

*South Africa's
Carbon Tax Policy Proposal an update*
National Climate Change Response Dialogue

National Treasury -- November 2014



national treasury

Department:
National Treasury
REPUBLIC OF SOUTH AFRICA

Outline

1: Policy context

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South Africa's response to its economic & social challenges and to climate change

- Promoting higher levels of economic growth & job creation are key policy objectives for South Africa
- However, economic growth since the great recession in 2008/09 has been relatively weak – for this year estimated to be a low of 1.4%
- So how do we balance the need for higher levels of growth and the energy & carbon intensive nature of our economy with our desire and commitment to help reduce GHG emissions.
- “the choices – the trade offs – we are told we must make between financial success and environmental success, between doing well and doing good, are just plain false (Confessions of a Radical Industrialist, Ray Anderson (with Robin White, 2009) (page xv – xvi)”.
- South Africa voluntarily committed (at COP 15 in 2009) to curb GHG emissions by 34% by 2020 and 42% by 2025 below the BAU trajectory with emissions peaking in 2020 - 2025, stabilising in 2025 - 2035 and declining in absolute terms from around 2035, subject to support from developed countries in the areas of climate finance, capacity building & technology transfers.

South Africa's National Climate Change Response White Paper, 2011

- South Africa's response to climate change has two objectives:
 - Effectively manage inevitable climate change impacts through interventions that build and sustain South Africa's social, economic and environmental resilience and emergency response capacity.
 - Make a fair contribution to the global effort to stabilise greenhouse gas (GHG) concentrations in the atmosphere at the level that avoids dangerous anthropogenic interference with the climate system within a timeframe that enables economic, social and environmental development to proceed in a sustainable manner.
- One of the elements in the overall approach to mitigation is: The deployment of a range of economic instruments to support the system of desired emissions reduction outcomes, including the appropriate pricing of carbon and economic incentives, as well as the possible use of emissions offset or emission reduction trading mechanisms ...

UN Climate Summit – September 2014 (1)

NYT ?

- 23 September 2014 – Bold new actions to immediately tackle climate change were announced today by Government, business, finance and civil society leaders attending a historic Climate Summit convened by United Nations [Secretary-General](#) Ban Ki-moon, who has long urged workable solutions based on “clear vision anchored in domestic and multinational actions.”
- “Today was a great day – a historic day. Never before have so many leaders gathered to commit to action on climate change,” Mr. Ban said, summing up the day-long [event](#), which drew a unique mix of international players who announced their vision and commitment for reaching a universal and meaningful climate agreement in 2015, as well made announcements on actions that will reduce emissions, enhance resistance to climate change and mobilize financing for climate action.
- **As for carbon pricing**, “one of the most powerful tools available for reducing emissions and generating sustainable development and growth”, Mr. Ban said that many Government and business leaders supported putting a price on carbon through various instruments and called for intensified efforts to eliminate fossil fuel subsidies.

UN Climate Summit – September 2014 (2)

Chair's Summary

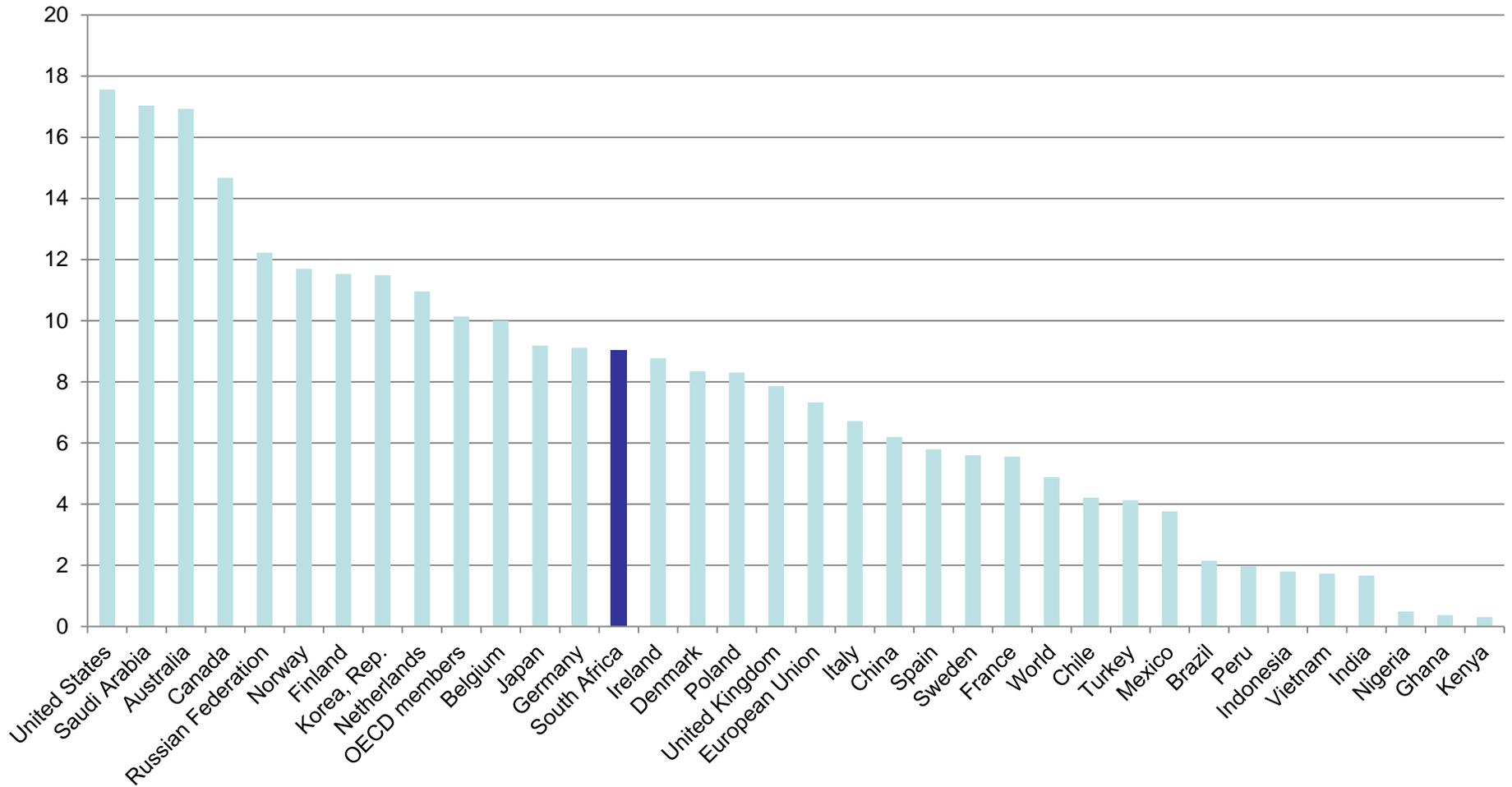
Pricing carbon

- Putting a price on carbon will provide markets with the policy signals needed to invest in climate solutions.
- Seventy-three national Governments, 11 regional governments and more than 1,000 businesses and investors signalled their support for pricing carbon. Together these leaders represent 52 per cent of global GDP, 54 per cent of global greenhouse gas emissions and almost half of the world's population.
- Some leaders agreed to join a new Carbon Pricing Leadership Coalition to drive action aimed at strengthening carbon pricing policies and redirecting investment
- More than 30 leading companies announced their alignment with the Caring for Climate Business Leadership Criteria on Carbon Pricing.

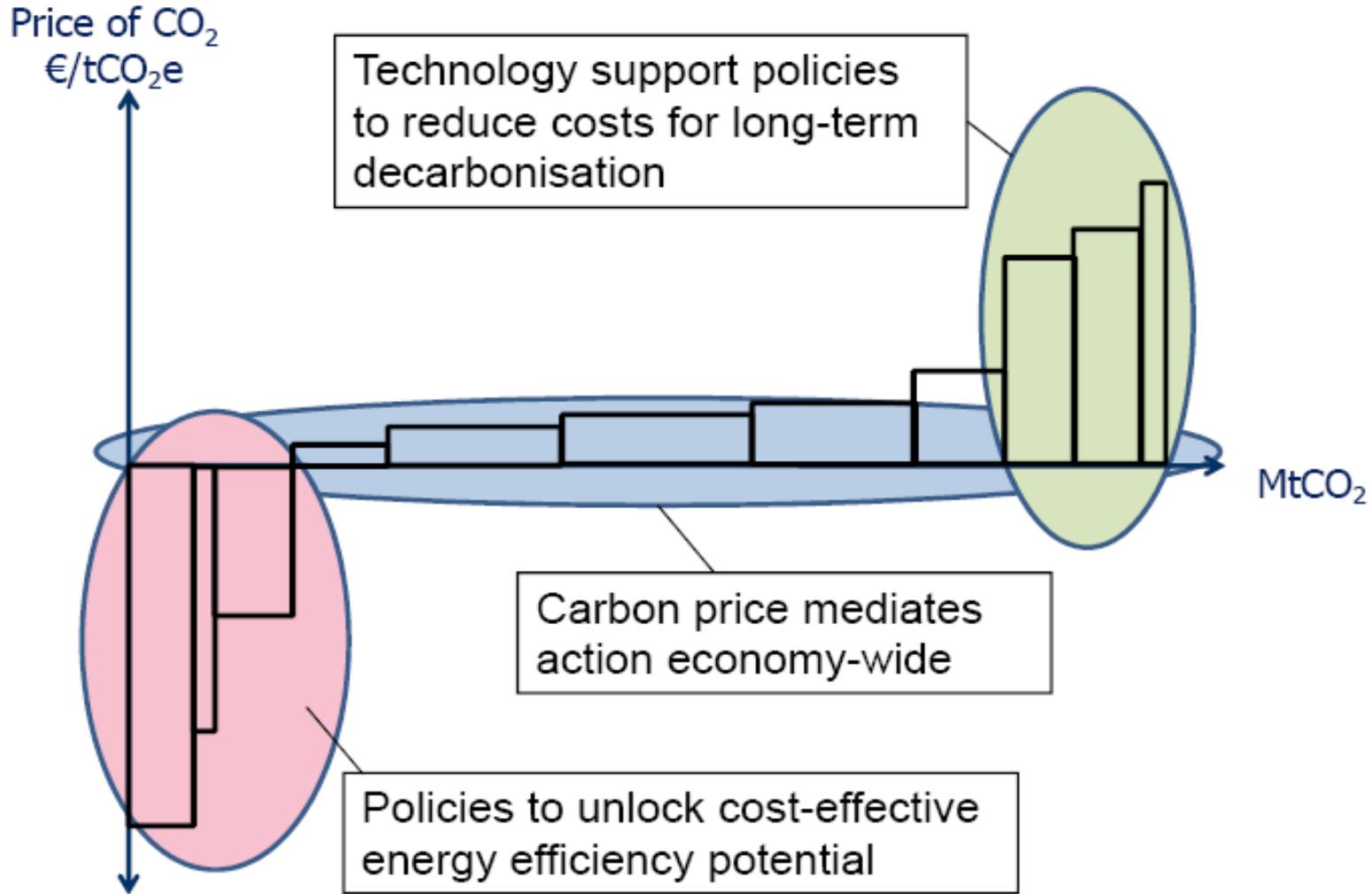
IEA: GHG – emissions: Sectoral Approach

| Mt of CO2: CO2 Sectoral Approach | | | | | |
|----------------------------------|----------------------------|--------|----|--------|----|
| | Country | 2010 | | 2008 | |
| B | People's Republic of China | 23.84% | 1 | 22.07% | 1 |
| | United States | 17.73% | 2 | 18.95% | 2 |
| B | India | 5.37% | 3 | 4.88% | 4 |
| B | Russian Federation | 5.22% | 4 | 5.40% | 3 |
| | Japan | 3.78% | 5 | 3.91% | 5 |
| | Germany | 2.52% | 6 | 2.71% | 6 |
| | South Korea | 1.86% | 7 | 1.70% | 9 |
| | Canada | 1.77% | 8 | 1.87% | 7 |
| | Islamic Republic of Iran | 1.68% | 9 | 1.69% | 10 |
| | United Kingdom | 1.60% | 10 | 1.74% | 8 |
| | Saudi Arabia | 1.47% | 11 | 1.31% | 13 |
| | Mexico | 1.38% | 12 | 1.37% | 12 |
| | Indonesia | 1.36% | 13 | 1.24% | 17 |
| | Italy | 1.32% | 14 | 1.48% | 11 |
| B | Brazil | 1.28% | 15 | 1.23% | 18 |
| | Australia | 1.27% | 16 | 1.31% | 14 |
| | France | 1.18% | 17 | 1.26% | 16 |
| B | South Africa | 1.15% | 18 | 1.31% | 15 |
| | Poland | 1.01% | 19 | 1.01% | 21 |
| | Chinese Taipei | 0.89% | 20 | 0.89% | 22 |
| | Spain | 0.89% | 21 | 1.08% | 19 |
| | Ukraine | 0.88% | 22 | 1.05% | 20 |
| | Turkey | 0.88% | 23 | 0.89% | 23 |

CO₂ emissions (metric tons per capita) in 2010 (WB, 2014)



Policy Mix (for energy sector) – a carbon price, energy efficiency and technology policies (IEA 2011)



Process with Carbon Tax Policy Proposal

Environmental Fiscal Reform Policy paper
(2006)
LTMS
(2007)

Carbon Tax Discussion Paper
(Dec 2010)
NCCR- WP
(2011)

Carbon Tax Policy Paper
(May 2013)

Carbon Offsets Paper
(April 2014)

Legislative Process & Technical Alignment
(2014 -2015)

Proposed Carbon Tax Implementation
(mid 2016)

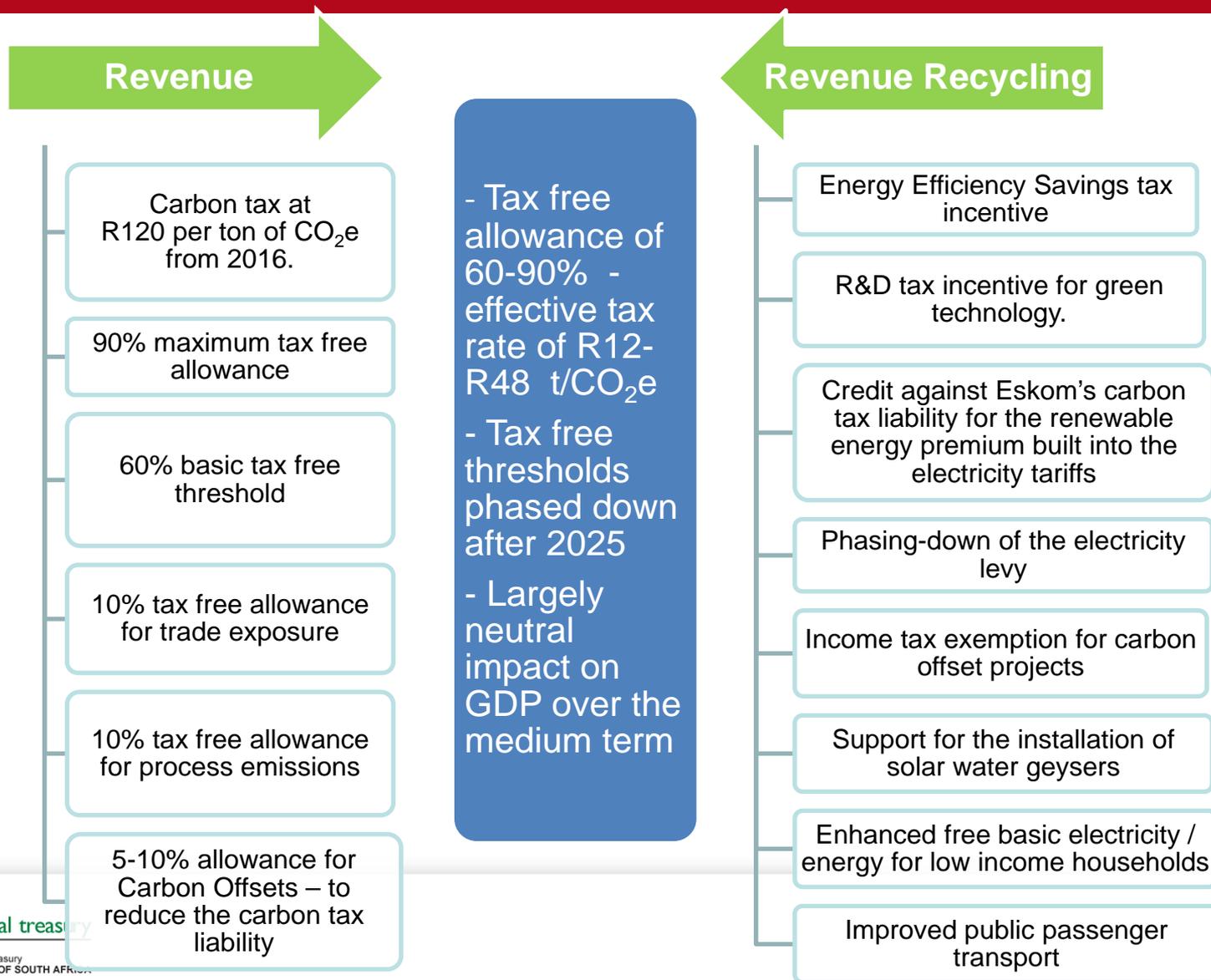
Comments on 2013 Carbon Tax Policy paper - high level summary (115 submissions)

- **52.2%** support a carbon tax as a carbon pricing mechanism;
 - **26.1%** gave a yes and **26.1%** a qualified yes (yes-but) and propose that elements of the proposed carbon tax design be tweaked to improve the effectiveness of the tax and reduce potential negative consequences;
- **41.7%** (no-but) acknowledge the need for a carbon price, but either did not propose a specific measure to that end or felt that command and control measures and other instruments should be pursued (e.g. the implicit carbon price in the IRP2010, an emissions trading scheme, etc.) to achieve an effective reduction in GHG emissions;
- **94%** of the submissions (yes, yes-but & no-but groups) acknowledged the need for a carbon price;
- **6%** felt climate change cannot be linked to anthropogenic emissions and hence there was no need for carbon pricing.

Proposed carbon tax design features

- A carbon tax at R120 per ton of CO₂e above the suggested thresholds with annual increases of 10 per cent until 2019/20 is proposed as from 2016.
- A basic tax-free threshold of 60 per cent is proposed.
- Additional tax-free allowance for process emission (10%)
- Additional relief for trade-exposed sectors (max 10%)
- Carbon offsetting allowed to reduce carbon tax liability (max 5% or 10%)
- The overall tax-free allowance for an entity will be capped at 90 per cent of actual verified emissions.
- Tax-free thresholds will be reduced during the second phase (2020 to 2025) and may be replaced with absolute emission thresholds thereafter.

Overview of the proposed carbon tax policy package



Carbon Tax Policy: Modelling

- Several studies have been undertaken to estimate the impact of carbon pricing in South Africa.
- Generally the carbon tax will result in emission reductions, and depending on revenue recycling assumptions the impact on economic output growth will be neutral to a small negative.
- The gradual phasing in of the carbon tax can reduce South Africa's GHG emissions by between 35 per cent and 44 per cent below business as usual by 2030.
- Estimated cumulative impact on economic output / growth slightly negative to neutral compared to business as usual (baseline) by 2030

Revenue Recycling (1)

- In general, “full” earmarking of specific tax revenue streams are not in line with sound fiscal management practices. However, the efficient recycling of revenue is important.
- Revenue recycling mechanisms for structural adjustment:
 - **“soft” earmarking** (on budget allocations): Independent Power Producers programme to incentivise renewable energy uptake, enhanced free basic energy / electricity programme, Carbon Capture and Storage rebate
 - **tax shifting**: reducing or not increasing other taxes (potential phasing-down of the electricity levy)
 - a range of environmental **tax incentives**, including Energy efficiency savings tax allowance

Revenue recycling (2)

Businesses:

- Energy efficiency savings tax incentive, a tax deduction of 45 c/ kwh for every kwh of verified energy efficiency savings;
- Refinement of the R&D tax incentive to encourage the development of green technology;
- Carbon offset that will reduce the carbon tax liability of businesses.

Households:

- Enhanced free basic electricity / energy for low income households;
- Increased investments and support for public passenger transport;
- Support for the installation of solar water heaters / geysers.

Electricity sector (Business & households)

- Impact on electricity prices will be mitigated by providing a credit against Eskom's carbon tax liability for the renewable energy premium that is built into the current electricity tariffs. The Integrated Resource Plan (IRP 2010) outlines the envisaged energy mix and might therefore impose some indirect carbon price. NT has committed to look at the 'actual' implicit carbon price relating to renewable energy of the current electricity supply in any given year and consider a rebate against that year's carbon tax liability.

You Can't Eat Electricity: Why tackling inequality and hunger should be at the heart of low carbon development in South Africa, Oxfam 2013

- The impacts of climate change on food production, livelihoods and hunger are becoming increasingly clear.
- Putting the fight against inequality and hunger at the heart of low carbon development can also give a shot in the arm to the politics of climate change in countries like South Africa.
- The government's proposal for a carbon tax offers a major opportunity to design a policy that not only helps to drive down greenhouse gas emissions, but is also a tool of economic redistribution and empowerment.
- The revenues of the tax should be recycled on an equal-per-household basis. This would be a tool of economic redistribution to narrow income inequalities and to boost the incomes of people facing food insecurity.
- Carbon tax revenue recycling would then be an effective means of redistributing income from high-income, high-emitting households to low-income, low-emitting ones.

Energy Efficiency Policies

- Energy Efficiency Strategy for South Africa, introduced in 2005, set aspirational targets for sector energy efficiency improvements as well as outlined several energy efficiency policy measures to be introduced.
- A national energy intensity reduction target of 12% by 2015 for all users of energy has been set. Additional energy efficiency improvement targets of 15% by 2015 for industry; mining; power generation; transport; and commercial & public buildings; and 10% for residential sector were set.
- Key policy measures include:
 - Energy Efficiency and Demand Side Management Programme
 - Energy Efficiency Tax Incentive
 - Revised National Building Regulations
 - Adoption of Energy Management System Standards (ISO 50 001)
 - Public Transport Programme

Energy Efficiency Savings Tax Incentive

- Aimed at helping to address climate change related challenges through improvement in energy use and address energy security concerns
- The value of the incentive (i.e. a tax deduction) is 45 cents per kwh saved
- Taxpayers that can prove EES from implementing an energy efficiency measures can claim the allowance
- Only accredited measurement and verification professional can verify the EES
- The South African National Energy Development Institute (SANEDI), a government agency, is responsible for endorsing and issuing EES certificates
- The taxpayer baseline is adjusted annually with the amount of EES claimed
- The legislation is already in place and the Regulations to effect the incentive await publication
- The EES incentive will run until January 2020
- It is complementary mechanism (i.e. carrot) in anticipation of the implementation of the proposed carbon tax. Some of the carbon tax revenue will be recycled through this EES Tax Incentive

Addressing International Competitiveness and Carbon Leakage Issues

- A trade exposure allowance (providing a special maximum 10 percent tax-free threshold for EITI sectors) has been proposed.
- This concession will be structured as a graduated relief. Firms will have the option to use either, exports only or exports plus imports as a percentage of output or sales as an indication of their trade intensity.
- The measure however primarily focuses on the trade exposure of businesses and does not examine their emissions intensity and marginal cost impacts of carbon tax.
- Further analysis might therefore be needed to ensure an optimal provision for international competitiveness relief for trade exposed and emission intensive sectors (scope 1 direct emissions).
- Some private sector stakeholders have requested that border carbon adjustments (BCAs) be explored; e.g. cement, steel, (and even electricity in future), etc.

Carbon tax MRV Overview

- The proposed carbon tax liability will cover emissions resulting directly from fuel combustion and gasification and from non-energy industrial processes.
- Tax paying entities will be required to self-report their carbon emissions & tax liability to SARS.
- Data from the mandatory reporting requirements will follow two separate reporting paths, depending if they relate to energy or process emission sources.
 - Energy-related data will be reported and verified according to guidelines outlined and managed by the DoE.
 - Process emissions data will be reported and verified within the NAEIS system and managed by the DEA.

South Africa GHG emissions MRV: Key Institutions

The Department of Environmental Affairs

- The DEA is the authority with respect to MRV, and will therefore support SARS in auditing and verifying GHG emissions as reported on the tax returns.
- DEA is working on the development of the National Atmospheric Emissions Inventory System (NAEIS)

The Department of Energy

- The DoE is mandated in terms of the Energy Act (Act 34 of 2008) to collect and analyse energy and fuel use data, as well as information on energy efficiency improvements.

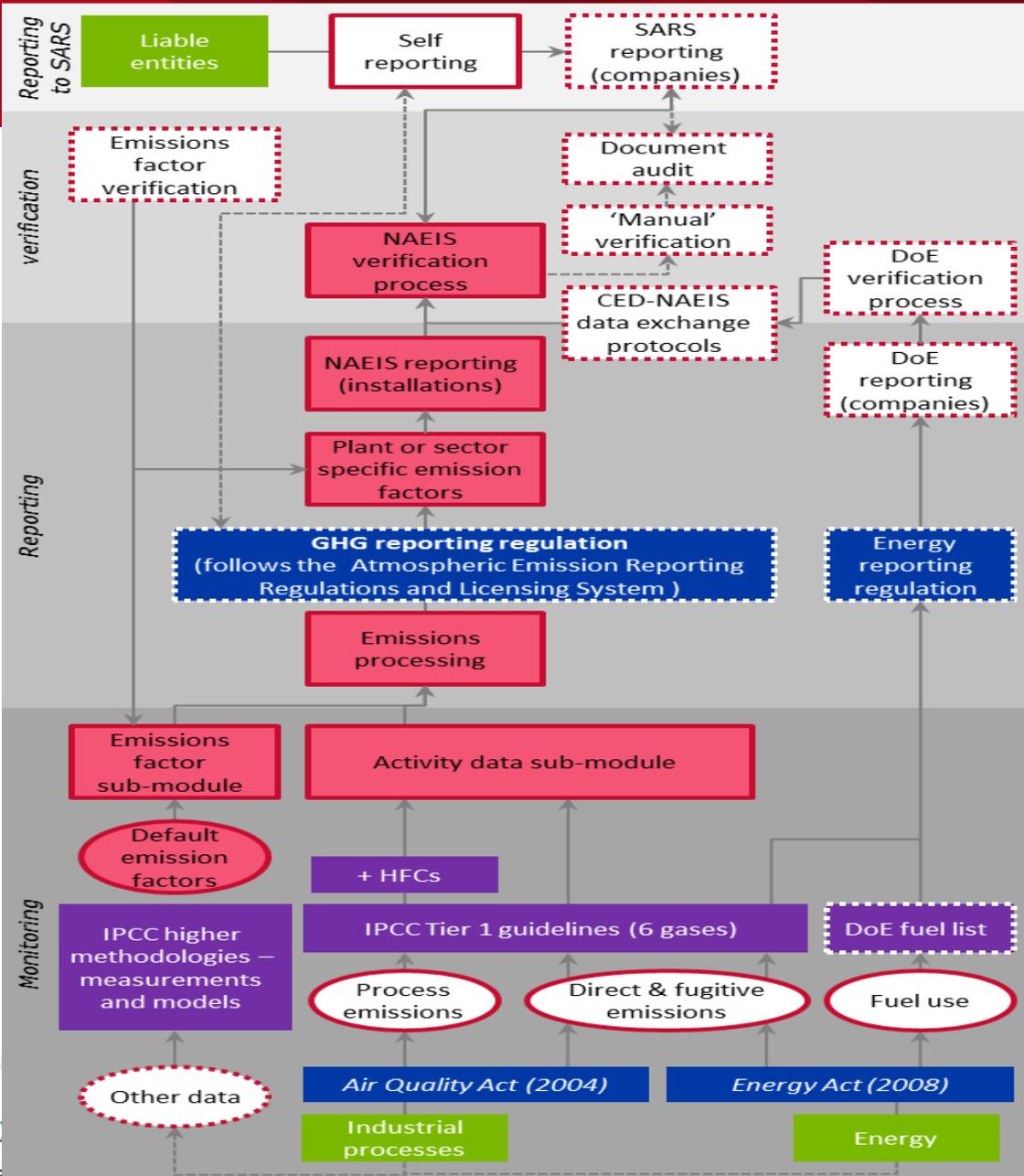
South Africa GHG emissions MRV: Regulatory Regime

- Regulations relevant to MRV are under development
- The National Environmental Management: Air Quality Act No. 39 of 2004 is the core regulation underpinning MRV and, in particular the NAEIS system, which will be used to verify the emissions that are self-reported by entities liable for the carbon tax.
- Energy Act (Act 34 of 2008) empowers the DoE to require energy and fuel use data reporting.

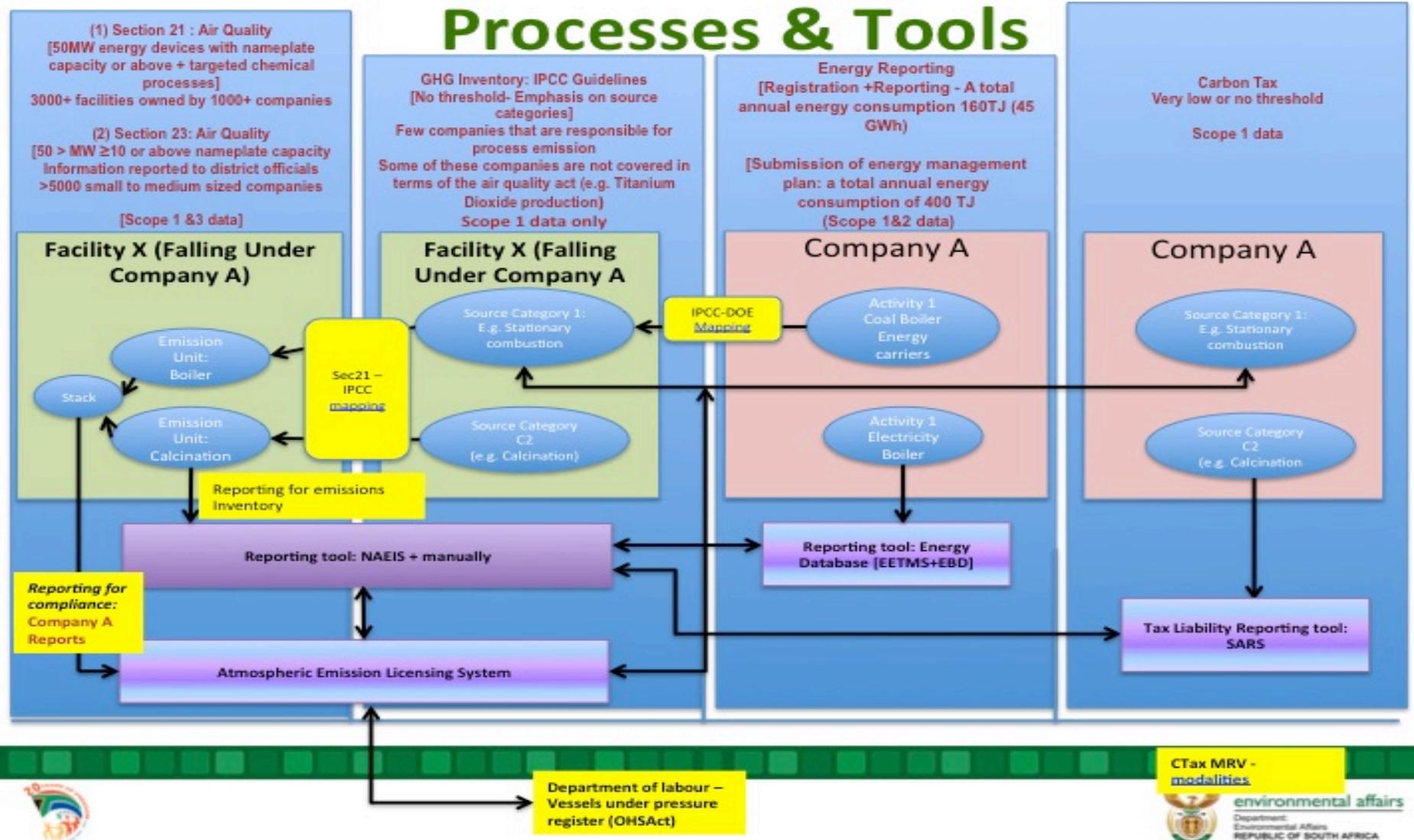
| Regulation (leading authority) | Timeline (tentative) | Activities and developments |
|---|-------------------------------|---|
| National atmospheric emission reporting regulations (DEA) | 2013 -2014 | Regulation drafting |
| | 18 July 2014 | Publication of the draft regulation |
| | November 2014 – February 2015 | Stakeholder consultation and public comments |
| | May – June 2015 | Regulation to become operational |
| Energy reporting regulation (DoE) | July-September 2014 | Draft regulation available for public comment |
| | October – December 2014 | Stakeholder consultation and public comments |
| | January-March 2015 | Regulation to become operational |

Proposed Institutional setup for the carbon tax

MRV



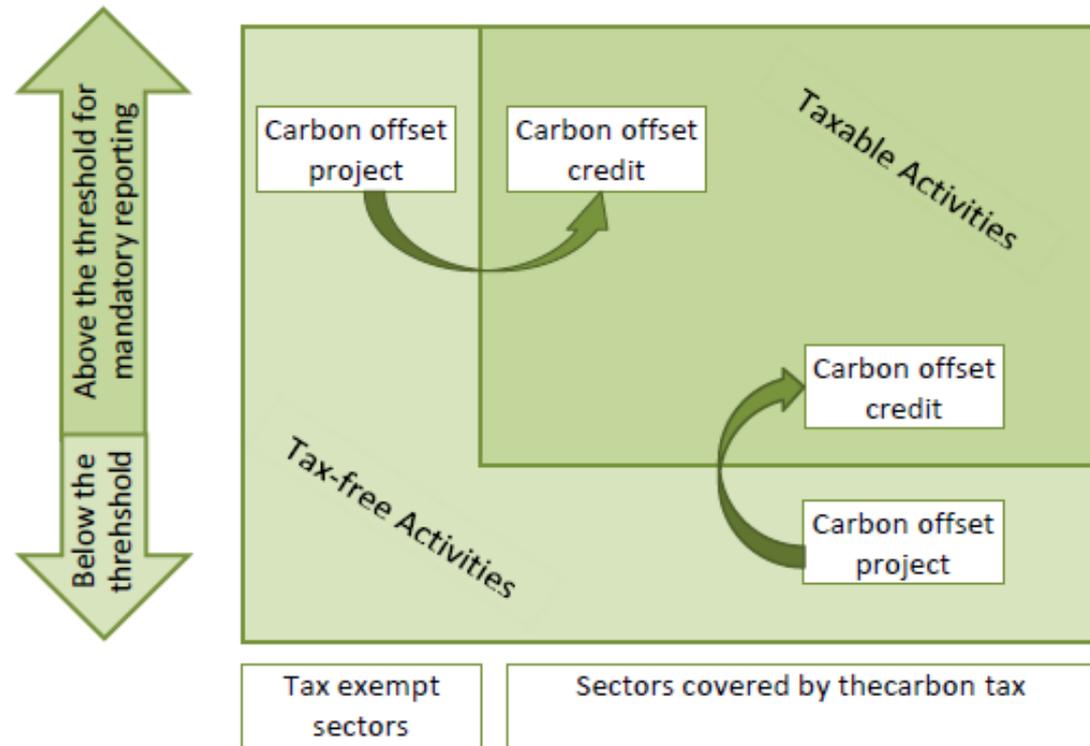
Mandatory GHG Emissions Reporting & Carbon Tax Audit process



Carbon offsets scheme

The carbon offset component of the carbon tax has a dual purpose:

- To serve as a flexibility mechanism that will enable industry to deliver least cost mitigation, i.e. mitigation at a lower cost to what would be achieved in their own operations, and thereby lower their tax liability; and
- To incentivise mitigation in sectors or activities that are not directly covered by the tax and/or benefiting from other government incentives, especially, transport, AFOLU, waste.



Carbon offsetting under the carbon tax

- It is proposed that initially carbon credits developed under certain internationally recognised carbon offset standards be permitted.
- A potential domestic standard would primarily cover the types of projects that are not well catered for under international standards.
- A specific set of **eligibility criteria for carbon offset projects** has been devised to ensure effective implementation of the offset mechanism:
 - Projects that generate carbon offset credits must occur **outside the scope of activities subject to the carbon tax.**
 - **Only South African based credits** will be eligible for use within the carbon offset scheme.
 - Carbon offset projects registered and / or implemented before the introduction of the carbon tax regime will be accepted subject to certain conditions and within a specific timeframe.
 - **Lists of both eligible and ineligible projects should be introduced.**

Administration of the carbon offsets scheme (a): SA Carbon Offsets Scheme – Using International Standards

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- 1. Submission of carbon-offset project ideas to the administrator (for pre-screening) – **Project Developer**
 - 2. National approval (CDM) - **Designated National Authority &** Project Description Submission (VCS) – **VCS Registry**
 - 3. Validation - **Designated Operational Entity (CDM)** / Project Description Submission - **Validation/Verification body (VCS)**
 - 4. Registration (CDM) **Executive Board** (not required under VCS)
 - 5. Project Monitoring - **Project Developer**
 - 6. Verification - **Designated Operational Entity (CDM)** or **Validation/Verification body (VCS)** (SANAS approved verifier under VCS)
 - 7. CER/VCU issuance - **Executive Board** (CDM) or **VCS Registry** (Review of verification reports)
 - 8. CER/VCU transfer to SA registry and cancellation in international registry – **DNA** (CDM &VCS)
 - 9. Issuance of certificate based on CER/VCU values and retirement in SA registry – **DNA** (CDM &VCS)
 - 10. Use of certificate to offset Carbon Tax liability – **Credit owner (tax liable entity) & SARS**



Administration of the carbon offsets scheme: Institutional Framework and Technical Infrastructure Development

- The current status of the envisioned institutional framework and technical infrastructure can be summarised as below:
 - Pre-screening & National approval
 - Validation and Registration
 - Monitoring
 - Verification
 - Issuance of carbon credits and carbon-offset certificates
 - Use of credits
 - Transversal tools:
 - Data management and Registry
- The offset scheme will use existing international carbon offset standards and the associated institutional and market infrastructure. Over the next few months the emphasis will be on putting in place its supporting.

Summary of comments on the 2014 Carbon Offsets Paper – 77 written submissions

- 53.2 per cent support (yes) the design of carbon offset scheme as outlined in the carbon offsets paper with some minor suggestions;
- 40.3 per cent support the use of carbon offsets, but propose amendments to the design features (yes-but).
- In total 93.5 per cent of the submissions either fully (yes) or with some conditions (yes-but) support the carbon offsets scheme;
- 6.5 per cent of respondents felt that carbon offsets scheme would undermine the declared objective of the carbon tax and should thus be scrapped (no).

Summary of policy developments and the next steps

- Policy development & public consultation with regard to a carbon price / carbon tax in South Africa commenced in 2010
- The Climate Change Response White Paper in 2011 provided the broader policy context for a carbon price / tax as one of a suite of measures to address the challenge of climate change and the transition to a low-carbon economy
- The next steps are the Cabinet & Parliamentary processes to obtain formal approval for the Carbon Tax legislation during 2015
- The carbon tax design, proposed revenue recycling measures and tax incentives are intended to address concerns about the impact of higher electricity prices on low income households and the international competitiveness of South African firms.
- The current low carbon price in the EU ETS, the carbon price policy reversal in Australia and the slow pace of international negotiations does not create a conducive environment.
- The emission trading schemes in China and the carbon tax initiatives in Mexico, Chile, etc. signal the way forward.

Thank you

Questions?