

Opportunities for Emissions Trading and Environmental Investment in Arab Countries

Expert Group Meeting on Trade and Environment Priorities in the Arab Region

Cairo, 11-13 November 2007

Nicholas Dreves

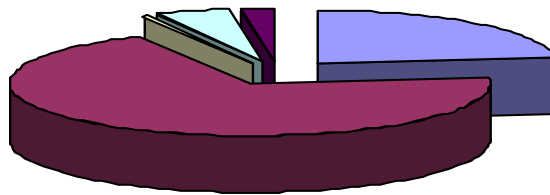
Overview

- Carbon Market – quick background
- Exposure
- Opportunities
- Challenges
- Benefits
- Conclusion

The Carbon Market

- > The Kyoto Protocol – compliance based
 - EU, Canada, Japan
 - CDM brings in the Middle East, project-based participation
- > Regional Initiatives
 - EU ETS, RGGI, California, New South Wales
- > Voluntary
 - Retail and wholesale offsetting of emissions, all on a voluntary basis
- > This presentation is focused mostly on the Clean Development Mechanism (CDM)

Regional distribution of potential CER issuance until 2012



Exposure...

- > Though a slow-moving influence, it is agreed that climate change is an inexorable truth. It is here to stay.
- > Slow-moving forces can on occasion impact business sharply
- > Policy responses to slow-moving change can induce a sharp change in asset values, sometimes creating new assets, i.e. carbon credits.
- > Through climate change, regions, sectors, and firms may be impacted through various domains of influence:
 - Regulatory
 - Physical
 - Competitive, technological
 - Reputational

... brings Opportunity

- > Each aforementioned exposure brings embedded opportunity
- > CDM and voluntary carbon market offers the potential to mitigate levels of exposure through action
- > A focus on contributing to the solution, instead of being part of the problem
- > The Middle East and North Africa can actively reduce emissions of greenhouse gases
- > Participate in international emissions trading, with innumerable possibilities for environmental investment

Screening for Opportunities



Wind farms



Landfills



Gas Flare Avoidance



Waste biodigestors



Biomass and waste mgt



Industrial efficiency

Example of CDM projects in the energy sector

- > Energy efficiency
- > Cogeneration
- > Fuel Switch (e.g. from oil to natural gas)
- > Waste heat recovery
- > Renewable Energies (solar, wind) as well as biomass-based renewables (bagasse)

Example of CDM projects in the oil & gas sector

- > Gas flare recovery (QP project)
- > Waste gas recovery in refineries
- > Tail gas recovery in natural gas processing facilities
- > Leakage prevention in natural gas transmission lines
- > Waste heat recovery in natural gas compressor stations

Example of CDM projects in the industrial sector

- > PFC reduction in aluminium
- > Cement
 - 3 components: fuel switch, clinker reduction, WHR
- > Iron & Steel production
 - Heat recovery from reduction kilns
 - Energy capture of waste gases from furnaces and kilns
 - Fuel switch to natural gas

Others

- > Landfills – methane capture
- > MSW – methane avoidance and RE power generation
- > Anaerobic digestion from CAFOs and industrial waste water

- > Carbon neutrality and voluntary offsetting
 - PR and marketing advantage where consumer behaviour impacts are high
 - Taking a position of action against climate change is viewed positively by customers

Challenges

- General country risk
 - Political and economic stability, legal system
- Institutional/managerial capacity
- Project developer's expertise
- Project technology risk
 - New versus well established technology
 - Delivery risk of technology provider

Review of existing policies and frameworks

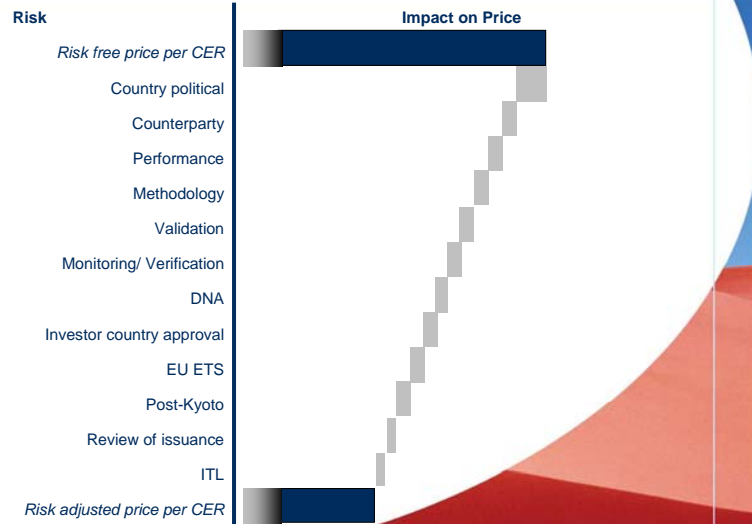
- Has country ratified Kyoto and established a DNA?
- What is the track-record of the DNA to grant Letters of Approval (LoA)?
 - What are the Sustainable Development requirements in the host country?
- What are experiences with Stakeholder Consultations in host country?
- What are the policies relating to the project technology? (e.g. energy pricing, building regulations, flare reduction initiatives)
 - Any regulations impacting CDM additionality?

Review of business culture – promoting the carbon market

- Inculcating a constructive culture of benefiting from climate change (often in senior and middle management)
- Moderating pressures on management to maximize short-term profits, often at the cost of long-term competitive advantage
- Encouraging employees to embrace change, and enabling them to do so through a structured program of training
- Undertaking the necessary research and development, often very sector- and firm-specific
- Translating the above into an appropriate investment platform

None of the above are easy to do

Reflection of risk in the CER price



Benefits to MENA

- > Early-mover status
 - Be one of the first GCC countries to register a project
- > PR/Marketing value of participation in international climate change community
- > Increased competitiveness through energy efficient production (maintain existing cost advantages)
- > Technology transfer – potential for new products and services
- > Increased foreign direct investment
 - Additional and lucrative revenue streams from CDM
 - Sound business practice – Good business by doing good

Case Study: Al-Shaheen CDM project, Qatar

- > Recovery and utilization of associated gas produced as a by-product of oil recovery activities at the Al-Shaheen oil field
- > Prior to 2004, associated gas at the Al-Shaheen oil field was primarily flared and a small percentage used for internal consumption
- > The treated gas is injected into a gas transmission pipeline for transport to a gas processing plant. The gas products are utilized for the electricity in the national grid, for export and for local industry consumption
- > First project in the Gulf Region registered. CDM component developed by EcoSecurities
- > Conservatively 1,500,000 tCO₂ reduced per year up to 2012
 - Translates into 15 million Euro in additional revenue

Conclusion

- > Timeframe to develop projects under the current framework is narrowing. 2012 is very close.
- > Significant revenue generating opportunities
- > Companies and countries that are aware of the impact of their business practices have on the overall environment, particularly climate change, and proactively take action to mitigate negative impacts may create significant competitive advantages compared to companies that lack this awareness.
- > If you want more information on how to move forward, EcoSecurities is close by. Office in Dubai!

THANK YOU! Any questions?

Nicholas Dreves
Senior Project Manager
Dubai, EcoSecurities
Email: nick@ecosecurities.com
tel. +971 50 253 5579

www.ecosecurities.com