

Fair Climate Network – Note on Crowdfunding

June 2017

1. Introduction

1.1. Definition

Crowdfunding is an old and established arrangement where a group of persons who cannot individually finance the total cost of a good cause, join together to pool resources to finance various activities. In India alone, more than ₹ 329 core has been raised for 1,000+ causes and organisations.

Conventional Crowdfunding raises once-off resources for a single cause or venture. Examples:

- A school doesn't have ready cash for a new building or facility that but will, over the years, be able to repay through tuition fees; loan based Crowdfunding.
- A centralised climate project (like the waste treatment plant example annexed to this paper) needs initial capital to invest on plant and machinery and kick-start operations; equity based Crowdfunding.
- An epidemic needs urgent supply of medicines and other equipment; reward based Crowdfunding.

However, unlike normal Crowdfunding Platforms, in the case of pro-poor community owned and managed projects, there is need for much larger, long-term, multi-year, committed contributions that will not be repaid in cash, but in a monetized environmental service.

Hence the need for this paper on Crowdfunding for the FCN model.

1.2. Crowdfunding FCN Projects

In the context of the Fair Climate Network, Crowdfunding is an arrangement where a group of climate conscious individuals and/or companies, who cannot individually finance the total cost of an environmentally valuable climate activity, join together to pool resources to implement, maintain and monitor the project.

- **Mitigation Value:**
Emission Reductions and Carbon Credits generated by the project are shared in direct proportion to their respective investments.
- **Adaptation Value:**
However, everyone in the crowdfunding group jointly take total credit for alleviating hardships caused by the adverse effects of climate change on disadvantaged populations since the project wouldn't have been possible without their collective effort.

1.3. Why Crowdfunding?

Climate Mitigation & Adaptation Projects, like any activity that aims to make a serious and discernible Impact in the lives of resource poor populations, need to be implemented *at scale*. Scale requires relatively large resources in the form of low/zero-interest loans through the forward purchase of environmental services, long before scheduled delivery dates. These third-party certified deliveries are measured in UNFCCC and/or Gold Standard Emission Reductions – CERs and GS VERs.

Such large resources may or may not be available with any single individual or company.

1.4. Clean Energy Technologies (Renewables)

Clean/alternate energy technologies, by definition, lend to decentralised community ownership and participation. Household and local community owned solar/wind energy accounts for more than half the renewable energy generation in entire countries of Europe¹, and an increasing number of counties/cities in the USA. Individual citizens and small neighbourhood groups have succeeded in substantial replacement of fossil fuel based energy with zero emission renewables.

1.5. Decentralised Management Systems

Conventional management practices were developed for centralised large-scale deployment at single sites. This will not work when tens and even hundreds of thousands of families participate in as many locations to meet their energy requirements. They have to be recognised as new age businesses needing a radical change in organisational culture, structure and management systems.

These new practices need to be anchored in the involvement of every single potential End User woman in planning, implementing, maintaining and monitoring renewable energy technologies. Total and exception-free transparency needs to replace bureaucracy, hierarchy and corporate confidentiality. And all this has to be supported with robust real-time digitization.

1.6. Fair Climate Network

Grassroots NGOs who have an intimate relationship with communities are best suited for implementing large-scale Climate Projects. For the past 11 years, the Fair Climate Network is engaged in building the capacity and capabilities of these NGOs. We help them identify apt and implementable technologies, register Climate Mitigation & Adaptation Projects with the

¹ 34% of the total installed capacity of renewable energy in Germany (50% of photovoltaic, 25% of wind and 41.9% of bioenergy) were owned by individuals and communities in Germany. From 2012 to 2013 this share jumped up to cross 50%

86% of wind turbines in Denmark are owned by private individuals.

UNFCCC and Gold Standard, and assist in setting up systems for implementation, maintenance and monitoring. Please visit <http://fairclimate.com/>

Many pro-poor technologies were born through the conceptualization of wild ideas, using cutting edge science. They were greenfield in two respects:

- a) Technical shortfalls had to be identified and corrected, and
- b) Implementation bottlenecks needed to be improved before being rolled out.

Checking the feasibility of a novel idea entails a certain amount of risk. We decided to take that risk and blaze the trail to demonstrate that *“the Poor are a part of the Solution; Not a part of the Problem”*.

Robust management systems and implementation technologies were developed for domestic Biogas, fuel efficient Woodstoves, Afforestation/Reforestation and Low Carbon Farming. Digital monitoring solutions were developed to effectively monitor activities spread over thousands of locations.

2. Crowdfunding

2.1. The Resource Challenge

When proven clean energy technologies, along with the intervention strategy/implementation technology have to be rolled out, obtaining humungous resources is the single biggest challenge. The problem is compounded by 2 additional factors:

- i. The volatile compliance market trades at a pitiable fraction of the actual cost of generation since Carbon Revenues are seen as just an additional subsidy of sorts to close the gap to make conventional technologies viable; the voluntary market offers a slightly better price, but is still far short of the actual cost of generation where pro-poor technologies are concerned.²
- ii. Disadvantaged populations do not have the money to themselves invest on the technology, maintain, monitor and generate Carbon Credits.

The only way that pro-poor Climate Projects can be financed is through forward purchase/sale of yet-to-be-generated Carbon Credits at the actual-price-of-generation.

Crowdfunding is a good strategy where many climate conscious individuals and/or companies get together, repose their faith in the poor as being a part of the solution, and finance Climate Projects spread over large regions, involving tens of thousands of End Users, in as many diverse locations.

² In spite of millions of grassroots climate activists being at the forefront to usher in the market mechanisms, Climate Projects under the Clean Development Mechanism (CDM) were never seriously conceived as mass actions undertaken by hundreds of thousands of poor families directly impacted by Climate Change.

2.2. Business, not Charity

Crowdfunding is based on solidarity, with no undertone of charity or patronage. Not because charity is bad or not needed, but because it is not sustainable and cannot be scaled up. It cannot offer the urgently needed viable alternative to a fossil fuel based economy/lifestyle. When the End User of the alternate/clean technology is to be regarded as a business woman in her own rights, the financier should also take a business approach.

This business outlook is also propelled by the realisation that, if *Homo sapiens* are to survive on planet Earth, the so-called alternative of today has to become mainstream by tomorrow.

2.3. Return on Investments

Crowdfunding therefore requires a Return on Investment. Divestment from fossil fuel industry is not enough; it needs to simultaneously be accompanied with investment in renewables. Returns from micro-level Emission Reduction activities carried out by hundreds of thousands of rural women will not be on par with returns from conventional non-renewables like windmills, hydro, *et al.* But the added value is the possibility to involve huge numbers into the building of an alternate economy. History has proven that large scale cooperation is the only way forward for our species.

Corporate Climate Investors exhibit a far-sightedness in recognising the value of powerful stories behind the generation of high quality, non-fudged, third-party verified Emission Reductions. They know that their customers will see the brink to which human beings have gone vis-à-vis Climate Change long before the economy as a whole acknowledges the fact.³

They pay a higher price for these Carbon Offsets for purely business win-win reasons and develop a “benevolent” carbon market till the economy fully recognises both, the value of environmental services as well as the destructive potential of extractive industries.

2.4. Forms of Crowdfunding

Depending of the situation, Crowdfunding takes on various forms like donation based, rewards based, equity based and loan based. This paper will not go into the details of each type. Instead, we refer you to Jens Radschinski at JRadschinski@unfccc.int who heads the Regional Collaboration Centre Bangkok (UNFCCC/IGES) and helps crowd-investing platforms. We have attached a PPT presentation of a typical example they have circulated.

2.5. Setting up the Crowdfunding Platform

- i. Identify a pro-poor community based Climate Project like domestic Biogas, registered with the UNFCCC and/or Gold Standard.

³ No corporate leader has forgotten the perils of using child labour in stitching footballs and making carpets. Genuine worries about Climate Change are as strong as the public’s aversion to stark exploitation.

- ii. Ensure that the selected project complies with 2 uncompromising FCN standards, which sit as a layer on top of internationally recognised UNFCCC and Gold Standard Carbon certification:
 - ✓ Community Ownership & Management of Climate Mitigation Projects by the End Users of respective technologies.
Communities need to be fully aware as to what the Climate action is all about right from the conception of the project. Transfer of ownership should not be nominal or token. It must be done in a responsible manner through awareness creation and capacity building.
 - ✓ Upfront, open, transparent and legally binding Carbon Revenue sharing agreements between the Project Proponent (grassroots NGO) and End User families.
We recognise that grassroots NGOs will have overhead costs to keep their organisations afloat. They are free to take a percentage of Carbon Revenues that flow in to meet these running costs. But that share should be thoroughly discussed and arrived at with each and every End User of the technology.
- iii. Meticulous financial projections are made by the Implementing NGO, based on current costs and prices, in a totally open and transparent manner. These are not "budgets" in the traditional sense of the term; they are estimates of how much capital is required.
- iv. Designate an impartial Lead Agent to manage the Crowdfunding Platform and spell out functions and responsibilities.
These will include putting the Crowdfunding Platform in the public domain, accepting Participants, receiving contributions into the Escrow account, drawing up the Emission Reduction Purchase Agreement (ERPA), acting as MOA with the UNFCCC and/or Gold Standard, releasing ERPA payments, overseeing implementation and third-party verification, receiving and analysing monthly progress and financial reports, appropriating issued Carbon Credits to Crowdfunding Participants and transferring to their respective Retirement Registry Accounts, etc.
- v. Prepare a synopsis of the Climate Project and publicise through word of mouth and also through a well-designed and attractive website.
- vi. Explain the terms and conditions under which individuals and/or companies can participate in the Crowdfunding Platform.
E.g. FCN supported Climate Projects will not transfer "live" CERs/GS VERs to carbon investors. Instead, they will be destroyed in the Retirement Registry of the UNFCCC/Gold Standard and then transferred to the Investors' Registry Accounts. This is in order to ensure that *real reductions* are made, and Climate Projects do not become a source for companies and corporates to make a double whammy by claiming Offsets as well as trading.
- vii. Open an Escrow Bank Account with the Lead Agent and Implementing NGO as the two and only joint signatories; make monthly/quarterly transfers from this Escrow Account to the NGO's Bank Account, following a "pay for performance" principle.
- viii. Open Accounts in the UNFCCC/Gold Standard Retirement Registry where necessary.
Note: Individuals cannot open these accounts. It is feasible for companies and corporates open

them only if a viable volume of CERs/GS VERs are going to be received by them. Alternatively, companies and corporates can also be treated as Individual Participants, as explained in the following paragraphs.

3. Recording Transactions

Carbon Offsets generated by Climate Projects are fungible commodities – i.e. they are tangible assets that can be monetised and treated as cash in books of accounts. However, in the FCN model, they are transferred to the Retirement Registry of the UNFCCC/Gold Standard and then transferred to the Retirement Account of the Crowdfunding participant.

Corporate Participants:

The question then arises as to how the initial contribution to the Crowdfunding should be treated in books of accounts. As per guidance given the Institute of Chartered Accountants, a company can record their contributions as:

“Advance paid against the purchase of (volume) CERs/GS VERs to be generated by (project title) Climate Project as per Crowdfunding Platform (reference number) dated (dd/mm/yyyy).”

Since Carbon Offsets are fungible commodities, whether they are “live” or “retired”, these advances will be offset when retired CERs/GS VERs are delivered by the Implementing NGO, after Verification and Issuance, to their respective Retirement Registry Account.

Individual Participants:

Individuals Participants in the Crowdfunding Platform, however, cannot follow the same procedure since they will not be permitted to open any kind of Account in the UNFCCC/Gold Standard Registry.

They will therefore have to record their contribution as donations made to the Project:

“Donation made to the (Project Title) Climate Project as per Crowdfunding Platform (reference number) dated (dd/mm/yyyy).”

The Lead Agent will ensure that the volume of Carbon Credits generated through the respective contributions of Individual Participants is prominently broadcasted.



bettervest

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Crowd-investing and the CDM



Crowd-investing for the CDM – an real example from Columbia

Climate-friendly Landfill Gas Project in Columbia

funded in 18 hours and 1 minute

8% Return on investment

146,214 t CO2 saved

3 year term

100% more efficient

110,300 € invested

110,300€ from 195 investors

Funding Threshold: 72,210€

Jetzt kostenlos registrieren

erfolgreich



Crowd-investing for CDM projects

The first ever registered CDM project was recently crowd-invested

Dormant landfill gas projects, registered under the Clean Development Mechanism (CDM) project

Resumed operational after receiving funding from 195 German citizens, within 19 hours

Thanks to an innovative and low cost way to raise finance fast - restoring the projects original purpose – to reduce GHG emissions



Project description

Pirgua Landfill gas recovery and flaring with the potential to reduce 11,170 tonnes CO2 equivalent per year (see [here](#))

Cartagena Landfill Gas Capture and Usage Project with the potential to reduce 142,384 tonnes CO2 equivalent per year (see [here](#))

Companies involved:

- SERVITUNJA S.A. E.S.P. (Colombia)
- OPTIM Consult (Colombia)
- CarbonBW Colombia S.A.S (Colombia)
- EnBW Kraftwerke AG (Germany)
- First Climate (Switzerland) AG





Project history

Problem:

- In 2012, two landfill-gas projects were commissioned in Cartegna and Pirgua-Tunja, Colombia
- The methane gas produced from the landfills is a valuable resource and was to be collected and flared, at a later date used to generate electricity
- As these projects were had heavily dependent on the carbon finance to operate (a positive NPV due to the sale of CERs)
- Due the collapse of the carbon market soon after 2012, the projects were put on hold indefinitely and
- The project never realized its potential to supply and sell LFG to nearby industries, in particular a brick factory (replacing coal) in the vicinity
- It was never able to reduce odors, improve health and quality of life for the community, mitigate methane related fires nor create the promised jobs from the operation of the LFG and power product

Solution:

- Fortunately the projects were registered under the CDM soon after comissioning along with national authority approvals (host party LOA)
- They had also undergone full environmental vetting and validation by 3rd party auditors (DOEs)
- Three years later an EU buyer purchased the option on the CERs from the projects (ERPAs)
- In 2016 Carbon BW SAS succesfully secured the contracts to restore and operate the plants
- The remaining capital required to kick-start andcomplete the operation was sourced with 18 hours via the bettervest crowdfund platform – a company that forms part of wider EU initiative to stimulate innovative crowdfunding solutions <ref>.





bettervest in a nutshell

bettervest is the 1st **crowdfunding** platform that enables citizens to jointly participate in energy projects and benefit financially from the energy costs saved.



Why crowdfunding?

Many people want to get actively involved in the energy transition and put their money to good use. With fossil fuel divestment gaining popularity and demand for alternative investments rising, we offer transparent investment opportunities with a positive environmental and social impact. Wallet size doesn't matter: citizens can invest as little as 50€.

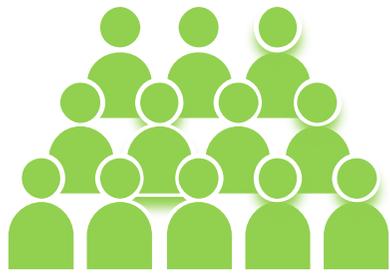
Project initiators, like schools and hospitals, save energy and money. Investors benefit from a green return and CO2 emission are reduced. Its a win win win.



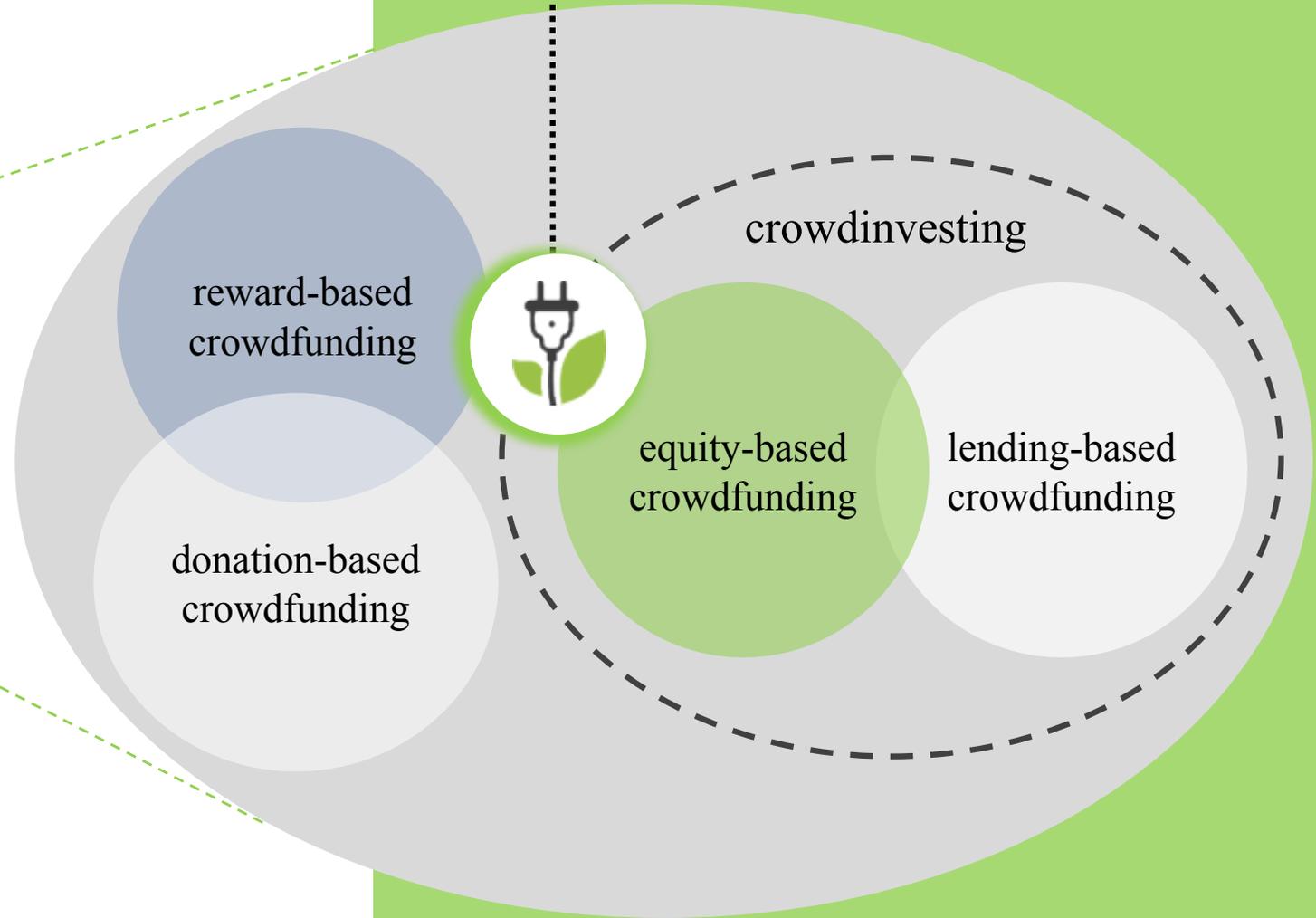


In crowdfunding markets
bettervest is uniquely
positioned

Financial returns +
product samples,
coupons or discounts



crowdfunding



The *bettervest* business model



INVESTMENTS



Funds transferred to escrow account

Project initiator benefits

No equity capital needed

CSR marketing

Strengthen employee and customer bonds

Circa 20% energy savings during the loan repayment period, then 100%



PROJECTS

Funds distributed via an escrow account



RETURNS

Benefits for investors

Environmentally sound investments from 50-10,000 €

Yearly repayments instalments

> 5% return

< 10 year loan period

Additional benefits: coupons, discounts, samples, etc.

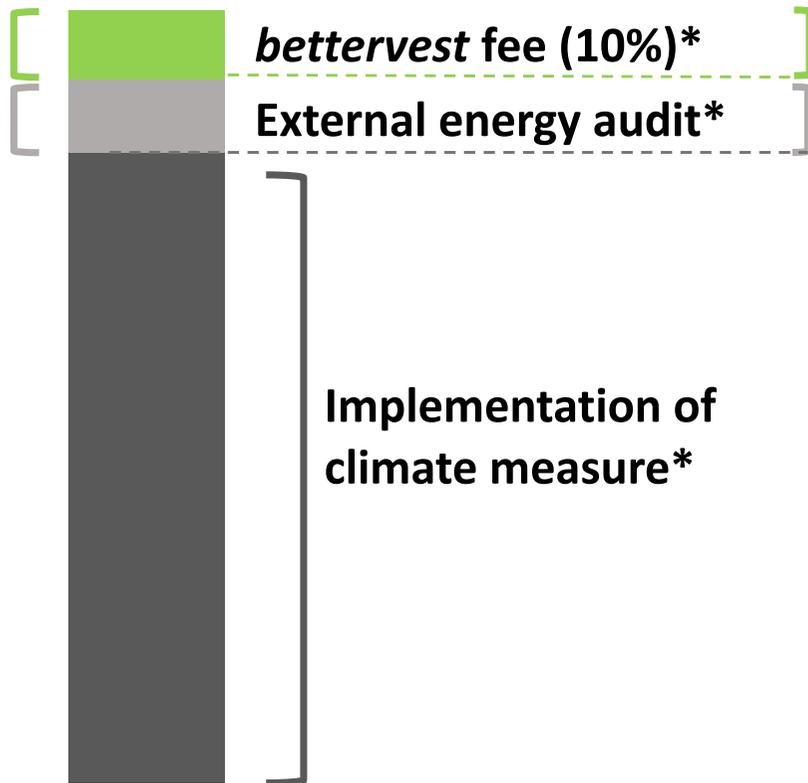


CROWD



What we finance

Principle, costs & fees

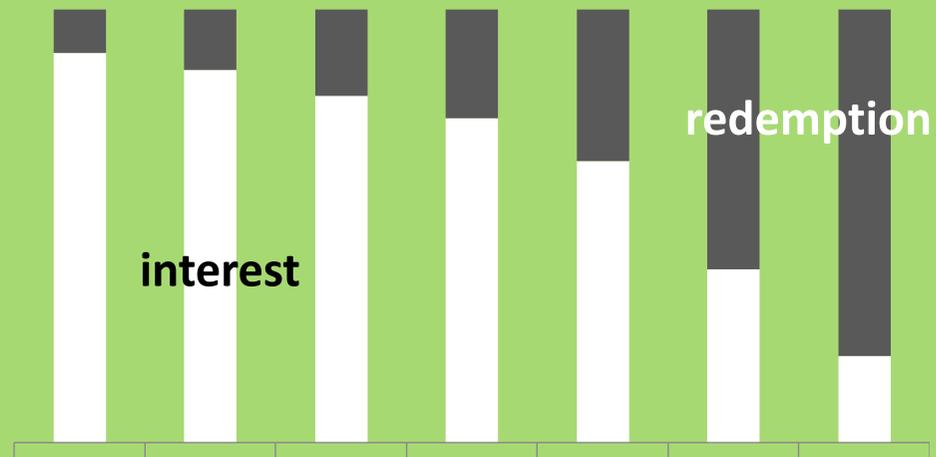


* excludes tax

How we finance it

Interest & redemption

Individual terms and interest rates are determined for each unique project





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