



GEF-6 REQUEST FOR PROJECT ENDORSEMENT/APPROVAL

PROJECT TYPE: Full-sized Project

TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title: Catalyzing Environmental Finance for Low-carbon Urban Development			
Country(ies):	Bosnia and Herzegovina (BiH)	GEF Project ID: ¹	9151
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5646
Other Executing Partner(s):	Ministry of Foreign Trade and Economic Relations of BiH (MOFTER); Ministry of Spatial Planning, Construction, and Ecology of Republic Srpska (MSPCE RS); Ministry of Environment and Tourism of Federation of BiH (MET F BiH); Fund for environmental protection of FBiH (EF FBiH); The Environmental Protection and Energy Efficiency Fund of RS (EF RS)	Submission Date:	July 20, 2017
GEF Focal Area (s):	Climate Change	Project Duration (Months)	60
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/> Corporate Program: SGP <input type="checkbox"/>		
Name of Parent Program	N/a	Agency Fee (\$)	225,150

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

Focal Area Objectives/Programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
CCM-2 Program 3	Policy, planning and regulatory frameworks foster accelerated low GHG development and emissions mitigation Financial mechanisms to support GHG reductions are demonstrated and operationalized	GEFTF	2,370,000	42,050,627
Total project costs			2,370,000	42,050,627

B. PROJECT DESCRIPTION SUMMARY

Project Objective: to leverage investment in low-carbon urban development (LCUD) in BiH						
Project Components/Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co-financing
Component 1: Innovative Financing Mechanisms for Low-Carbon Urban Development (LCUD)	TA	Outcome 1.1 Strengthened public capacities to programme and monitor environmental finance for LCUD	1.1: Regulations for polluter pays principle developed 1.2: Relevant institutions experienced with innovative finance options for LCUD (40 staff EF and ministry staff trained, and 100	GEF	800,000	430,000

¹ Project ID number remains the same as the assigned PIF number.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#) and [CBIT programming directions](#).

³ Financing type can be either investment or technical assistance.

Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co- financing
			SME representatives informed about the ESCO-support mechanism) 1.3: Contractual and implementation arrangements for repayment mechanism established 1.4: Measurement, Reporting and Verification (MRV) for implementation of ESCO-support mechanism established			
	INV	Outcome 1.2 Increased and diversified sources and modalities of investment in LCUD <i>(resulting in consequential GHG emission reductions of 900,000 – 1,400,000 tCO₂)</i>	1.5: Financial mechanism (ESCO Funding window) established at EFs and capitalized with EF's own finance	GEF	0	24,420,627
Component 2: Low-carbon public buildings and utilities	TA	Outcome 2.1: Strengthened capacities of municipal managers, companies and utilities to monitor resource use, and prepare and implement infrastructural LCUD projects	2.1: EMIS expanded to cover all types of public facilities and resource use in public utilities (1,500 buildings) 2.2: Municipal staff trained and equipped to apply EMIS (1,500 end-users trained) 2.3: SEAPs and/other relevant municipal planning documents (15) prepared to scale-up piloted investment	GEF	170,000	2,000,000
	INV	Outcome 2.2: Reduced GHG emissions from pilot investment in LCUD <i>(400,000 tCO₂ over the LCUD investment lifecycle)</i>	2.4: LCUD investment projects (45) in public facilities and utilities implemented	GEF	650,000	10,300,000
Component 3: Low-carbon waste management and logistics (transport)	TA	Outcome 3.1: Reduced GHG emissions from improved waste management system as a result of waste minimization	3.1: MRV system for waste sector developed, institutionalized and legally recognized 3.2: Municipal managers, and Environmental Fund and Environmental Ministry's staff trained	GEF	400,000	4,041,429

Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co- financing
		Outcome 3.2: Reduced GHG emissions from improved waste management system as a result of waste collection route optimization (900 tCO ₂ /year directly and 4,500 tCO ₂ /year consequentially)	and equipped to improve and monitor the waste management system (55 managers and staff) 3.3: Reformed waste fee system introduced 3.4 Green logistics scheme for municipal waste recycling designed and piloted in 4 municipalities			
Component 4: National and sectoral policies, institutional coordination and awareness raising on LCUD	TA	Outcome 4.1: LCUD-related policies adopted and institutional coordination strengthened Outcome 4.2: Increased awareness of urban dwellers regarding LCUD	4.1: Harmonized environmental-related rules and regulations developed for LCUD 4.2: National awareness-raising campaign conducted (reaching out to at least 750,000 urban citizens)	GEF	250,000	400,000
Subtotal					2,270,000	41,592,056
Project Management Cost (PMC) ⁴				GEF	100,000	458,571
Total project costs					2,370,000	42,050,627

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 (\$)
Recipient Government	Fund for Environmental Protection and Energy Efficiency of Republic of Srpska	Grant	11,400,000
Recipient Government	Environmental Fund of the Federation of Bosnia and Herzegovina	Grant	26,150,627
GEF Agency	UNDP	Grant	4,500,000
Total Co-financing			42,050,627

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

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁵

Provide the expected project targets as appropriate.

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% 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.

⁵ Update the applicable indicators provided at PIF stage. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
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)	400,000 tCO _{2eq} – direct Between 900,000 and 1,400,000 tCO _{2eq} – consequential
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN WITH THE ORIGINAL PIF⁶

A.1. *Project Description*. Elaborate on: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, GEF focal area⁷ strategies, with a brief description of expected outcomes and components of the project, 4) [incremental/additional cost reasoning](#) and expected contributions from the baseline, the GEFTF, LDCF, SCCF, CBIT and [co-financing](#); 5) [global environmental benefits](#) (GEFTF) and/or [adaptation benefits](#) (LDCF/SCCF); and 6) innovativeness, sustainability and potential for scaling up.

1) the global environmental problems, root causes and barriers that need to be addressed

While there have been no changes in alignment with the original PIF, additional information and analysis has been provided on the environmental problems in the UNDP Project Document, Section I Part I ‘Development Challenge’ and include:

- A summary of sources and trends in urban GHG emissions in BiH. Technical Annex I describes urban GHG emission analysis in more detail.
- A description of existing strategic and policy framework for environmental protection and climate change mitigation in relation to urban development. Technical Annex II elaborates on the status and level of climate change mitigation ambitions (local GHG emission reduction targets) in the form of Sustainable Energy Action Plans (SEAPs) developed and adopted by the municipalities in BiH.

Regarding barriers to be addressed, an overview has been provided of key barriers to investment in low-carbon urban development (LCUD) grouped into three main categories: a) financial, including limited access to finance and low financial returns; b) insufficient local capacities; and c) lack of a broader enabling environment. The UNDP Project Document, Technical Annex III provides more detailed analysis and description of the identified barriers.

2) the baseline scenario or any associated baseline projects

The description of the baseline scenario and the associated baseline projects has been updated in the UNDP Project Document, Section I Part III ‘*Results and Partnerships* (‘Partnerships’)’ and Technical Annex III. Details have been provided on the resources, capacity and financing that are committed by a project partners – over the five-year time frame of the project – to address the key barriers to investment in LCUD in BiH, namely:

- UNDP Green Economic Development (GED) project which, includes support for the roll-out and operationalization of the EMIS and will provide \$3,458,571 in co-financing in the form of technical assistance and investment in priority LCUD measures under Component 2, as well as for Project Management Costs (PMC);
- Environmental Protection and Energy Efficiency Funds of FBiH and RS (EFs) are the key co-financing partners of the project, which will contribute \$26,150,625 and \$11,400,000 respectively to capitalize the proposed financing mechanism under Component 1, as well as to implement investment in low-carbon public buildings, utilities and waste management under Components 2 and 3.

3) the proposed alternative scenario, GEF focal area strategies, with a brief description of expected outcomes and components of the project

The alternative scenario remains consistent with that described in the PIF. Additional details have been provided, including a full description of the alternative scenario, and a detailed description of outcomes and outputs, are in the accompanying UNDP Project Document in Section II ‘Strategy’ and Section III ‘Results and Partnerships’ under the heading ‘Expected Results’.

⁶ For questions A.1 –A.7 in Part II, if there are no changes since PIF, no need to respond, please enter “NA” after the respective question.

⁷ For biodiversity projects, in addition to explaining the project’s consistency with the biodiversity focal area strategy, objectives and programs, please also describe which [Aichi Target\(s\)](#) the project will directly contribute to achieving.

The alignment with the GEF focal area strategy remains the same. The project's overall focus and approach also remain the same. The project consists of four inter-linked Components: the first Component establishes the financial mechanism for LCUD and is supported by the other three complementary Components. Under Component 2 and 3, the project will work at the local level with relevant public authorities to build their capacities for identifying, carrying out and monitoring low-carbon projects in key urban GHG emitting sectors, public facilities and utilities (Component 2) and waste management and logistics/transport (Component 3). Under Component 4, at the entity/sub-national level, the project will work with relevant public authorities to design and adopt policies and regulations supportive to the scale-up of low-carbon investments. In addition, a national awareness raising and advocacy campaign will be conducted to increase public support of, and demand for, low-carbon urban living.

Based on the work undertaken during the project development stage, and in response to STAP and GEF Council comments, the following modifications have been made:

Original PIF	Changes proposed at CEO Endorsement	Rational for changes
Component 1: Innovative Financing Mechanisms for Low-Carbon Urban Development (LCUD)		
Project Output: At least 30 staff of the Environmental Funds (EFs) trained on innovative finance options for LCUD	Output 1.2: Relevant institutions experienced with innovative finance options for LCUD (40 staff EF and ministry staff trained, and 100 SME representatives informed about the ESCO-support mechanism)	The number of relevant staff at the EFs has increased since the PIF approval and is projected to grow further in line with the foreseen expansion of EFs' programming, hence the target "EFs' staff trained" has been increased.
No relevant outputs in the original PIF	New outputs introduced: Output 1.1: Regulations for polluter pays principle developed Output 1.3: Contractual and implementation arrangements for repayment mechanism established	Achievement of intended Outcome 1.2 "Increased and diversified sources and modalities of investment in LCUD" requires addressing several barriers, in particular a) operationalization of the polluter pays principle; and b) working out legal, contractual and implementation arrangements for the ESCO-based model of LCUD investment. Therefore, additional TA-related outputs have been introduced and the TA budget of Component 1 has been increased to correspond with the expanded scope of work.
Outcome: Increased and diversified sources and modalities of investment in LCUD (resulting in annual GHG emission reduction of at least 15,000 tCO ₂ /year) GEF (INV): \$ 600,000 Co-financing: \$13,200,000	Outcome 1.2: Increased and diversified sources and modalities of public investment in LCUD (resulting in consequential GHG emissions reductions of 900,000 – 1,400,000 tCO ₂) GEF (INV): - Co-financing: \$24,420,625	Component 1 will support the establishment of an innovative financial mechanism for LCUD investment. GEF resources will not be used for its capitalization (originally foreseen as INV); rather it will be capitalized with the EFs' resources. GEF resources will leverage co-financing by providing related TA and addressing non-financial barriers. Given that the mechanisms will be capitalized with EFs' own resources at a scale much larger than originally envisaged in the PIF, the GHG emissions reductions impact of Component 1 will be much larger than estimated at PIF approval.
Project Output: Performance-based financing scheme for energy, waste and sustainable transport projects established and capitalized Project Output: Revolving fund set-up for energy efficiency/renewable energy and other bankable LCUD projects	Output 1.5: Financial mechanism (ESCO Funding window) established at EFs and capitalized with EF's own finance	Instead of two over-lapping outputs, as defined at PIF (i.e. performance-based financing for LCUD and revolving fund for EE/RE projects), one financial mechanism is proposed. This mechanism is based on the ESCO model and is both performance-based (payments to ESCO are linked to actual GHG savings/performance); and operates on a revolving basis, since the cash value of achieved energy saving will be paid back to EFs and accumulated for subsequent investment.

Original PIF	Changes proposed at CEO Endorsement	Rational for changes
Component 2: Low-carbon public facilities and utilities		
Component 2: Low-carbon public buildings and utilities	Component 2: Low-carbon public facilities and utilities	For clarity, the title of the component has been adjusted.
Project Output: Energy and resources save, GHG emissions reduced from pilot investment projects: at least 22,000 tCO ₂ in direct GHG emission reduction GEF (INV): \$550,000 Co-financing: \$5,000,000	Outcome 2.2: Reduced GHG emissions from pilot investments in LCUD (400,000 tCO ₂ over the LCUD investment life-cycle directly) GEF (INV): \$650,000 Co-financing: \$10,300,000	Estimates of direct GHG emissions reductions have been recalculated based on a) detailed technical and economic analysis of the potential LCUD projects, investment costs and expected GHG benefits; b) confirmed co-financing from partners. Consequently, and in line with relevant GEF-STAP methodology, much higher GHG emission reductions will be achieved directly with GEF investment and co-financing. While the total GEF contribution to this Component remains the same, the GEF share of Investment (INV) support has also been increased in proportion to the increase in co-financing.
Component 3: Low-carbon waste management and logistics		
Component 3: Low-carbon transport and logistics for waste management	Component 3: Low-carbon waste management and logistics (transport)	For clarity, the title of the component has been adjusted: transport is covered under logistics. i.e. low-carbon alternatives for waste transportation, such as alternative fuels, optimized routing, capacity and load factors, use of ICT.
Project Output: Feasibility study to optimize and reduce carbon footprint of regional landfills prepared and selected low-carbon transport-waste management solutions piloted	Output 3.1: MRV system for waste sector developed, institutionalized and legally recognized	The project will not support activities related to re-organization of the landfills in BiH as this work has now been completed under the WB-funded project which is now ended. The need for establishment of a robust MRV system (solid waste and recycling database) for municipal waste management was identified as a prerequisite for the identification, prioritization and implementation of appropriate climate change mitigation projects in the sector, in particular as it concerns logistics of waste management. This system will ensure that the information is available to subsequently plan and optimize performance, and to reduce the carbon footprint. The low-carbon transport-waste management solutions will be piloted under Output 3.4
Project Output: At least 20 municipal waste managers trained and equipped with skills and tools to improve and monitor waste management system	Output 3.2: Municipal managers, and Environmental Fund and Environmental Ministry's staff trained and equipped to improve and monitor the waste management system (55 managers and staff)	The numerical target for Output 3.2. has been increased reflecting the larger training needs among the targeted municipalities,
Project Output: Low-carbon transport strategy for regional landfills prepared and included in the Waste Management Strategy and co-financing enabled for its implementation	Output 3.4 Green logistics scheme for municipal waste recycling designed and piloted in 4 municipalities	Based on stakeholder consultations, the scope of Output 3.2 has been expanded to include not only "low-carbon transport strategy" (PIF) for waste collection but also feasibility studies for low-carbon transport and logistics in each of the selected municipalities, including consideration, assessment and testing of various low-carbon alternatives, such as alternative fuels, optimized routing, capacity and load factors, use of ICT.

Original PIF	Changes proposed at CEO Endorsement	Rational for changes
Component 4: National and sectoral policies, institutional coordination and awareness raising on LCUD		
Project Output: National/sub-national/sectoral policies and regulations to promote best low-carbon practices and technologies in urban environment drafted. Project Output: Institutional coordination on low-carbon urban development and spatial planning improved	Output 4.1: Harmonized environmental-related rules and regulations developed for LCUD	The two outputs have been merged into one to streamline the project's efforts: the project will harmonize rules and regulations, and ensure institutional coordination within the environmental sector across environmental authorities in BiH for LCUD
Project Output: National awareness –raising campaign on LCUD conducted reaching out to at least 50% of BiH urban population (1,000,000 people)	Output 4.2: National awareness–raising campaign conducted (<i>reaching out to at least 750,000 urban citizens</i>)	The urban population of BiH is estimated to be 1.5 million per UN and other data sources ⁸ , therefore the 50% target has been corrected as 750,000.

4) Incremental cost reasoning and expected contributions from the baseline, the GEFTE and co-financing

The incremental cost reasoning remains as that articulated in the PIF. Funding from the GEF is to be used to overcome systemic barriers to implementing LCUD in BiH, specifically those barriers related to access to finance, as well as inadequate capacity and awareness constraints in the sector. Without the GEF investment in the proposed project, the *business-as-usual scenario* for the investment in low-carbon urban development in BiH is one where: (i) investment in LCUD projects are scarce and limited only to grants regardless of their potential to generate economic and financial savings and ensure returns; (ii) municipal managers have limited data, capacities and skills to identify and implement bankable LCUD projects, as well as very restricted borrowing capacity; (iii) private sector has also limited capacity to invest in LCUD projects on a larger scale; and (iv) national policy framework for LCUD is fragmented, lacks coordination and coherence among various levels of governance in BiH.

The *alternative scenario* that the project seeks to contribute to is characterised by: (i) creating alternative financing paradigm for LCUD investments which is characterized by larger and more diversified source of public finance for LCUD along with more cost-effective allocation of public finance (grants) increasingly in combination with non-grant financing; (ii) strengthening capacities of municipal managers to identify, prioritize and carry out LCUD projects, as well as to secure means for their implementation; (iii) creating a conducive environment for private sector investment in LCUD; and (iv) harmonization and alignment of the strategic and policy framework for LCUD at state and entity levels.

The project presents an efficient use of GEF funding to reduce GHG emissions in the urban sector for several reasons:

- The sector has a high potential for cost-effective mitigation efforts;
- The project offers entry points for GHG emission reduction in the waste and waste logistics sectors;
- Through its support to establishment of the financial mechanism for LCUD the project will generate large and lasting effects on emissions by substantially scaling-up investment in the sector;
- The project will leverage more than \$ 40,000,000 million in co-financing; i.e., a co-financing ratio of 17:1.

⁸ 40.3 % of the population is urban (1,528,404 people in 2017) <http://www.worldometers.info/world-population/bosnia-and-herzegovina-population/> - processes data collected from the United Nations Population Division.

Urban population: 39.8% of total population (2015) - http://www.indexmundi.com/bosnia_and_herzegovina/demographics_profile.html Source: [CIA World Factbook](#)

Co-financing amounts have increased since what was included in the PIF, and the table below notes the co-financing sources and amounts confirmed at the CEO Endorsement stage.

Co-financier	At PIF (US\$)	At CEO Endorsement (US\$)	Comments
Fund for environmental protection and energy efficiency of RS	1,500,000	11,400,000	Both Environmental Funds have significantly scaled-up their financial commitment for the project due to its high relevance to EFs' mandate, objectives and needs. The co-financing includes capitalization of the ESCO Fund under Component 1, as well as investment in LCUD projects in buildings and waste sector under components 2 and 3.
Environmental Fund of FBiH	13,000,000	26,150,627	
UNDP	4,500,000	4,500,000	
Municipalities	900,000	To be leveraged	Participating municipalities and LCUD projects will be selected on a rolling basis and co-financing will be essential criteria. However, other criteria such as the adoption of SEAPs, gender mainstreaming in project design, etc. will also be important. Securing co-financing commitments ahead of LCUD project identification and selection could undermine the principles of competition and transparency.
World Bank Waste Management Project	4,000,000	N/a	During the time between project design (2015) and the beginning of implementation (2017), the WB Waste Management Project has been completed. However, alternative co-financing has been secured from EFs to cover the gap, specifically for component 3 on low-carbon waste management.
TOTAL	23,900,000	42,050,627	

5) Global Environmental Benefits

The UNDP Project Document elaborates on the global environmental benefits, including methodology, calculations and targets in Section IV 'Feasibility'. Targets for global environmental benefits are provided in the Project Document Section VI, 'Project Results Framework'. See also the GEF CCM Tracking Tool (Annex D), and the completed GEF STAP calculation tool for details on how these targets were derived (Technical Annex IV).

At PIF approval, direct GHG emissions reductions were estimated as 22,000 tCO₂ from the urban building sector and consequential (formerly indirect) emissions of at least 670,000 tCO₂ and ~6,000 tCO₂/year from nationwide replication of low-carbon transport/logistic scheme for waste management. Direct post-project emission reductions were estimated as 150,000 tCO₂. However, at CEO Endorsement, due in part to additional co-financing, both direct and consequential emissions are higher as summarized in the table below.

GHG emissions reductions (tCO ₂)	2017-2022	2023-2033
Direct	400,000	
Consequential (bottom-up))		922,000
Consequential (top-down)		1,400,000

6) Innovativeness, sustainability and potential for scaling up

Innovation: By supporting the design of an innovative financing mechanism for LCUD investment, the project will facilitate a gradual shift from the predominantly grant-based financing of municipal investments towards an ESCO-based model. With this new model, the need for public subsidies will be gradually reduced and their use will be limited only to cases when such support is needed to address specific structural, technical and financial barriers to private investors (as opposed to current model whereby all LCUD investments are publicly financed).

Sustainability: GEF support will be fully embedded in the regular operations of the EFs, the two environmental finance institutions in BiH, thus ensuring sustainability of the proposed financial mechanisms for infrastructural LCUD projects. Specifically, the project's sustainability will be ensured by building the capacities of relevant partners at both the local and entity level to identify, prepare and implementing infrastructural LCUD projects. The project will create an enabling policy and regulatory framework for private investment in the sector.

Scaling-up: The project's objective is to scale-up investment in LCUD, which will continue after the project's end. All four project components will contribute to this objective as follows:

- Component 1 will work with EFs to help scale-up their programming budgets for LCUD by a factor of 3 to 4 (via expanding and diversifying their revenues and establishing of the new financial mechanism);
- Components 2 and 3, respectively, will identify and demonstrate feasible LCUD investments in public buildings/utilities and waste management sectors which can be easily scaled-up and financed by EFs and the private sector;
- Component 4 will create harmonized (at entities and local levels) policy and investment framework for LCUD thus establishing a single economic market space and rules for investors.

A.2. Child Project? If this is a child project under a program, describe how the components contribute to the overall program impact.

N/a

A.3. Stakeholders. Identify key stakeholders and elaborate on how the key stakeholders engagement is incorporated in the preparation and implementation of the project. Do they include civil society organizations (yes ☒ /no ☐)? and indigenous peoples (yes ☐ /no ☒)?⁹

During the project preparation stage, a stakeholder analysis identified key stakeholders and assessed their prospective roles and responsibilities in the context of the project. The consultation workshop that presented the project design involved 41 representatives of different institutions (including different governmental levels, international organizations, CSOs, SMEs, etc.). Of note was that 20 out of 41 participants were women.

Beneficiaries of the completed EE UNDP projects were consulted as well. The end-users of two public sector buildings (Kindergarden, Bosnaska Krupa and Hrvatska Bolnica Nova Bila, Nova Bila), which were retrofitted in 2014, have been visited with the aim to determine the impacts of energy efficiency investments in these two public sector buildings. Local communities' representatives have expressed satisfaction with regard to energy and cost savings, which resulted in additional energy efficiency investments and related investments.

It should be noted that BiH is made up of three 'constituent' peoples – Bosniaks, Croats and Serbs – along with smaller minority groups, the largest of which are the Roma. There are no "indigenous people" as such in BiH, as defined by international conventions and protocols. However, several relevant CSOs will be closely involved in project implementation.

⁹ As per the GEF-6 Corporate Results Framework in the GEF Programming Directions and GEF-6 Gender Core Indicators in the Gender Equality Action Plan, provide information on these specific indicators on stakeholders (including civil society organization and indigenous peoples) and gender.

The table below lists the key stakeholder organisations, and provides a brief summary of their mandates and roles in supporting or facilitating the implementation of project activities.

<i>Stakeholder</i>	<i>Mandate and anticipated role in the project</i>
Public sector	
The Environmental Funds of FBiH and RS (EFs)	The Environmental Funds' in BiH are project implementation partners whose role is to develop capacities and gradually contribute more and more to project implementation activities as their skills raise during project implementation. Environmental Funds' representatives will work on a daily basis together with UNDP project staff, where technical assistance in the field of LCUD financing, project appraisal, MRV. Environmental Funds will gradually absorb the assistance in the form of consultative, advisory and technical support, through annual training for Fund staff, advisory support and other forms of capacity building.
Other relevant public authorities at entity and state level	The project will work with the Ministry of Foreign Trade and Economic Relations of BiH (MOFTER); as well as the Ministry of Spatial Planning, Construction, and Ecology of Republika Srpska (MSPCE RS), the Ministry of Environment and Tourism of Federation of BiH (MET FBiH) and the authorities in Brčko district with harmonization of relevant state/entity level policies and regulations on low-carbon urban development, and institutional coordination within the environmental sector across relevant authorities.
Local authorities	Local authorities (municipalities and cantons) will be key partners in project implementation, they will be directly involved in all project activities under Components 2 and 3, i.e. identification, development, implementation, and monitoring of LCUD investment in partnership with relevant state-level authorities, private sector and civil society.
Civil Society	
Regional Education and Information Center for Sustainable Development in South-East Europe (REIC), Center for Development and Support (CRP), Center for Education and Raising Awareness of Energy Efficiency (Energis)	CSOs will be invited to collaborate in the design and implementation of public outreach activities under Component 4
Private sector	
Small and Medium Enterprises (SMEs)	SMEs are important delivery mechanisms for infrastructural LCUD projects' design and implementation, and the key driver for market transformation. SMEs are also poised to benefit from increased demand for works and services related to LCUD projects design and implementation, and would respond with employing more staff to meet that increase. SMEs can be an important generator of new employment, which is a key development issue for BiH, where the unemployment rate is extremely high (currently official unemployment rate of 27.5%, as per ILO methodology ¹⁰). Under Component 2, preparation of energy audits and implementation of infrastructural LCUD projects will be conducted by local SMEs. SMEs will also be important stakeholders in the process of MRV set-up for the waste sector

A.4. Gender Equality and Women's Empowerment. Elaborate on how gender equality and women's empowerment issues are mainstreamed into the project implementation and monitoring, taking into account the differences, needs, roles and priorities of women and men. In addition, 1) did the project conduct a gender analysis during project preparation (yes ☒ /no ☐)?; 2) did the project incorporate a gender responsive project results framework, including sex-disaggregated indicators (yes ☒ /no ☐)?; and 3) what is the share of women and men direct beneficiaries: women 60%, men 40%.

Consistent with what was noted in the PIF, the gender analysis conducted during project development identified areas where gender equality and women's empowerment issues can be mainstreamed in the project's design, implementation

¹⁰ BiH Agency for Statistics, 2017

and monitoring. The UNDP Project Document summarizes the how the project is mainstreaming gender (Section III. 'Results and Partnerships', Section iv 'Mainstreaming gender') and provides the 'Gender assessment and action plan' (Annex L).

The Project Results Framework (Annex A) is gender responsive and includes:

- gender-specific activities, such as working to maximize women's participation in capacity-development training
- targets for women's participation in capacity building
- awareness-raising strategies that will take into account the differentiated roles of men and women in LCUD
- project's monitoring and evaluation budget supporting the collection of gender-disaggregated data.

The project will monitor the share of women and men who are direct project beneficiaries, and it will also monitor the nature of these benefits. Project targets and activities will be monitored in project reporting, both in annual reports and in the mid-term evaluation and the terminal evaluation.

A.5 Risk. Elaborate on indicated risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, the proposed measures that address these risks at the time of project implementation. (table format acceptable):

Table A.5.1: Project Risk Overview

Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
The risk that a <u>consensus between BiH entities and state level</u> regarding the design of harmonized policies and financial support mechanism for LCUD is not reached	<i>Political</i>	Probability – 3 Impact - 2	Recognizing the complex administrative and political structure in BiH, the project will work with and support both entities, FBiH and RS separately at first to design the financial support mechanism for LCUD, which is appropriate for each entity. To ensure harmonized approaches among entities, the project will work with MOFTER and facilitate inter-entity dialogue and exchange of relevant experiences and approaches.	UNDP CO	Medium
<u>Complex administrative and governance structure</u> in BiH coupled with low capacities of public authorities, in particular at local level, poses risks related to the ability of relevant bodies to undertake and enforce required policy and regulatory changes, in particular as far as creation of enabling environment for private investment in low carbon public facilities is concerned.	<i>Regulatory</i>	Probability – 3 Impact - 3	Design of the project strategy and its implementation structure has taken into account BiH's administrative complexities and the need to address policy and regulatory risk. Activities outlined below address this risk: <ul style="list-style-type: none"> • At the entity level, Component 1 will strengthen capacities of the two EFs to deliver on their mandate and facilitate investment in infrastructural LCUD projects, including developing and adopting required entity-level policy and regulations. • At the local/municipal level, Activity 2.4 will support the preparation, upgrade and adoption of municipal SEAPs as a key policy instrument that establishes specific commitments at the local level for 	UNDP CO	High

Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
			<p>GHG emission reduction, energy saving and renewable energy application in cities. SEAPs are also important to ensure availability of local co-finance for the project, as budgetary allocations at the local level are directly linked to investment priorities.</p> <ul style="list-style-type: none"> At the national level, Component 4 will work with relevant entity authorities and MOFTER to facilitate inter-entity dialogue and harmonization and alignment of the pro-LCUD policies and regulations between the entities and Brcko district. <p>The fact that project will be directly implemented by UNDP will additionally help mitigate the risk because of UNDP's impartiality and ability to negotiate and reach consensus between the entities, as has been demonstrated during the project's design, which received full support of stakeholders at both entity and local levels across BiH.</p>		
<u>Financial risk</u> is related to the fact that the municipalities' and EFs' resources currently available to support LCUD investments are based on annual budget decisions, which can be subject to major changes as a result of eventual political changes and/or increased budget constraints.	<i>Financial</i>	Probability – 2 Impact - 4	The financial risks as they concern the implementation of the planned demonstration projects only are reduced by the formal co-financing letter obtained from the EFs to support the mentioned demonstration projects with at least \$ 40 million over the duration of the project. The risks will also be overcome by supporting EFs to diversify and strengthen their funding base, including the work on operationalization of the polluter-pay-principle and strengthening capacities to access international funding sources.	UNDP CO	Medium
<u>Technology risk</u> that due to technical failures of the equipment and/or software used for EMIS and/or for the targeted follow up LCUD investments, the trust of the key stakeholders and investors on EMIS and on the promoted measures is lost.	<i>Technology</i>	Probability – 1 Impact - 3	This risk is considered low because the targeted technologies are based on common and well-proven technologies, and the EMIS software and the rest of the system has already been tested and operational over several years not only in Croatia, where it was designed, but also in BiH.	UNDP CO	Low
<u>Environmental/ climate change risk</u> that global increase in temperature will reduce demand for energy (especially in winter) and therefore reduce the rationale for increased investments in energy-efficiency.	<i>Environmental</i>	Probability – 2 Impact - 2	This risk in terms of diminishing the rationality of the project is low because the municipalities do not use energy just for heating. Temperature increases in the near future, according to the most recent IPCC estimates even under	UNDP CO	Low

Description	Type	Impact & Probability	Mitigation Measures	Owner	Status
			the business as usual scenario, are not expected to be so high that they would completely remove the need for heating of the building stock in BiH during the winter time. In fact, the increased variability of temperatures may make the metering and automatic control of energy use even more important from both cost and energy savings points of view. Warmer summer months may also increase the demand for cooling. The project will also work closely with the UNDP-SCCF project addressing resilience issues at the municipal level to identify the most critical risks and potential measures to address them within the scope of the project.		

The project will be implemented according to UNDP's environmental and social policies to ensure minimisation of any environmental risks. The project has completed the standard UNDP social and environmental screening procedure (UNDP SESP in the Project Document's Annex F). The screening was undertaken to ensure that the project complies with UNDP Social and Environmental Standards. The overall risk category for this project is: Moderate.

An Environmental Impact Assessment (EIA) is not required for the envisaged type and scale of EE investments under this project according to relevant provisions of the following laws for FBiH and RS in field of environment protection:

- Law on Environmental Protection of Federation of B&H (Official Gazette of FBiH, no. 33/03);
- Law on Environmental Protection of Republika Srpska (Official Gazette of the Republika Srpska, no. 71/12);
- Regulation on plants and facilities for which environmental impact assessment is obligatory and plants that can be built and activated only if they have environmental permit (Official Gazette of FBiH no. 19/04)
- Regulation on plants and facilities that can be built and activated only if they have environmental permit (Official Gazette of the Republika Srpska" no. 7/06);
- The relevant cantonal regulations.

EE-RES related projects and activities in the building sector are not subject to EIA, nor is the issuance of environmental permit required for such projects. Retrofitting of building envelopes and associated works are classified as building 'maintenance', which eliminates the need for obtaining any kind of permits. Furthermore, in case of RES system installation with capacity below 1MW (only for combustion based) there is no need to obtain an environmental permit. Environmental and social grievances will be reported to the GEF in the annual PIR.

Over the course of the project, a UNDP risk log will be regularly updated in intervals of no less than every six months in which critical risks to the project have been identified. At the time of project formulation, strong political commitment from national as well as municipal authorities is evident which will limit a number of risks from materializing. Consistent involvement of a diverse set of partners, including local municipalities, community organizations and NGOs will further reduce these risks. Environmental and social grievances will be reported to the GEF in the annual PIR.

A.6. Institutional Arrangement and Coordination. Describe the institutional arrangement for project implementation. Elaborate on the planned coordination with other relevant GEF-financed projects and other initiatives.

(i) Institutional Arrangements

The project will be implemented following UNDP's Direct Implementation Modality (DIM), according to the Standard Basic Assistance Agreement between UNDP and the Government of B&H (SBAA of 7 December 1995), and the Country Program Action Plan (CPAP). The Implementing Partner for this project is UNDP. The Implementing Partner is responsible and accountable for managing this project, including the monitoring and evaluation of project interventions, achieving project outcomes, and for the effective use of GEF resources.

The implementation arrangements (DIM) have been chosen in view of and taking into account the following factors:

- a) Complex administrative structure of BiH, which is a complicated system of government with even the Presidency of BiH consisting of three members;
- b) Complex institutional structure in the public sector, whereby public infrastructure falls under hundreds of different jurisdictions;
- c) Complex policy and financing framework for public infrastructure;
- d) There is no entity in BiH with sufficient capacities and power of authority to ensure effective dialogue, coordination and synchronization of tasks between the two entities – the primary rationale for choosing UNDP as the lead Implementing Partner and DIM as the implementation modality.

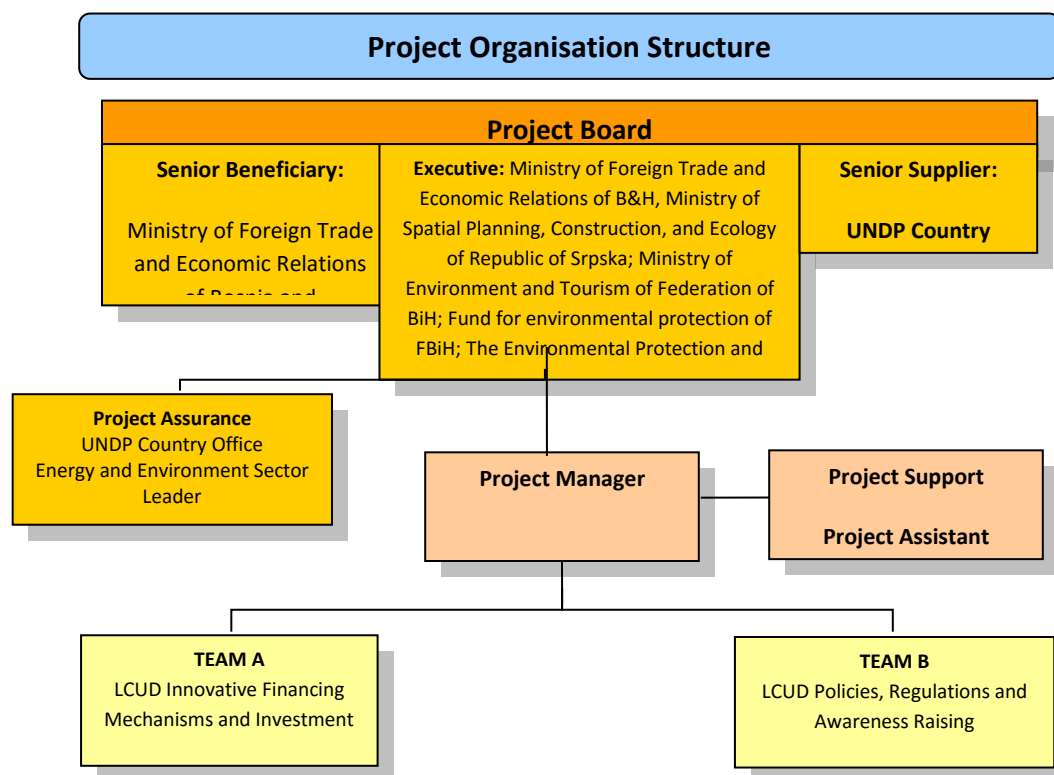
The Project Board (also called Project Steering Committee) is responsible for making, by consensus, management decisions when guidance is required by the Project Manager, including recommendation for UNDP/Implementing Partner approval of project plans and revisions. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure management for development results, best value money, fairness, integrity, transparency and effective international competition. In case a consensus cannot be reached within the Board, final decision shall rest with the UNDP Programme Manager. The terms of reference for the Project Board are contained in Annex E of the UNDP Project Document. The Project Board is comprised of the following institutions: Ministry of Foreign Trade and Economic Relations of B&H; Ministry of Spatial Planning, Construction, and Ecology of Republika Srpska; Ministry of Environment and Tourism of Federation of BiH; Fund for environmental protection of FBiH; The Environmental Protection and Energy Efficiency Fund of RS.

The Project Manager will run the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Board. The Project Manager function will end when the final project terminal evaluation report, and other documentation required by the GEF and UNDP, has been completed and submitted to UNDP (including operational closure of the project).

The project oversight and assurance role will be provided by the UNDP Country Office. In line with UNDP's Accountability Framework and Oversight Policy, UNDP BiH has put in place an Internal Control Framework for DIM projects to ensure their effective and independent oversight and quality assurance. In particular, the Energy and Environment Sector Leader will take primary responsibility for overseeing project implementation and regularly communicating the results of oversight work to relevant and concerned parties, the Government and other project partners. In addition, the Energy and Environment Sector Associate provides quality assurance of the implementation of the project and narrative, and financial reports on behalf of the Energy and Environment Sector. At the level of the Country Office, the Programme Resources Planning and Management Analyst and the Monitoring and Evaluation Specialist will provide additional guidance and assurance of implementation plans, including finance and collection, and communication of results. Where applicable, the UN Resident Representative and the Deputy Resident Representative as well as Heads of Units will ensure standard oversight and guidance. Additional quality assurance will be provided by the UNDP Regional Technical Advisor as needed.

Figure A.6.1 describes the relationships between the stakeholders and the staffing arrangements for the project team.

Figure A.6.1: Project Organisation Structure



(ii) Coordination

Project will build on and expand existing partnerships between UNDP, EFs and municipalities across BiH within the framework of the on-going multi-partner **UNDP Green Economic Development (GED) project** (2013-2018, US\$ 11.2 million). Through the GED project, UNDP supports the roll-out and operationalization of the EMIS throughout the country, aiming at sub-national/cantonal public sector facilities (educational, healthcare and administrative institutions). A key aspect of the GED project is the institutionalisation of energy management activities within public sector facilities, notably through the preparation of detailed energy audits and enabling building managers to monitor energy consumption through EMIS. The Project will leverage the achievements of GED project and will expand the EMIS database by covering all types of municipal facilities and resources use.

The project will work with several ministries under Component 4, at the entity/sub-national level, apart from the EFs. In particular, the project will work with the Ministry of Foreign Trade and Economic Relations of B&H (MOFTER); as well as the Ministry of Spatial Planning, Construction, and Ecology of Republika Srpska (MSPCE RS), the Ministry of Environment and Tourism of Federation of BiH (MET FBiH) and the authorities in Brčko district with harmonization of relevant state/entity level policies and regulations on low-carbon urban development, and institutional coordination within the environmental sector across relevant authorities. The project will also collaborate closely with the UNDP-led GEF-financed “Third National Communication (TNC)” project regarding the design and practical steps involved in the establishment of urban MRV systems for waste and energy management (Component 2 and 3). Through its support to expanded EMIS, the project will lay a solid foundation for systematic data collection at the local level, which can then be aggregated at the FBiH and RS levels, and feed in the national GHG inventory process and MRV.

The UNEP-GEF “Capacity Development for the Integration of Global Environmental Commitments into National Policies and Development Decision Making” project supports the establishment of central environmental information and monitoring system for key environmental indicators. The proposed UNDP-GEF project will concentrate on the local/municipal level, but will strive to ensure that local/municipal data-bases and monitoring process for energy and

waste sub-sectors specifically are compatible with and feed into the central system to be supported by the UNEP-GEF project.

Given the past activities related to energy efficiency in BiH, a Memorandum of Understanding on “Energy Efficiency Donor Coordination in BiH” was signed in 2012 defining the cooperation between donors and agencies working in the area of EE in BiH. UNDP will continue to create synergies and collaborate with GIZ’s “Energy Efficiency Consultancy BiH” project on various policy-level activities related to energy efficiency. The project will also build upon the work done under the WB “Energy Efficiency Project” which provides financing for energy efficient retrofits of public buildings (expected to be completed in 2017).

The project will also liaise closely with the GEF Sustainable Cities Integrated Approach Pilot (SC IAP), which is part of the GEF’s Integrated Approach Pilot (IAP) series, that aims to adopt a more holistic approach to sustainable city development. The SC IAP consists of two tracks: (i) city-level projects (23 cities with around US\$140 million total GEF grant funding) and (ii) a Global Platform for Sustainable Cities (GPSC) led by the World Bank (with US\$10 million GEF grant funding). While this project in BiH is not one of the city-level projects, the BiH project is liaising with the SC IAP. The GPSC is a knowledge platform that ties all of the participating SC IAP cities together by providing a collaborative space for both cities and a wide range of entities already working on urban sustainability issues. The project in BiH is liaising with the GPSC to get program updates from the Collaboration for Development (C4D) website. Project details have been shared so that the GPSC is able to provide relevant program materials and find synergies between the SC-IAP/GPSC and this project in BiH. UNDP may invite representatives of some of these projects or the GEF Secretariat to attend the closing workshop of the project in BiH, and to deliver presentations and disseminate their own materials. The project will actively use the GPSC for knowledge management, as noted in section A.8 below.

Additional Information not well elaborated at PIF Stage:

A.7 Benefits. Describe the socioeconomic benefits to be delivered by the project at the national and local levels. How do these benefits translate in supporting the achievement of global environment benefits (GEF Trust Fund) or adaptation benefits (LDCF/SCCF)?

In addition to contributing to global environmental benefits, the project will improve the access of local communities, including vulnerable communities, to clean, safe and affordable energy. The retrofitted public facilities will provide improved occupancy conditions: affordable, clean, adequate warmth in schools and hospitals; and improved indoor and outdoor air quality. The project will also support duty bearers in the public sector to improve the delivery of services to communities (e.g. through a set of capacity building interventions that will improve skills and competencies to design, implement and operate integrated fuel switch interventions and improved local design of programmes and policies).

The project will promote women’s participation in capacity building and awareness-raising through dedicated focus on gender-specific initiatives. It will provide market education and awareness to the public but especially to women about the positive effects on children’s health and safety of the retrofitted schools and hospitals. The project will seek to engage with NGOs, including women organisations, to become agents of change and promote the positive results of the energy efficiency measures in terms of environmental, social and economic benefits.

Overall, the project will improve conditions for occupants and users of public facilities, most of whom are women and children; reduce local pollution and improve public health; and drive local economic growth and employment. The cumulative socio-economic benefits related to the proposed low-carbon solutions in public facilities will in turn secure public buy-in and recognition of the importance of climate change mitigation measures for local community development thus supporting the achievement and sustaining global environment benefits resulting from GEF investment.

A.8 Knowledge Management. Elaborate on the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives (e.g. participate in trainings, conferences, stakeholder exchanges, virtual networks, project twinning) and plans for the project to assess and document in a user-friendly form (e.g. lessons learned briefs, engaging websites, guidebooks based on experience) and share these experiences and expertise (e.g. participate in community of practices, organize seminars, trainings and conferences) with relevant stakeholders.

The project will build on and expand existing partnerships between UNDP, EFs and municipalities across BiH within the framework of the on-going multi-partner UNDP GED project noted above. Through the GED project, UNDP supports the roll-out and operationalization of the EMIS throughout the country, aiming at sub-national/cantonal public sector facilities (educational, healthcare and administrative institutions). A key aspect of the GED project is the institutionalisation of energy management activities within public sector facilities, notably through the preparation of detailed energy audits and enabling building managers to monitor energy consumption through EMIS. The Project will leverage the achievements of the GED project and aims to expand the EMIS database by covering all types of municipal facilities and resources use.

Under the GED project, UNDP has conducted extensive technical and economic analysis of EE-RE retrofit projects at the level of individual public buildings, as well as aggregated analysis at municipal and cantonal (in FBiH) levels. UNDP experience, in particular, shows high demand for partial grants combined with municipalities' own financing. Recognizing that the grant-based financing model is neither sustainable, nor affordable for BiH in the long-run, the GED project in partnership with EFs initiated a shift from grant-based financing towards a revolving lending approach. In the last three years, the revolving financing modality has been developed (including study on improvement of financial mechanisms in EF, internal acts, evaluation procedure, methodology, TOR for selection of strategic financial partner, etc.) and launched in FBiH in July 2016 (launch in RS is expected in 2017).

The project will work closely with the UNDP-GEF "Third National Communication (TNC)" project regarding design and practical steps involved in the establishment of urban MRV systems for waste and energy management (Component 2 and 3). Through its support to expanded EMIS the project will lay a solid foundation for systematic data collection at the local level, which can then be aggregated at the FBiH and RS levels, and feed in the national GHG inventory process and MRV.

The UNEP-GEF "Capacity Development for the Integration of Global Environmental Commitments into National Policies and Development Decision Making" project supports the establishment of central environmental information and monitoring system for key environmental indicators. While the new UNDP-led project will concentrate on the local/municipal level, it will try to ensure that local/municipal data-bases and monitoring process for energy and waste sub-sectors specifically are compatible with and feed in the central system to be supported by the UNEP-GEF project.

Given the past activities related to energy efficiency in BiH, a Memorandum of Understanding on "Energy Efficiency Donor Coordination in BiH" was signed in 2012 defining the cooperation between donors and agencies working in the area of EE in BiH. UNDP will continue to create synergies and collaborate with GIZ's "Energy Efficiency Consultancy BiH" project on various policy-level activities related to energy efficiency. The project will also build upon the work done under the WB "Energy Efficiency Project" which provides financing for energy efficient retrofits of public buildings (expected to be completed in 2017).

The project will collaborate with UNDP's Global Low Emission Capacity Building Programme (LECB), which supports over 30 countries around the world with establishing national MRV systems for climate finance. Vast experience of the LECB programme and lessons learned will be leveraged to inform the design of MRV systems for LCUD finance in BiH, as envisaged under Component 1.

As part of UNDP's evaluation activities, the project will compile results and lessons learned. Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums, and at a national conference to be organized by the project near its close. The project will identify and

participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. As noted above, the project will liaise closely with the GEF's SC IAP and its GPSC, and will attempt to learn from and use similar methodologies and indicators as they evolve. While not officially part of the IAP, this project will continuously exchange information with other projects of similar focus in the same country, region and globally. The project will also contribute to relevant GEF- and UN-related publications, as appropriate.

B. DESCRIPTION OF THE CONSISTENCY OF THE PROJECT WITH:

B.1 Consistency with National Priorities. Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions such as NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.:

In terms of a strategic framework of environment protection and climate change mitigation, it is of note that BiH has adopted the Strategy for Climate Change Adaptation and Low Emission Development Strategy for Bosnia and Herzegovina (in 2013) and the National Emission Reduction Plan for BiH. BiH ratified the United Nations Framework Convention on Climate Change in 2000 as a non-Annex I party. To date, BiH submitted the Initial and Second National Communications; the Third National Communication is in the final stage of preparation. Additionally, BiH signed the Paris Agreement and thereby developed its Nationally Determined Contribution (NDC). In its NDC¹¹, BiH recognizes the potential of the public sector for GHG emissions reductions, including 'systemic energy rehabilitation of existing buildings (focus on public sector)'.

At the state level, BiH has signed the International Energy Charter (2016) and the Energy Community Treaty (2009), indicating the government's recognition of the need to improve energy efficiency to ensure sustainable and low carbon development. The country has also developed its National Energy Efficiency Action Plan (NEEAP), consisting of two entities' NEEAPs and Brcko District (approved by FBiH and expected to be adopted soon by RS). NEEAPs includes an indicative energy savings target of 9% by 2018, where energy efficiency in public facilities and utilities is clearly a priority area and is expected to contribute the most to achievement of the national target with an annual reduction in energy consumption by 1,900 GWh. Congruent with the best international policy practices, the NEEAP emphasizes that the public sector must lead by example and act as a driver for low-carbon urban transformation.

Local authorities across BiH also recognize the importance of transition to low-carbon urban development and are taking appropriate policy and regulatory actions. Several municipalities voluntarily signed the EU Covenant of Mayors initiative, they have developed and adopted their Sustainable Energy Action Plans (SEAPs) and set up specific urban GHG emission reduction targets, which cumulatively represent a commitment to reduce urban carbon footprint in BiH by 870,000 tCO₂ by 2030 (See Technical Annex II). Energy efficiency and renewable energy improvements in public buildings constitute the largest part of this commitment (as per SEAPs).

C. DESCRIBE THE BUDGETED M & E PLAN:

The project results as outlined in the project results framework will be monitored annually and evaluated periodically during project implementation to ensure the project effectively achieves these results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the [UNDP POPP](#) and [UNDP Evaluation Policy](#). While these UNDP requirements are not outlined in this project document, the UNDP Country Office will work with the relevant project stakeholders to ensure UNDP M&E requirements are met in a timely fashion and to high quality standards. Additional mandatory GEF-specific M&E requirements (as outlined below) will be undertaken in accordance with the [GEF M&E policy](#) and other relevant GEF policies.

¹¹<http://www4.unfccc.int/submissions/INDC/Published%20Documents/Bosnia-Herzegovina/1/INDC%20Bosnia%20and%20Herzegovina.pdf>

In addition to these mandatory UNDP and GEF M&E requirements, other M&E activities deemed necessary to support project-level adaptive management will be agreed during the Project Inception Workshop and will be detailed in the Inception Report. This will include the exact role of project target groups and other stakeholders in project M&E activities including the GEF Operational Focal Point and national/regional institutes assigned to undertake project monitoring. The GEF Operational Focal Point will strive to ensure consistency in the approach taken to the GEF-specific M&E requirements (notably the GEF CCM Tracking Tool) across all GEF-financed projects in the country. This could be achieved for example by using one national institute to complete the GEF Tracking Tools for all GEF-financed projects in the country, including projects supported by other GEF Agencies.

M&E Oversight and monitoring responsibilities

Project Manager: The Project Manager is responsible for day-to-day project management and regular monitoring of project results and risks, including social and environmental risks. The Project Manager will ensure that all project staff maintain a high level of transparency, responsibility and accountability in M&E and reporting of project results. The Project Manager will inform the Project Board, the UNDP Country Office and the UNDP-GEF RTA of any delays or difficulties as they arise during implementation so that appropriate support and corrective measures can be adopted.

The Project Manager will develop annual work plans based on the multi-year work plan included in Annex A, including annual output targets to support the efficient implementation of the project. The Project Manager will ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality. This includes, but is not limited to, ensuring the results framework indicators are monitored annually in time for evidence-based reporting in the GEF PIR, and that the monitoring of risks and the various plans/strategies developed to support project implementation (e.g. gender strategy, KM strategy etc..) occur on a regular basis.

Project Board: The Project Board will take corrective action as needed to ensure the project achieves the desired results. The Project Board will hold project reviews to assess the performance of the project and appraise the Annual Work Plan for the following year. In the project's final year, the Project Board will hold an end-of-project review to capture lessons learned and discuss opportunities for scaling up and to highlight project results and lessons learned with relevant audiences. This final review meeting will also discuss the findings outlined in the project terminal evaluation report and the management response.

Project Implementing Partner: The Implementing Partner is responsible for providing any and all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary and appropriate. The Implementing Partner will strive to ensure project-level M&E is undertaken by national institutes, and is aligned with national systems so that the data used by and generated by the project supports national systems.

UNDP Country Office: The UNDP Country Office will support the Project Manager as needed, including through annual supervision missions. The annual supervision missions will take place according to the schedule outlined in the annual work plan. Supervision mission reports will be circulated to the project team and Project Board within one month of the mission. The UNDP Country Office will initiate and organize key GEF M&E activities including the annual GEF PIR, the independent mid-term review and the independent terminal evaluation. The UNDP Country Office will also ensure that the standard UNDP and GEF M&E requirements are fulfilled to the highest quality.

The UNDP Country Office is responsible for complying with all UNDP project-level M&E requirements as outlined in the UNDP POPP. This includes ensuring the UNDP Quality Assurance Assessment during implementation is undertaken annually; that annual targets at the output level are developed, and monitored and reported using UNDP corporate systems; the regular updating of the ATLAS risk log; and, the updating of the UNDP gender marker on an annual basis based on gender mainstreaming progress reported in the GEF PIR and the UNDP ROAR. Any quality concerns flagged during these M&E activities (e.g. annual GEF PIR quality assessment ratings) must be addressed by the UNDP Country Office and the Project Manager.

The UNDP Country Office will retain all M&E records for this project for up to seven years after project financial closure in order to support ex-post evaluations undertaken by the UNDP Independent Evaluation Office (IEO) and/or the GEF Independent Evaluation Office (IEO).

UNDP-GEF Unit: Additional M&E and implementation quality assurance and troubleshooting support will be provided by the UNDP-GEF Regional Technical Advisor and the UNDP-GEF Directorate as needed.

Audit: The project will be audited according to UNDP Financial Regulations and Rules and applicable audit policies.¹²

Additional GEF monitoring and reporting requirements

Inception Workshop and Report: A project inception workshop will be held within two months after the project document has been signed by all relevant parties to, amongst others:

- Re-orient project stakeholders to the project strategy and discuss any changes in the overall context that influence project implementation including the formulation of detail criteria for selection of municipalities and participation in the final decision on their selection
- Discuss the roles and responsibilities of the project team, including reporting and communication lines and conflict resolution mechanisms;
- Review the results framework and finalize the indicators, means of verification and monitoring plan;
- Discuss reporting, monitoring and evaluation roles and responsibilities and finalize the M&E budget; identify national/regional institutes to be involved in project-level M&E; discuss the role of the GEF OFP in M&E;
- Update and review responsibilities for monitoring the various project plans and strategies, including the risk log; Environmental and Social Management Plan and other safeguard requirements (for moderate and high risk projects only); the gender strategy; the knowledge management strategy, and other relevant strategies;
- Review financial reporting procedures and mandatory requirements, and agree on the arrangements for the annual audit; and
- Plan and schedule Project Board meetings and finalize the first year annual work plan.

The Project Manager will prepare the inception report no later than one month after the inception workshop. The inception report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board.

GEF Project Implementation Report (PIR): The Project Manager, the UNDP Country Office, and the UNDP-GEF Regional Technical Advisor will provide objective input to the annual GEF PIR covering the reporting period July (previous year) to June (current year) for each year of project implementation. The Project Manager will ensure that the indicators included in the project results framework are monitored annually in advance of the PIR submission deadline so that progress can be reported in the PIR. Any environmental and social risks and related management plans will be monitored regularly, and progress will be reported in the PIR.

The PIR submitted to the GEF will be shared with the Project Board. The UNDP Country Office will coordinate the input of the GEF Operational Focal Point and other stakeholders to the PIR as appropriate. The quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR.

Lessons learned and knowledge generation: Results from the project will be disseminated within and beyond the project intervention area through existing information sharing networks and forums. The project will identify and participate, as relevant and appropriate, in scientific, policy-based and/or any other networks, which may be of benefit to the project. The project will identify, analyse and share lessons learned that might be beneficial to the design and implementation of similar projects and disseminate these lessons widely. There will be continuous information exchange between this project and other projects of similar focus in the same country, region and globally.

¹² See guidance here: <https://info.undp.org/global/popp/frm/pages/financial-management-and-execution-modalities.aspx>

GEF Focal Area Tracking Tools: The following GEF Tracking Tool will be used to monitor global environmental benefit results: Climate Change Mitigation.

The baseline/CEO Endorsement GEF Focal Area Tracking Tool – submitted in Annex D to this project document – will be updated by the Project Manager/Team and shared with the mid-term review consultants and terminal evaluation consultants (not the evaluation consultants hired to undertake the MTR or the TE) before the required review/evaluation missions take place. The updated GEF Tracking Tool will be submitted to the GEF along with the completed Mid-term Review report and Terminal Evaluation report.

Independent Mid-term Review (MTR): An independent MTR process will begin after the second PIR has been submitted to the GEF, and the MTR report will be submitted to the GEF in the same year as the 3rd PIR. The MTR findings and responses outlined in the management response will be incorporated as recommendations for enhanced implementation during the final half of the project's duration. The terms of reference, the review process and the MTR report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the [UNDP Evaluation Resource Center \(ERC\)](#). As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final MTR report will be available in English and will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and approved by the Project Board.

Terminal Evaluation (TE): An independent TE will take place upon completion of all major project outputs and activities. The terminal evaluation process will begin three months before operational closure of the project allowing the evaluation mission to proceed while the project team is still in place, yet ensuring the project is close enough to completion for the evaluation team to reach conclusions on key aspects such as project sustainability. The Project Manager will remain on contract until the TE report and management response have been finalized. The terms of reference, the evaluation process and the final TE report will follow the standard templates and guidance prepared by the UNDP IEO for GEF-financed projects available on the UNDP Evaluation Resource Center. As noted in this guidance, the evaluation will be 'independent, impartial and rigorous'. The consultants that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing or advising on the project to be evaluated. The GEF Operational Focal Point and other stakeholders will be involved and consulted during the terminal evaluation process. Additional quality assurance support is available from the UNDP-GEF Directorate. The final TE report will be cleared by the UNDP Country Office and the UNDP-GEF Regional Technical Adviser, and will be approved by the Project Board. The TE report will be publically available in English on the UNDP ERC.

The UNDP Country Office will include the planned project terminal evaluation in the UNDP Country Office evaluation plan, and will upload the final terminal evaluation report in English and the corresponding management response to the UNDP Evaluation Resource Centre (ERC). Once uploaded to the ERC, the UNDP IEO will undertake a quality assessment and validate the findings and ratings in the TE report, and rate the quality of the TE report. The UNDP IEO assessment report will be sent to the GEF IEO along with the project terminal evaluation report.

Final Report: The project's terminal PIR along with the TE report and corresponding management response will serve as the final project report package. The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up.

TABLE C.1 MANDATORY GEF M&E REQUIREMENTS AND M&E BUDGET

GEF M&E requirements	Primary responsibility	Indicative costs to be charged to the Project Budget ¹³ (US\$)		Time frame
		GEF grant	Co-financing	
Inception Workshop	UNDP Country Office	5,000	5,000	Within three months of project document signature
Inception Report	Project Manager and Chief Technical Advisor	5,000	None	Within two months of inception workshop
Standard UNDP monitoring and reporting requirements as outlined in the UNDP POPP	UNDP Country Office	None	None	Quarterly, annually
Monitoring of indicators in project results framework by UNDP BiH	Project Manager	Per year: 4,000 Total: 20,000	Per year: 6,000 Total: 30,000	Annually
GEF Project Implementation Report (PIR)	Project Manager and UNDP Country Office and UNDP-GEF team	None	None	Annually
Supervision missions	UNDP Country Office	None ¹⁴	None	Annually
Oversight missions	UNDP-GEF team	None ¹⁴	None	Troubleshooting as needed
Knowledge management	Project Manager	23,700 (1% of GEF grant)	10,000	On-going
GEF Secretariat learning missions/site visits	Project Manager and UNDP-GEF team	None	None	To be determined.
Mid-term GEF Tracking Tool to be updated by the Ministry of Foreign Trade and Economic Relations	Project Manager	5,000	None	Before mid-term review mission takes place
Independent Mid-term Review (MTR)	UNDP Country Office and Project team and UNDP-GEF team	20,000	None	Between 2 nd and 3 rd PIR.
Annual audit costs	UNDP Country Office and Project team	Per year: 4,000 Total: 20,000	None	Annually
Final GEF Tracking Tool to be updated by the Ministry of Foreign Trade and Economic Relations	Project Manager	5,000	None	Before terminal evaluation mission takes place
Independent Terminal Evaluation (TE) included in UNDP evaluation plan	UNDP Country Office and Project team and UNDP-GEF team	30,000	None	At least three months before operational closure
Translation of MTR and TE reports into English	UNDP Country Office	5,000	None	As required. GEF will only accept reports in English.
TOTAL indicative COST (Excluding project team staff time, and UNDP staff and travel expenses)		138,700	45,000	

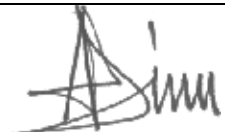
¹³ Excluding project team staff time and UNDP staff time and travel expenses.

¹⁴ The costs of UNDP Country Office and UNDP-GEF's participation and time are charged to the GEF Agency Fee.

PART III: CERTIFICATION BY GEF PARTNER AGENCY(IES)

A. GEF Agency(ies) certification

This request has been prepared in accordance with GEF policies¹⁵ and procedures and meets the GEF criteria for CEO endorsement under GEF-6.

Agency Coordinator, Agency Name	Signature	Date (MM/dd/y yyy)	Project Contact Person	Telepho ne	Email Address
Adriana Dinu UNDP-GEF Executive Coordinator		July 20, 2017	Marcel Alers, PTA, EITT	+1-212- 906- 6199	marcel.alers@un dp.org

¹⁵ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF and CBIT

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

<p>This project will contribute to the following Sustainable Development Goal (s): list relevant SDG goal (s) SDG 7: Affordable and clean energy - Ensure access to affordable, reliable, sustainable and modern energy for all SDG 11: Sustainable cities and communities – Make cities and human settlements inclusive, safe, resilient and sustainable SDG 13: Climate action - Take urgent action to combat climate change and its impacts</p>
<p>This project will contribute to the following country outcome included in the UNDAF/Country Programme Document: UNDAF/Country Program Outcome 5: By 2019, legal and strategic frameworks enhanced and operationalized to ensure sustainable management of natural, cultural and energy resources.</p>
<p>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) UNDP Strategic Plan Area of Work: 2. Sustainable development pathways</p>
<p>Applicable Output Indicators from the UNDP Strategic Plan Integrated Results and Resources Framework: Indicator 1.4.2.A.1.1: Extent to which implementation of comprehensive measures - plans, strategies, policies, programmes and budgets – to achieve low-emission and climate-resilient development objectives has improved Indicator 1.5.1.A.1.1: Number of new development partnerships with funding for improved energy efficiency and/or sustainable energy solutions targeting underserved communities/groups and women.</p>

	Objective and Outcome Indicators	Baseline ¹⁶	Mid-term Target ¹⁶	End of Project Target ¹⁶	Assumptions ¹⁷
Project Objective: to leverage investment in low-carbon urban development (LCUD) in BiH thereby promoting safer, cleaner, and healthier cities and reducing GHG emissions	Number of new development partnerships with funding for improved energy efficiency and/or sustainable energy solutions targeting underserved communities/groups and women.	N/a	2 (with Environmental Funds of the entities)	2 (with Environmental Funds of the entities); 4 selected municipalities for implementation of LCUD investment projects; 4 selected municipalities for implementation of green logistic schemes for municipal waste recycling	Commitments and capacities in place at EFs to implement proposed financial support mechanism Local authorities' commitment to adopt and pursue LCUD targets remains strong Local authorities' commitment to pilot green logistic scheme

¹⁶ Baseline, mid-term and end of project levels must be expressed in the same neutral unit of analysis as the corresponding indicator.

¹⁷ Risks must be outlined in the Feasibility section of this project document.

	Objective and Outcome Indicators	Baseline ¹⁶	Mid-term Target ¹⁶	End of Project Target ¹⁶	Assumptions ¹⁷
	Amount of project-facilitated investment in LCUD	0	15 mil USD	40 mil USD	Commitments and capacities in place at EFs to implement proposed financial support mechanism
	tCO2eq direct emissions reductions (which are attributable to the project-facilitated investments in LCUD made during the project's supervised implementation period, totaled over the respective lifetime of the investments)	0	150,000 tCO2eq	400,000 tCO2eq	Estimation over LCUD investment lifetime (20 years) Full comfort conditions are assumed in the baseline The procurement process is efficient and timely Co-financing realized
	Number of project beneficiaries, including % of women	NA	6,000 (including 60% - women)	15,000 (including 60% - women)	The procurement process is efficient and timely Co-financing realized
Component 1: Innovative Financing Mechanisms for Implementation of Low-Carbon Urban Development Concept (LCUD)	Status and level of capitalization of the financial mechanism (ESCO Funding window)	ESCO Funding window does not exist	Regulatory framework for ESCO Fund established at each entity	ESCO Funds established and capitalized with at least US\$24 mln	Commitment and capacities at EFs to implement the proposed scheme
	Number of staff at EFs and other stakeholders trained on the operation of ESCO Fund and other innovative financing mechanisms (including number of women)	0	10 (5 women)	40 (20 women)	Commitment and capacities at EFs to implement the proposed scheme
	Status of MRV system	No MRV system in place	MRV system proposed and tested	MRV system is both operational in both entities	Commitment and capacities at EFs to implement the proposed scheme, including MRV
Component 2: Low-carbon public buildings and utilities	Number of public facilities and utilities covered by EMIS on municipal level	2,300	1,500	3,800	Local authorities' commitment to adopt EMIS remains strong
	Number of people trained in energy management and LCUD project design and implementation (and % women)	0	500 (20% women)	1,500 (30% women)	Learning opportunities offered by this project lead to increased investment in LCUD
	Number of infrastructural LCUD projects implemented	0	15	45	The procurement process is efficient and timely

	Objective and Outcome Indicators	Baseline ¹⁶	Mid-term Target ¹⁶	End of Project Target ¹⁶	Assumptions ¹⁷
Component 3: Low-carbon waste management and logistics	Status of MRV for waste sector	No MRV for waste sector	Identified MRV modalities evaluated and MRV system proposed	MRV system established (data collection, assessment, archive and evaluation), institutionalized and legally recognized responsibility for MRV in place	Relevant authorities' commitment to adopt MRV
	Reduction in fuel consumption from municipal waste transportation (% to baseline) in pilot municipalities	N/a	15% reduction in at least 2 municipalities	15% reduction in all 6 pilot municipalities	Local authorities' and waste management companies are committed to collaborate and implement pilot projects
Component 4: National and sectoral policies, institutional coordination and awareness raising on LCUD	Status of relevant LCUD enabling rules and regulations	N/a	Harmonized LCUD-enabling rules and regulations proposed	Harmonized LCUD-enabling rules and regulations developed and enacted across BiH	Commitment at entity and state level to promote LCUD Political stability
	Number of people reached out to by national LCUD awareness raising campaign (see Annex B of UNDP Project Document for details on how this will be measured)	0	200,000 (at least 50% women)	750,000 (at least 50% women)	The procurement process is efficient and timely Adequate support by the CO communications office

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).

Comments (by Party)	Location	Response and Action
STAP		
1. The project aims to support and encourage innovative finance for low-carbon urban development projects including waste, transport, energy efficiency and renewable energy. Aiming at municipal public buildings is a good approach. It is assumed this will be mainly retrofitting of existing buildings but are any new building designs planned? If so then, to gain international credibility, they should be linked with gaining a LEED building rating http://www.usgbc.org/LEED/ or to the Living Building Challenge http://living-future.org/lbc/certification .	Section III of the UNDP Project Document under Component 2	The pilot LCUD investments will only include measures in existing public buildings. Best available technologies and international best practices have been considered, and will be applied. The energy efficiency parameters of the materials and measures will be higher than those required by national standards and are fully compatible with best EU practices, such as German EnEV standards (2014).
2. Retrofitting of historic buildings to become more energy efficient is a great challenge but good examples exist: see for example http://www.sciencedirect.com/science/article/pii/S0378778814009190 and http://transact.westminster.gov.uk/docstores/publications_store/Retrofitting_Historic_Buildings_for_Sustainability_January_2013.pdf	Technical Annex III of the UNDP ProDoc	Historic buildings (constructed before 1900) represent only 4% of the total public building stock in BiH. The project objective is to support a standardized package of building retrofit measures while prioritizing cost-effectiveness and scalability of the GEF-funded initiative. Therefore, the project is not focusing on historic buildings due to higher costs of those EE measures and lower potential for their replication.
3. Similarly there are many examples of improving city transport systems to reduce greenhouse gas emissions in spite of growing travel demands. These are well addressed in the proposal. The challenge is to mobilise the necessary finance. This project addresses this and includes staff training and MRV to track investments. Introducing the EMIS makes good sense. Linking transport logistics and waste management through landfills into one component is interesting, but attempts to minimize the waste volumes and encourage recycling at source, with separate collections of glass, plastics etc., appears to be a gap. It is not clear how waste collection is carried out in the suburbs. For example see San Borja in Peru http://transact.westminster.gov.uk/docstores/publications_store/Retrofitting_Historic_Buildings_for_Sustainability_January_2013.pdf page 54.	Section III of the UNDP Project Document under Component 3	The gap and the need to address waste minimization, recycling and associated logistics has been duly acknowledged and reflected in the project design. Component 3 of the project now includes activities aimed at designing green logistics scheme for municipal waste recycling looking specifically at measures to encourage and demonstrate sustainable ways of waste recycling for different waste streams. Activity 3.3 is aimed at introducing economic incentives for waste minimization and recycling, while Activity 3.4 will support a green logistic scheme.
4. Section 1.4 fails to explain how the mitigation potentials were calculated or what assumptions were made. Reducing the organic wastes entering the landfills to reduce methane is not considered, nor the benefits from having 5 or 6 central well-managed landfills as opposed to the hundreds of small informal ones as at present.	Section IV Feasibility of the UNDP Project Document, and Technical Annex IV 'GHG emission reduction assessment' (GEF-STAP tool)	The project won't support activities related to re-organization of the landfills in BiH as this work has been done under the WB-funded project which is now completed. The resulting GHG emissions from the GEF-supported technical assistance will come from a) waste minimization as a result of economic incentives; and b) optimized logistics of waste collection for recycling purpose. Estimates of the GHG emissions have been provided. However, due to data gaps (information on the waste volume and composition), detailed GHG emission reduction estimated can only be made after municipal waste sector MRV is set-up, as foreseen under Activity 3.1 of the project.

Comments (by Party)	Location	Response and Action
5. Was consideration given to collecting the landfill gas for energy uses? It is mentioned in the strategy on page 10 but not considered elsewhere. If implemented, this would result in relatively large GHG emission reductions given the high global warming potential of methane from leakages. These could well greatly exceed any CO2 mitigation from the transport logistics being considered in the project and should be explored during project preparation.	N/a	BiH Solid Waste Management Strategy already foresees environmental standards that are required for EU accession, including mandatory capture of the landfill gas. Further, BiH has already in place feed-in tariff for biogas-based electricity generation. In this respect, further GEF technical assistance to comply with EU acquis requirements and stimulate investment in the sector covered by feed-in tariff cannot be justified based on GEF incrementality principle.
6. Interestingly, solid waste management does not appear in BiH's INDC though solid waste disposal on land and wastewater handling do.	N/a	This omission has been recognized by the stakeholders, and shall be addressed within the next NDC.
7. The project proponents should liaise with the other urban development projects that are progressing under the GEF Cities IAP and use similar methodologies and indicators as they evolve: https://www.thegef.org/gef/node/10826	Section A.6	The GEF Sustainable Cities Integrated Approach Pilot (SC IAP) is recognized as an important initiative with which to liaise. The SC IAP aims to adopt a more holistic approach to sustainable city development. The SC IAP consists of two tracks: (i) city-level projects (23 cities with around US\$140 million total GEF grant funding) and (ii) a Global Platform for Sustainable Cities (GPSC) led by the World Bank (with US\$10 million GEF grant funding). While this project in BiH is not one of the city-level projects, the BiH project is liaising with the SC IAP. The GPSC is a knowledge platform that ties all of the participating SC IAP cities together by providing a collaborative space for both cities and a wide range of entities already working on urban sustainability issues. The project in BiH is liaising with the GPSC to get program updates from the Collaboration for Development (C4D) website. Project details have been shared so that the GPSC is able to provide relevant program materials and find synergies, including sharing information on methodologies and indicators as they evolve.
Germany's Comments		
Germany welcomes the project to catalyze environmental finance for low-carbon urban development in Bosnia/Herzegovina. The project is well-conceived and should be commended for identifying specific areas of complementarity with existing projects that are on-going in the country. By identifying some of the shortcomings of existing projects, this new project seeks to fill in gaps and address important problems that will have a significant impact on GHG emissions and urban livability. Furthermore, opportunities exist for the GEF project to benefit from ongoing efforts, such as UNDP support to the country's 3rd NatCom and 1st BUR, to build up urban MRV systems.	Section A.6 UNDP ProDoc. Section III Results and Partnerships	Further details about partnership arrangements and collaboration with relevant on-going initiatives have been elaborated, including the complementarity with GEF-supported 3 rd National Communication and 1 st BUR in the context of designing and operationalization of urban MRV systems.
Regarding the high political-related risks of the project, Germany seeks clarification on how the project will succeed in retro-fitting government buildings in the face of a very complex administrative	Section A.3 Stakeholder consultations	Indeed, the complexity of BiH governance structure and consequently high political-related risks of the project have been duly acknowledged in the project designed, as follows.

Comments (by Party)	Location	Response and Action
<p>and governmental structure in the country. Please provide information, whether building managers are open to these changes.</p>	<p>Section A.5 Risks</p> <p>Section A.8 Knowledge management</p>	<p>First, under the on-going Green Economy Development (GED) project, UNDP has conducted extensive technical and economic analysis of EE-RE retrofit projects at the level of individual public buildings, as well as aggregated analysis at municipal and cantonal (in FBiH) levels. UNDP experience under the GED project showed high demand for partial grants combined with municipalities' own financing. Over the 3 years of project operation the grant-to-own financing ratio has been steadily reduced from 1:1 at the beginning to 1:3 now. In other words, for each dollar of grant, the municipalities are willing to commit 3 dollars of their own funds (in cash).</p> <p>Further, extensive stakeholder consultation undertaken during project design, including meeting with municipalities and other building end-users, as well as beneficiaries of the completed by UNDP. The end-users of two public sector buildings (Kindergarden, Bosnaska Krupa and Hrvatska Bolnica Nova Bila, Nova Bila) which have been retrofitted in 2014 have been visited by the consultants preparing this project proposal with the aim to determine the effects of EE investments in these two public sector buildings.</p> <p>Local communities' representatives have expressed satisfaction with regard to energy and cost savings which resulted in additional EE investments and related investments. They have also expressed their interest and commitment to continue collaboration with UNDP in the scope of this GEF-supported project.</p> <p>Finally, to address high-level policy-related risks the following mitigation strategy is proposed:</p> <p>At the entity level, Component 1 will strengthen capacities of the two EFs to deliver on their mandate and facilitate investment in infrastructural LCUD projects, including developing and adopting required entity-level policy and regulations.</p> <p>At the local/municipal level, Activity 2.4 will support preparation, upgrade and adoption of municipal SECAPs as a key policy instrument which establish specific commitments at the local level for GHG emission reduction, energy saving and renewable energy application in cities. SECAPs are also important to ensure availability of local co-finance for the project, as budgetary allocations at the local level are directly linked to SECAP's investment priorities.</p>

Comments (by Party)	Location	Response and Action
		<p>At the national level, Component 4 will work with relevant entity authorities and MOFTER to facilitate inter-entity dialogue and harmonization and alignment of the pro-LCUD policies and regulations between the entities and Brcko district.</p> <p>The fact that the project will be directly implemented by UNDP will additionally help mitigate the risk because of UNDP's impartiality and ability to negotiate and reach consensus between the entities, as has been demonstrated in the course of the project design, which received full support of stakeholders, at both entity level and local levels across BiH.</p>
<p>With regard to waste management, and in line with STAP comments, Germany suggests providing more detail about plans to reduce emissions from waste itself, especially with regards to the methods that will be applied (i.e. recycling, reducing organic waste, waste-to-energy, etc.).</p>	<p>Section A.1</p> <p>Section II Results and Partnership of UNDP ProDoc</p>	<p>The scope of Outcome 3 has been clarified: it is now focuses on achievement of two distinct outcomes:</p> <p>Outcome 3.1: Reduced GHG emissions from improved waste management system as a result of waste minimization through introduction of the waste fee system (weight- / volume-based fees) as economic incentives to promote recycling and minimize the volume of waste for landfilling</p> <p>Outcome 3.2: Reduced GHG emissions from improved waste management system as a result of <i>waste collection route optimization</i>.</p> <p>To enable the achievement of both outcomes, the project will support the establishment of a robust MRV system (solid waste and recycling database) for municipal waste management as a prerequisite for identification, prioritization and implementation appropriate climate change mitigation projects in the sector, in particular as it concerns logistics of waste management.</p>

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS¹⁸

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

PPG Grant Approved at PIF: \$49,076			
<i>Project Preparation Activities Implemented</i>	<i>GETF/LDCF/SCCF/CBIT Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent to date</i>	<i>Amount Committed</i>
Component A: Technical Review	22,000	22,000	
Component B: Institutional arrangements, monitoring and evaluation	10,000	10,000	
Component C: Financial planning and co-financing investments	10,000	10,000	
Component D: Validation workshop	7,076	7,076	
Total	49,076	49,076	

¹⁸ 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.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

N/A