Buyer Counters Crisis

How Norway supports CDM projects at risk

by Ash Sharma, Nordic Environment Finance Corporation

Since the price decline of carbon credits in late 2011 and the subsequent collapse of the market, there are several hundred Clean Development Mechanism (CDM) projects which have been initiated but have not been able to continue for economic reasons. Against this backdrop, the Norwegian Government established the NEFCO Norwegian Carbon Procurement Facility (NorCaP) in September 2013, with the Nordic Environment Finance Corporation (NEFCO) as the Facility Manager. The principal objective of NorCaP is to prevent the reversal of emission reduction activities by procuring credits from such projects whose survival or continued emission reductions depend on a higher carbon price than is achievable under current market conditions (hereafter "vulnerable projects").

The facility has sought to ensure the viability of existing projects and their emission reductions, support sustainable development outcomes associated with the projects and, to the extent possible, maintain monitoring, reporting and verification capacity in the market. Its target is to procure up to 30 million CERs from eligible project types in order to meet part of Norway's commitments under the second period of the Kyoto Protocol. NorCaP, wholly funded by the Norwegian government, is one of the few remaining institutional carbon credit procurement instruments left in the market.

The Facility covers all CDM project types with the exception of hydro and wind projects as empirical data suggested that these where reliant primarily on power sales (there are exceptions for least developed countries (LDCs)). Other exceptions are industrial gases: trifluoromethane (HFC-23), produced as a by-product of chlorodifluoromethane (HCFC-22), nitrous oxide (N_2O) from adipic acid and coal-based energy production without carbon capture or storage.

The main NorCaP selection criteria are vulnerability and cost effectiveness (i.e. least cost, see below). Further information including call documentation is available at www.norcap.org

Identifying and Evaluating Projects

The main form of project origination was through a Call for Proposals (CfP), similar to a tendering process. This route was taken instead of other channels, such as identifying and directly contacting project developers and owners, and formal auctions, for three reasons. First, this was due to the need for rapidly building up a pipeline of projects for evaluation. Given the rapid decay in the number of operational CDM projects and hence urgency in the market, speed was judged to be of the essence. Second, a contestable approach provided pressure on pricing. Third, NorCaP is working with a known universe of potential projects and used direct email contacts using the UNFCCC data on registered projects to invite potential applicants to bid, supported by wider communication for outreach.

NorCaP was able to mobilise and direct funds to projects rapidly. The facility launched a CfP within months of being established. All successful projects were contracted and the first credits received (and thus, funds disbursed) within one calendar year.

Demonstrating Vulnerability

The concept of vulnerability was operationalised within a relatively short period. Given the constraints of time, there was only opportunity for limited stakeholder consultation.

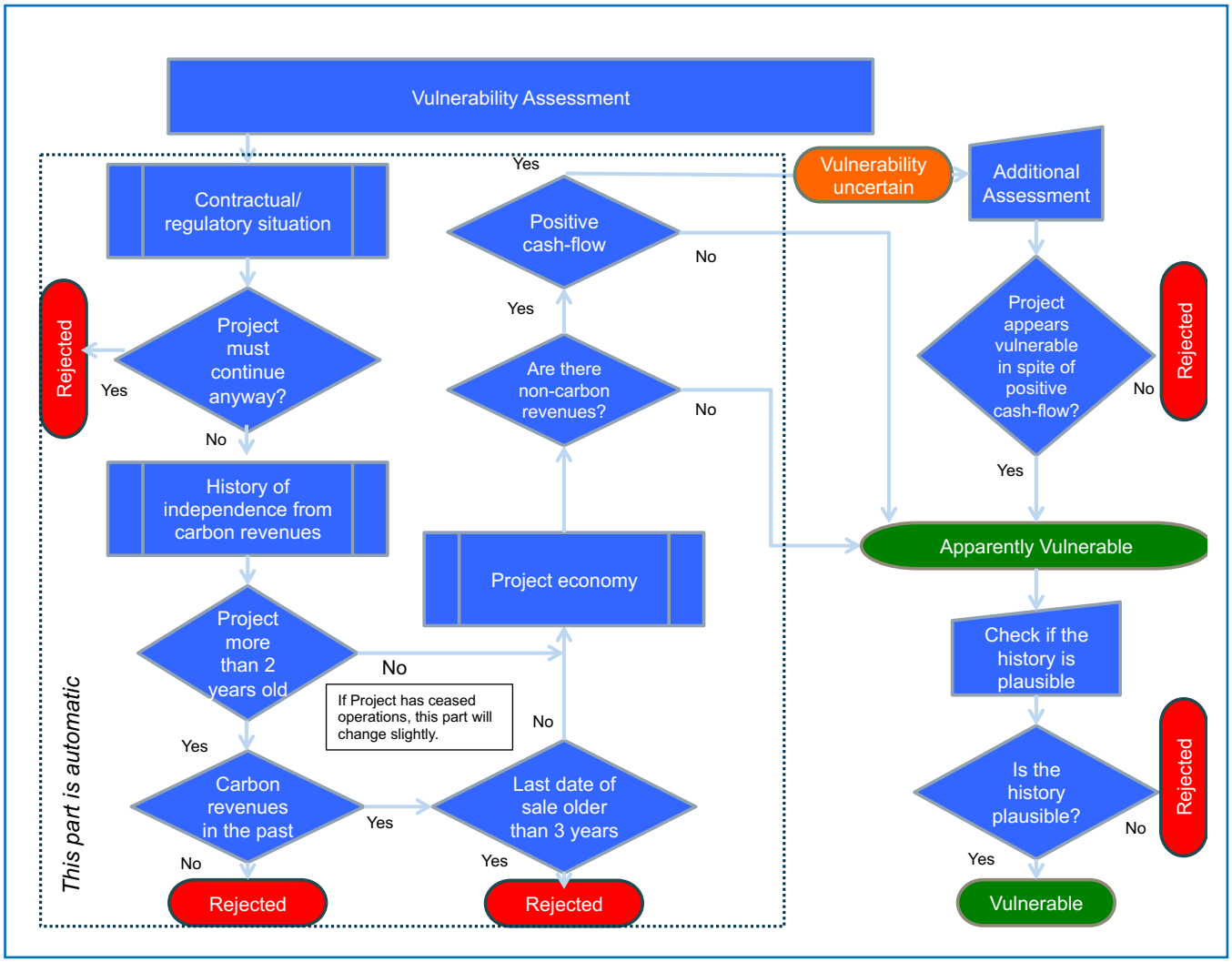
After a completeness check, the projects were screened for eligibility criteria before being ranked in least cost order. The vulnerability testing was partially automated, using the logic as outlined in Figure 1, and supported by expert judgement.

The highest ranked projects were then subject to further desk review and expert judgement. Letters of Intent were signed with shortlisted projects, and a period of detailed due diligence undertaken including a thorough vulnerability assessment and a site visit to each project. Some projects were also unsuccessful at this stage due to non-vulnerability issues such as counterparty integrity concerns.

Commercial negotiations were aided by publication of a standardised Emissions Reduction Purchase Agreement contract. All CfP1 ERPAs were signed by December 2014.

Results

The first call for proposals under NorCaP closed in January 2014 and the second in December 2014. They



are referred to below as CfP1 and CfP2. Approximately half the number (and volume) of projects were received in the CfP2. There are, at the time of writing, no further CfPs planned.

There has been a good response overall and, in terms of countries submitting, is broadly in line with the general CDM pipeline. Projects located in LDCs have been particularly well represented.

There is also good diversity in terms of submissions by typology of projects (technology), with methane related projects well represented in the pipeline but also in the final CfP1 portfolio.

The prices bid into the CfPs are illustrated below and demonstrate the market response to the price cap introduced in CfP2. Most projects complied with the cap and the average price was accordingly reduced.

Final CfP Portfolio

A total of 18.86 million CERs have been contracted from 10 projects or bundles of projects at an average price of g2.19/CER. The full list of projects is available at:
http://www.nefco.org/sites/nefco.viestinta.org/files/Contracted%20NorCaP%20projects.pdf

Encouraging LDCs

In order to introduce some portfolio diversification, a set-aside of up to 5 million CERs was introduced in CfP2 for projects located in least developed countries (LDCs). The projects still need to demonstrate compliance with the vulnerability criteria and are subject to a cap of g4 per CER, which is higher than the average price in CfP2.

At the same time but supplemental to CfP2, the NEFCO Carbon Fund (NeCF), an established instrument in which Norwegian funds had been placed in 2008, was opened up for LDC projects, with a target volume of 3-4 million CERs. The NeCF projects are judged based on broader criteria, and projects did not need to demonstrate vulnerability.

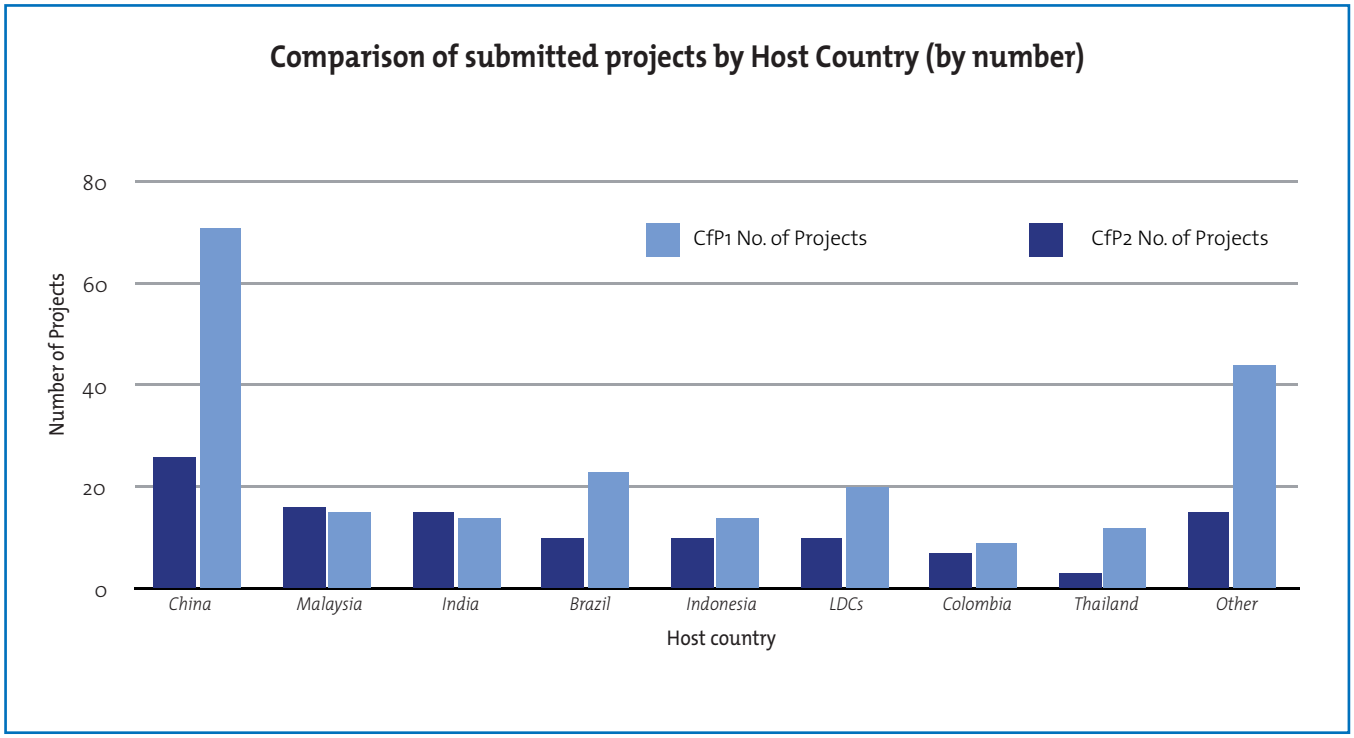
Conclusions and Lessons Learnt

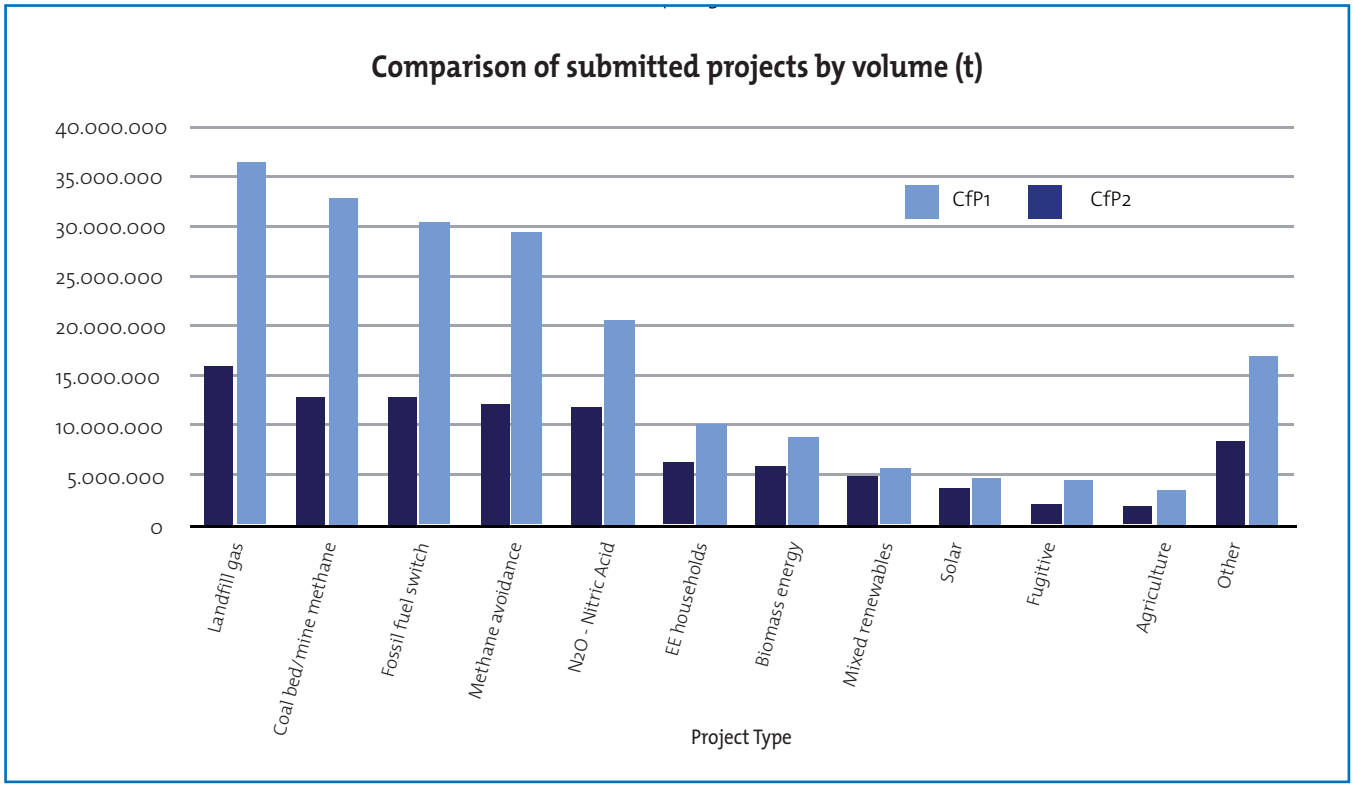
The first 18 months of NorCaP operation has exceeded expectations. The following preliminary conclusions can be drawn:

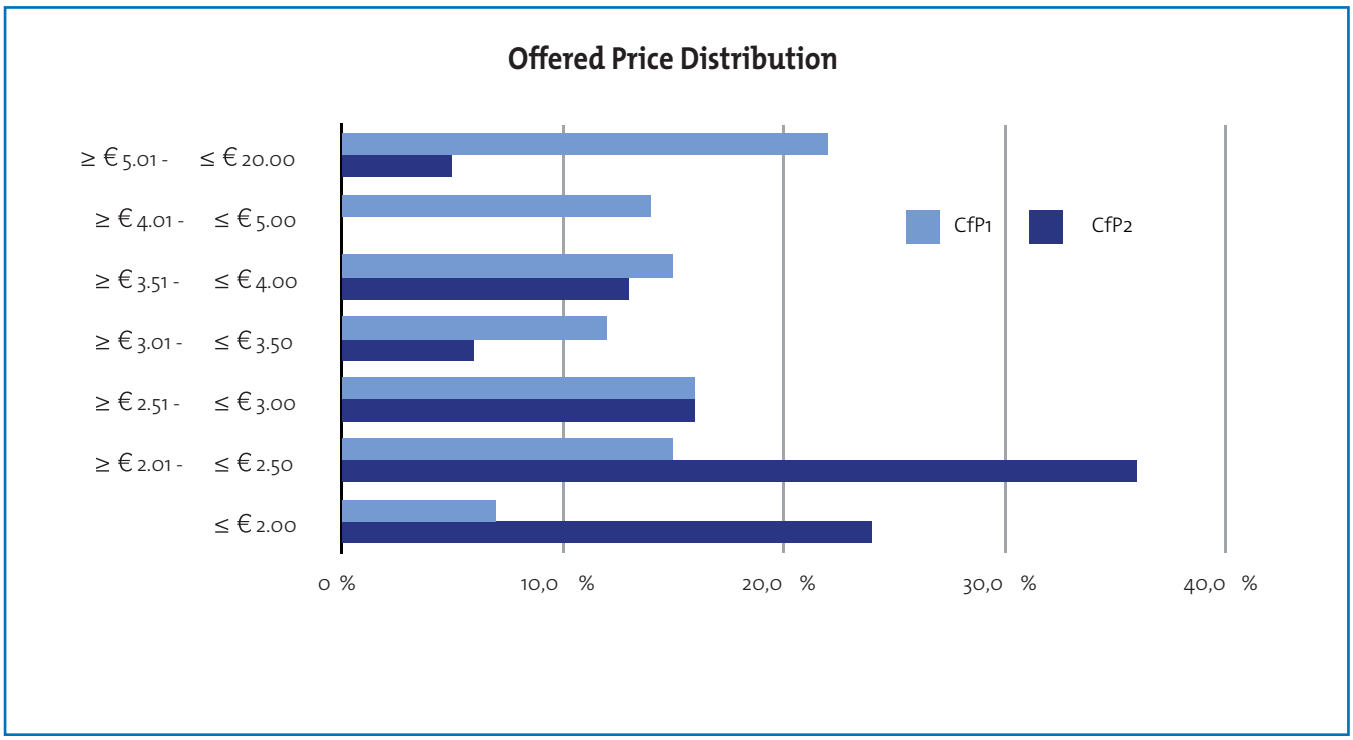
- NorCaP's presence in the market has attracted significant interest from project developers, with almost 350 eligible proposals, demonstrating

Summary of Submissions Under CfPs 1 and 2

	CfP1	CfP2
Number of eligible projects (of which, PoAs)	232 (29)	114 (18)
Total volume (million CERs)	211	107
Weighted average price	3,92 g/CER	3,20 g/CER
Number of countries	35	27


Comparison of submitted projects by Host Country (by number)
80
60
40
20
0
Number of Projects
CfP1 No. of Projects
CfP2 No. of Projects
China
Malaysia
India
Brazil
Indonesia
LDCs
Colombia
Thailand
Other
Host country


Comparison of submitted projects by volume (t)
40.000.000
35.000.000
30.000.000
25.000.000
20.000.000
15.000.000
10.000.000
5.000.000
0
CfP1
CfP2
Landfill gas
Coal bed/mine methane
Fossil fuel switch
Methane avoidance
N2O - Nitric Acid
EE households
Biomass energy
Mixed renewables
Solar
Fugitive
Agriculture
Other
Project Type



strong demand still remaining in the market. In total, the fund is over 30 times oversubscribed by offers over both calls. There is also some evidence of decay in the stock of viable projects as half the projects were in the second call, perhaps as projects cease activity after a few years of poor pricing, although there was possibly some self-selection based on price in CfP2.

- The NorCaP experience shows that emission reductions can be sourced cost-effectively – the contracted price under CfP1 was g2.19. In many cases, these are close to the marginal abatement costs. Competition ensures value for money for public funds.
- The contestable CfP approach has proved a successful and expedient method to attract good quality projects. As a result, the NorCaP has been able to direct funds to projects rapidly, thereby preventing GHG emissions in the short term. The CfP model can be of use in targeting other project types and geographical priorities (e.g. LDCs) by varying the requirements of the call.
- NorCaP (and for that matter, the CDM) is a good example of results-based financing, which incentivises performance and is attractive to donors.
- The large number of methane-related projects (101 in CfP1 and 63 in CfP2) supports the need for a targeted facility directed at methane as a short lived climate pollutant. Such an instrument, possibly under the auspices of the Climate and Clean Air Coalition, could complement other initiatives such as the innovative Pilot Auction Facility (PAF), which is focused on larger and more capital-intensive projects since many projects will not have the wherewithal to bid into the PAF.
- The composition of the CfP1 portfolio shows that the vulnerability evaluation criteria clearly

favoured projects with no income other than carbon revenues. Together with the least cost criterion, this led to a narrow typology of projects being contracted in CfP1. While significantly reducing GHGs, these projects are typically less likely to have wider sustainable development impacts. Other programmes such as the World Bank's Carbon Initiative for Development (CI-Dev) are currently targeting development outcomes through use of the CDM, although it should be noted that these are not compliance instruments and use Official Development Assistance.

- The vulnerability criteria turned out to be unsuitable for Programmes of Activity encompassing deployment of microtechnologies such as cook stoves, efficient lighting, and water purifiers since these project types were unable to unequivocally demonstrate that the emission reduction activities would be reversed in the absence of the NorCaP intervention. Further development of the vulnerability methodology, with wider consultation, may be required.

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