GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Medium-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title: The Climate Aggregation Platform for Developing Countries			
Country(ies):	Global	GEF Project ID:	9309
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5749
Other Executing Partner(s):	Climate Bonds Initiative	Submission Date:	2016-11-23
GEF Focal Area (s):	Climate Change	Project Duration (Months)	36
Integrated Approach Pilot	IAP-Cities ☐ IAP-Commodities ☐ IAP-Food Security ☐	Corporate Program: SGP ☐	
Name of Parent Program	[if applicable]	Agency Fee ($)	185,250

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in $) GEF Project Financing	Co-financing
CCM-1 Program 2	Develop and demonstrate innovative policy packages and market initiatives to foster a new range of mitigation actions	GEFTF	1,950,000	85,350,000
	Total project costs		1,950,000	85,350,000

B. PROJECT DESCRIPTION SUMMARY

Project Objective: to promote the scale-up of financial aggregation for small-scale, low-carbon energy assets in developing countries.

Project Components/ Programs	Financ-ing Type	Project Outcomes	Project Outputs	Trust Fund	(in $) GEF Project Financing	Confirmed Co-financing
1. Global offer: awareness raising, knowledge management and working group	TA	1. Increased awareness, exchange of information and engagement in financial aggregation for small-scale, low-carbon energy activities in developing countries.	1.1 *Awareness raising*: stakeholders are aware of the opportunity for financial aggregation and of the CAP's products and services *Activities:* 1.1.1 Online presence is developed and maintained (website, social media, blogs, webinars) 1.1.2 Media outreach (opinion pieces, interviews) with relevant media outlets 1.1.3 High-profile CAP events and panels at international meetings 1.2 *Knowledge management*: knowledge products and toolkits are developed for use by stakeholders, addressing information barriers in financial aggregation *Activities:* 1.2.1 A flagship annual report, 'State of the Small-Scale, Low-Carbon Aggregation Markets', is	GEFTF	650,000	250,000

			published 1.2.2 In-depth research pieces, e.g. lessons learnt in SPV structuring, are published 1.2.3 Library of case studies and tool-kits are made available, both in-house and from relevant third party activities. In house materials will draw on information from CAP's showcase transactions and in-country initiatives 1.2.4 Global database of green aggregation transactions is populated and maintained, including where possible, deal terms, structures, investors etc. 1.3. *Global working group*: international and national stakeholders in financial aggregation are enabled to network, coordinate and exchange information at the global level. *Activities:* 1.3.1 A global working group, consisting of high-profile members, is established, regularly convened and supported.			
2. In-country initiatives: showcase transactions	TA	2. Financial closure of first-of-a-kind financial aggregation transactions of-small-scale, low carbon energy activities in four developing countries	2.1 *Showcase transactions:* partner transactions in each in-country initiative are provided with CAP financial support of up to $100,000, addressing first-mover transaction and/or structuring costs 2.2 *Knowledge management:* Information from showcase transactions is extracted, analysed and developed into suitable knowledge products, ready for dissemination to stakeholders at national, regional and global level.	GEFTF	570,000	20,000,000
3. In-country initiatives: tailored market development activities	TA	3. The market architecture and environment for replication and scale-up of financial aggregation transactions for small-scale, low-carbon energy is enhanced in four developing countries	3.1 *National working groups:* national and international stakeholders in financial aggregation in each in-county initiative are enabled to network, coordinate and exchange information. *Activities:* 3.1.1 National working groups in each in-country initiative, consisting of key national and international stakeholders, are established, regularly convened and supported.	GEFTF	480,000	65,000,000

			3.2 Market assessments: The CAP and stakeholders in each in-country initiative are informed by an accurate, up-to-date understanding of the supported financial aggregation market *Activities:* 3.2. A detailed market assessment is performed for each of the four in-country initiatives. The market assessment is updated at the mid-point and end of the project. Subject to confidentiality, the market assessment is made publicly available. 3.3. *Tailored CAP market development activities:* Stakeholders benefit from targeted CAP activities that remove barriers to financial aggregation, contributing to an enabled market environment *Activities:* 3.3.1 A CAP action plan – identifying targeted and coordinated barrier-removal activities for the CAP to implement - is developed for each of the four in-country initiatives. 3.3.2 Specified CAP barrier-removal activities are implemented. Example barrier-removal activities include: standardizing contracts and outputs; financial intermediary education (mock filings); tax/regulatory reform. *3.4 Knowledge management:* Information gained from the CAP's market development activities in each in-country initiative is extracted, analysed and developed into suitable knowledge products, ready for dissemination to stakeholders at national, regional and global level.			
4. Mid and Terminal Evaluations	TA	NA	4.1 Independent mid-term review to be commenced at 15 months into the project 4.2 Independent terminal evaluation performed after completion of major outputs and activities.	GEFTF	73,000	
			Subtotal		1,773,000	85,250,000

Project Management Cost (PMC)[1]	GEFTF	177,000	100,000
Total project costs		1,950,000	85,350,000

C. CONFIRMED SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include evidence for co-financing for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount ($)
Donor Agency	Inter-American Investment Corporation	Loans	50,000,000
Private Sector	MGM Innova Capital	Equity	30,000,000
Donor Agency	EESL	Loans	5,000,000
CSO	Climate Bonds Initiative	In-kind	200,000
GEF Agency	UNDP	In-kind	150,000
Total Co-financing			85,350,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND THE PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country Name/Global	Focal Area	Programming of Funds	(in $)		
					GEF Project Financing (a)	**Agency Fee** a) (b)[2]	**Total** (c)=a+b
UNDP	GEFTF	Global	Climate Change		1,950,000	185,250	2,135,250
Total Grant Resources					1,950,000	185,250	2,135,250

a) Refer to the Fee Policy for GEF Partner Agencies

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS

Provide the expected project targets as appropriate.

Corporate Results	**Replenishment Targets**	**Project Targets**
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO_{2e} mitigated (include both direct and indirect)	Direct: 266,118 tCO2e (lifetime) reflecting the project's three showcase transactions Indirect 31.9-319.2 million tCO2e over the 10 years following project completion. (Reflecting a 1% to 10% causality for the CAP)

F. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? NO

[1] For GEF Project Financing up to $2 million, PMC could be up to10% of the subtotal; above $2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF

A.1. *Project Description*.

1.1. Global environmental and/or adaptation problems, root causes and barriers that need to be addressed

1. Improved technical understanding. The project design is now based on a more nuanced and in-depth technical understanding of financial aggregation. This understanding was gained from stakeholder consultations and desk research.

- The project document's technical annex A, '*Trends leading to financial aggregation in developing countries*', describes a revised set of drivers for financial aggregation. This now explicitly includes the growing green bond markets as one of the four key identified drivers for financial aggregation.
- The project document's technical annex B, '*Overview of financial aggregation transactions*', incorporates new understanding throughout. Of note, annex B's sub-section on '*Key characteristics of financial aggregation transactions*', introduces more detail on the role of (i) originators, (ii) SPV structures and (iii) exits, investors and currencies. In annex B's sub-section on '*Barriers to financial aggregation in developing countries*', the list of typical barriers for financial aggregation, together with matching barrier-removal activities, has been refined. This now includes an explicit barrier related to SPV structuring, and more of an emphasis on underwriting standards and the quality of underlying assets.

1.2. Baseline scenario or any associated baseline projects

2. Updated status of baseline activities. Updated data has been gathered on the status of baseline activities as of November 2016. This has been gained from stakeholder consultations and desk research.

- With regard to baseline financial aggregation transactions, please see paragraph 8 of the project document. In particular, new information is provided on the current status of specific transactions in Kenya and India. Further detail on these transactions is provided in the project document's technical annex C.
- With regard to baseline initiatives promoting financial aggregation solutions, please see paragraph 9 of the project document. In particular, updated information is provided on (i) various initiatives in the US, (ii) IRENA/Terrawatt's initiative on solar PPA standardization, (iii) WHEEL's initiative on warehouse vehicles in Brazil, China and India, and (iv) WBG/GOGLA's initiative on key performance indicators for solar home systems. The CAP is already in contact, or will be seeking to collaborate, with all these initiatives.

1.3 Proposed alternative scenario, GEF focal area strategies, with a brief description of expected outcomes and components of the project

3. Project name. The project's name has been changed from the "*Climate Finance Aggregation Initiative for Developing Countries*" to the "*Climate Aggregation Platform for Developing Countries*". The new name has been selected in large part because of its more user-friendly acronym ("CAP").

4. Project objective. The project's objective is now stated as being "*to promote the scale-up of financial aggregation for small-scale, low-carbon energy assets in developing countries*." This is a simpler and clearer articulation of the objective which does not depart from the original sense of the PIF.

5. Project strategy. A set of strategic principles have been carefully considered and incorporated into the project design. This is set out in the project document's section 2, '*Strategy*'.

- A clear theory of change for the project has been developed, linking to UNDP's '*Derisking Renewable Energy Investment'* framework, focusing on the CAP's opportunity to lower financing costs for low-carbon energy in developing countries

- The project's central mechanism to achieve change is confirmed as a barrier removal approach. This is embedded throughout its design - examples include addressing: information barriers (its global activities); first-mover barriers (its showcase transactions) and market barriers (its market development activities)
- The roles of UNDP, CBI and partners, including development banks, in their project have been expressly selected to leverage their particular comparative advantage

6. The CAP's global and an in-country offer, The CAP's activities and value proposition are now formulated in terms of a *global offer* and an *in-country offer*.

- *Global offer*: global awareness raising, knowledge management and a global working group
- *In-country offer***:** three in-country initiatives, each centered around (i) a showcase transaction, likely in partnership with a development bank and/or the private sector, and (ii) market development activities from a menu of services, such as standardization efforts or addressing tax/regulatory bottlenecks.

7. The CAP's design reflects a shift to a country-level, transaction-driven model. Feedback gathered in the project's design phase repeatedly identified the importance of local context (technology, jurisdiction) in financial aggregation transactions. This has guided the prominence of the in-country initiatives in the CAP's design. Within each in-country initiative, the aim is that showcase transactions can create a concrete objective around which domestic stakeholders can engage and be incentivized. Such transactions can also provide information-discovery on domestic market barriers, for example regulatory or tax issues. The CAP's menu of market development activities can then assist in targeting identified barriers, working with local partners to create the conditions for replication and scale-up. Finally, the lessons learnt and good practice from the in-country initiatives can be shared regionally and globally.

8. Projects outcomes/components. The project's outcomes/components now align with the CAP's formulation into global and in-country offers. The project's four components/outcomes are as follows.

- 1. *Global offer:* awareness raising, knowledge management and working group
- 2. *In-country offer:* showcase transactions (3 countries)
- 3. *In-country offer:* market-development activities (3 countries)
- 4. Mid-term and terminal evaluation

A detailed description of each outcome/component is found in the project document's Section 3, '*Project Objective, Outcomes and Outputs*'. A summary of outputs and activities is found in this document's Table B. In comparison to the PIF stage, outputs and activities have now been further scrutinized, developed and elaborated, in large part based on dialogues with stakeholders. Activities are now been structured together in a clearer offer, for example the (i) national working groups, (ii) market assessments and (iii) CAP action plans envisioned in outcome/component 3. Some activities from the PIF stage have been moved within the project structure; for example, standardization of contracts was a standalone global component at the PIF stage, and is now found as an individual barrier-removal activity at the in-country level in outcome/component 3. This again reflects feedback received to shift the CAP to a country-level, transaction-driven model.

9. In-country initiatives: There are two main changes from the PIF stage with regard to the in-country initiatives.

- Due to budgetary constraints, the project now has three, instead of four, in-country initiatives. This is function of having a clearer understanding and articulation of the project's activities, combined with a more detailed budgeting exercise.
- An initial exercise has been performed to propose promising candidates for the three in-country initiatives. These are:
    - *Kenya* (East Africa): solar home systems
    - *Mexico, Brazil, Panama or Colombia (Latin America):* commercial & industrial (C&I) solar or ESCO energy efficiency
    - *India*: solar renewable energy or energy efficiency

  More detail on each of the three proposed in-country initiatives is found in the project document's technical annex C. Of note, the selection of countries and technology sectors for the in-country initiatives, as well as the matching showcase transactions, will be further scrutinized and confirmed early in project implementation. This will allow for a systematic and informed selection decision, backed up by close consultation with partners and national stakeholders.

1.4 Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and co-financing;

10. Incremental cost reasoning. The incremental cost reasoning for the project is set out in the project document's paragraphs 5 to 9. Financial aggregation transactions currently face a range of information, first mover and market barriers. As set out in the project document's paragraph 7, in the absence of efforts to promote financial aggregation, business-as-usual approaches to financing will likely result in a more costly approach to investment - in the form of high upfront capital needs, high financing costs and short loan tenors. In such a scenario, financial aggregation will likely remain at a nascent stage, with limited replication and scaling.

- For the global offer, there is currently no other platform pursuing the CAP's collective activities, objectives and partner model. The CAP has a distinct niche, focused on developing countries and small-scale, low-carbon energy. A comparative advantage of the CAP is its global reach, and its ability to draw lessons learnt from around the world and across both renewable energy and energy efficiency sectors.
- For the in-country offer, the countries and technologies for the in-country initiatives are to be selected early in implementation. Incremental cost reasoning will be incorporated into (i) the selection and the type of CAP's assistance to the showcase transaction and (ii) the selection of barrier-removal activities, via the market assessment and CAP action plan processes.

11. Co-financing. The table below summarizes the changes in co-financing from the PIF stage to the CEO Endorsement Request. Co-financing at the PIF stage was USD 51,050,000. Co-financing at the CEO Endorsement stage is USD 85,350,000. It is anticipated that the CAP's three in-country initiatives will generate additional investment co-financing once up and running. The actual realisation of parallel co-financing will be monitored during the mid-term review and terminal evaluation process and will be reported to the GEF.

Source of co-financing	PIF Amount (USD)	Actual Amount at CEO ER (USD)	Comment
IDB/IIC	50,000,000	50,000,000	IDB/IIC will contribute loan financing for renewable energy and energy efficiency in Latin America.
MGM Innova Capital	-	30,000,000	MGM Innova Capital is a private equity fund focusing on energy efficiency and renewable energy in Latin America. The opportunity is for MGM equity co-financing to complement IDB/IIC loan financing. MGM Innova Capital have indicated co-financing in a range of USD 30-60,000,000. This figure is conservatively represented here at USD 30,000,000 - the lower bound of the range.
Energy Efficiency Services Limited (EESL)	-	5,000,000	EESL is a large government ESCO in India. It is involved in a range of potential financial aggregation projects, including energy efficient appliances and solar powered energy efficient water pumps for the agricultural sector.
Working Group Partners	700,000	-	This was envisaged at the PIF stage as an in-kind contribution from working group members to the CAP. At the CEO ER stage, it was decided to not to seek to obtain such a letter, however it is still fully envisioned that pro bono efforts from working group members and stakeholders will be an important contribution to the CAP.
Climate Bonds Initiative	200,000	200,000	Climate Bonds Initiative will provide in-kind co-financing in the form of staff time towards the CAP's technical and administrative tasks. This can include technical expertise and insights, and senior management representation at events.
UNDP	150,000	150,000	As with Climate Bonds, UNDP will also provide in-kind co-financing in the form of staff time towards the CAP's technical and administrative tasks. This can include technical expertise and insights, and senior management representation at events.
TOTAL	**51,050,000**	**85,350,000**	

1.5 Global environmental benefits (GEFTF);

12. The project will generate both economic and environmental benefits. Economic benefits from financial aggregation can be assessed in terms of the savings that will arise from lower financing costs for low-carbon energy assets. Lower financing costs will translate to lower tariffs and energy costs for end-users. Environmental benefits from financial aggregation can be assessed in terms of the reduced greenhouse gas emissions that will flow from the low-carbon energy measures, as compared to a baseline of conventional, fossil-fuel based generation. Updated modelling has been performed since the PIF stage to estimate these benefits, adding a direct benefits analysis and refining the underlying assumptions. More detail on assumptions can be found in the project document's paragraphs 37 to 39, and in its Section 5, '*Project Results Framework'*.

13. Direct benefits: Direct activities under this project are considered to be the three showcase transactions. For the purpose of *ex-ante* estimates, each showcase transaction is assumed to total, on average, USD 10 million. In practice, showcase transactions will be identified early during implementation. Benefits will then be calculated *ex-post* based on the empirical transaction size and type.

- On this basis of three showcase transactions at an average of USD 10 million, direct benefits are estimated to have the following impact.
    - Total financial aggregation of small-scale, low-carbon energy of USD 30 million
    - Total economic savings due to lower financing costs of USD 3.171 million
    - Total emission reductions (lifetime) of 266,118 tCO2e

14. Indirect benefits: the project's modelling estimates indirect benefits using a top-down analysis. The analysis is based on SE4All projections of the annual SE4All investment needs in developing countries until 2030, as set out in the project document's paragraph 3. To model benefits, it is estimated that financial aggregation will represent 10% of the SE4All annual incremental investment needs – for example, if the SE4All investment gap is USD 518.1 billion per year, financial aggregation will provide USD 51.8 billion of this gap. The CAP's causality for these benefits is then estimated via a range – with a lower bound of 1% and a higher bound of 10%. On this basis, over the 10 year time horizon after the project is completed, the CFA Initiative would result in the following indirect benefits:

- Total financial aggregation for low-carbon energy assets over 10 years of USD 3.6 billion (1% causality) to USD 36.0 billion (10% causality)
- Total economic savings due to lower financing costs over 10 years of USD 380.3 million (1% causality) to USD 3.8 billion (10% causality)
- Total annual emission reductions over 10 years of 31.9 million tCO2e (1% causality) to 319.2 million tCO2e (10% causality)

1.6 Innovativeness, sustainability and potential for scaling up.

15. Innovativeness. The project is innovative in its focus on promoting the new approach of financial aggregation. This represents a shift from conventional financing approaches of project finance (utility scale) and end-user financing (small-scale) that currently predominate. The project document's technical annex A '*Trends leading to financial aggregation in developing countries*' sets out the four key trends resulting in this innovation: energy systems that are transforming, incorporating distributed activities; disruptive innovations in business models and digitalization; high financing costs in developing countries; and, rapidly growing green bond markets.

16. Sustainability. The intent is that the CAP will gain further funding and operate indefinitely, past the initial funding provided by this project. The activities set out in this project document are envisioned as an initial phase of the CAP, with the GEF providing seed-funding. Subsequent phases, for example, could include the addition of further in-country initiatives beyond the initial three funded by the project. The architecture of the CAP, with a global 'chapeau', is well suited to scaling in this way. As the CAP proves its value-add, the possibility of funding the CAP in part by private sector contributions, such as a membership fees, will be explored. This is a similar model to that taken by CBI.

17. Scalability. The CAP's design and activities are inherently replicable and scalable in nature. Financial aggregation, in its various forms, is applicable to all developing country contexts, and has the potential to account for an increasing share of low-carbon investment. In the CAP's global offer, the CAP's services, such as knowledge products and tool-kits, are expressly designed to have broad replication applicability across country contexts. In the CAP's in-country offer, the CAP's market development activities are designed to contribute to the creation of an enabled environment for in-country replication of showcase and other transactions.

A.2. Child Project?

NA.

A.3. Stakeholders.

18. Stakeholder engagement is central to the project. The project document's paragraph 17, figure 3, and technical annex D, '*CAP value proposition for different stakeholders'*, detail various aspects of the project's approach to stakeholders. The project has performed an analysis of the typical stakeholders in a financial analysis aggregation along five main stakeholder groups – public sector, financial market and advisory, investors, power industry and media – each of which is then composed of multiple stakeholder types. The project has a number of mechanisms to engage with stakeholders, from social media, to global and national working groups, to partnerships and its transaction-driven model. The project document's technical annex E, '*Illustrative membership of the global working group*', has updated its indicative membership based on consultations during the PPG phase.

A.4. Gender Equality and Women's Empowerment.

19. Gender considerations impact investment risks for small-scale, low-carbon energy in developing countries. Women can play an important role in small-scale, low-carbon energy: first, at the household level, as the recipients of energy services, and as energy managers in the home; second, at the business and finance level, where women can act as entrepreneurs in energy companies, and/or be employed in the finance industry. UNDP's *Derisking Renewable Energy Investment* framework, as one of its current work-streams, has analysed how gender can affect investment risks for small-scale energy activities. For example, issues related to gender can impact credit risk (where women end-users in households may have lower creditworthiness, for example due to a lack of property rights, or a lack of consumer banking products for women) and financing risk (where female entrepreneurs in low-carbon energy may face challenges in closing on financing for their businesses due to gender bias where women are perceived by investors as less able entrepreneurs).

20. Gender and the project design. Gender equality has been incorporated into the project design. The project manager will be the designated focal point for gender in the project, accountable for all project matters related to gender. The Climate Bonds Initiative will support the project manager on gender issues. The project activities will address gender as follows:

- Activities.
    - Global offer: The CAP will develop and disseminate at least one knowledge product on gender and financial aggregation
    - In-country offer: In each in-country initiative, the CAP will perform a gender analysis as part of the market assessments and CAP action plans. Where appropriate gender will then be incorporated into the CAP's selected barrier-removal activities.
- Monitoring.
    - Tracking of participants in global and national working groups and CAP events, with a target that at least [20%] of participants are women
    - As per the Project Results Framework in section 5, one of the project objective indicators – the number of individuals and/or businesses benefiting from low-carbon energy as a result of financial closed CAP showcase transactions – will be monitored on a gender-disaggregated basis.

A.5 Risk.

21. Risk management. The project faces a number of external risks that may prevent the project's objectives from being achieved. The project will seek to actively monitor and mitigate risks. As per standard UNDP requirements, the Project Manager will monitor risks quarterly and record progress. The identification of project risks has been further developed since the PIF stage, including disaggregating market risks into their constituent parts, and adding a new risk on data privacy. The table below summarizes the project's risk management approach.

Risk Category	Rating (1 to 5)	Risk Mitigation Measures	Risk Owner	Current Status
Political will Political will and buy-in from domestic governments for the CAP will be an important factor in its success. There is risk if governments are unable to provide this political support.	Prob.: 3 Imp.: 3	(i) At the global level, a number of international actors – G20, the Clean Energy Ministerial, SE4All- have identified financial aggregation as a priority area. These can assist in building political will in-country. The CAP will seek to support such global initiatives. (ii) At the in-country level, the CAP will screen potential in-country initiatives for the status of power market regulation. The CAP will only proceed with an in-country initiative if the power market regulatory context is *already* favourable. If there is an adverse policy change after proceeding with a country, the CAP will seek, with partners, to engage the domestic government.	Project manager	There is currently a good level of interest in financial aggregation. The proposed in-country initiatives all have favourable regulatory contexts.
Market risks – fuel prices There is risk in global fuel price volatility. The underlying uptake of small-scale, low-carbon energy may be negatively impacted by lower conventional fuel prices. Fuel prices may also be impacted by subsidies.	Prob: 2/3 Imp.: 3	The CAP will screen potential in-country initiatives for the financial viability of the proposed technology, including the impact of possible lower fuel prices. Related mitigating factors against this risk, such as the realization of non -financial co-benefits, e.g., electrification needs and rising energy demand, will also be considered.	Project manager	Global energy prices are currently low. Downside risk to prices is low.
Market risks – general securities market downturn There is risk in securities market volatility. The performance of securities markets tends to be cyclical in nature. The appetite of investors in financial aggregation transactions may be diminished by a securities market correction or downturn.	Prob: 3/4 Imp: 3	The CAP will identify in-country initiatives representing a diversity of country contexts, and by association security market contexts. If the CAP is active in distinct regions, this can provide a natural hedge against market downturns. The CAP will also seek to build in flexibility in terms of the proposed take-out for financial aggregation transactions, for example, if need be, substituting a capital markets exit with a bank debt exit. More generally, pricing on financial aggregation assets will adapt to new market conditions. Irrespective of market conditions, in general, financing costs from financial aggregation will still be preferable to conventional alternatives.	Project manager (with CBI inputs)	Some current risk. Securities markets, particularly in developed countries, may be overpriced and due a correction.
Market risks – triggering of a financial crisis Securitisation in sub-prime mortgages was a key contributing factor to the financial crisis of 2008. Securitisation of mortgages and low-carbon energy assets share similarities, with the risk that the underlying issues which existed with sub-prime mortgage securities may be replicated with low-carbon energy securities.	Prob.: 1 Imp.: 4	While aggregation of low-carbon energy and mortgages do share similarities, there are also a number of clear reasons why it is unlikely that low-carbon energy assets could trigger a similar financial crisis. Low-carbon energy is not likely to reach the market size and origination volume to become a systemic risk to the financial system. New regulations, such as Basel-III, have placed constraints on bank leverage and proprietary trading, further reducing risk in these areas. The CAP's market development activities expressly address – through standardization in contracts, data sets and due diligence -–the very	Project Board	Low-carbon financial aggregation is currently too small to present systemic risk.

		issues of transparency of information and robust risk assessment which were lacking with sub-prime mortgages. `		
Data privacy risks New business models for financial aggregation of small-scale, low-carbon energy assets can involve gathering and analysing of end-user data. For example, solar home kit companies may gather usage and mobile money data on end-users. There is a risk that private data may be breached or abused. This in turn could create reputational risk in the sector.	Prob.: 2/3 Imp.: 3	The CAP's market assessment, and corresponding market development activities, for each in-country initiative will assess the issue of data privacy risks and the extent to which the CAP can be involved. If the risk exists, a number of potential risk mitigation approaches exist including developing common industry guidelines on treatment of data, and establishing balanced regulations on consumer data protection.	Project manager	Evolving and dependent on the particular technology sector. The first examples of data breaches have occurred in solar home kit sector.
Climate change risks Climate change may bring about increased frequency of extreme weather events and natural disasters. This may pose a physical risk to the infrastructure and hardware necessary for small-scale, low-carbon energy assets.	Prob.: 3/4 Imp.: 2	This risk is several steps removed from the core activities of the CAP and will be primarily addressed by the private sector developers offering small-scale, low-carbon energy assets. Developers typically manage this risk as part of their regular business planning, and may mitigate it through, for example, the use of remote cellular monitoring of hardware, or the use of insurance. Small-scale, renewable energy solutions also provide electricity systems with resilience to climate change risks, and thereby provide a natural hedge in this area. The CAP will nonetheless monitor this risk. If private sector developers are not addressing this risk, the CAP can seek to engage these stakeholders.	Project manager	Currently tends to be addressed by private sector developers.

A.6. Institutional Arrangement and Coordination.

22. Project implementation: The project document's Section 7, '*Governance and Management Arrangements*', details how the project will be implemented. UNDP will implement the project using the direct implementation modality. UNDP will be responsible for the overall implementation and delivery of the project, and will ensure that the project objectives are met. CBI has been selected as a 'Responsible Party' to UNDP, entering into a Responsible Party Agreement with UNDP. In this role, CBI will perform pre-designated components and activities. When CBI is acting as a Responsible Party, all activities will be carried out in compliance with UNDP and GEF procedures. The sharing of the project's activities is as follows:

- CBI will perform component 1 (global offer) and 50% of component 3 (in-country market development).
- UNDP will perform component 2 (in-country showcase transactions), 50% of component 3 (in-country market development) and component 4 (mid term and terminal evaluation).
- The total project budget is split approximately 50/50 between UNDP and CBI.

23. Coordination. The project will seek to actively coordinate with relevant initiatives and projects, including GEF projects, to maximize synergies and to minimize redundancy. At the global level, contact has already been made at the PPG stage with most, if not all, existing initiatives and many ongoing transactions. This will be continued during project implementation through the CAP's various activities, including the global working group. At the country level, coordination will be achieved primarily through the national working group and in-country presence, informed and supported by the market assessments, updated annually. .

A.7 *Benefits.*

24. The CAP is envisaged to deliver multiple benefits. The benefits from financial aggregation for small-scale, low-carbon energy can take a number of forms. The end result is to catalyse affordable, clean and reliable energy for developing country citizens. Energy itself, particularly energy access, is a key enabler of human development, impacting multiple sustainable development goals, such as poverty, health and industry. At a more technical level, the project document's paragraph 5 sets out the financial benefits of financial aggregation, improving financial terms and de-risking investment. The project document's 37 to 39 then translate these financial benefits, to economic and environmental benefits. The form and extent of savings from economic benefits will depend on the particular financial transaction and circumstances, however it is possible for these savings to be re-channeled to further contribute to global environmental benefits.

A.8 *Knowledge Management.*

25. Knowledge management. The project document's Section 3, '*Project Objective, Outcome and Outputs'*, and in particular paragraphs 21 to 24, describe its approach to knowledge management. Financial aggregation transactions are currently characterized by a lack of information and transparency on latest practices, deal structures, and deal pricing. Information is typically fragmented and hard to come by. The CAP will act as a centralized, global depositary for high-quality technical data and research. Information gained from the CAP's in-country initiatives will be extracted, analysed and developed into suitable knowledge products, ready for dissemination to stakeholders at national, regional and global level. At the global level, the CAP will engage in the following knowledge management activities:

- It will produce a flagship, annual 'State of the Low-Carbon Aggregation Markets' report
- It will commission specialized research, for example on good practice in SPV structuring.
- It will develop a global database of financial aggregation transactions.
- It will develop a library of case studies and tool-kits, both in-house and from relevant third party activities. In-house materials will draw from CAP's own showcase transactions and in-country initiatives.

Where possible, partnerships, for example with academic institutions, will be pursued on research and data gathering.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 *Consistency with National Priorities.*

26. Consistency with National Priorities. The selection of countries and sectors for CAP's in-country initiatives will be made early in project implementation. Alignment and consistency with relevant national strategies and plans will be an important requirement. Once the country/sector is selected, ongoing alignment will be verified through the market assessment and CAP action plans.

C. DESCRIBE THE BUDGETED M &E PLAN:

27. M&E approach. The project document's Section 6, 'M&E plan', provides a detailed description of the monitoring and evaluation to be undertaken during the project. M&E activities will follow standard UNDP and GEF M&E policies and guidelines. Details of indicators, baseline values and targets are presented in the results framework in Annex 1 to this document. A summary of the envisaged M&E activities is provided in the following table.

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget[2] (US$)	Time frame
Inception Workshop	Project Manager	None	Within two months of project document signature
Inception Report	Project Manager	None	Within two weeks of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	Project Manager	None	Quarterly, annually
Monitoring of indicators in project results framework	Project Manager, CBI	None	Annually
GEF Project Implementation Report (PIR)	Project Manager, CBI and UNDP-GEF team	None	Annually
Monitoring of environmental and social risks, and corresponding management plans as relevant	Project Manager	None	On-going
Project Board meetings	Project Board Project Manager	None	At minimum annually
Independent Mid-term Review (MTR) and management response	Project Manager and UNDP-GEF team	USD 24,000	Start: 15 months into implementation. End: 18 months
Terminal GEF Tracking Tool	Project Manager	None	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE) included in UNDP evaluation plan, and management response	UNDP Country Office and Project team and UNDP-GEF team	USD 40,000	At least three months before operational closure
TOTAL indicative COST		**UNDP 64,000**	

[2] Excluding project team staff time and UNDP staff time and travel expenses.

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies[3] and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Adriana Dinu, Executive Coordinator UNDP-GEF		11/23/2016	Oliver Waissbein, Energy Finance Specialist	+1 212 906 3637	oliver.waissbein @undp.org

[3] GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

ANNEX A: PROJECT RESULTS FRAMEWORK.

This project will contribute to the following Sustainable Development Goal (s): *SDG 7: Affordable and Clean Energy*					
This project will be linked to the following output of the UNDP Strategic Plan: Output 1.5: Inclusive and sustainable solutions adopted to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy)					
	Indicator	**Baseline**	**End of Project Target**	**Source:**	**Assumptions**
Project Objective: ***To promote the scale-up of financial aggregation for small-scale, low-carbon energy assets in developing countries***	*Direct impact:* USD value of financially closed CAP showcase transactions	0 CAP showcase transactions	USD 30 million[4]	Transaction documentation	Showcase transactions will be advanced in partnership with the private sector/and or development banks.
	Direct impact: Lifetime GHG emission reductions from financially closed CAP showcase transactions	0 CAP showcase transactions	266,118 tC02e [7]	Transaction documentation	
	Direct impact: number of individuals or businesses benefiting from low-carbon energy as a result of financially closed CAP showcase transactions. Disaggregated by gender.	0 CAP showcase transactions	31,250 individuals, of which 15,625 are women <u>or</u> 60 businesses[7]	Transaction documentation	
Component/Outcome 1 ***Increased awareness, exchange of information and engagement in financial aggregation for small-scale, low-carbon energy activities in developing countries.***	Survey score conveying stakeholders' assessment of CAP's awareness raising	0 CAP awareness raising activities	75% of stakeholders state 'satisfied' or 'very satisfied'	Online surveys	
	Survey score conveying stakeholders' assessment of CAP's global knowledge products	0 CAP global knowledge products	75% of stakeholders state 'satisfied' or 'very satisfied'	Online surveys	
	CAP global working group meetings	0 meetings annually	4 well-attended meetings held annually	Meeting minutes	
Component/ Outcome 2 ***Financial closure of three financial aggregation transactions for small-scale, low carbon energy activities in developing countries***	Financially closed CAP showcase transactions	0 CAP showcase transactions	4 showcase transactions supported	Transaction documentation	
Component/ Outcome 3 ***The market architecture and environment for replication and scale-up of financial aggregation transactions for small-scale, low-carbon energy is enhanced in three developing countries***	CAP national working groups	0 meetings annually	4 well-attended meetings held annually in each in-country initiative	Meeting minutes	
	Endorsement letters by relevant stakeholders conveying positive assessment of impact of CAP's market development activities	0 CAP market development activities	3 endorsement letters in each in-country initiative	Endorsement letters	.

[4] Project objective targets presented here are based on assumptions. Showcase transactions for each in-country initiative will only be identified later during project implementation. This will determine the size of transactions, low-carbon technology types and associated baseline technologies. Beneficiaries will also be a function of the low-carbon technology type. The USD 30 million project target shown in the table is for a total of 3 showcase transactions, with a conservative assumption that each transaction amounts to an average USD 10m in size. The tC02e target used here is based on a number of assumptions, including a solar PV technology and a combined cycle gas baseline. The individual or business beneficiaries assumes average household rooftop solar PV systems of 3kW, and average C&I rooftop solar PV systems of USD 500,000 per system. Average household size of 5 individuals. All of these estimates will be replaced with empirical data during project implementation. Sources: IRENA, Power to Change (2016); UNDP, DREI Tunisia (2014).

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Response to comment from the GEF Secretariat at PIF stage.

5 b) A major co-financing partner is the IADB, in particular for the structuring and financial closure of transaction demonstrations in selected recipient countries in Component 4. This is sufficient at PIF stage, however, for CEO endorsement, it would be advantageous for the overall efficiency and effectiveness of the project to identify additional co-financing and partners to strengthen this component and enhance its reach even further.

Please see this document's section A.1.4, '*Incremental/additional cost reasoning and co-financing'*, for an overview of the co-financing secured at the CEO Endorsement Request stage. At the PIF stage, IDB had provided USD 50,000,000 in indicative co-financing. Now, at this CEO endorsement stage

- IDB has confirmed the USD 50,000,000 in co-financing in the form of loans.
- This has now been strengthened by matching equity co-financing from MDG Innova Capital totaling USD 30,000,000 to 60,000,000.
- In India, a first potential partner, EESL, has confirmed co-financing of USD 5,000,000

UNDP and CBI are confident of aligning further partners for the in-country initiatives and showcase transactions during project implementation.

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS[5]

A. Provide detailed funding amount of the PPG activities financing status in the table below:

PPG Grant Approved at PIF: **$50,000**			
Project Preparation Activities Implemented	***GETF/LDCF/SCCF/CBIT Amount ($)***		
	Budgeted Amount	***Amount Spent Todate***	***Amount Committed***
Consultants for project design	$44,500.00	$20,662.50	$23,837.50
HACT assessment of Climate Bonds Initiative	$5,500.00	0	$5,500.00
Total	$50,000	$20,662.50	$29,337.50

PPG activities will continue into the first year of implementation with the further elaboration and selection of countries/technologies for the in-country initiatives.

5 If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities. Agencies should also report closing of PPG to Trustee in its Quarterly Report.