
- Benefits of strong, early action on climate change outweigh the costs.

Background and introduction (continues...)

UNFCCC - Paris Agreement: commitments were made by 197 countries.

- Limit the rise in global average temperature to less than 2°C of pre-industrial levels.
- Each country sets measure, **Nationally Determined Contributions (NDC)**.
- SA anticipates emissions to reach a *peak* by 2025, *plateau* between 2025 and 2035, and then start to *decline* post 2035.

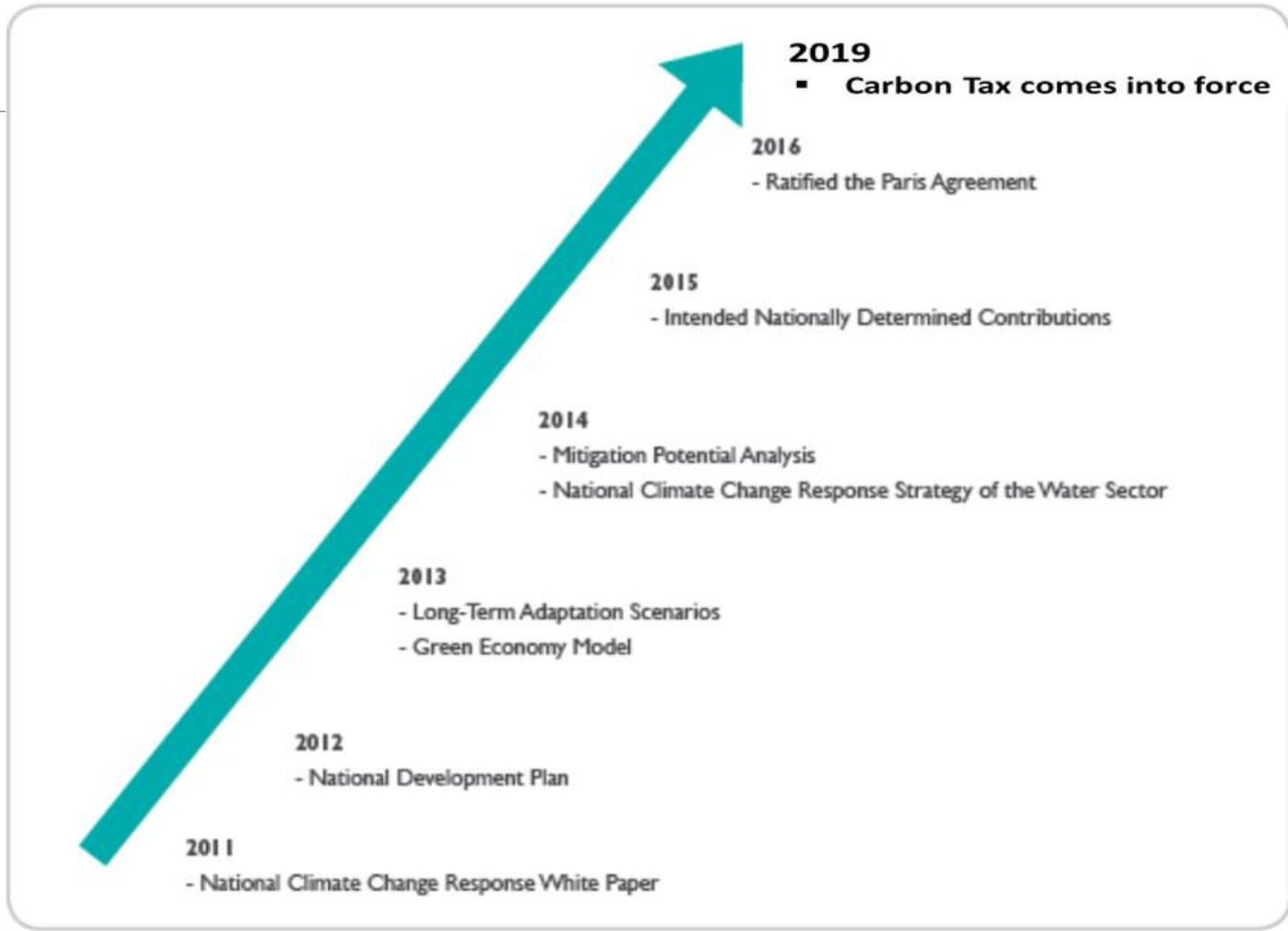
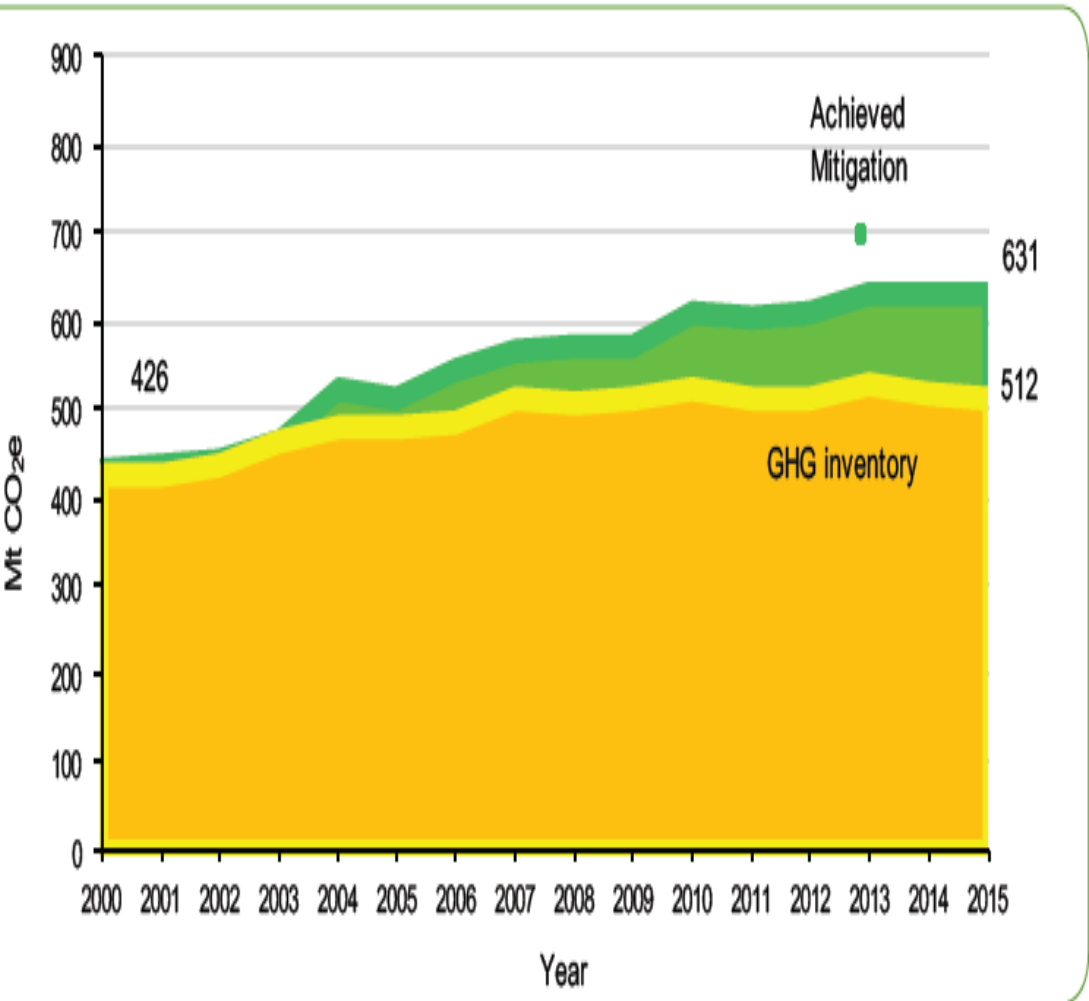
Targets:

- South African committed to reduce its emissions by **34 percent** below business as usual (BAU) scenario by 2025 and **42 percent** below BAU by 2035.

Why?

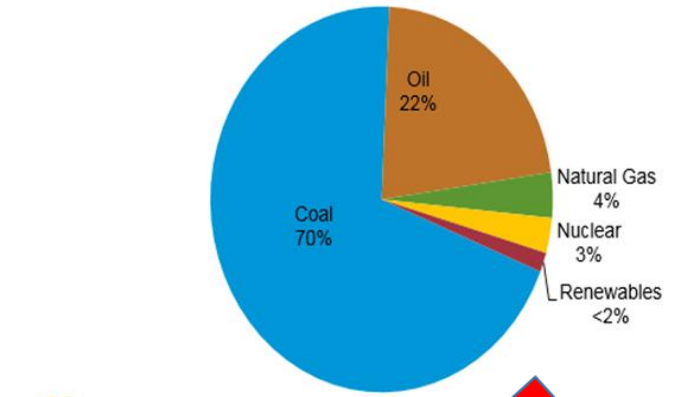
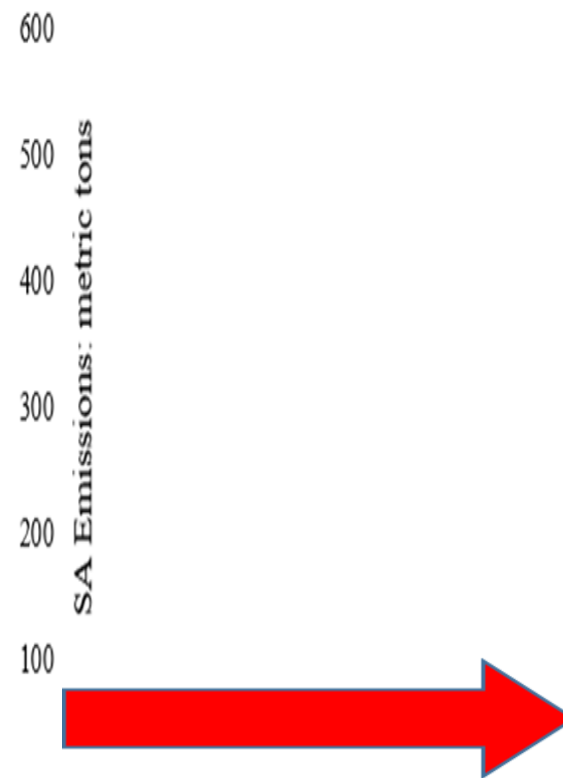
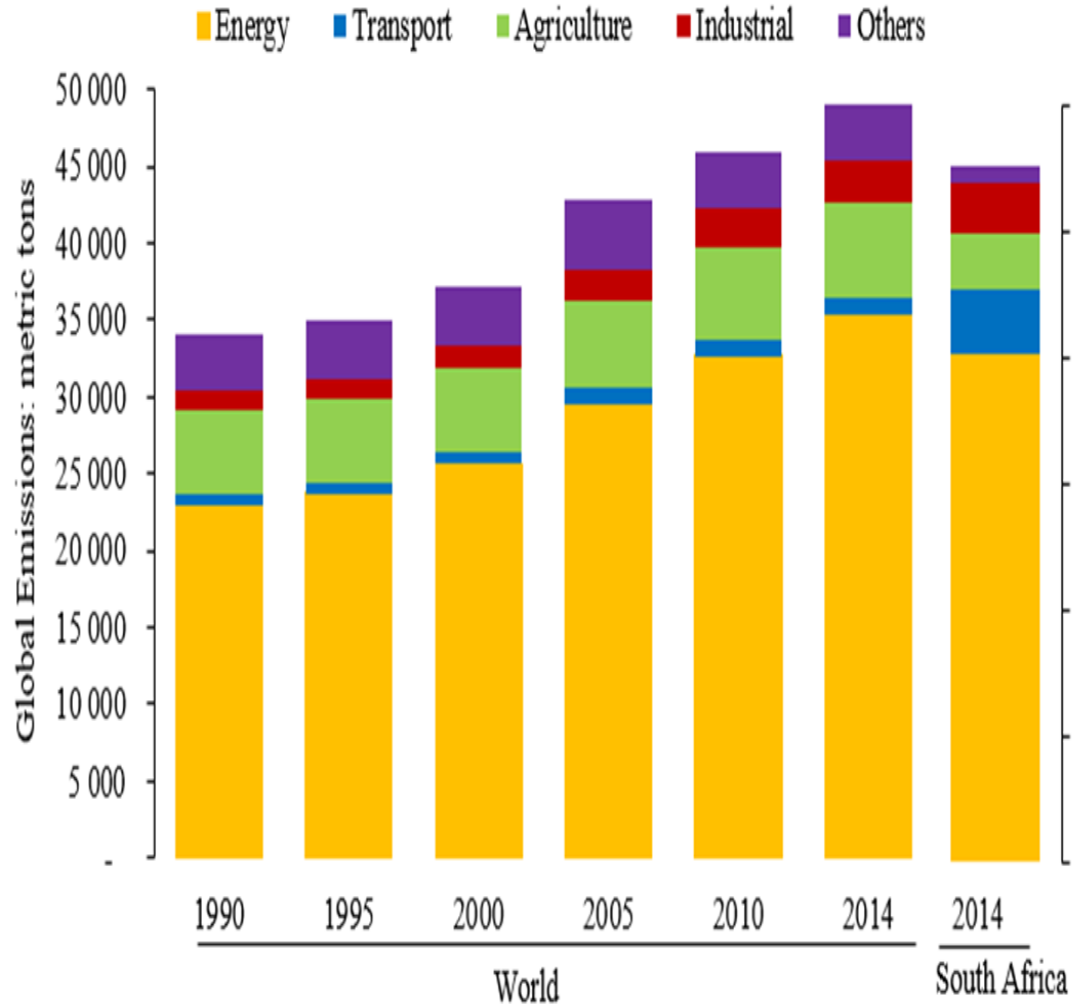
- SA is one of **57 countries** in the world and the only **African applying carbon pricing**.
- SA is the **leading emitter** on the continent, one of **top 15 emitters** in the world, and **the leading non-oil producing** developing country.

South African GHG emissions

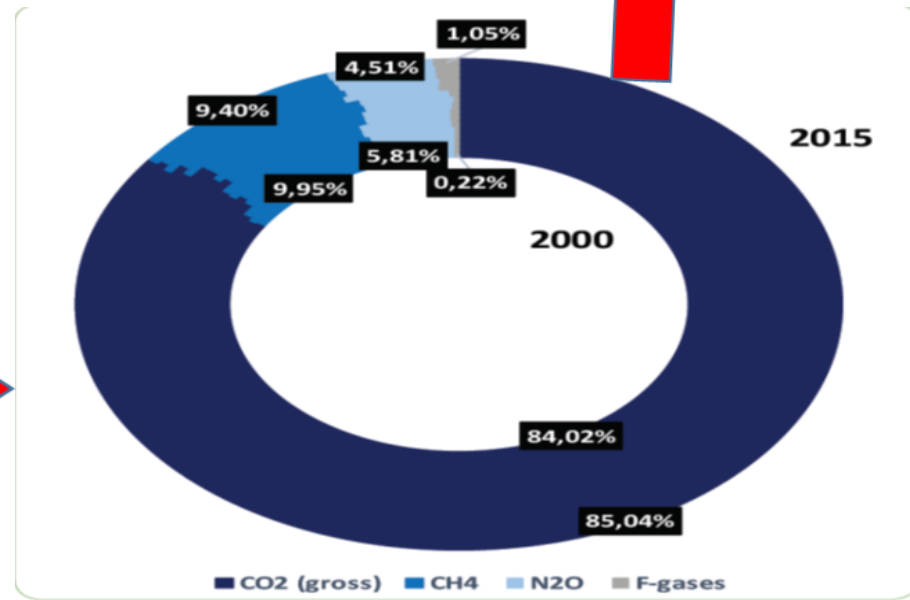


SA climate action policies: why carbon tax?

Figure 2. Total primary energy consumption in South Africa, 2016



Note: Traditional solid biomass and waste is not included
 Source: BP Statistical Review of World Energy 2017



Execution of the policy

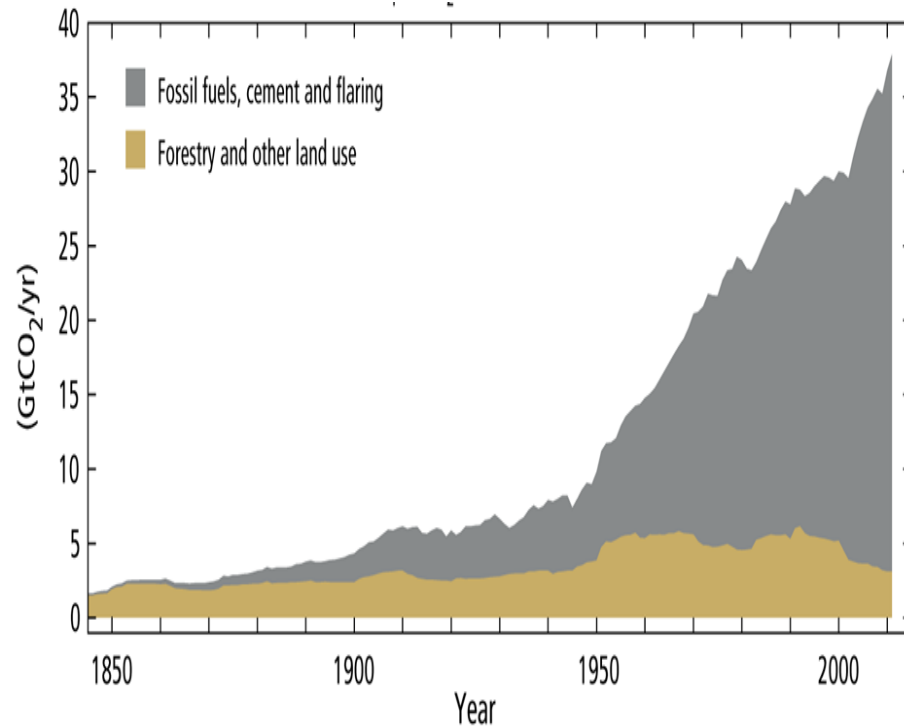
Market (price) based instruments: border carbon adjustment (BCA), emissions trading system (ETS) & regulatory measures and standards

How the tax works:

- In the first 5 years, the agricultural, forestry, waste handling and land-use sectors are fully exempted but the food manufacturing activities are not fully exempted;
- Tax free allowances:
 - basic (60%), trade exposure, process & fugitive (10%),
 - performance, carbon budget, carbon offset (5%), and
 - Up to 95% tax-free allowances in the first phase.
- The tax is effectively a fossil-fuel input tax levied on emissions that result from fuel combustion, gasification, and non-energy industry processes;
- The tax is levied at R120/tCO₂-eq.

International trade offs: Trade vs climate action

Industrialised countries.



Some potential conflicts

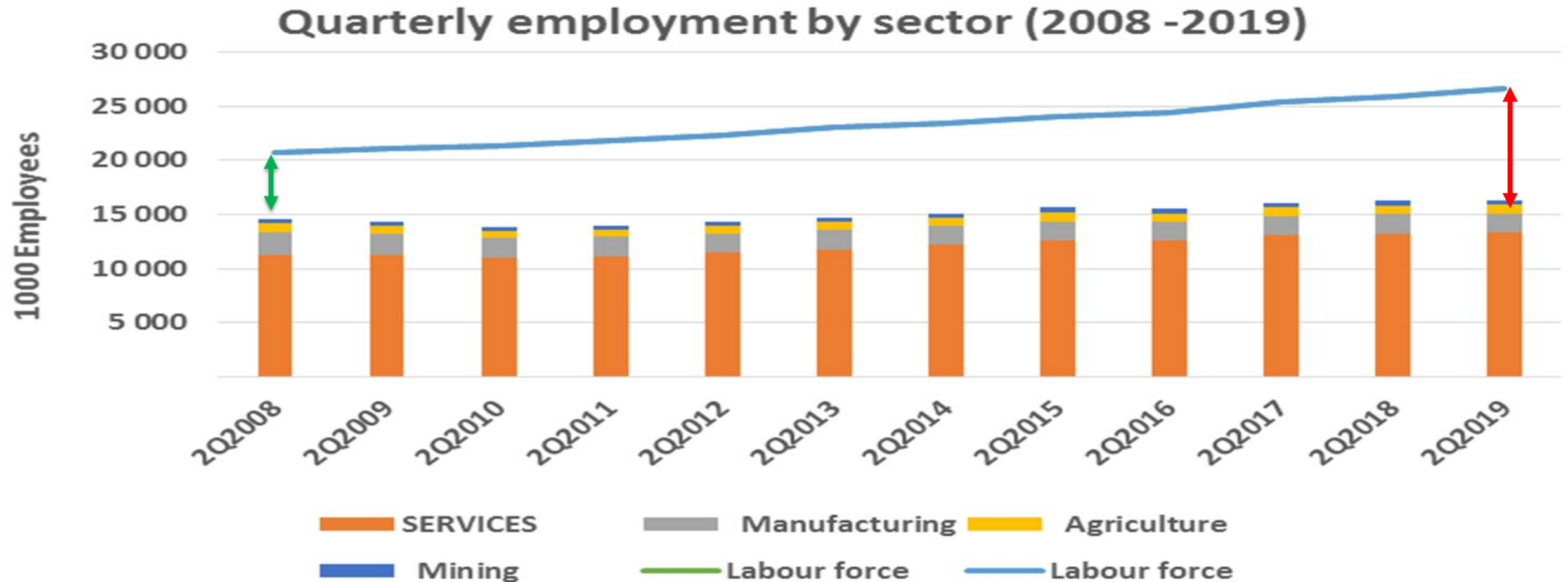
International level

- Climate action vs trade.
 - E.g., WTO's non-discrimination principle
- **Competitiveness:** domestic and international
- **Non-tariff measures (NTMs)** as policy instruments.
- Changing **comparative advantage** of countries.
- Weakening of **trade position** of some countries.
- **Global and regional trade** programmes are likely to remain uncertain.

SA challenges: local policy and climate change

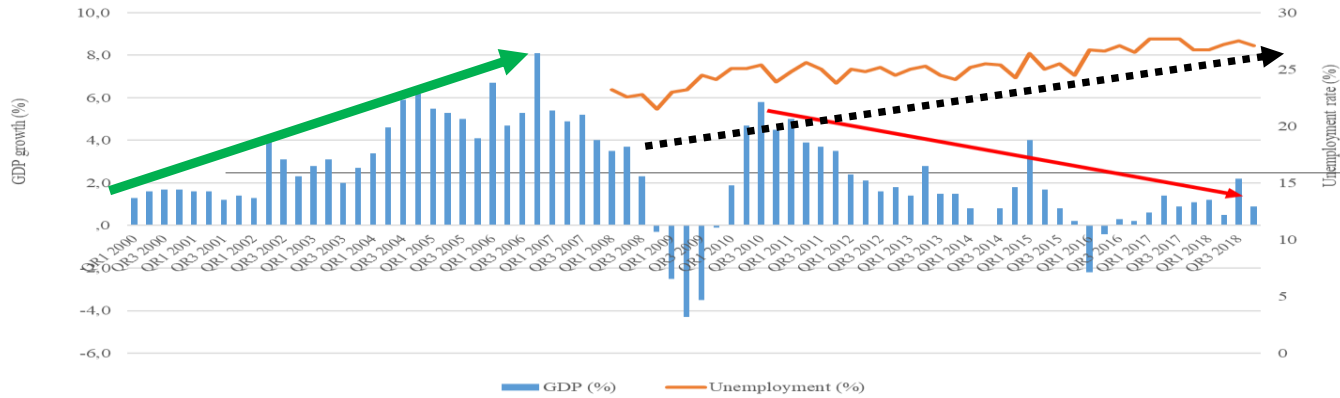
South African is energy intensive (relative to the world average).

There are abundant energy resources however they contribute more towards the GHG emissions.



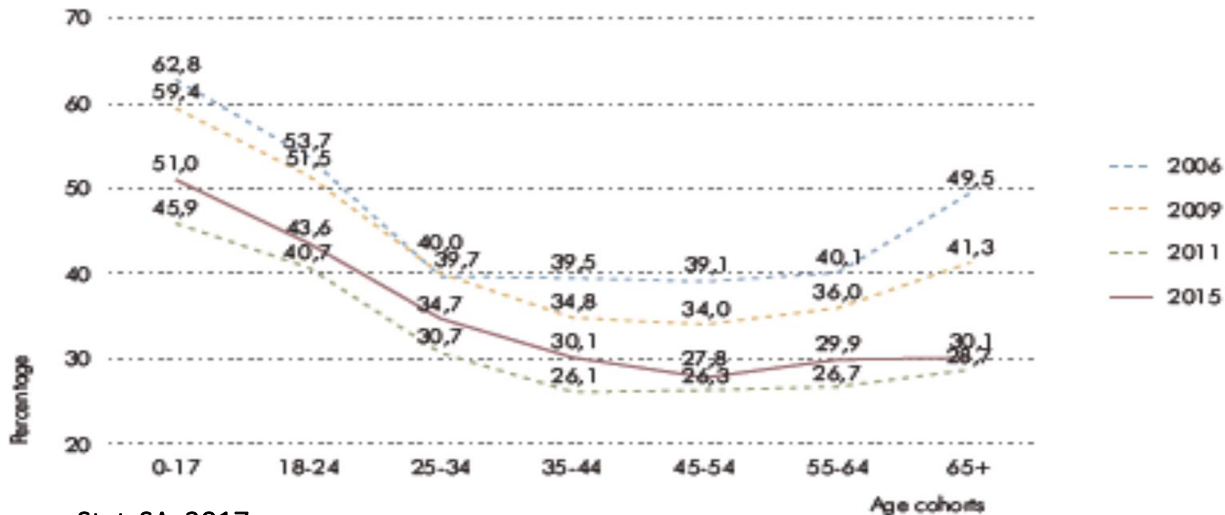
SA economic growth, unemployment, poverty and inequality

South African quarterly economic performance (2000-18) & unemployment rate (2008 - 18).



Source: Kalaba, 2019

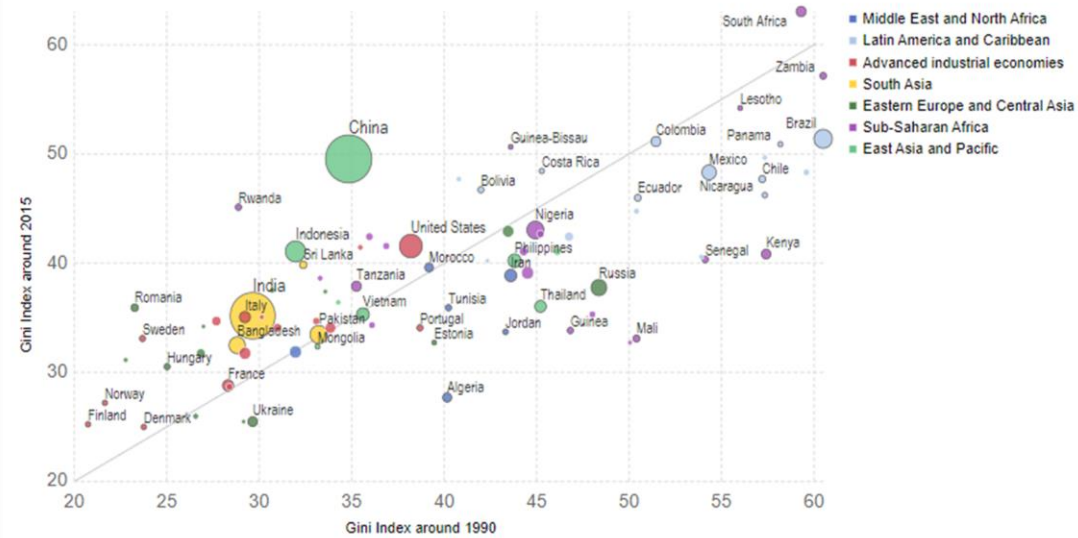
Figure 2.16: Proportion of the population living below the LBPL by age (2006, 2009, 2011 and 2015)



Source: StatsSA, 2017

Inequality in 1990 vs 2015

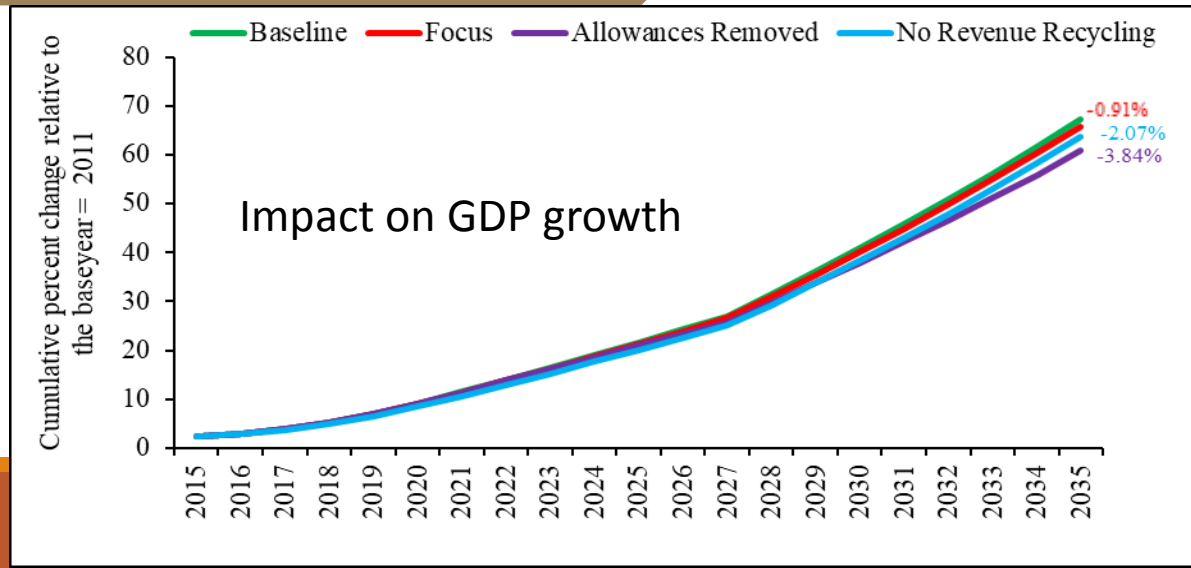
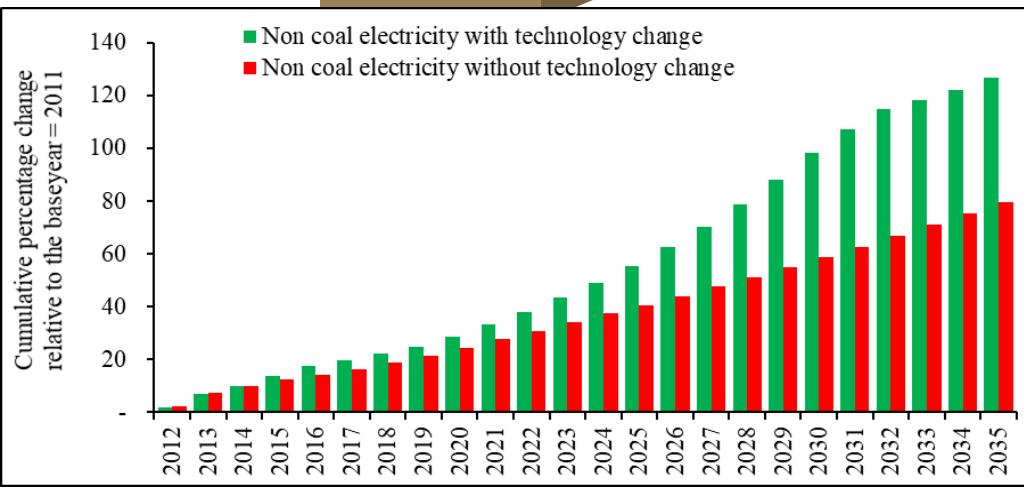
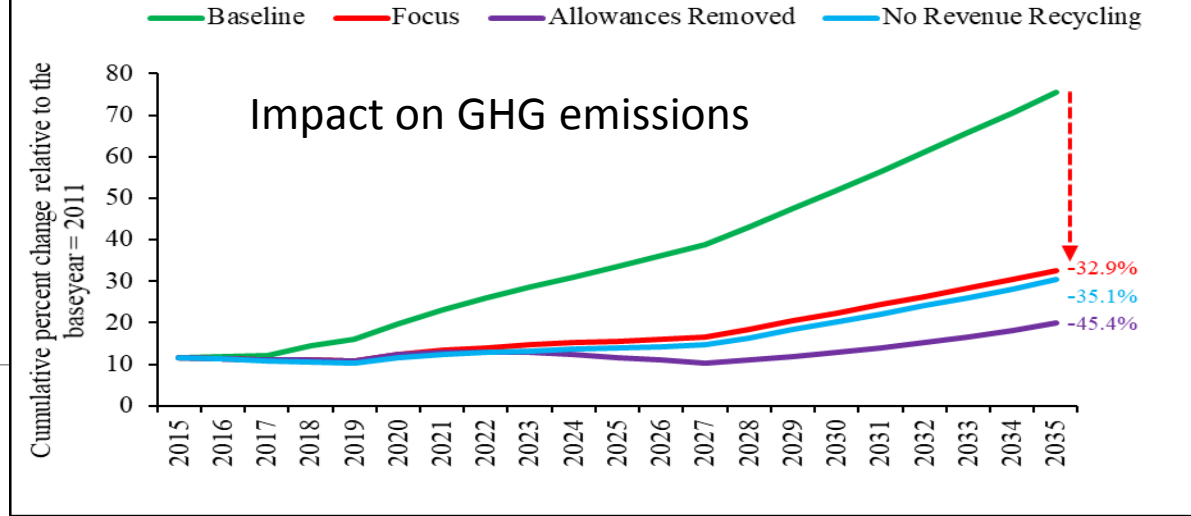
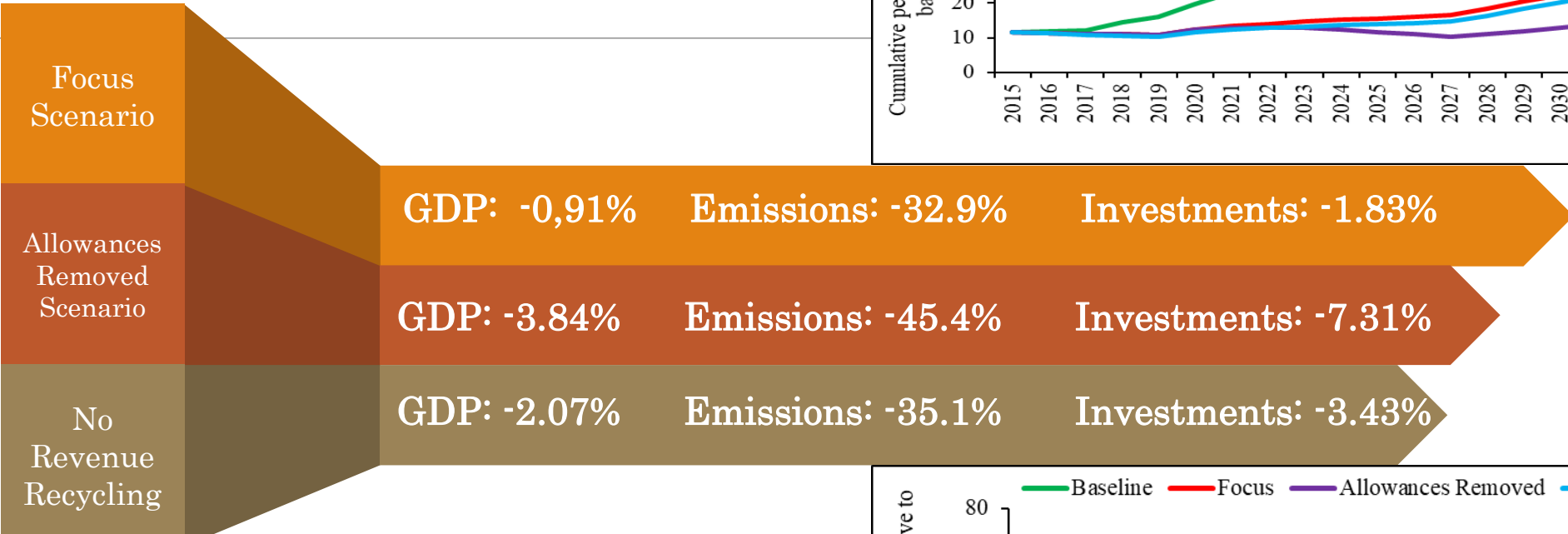
A higher Gini index represents higher inequality.



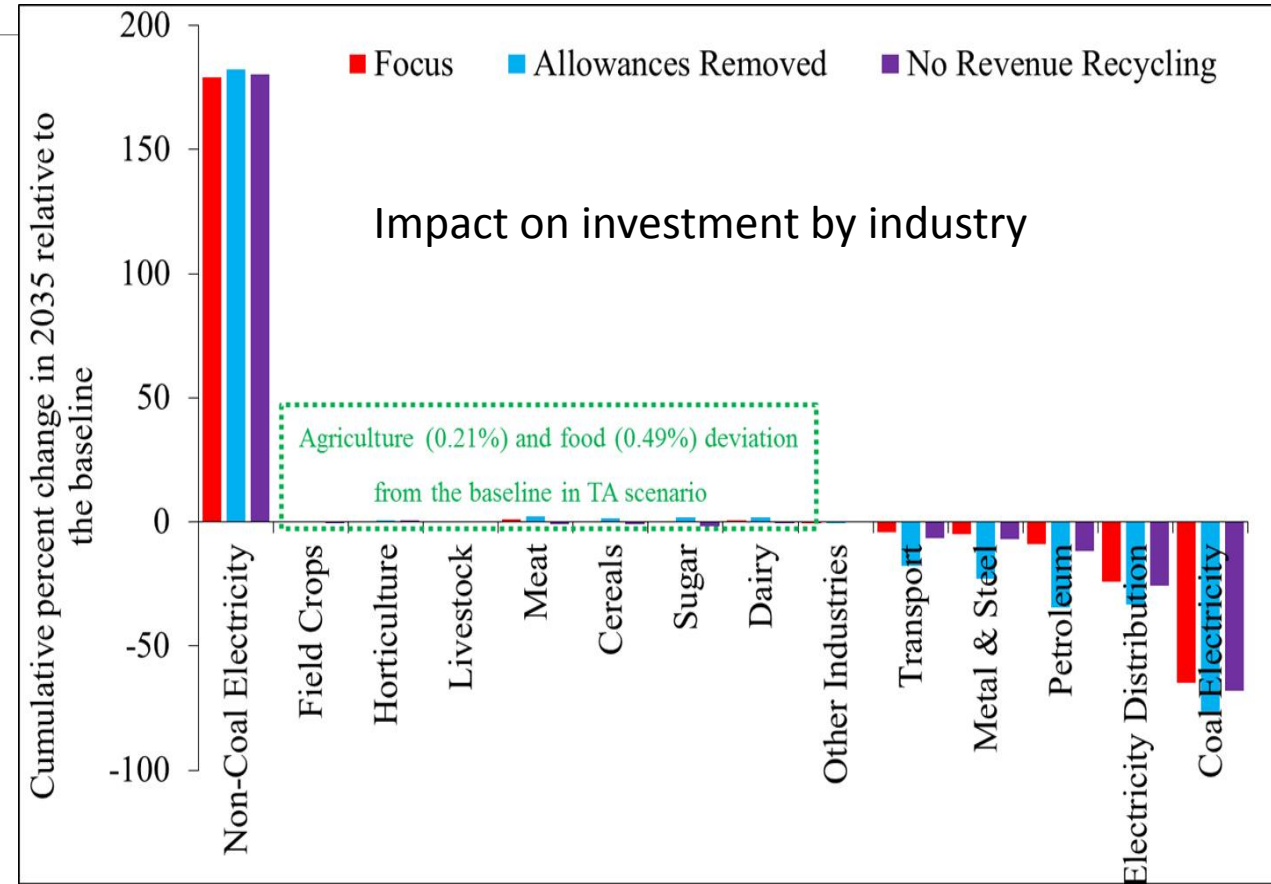
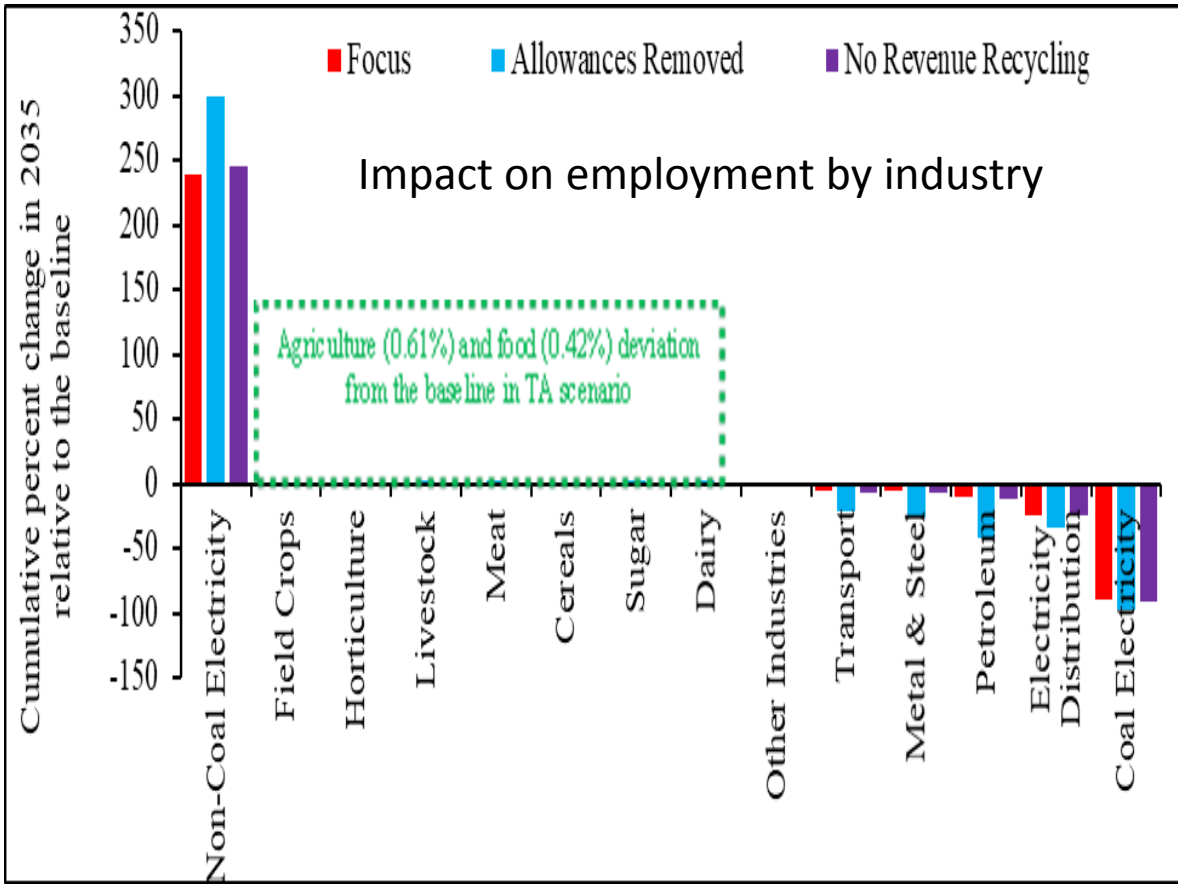
Source: Povcal (2018), The Chartbook of Economic Inequality (2017), Kandbur et al. (2017) Table 1.B
 Note: Estimates are based on household survey data of either incomes or consumption. All countries for which comparable surveys within five years of each reference year were available are shown.

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Macroeconomic estimation of the policy results



Employment and investment impacts



Concluding remarks

The effects of climate change are already devastating, and there are indications that it **might be worse** in future.

Therefore South Africa's commitment to NDC and introduction of **carbon tax** are steps in the right direction.

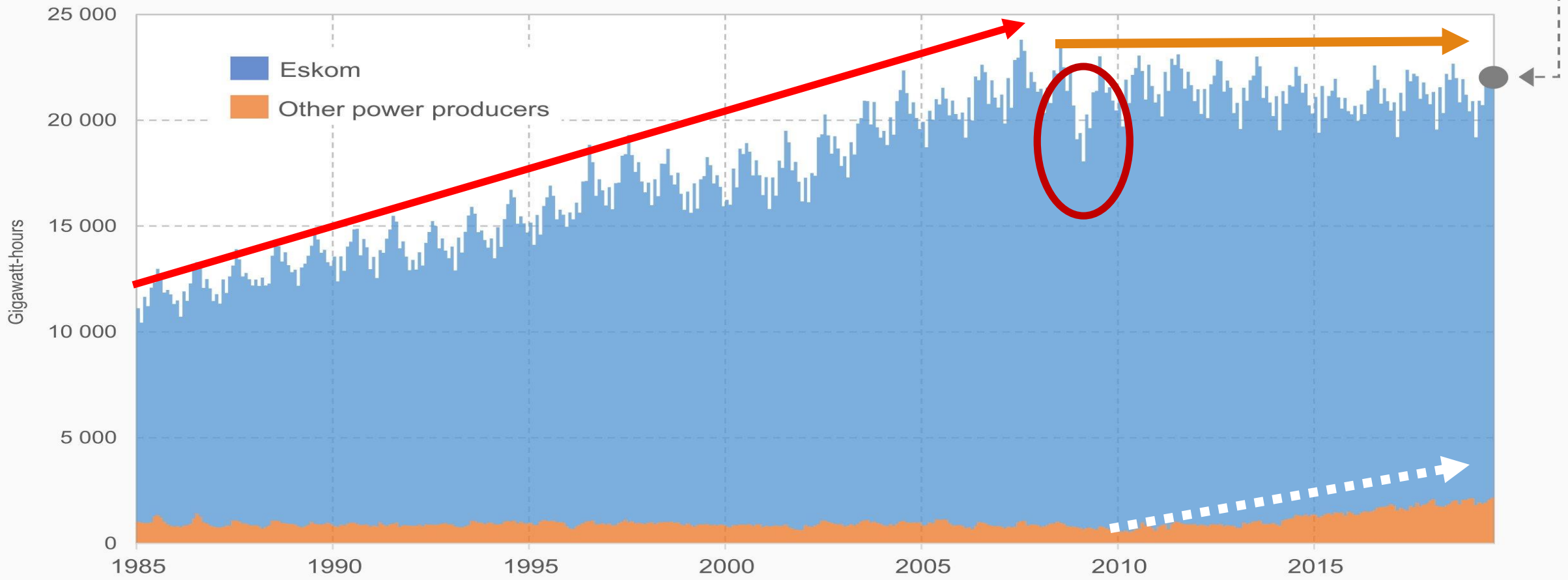
However, more still needs to be done to deal with potential conflicts with other goals.

- 1. Transition:** While climate action does not call for energy insecurity, the transition from one source to another needs to be managed with care.
- 2. Transformation of the economy:** the entire structure and look of the economy will change, and thus such countries need to be prepared for that.
- 3. Global and regional programmes:** AfCFTA, SADC and other regional programmes need to pay attention to these potential conflicts, i.e., increase in trade measures to pursue climate change goals.
- 4. Domestic and global policy makers:** strong and coherent trade and environmental policies are required to restrict 1.5C.
- 5. Align integrated resource plans** with other policies.
- 6. Carbon tax policy:** Incentives are needed as well, and not just penalties.
- 7. Some small measures can contribute the reduction of GHG emissions:** public transport, minimize food wastage (postharvest losses), residential solar programmes, road-to-rail, reforestation,

SA Electricity generation -1985 - 2019

Eskom generated 90,4% of electricity in July 2019

Total volume of electricity generated in South Africa by month (gigawatt-hours)



Source: Electricity generated and available for distribution, July 2019 (Table 7)

Thank you

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