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The South African Carbon Tax & Offset Provision:

Promoting the international carbon market as a driver for clean economic growth

Project Developer Forum
25 November 2016, Pretoria, National Treasury

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Agenda

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I. The “PD Forum”: “climate change” expertise & contribute to SA Carbon Tax & offset legislation

II. The “Paris Agreement”: can we -all together- do it? With Global Carbon Market Mechanisms?

III. Flexible mechanisms for domestic GHG abatement and global/international cooperation

IV. The Carbon Tax Dynamic in South Africa: which propositions towards the “offset scheme”?

I. About the “PD Forum”

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Project Developer Forum (PD Forum) is a collective voice of companies and practitioners that are **developing and financing greenhouse gas emission reduction projects** in all regions of our globe.

Our knowledge and experience with global carbon market, climate finance instruments, country specific policies and NDCs, make PD Forum a unique platform and stakeholder for discussions around the reform and creation of policies and mechanisms to mitigate climate change.

PD Forum commends South Africa for its leadership in designing domestic climate change policies as well as its role in international negotiations.

To support the process, PD Forum has prepared multiple submissions:

- Call for public comments on the Draft Regulations: Carbon Offsets - June 2016
- Call for public comments on the Draft Carbon Tax Bill - November 2015
- Call for public comments on the proposed carbon tax - April 2015
- Call for public comments on the "Carbon Offsets Paper” - April 2014

Active contributor

II. "Paris Agreement": ratified by 112 Parties - to date

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- ⇨ Hold global temperature increase to below **2° C**;
- ⇨ Achieve **global** greenhouse gas emission peak;
- ⇨ Achieve **Net Zero Emissions** by the second half of this century.
- ⇨ Nationally Determined Contributions will evolve to **domestic mitigation policies** that promote the mitigation and adaptation objectives.
- ⇨ The Paris Agreement was ratified in recorded time by now 112 parties, covering ~80% of global emissions.
- ⇨ The rules and mechanisms of the Paris Agreement shall be defined and agreed by end of 2018.

Rules to be agreed Dec.18

Implementation: 2020

II. "Paris Agreement": more ambitious national plans are needed!

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Can we reach the targets?

⇨ **"Greater reduction efforts will be required"**

⇨ NDCs (national objectives) revised every 5 years (**Ratcheting mechanism**)

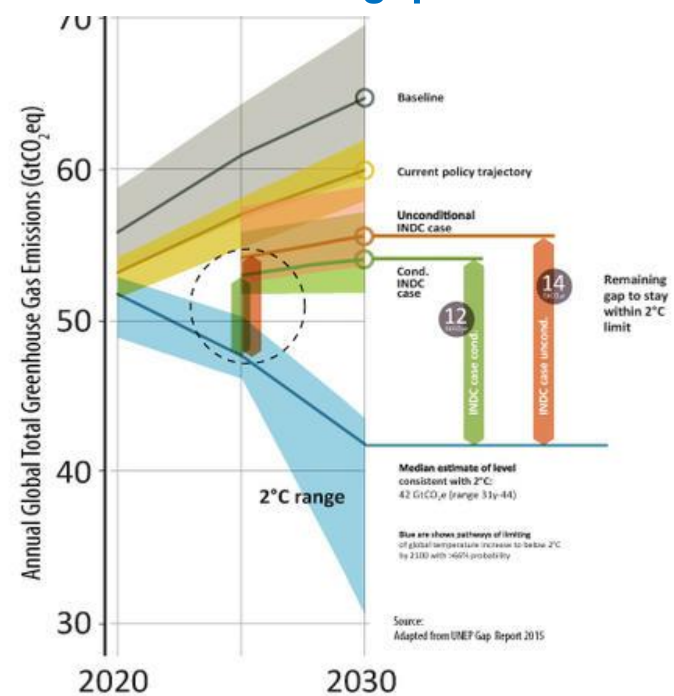
⇨ Carbon markets and climate finance are key to reduce global cost and increase ambition

– ***Comments:***

- Gradually increasing ambition generates **policy uncertainty and risks**.
- Lack of early action and delay leads to **increasing costs of mitigation**.
- Early action for the private sector is both **opportunity and risk** that has to be managed.

United Nations estimates a 12 to 14 GtCO2e gap by 2030

1. Early action and
2. international cooperation
are crucial to avoid widening the gap



climatecollege.unimelb.edu.au

II. “Paris Agreement”: focus on clean growth in developing country, all right!...With which financing?

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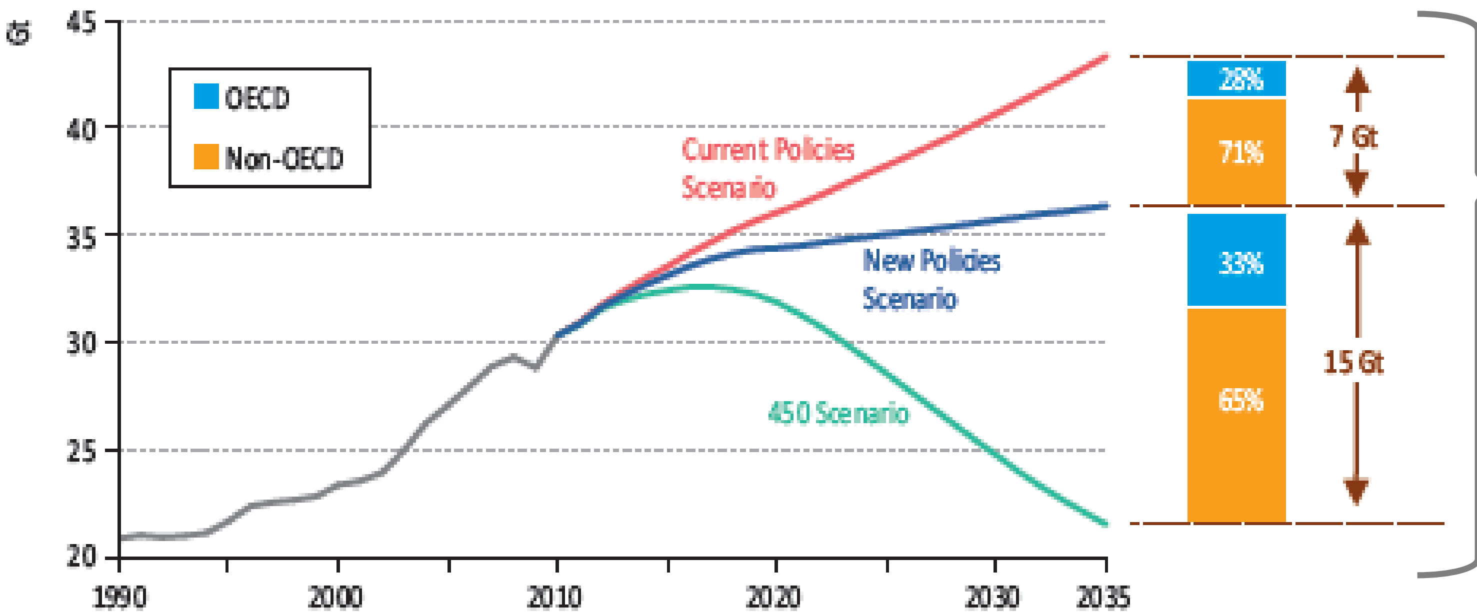
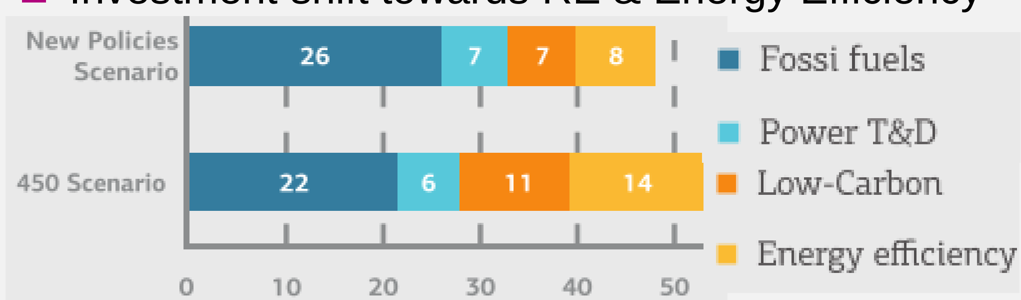


Global RE investment to increase by 120 BUSD p.a.

- Non-OECD:
  - 90% of population & energy demand growth;
  - Investment demand of USD 1.3 trillion (0,9 trillion in OECD).

- Investment shift towards RE & Energy Efficiency



II. "Paris Agreement": more "Carbon Pricing" increases international financing (IEA -International Energy Agency- motto!)

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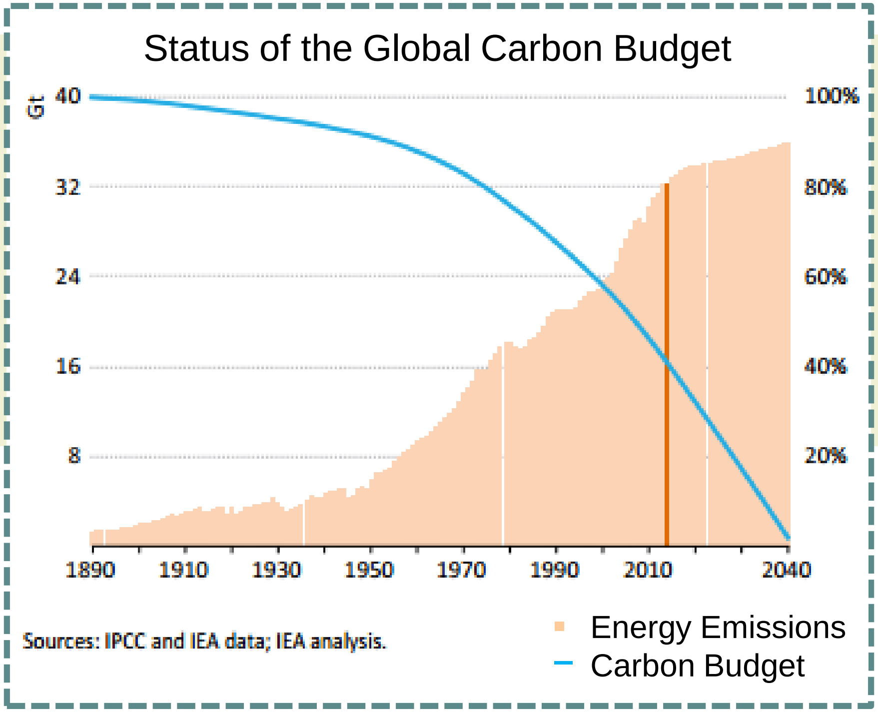
"If we do not change course, by 2017, 100% of the permissible energy sector emissions will be locked in."

Maria van der Hoeven

Executive Director IEA



- ⇨ Carbon prices in a 450 ppm scenario:
  - In OECD: \$120/t in 2035;
  - In BRICS: \$10/t in '20 / \$95 in '35.
- ⇨ Common use of **offsets** (indirect linking) may allow price convergence and channel financial flows and investments to developing countries.
- ⇨ If **all countries begin immediate mitigation**, establish a **single global carbon price** and use of all technologies, economic costs will be limited to 0,06% reduction in annual consumption growth until 2100 (IPCC 5th AR WG III)

III. Fundament for
International Carbon Markets - Article 6 (Paris Agreement)

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- ⇨ Voluntary cooperation in NDCs to higher ambition in mitigation & adaptation and promote sustainable development.
- ⇨ Internationally Transferred Mitigation Outcomes (ITMOs) to avoid double counting
- ⇨ A new carbon market mechanism to:
  - Promote the mitigation of GHG emissions & foster sustainable development;
  - Incentivize authorized public & private entities;
  - Allow **international transfers of mitigation** units based on sound accounting

Each country to propose Mar.'17

Comments:

- ✓ Access to international carbon markets is a reward for ambitious and diligent NDCs
- ✓ Domestic ambition and demand for mitigation units opens access to global market.
- ✓ CDM **(Clean Development Mechanism)** and its evolution towards Article 6 mechanism is an opportunity to engage private sector and anticipate action.
- ✓ Regulatory security and recognition of early action is key.

Prepare SA regulations today (Offset with CDM) to bridge to international carbon market

III. International Carbon Markets: a group of leaders focused on domestic regulations, with few integrating coordination

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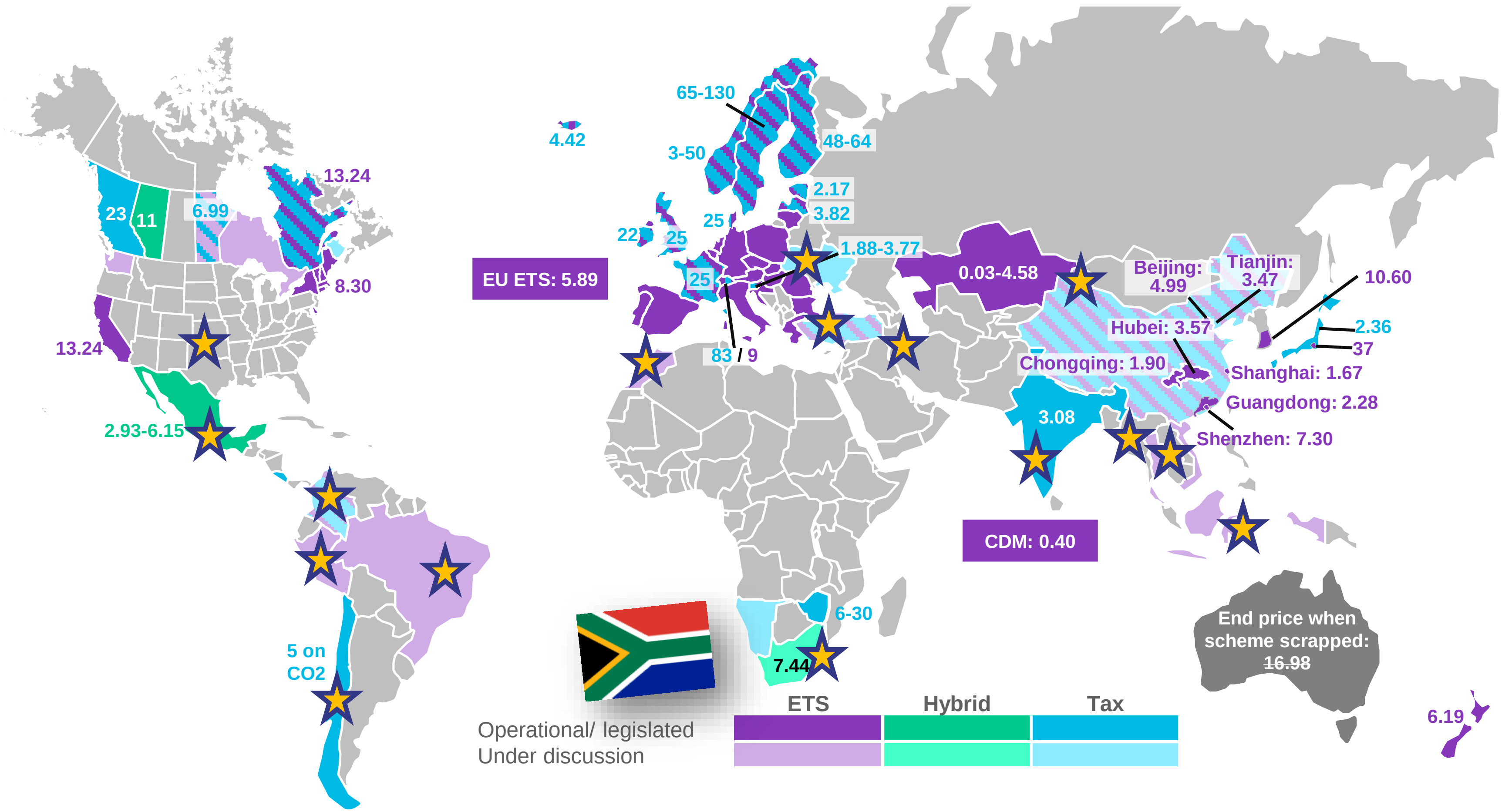

★ The *World Bank's Partnership for Market Readiness (PMR) supports 16 member states to establish carbon pricing policies*

III. <u>Carbon pricing framework:</u> well coordinated policies/regulations maximize impact & optimize costs

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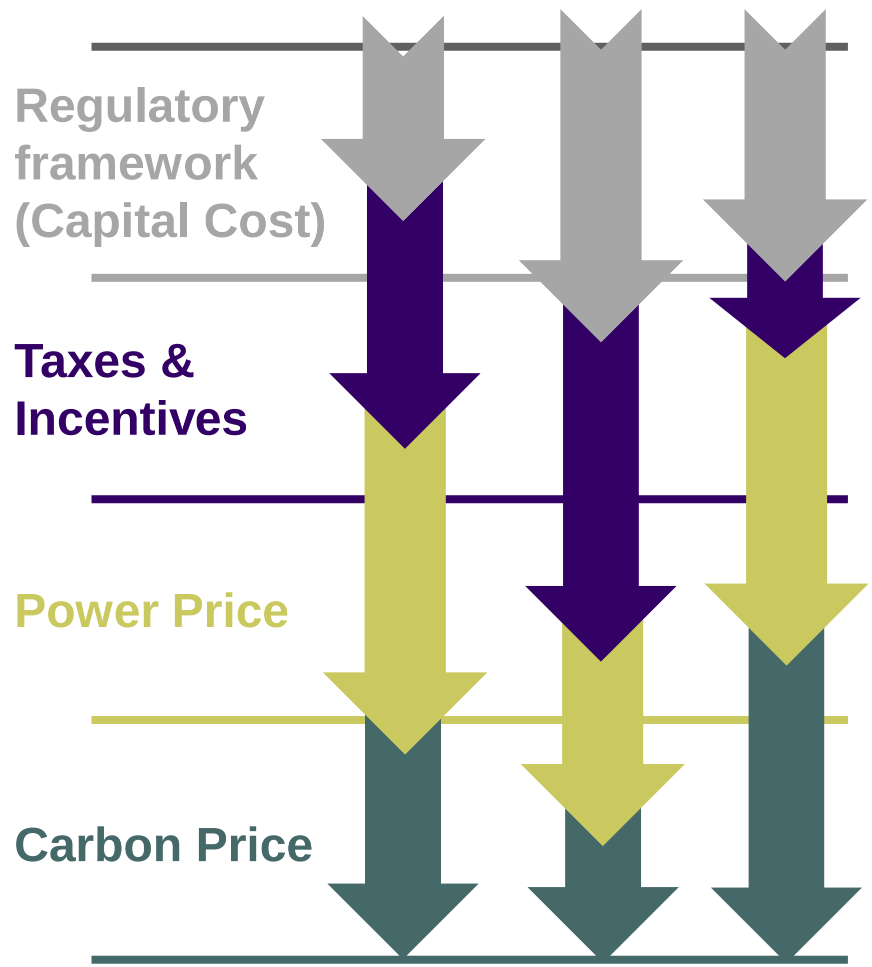
- ⇨ Compatible regulations to ensure economic efficiency
- ⇨ The policy overlap determines explicit prices for carbon and electricity
- ⇨ Balance of emission pricing and GHG mitigation incentives is an important instrument in developing countries to minimize impact on growth and poor population.



IV. The Carbon Tax dynamic in South Africa: the ambition to accelerate the transition to sustainable growth

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⇨ Country Indicators (2013)

- 52.3 M inhabitants
- GDP/capita (USDPPP) ~ 12,375 (2011)

⇨ Economy

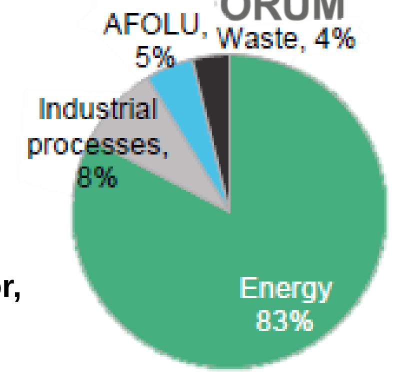
- High level of inequality and > 30% poverty
- Depends on extractive industry & exports

⇨ GHG Emissions

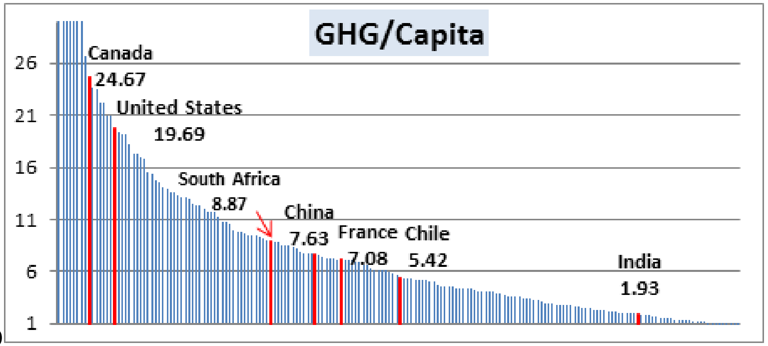
- 463 MtCO2 (2012) +46% since 1990
- **<u>Energy</u> 82%** of total emissions, **<u>60% thereof related to Power Generation</u>**

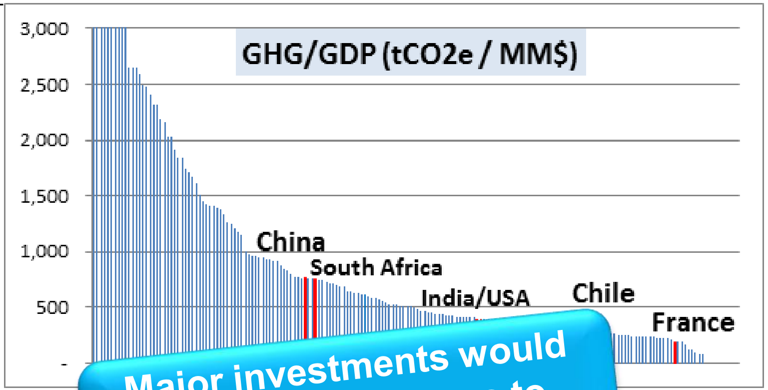
⇨ Challenges for GHG mitigation

- Ambitious GHG mitigation requires **<u>171 billion USD investments in renewable energy</u>**.
- The 63 billion above the business as usual trajectory represent 19% of South Africa's GDP.



South Africa greenhouse-gas emissions by sector, 2010
Source : BNEF





Source : Prepared from World Bank Data

Major investments would benefit from access to international financing

Source: Alton et al; Introducing carbon taxes in South Africa; Applied Energy 03/2014; 116:344–354, available from http://www.sciencedirect.com/science/article/pii/S0306261913009288

IV. <u>The Carbon Tax dynamic in South Africa:</u> offset scheme as flexibility mechanisms & access to international market

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International standard "CDM" to prepare the future/access to international carbon market

- ⇨ Status of Carbon Tax in South Africa
  - Tax rate is defined to ZAR 120/t CO2
  - In the Power Sector, 40% of emissions are taxed, leading to cost of up to 48 ZAR/t.
  - Impact for Eskom estimated to be > 500 Mio USD – 138% of its 2014/15 pre tax profit.
  - Pass through to tariffs is politically sensitive due to low purchase power of population.
- ⇨ Status of Carbon Credit Flexibility Mechanism: OFFSET SCHEME => GOOD START!
  - Mechanism plans to recognize **<u>CDM</u>** Certified Emission Reductions as well as voluntary standards and could translate into price of up to 120 Rand/CER.
  - Bloomberg estimates that demand for CERs <u>per year</u> in South Africa could reach 51 Mio CERs.
  - **<u>Eligibility of renewable Energy and REIPPP projects</u>** is a major opportunity for a swift, smooth and affordable energy transition. Credits from projects that meet CDM eligibility should be included as eligible offsets, even if they are REIPP projects. These projects obtain IPP status through an open bidding process and carbon credits can reduce the overall cost of energy to the country.

IV. The Carbon Tax dynamic in South Africa: the benefit of the domestic offset mechanism

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Economic Benefits from country perspective

Tax incites operational efficiency in existing assets	Domestic crediting to finance clean expansion
Operating of existing assets is necessary to sustain the economy.	Crediting clean infrastructure outside of existing installations attracts investments
Non abatable emissions can be managed & compensated	Complementary performance based mechanism orients best mitigation

BENEFITS

- Mitigate impact on energy cost and inflation and protect consumers.
- Promote early action as investors will anticipate and balance their portfolio
- Ensure (Inter)-national recognition of early action and MRV of results
- Attracts investments with important Socio-environmental benefits
- Allows attracting international carbon market & finance flows.

IV. **The Carbon Tax dynamic in South Africa:** Propositions to optimize design and coordination of regulations

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OFFSET: a **MAJOR** opportunity to accelerate the transformation of power sector

- South Africa's Carbon Tax and **Offset** is an **innovative policy proposal**. If well implemented it will influence the regulation of the Article 6 mechanism (notably other developing countries – who look at South Africa).
- **Clean growth** in South Africa's Energy sector is crucial. **Including REIPPPP** projects allows containing power price increases and promotes economic growth.
- Regulatory certainty is key to attract investment and recognizing projects that were registered in the past is a clear signal that early action will be rewarded.
- Using the **"CDM"- International standard** allows anticipating action, reduces investment risk and ensures international recognition and fungibility of emission reduction units.
  - A revival of the market for CDM Certified Emission reductions would be a decisive driver to attract investment and early mitigation actions.
  - A regional approach would enhance economic efficiency and economic integration.
  - Domestic demand for CERs by allowing compensation of the carbon tax would attract international demand and financing flows.

Towards International Carbon Markets: the importance of domestic regulations

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Building a global carbon markets from **bottom-up** action