

What are Investors Looking for in a Renewable Energy Carbon Finance Transaction?

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Agenda

- Introduction to NEFCO and Carbon Finance and Funds
- NEFCO's Investment Strategy
- What is NEFCO Looking for in Projects?
- Buyer's Perspectives
- Seller Considerations



NEFCO and Carbon Finance

- Nordic Environment Finance Corporation (NEFCO) is a risk capital institution and specialist fund manager, established in 1990 under international treaty by the five Nordic governments
- NEFCO offers a variety of financial products geared towards environmental enhancement, energy efficiency and cleaner production, many of which have a climate protection component
- NEFCO's Carbon Finance and Funds manages carbon funds that buy carbon credits from Kyoto Protocol's Joint Implementation (JI) and Clean Development Mechanism (CDM) projects
- Carbon funds under management are currently €77 million

NEFCO and Carbon Finance

- Since 2003, NEFCO has been Fund Manager of **Baltic Sea Region Testing Ground Facility (TGF)**, a €35m regional carbon procurement fund for JI, vested as a public - private partnership
- **NEFCO Carbon Fund (NeCF)** launched in early 2008, focusing on CDM. Target capitalisation €50m, of which €42m already raised from Nordic companies and governments
- Bulk of carbon finance investments include renewable energy & energy efficiency components



NEFCO Investment Strategy

- The investment strategy driven by judicious project selection and application of risk management techniques, focusing on
 - Ensuring compliance with Kyoto Protocol and EU ETS guidelines
 - Reasonably predictable generation of emission reductions, with high delivery (issuance) rates; favours certain technologies
 - Use of proven commercial technology with manageable risk profiles, issuance rates and approved methodologies (Kyoto risk, registration risk)
 - Feasibility: technical, economic, financial, institutional and environmental
 - Competent and creditworthy project owners

NEFCO Investment Strategy

- For a portfolio of projects, a fund manager still needs an acceptable risk profile for each project
- To address regulatory uncertainty: NeCF considers post-2012 placements regardless of entry into force of, or nature of a post-Kyoto regime



What is NEFCO Looking for in Projects?

Carbon purchasers focus on **certainty of delivery**, depends on a number of factors:

- **Delivery risk** is key – focus on supplier’s financial status and technical capacity to deliver
- **Ability to service debt** / deliver credits, evidenced by, inter alia:
 - Financial analysis, credit checks & business plan
- **Other risks** are manageable under conventional investment procedures
 - Social & environmental, technology, market (sector viability), financial, construction etc.
- **Adequately advanced project development** required as Kyoto window of opportunity closing:
 - Project within 3-9 months of financial closure, or evidence of a financing plan
 - Most key agreements or permits in place
 - Ideally with IFI financing, but other strong commercial institutions also acceptable
- **Transparency** of ownership and business conduct
- **Acceptable methodology and registration risk**

Buyer's Perspectives

- Most buyers are willing to fund JI/CDM preparation costs upfront (taking on some pre-registration risk)
- Many buyers, especially investment banks and speculative actors, are looking for large volumes and late-stage projects
 - Initially low hanging fruit; increasingly moving into other markets (renewables, waste) as global market widens and deepens
 - Can offer higher prices or attractive terms



Buyer's Perspectives

- Often renewable energy and energy efficiency projects are interesting (but small-scale projects generally perceived less interesting)
 - Many developers are not well capitalised or deemed creditworthy, preference for large industrials
 - Some financial institutions willing to consider Emission Reduction Purchase Agreements (ERPAs) with reliable buyers as a form of security
 - Project aggregation and programmatic approaches can help but have their own risks



Buyer's Perspectives

- Governmental buyers often have policy mandates to fulfil
 - May consider projects deemed too risky by private sector / speculators
 - May be willing to participate earlier in the project cycle and fund preparation costs, such as new methodology development
 - Often interested in projects with higher social and sustainable development impacts
- Many fund managers' portfolios are long on projects in CDM "superpowers", China and India
 - Looking to diversify, increasing interest in Joint Implementation

Seller Considerations



- A judicious choice of buyer is also required:
 - Consider buyer creditworthiness, especially in view of credit crunch and looming recession in US and Europe
 - Governmental buyers, investment grade companies & financial institutions are increasingly considered most reliable
 - Consider newer buyers to the market
- Headline price is not everything, often *the devil is in the detail* of ERPA contracts
 - Division of risks and transaction costs

Seller Considerations

- Consider selling post-2012 credits if offered by buyers
 - Especially for smaller and less well capitalised project owners, or project which need to "lock in" a revenue line to enhance project economics
 - Better to package Kyoto and post-Kyoto
- Consider value of sustainable development impacts (not relevant to all buyers)
 - Buyers may take on more risk and/or offer price premium

Concluding Remarks

- Buyers differ significantly in their purchase motivations (i.a. speculation, compliance, market development)
- Projects should be well prepared with risk characterisation and mitigation - carbon finance is not the panacea to all ills
- For renewable energy projects:
 - Selling carbon credits forward can significantly improve project economics, and reduce risks
 - Fixed prices are beneficial given the turbulent carbon markets
 - Consider selling post-2012: for the full first crediting period to lock-in a buyer regardless of outcome of the international negotiations

Benaičiai Wind Park, Lithuania

- **Project:** Wind park of 6 x 2,75 MW Vestas wind turbines in western Lithuania
- **Financing:** Lease financing from local institution, carbon finance advance payment (AP) from TGF
- **Supplier:** UAB Achema Hidrostotys
- **Emission reductions:** up to 143,000 tCO₂e by 2012
- **JI cycle status:**
 - Documentation prepared by Ekostrategija
 - Host country approval granted
 - ERPA signed May 2007
 - Final JI status achieved in July 2008
 - Implemented



Substation construction in Oct 2006

Priozersk Integrated Fuel Switch, Leningrad Oblast, Russia

- **Project:** Fuel switch from mazut to biomass and natural gas by replacing outmoded CHP plant, and associated energy efficiency actions
- **Financing:** Own equity, NEFCO loan, carbon finance from TGF and Danish Energy Agency
- **Supplier:** OJSC TeploService
- **Emission reductions:** 183,000 tCO₂e by 2012
- **JI cycle status:**
 - Documentation prepared by FORCE Technology
 - Determination ongoing by DNV
 - ERPA signed August 2008

Old Boiler House, Priozersk



Biomass Resources, Priozersk

Animal Waste Treatment CHP, Estonia

- **Project:** Centralised pig waste collection & anaerobic digestion, biogas used for CHP
- **Financing:** EU grants, commercial loans, carbon finance advance payment (AP) from TGF
- **Supplier:** Locally owned special purpose company
- **Emission reductions:** 88,000 tCO₂e by 2012
- **Jl cycle status:**
 - Documentation prepared by ECON Analysis
 - Host country approval granted
 - Determination undertaken by DNV
 - ERPA signed January 2006
 - Implemented

Biogas Treatment Plant



Reception and Digestion Tanks

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**Carbon Finance and Funds
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For general information, please visit <http://www.nefco.org/cff>