

Result-Based Carbon Financing for Renewable Energy Projects on Islands

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Content

1. UNFCCC Regional Collaboration Centres
2. What is Result-Based Finance?
3. The Clean Development Mechanism
4. Estimated demand for CERs (pre-2020)
5. Value of using the CDM infrastructure
6. Final Remarks



UNFCCC Regional Collaboration Centre

Promoting clean technologies and opportunities under the carbon market

Renewable energy

Determining sectoral baselines for countries and **grid emission factors (GEFs)**

Support the development of CDM proposal at programme level, PoA (programme of activities)

CDM support

To project participants in the CDM cycle

To CDM process, providing inputs to improve the CDM

Exploring synergies between the CDM and other mitigation actions

To link buyers-sellers of carbon credits

Stakeholder engagement

Government level – ministries of environment and energy

Private – developers, investors/entrepreneurs

International level – donors, technology providers

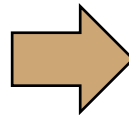
Capacity building: designing and delivering trainings, promoting success stories, sharing information, and responding technical queries



What is Result-Based Finance?

- Performance-based finance
- Results-based approaches
- Payments for performance
- Results-based finance
- Results-based funding

- Results-based aid
- Results-based finance



- Results-based budgeting
- Performance-based contracts
- Performance-based incentives

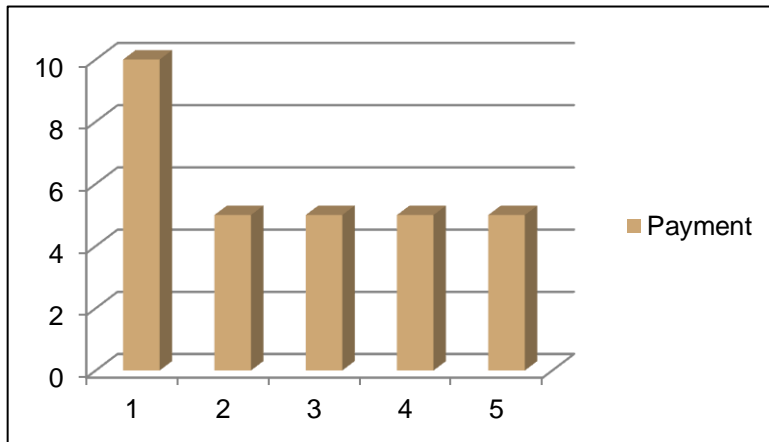


Source: <http://talkincloud.com/office-365-vs-third-party-hosted-exchange-whats-the-difference>

Results-Based Finance

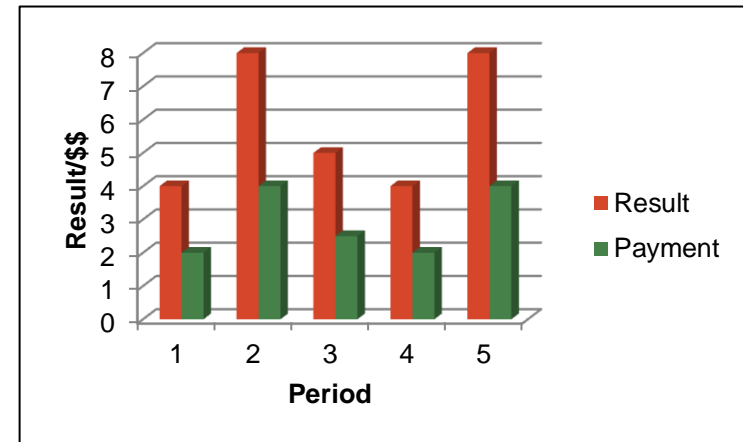
Traditional finance:

total amount and payment schedule agreed from the start



RBF:

total amount and schedule dependent on results achieved



Different approaches for RBF

- 100% on results achieved
- Front-loaded
- Accelerated payment
- Additional incentives



<http://www.govops.co.uk/paying-for-public-service-ethos-and-public-value-the-future-of-payment-by-results/>

The clean development mechanism is a system for monitoring, reporting, and verification of mitigation results

UN carbon credits (CERs) are a tool for pay-for-performance (RBF) approaches



The Clean Development Mechanism

- ✓ The Clean Development Mechanism (CDM) allows projects to implement emission reductions that would not have happened without the support of the CDM. Therefore mitigation from CDM represents a deviation from the business-as-usual scenario
- ✓ The CDM verifies that the emission reduction is real and meet stringent standards. Once this is done a Certified Emission Reduction (CER) is issued. One CER corresponds to one tonne CO_{2eq}
- ✓ The CER is created within the CDM registry and can be traded or transferred to other owners than the project that generated them. The new owner of the CER may use this to compensate for his own emissions that he is unable to reduce at home
- ✓ When a CER is removed from further circulation (i.e. cancelled) it means that the current owner has financed the additional emission reduction that the CER represents



Estimated demand for CERs (pre-2020)

Source of demand for the 2015-2020 period	Equivalent estimated CER use per year (in Mt)
NEFCO	4.3
Norwegian Carbon Procurement	10.0
Swedish Energy Agency	5.7
WB Carbon Partnership Facility	2.8
WB Ci-Dev	2.2
WB Pilot Auction Facility	4.3
EU ETS operators	15.0
EU Governments	4.3
South Africa	7.4
South Korea	19.2
Mexico	0
Demand side initiative	2
Total	77.2



Estimated demand for CERs (pre-2020)



Norway: Carbon Credit Procurement Programme announced that it will purchase 60 to 100 million CERs generated between 2014 and 2020 (part of Norway's 2020 target to cut emissions 30% to 40% from 1990 levels)



NEFCO: First procurement of 18.6 million CP2 CERs from ten "vulnerable CDM projects" on behalf of the Norwegian Carbon Procurement Facility

- Average price of EUR 2.19 per CER
- Mostly N₂O nitric acid and landfill CH₄ projects
- Objective to contract 30 million CERs in total



International Climate Neutral Day:

22 September

Official launch of Climate Neutral Now campaign



Value of using the CDM infrastructure

The utility of the CDM is already aimed beyond just compliance with Kyoto Protocol targets by Annex I Parties by virtue of its objective to contribute to the sustainable development of non-Annex I Parties

The infrastructure of the CDM for the MRV of the impact of mitigation actions can in principle also be applied to any situation where there is a need to quantify and give assurance of the outcomes of specific mitigation activities

The CDM infrastructure provides a number of benefits for users:

- a) Mitigation outcomes that are internationally credible
- b) Comparability of results
- c) Broad scope and proven scalability of results
- d) Prompt start



Value of using the CDM infrastructure

GEF in SIDS

Country	GEF, tCO2/MWh (CDM projects) *	GEF, tCO2/MWh (Standardized Baselines developed with the support of the RCCs) **
Antigua & Barbuda	-	In progress
Bahamas	0.723 (CDM 5620)	-
Belize	-	0.2278 (PSB0006)
Dominican Republic	-	0.5434 (PSB0010)
Grenada	-	0.585 (PSB0023)
Guyana	0.948 (CDM 1458)	In progress
Jamaica	0.834 (CDM 0239)	Data gathering
St Vincent & the Grenadines	-	0.7309 (PSB0021)
Trinidad & Tobago	0.666 (CDM 9358)	In progress
Mauritius	-	1.0116 (PSB0008)
Cape Verde	-	0.5808 – 0.7273 (PSB0007)



*) <https://cdm.unfccc.int/Projects/projsearch.html>

***) https://cdm.unfccc.int/methodologies/standard_base/new/sb8_index.html

Value of using the CDM infrastructure

Emissions Reductions (tCO₂) = Baseline Emissions – Project Emissions

Emission Reductions (tCO₂) = XXXX MWh/year * **Grid Emission Factor** (tCO₂/MWh) - 0

Accurate GEF values supports (part of) the **decision making process** to achieve renewable energy targets under country or regional plans by

- **Selecting** type/size of interventions based on emission reductions
- Providing **Monitoring Reporting & Verification frameworks** that have been already applied

GEF is used to calculate the emission reduction from **renewable energy**

GEF is also used to estimate carbon reductions for any type of intervention that **reduces electricity consumption** e.g. energy efficiency

RCC St George's provides *in-kind* **assistance** to stakeholders in

- Carbon accounting for electricity sector interventions; e.g. renewable energy and energy efficiency technologies
- Estimating/updating GEFs



Value of using the CDM infrastructure

The use of the CDM infrastructure by result-based financing programmes can leverage the knowledge and resources of the CDM while providing readily available and credible MRV services to those programmes

Since the CDM is an ex-post mechanism (i.e. CERs are issued after achievement of emission reductions), the CDM could be seen as a natural fit for result-based finance

Examples of the use of CDM for results-based finance:

- a) Carbon Initiative for Development (Ci-Dev)
- b) Pilot Auction Facility for Methane and Climate Change Mitigation (PAF)

CAF in cooperation with KfW, is developing and implementing the Performance Based Climate Finance Facility (PBC)

The Green Climate Fund (GCF) may also employ results-based financing approaches



The Green Climate Fund



GREEN
CLIMATE
FUND

Total amount pledged to date **USD 10.2 billion**

Total amount in contributions signed **USD 5.5 billion**

- ✓ 33 governments have made a pledges, 8 representing developing countries

The CGF aims to finalize its first set of projects for approval by the GCF Board, expected to take place at its eleventh meeting in November this year

Seven Accredited Entities

- ✓ National LAC – ***Profonanpe***
- ✓ National Africa (LDC) – ***CSE***
- ✓ Regional Pacific (SIDS) – ***SPREP***
- ✓ Private sector social impact investment – ***Acumen***
- ✓ 3 international – ***ADB, KfW, UNDP***

Private Sector Advisory Group (PSAG)

May create structures and use the Fund's concessional resources to attract third-party funding for specific projects and programmes through, amongst others, such items as bonds, commercial paper, syndications, club deals and private placements

Proposal to launch a “crowdfunding” portal



Final Remarks

CDM is an MRV instrument suitable for RBF

- ✓ Is internationally accepted
- ✓ Has a fully operational assessment apparatus
- ✓ Has accreditation system for third party (validators/verifiers)
- ✓ Has registry for issuing and tracking credits
- ✓ Is used across the world as the source of rules for
- ✓ mitigation activities
- ✓ Enjoys a unique political legitimacy



Final Remarks

- ✓ Much more mitigation actions are needed from now up to 2020. Economic instruments contribute in providing flexibility
- ✓ Carbon finance will be the main driver of the mitigation activities needed to be implemented to fill the pre 2020 gap
- ✓ Demand for the CDM over 2015-2020 remains low but is firming-up
- ✓ Role of markets post-2020 under consideration
 - Input on market received under the ADP
 - Markets considered in several INDCs
 - First INDCs to clearly call for an international market based mechanism received
 - Some INDCs call for the use of the CDM after 2020 but with key reforms to avoid double counting



"2015 is not just
another year, it is a
chance to change the
course of history"

-Secretary-General Ban Ki-moon



Thank you!

