



Government of Pakistan Ministry Of Environment

Clean Development Mechanism Cell

10th April 2008

Who are we?

- ❖ **Scott Wilson is a global international engineering and consultancy offering integrated professional services in:**
 - ❖ Carbon Finance and Management
 - ❖ Environmental Management
 - ❖ Transportation
 - ❖ Natural resources; including energy utilisation and power generation
- ❖ **We have the breadth and depth associated with a global engineering and consultancy**
- ❖ **We are proud of our unrivalled international carbon management and highly skilled engineering team:**
 - ❖ Deliver solution based strategies
 - ❖ Comply with emission reduction constraints
 - ❖ Mitigate and offset environmental liability
 - ❖ Create environmental capital translated in tradable commodities



Cont...

Who are we?

Ambitious ■ Collaborative ■ Diverse ■ Professional ■ Responsive

- ❖ **Scott Wilson is accredited by [The Carbon Trust](#) and is signatory to [The United Nations Global Compact](#)**
- ❖ **We are all about “DELIVERY”**
- ❖ **We have a global presence: > 80 offices around the world and 6,000 highly skilled employees**

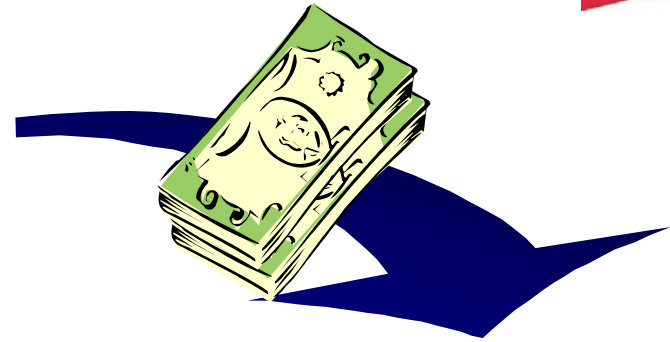
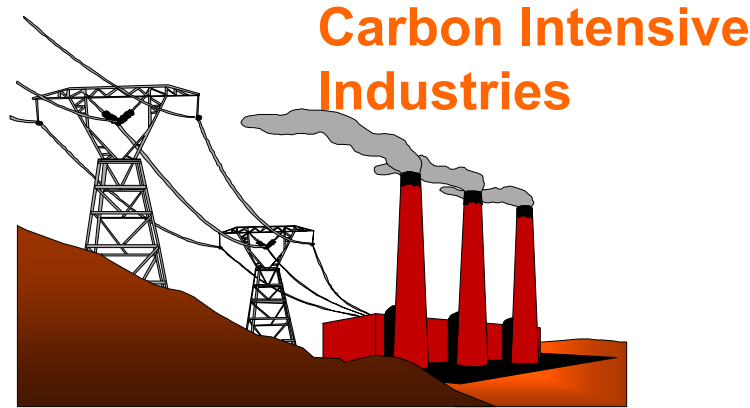
Regions	Head-Count
Americas	24
Africa	74
Europe	4103
MENA	125
Australasia	721



Clean Development Mechanism at a glance

- ❖ **The Kyoto Protocol established three "Flexibility Mechanisms"**
 - ❖ European Union Emissions Trading Scheme ('EU ETS')
 - ❖ **Clean Development Mechanism ('CDM')**
 - ❖ Joint Implementation ('JI')
- ❖ **CDM allows carbon intensive economies to have lower cost options for reducing greenhouse gas emissions in order to:**
 - ❖ Meet their Kyoto targets at a lower cost
 - ❖ Promote sustainable development in host countries
 - ❖ It is the most developed of the three flexibility mechanisms
 - ❖ It has its own governance: **Executive Board, Designated National Authorities, CDM Registry and International Transactions Log**
- ❖ **CDM is the only flexibility mechanism involving developing countries**

Carbon Finance – how does it work?



Invest in emission reduction projects in developing countries

Projects generate Certified Emission Reductions CERs



What are we looking for?



- ❖ **Good quality and viable small and large scale CDM projects:**
 - ❖ Project size of +50,000 Certified Emissions Reductions ('CERs') per annum
 - ❖ In all CDM activities except large **hydro** and **forestry**
 - ❖ Methane Capture: **Landfills, coal mines, paper & pulp, slaughterhouses, alcohol, beer, starch, organic chemicals**
 - ❖ Renewable Energy: **Wind, biomass, geothermal, small hydro**
 - ❖ Energy Efficiency: **Process optimisation, co-generation**
 - ❖ Gas Flaring: **Gas collection, gas cleaning & utilisation**
 - ❖ Fuel Switching: **Coal-fired plants, oil-fired plants**
 - ❖ Nitrous Oxide Abatement: **Adipic acid plant, nitric acid plant, 3-way catalyst plant**
- ❖ **Those of you wishing to submit your projects PINs for our review....**

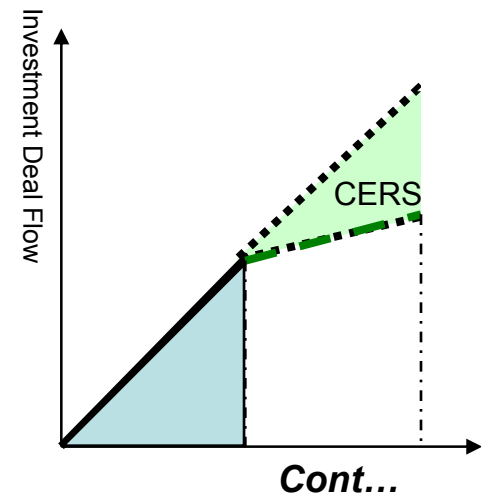


Basis for our PIN selection

- ❖ **Commercially viable technology**
- ❖ **Credible baseline scenario** - *the ER volume must be big enough to make a project viable under the CDM, minimum threshold of 50,000 tCO2/year.*
- ❖ **Competent project participants and clear legal arrangement**
 - ❖ Technically experienced and financially sound project participant(s) with clear division of functions.
 - ❖ Legal arrangement: *who owns what? who operates what?*
 - ❖ Type of agreement between project participants or with third party
 - ❖ Power Purchase Agreement,
 - ❖ Emission rights ownership agreement, etc
- ❖ **Viable business and operation model** - *that helps reduce transaction costs*
 - ❖ Potential for scale up
 - ❖ Potential for bundling

What we look for during a PIN review

- ❖ **Clear description of project activities and type of utilized technology**
- ❖ **Identification of project participants and legal arrangement for project implementation**
 - ❖ Roles of participants and their technical and financial capability
 - ❖ Identification and status of the third party involvement such as PPA negotiation in case of an electricity generation project or an agreement with municipal government regarding ownership of the waste in the case of a landfill project
- ❖ **Baseline Scenario, Additionality and Emission Reductions**
 - ❖ Why the project should not happen on its own
 - ❖ What could have happened in the absence of the project?
 - ❖ Sources of emission reductions and total ER volume



What we look for during a PIN review

❖ Project Financing

- ❖ Determination of project costs
- ❖ Identification of underlying finances and expected financing gap
- ❖ Financial analysis: How will the carbon financing impact on the implementation of the project?

❖ Demonstration of Environmental Sustainability

- ❖ The status of EIA
- ❖ Compliance with Host Country's sustainability criteria

❖ Community/Social Benefit

- ❖ Type of benefits the project can generate for local communities

What doesn't work

❖ Lack of project preparation

❖ Underlying projects must include:

- ❖ Feasibility study
- ❖ Risk Assessment

❖ The project must be a viable business proposition

❖ Committed project developers

❖ Claimed baseline contradicts other information

❖ Baseline claim must be credible and consistent throughout

❖ Consistency with guidelines on baselines and Additionality

❖ Project contradicts social and environmental standards

❖ The project must comply with environmental and social criteria

What makes a successful project?

❖ Business Environment

- ❖ A **credible** project sponsor with a strong balance sheet to mobilize financing
- ❖ A **credible** technical, environmental, carbon finance, and economic specialist to tick all the boxes
- ❖ In-house resources and capabilities to bring to completion projects that are technically sound and sustainable
- ❖ Upstream due diligence on carbon asset and financial risk
- ❖ Early review of credibility of baselines and determination of project Additionality

❖ Regulatory Environment

- ❖ Clear and consistent approach to sustainable development
- ❖ Clear procedures for project approval with specific timelines
- ❖ Fully capacitated Designated National Authority (“DNA”)
- ❖ DNA to assist project proponents in complying with Host Country's CDM rules and regulations
- ❖ Approving a CDM project should not be unnecessarily complicated

How can we help you?

- ❖ **Technical & Environmental Assistance**
 - ❖ Assess the technical viability of your projects
 - ❖ Conduct environmental and social due diligence, EIAs, etc
 - ❖ Comply with host country's **Sustainable Development Criteria**
 - ❖ Design utilized technology
 - ❖ Manage the delivery of your project
 - ❖ Model and calculate **ER Baseline** and develop a **Monitoring Plan**

- ❖ **Carbon Finance Assistance & Potential Joint Development Opportunity**
 - ❖ Assist in securing financing
 - ❖ Risk assess your project
 - ❖ Act as your principal carbon project finance advisor
 - ❖ Support your CDM development investment decisions
 - ❖ Potentially jointly develop the project with you

- ❖ **Carbon Logistic Assistance**
 - ❖ Steer your **Stakeholder Consultation**
 - ❖ Conduct carbon asset and financial due diligence
 - ❖ Prepare your PINs_(if you do not have any) and your_PDDs
 - ❖ Register your project with the **Designated Operational Entity** (“DOE”)
 - ❖ Trade your **CERs**

Project technical development

Sugar industry bagasse-fired power plant

Example: *You are the project developer of a sugar plantation, mill and/or refinery. We can provide you with the following technical services:*

- ❖ Initial technical/financial concepting, including scheme options, heat and mass balances, overall fuel and carbon efficiency, outline financial business plan (IRR assessment), plant/facility layout, equipment selection and sizing, logistics for fuel, water, heat and power offtake, etc
- ❖ Includes an assessment of alternative fuels to render the project a viable power generating facility with high availability throughout the year (i.e. not solely dependant on bagasse supply)

Cont...

Project technical development

Sugar industry bagasse-fired power plant

- ❖ **Full feasibility study, for Private Power & Infrastructure Board acceptance leading to full Letter of Support for power development project**
 - ❖ Off-take tariff negotiation
 - ❖ Project engineering and management
- ❖ **Project Delivery - Full “Owner’s Engineering” capability for new or retrofit projects covering**
 - ❖ Specification of the plant for EPC construction
 - ❖ Co-ordination with third parties
 - ❖ Project management of EPC contractor
 - ❖ Design review of EPC contractor’s designs
 - ❖ Inspection and expediting of equipment
 - ❖ Construction supervision
 - ❖ Performance testing and certification
 - ❖ Warranty control

We welcome your CDM project ideas to:

nadia.munday@scottwilson.com

Thank you



Nadia Munday

Carbon Asset Director
Scott Wilson , 3rd Floor
6 Greencoat Place,
London , SW1P 1PL

T: + 44 (0)20 7798 5000

D: + 44 (0)20 7798 5152

F: + 44 (0)20 7798 5001

M: + 44 (0)77 385 46 495

E: Nadia.Munday@scottwilson.com

W: www.scottwilson.com