Accessing financing for green projects.

DNA Carbon Financing Workshop
16 September 2010
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The Bigger Picture

Drivers for going green:

- **Presidential commitment** to reduce South Africa’s greenhouse gas emissions compared with business as usual (34% by 2020 and 42% by 2025).

- Department of Environment: expressed “firm intent” to publish the National Climate Change Policy White Paper (green paper expected late 2010).

- National Treasury: draft *carbon pricing policy paper* expected in 2010. We anticipate a preference for carbon tax rather than cap-and-trade.

- DTI: **grants** available for R&D and the CIP already makes provision for renewable energy projects.

- SARS: **incentives** for energy efficiency initiatives and delivery of strategic infrastructure (including clean technologies).

- King III: places sustainability firmly at the centre of **good corporate governance**.

- International: South Africa is the host of **COP17** at the end of 2011.
The Bigger Picture

Drivers for going green:

- **Energy security** following the electricity supply shortages in the beginning of 2008.
- Energy efficiency and reduction in energy consumption given Eskom’s approved **tariff increases**.
- A reduction in carbon emissions is often linked to improved energy efficiency and a reduction in waste. This, in turn, results in reduced **operating costs**.
- Job creation through growth in the ‘**green**’ sector and the implementation of ‘green’ projects.
- Traditional projects require energy efficiency and ‘green’ aspects in order to get financing.
- New market opportunities
- Reputational benefits
Financing Options Available

A number of financing options exist for ‘green’ projects:

• Carbon Credits
• Government Grants and Incentives
• Climate Change Funds

Important points to note:

• Huge growth potential for the carbon markets in Africa!
• Carbon credit projects can access other grants and incentives. It is important to look at the all funding options and see where you can get the most return for your investment. Maximise the revenue!
• Accessing other grants and incentives or climate change funds can change the cash flow of your green project. In some cases, funding can be accessed up front.
• Accessing grants and incentives and climate change funds can reduce the risk of relying on carbon credits as the only income stream. Reduce the risk!
Carbon Credits
Carbon Credits

Introduction to Carbon Credits:

• A carbon credit places a monetary value on a reduction in greenhouse gas emissions.

• Carbon credits can be traded between companies and ultimately countries – this creates a carbon market.

• The **Clean Development Mechanism (CDM)** was created under the Kyoto Protocol and allows entities in South Africa to implement emission reduction projects and generate carbon credits (Certified Emission Reductions). These carbon credits can be sold to entities in developed countries to assist them in meeting their emission reduction targets.

• One carbon credit represents one tonne of CO₂ and is currently trading at €13.75.

• There are approximately 140 projects in the pipeline in Africa.
## Size of the Carbon Market

<table>
<thead>
<tr>
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<th>EUA Price 2012 (€/tCO₂)</th>
<th>EUA Price 2020 (€/tCO₂)</th>
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<tbody>
<tr>
<td>Barclays</td>
<td>13.5-24</td>
<td>35</td>
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<td>Deutsche Bank</td>
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<td>Orbeo</td>
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Source: Ecx, BlueNext, IDEAcarbon and The World Bank
What Type of Projects Qualify Under the CDM?

- Projects that result in real and measurable greenhouse gas emission reductions and that meet the Letter and the Spirit of the Kyoto Protocol.
- Projects must be additional! In other words, projects must require the revenue from carbon credits in order to proceed.
- Renewable energy, energy efficiency and waste to energy projects qualify under the CDM. There are existing methodologies for these project types.
- Destruction of greenhouse gas emissions (such as capture and use of methane from gold mines in South Africa).
- Large potential in South Africa for the following projects:
  - Industrial energy efficiency
  - Waste to energy and waste treatment projects such as wastewater treatment
- Huge opportunities for Programmatic CDM in South Africa.
Programmatic CDM

• Programmatic CDM was developed to streamline the CDM process and reduce costs.

• A programme is registered for a specific project type and then individual projects can be added onto the programme throughout the life of the programme. Reduced costs for validation, registration and verification.

• The programme can extend across boarders.

• The programme is administered by a single entity called the Managing or Coordinating Entity.

Examples: Solar water heating, energy efficient lighting and wastewater treatment
Financing CDM Projects

Access financing for the CDM development costs and the actual project financing:

CDM Development Costs

• Costs to register a CDM project include consultant, validation and registration fees. These fees amount to in the region of R1 million or more depending on the project type and scale.

• If these costs cannot be carried in house then financing can be obtained from funders, compliance buyers or carbon credit brokers. These entities will pay the up front CDM development costs for:
  – First right to the carbon credits
  – A portion of the carbon credits
  – The carbon credits at a discount to market price

• Examples of financiers for CDM development costs: Nedbank, Industrial Development Corporation, Danish Oil and Natural Gas (DONG) Company, Evolution Markets etc.
## CDM Project Financing

Options available depend on the phase of the project:

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Angel / White knight investors</th>
<th>Own equity</th>
<th>Grants / Incentives</th>
<th>Private equity</th>
<th>Initial Public Offerings (IPO’s)</th>
<th>Bank funding</th>
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<tr>
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<td>Early stage / Registration of CDM project</td>
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Financing CDM Projects

Challenges to obtaining finance for CDM projects:

- **Lack of awareness:** There has always been a lack of awareness around the CDM and the benefits of the CDM in Africa. This is slowly starting to change with the profile given to COP15 and the Presidential commitment to reduce South Africa’s emissions. COP17 in Africa will hopefully build climate change awareness in South Africa.

- **Post 2012:** The uncertainty surrounding what will happen to the CDM post 2012 is a concern. There is still no clarity on whether the CDM will continue and if it does then it what form it will continue. Indications are that it will continue, but the mechanism will need to be revamped in order to have a larger impact on reducing emissions.
Financing CDM Projects

Challenges to developing CDM projects:

– **Technology**: A great deal of the renewable energy and clean technology must be sourced from overseas. Maintenance and operation of the technology is a concern. Technology skills transfer is important. This is starting to change as technology suppliers set up permanent representation in South Africa.

– **Renewable Energy Feed in Tariffs**: REFIT still not accessible by project developers. In addition, there is uncertainty as to how the REFIT will be handled in the demonstration of additionality.

– **CDM Registration**: The timeline to register a CDM project and the stringent rules and regulations have discouraged project developers from applying for CDM registration. A number of changes have and will continue to happen to the CDM in order to reduce costs and timeline (Programmatic CDM, Post 2012 CDM reform etc.). In addition, it is important to get the right consultant on board initially to ensure that the project risks are adequately identified and mitigated.
Financing CDM Projects

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Grants and Incentives
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The 2009 budget speech introduced new tax incentives relating to climate change. These were signed into law on 30 September 2009.

Section 12K allowance:
• Any disposal after 11 February 2009 by the originator of a carbon credit will be exempt from tax (income tax and capital gains tax);
• Expenditure incurred in producing carbon credits will not be allowed as a deduction for tax purposes.

Section 12L allowance:
• Provides a tax deduction for taxpayers who are energy efficient
• Allowance will apply in the first year when an energy saving is achieved.
• Deduction is dependant on “energy efficiency savings certificate” subject to regulations issued by the Department of Energy.
• Latest intelligence suggests that regulations to support Section 12L are likely to be published on 1 April 2010.
Grants and Incentives

Section 12I allowance

- Additional tax allowance – 35% or 55% of capital project with cap on cost of R1.6b
- Has energy efficiency requirements in point allocation - greenfields– new and greener technology – 2 points
- Brownfields – 12.5% improvement over base 2006 – 1 point, >15% - 2 points
- So assist to qualify or increase benefit from 35% to 55%
- Question on how you measure energy efficiency…so careful planning is needed.

Section 11D allowance

- Provides a tax deduction for taxpayers who are research & development
- 150% tax allowance
- Person funding the research receives the deduction
- Significant research needs to be done in renewable and clean tech so need to be taken into account in developing business case
Grants and Incentives

Critical Infrastructure Programme
- Grant of between 10 and 30% on infrastructure
- Linked to investment project
- Needs to have wider impact than own project
- Co-generation projects qualify?

Renewable Energy Finance and Subsidy office
- REFSO is subsidy for renewable projects
- R1m grant per megawatt installed
- 6 projects funded – 24MW subsided
- But can’t get REFIT tariff if sell into grid - Phasing out?
Grants and Incentives

Municipal Grants and Incentives

• There are over 40 municipal grants available for activities such as public transportation, roads and electrification.

• Examples include:
  o Municipal Infrastructure Grant
  o Municipal Systems Improvement Grant
  o Local Government Financial Management
  o National Electrification Programme
  o Neighbourhood Development Partnership
  o Public Transport Infrastructure and Systems Grant
  o Bulk Infrastructure Grant
  o Backlogs in water and sanitation at Clinics and Schools Grant
  o Backlogs in the electrification of Clinics and Schools Grant
  o Water Services Operating and Transfer Subsidy Grant

• Not all being accessed or optimised and this results in money being re-allocated and taken away from municipalities.
Climate Change Funds
Climate Change Funds

There is significant international funding available for projects in Africa:

• **Clean Technology Fund** – financing for deployment/use of low carbon technologies. Largely supports renewable energy technologies.

• **KfW Carbon Fund** – Financing for CDM projects. Particular interest in innovative approaches such as programmatic CDM projects.

• **The Danish Carbon Fund** – Financing CDM projects in the areas of wind power, combined heat and power (co-generation), hydropower, biomass, and landfills.

• Other funds are: The Netherlands CDM Facility, Carbon Fund for Europe, Community Development Carbon Fund, BioCarbon Fund, the Prototype Carbon Fund, etc.
Making Green Projects Work

The following are key to making a green project successful:

• **Start Now:** Start now to identify technically-feasible emission reduction and energy efficiency projects.

• **Consider the Business Case:** Build the business case for each reduction initiative.

• **Consider the Options:** Consider carbon credits, grants and incentives and the various climate change funds to see how they could contribute to the business case.

• **Get Buy-In from the Top:** Every project requires the support of the CEO and Board in order to be successful.

• **Prepare:** The world is shifting towards a low carbon economy – your business will need to make the shift in order to be sustainable.

• **Educate:** Start to educate all stakeholders in your business about climate change risks and opportunities – this will ensure they are on board with the green strategy.
Background to Deloitte

- Deloitte is a dynamic, global, multi-disciplinary business services firm. **We offer clients a multi-dimensional 360 degree thinking approach.** Drawing on unique service combinations, we understand and evaluate your issues more broadly and deeply than our competitors.

- Our services include Strategy, Consulting, Risk Advisory, Corporate Finance, Audit & Tax & Legal. **We are much more than an audit firm!**

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We are a truly global business:
- Approximately 168 000 people
- Operating in 140 countries World-wide revenue of US$26.1 billion (2009)
- Serve over one-half of the world’s largest companies

In South Africa:
- Offices in eight South African cities
- 241 partners and directors & 3 444 staff
- Revenue of R2.6 billion (2009)
- We have a 42% market penetration of the Top 100 JSE listed companies
How Deloitte can assist with your green project financing

- Access to a wide spectrum of funders active in the continental African markets

- Assist entities with raising new or additional capital and/or debt financing for the full CDM cycle (PIN, PDD, DOE and UNFCCC costs) as well as related project finance facilitation
  - Advise entities wanting to implement CDM projects on optimal funding structures
  - Assist with scoping studies, bankable-feasibility studies and financial modelling to support applications for funding
  - Assist in accessing grants and incentives, carbon credits and climate change funds.
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