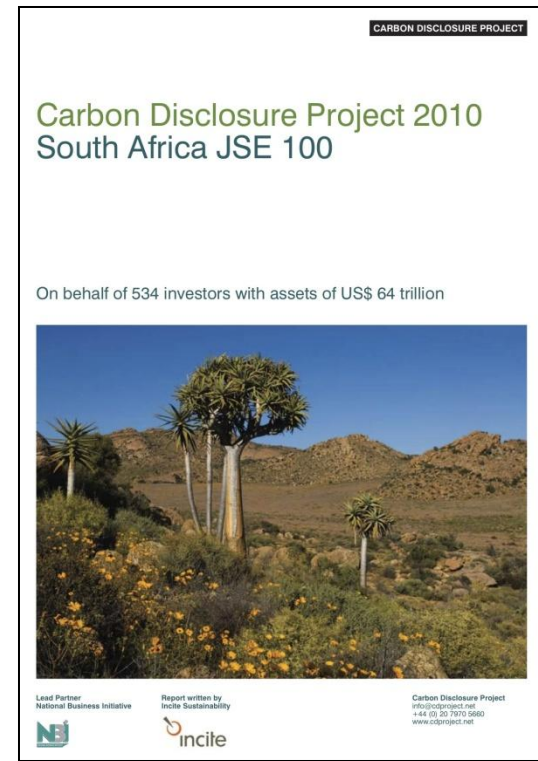


Carbon Disclosure Project 2010 South Africa JSE 100

Lessons from the CDP for Treasury's policy process

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What role for the CDP (if any) in informing the policy process?

Carbon Disclosure Project 2010

534 financial institutions with assets of over US\$ 64 trillion were signatories to the CDP 2010 information request dated February 1st, 2010, including:

CDP Mission Statement

To collect and distribute high quality information that motivates investors, corporations and governments to take action to prevent dangerous climate change.



Reference to the CDP in the Treasury Document

The Carbon Disclosure Project is a voluntary international initiative that companies can participate in by submitting annual reports on their emissions profile. South Africa's first Carbon Disclosure Project report generated a high response rate from the top JSE-listed companies. Table 8 below shows that South Africa's carbon emissions are dominated by a few large players: Sasol, BHP Billiton and Anglo American, which are listed companies, and Eskom, a non-listed company. The Carbon Disclosure Project can play an important role in providing baseline company data on measured GHG emissions that should ideally feed into a future compulsory measuring, reporting and verification system, to be administered by the Department of Environmental Affairs in terms of the National Environmental Management: Air Quality Act (2004).

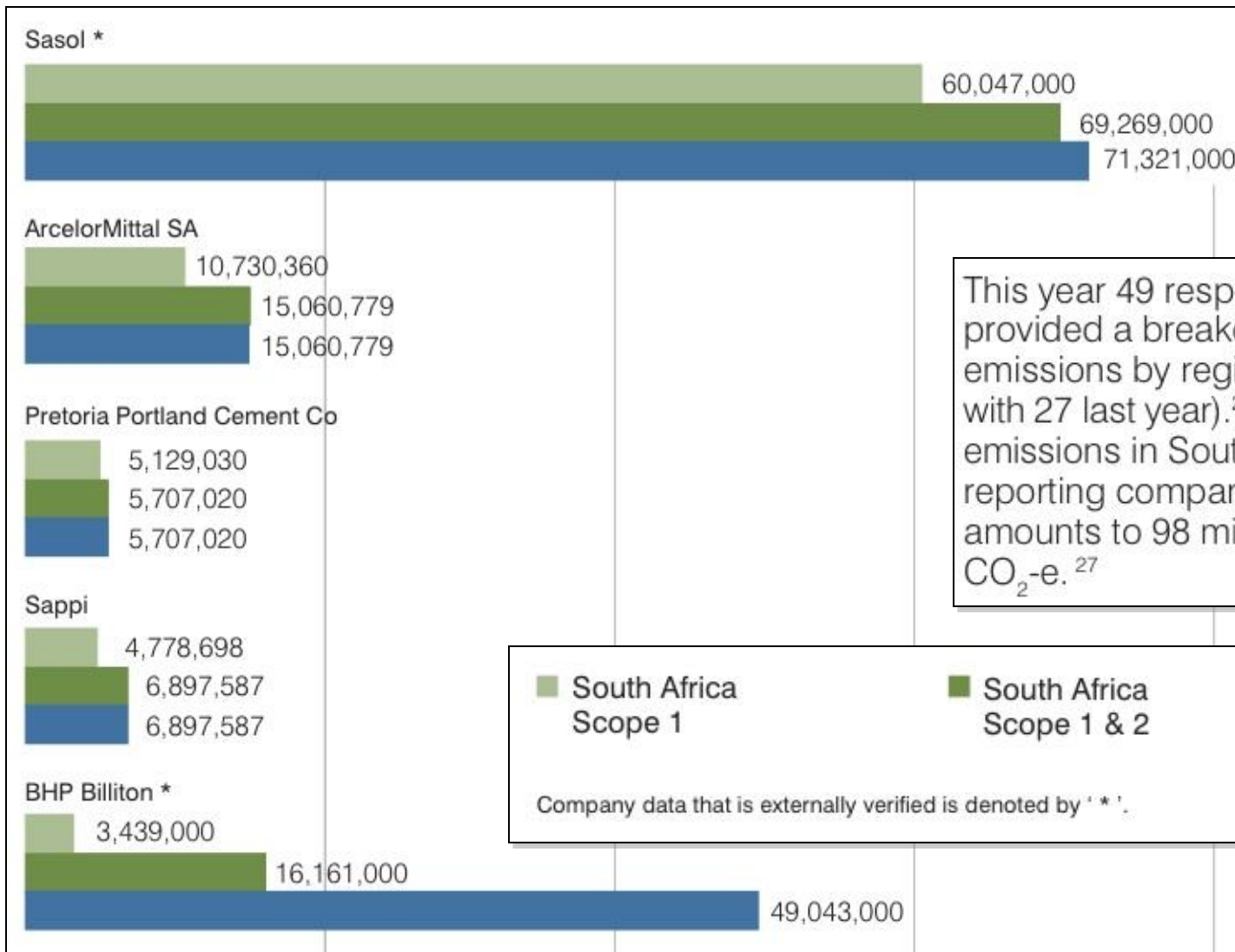
Reference to the CDP in the Treasury Document

Table 7: South Africa: firm-disclosed carbon emissions estimates based on *Carbon Disclosure Project Report*³⁰ (2010)

| Company | Scope1 tCO ₂ e | Scope2 tCO ₂ e |
|----------------------------------|------------------------------|------------------------------|
| ESKOM | 224,700,000 | 0 |
| Sasol | 61,678,000 | 9,553,000 |
| BHP Billiton | 21,355,000 | 27,688,000 |
| ArcelorMittal SA | 10,730,360 | 4,330,419 |
| Anglo American | 8,850,000 | 10,252,000 |
| Pretoria Portland Cement Company | 5,129,030 | 577,990 |
| Sappi | 4,778,698 | 2,118,889 |
| Mondi | 4,420,810 | 1,447,991 |
| SAB Muller | 1,449,442 | 1,182,614 |
| Gold Fields | 1,308,764 | 5,093,511 |
| AngloGold Ashanti | 1,183,000 | 3,489,000 |
| Tongaat Hulett | 787,711 | 309,388 |
| Imperial Holdings | 758,011 | 156,468 |
| Impala Platinum Holdings | 693,145 | 2,930,324 |

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A few companies continue to dominate Scope 1 SA emissions



This year 49 responding companies provided a breakdown of their emissions by region (as compared with 27 last year).²⁶ The total Scope 1 emissions in South Africa for all the reporting companies in CDP 2010 amounts to 98 million metric tonnes of CO₂-e.²⁷

■ South Africa Scope 1
 ■ South Africa Scope 1 & 2
 ■ Global Scope 1 & 2

Company data that is externally verified is denoted by ' * '.

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South African emissions

(Top 15 publicly responding companies – ranked by **Scope 1&2**)

| Company Name | SA Scope 1 (t CO ₂ -e) | SA Scope 2 (t CO ₂ -e) | SA total (t CO ₂ -e) (Scope 1 & Scope 2) |
|-----------------------------|--------------------------------------|--------------------------------------|--|
| Sasol | 60,047,000 | 9,222,000 | 69,269,000 |
| BHP Billiton | 3,439,000 | 12,722,000 | 16,161,000 |
| Arcelor Mittal South Africa | 10,730,360 | 4,330,419 | 15,060,779 |
| Anglo American | 3,051,000 | 7,763,000 | 10,814,000 |
| Sappi | 4,778,698 | 2,118,889 | 6,897,587 |
| Gold Fields | 966,728 | 4,886,693 | 5,853,421 |
| Pretoria Portland Cement Co | 5,129,030 | 577,990 | 5,707,020 |
| Anglo Platinum | 427,290 | 5,152,793 | 5,580,083 |
| Harmony Gold Mining Co | 28,117 | 3,444,406 | 3,472,523 |
| AngloGold Ashanti | 115,000 | 3,320,000 | 3,435,000 |
| Impala Platinum Holdings | 642,107 | 2,736,833 | 3,378,940 |
| Exxaro Resources | 537,385 | 2,192,666 | 2,730,051 |
| African Rainbow Minerals | 647,720 | 1,735,289 | 2,383,009 |
| Mondi Group | 1,074,439 | 1,118,825 | 2,193,264 |
| Lonmin | 81,277 | 1,488,755 | 1,570,032 |

****Light yellow = emissions have been verified**

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South African emissions

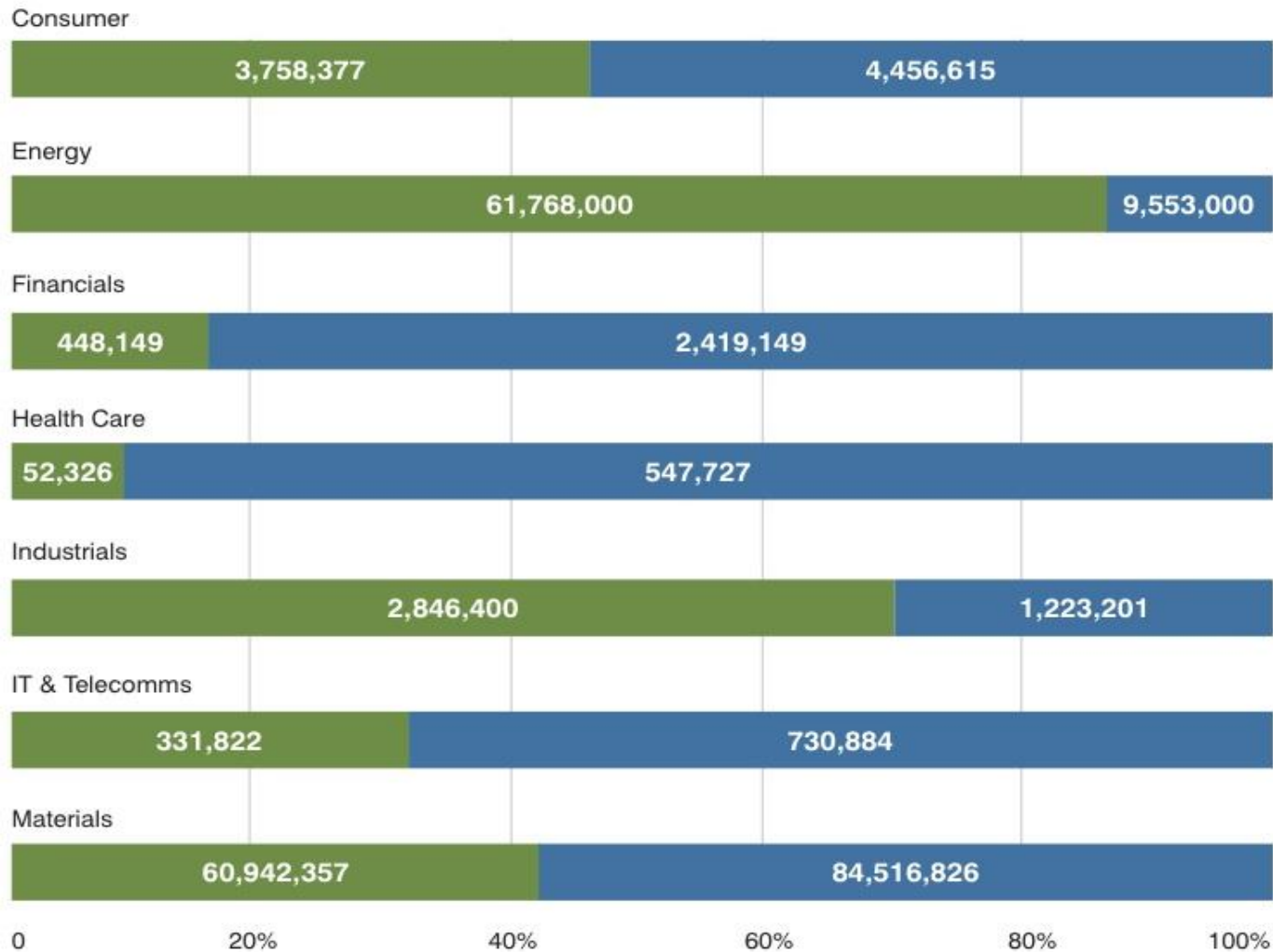
(Top 15 publicly responding companies – ranked by **Scope 1**)

| Company Name | SA Scope 1 (t CO2-e) | SA Scope 2 (t CO2-e) | SA total (t CO2-e) (Scope 1 & Scope 2) |
|-----------------------------|-------------------------|-------------------------|---|
| Sasol | 60,047,000 | 9,222,000 | 69,269,000 |
| Arcelor Mittal South Africa | 10,730,360 | 4,330,419 | 15,060,779 |
| Pretoria Portland Cement Co | 5,129,030 | 577,990 | 5,707,020 |
| Sappi | 4,778,698 | 2,118,889 | 6,897,587 |
| BHP Billiton | 3,439,000 | 12,722,000 | 16,161,000 |
| Anglo American | 3,051,000 | 7,763,000 | 10,814,000 |
| Mondi Group | 1,074,439 | 1,118,825 | 2,193,264 |
| Gold Fields | 966,728 | 4,886,693 | 5,853,421 |
| Group Five | 799,393 | 185,462 | 984,855 |
| Imperial Holdings | 758,011 | 156,468 | 914,479 |
| Tongaat Hulett | 686,108 | 276,044 | 962,152 |
| African Rainbow Minerals | 647,720 | 1,735,289 | 2,383,009 |
| Impala Platinum Holdings | 642,107 | 2,736,833 | 3,378,940 |
| Exxaro Resources | 537,385 | 2,192,666 | 2,730,051 |
| Tiger Brands | 468,678 | 268,347 | 737,025 |

****Light yellow = emissions have been verified**

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Fig. 8: Contribution of Scope 1 & 2 emissions to total emissions in each sector (absolute emissions and percentage)



Data provided on energy consumption

Table 10: Examples of total reported energy consumption

| A: Companies with data for 2009 and 2010 | 2009 (MWh) | 2010 (MWh) | Change |
|---|-------------------|-------------------|---------------|
| Consumer | 10,443,130 | 3,812,910 | - 6,630,220 |
| Nampak | 573,025 | 488,972 | -84,053 |
| New Clicks Holdings | 100,788 | 94,467 | -6,321 |
| Pick n Pay Holdings | 613,000 | 569,192 | -43,808 |
| Rainbow Chicken | 300,975 | 311,714 | 10,739 |
| SABMiller | 7,297,948 | 1,532,271 | -5,765,677 |
| Tongaat Hulett | 1,209,747 | 424,018 | -785,729 |
| Truworths International | 46,782 | 72,836 | 26,054 |
| Woolworths Holdings | 300,865 | 319,440 | 18,575 |
| Energy | 8,823,669 | 9,417,000 | 593,331 |
| Sasol | 8,823,669 | 9,417,000 | 593,331 |

Improvements in emissions intensity reporting

Table 9: Examples of reported GHG per square metre of floor or trading space

| Sector | Company | t CO ₂ -e per m ² floor space |
|-------------|--------------------------|---|
| Consumer | Truworths International | 0.34 |
| | Massmart Holdings | 0.26 |
| | New Clicks Holdings | 0.23 |
| | Pick n Pay Holdings | 0.42 |
| | Woolworths Holdings | 0.67 |
| Financials | Capital Shopping Centres | 0.04 |
| | Remgro | 0.44 |
| | Liberty Holdings | 0.38 |
| | Discovery Holdings * | 0.63 |
| | Nedbank | 0.32 |
| Health Care | Adcock Ingram | 0.40 |
| | Medi-Clinic Corporation | 0.29 |
| Materials | Nampak | 0.51 |

* *Discovery Holdings* suggests that these figures may not be relevant for the following reasons: electricity consumption figures may not be accurate, and *Discovery* operations include a 24 hour call centre, and therefore hours of operations may be significantly longer when benchmarking on a per meter squared basis alone.

Improvements in emissions intensity reporting

Table 6: Examples of reported GHG per ounce of gold or PGM

| Sector | Company | t CO ₂ -e per ounce gold or PGM |
|-----------------|------------------|--|
| Materials - PGM | Northam Platinum | 2.13 |
| | Lonmin | 2.30 |
| | Impala Platinum | 2.13 |
| | Anglo Platinum | 1.17 |

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It is essential to consider the qualifying remarks before relying on the data

| Sector / Company | A selection of Exclusions and Qualifying Remarks |
|------------------------|---|
| Financials | |
| Growthpoint Properties | Scope 1 & 2: Excludes mobile fuels, stationary fuels, refrigerants, electricity in satellite offices and common area, and HVAC refrigerants from other buildings (only three regional offices included). |
| Nedbank | Scope 1 & 2: Excludes offshore operations. Scope 2: Excludes ATM (automated teller machines), SST (self Service terminals) and POS (point of sale) devices (no reliable data for electricity consumption); Excludes Bancassurance and Wealth Financial Advisors; Excludes approximately 100 units of Pick n-Pay in-store Nedbank outlets (separate electricity meters are not installed). |
| Standard Bank Group | Scope 1 & 2: Excludes branches (information not readily available). Scope 1 excludes: Combustion of fuel boilers or furnaces (no equipment) |
| Santam | Scope 1 & 2: Excludes everything except the head office ; Namibia also excluded (considered immaterial, data not available). |
| Materials | |
| Exxaro Resources | Scope 1: Excludes coal discard dumps (in process of assessing, especially Grootgeluk due to size). |
| Gold Fields | Scope 1: Excludes mine methane at all operations except Beatrix (small, variable, difficult to obtain). |
| Kumba Iron Ore | Scope 1 & 2: Excludes head office (electricity used and business travel at head office considered immaterial); Scope 1 & 2: Excludes Kolomela Mine (new mine). |

Many companies are still battling to report reliable data

- Many companies report that changes in their year-on-year emissions are a primary result of **changes in accounting practices** or are a function of historic **calculation errors**, resulting in either over-estimation or under-estimation of previous data.
- Some examples:

Remgro's reported emissions have decreased significantly (by 81%) as last year there was the "incorrect inclusion of emissions from the burning of bagasse for the generation of renewable electricity." They have restated last year's figures, and suggest that this year's data is an accurate reflection.

Murray and Roberts revised last year's emissions calculation downwards by 34%, following methodological corrections; the restated figures are now more comparable to their 2010 figures (given the boundary increases).

The Bidvest Group report a 21.8 % increase in emissions and only a 2% increase in turnover: "The increase in reported emissions is as a result of more accurate data due to better measurement processes, more rigorous auditing and improved controls."

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Testing the ambition of corporate targets – some examples

Materials

| | | | |
|------|------|----------------|--|
| 2014 | 2004 | Scope 1 & 2 | 10% reduction per unit of production from baseline. (4,869,000 t CO ₂ -e reported in base year). |
| | 2007 | Scope 1 & 2 | 30% reduction of CO ₂ -e per ounce of gold produced in the medium to long term. |
| 2020 | 2007 | Scope 1, 2 & 3 | 8% reduction from base year. (16,330,621 t CO ₂ -e reported in base year). |
| 2012 | 2006 | Scope 1 & 2 | 6% reduction from base year in tonnes of GHG emissions per unit of product. (100 t CO ₂ -e reported in base year). |

Financials


| | | | |
|------|------|----------------|---|
| 2011 | 2008 | Scope 1, 2 & 3 | A reduction of the average of the metric tonnes of CO ₂ -e per capita per permanent employee equivalent to 8.6 metric tonnes in target year. |
| 2020 | 2008 | Scope 1, 2 & 3 | A reduction of the average of the metric tonnes of CO ₂ -e per permanent employee equivalent to 5.7 t by target year. Baseline average = 10.1 t. |
| 2015 | 2007 | Scope 1, 2 & 3 | 12% reduction per full-time employee equivalent (FTE) relative to base year. 9 t CO ₂ -e in base year. |
| 2015 | 2005 | Scope 2 | 12% reduction per FTE relative to base year. |
| 2010 | 2007 | Scope 3 | 10% reduction per FTE relative to base year. Target achieved. |

Utilising the CDP study effectively to inform the policy debate

CARBON DISCLOSURE PROJECT


Carbon Disclosure Project The Carbon Chasm

Based on Carbon Disclosure Project 2008 responses from the world's 100 largest companies



This research was supported by BT

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Current Global 100 targets will not achieve scientific requirements

Key Findings:

We are facing a Carbon Chasm – to cut emissions in developed economies by the required 80% by 2050, we need to see a minimum annual global reduction rate of 3.9% per annum. However, analysis of reduction targets from the Global 100 companies shows they are currently on track for an annual reduction of just 1.9% per annum. If we were all to continue on that trajectory we will not achieve the required reductions until 2089, 39 years too late. The consequences for the climate could be dramatic.

A final thought

“Governments have to stop pretending that they can exhort people to make changes when the prices people pay tell them otherwise.”

Simon Upton – OECD

“Setting proper prices for environmental resources will be one of the hardest political tasks in the coming century; a whole civilisation has grown up with bad ‘genes’ - wrong signals from the market about the proper way to value the environment.”

The Economist

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