



## **Part I: Project Information**

### **GEF ID**

10090

### **Project Type**

FSP

### **Type of Trust Fund**

GET

### **CBIT/NGI**

CBIT **No**

NGI **No**

### **Project Title**

Promoting Low Cost Energy Efficient Wooden Buildings in T?rkiye

### **Countries**

T?rkiye

### **Agency(ies)**

UNDP

### **Other Executing Partner(s)**

General Directorate of Forestry, Ministry of Agriculture and Forestry

### **Executing Partner Type**

Government

### **GEF Focal Area**

Climate Change

### **Sector**

Energy Efficiency

### **Taxonomy**

Focal Areas, Climate Change, Climate Change Mitigation, Energy Efficiency, Financing, United Nations Framework Convention on Climate Change, Nationally Determined Contribution, Influencing models, Demonstrate innovative approach, Convene multi-stakeholder alliances, Transform policy and regulatory environments, Strengthen institutional capacity and decision-making, Stakeholders, Private Sector, SMEs, Financial intermediaries and market facilitators, Capital providers, Civil Society, Academia, Trade Unions and Workers Unions, Non-Governmental Organization, Beneficiaries, Type of Engagement, Information Dissemination, Consultation, Participation, Partnership, Communications, Awareness Raising, Education, Behavior change, Public Campaigns, Gender Equality, Gender Mainstreaming, Sex-disaggregated indicators, Gender-sensitive indicators, Women groups, Gender results areas, Knowledge Generation and Exchange, Capacity Development, Integrated Programs, Sustainable Cities, Energy efficiency, Buildings, Capacity, Knowledge and Research, Knowledge Exchange, Enabling Activities, Knowledge Generation, Learning, Theory of change, Indicators to measure change, Adaptive management, Innovation

**Rio Markers**

**Climate Change Mitigation**

Principal Objective 2

**Climate Change Adaptation**

Significant Objective 1

**Biodiversity**

No Contribution 0

**Land Degradation**

No Contribution 0

**Submission Date**

12/20/2020

**Expected Implementation Start**

4/1/2023

**Expected Completion Date**

4/1/2029

**Duration**

72In Months

**Agency Fee(\$)**

361,000.00

**A. FOCAL/NON-FOCAL AREA ELEMENTS**

<b>Objectives/Programs</b>	<b>Focal Area Outcomes</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
CCM-1-3	Promote innovation and technology transfer for sustainable energy breakthroughs for accelerating energy efficiency adoption	GET	3,800,000.00	49,200,000.00
<b>Total Project Cost(\$)</b>			<b>3,800,000.00</b>	<b>49,200,000.00</b>

**B. Project description summary**

**Project Objective**

To promote and replicate the use of innovative wood based technologies as low carbon construction materials in T?rkiye based on the successful implementation during the project of at least 6 pilot wooden building projects for a total of 8 400m2 floor space leading to an additional 0.58 million m2 of new construction in T?rkiye coming from wood by 2028 leading to direct lifetime greenhouse gas emissions of at least 165,715 tonnes of CO2e and indirect emissions of 2,353 tonnes of CO2e.

Project Compon ent	Financi ng Type	Expecte d Outcom es	Expected Outputs	Tru st Fund	GEF Project Financing (\$)	Confirmed Co- Financing( \$)
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Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing(\$)
1: Policy, Legislative, and Regulatory Support	Technical Assistance	<p>Outcome 1: Enhanced Legislation and Regulations</p> <p>Outcome 2: Stronger Institutional Support within the Ministry of Agriculture and Forestry for supporting construction from wood in Türkiye</p>	<p>1.1 Report on EU and other country legislation, regulations, standards and programmes aimed at promoting competitive energy efficient wooden building and assessment of their relevance for Türkiye, including relevant entrypoints for gender responsive legislative framework, prepared</p> <p>1.2 Joint policy and working documents elaborated (among General Directorate of Forestry (GDF), and General Directorate of Vocational Services (GDVS) of Ministry of Environment, Urbanization and Climate Change (MoEUCC))</p> <p>1.3 National strategy for low cost energy-efficient wooden buildings, including near zero emission buildings (NZEB), to support development in urban areas elaborated with gender responsive approach</p> <p>1.4 National Standards, legislation and guidelines for designing and using timber for construction in Türkiye prepared, considering the different needs of women and men</p> <p>1.5 Legislation that promotes government programmes to support low cost energy efficient wooden buildings prepared, considering the gender</p>	GE T	791,063.00	500,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing(\$)
2: Phased Financial Support Mechanism (including demo projects)	Technical Assistance	Outcome 3: Phased Financial support mechanism (FSM) is operational and providing incentives to SMEs for greater use of wood in construction in Türkiye	<p>3.1 Feasibility studies to support the investment of SMEs in wood and construction sectors finalized (TA)</p> <p>3.2 Phased Financial Support Mechanism (FSM) for supporting forestry small and medium size entrepreneurship (forestry SMEs) and/or construction companies to produce wood materials and construct energy efficient wooden buildings established with gender responsive approach (TA)</p> <p>3.3 Phase I: At least 6 buildings with a total floor space of 8,400 m² are constructed using CLT technologies, with support from the Phased FSM (TA)</p> <p>3.4 Phase II: Replication phase based on Performance-Based Payments implemented (TA)</p> <p>3.5 Phase III - Commercialization Phase with no GEF support implemented (TA)</p>	GE T	1,028,127.00	1,300,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing(\$)
2: Phased Financial Support Mechanism (including demo projects)	Investment	Outcome 3: Phased Financial support mechanism (FSM) is operational and providing incentives to SMEs for greater use of wood in construction in Türkiye	3.2.3 Implement the Phased FSM both for production companies and construction companies/investors/government partners (INV)	GE T	907,002.00	44,460,000.00

Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing(\$)
3: Public Awareness Campaign and Training Programmes for Construction Companies on Benefits of Wooden Houses	Technical Assistance	Outcome 4: Increased awareness about the benefits of using wood in construction	4.1 National Marketing Strategy and Public Awareness Campaign on the benefits of low cost EE wooden buildings developed with participation of women professionals (4 national workshops, minimum 400 participants)	GE T	751,576.00	500,000.00
		Outcome 5: Increased training and capacity building on using wood in construction	5.1 Marketing materials created and disseminated with gender responsive communication principles to construction companies on the benefits of CLT for new low cost EE wooden building construction			
			5.2 Detailed training programmes for stakeholders, including participation of women investors and entrepreneurs on the financial support mechanism elaborated			
			5.3 Capacity Building and Training provided to construction sector in T?rkiye on the benefits of using wood for construction (includes training and awareness raising related to the financial support mechanism) which includes at least 5 capacity building and awareness raising workshops (minimum 500 participants with a target of 30% women participants)			
			5.4 Good quality CLT production in line with the required standards is ensured with gender responsive communication principles			



Project Component	Financing Type	Expected Outcomes	Expected Outputs	Trust Fund	GEF Project Financing (\$)	Confirmed Co-Financing(\$)
4. Monitoring and Evaluation	Technical Assistance	Monitoring and Evaluation	Monitoring and Evaluation	GET	141,280.00	
Sub Total (\$)					3,619,048.00	46,760,000.00

#### Project Management Cost (PMC)

GET	180,952.00	2,440,000.00
<b>Sub Total(\$)</b>	<b>180,952.00</b>	<b>2,440,000.00</b>
<b>Total Project Cost(\$)</b>	<b>3,800,000.00</b>	<b>49,200,000.00</b>

Please provide justification

The PMC co-financing amount of US\$400,000 also includes US\$80,000 from UNDP.

**C. Sources of Co-financing for the Project by name and by type**

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Recipient Country Government	General Directorate of Forestry, Ministry of Agriculture and Forestry	Grant	Investment mobilized	17,640,000.00
Recipient Country Government	General Directorate of Forestry, Ministry of Agriculture and Forestry	In-kind	Recurrent expenditures	1,000,000.00
Recipient Country Government	Ministry of National Education	Grant	Investment mobilized	1,300,000.00
Recipient Country Government	Ministry of National Education	In-kind	Recurrent expenditures	200,000.00
Recipient Country Government	TOKI (Housing Development Administration of Turkey)	Grant	Investment mobilized	1,200,000.00
Recipient Country Government	TOKI (Housing Development Administration of Turkey)	In-kind	Recurrent expenditures	100,000.00
Recipient Country Government	Istanbul Metropolitan Municipality	Grant	Investment mobilized	18,000,000.00
Recipient Country Government	Istanbul Metropolitan Municipality	In-kind	Recurrent expenditures	500,000.00
Other	Bo?azi?i University	Grant	Investment mobilized	6,000,000.00
Civil Society Organization	The Turkish Timber Association	In-kind	Recurrent expenditures	150,000.00
Civil Society Organization	Turkish Business Association for Wood Products (TORID)	In-kind	Recurrent expenditures	100,000.00

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Investment Mobilized	Amount(\$)
Civil Society Organization	Nature Conservation Center	In-kind	Recurrent expenditures	250,000.00
GEF Agency	UNDP	Grant	Recurrent expenditures	80,000.00
GEF Agency	UNDP	In-kind	Recurrent expenditures	320,000.00
Recipient Country Government	General Directorate of Forestry, Ministry of Agriculture and Forestry	Grant	Recurrent expenditures	2,360,000.00
<b>Total Co-Financing(\$)</b>				<b>49,200,000.00</b>

**Describe how any "Investment Mobilized" was identified**

All "investment mobilized" were identified in consultation with the government, CSO and other sources. The grant funding provided by the General Directory of Forestry, Ministry of National Education, TOKI, Istanbul Metropolitan Municipality and Bogazici University is investment capital provided for the construction of a total of 6 pilot projects. These institutions plus a number of other stakeholders also provide in-kind contributions as support to the project.

D. Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds

Agency	Trust Fund	Country	Focal Area	Programming of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	T?rkiye	Climat e Chang e	CC STAR Allocation	3,800,000	361,000	4,161,000. 00
Total Grant Resources(\$)					3,800,000. 00	361,000.0 0	4,161,000. 00

**E. Non Grant Instrument**

NON-GRANT INSTRUMENT at CEO Endorsement

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Includes Non grant instruments? **No**

Includes reflow to GEF? **No**

F. Project Preparation Grant (PPG)  
PPG Required **true**

PPG Amount (\$)  
100,000

PPG Agency Fee (\$)  
9,500

Agenc y	Trust Fund	Country	Focal Area	Programmin g of Funds	Amount(\$)	Fee(\$)	Total(\$)
UNDP	GET	T?rkiye	Climat e Change	CC STAR Allocation	100,000	9,500	<b>109,500.00</b>
Total Project Costs(\$)					100,000.00	9,500.00	109,500.00

## Core Indicators

### Indicator 6 Greenhouse Gas Emissions Mitigated

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO <sub>2</sub> e (direct)	434926	165715	0	0
Expected metric tons of CO <sub>2</sub> e (indirect)	0	2353607	0	0

### Indicator 6.1 Carbon Sequestered or Emissions Avoided in the AFOLU (Agriculture, Forestry and Other Land Use) sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO <sub>2</sub> e (direct)				
Expected metric tons of CO <sub>2</sub> e (indirect)				
Anticipated start year of accounting				
Duration of accounting				

### Indicator 6.2 Emissions Avoided Outside AFOLU (Agriculture, Forestry and Other Land Use) Sector

Total Target Benefit	(At PIF)	(At CEO Endorsement)	(Achieved at MTR)	(Achieved at TE)
Expected metric tons of CO <sub>2</sub> e (direct)	434926	165,715		
Expected metric tons of CO <sub>2</sub> e (indirect)		2,353,607		
Anticipated start year of accounting	2025	2026		
Duration of accounting		10		

### Indicator 6.3 Energy Saved (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Total Target Benefit	Energy (MJ) (At PIF)	Energy (MJ) (At CEO Endorsement)	Energy (MJ) (Achieved at MTR)	Energy (MJ) (Achieved at TE)
Target Energy Saved (MJ)	326,803.00	1,433,000,000		

### Indicator 6.4 Increase in Installed Renewable Energy Capacity per Technology (Use this sub-indicator in addition to the sub-indicator 6.2 if applicable)

Technology	Capacity (MW) (Expected at PIF)	Capacity (MW) (Expected at CEO Endorsement)	Capacity (MW) (Achieved at MTR)	Capacity (MW) (Achieved at TE)
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**Indicator 11 People benefiting from GEF-financed investments**

	Number (Expected at PIF)	Number (Expected at CEO Endorsement)	Number (Achieved at MTR)	Number (Achieved at TE)
<b>Female</b>	200	315		
<b>Male</b>	240	585		
<b>Total</b>	440	900	0	0

Provide additional explanation on targets, other methodologies used, and other focal area specifics (i.e., Aichi targets in BD) including justification where core indicator targets are not provided



## Part II. Project Justification

### 1a. Project Description

1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed (systems description): the PIF mentioned that in 2014 out of 151,016,151m<sup>2</sup> of new buildings constructed in all of Türkiye 289,681m<sup>2</sup> or 0.19% used wooden frames and wooden materials. A more detailed analysis carried out during the PPG phase showed that this figure is not correct. Based on the latest available data, the share of wooden buildings in total buildings in 2014 was 0.17%, whereas the share of the total constructed area of wooden buildings was only 0.04% of the total constructed area. The reason for this is that an average building has a floor size of around 1,370 m<sup>2</sup>, whereas an average wooden building has a floor size of less than 200 m<sup>2</sup>. Between 2010 and 2018, the share of wooden buildings by a number of square meters fluctuated between 0.02% and 0.11%, the average over the last 3 years (2016-2018) was 0.03%.

The Project Document now includes a clear analysis of the volume of wood required to reach the project target vs the volume of wood being harvested in Türkiye every year. To achieve the project target of 0.58 million m<sup>2</sup> of buildings constructed with CLT, a total volume of around 200,000 m<sup>3</sup> of wood is required. To produce this volume of wood for CLT production, harvesting of 1400,000 m<sup>3</sup> of log is required. The production volume for Black Pine and Turkish Red Pine (which are best input materials for CLT) has been above 5 million m<sup>3</sup> for each of the two types of wood over the last years, providing a total supply of more than 10 million tons annually. This is sufficient to maintain the required timber amount to reach the project target.

The Project Document now includes a cost comparison of CLT vs. the standard method of building construction (concrete). Three construction options were evaluated: (a) a combination of CLT, Glued Laminated Timber (Glulam or GLT) and Structural Timber (ST), (b) a combination of CLT and ST and (c) concrete. Costs of the concrete option were collected from interviews with construction experts, costs of CLT were based on estimates upon consultations with sector players, experts and technical advisors. The combination of CLT with Structural Timber (ST) is the least cost option and construction costs alone are 8% cheaper than the concrete option. Taking into consideration additional income from rent due to earlier finalization of the CLT building, the difference increases to 14%. This has impacts on the design of the Financial Support Mechanism (FSM). The Phased FSM will be implemented in three phases but only the first two phases will involve GEF support. A demonstration phase (Phase I) where GEF support and technical assistance as well as an investment grant of up to 25% of the total building cost (and a maximum amount of \$250,000 per demonstration project) will be provided only for the first 6 demonstration projects. Phase I will also support the establishment of production capacity through GEF support and technical assistance. A replication phase (Phase II) where GEF support will be limited to design for technical assistance for architectural drawings, feasibility studies, and business plans only (and a maximum amount of \$30,000 per demonstration project) (with a plan for at least 25 more buildings). The actual cash to be used for the construction will

come from the investors. During the commercialization phase with no GEF support (or Phase III), no investment grant subsidy will be available.

Competitiveness of the proposed solution – the use of CLT and related technologies in Türkiye's building industry – is a key to success not only during the lifetime of the project, but especially after GEF support has ended. The project title includes the term 'low cost', however, this should not be interpreted as cheap, but should be understood as competitive compared to traditional building technologies applied in Türkiye, such as cement or bricks. Quality of CLT and related technologies will be a key factor in changing the current perception wood in the building sector in Türkiye. These requirements will have an impact both on production of CLT as well as on application in the building process and lead to higher costs than a low-cost strategy. Still the aim has to be competitiveness.

## 2) the baseline scenario and any associated baseline projects:

The baseline in the PIF was assumed as less than 0.2% of all new buildings in Türkiye will be constructed using wood products. This figure was based on the share new buildings constructed using wooden frames and wooden materials in 2014, which was 0.19%. Moreover, it was expected that this figure will not increase over time. As analysis during the PPG phase has shown that this figure was not correct and that the share of share of total constructed area of wooden buildings was only 0.04% of the total constructed area. Over the period 2016-2018 on average 161.2 million m<sup>2</sup> of buildings were constructed. The annual figures show an upward trend over the last 3 years of around 6% p.a., however, due to the current economic situation in Türkiye it is expected that the annual quantity of square meters constructed will be stable in the foreseeable future. In the same time period (2016-2018), on average around 44,000 m<sup>2</sup> of wooden buildings were constructed per year. This is 0.027% of the total building area constructed in Türkiye, which is considered as the baseline in the Project Document (compared to a baseline of 0.2% in the PIF). As in the PIF, it is not expected that the baseline will not increase over time.

## 3) the proposed alternative scenario with a brief description of expected outcomes and components of the project: (Please briefly mention the outcomes/components/activities which are stated in Prodoc, here as well.)

The project target in the PIF was defined as an additional 1.5 million m<sup>2</sup> of construction per annum in Türkiye comes from wood by the end of the project. This was based on a share of wooden buildings of 0.19% in the baseline and an increase to 1.19% during the lifetime of the project. Based on analysis carried out during the PPG phase, the revised project target is to start construction of 575,400 m<sup>2</sup> of additional floor space from wooden buildings by the end of the project lifetime. This is based on a progressive increase in production from 6 pilot projects with a total of 8,400 m<sup>2</sup> to additional floor space of 280,000 m<sup>2</sup> in 2026, giving an overall addition of floor space under construction of 575,400 m<sup>2</sup> during the lifetime of the project. With further increases in the share of wooden buildings after end of the project, the original target of 1.5 million m<sup>2</sup> will be reached within 3 years of project end.

The substance of components, outcomes and outputs is as described in the PIF with some further details and elaboration added, including a detailed list of activities for each outcome. Details can be mainly found in chapters IV (Results and Partnerships) and V (Project Results Framework).

4) alignment with GEF focal area and/or Impact Program strategies:

No changes in alignment with the PIF.

5) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing:

There are no changes in GEFTF funding required. Co-financing has increased from \$34,000,000 in PIF stage to \$49,200,000, all co-financing commitments are secured with co-financing letters. The increase in co-financing is due to strong interest of various stakeholders in providing cash financing for the implementation of pilot projects. Some stakeholders (such as KOSGEB or the Yale School of Forestry), which indicated willingness to provide co-financing in the PIF stage, were not willing to sign firm co-financing commitments. However, these stakeholders, especially KOSGEB, will be approached again at project start to understand their interest and willingness to contribute towards the project targets.

6) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF):

Based on the changes in baseline and project target (the figure of 1.5 million m<sup>2</sup> of additional floor space from wood was reduced to 575,400 m<sup>2</sup>) , the expected direct GHG emission reduction is being reduced from 434,926 tons to 165,715 tons during the lifetime of the project. Assumptions from the PIF on the quantity of GHG emission reductions per m<sup>2</sup> of floor space have not been modified (using the same factor of 0.288 t CO<sub>2</sub>/m<sup>2</sup>). In the PIF, no indirect GHG emission reductions have been estimated. These are now calculated at 2.4 million tons over a period of 10 years after end of the project assuming an annual growth rate for buildings using CLT of 15%.

7) innovativeness, sustainability and potential for scaling up:

The PPG phase led to promising results on the financial viability of CLT vs. traditional ways of building construction (concrete), with expected cost savings between 7% and 14%. This is in contrast to the situation in the PIF, where it was expected that a financial support mechanism has to be established, which would be operational beyond the lifetime of the project in order to make CLT and related wood products financially attractive for investors and construction companies. This improved situation increases the sustainability of the project, as no financial support mechanism is required beyond lifetime of the project and it is expected that CLT becomes a commercially viable technology in Türkiye during the lifetime of the project.

The following table summarizes the changes in alignment with the project design with the original PIF:

PIF	ProDoc	Justification of changes
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<p>Assumed for 2014 a share of 0.19% of new houses using wooden frames and wood materials, not taking into account that average size of wooden houses is considerably lower than standard houses. Baseline was therefore assumed at 0.2% of all new buildings in T?rkiye will be constructed using wood products.</p>	<p>Clarifies that in 2014 the share of wooden buildings was 0.17%, however the share of wooden buildings in total constructed area was only 0.04%. Average over the last 3 years (2016-2018) was 0.027%. Baseline is set at 0.027% of all new buildings in T?rkiye</p>	<p>Analysis during PPG phase showed that PIF assumption was too optimistic. Baseline figure in ProDoc is based on latest available data.</p>
<p>Defined the target at additional 1.5 million m<sup>2</sup> of construction per annum in T?rkiye comes from wood by the end of the project, increasing the share of wooden buildings from 0.19% in the baseline to 1.19% in the project.</p>	<p>Revised target of 575,400 m<sup>2</sup> of additional floor space from wooden buildings by the end of the project lifetime using performance based payments to support pilot projects and with the amount of the payment and the total investment cost of each performance based payment to be reviewed by independent third party expert.</p>	<p>Analysis during PPG phase showed that PIF assumption was too optimistic. Original project target will be reached within 3 years of project end.</p>

Co-financing of \$34,000,000.	Co-financing of \$49,200,000.	PPG Team was successful in securing higher co-financing commitments from partners.
Direct GHG emission reduction of 434,926 tons.	Direct GHG emission reduction of 165,715 tons.	As quantity of floor space is lower (see above), GHG emission reductions are reduced proportionally.

#### 1b. Project Map and Coordinates

**Please provide geo-referenced information and map where the project interventions will take place.**

The project will be implemented on the territory of Türkiye. Pilot project 1 (Museum and Visitor Centre of GDF) will be implemented in Ankara, and pilot project 2 (Student Centre at Boğaziçi University) in Istanbul. The location of other pilot projects will be determined during the course of the project, but all will be on the territory of Türkiye.

#### 1c. Child Project?

**If this is a child project under a program, describe how the components contribute to the overall program impact.**

N/A

#### 2. Stakeholders

**Select the stakeholders that have participated in consultations during the project identification phase:**

**Civil Society Organizations** Yes

**Indigenous Peoples and Local Communities**

**Private Sector Entities** Yes

**If none of the above, please explain why:** No

As described in the PIF, but extended to include all relevant stakeholders as presented in the Project Document in chapters IV (Results and Partnerships) and Annex 6 (Stakeholder Engagement Plan) which is Annex J of the CEO ER document. This extension includes additional departments in ministries related to the project, additional civil society stakeholders, forestry faculties, the private sector, and associations representing the interests of women to contribute towards gender balance.

**Please provide the Stakeholder Engagement Plan or equivalent assessment.**

Stakeholder	Responsibility	Role in project
General Directorate of Forestry (GDF), Ministry of Agriculture and Forestry	Ministry of Agriculture and Forestry (MoAF) is the organization that is responsible from management and protection of natural resources including forests and water resources in T?rkiye. Currently, 99.9% of all forests in T?rkiye are managed by MoAF. General Directorate of Forestry (GDF) is the organization responsible from management, development and protection of forests in T?rkiye. Organization's mission is to protect forest resources against any threats and danger, to develop forest resources in a nature-friendly manner and to achieve sustainable forest management at a level that will provide far-reaching sustainable benefits for society in ecosystem integrity. Production and supply of industrial and fuel wood to the market from the State Forests is under responsibility of the "Production and Marketing Department" of GDF.	<p>The Production and Marketing Department in the General Directorate of Forestry is the executing partner of the project.</p> <p>General Directorate of Forestry (GDF), Ministry of Agriculture and Forestry, as being the National Implementing Partner of the project shall lead and coordinate the all project components, ensuring relevant inputs and co-financing from project partners.</p>
General Directorate of Vocational Services, Ministry of Environment, Urbanization and Climate Change	<p>GDVS is one of the most relevant institution to promote the Low cost energy efficient buildings in T?rkiye as stated in their vision "Creating brand cities in accordance with the "Livable Environment and Brand Cities" by organizing vocational services with safe construction products supported by accessible recording and monitoring systems and with qualified, energy efficient, sustainable settlement and construction.</p> <p>In that regard GDVS determines the general principles, strategies and standards relating to all kinds of buildings and it produce regulations for settlement and construction relating to architecture, engineering, contracting and consulting services, monitoring and auditing.</p> <p>It determines the procedures, principles and standards relating to design and construction in planned and unplanned areas and regulates the building license and building use permit based on national address database.</p>	<p>GDVS will be the most important counterpart of GDF to support and take an active role in activities related to construction sector.</p> <p>Their participation is important to realize many of the activities in Component 1, 2 and 3.</p>

<p>Housing Development Administration of Türkiye (TOKİ), (Ministry of Environment, Urbanization and Climate Change)</p>	<p>TOKİ, with the models it has developed, functions as an umbrella rather than a competing body in the housing sector of Türkiye in awareness of its responsibility as a guiding, supervising and educating organization and undertakes a significant role in production prioritizing the demands and solvency of the target masses in need.</p> <p>New vision of TOKİ within the scope of the programme of the Government of the Republic of Türkiye is to realize the project target of 1 million housing units by the end of 2023. In this context, the Administration carries on its housing production activities throughout the country in view of priorities and needs;</p> <ul style="list-style-type: none"> <li>a) Urban Regeneration and Slum Transformation Projects in cooperation with Municipalities,</li> <li>b) Social housing projects toward the Middle and Low Income Group,</li> <li>c) Establishing example settlement units in our medium-scale provinces and districts,</li> <li>d) Increase of educational and social facilities as well as other social facilities, forestation and landscapes.</li> </ul>	<p>TOKİ is one of the key stakeholders for the Component 2 and Component 3. As TOKİ has responsibility in constructing many governmental buildings and housing projects its involvement in the process will provide an important leverage for the promotion of the low cost EE buildings.</p> <p>TOKİ shall undertake a significant role during the implementation and design of 6 pilot projects using CLT technologies.</p>
<p>General Directorate of Sectors and Public Investments, Strategy and Budget Department (GDSPI)</p>	<p>GDSPI is the natural member of the Project Board/Steering Committee, with a responsibility for defining, assessing, and monitoring programme outputs towards country-level outcomes to ensure that the project results have been linked to the national development plans. GDSPI will work closely with UNDP to ensure that the plan of the programme includes necessary aspects, including identification of projects required to achieve the expected outcomes.</p>	<p>General Directorate of Sectors and Public Investments, Strategy and Budget Department (GDSPI) is one of the key partners for implementation of Component 1 of the project with respect to review of EU and other country legislation regulations and programmes aimed at promoting wood based construction and assessment of relevance for Türkiye.</p>

<p>Department of Energy Efficiency and the Environment, Ministry of Energy and Natural Resources (MoEN)</p>	<p>The Ministry of Energy and Natural Resources (MoEN) is the government entity in T?rkiye responsible for developing energy and natural use policies. The General Directorate of Energy Affairs of the Ministry is responsible for all necessary planning to meet the Turkish energy demand and also keep an inventory of energy resources and facilities. Department of Energy Efficiency and the Environment has recently been established in January of 2019, with changes to the function of the General Directorate of Energy Affairs. Accordingly the Department is now responsible for areas of energy efficiency, climate change, the environment and sustainability. It also stands as the responsible body for coordination of actions to be implemented within the scope of the National Energy Efficiency Action Plan 2017-2023.</p> <p>As one of the main strength of the wooden buildings is energy efficiency Department of Energy Efficiency will play a critical role in the promotion of the wooden buildings.</p>	<p>Department of Energy Efficiency and the Environment is one of the partner institutions for the implementation and development of Component 3 aiming to increase public awareness for low cost EE wooden buildings.</p>
<p>KOSGEB (Small and Medium Enterprises Development Program), Ministry of Industry and Technology</p>	<p>As the national agency for SME innovation and technology promotion in T?rkiye, KOSGEB has established itself as a key player in the economic landscape, having contributed successfully to the delivery of a series of strategic objectives through a range of intervention activities and assistance mechanisms for SMEs and partners and this can be extended to SMEs working in the forestry/construction sector.</p>	<p>KOSGEB is one of the key stakeholder for Component 2: Financial Support Mechanism (FSM) to support forestry SMEs to produce wood materials and promote for greater use of wood in construction in T?rkiye.</p>



<p>The Union of Municipalities of T?rkiye (TBB)</p>	<p>The Union is an important stakeholder in terms of its support to local municipal work through its mediating function between the central governmental institutions and local offices. The main function and responsibilities are as the following (relevant to project):</p> <ul style="list-style-type: none"> <li>a) Organizing training programs for mayors, council members and municipal personnel</li> <li>b) Assisting municipalities in their development and provide guidance.</li> <li>c) To encourage the prevalence of good implementation examples and exchange of experience.</li> <li>d) Organizing seminars, workshops, panels, technical visits about municipal work abroad or in country.</li> <li>e) Carrying out joint service projects with public institutions, universities and NGO?s working in the field of municipal work.</li> <li>f) Providing technical support to municipalities in development technology and information.</li> <li>g) Cooperating and conducting joint projects with international institutions and their co-institutions in the country.</li> <li>h) Assisting the works of municipalities in the process of the EU and assisting municipalities to benefit from EU grants and technical assistance.</li> </ul>	<p>The Union of Municipalities of T?rkiye (TBB) is the key stakeholder for implementation of Component 3: Public Awareness Campaign and Training Programmes for Construction Companies on Benefits of wooden Houses. TBB shall take an active role in capacity building and trainings to be provided to construction companies in T?rkiye on the benefits of using wood for construction.</p>
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National and International Financing Institutions	<p>TSKB (Industrial Development Bank of T?rkiye)</p> <p>The European Bank for Reconstruction and Development (EBRD)</p> <p>The World Bank Group</p> <p>French Development Agency</p> <p>Turkish Residential Energy Efficiency Financing Facility (TuREEF)</p> <p>The T?rkiye Sustainable Energy Financing Facility (TurSEFF)</p> <p>Commercial Banks</p> <p>Business for Goals (B4G) platform</p> <p>TURKONFED</p> <p>TUSIAD</p>	There are a number of stakeholders, which will be contacted during the course of the project to discuss potential cooperation in financing.
<b>Civil Society</b>		
TOBB (Union of Chambers and Commodity Exchanges of T?rkiye)	Within the context of its organic law and other applicable legislation, TOBB aims, parallel to the developments elsewhere in the world and in its capacity of the highest level representative of the Turkish private sector, at ensuring unity and solidarity between chambers and commodity exchanges, enhancing development of the professions in conformance with general interest, facilitating professional work of members, promoting honesty and confidence in the relations of members with one another and with the general public, and preserving professional discipline and ethics.	TOBB (Union of Chambers and Commodity Exchanges of T?rkiye) is one the key stakeholder for Component 3: Public awareness campaigns and training programmes for construction companies on the benefits of wooden houses. TOBB?s role in supporting national marketing strategy and public awareness campaign on the benefits of low EE wooden buildings is significant.

UCTEA (Union of Chambers of Turkish Engineers and Architects)	UCTEA ( <a href="http://www.tcmob.org.tr">www.tcmob.org.tr</a> ) aims to representing the engineers and the architects of our country in professional, economic, social, and cultural areas; protect and improve their rights and interests on the basis of the common interest of our people; ensure their professional, social and cultural development; and provide a common ground to use their professional experiences for the benefit of public. In this respect, it is crucially important to comprehend, interpret, and then inform the public on the social, political, and economic dimensions of the developments in their professional areas and in policies concerning their professions.	UCTEA (Union of Chambers of Turkish Engineers and Architects) is one of the key stakeholder for Component 3, both for public awareness campaigns and training programs for construction companies on the benefits of wooden houses. As an umbrella organization UCTEA's role will be significant to reach to architects, civil engineers, forest engineers and construction companies to create awareness on CLT and wooden buildings. UCTEA shall contribute to the development of the 'Technical Manuel of Civil Engineers and Architects' on how to construct wood buildings. Through its sub-branch Union of Forest Engineers, promotion CLT production and use of wood in construction will be supported and dissemination activities will be conducted.
<b>NGOs and Academia</b>		
TORID (Turkish Forest Industry and Businessman Association)	TORID is an important organization, established by major importers and traders of wood and wooden products. The association is a lobbying platform protecting the rights of wood and wooden product exporters in Türkiye. TORID will have key role in influencing the wood industry for the CLT production, quality management through impact on their members.	TORID will be one of the critical partners of the project to support the conversion of the sector for good quality CLT production and to provide necessary material input in developing low cost energy efficient wooden building sector. They will take part in all of the Components but especially providing guidance in realization of the pilot projects.

UAB (Turkish Timber Association)	Turkish Timber Association (UAB) is the main institution bringing all actors interested in promoting timber usage in different fields of construction together including planners, architects, engineers, academics and other experts. UAB will be one of the major platforms to engage the wood sector for CLT production and CLT use.	UAB is one of the critical partners of the project to support all of the components of the project. UAB shall take an active role in development of National Strategy and preparedness of the sector with it's all components.
TOD (The Forester's Association of T?rkiye)	The Forester's Association of T?rkiye is one of the oldest civil society organizations in T?rkiye. They work in collaboration with other NGOs in T?rkiye, as well partners in the US and Europe in forest and species conservation projects, increasing public awareness, contributing to forestry science and techniques, and providing solutions to forestry-related problems through scientific principles.	TOD (The Forester's Association of T?rkiye) shall contribute to Component 1 and 3. In preparation of the national strategy, accreditation of the different tree species in CLT production, public awareness campaigns and training programs.
OREMDER (Association of Forest Industrial Engineers)	The Association of Forest Industrial Engineers (OREMDER) was founded in 2013 with the main objective of developing projects in their areas of activity to increase public awareness about forests and forest products, and also defend social rights of forest industrial engineers.	OREMDER is a stakeholder for the establishment of a system for a production of good quality CLT.
DKM (Nature Conservation Centre)	DKM is a foundation established in 2004. Since its establishment DKM tries to bring new and innovative approaches to improve biodiversity conservation and natural resource management. DKM has been working with GDF in close collaboration in various issues such as assessment and conservation of forest biodiversity, ecotourism, non-wood forest products. In the previous GEF Project 'Integrated Approach to Management of Forests', DKM has partnered UNDP and GDF to develop an implement a procedure to integrate biodiversity conservation into the forest management.	DKM will support the studies on preparation of the National Strategy under Component 1.  Besides, DKM will be supporting GDF in terms of integrated approach to forest management, integration of biodiversity, and sustainable forest management beyond the project concept too.
OGEMVAK	OGMEVAK is an NGO running several forestry training projects focusing on the needs of the Ministry personnel. The foundation was established in 1996 to improve forestry and prevent forest fires in T?rkiye. OGEMVAK has been organizing training and education for the GDF staff and forests, and running a scholarship programme for graduate students.	OGEMVAK has a wide experience on trainings and educations for forestry sector. OGEMVAK is a stakeholder for several vocational trainings for production of good quality CLT.

Forestry Faculties		
Forestry Faculties in T?rkiye	<p>There are total of 11 forestry faculties in distributed in different regions of T?rkiye, at the following universities:</p> <ul style="list-style-type: none"> <li>? ?stanbul University</li> <li>? Karadeniz Technical University</li> <li>? Bart?n University</li> <li>? S?leyman Demirel University</li> <li>? Artvin ?oruh University</li> <li>? D?zce University</li> <li>? Kastamonu University</li> <li>? ?ank?r? Karatekin University</li> <li>? Kahramanmara? S?t?? ?mam University</li> <li>? Bursa Teknik University</li> <li>? ?zmir K?tip ?elebi University</li> </ul> <p>Although the curricula differ among different faculties, The Law on Forestry Engineering, Forestry Industrial Engineering and Wood Works Industrial Engineering (Law No. 9921) regulates the occupational activity areas for all three engineering departments, and the requirements to become a member of each profession as per the Law. Introduction of CLT like wood technologies into the curriculum of the Forestry Faculties will play major role in long term promotion of wooden buildings in T?rkiye.</p>	Forestry Faculties in T?rkiye are one the key partners for Component 1: Policy, Legislative and Regulatory Support and Component 3: Public awareness campaigns and training programmes for construction companies on the benefits of wooden houses. Forestry Faculties shall have a significant contribution to the development of the National Strategy, National standards to promote wood based construction.
Civil Engineering Departments in T?rkiye	<p>Civil engineering departments, which run ?Construction Material / Mechanics Laboratories? would contribute to the Project through their wood testing facilities. Introduction of CLT like wood technologies into the curriculum of the civil engineering faculties will play major role in promotion of wood as construction material.</p>	Civil Engineering Departments in T?rkiye are significant stakeholder for Component 3: Public awareness campaigns and training programmes for construction companies on the benefits of wooden houses.

Yale School of Architecture	Yale School of Architecture has innovative studies relating to environment and climate friendly architecture. There is a center specialized on solar, air, water, climate in architecture ?Center for Ecosystems in Architecture?. Yale Architecture is one of the institutions considers use of CLT within ecosystem approach and sustainable development practices in architecture and construction.	Yale School of Architecture will play an important role in technical aspects of CLT, estimating the global environmental benefits of the project and also provide know-how to consider low cost energy efficient building in bigger framework within the sustainable urban life-style.
University of Washington, Natural Resource Spatial Informatics Group (NRSIG)	NRSIG is a research group within the Precision Forestry Cooperative at the School of Environmental and Forest Sciences in University of Washington. NRSIG provides technologies and expertise for analyzing forestry and agricultural issues, specializing in large spatial scales and big data. NRSIG?s focus is on applied problems that integrate environmental, social, and economic objectives to consider the sustainability, acceptability, and productivity of management opportunities.  NRSIG has worked together with GDF and UNDP in ?Integrated Approach to Management of Forests?.	NRSIG has involved in development of The Forest Ecosystem Management System (FEMS), which is a decision support system, developed during the previous GEF Project ?Integrated Approach to Management of Forests?, NRSIG will be contributing to the project trough development of new tools to use the same system (FESM) in assessment of climate benefits of the project and for sustainable forest management.
<b>Private Sector</b>		
SURATAM (The Turkish Center for Sustainable Production, Research and Design)	The Turkish Center for Sustainable Production, Research and Design was established in 2014 to promote and develop sustainable production in T?rkiye through research and development, and design. The Center aims to enable energy and resource efficient production through life-cycle oriented sustainable design approaches. In its areas of activity, SURATAM creates necessary knowledge, information, know-how and standards in order to help design of more sustainable buildings and building materials. SURATAM is also the coordinator of EPD T?rkiye certification system that is issued for construction materials in green building certification systems.	SURATAM shall play an important role in ensuring the contribution of the project in climate change mitigation and sustainability, through life cycle assessment of the low cost energy efficient wooden buildings.

In addition, provide a summary on how stakeholders will be consulted in project execution, the means and timing of engagement, how information will be disseminated,

and an explanation of any resource requirements throughout the project/program cycle to ensure proper and meaningful stakeholder engagement

**Select what role civil society will play in the project:**

**Consulted only;** Yes

**Member of Advisory Body; Contractor;** Yes

**Co-financier;** Yes

**Member of project steering committee or equivalent decision-making body;**

**Executor or co-executor;**

**Other (Please explain)**

### **3. Gender Equality and Women's Empowerment**

**Provide the gender analysis or equivalent socio-economic assesment.**

Gender equality and women's empowerment have been addressed in greater details in chapter IV "Results and Partnerships" under "Gender equality and Women?s Empowerment".

Please see Annex M of CEO ER document: Gender Analysis and Gender Action Plan (Annex 9 of the Project Document)

**Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?**

Yes

**Closing gender gaps in access to and control over natural resources;**

**Improving women's participation and decision making** Yes

**Generating socio-economic benefits or services or women**

**Does the project?s results framework or logical framework include gender-sensitive indicators?**

Yes

#### 4. Private sector engagement

##### **Elaborate on the private sector's engagement in the project, if any.**

Private sector is involved in a number of outcomes and activities. Under Outcome 3 incentives will be provided to SMEs for greater use of wood in construction in Türkiye. This will include companies active in wood production (including production of CLT), as well as architecture , engineering and construction companies involved in the planning and erection of buildings. Under Outcome 5, training and capacity building will be offered to private sector participants. The participation of the private sector is also secured through the involvement of associations representing different professional categories, such as architects or engineers. Private sector is also included in the Stakeholder Engagement Plan (see Annex J of the CEO ER document and Annex 6 of the Project Document).

#### 5. Risks to Achieving Project Objectives

##### **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):**

The foreseen main project risks have remained as described already in the PIF, but with some further details and elaboration added. The final list of project risks and risk mitigation measures can be found in the table below. Besides, as a standard requirement for all UNDP projects, a Social and Environmental Screening was completed during the project preparatory phase. The results of the Social and Environmental Screening can be found in Annex K.

#	Description	Date Identified	Risk Category	Impact & Probability	Risk Treatment / Management Measures	Risk Owner	Status
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1	New policies and legislation are proposed but not enacted	October 2019	Regulatory	<p>A revision of the regulatory framework in the form of an annex to Turkish construction standards as well as revised guidelines are necessary to be able to use CLT in building construction. If modifications are not approved and implemented, use of CLT will be limited.</p> <p>Probability ? 2</p> <p>Impact ? 2</p>	<p>The project will hire national consultants / national staff who have the ability to lobby the government related to new legislation. In the event that the lobbying is not successful the project will examine alternative strategies. However, given that the project has the strong support of the Ministry of Agriculture and Forestry, this risk is rated as low.</p>	GDF	Low
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2	Financial Support Mechanism (FSM) does not materialize or work effectively	October 2019	Financial	<p>If the Financial Support Mechanism (FSM) is not attractive for investors and construction companies, investments will not reach the expected levels and targets on additional m<sup>2</sup> of buildings using wood/CLT will be missed.</p> <p>Probability ? 3</p> <p>Impact ? 3</p>	<p>The key risk for the FSM support mechanism is participation of stakeholders co-financing the implementation of pilot and replication projects as well as SMEs for setting up the production capacity of CLT in T?rkiye. The FSM will be managed by GDF, for the SME part KOSGEB is a potential partner. The level of risk is considered medium and the mitigation measures will include strong, effective and to-the-point awareness raising campaigns on the benefits of wooden buildings and wooden construction materials towards ensuring energy efficiency and to promote the FSM among relevant construction companies, investors and SMEs. A Third Party expert will review the total amount of investment to which the total subsidy will be applied and the level of subsidy up to 25%/\$250,000 will be determined on a case by case basis.</p>	GDF	Medium
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3	Co-financing does not materialize both for the demo projects and for the full Financial Support Mechanism (FSM)	October 2019	Financial	<p>As the GEF Performance-Based Payment will only cover part of the investments into pilot projects, co-financing of investors is required to implement the projects and make full use of the FSM. Lack of co-financing indicates that the financial terms offered are not attractive enough for investors to construct wooden buildings and targets on additional m<sup>2</sup> of buildings using wood/CLT will be missed.</p> <p>Probability ? 2</p> <p>Impact ? 4</p>	<p>The risk that co-financing does not materialize is minimized by choosing project partners who have already committed to the implementation of their construction projects. The strategy for mitigating this risk will be to choose alternative partners (for demo projects) in the event that co-financing does not materialize and to move quickly and decisively to choose new partners and make such changes if co-financing with the original partners does not materialize. A Third Party expert will review the total amount of investment to which the total subsidy will be applied and the level of subsidy up to 25%/\$250,000 will be determined on a case by case basis.</p>	UNDP CO	Medium
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4	Public Awareness Campaign and Targeted Capacity Building Programmes with Construction Companies has limited impact	October 2019	Operational	<p>If public awareness campaigns and capacity building activities are not taken up by stakeholders such as engineers, architects, investors, etc., the project will fail in informing target groups about the benefits of CLT in buildings. This will lead to a reduced uptake of the technology and targets will be missed.</p> <p>Probability ? 2 Impact ? 2</p>	<p>Previous experience with public awareness campaigns in T?rkiye has shown that when designed properly they can have a big impact. Similarly, targeted training and capacity building programmes with companies can be shown to have a big impact. UNDP has considerable experience (e.g. ?</p> <p>UNDP/UNIDO GEF Industrial Energy-Efficiency project) with running training programmes in T?rkiye and achieving positive results. In addition, the General Directorate of Forestry will significantly help to promote public awareness about the benefits of wood technologies in construction and decrease the risks of the public awareness campaign not working.</p>		
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5	Climate risks make use of wooden products less attractive	October 2019	Social and Environmental	<p>Climate impacts can lead to less production of wood and might endanger a sustainable supply of forest products for CLT production.</p> <p>Probability ? 2 Impact ? 2</p>	<p>Climate change can have significant impacts on the health of forests. Although there are no in-depth studies and models related to climate change and forest ecosystems in Türkiye, some studies in the Mediterranean region have revealed that forests may have a lesser yield in terms of timber and tree species distribution patterns may change. Although, over the six-year life time of this project climate change is expected to have negligible impact on these matters, over the longer term it is crucial to respond and adapt to those expected changes. The General Directorate of Forestry has already initiated some measures to adapt to these changes through adoption of SFM focused implementations and new and innovative integrated forest management approaches through functional forest planning. These include specific adaptation measures and conservation of</p>	GDF	Low
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6	Unsustainable Forestry Practices lead to increased deforestation in T?rkiye.	October 2019	Social and Environmental	<p>Unsustainable forestry practices can lead to less production of wood and might endanger a sustainable supply of forest products for CLT production.</p> <p>Probability ? 2 Impact ? 3</p>	<p>Ministry of Agriculture and Forestry controls the ?Allowable Cut? in T?rkiye and makes sure that the annual increment in new forested area is always considerably more than the harvested amount. This means that in 100% of cases, sustainable forestry practices are always followed. The MoAEP will not allow unsustainable forestry practices to be used so this risk is considered low.</p>	MoAF	Low
7	Economic slow-down and reorientation due to COVID-19 impacts	March 2020	Financial	<p>Uncertainty on economic impact of the COVID-19 can lead to re-orientation of economic activity and recovery phase at national scale.</p> <p>Probability - 3 Impact - 3</p>	<p>The risk will be evaluated closely and a mitigation action will be included in the project work plan and budget during the inception phase.</p>	MoAF	Medium

## 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.**

The project institutional and co-ordination arrangements have remained as described in the PIF, but with some further details and elaboration added as presented in chapter VII (Governance and Management Arrangements) of the project document.

**Section 1: General roles and responsibilities in the projects? governance mechanism:**

Implementing Partner: The Implementing Partner for this project is the **General Directorate of Forestry (GDF), Ministry of Agriculture and Forestry** (*hereinafter referred to as ?the Ministry?*). The execution modality for this particular project is National Implementation Modality (NIM), with targeted UNDP execution support under **Component 2**, for the implementation of the performance based payments

The UNDP implementation/execution support to NIM has been requested by the Implementing Partner (the Ministry) through the official letter signed by the GEF OFP (as Annex 22-Appendix a of the ProDoc) for the certain project sub-components (see table, below, of this section). This is due to the limitations in the public procurement law in T?rkiye which requires a verified technical specifications to start any procurement action, if to be done by the Ministry, for wooden buildings. Currently, there are no verified technical specifications for procuring goods and services for wooden buildings and those shall be prepared under Component 1 of the project, however only at a later point of the project implementation. For that reason, and only for the performance based payments (PBP) activities, UNDP support will be provided to define these technical specifications for the use of timber in construction for the concrete demonstration projects and assure successful execution of demonstrative wooden buildings.<sup>[1]</sup>, all before reaching the mid-term project milestone. This approach will allow 3 years for replication and commercialization period before the end of the project, while establishing a trackrecord of the use of the preliminary technical specification (tailored for the concrete demonstration projects), also feeding lessons learned from the process into the work under Component 1. Without UNDP's support for PBP activities, the demo projects would only be initiated after the legislation works is completed which would shorten the replication and commercialization period of the project to merely 1 year.

The Implementing Partner is the entity to which the UNDP Administrator has entrusted the implementation of UNDP assistance specified in this signed project document along with the assumption of full responsibility and accountability for the effective use of UNDP resources and the delivery of outputs, as set forth in this document. (HACT assessment for GDF is enclosed in Annex V of CEO ER document and Annex 21 of the Project Document)

The Implementing Partner is responsible for executing this project. Specific tasks include:

- Project planning, coordination, management, monitoring, evaluation and reporting. This includes providing all required information and data necessary for timely, comprehensive and evidence-based project reporting, including results and financial data, as necessary. 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 and generated by the project supports national systems.

- ? Overseeing the management of project risks as included in this project document and new risks that may emerge during project implementation;

- ? Procurement of goods and services, including human resources;

- ? Financial management, including overseeing financial expenditures against project budgets;

- ? Approving and signing the multiyear workplan;
- ? Approving and signing the combined delivery report at the end of the year; and,
- ? Signing the financial report or the funding authorization and certificate of expenditures.

Responsible Parties: A national NGO will be selected and contracted by the Ministry (IP) to provide support in the implementation of the activities that cannot be carried out by the Ministry due to the limitations in its current operational procedures related to hiring of international companies/experts under the current public procurement law. This NGO engagement shall address the current limits of public procurement law to hire international experts and to procure goods and services from the international vendors, institutional obligations on the audit, reporting and verification processes of the Ministry. This was discussed with the GEF OFP, the Ministry and UNDP, and identified as the most feasible option in view of the legislative restrictions. (Please see table, below, of this section, for the distribution of the responsibilities). Selection/engagement of the national NGO will be finalized during the inception phase in line with the Ministry (IP) rules and regulations.

During the implementation, the selected NGO will report back to the Project Manager (staff member of the Ministry), as demonstrated in the project organisation structure. The selected NGO, in close coordination with the Ministry, will facilitate the recruitment of national and international consultants, hire part of the project management unit and execute several procurement activities where as the Ministry faces difficulties due to the regulations (or its lack). In the rest of the project activities where the legislation enables it, the Ministry will carry out activities, including public procurement. The selected NGO will receive an execution fee to be paid out of the project management cost from the GEF funding, not more than US\$ 70,405 as explained in the section IX. Total Budget and Work Plan.

*Execution of the performance based payment vs. UNDP oversight::*

Performance-based payments (PBPs) are a type of agreement between UNDP and a responsible party to provide funding upon the verified achievement of an agreed measurable development result. No advances are provided, rather payments are made only upon the verified achievement of agreed results. This approach gives greater incentive to responsible parties to achieve results. Under the PBP agreements, UNDP will contract several type of responsible parties as NGOs, CSOs, non-UN IGOs, private sector firms, individuals, academia, and/or public authorities for certain types of activities where payments will be made based on the RP's verified achievement of result(s) as defined in the Agreement. Payment by UNDP to the RP will be made based on the RP's achievement of one or more results and completion of the related deliverable and is therefore a Performance-Based Payment. UNDP and the Ministry will sign an Letter of Agreement (LOA) for UNDP support services to the implementation, as drafted in Annex 24. UNDP will execute the total amount of **US\$ 1,741,753** for the targeted support service provided under Component 2 and project management of the project as in detail at Annex 24, where as the responsible parties under PBP agreements will receive **US\$ 1,369,502** out of the total amount that UNDP executes. The effectiveness of this modality will be reviewed as part of the mid-term review (MTR) of the project and if any issues are identified, swift action will be taken by UNDP.

The UNDP's targeted execution support will be performed by the **?Performance-Based Payments (PBP) Support Unit?**, which will be led by personnel on non-staff/project-based contracts (i.e. Personnel Service Agreement) specifically hired for the implementation of the specific outputs under Component 2 of this project (specified in further detail in the table, below, of this section), and located at the premises of the Ministry. The PBP Support Unit will be formed by PBP Task Manager and PBP Task Associate and they will report back to the Project Manager, who will be a staff member of the Ministry and to the Project Board, while the administrative aspects of the contracts of the unit's project personnel will be managed by the UNDP CO officer who is not, in any way, involved in neither programmatic nor operational oversight of the project.

Project stakeholders and target groups: The details of the engagement of stakeholders are given in the Stakeholder Engagement Plan.



UNDP: UNDP is accountable to the GEF for the implementation of this project. This includes overseeing of project execution undertaken by the Implementing Partner to ensure that the project is being carried out in accordance with UNDP and GEF policies and procedures and the standards and provisions outlined in the Delegation of Authority (DOA) letter for this project. **The NCE Executive Coordinator of UNDP, in consultation with UNDP Bureaus and the Implementing Partner, retains the right to revoke the project DOA, suspend or cancel this GEF project.** UNDP is responsible for the Project Assurance function in the project governance structure and presents to the Project Board and attends Project Board meetings as a non-voting member.

A firewall will be maintained between the delivery of project oversight and quality assurance performed by UNDP and charged to the GEF Fee and any support to project execution performed by UNDP (as requested by and agreed to by both the Implementing Partner and GEF) and may be charged to the GEF project management costs (only if approved by GEF). The segregation of functions and firewall provisions for UNDP in this case is described in the next section.

UNDP understands the importance of putting in place a firewall between oversight and implementation/execution support, whereas UNDP is also requested to provide execution support. It should be noted that the execution support, in line with UNDP Internal Control Framework and POPP/financial regulations, can only be provided in case requested by the Government and agreed by GEF Sec. The project document as well as UNDP Audit checklist at Annex 23 sets out various steps and arrangements to contribute to the firewall, some described directly below.

The firewall settings as outlined below apply and are coherent with the standing UNDP ICF and POPP:

? The Project Manager will be assigned by the Ministry and will have the 1<sup>st</sup> approval authority in the context of Internal Control Framework as for the execution. The Project Manager who will be a staff member of the Ministry, will manage the project on a day-to-day basis on behalf of the Implementing Partner within the constraints laid down by the Project Board. The Implementing Partner (the Ministry) appoints the Project Manager, who must be different from the Implementing Partner's representative in the Project Board.

? Terms of reference for all of the staff working for the project make very clear that there is a firewall. The project associate will have the project-based NGO contracts, and will primarily report to the Project Manager, and secondarily to the PBP Task Manager of the PBP Support Unit of the project. PBP Task Manager and PBP Task Associate who forms the PBP Support Unit will have non-staff/project based contracts in line with UNDP POPP and will report back to the Project Manager, and to the Project Board, while the administrative aspects of the contracts of the unit's project personnel will be managed by the UNDP CO officer who is not, in any way, involved in neither programmatic nor operational oversight of the project.

? Strict firewall within UNDP will be maintained between ?Project execution support (performed by the project-based PBP Support Unit, as part of the Project Management Unit)?, and ?oversight? (performed by CO Programme and Operations Staff). There is no overlap (neither people in respective positions, nor in reporting lines) between the project-based PBP Support Unit of the project, CO Program Unit, and CO Operations units.

**?Project execution support performed by PBP Support Unit?:** Technical assistance of the PBP Support Unit for the project is critical with respect to defining the technical specifications for the use of timber in construction (setting out application of the Eurocode 5 standards for timber at national level) and successful execution of the demonstrative wooden buildings that will use those technical specifications for

the first time. The Unit will provide assistance in architectural concept design and preparation of engineering in close cooperation with responsible parties. The Unit will assist with the Performance-Based Payments management as a critical component of the financial mechanism. Administrative tasks of the PBP Support Unit will be limited to preparing procurement plans and terms of references, ensuring procurement process, hiring and managing consultancies, arranging for a proper process for all project management activities (e.g. establishing the Phased Financial Support Mechanism (FSM) based on PBP modality, ensuring and monitoring of the Performance-based payment Agreements), maintaining records of all related documentation, preparing relevant progress reports, financial reports, and providing support to the financial auditing for the project, as needed.

? The oversight over the PBP Support Unit and the overall project management will be carried out by UNDP Country Office programmatic and operational units (i.e. the Quality Assurance Team, Climate and Environment Unit, Finance Unit under the supervision of the CO Senior Management).

? UNDP CO will provide **programme (substance-matter; non-financial) oversight** at the level of RR, Programme Specialist - Climate Change and Environment Portfolio Manager and CO M&E Programme Analyst. Names of UNDP country office staff who will provide **programmatic oversight to the project at the CO level (tier 1)**:

- Resident Representative, Delegated Authority for oversight of the project by UNDP's Executive Coordinator for GEF Programming, in coordination with the Deputy Regional Bureau Director, Regional Bureau for Eastern and Central Europe;
- Assistant Resident Representative (Programme), UNDP T?rkiye
- Climate Change and Environment (CCE) Portfolio Manager, UNDP T?rkiye;
- Assurance and Monitoring and Evaluation Analyst, UNDP T?rkiye;
- Programme Support Associate, (Programmatic-Financial oversight), UNDP T?rkiye.

The **operational oversight at the CO level (tier 1)** will be provided under the overall operational supervision of the following heads of the operational units, who are reporting to UNDP CO Deputy Resident Representative:

- Assistant Resident Representative (Operations), UNDP T?rkiye;
- Finance Analyst, Head of Finance Unit and HACT focal point, UNDP T?rkiye;
- Head of Procurement Unit, UNDP T?rkiye;
- Head of HR Unit, UNDP T?rkiye.

? The oversight over the PBP Support Unit and the overall project management will be also carried out at **the Head Quarters and Regional Bureau level (tier 2)**:

- The RBEC Regional Bureau, RBEC CO Solutions Specialist ? desk officer for the Western Balkans, T?rkiye and Cyprus, to ensure compliance with UNDP Regulations and Rules (POPP), and

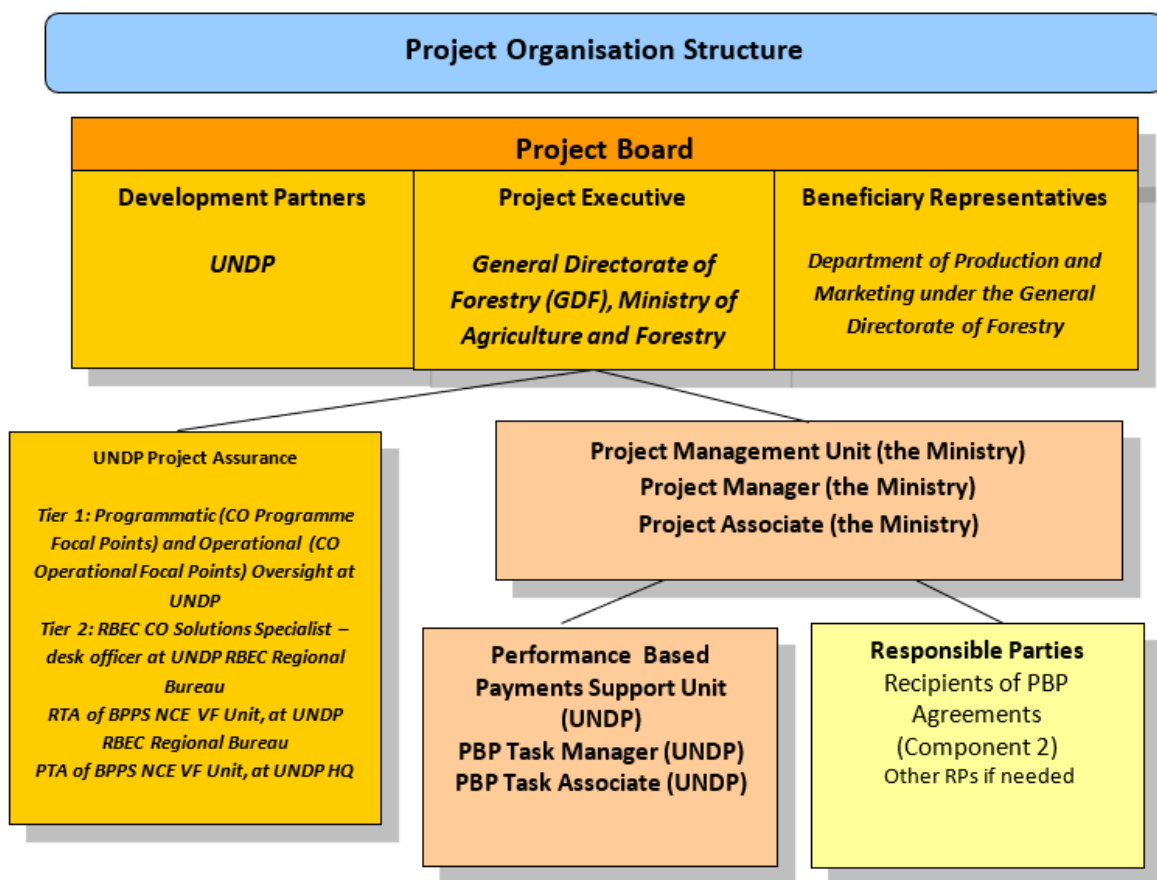
- The BPPS Nature, Climate and Energy (NCE) Team, to provide technical advice and ensure compliance with GEF policies and requirements. The BPPS-NCE team operates through Regional Technical Advisor (RTA), and Regional Technical Leader (RTL), supported (as appropriate) by Principal Technical Advisor (PTA) and the BPPS-NCE Directorate at HQ.

? All tiers of oversight are recovered exclusively from the GEF Fee or other UNDP sources and not from the project grant. Further detail can be found in Annex 23, UNDP Audit Checklist.

## **Section 2: Project governance structure:**

The **Project Management Unit (PMU)** will be established by the General Directorate of Forestry (GDF) and will consist of **the Project Manager, and the Project Associate**. The Project Manager will be assigned by GDF and will be a GDF staff member. The Project Associate will be assigned by the Responsible Party. The PMU will perform day-to-day management of project activities, regular reporting and manage stakeholder engagement, communication and outreach activities. Also, the Project Management Unit, based on the Letter requesting UNDP's execution support services, will be fully in charge of implementing the Outcome 1, Outcome 2, Outcome 4, Outcome 5 and Output 3.1 under Outcome 3 of the Project which are specified in further detail in table 2, below.

The Project-Based Performance Support Unit will be fully non-staff/project-based and will support the Phased Financial Support Mechanism (FSM) based on PBP agreements as per line with UNDP POPP. The unit will consist of **the PBP Task Manager and PBP Task Associate**, and will be in charge of providing support on the implementation of the Outputs 3.2, 3.3, 3.4 and 3.5 under Outcome 3 of the Project as per the Letter of the Ministry requesting execution support services of UNDP in Annex 22 of the project document. The unit reports to the Project Manager engaged by the Ministry and to the Project Board, while the administrative aspects of the contracts of the unit's project personnel will be managed by the UNDP CO officer who is not, in any way, involved in neither programmatic nor operational oversight of the project. This, in particular, refers to the preparation and the implementation of the Phased Financial Support Mechanism (FSM) based on PBP agreements as per line with UNDP POPP and the support provided during Phase I, II and III of the FSM. The Unit will act in close coordination and under the overall management of the Project Management Unit of the Ministry.



The UNDP Resident Representative assumes full responsibility and accountability for oversight and quality assurance of this Project and ensures its timely implementation in compliance with the GEF-specific requirements and UNDP's Programme and Operations Policies and Procedures (POPP), its Financial Regulations and Rules and Internal Control Framework. A representative of the UNDP Country Office will assume the assurance role and will present assurance findings to the Project Board, and therefore attends Project Board meetings as a non-voting member.

**UNDP project support:** The Implementing Partner and GEF OFP have requested the limited targeted execution support of UNDP which will be performed by the Performance-Based Payments (PBP) Support Unit of the project, and will be led by personnel on non-staff/project-based contracts (i.e. Personnel Service Agreement) specifically hired for the implementation of the specific outputs under Component 2 of this project (specified in further detail in table 11 of the project document), and located at the premises of the Ministry. The PBP Support Unit will be formed by PBP Task Manager and PBP Task Associate and they will report back to the Project Manager, who will be a staff member of the Ministry and to the Project Board, while the administrative aspects of the contracts of the unit's project personnel will be managed by the UNDP CO officer who is not, in any way, involved in neither programmatic nor operational oversight of the project. UNDP will provide targeted execution support to the implementation of **USD\$ 1,741,753** under Component 2 and project management of the project, where as the responsible parties under PBP agreements will receive **USD\$ 1,369,502** out of the total amount that UNDP executes for the full duration of the project, and the GEF has agreed for UNDP to provide such execution support services. The

execution support services ? whether financed from the project budget or other sources - have been set out in detail and agreed between UNDP Country Office and the Implementing Partner in a Letter of Agreement (LOA). This LOA is attached as in Annex 24 of this Project Document. The effectiveness of this modality will be reviewed as part of the mid-term review (MTR) of the project and if any issues are identified, swift action will be taken by UNDP.

To ensure the strict independence required by the GEF and in accordance with the UNDP Internal Control Framework, these execution services will be delivered independent from the GEF-specific oversight and quality assurance services.

### **Section 3: Segregation of duties and firewalls vis-à-vis UNDP representation on the project board:**

As noted in the [Minimum Fiduciary Standards for GEF Partner Agencies](#), in cases where a GEF Partner Agency (i.e. UNDP) carries out both implementation oversight and execution of a project, the GEF Partner Agency (i.e. UNDP) must separate its project implementation oversight and execution duties, and describe in the relevant project document a: 1) Satisfactory institutional arrangement for the separation of implementation oversight and executing functions in different departments of the GEF Partner Agency; and 2) Clear lines of responsibility, reporting and accountability within the GEF Partner Agency between the project implementation oversight and execution functions.

In this case, UNDP's implementation oversight role in the project ? as represented in the project board and via the project assurance function ? is performed **programmatic (substance-matter; non-financial) oversight** to the project at the CO level (tier 1) by:

- ? Resident Representative\*, Delegated Authority for oversight of the project by UNDP's Executive Coordinator for GEF Programming, in coordination with the Deputy Regional Bureau Director, Regional Bureau for Eastern and Central Europe;
- ? Assistant Resident Representative (Programme), UNDP T?rkiye;
- ? Climate Change and Environment (CCE) Portfolio Manager, UNDP T?rkiye;
- ? Assurance and Monitoring and Evaluation Analyst, UNDP T?rkiye.

**The operational oversight at the CO level (tier 1)** will be provided under the overall operational supervision of the following heads of the operational units, who are reporting to UNDP CO Deputy Resident Representative:

- ? Assistant Resident Representative (Operations), UNDP T?rkiye;
- ? Resource Mobilization Analyst, Head of Finance Unit, UNDP T?rkiye;
- ? HACT focal point, UNDP T?rkiye;
- ? Procurement Analyst, Head of Procurement Unit, UNDP T?rkiye;
- ? Head of HR Unit, UNDP T?rkiye.

UNDP's execution role in the project (as requested by the implementing partner and approved by the GEF) is performed by the **PBP Task Manager** and **PBP Task Associate (PBP Support Unit)**. (Terms of references of the unit can be found at Annex 20 of the project document) who will report to the Project

Manager, assigned by the Implementing Partner, and to the Project Board, while administrative aspects of the contracts of the Unit's project personnel will be managed by the UNDP CO officer who is not, in any way, involved in programme nor operational oversight of the project. **The oversight over the PBP Support Unit and the overall project management?** will be carried out by UNDP Country Office programmatic and operational units (i.e. the Quality Assurance Team, Climate and Environment Unit, Finance Unit under the supervision of the CO Senior Management).

#### **Section 4: Roles and Responsibilities of the Project Organization Structure:**

**a) Project Board:** All UNDP projects must be governed by a multi-stakeholder board or committee established to review performance based on monitoring and evaluation, and implementation issues to ensure quality delivery of results. The Project Board (also called the Project Steering Committee) is the most senior, dedicated oversight body for a project.

The two main (mandatory) roles of the project board are as follows:

- 1) **High-level oversight of the execution of the project by the Implementing Partner** (as explained in the **Provide Oversight?** section of the POPP). This is the primary function of the project board and includes annual (and as-needed) assessments of any major risks to the project, and decisions/agreements on any management actions or remedial measures to address them effectively. The Project Board reviews evidence of project performance based on monitoring, evaluation and reporting, including progress reports, evaluations, risk logs and the combined delivery report. The Project Board is responsible for taking corrective action as needed to ensure the project achieves the desired results.
- 2) **Approval of strategic project execution decisions of the Implementing Partner** with a view to assess and manage risks, monitor and ensure the overall achievement of projected results and impacts and ensure long term sustainability of project execution decisions of the Implementing Partner (as explained in the **Manage Change?** section of the POPP).

#### **Requirements to serve on the Project Board:**

- ? Agree to the Terms of Reference of the Board and the rules on protocols, quorum and minuting.
- ? Meet annually; at least once.
- ? Disclose any conflict of interest in performing the functions of a Project Board member and take all measures to avoid any real or perceived conflicts of interest. This disclosure must be documented and kept on record by UNDP.
- ? Discharge the functions of the Project Board in accordance with UNDP policies and procedures.
- ? Ensure highest levels of transparency and ensure Project Board meeting minutes are recorded and shared with project stakeholders.

#### **Responsibilities of the Project Board:**

- ? Consensus decision making:
  - o The project board provides overall overall guidance and direction to the project, ensuring it remains within any specified constraints, and providing overall oversight of the project implementation.
  - o Review project performance based on monitoring, evaluation and reporting, including progress reports, risk logs and the combined delivery report;
  - o The project board is responsible for making management decisions by consensus.
  - o 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.
  - o In case consensus cannot be reached within the Board, the UNDP representative on the board will mediate to find consensus and, if this cannot be found, will take the final decision to ensure project implementation is not unduly delayed.
- ? Oversee project execution:
  - o Agree on project manager's tolerances as required, within the parameters outlined in the project document, and provide direction and advice for exceptional situations when the project manager's tolerances are exceeded.

- o Appraise annual work plans prepared by the Implementing Partner for the Project; review combined delivery reports prior to certification by the implementing partner.
- o Address any high-level project issues as raised by the project manager and project assurance;
- o Advise on major and minor amendments to the project within the parameters set by UNDP and the donor and refer such proposed major and minor amendments to the UNDP BPPS Nature, Climate and Energy Executive Coordinator (and the GEF, as required by GEF policies);
- o Provide high-level direction and recommendations to the project management unit to ensure that the agreed deliverables are produced satisfactorily and according to plans.
- o Track and monitor co-financed activities and realisation of co-financing amounts of this project.
- o Approve the Inception Report, GEF annual project implementation reports, mid-term review and terminal evaluation reports.
- o Ensure commitment of human resources to support project implementation, arbitrating any issues within the project.
- ? Risk Management:
  - o Provide guidance on evolving or materialized project risks and agree on possible mitigation and management actions to address specific risks.
  - o Review and update the project risk register and associated management plans based on the information prepared by the Implementing Partner. This includes risks related that can be directly managed by this project, as well as contextual risks that may affect project delivery or continued UNDP compliance and reputation but are outside of the control of the project. For example, social and environmental risks associated with co-financed activities or activities taking place in the project's area of influence that have implications for the project.
  - o Address project-level grievances.
- ? Coordination:
  - o Ensure coordination between various donor and government-funded projects and programmes.
  - o Ensure coordination with various government agencies and their participation in project activities.

**Composition of the Project Board:** The composition of the Project Board must include individuals assigned to the following three roles:

1. **Project Executive:** This is an individual who represents ownership of the project and chairs (or co-chairs) the Project Board. The Executive usually is the senior national counterpart for nationally implemented projects (typically from the same entity as the Implementing Partner), and it must be UNDP for projects that are direct implementation (DIM). In exceptional cases, two individuals from different entities can co-share this role and/or co-chair the Project Board. If the project executive co-chairs the project board with representatives of another category, it typically does so with a development partner representative. The Project Executive is: **General Director of Forestry, Ministry of Agriculture and Forestry.**
  
2. **Beneficiary Representative(s):** Individuals or groups representing the interests of those groups of stakeholders who will ultimately benefit from the project. Their primary function within the board is to ensure the realization of project results from the perspective of project beneficiaries. Often representatives from civil society, industry associations, or other government entities benefiting from the project can fulfil this role. There can be multiple beneficiary representatives in a Project Board. The Beneficiary representative (s) is/are: **Head of Department of Production and Marketing under the General Directorate of Forestry.**
  
3. **Development Partner(s):** Individuals or groups representing the interests of the parties concerned that provide funding, strategic guidance and/or technical expertise to the project. The Development Partner is/are: **the Resident Representative to UNDP Country Office of Türkiye.**

b) **Project Assurance:** Project assurance is the responsibility of each project board member; however, UNDP has a distinct assurance role for all UNDP projects in carrying out objective and independent

project oversight and monitoring functions. UNDP performs quality assurance and supports the Project Board (and Project Management Unit) by carrying out objective and independent project oversight and monitoring functions, including compliance with the risk management and social and environmental standards of UNDP. The Project Board cannot delegate any of its quality assurance responsibilities to the Project Manager. Project assurance is totally independent of project execution.

A designated representative of UNDP playing the project assurance role is expected to attend all board meetings and support board processes as a non-voting representative. It should be noted that while in certain cases UNDP's project assurance role across the project may encompass activities happening at several levels (e.g. global, regional), at least one UNDP representative playing that function must, as part of their duties, specifically attend board meeting and provide board members with the required documentation required to perform their duties. The UNDP representative playing the main project assurance function is/are: Assistant Resident Representative (Operations), UNDP Türkiye, Climate Change and Environment (CCE) Portfolio Manager, UNDP Türkiye and/or Assurance and Monitoring and Evaluation Analyst, UNDP Türkiye.

c) **Project Management ? Execution of the Project:** The Project Manager (PM) (also called project coordinator) is the senior most representative of the Project Management Unit (PMU) and is responsible for the overall day-to-day management of the project on behalf of the Implementing Partner, including the mobilization of all project inputs, supervision over project staff, responsible parties, consultants and sub-contractors. The project manager typically presents key deliverables and documents to the board for their review and approval, including progress reports, annual work plans, adjustments to tolerance levels and risk registers.

A designated representative of the PMU is expected to attend all board meetings and support board processes as a non-voting representative.

The primary PMU representative attending board meetings is: **The Project Manager.**

Table for the List of Responsibility Distribution between the Ministry and UNDP

Components	Outcomes	Outputs	Responsibility	Execution Functions
<b>Component 1: Policy, Legislative, and Regulatory Support</b>	Outcome 1: Enhanced Legislation and Regulations	Output 1.1 Report on EU and other country legislation, regulations, standards and programmes aimed at promoting competitive energy efficient wooden building and assessment of their relevance for Türkiye, including relevant entrypoints for gender responsive legislative framework, prepared	The Ministry	<p><b>Procurement: the Ministry</b></p> <p>Subcontracting for Activity 1.6.5 ? USD 150,000, Activity 1.8.1 ? USD 50,000 and 1.8.2 ? USD 150,000</p> <p>1.6.5 Develop a toolbox within FEMS to integrate the competitive EE wooden buildings into the existing forest management scheme, including the MRV system</p> <p>1.8.1. Integration of sustainable forest certification systems into</p>



Components	Outcomes	Outputs	Responsibility	Execution Functions
		Output 1.2 Joint policy and working documents elaborated (among General Directorate of Forestry (GDF), and General Directorate of Vocational Services (GDVS) of Ministry of Environment, Urbanization and Climate Change (MoEUCC))	The Ministry	<p>CLT production</p> <p>1.8.2. Ensuring integrated forest management plans are in place for the CLT production sites</p> <p><b>Procurement: NGO</b></p> <p>Printing and publishing information materials for dissemination of the results of Component 1</p> <p><b>Consultancy: NGO</b></p> <p>-Chief Technical Advisor will lead the preparation of GDF-GDVS policy document, National strategy, strategies for municipalities, Wood Promotion for Sustainable Wood Construction Working Unit (Act. 1.2.1, 1.2.4, 1.3.1, 1.3.2, 1.3.4, 1.7.1) (39 working days x \$ 500 per day)</p> <p>-International Legislation Expert on Wood will contribute to the preparation of the report on legislation</p>
		1.3 National strategy for low cost energy-efficient wooden buildings, including near zero emission buildings (NZEB), to support development in urban areas elaborated with gender responsive approach	The Ministry	

Components	Outcomes	Outputs	Responsibility	Execution Functions
		1.4. National Standards, legislation and guidelines for designing and using timber for construction in Türkiye prepared, considering the different needs of women and men	The Ministry	<p>and standards of EU to promote competitive EE Wooden buildings in Türkiye (Act. 1.1.1, 1.1.2, 1.1.4, 1.4.5) ( 30 working days x \$ 800 per day)</p> <p>-International Expert on Wood, Wooden Buildings will contribute to the preparation of the national strategy and strategy document for the municipalities (Act. 1.3.2, 1.7.2) ( 27,5 working days x \$ 800 per day)</p> <p>-National Expert on Communication will support the preparation of the National Strategy, developing strategy for the promotion of the Low Cost EE Wooden buildings (Act. 1.3.1, 1.3.2) (15 working days x \$ 500 per day)</p> <p>-National Expert on Forest Biodiversity Conservation will support the preparation of the National Strategy, facilitating and writing down the sections for forest biodiversity conservation issues in providing the parts related to promotion of the Low Cost EE Wooden buildings (Act. 1.3.1, 1.3.2) (10 working days x \$ 500 per day)</p>
		1.5. Legislation that promotes government programmes to support low cost energy efficient wooden buildings prepared, considering the gender mainstreaming where possible	The Ministry	
		1.6. MRV system ready to monitor and evaluate GHG reductions associated with low cost wooden housing ? including calculations of GHG reductions	The Ministry	

Components	Outcomes	Outputs	Responsibility	Execution Functions
		1.7. At least (3) municipalities, selected by a criterion including gender responsive selection criteria, developed Low Cost EE Wooden Housing Strategy Documents (introductory information, promotion and guidelines)	The Ministry	-National Expert on Institutional, Legislation of Wood and Wooden Buildings will be working in close collaboration with International EU Wooden Construction Legislation Expert to deliver report on legislation and standards of EU, contribute to the national strategy, participating to the development of national standard, guidelines and draft legislation, promotion of the national standards,

Components	Outcomes	Outputs	Responsibility	Execution Functions
		1.8. Environmental measures developed and in place to ensure the wood for CLT is produced in a sustainable way	The Ministry	<p>facilitating discussions on bidding procedure of GDF within wood sector (Act.1.1.1, 1.1.2, 1.1.4, 1.3.2, 1.4.2, 1.4.3, 1.4.5, 1.5.1, 1.5.2) (67 working days x \$ 500 per day)</p> <p>- National Expert on Monitoring and Greenhouse Emissions will be responsible in development of MRV and relevant documentation (Act. 1.6.1, 1.6.4, 1.6.6) (37 working days x \$ 500 per day)</p> <p>- National Expert on Sustainable Forest Management will contribute to the national strategy and development of certification system for the sustainable management of forests where the wood for the CLT will be provided (Act. 1.3.1, 1.3.2, 1.8.1) (20 working days x \$ 500 per day)</p> <p>- National Expert on Wood, Wooden Buildings will provide know-how on CLT and constructing with CLT in preparation of National Strategy, national standards, design and documentation of the MRV system, strategy for the municipalities. Depending on the expertise one or four different consultants can work for this task (Act. 1.3.1, 1.3.2, 1.4.3, 1.6.1, 1.6.4, 1.6.6, 1.7.2) (64 working days x \$ 500 per day)</p> <p><b>Human Resources: NGO</b></p> <p><b>Events: the Ministry and/or NGO</b></p>

Components	Outcomes	Outputs	Responsibility	Execution Functions
	Outcome 2: Stronger Institutional Support within the Ministry of Agriculture and Forestry and the GDF for supporting construction from wood in Türkiye	Output 2.1. Established and operationalized Wood Promotion for Sustainable Wood Construction Working Unit within the General Directorate of Forestry with gender balanced representation to the extent possible	The Ministry	<p><b>Consultancy: NGO</b></p> <p>Chief Technical Advisor will lead the preparation of GDF-GDVS policy document, National strategy, strategies for municipalities, Wood Promotion for Sustainable Wood Construction Working Unit (Act. 2.1.1, 2.1.2) (10 working days x \$ 500 per day)</p>
		Output 2.2 Revised GDF bidding procedure to support the massive wood sector	The Ministry	<p>-National Expert on Institutional, Legislation of Wood and Wooden Buildings will be working in close collaboration with International EU Wooden Construction Legislation Expert to deliver report on legislation and standards of EU, contribute to the national strategy, participating to the development of national standard, guidelines and draft legislation, promotion of the national standards, facilitating discussions on bidding procedure of GDF within wood sector (Act.2.2.2) (5 working days x \$ 500 per day)</p> <p><b>Human Resources: NGO</b></p> <p><b>Events: GDF and/or NGO</b></p> <p>Costs of training sessions, workshops and other events (including venue, catering, information materials, etc.) for Activity 2.2.1</p> <p><b>Travel: the Ministry and/or NGO</b></p>

Components	Outcomes	Outputs	Responsibility	Execution Functions
<b>Component 2: Phased Financial Support Mechanism (including demo projects)</b>	Outcome 3: Phased Financial Support Mechanism (FSM) is operational and project providing incentives to SMEs for greater use of wood in construction in T?rkiye	Output 3.1. Feasibility studies to support the investment of SME?s in wood and construction sectors finalized	The Ministry	<b>Consultancy: NGO</b>  -International Expert (Chief Technical Advisor)on Wood, Wooden Buildings will be guiding CLT production and effective use of CLT in construction of the wooden buildings, provide support to the realization of the pilot projects (Act. 3.2.3, 3.3.1, 3.3.5, 3.4.4) (110 working days x \$ 800 per day over 2 years)  -Third Party International Expert to review the Investment Cost and the Subsidy Cost for the Demo Investment Buildings (17.5 working days at \$800 per day)  -Chief Technical Advisor will provide overall guidance to the production of CLT and dissemination of the low cost EE wooden buildings, realization of the pilot projects and phased financial support system (Act. 3.1.1, 3.1.2, 3.1.3, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.4.1, 3.5.1, 3.5.2) (100 working days x \$ 500 per day)  -National Expert on Finance, Economical Analysis will provide technical assistance and develop tools/means to increase the financial potential of the SME?s in wood and construction sector, conduct life-cycle assessment of CLT, identify
		Output 3.2. Phased Financial Support Mechanism (FSM) for supporting forestry small and medium size entrepreneurship (forestry SMEs) and/or construction companies to produce wood materials and construct energy efficient wooden buildings established with gender responsive approach	The Ministry with UNDP Implementation Support	
		Output 3.3. Phase I: At least 6 buildings with a total floor space of 8,400 m? are constructed using CLT technologies, with support from the Phased FSM	The Ministry with UNDP Implementation Support	
		Output 3.4 Phase II: Replication phase based on Performance-Based Payments implemented	The Ministry with UNDP Implementation Support	

Components	Outcomes	Outputs	Responsibility	Execution Functions
		Output 3.5 Phase III - Commercialization Phase with no GEF support implemented	The Ministry with UNDP Implementation Support	<p>FSM and make SMEs using FSM effectively (Act. 3.1.1, 3.1.2, 3.1.3, 3.2.1, 3.2.2, 3.2.4) (50 working days x \$ 500 per day)</p> <p>-National Expert on Monitoring and Greenhouse Emissions will be conducting life-cycle assessment regarding the CO2 emissions (Act. 3.1.1) (30 working days x \$ 500 per day)</p> <p>-Third Party National Expert to review the Investment Cost and the Subsidy Cost for the Demo Investment Buildings (35 working days @ \$500 per day)</p> <p><b>Procurement: UNDP</b></p> <p>-Sub-budget category for Technical Assistance:</p> <p>For 6 pilot buildings:</p> <p>3.3.1 ? (Architectural conceptual and detailed design support for the pilot buildings)</p> <p>3.3.2 - (Structural analysis of the pilot buildings)</p> <p>3.3.3 ? (Detailed construction plan support for pilot buildings)</p> <p>3.3.4 - (Support for getting the permits, rganizati final changes etc. for pilot buildings)</p> <p>For phase 2:</p> <p>3.3.7 ? (Control and quality assurance support)</p>

Components	Outcomes	Outputs	Responsibility	Execution Functions
<b>Component 3: Public Awareness Campaign and Training Programmes for Construction Companies on Benefits of Wooden Houses</b>	Outcome 4: Increased awareness about the benefits of using wood in construction	Output 4.1. National Marketing Strategy and Public Awareness Campaign on the benefits of low cost EE wooden buildings developed with participation of women professionals (4 national workshops, minimum 400 participants)	The Ministry	<p><b>Consultancy: NGO</b></p> <p>-International Expert on Wood, Wooden Buildings will increase the capacity on CLT production and construction with CLT through supporting series of workshops, preparation of guidelines (Act. 4.1.7) (15 working days x \$ 800 per day)</p> <p>-National Expert on Communication will provide technical assistance for the dissemination strategy and materials, training activities and capacity building of the stakeholders and other representatives of the wood and construction sectors (Act. 4.1.2, 4.1.3, 4.1.5, 4.1.6, 4.1.7) (70 working days x \$ 500 per day)</p> <p><b>Human Resources: NGO</b></p> <p><b>Procurement: the Ministry</b></p> <p>Cost of subcontracts for services under Activity</p> <p>4.1.6 ? USD 10,000</p> <p>Printing and publishing information materials for dissemination of the results of Outcome 5</p> <p><b>Events: the Ministry and/or NGO</b></p> <p>Costs and other training sessions and workshops, events (including venue, catering, information materials, etc.) for Activity 4.1.3, 4.1.4, 4.1.7</p> <p><b>Travel: the Ministry and/or NGO</b></p>



Components	Outcomes	Outputs	Responsibility	Execution Functions
	Outcome 5: Increased training and capacity building on using wood in construction	Output 5.1. Marketing materials created and disseminated with gender responsive communication principles to construction companies on the benefits of CLT for new low cost EE wooden building construction	The Ministry	<p><b>Consultancy: NGO</b></p> <p>International Expert on Wood, Wooden Buildings will increase the capacity on CLT production and construction with CLT through supporting series of workshops, preparation of guidelines (Act. 5.3.1, 5.3.2) (20 working days x \$ 800 per day)</p> <p>-Chief Technical Advisor will support the implementation of the training programs for construction and wood sectors (Act. 5.3.3, 5.3.4) (20 working days x \$ 500 per day)</p> <p>-National Expert on Communication will provide technical assistance for the dissemination strategy and materials, training activities and capacity building of the stakeholders and other representatives of the wood and construction sectors</p>
		Output 5.2. Detailed training programmes for stakeholders, including participation of women investors and entrepreneurs on the financial support mechanism elaborated	The Ministry	

Components	Outcomes	Outputs	Responsibility	Execution Functions
		Output 5.3. Capacity Building and Training provided to construction sector in Türkiye on the benefits of using wood for construction (includes training and awareness raising related to the financial support mechanism) which includes at least 5 capacity building and awareness raising workshops (minimum 500 participants with a target of 30% women participants)	The Ministry	<p>(Act. 5.2.1, 5.2.2, 5.2.3, 5.3.1, 5.3.2, 5.3.4) (70 working days x \$ 500 per day)</p> <p>-National Expert on Wood, Wooden Buildings will increase the capacity on CLT production and construction with CLT through supporting series of workshops, preparation of guidelines (Act. 5.3.1, 5.3.2, 5.4.2,) (90 working days x \$ 500 per day)</p> <p><b>Human Resources: NGO</b></p> <p><b>Procurement: the Ministry</b></p> <p>Cost of subcontracts for services under Activity</p> <p>5.1.2 ? USD 3,491</p> <p>5.3.1 ? USD 42,000</p> <p>5.3.2 - USD 42,000</p> <p>5.4.2 ? USD 30,000</p> <p>Printing and publishing information materials for dissemination of the results of Outcome 5</p> <p><b>Events: the Ministry and/or NGO</b></p> <p>Costs and other training sessions and workshops, events (including venue, catering, information materials, etc.) for Activity 5.2.1, 5.2.2, 5.2.3, 5.3.4</p> <p><b>Travel: the Ministry and/or NGO</b></p>

Components	Outcomes	Outputs	Responsibility	Execution Functions
		Output 5.4. Good quality CLT production in line with the required standards is ensured with gender responsive communication principles	The Ministry	
<b>Component 4: Monitoring and Evaluation</b>	M&E	Monitoring and Evaluation		<p><b>Consultancy: NGO</b></p> <p>Project Mid-term Evaluation Expert (20 working days x \$ 1.000 per day)</p> <p>Project Terminal Evaluation Expert (25 working days x \$ 1.000 per day)</p> <p><b>Human Resources: NGO</b></p> <p><b>Events: the Ministry and/or NGO</b></p> <p>Cost of Inception Workshop of the Project</p> <p><b>Travel: the Ministry and/or NGO</b></p>

Components	Outcomes	Outputs	Responsibility	Execution Functions
<b>Component 5: Project Management Cost</b>	PMC	Project Management Costs		<p><b>Procurement: NGO</b></p> <p>Office (IT) equipment of the PMU (such as lap-top computers, monitors, printer, etc.)</p> <p><b>Audit Costs: UNDP</b></p> <p>audit fees, costs of capacity Assessments, spot-checks</p> <p><b>Human Resources: NGO</b></p> <p>Project Management Cost of below functions:</p> <p>Project Associate</p>

[1] Türkiye has adopted the Eurocode 5 standards for timber which is called TS EN 1995. However, a national annex that is in line with the Turkish construction standards setting out the application of the standard at the national level in detail has not been developed yet. UNDP will through the PBP financial support mechanism start architectural concept design/engineering plans through the pilot projects (benefitting PBPs) that will serve as the practical basis for the development of the national technical specifications (that are a deliverable of this project under Component 1). In other words, the government development of the national technical specifications on the use of timber in construction will build on the UNDP demonstration of the technical requirements for timber that will be set for the 6 demonstration projects. Without UNDP support, the government would not be in a position to start procurement activities given the lack of technical requirements at the time when the demonstration projects are to start. Change of activity sequencing, is on the other hand not desirable, given the essential importance of allowing sufficient time for the demonstration projects to be able to replicate/commercialize.

## 7. Consistency with National Priorities

Describe the consistency of the project with national strategies and plans or reports and assessments under relevant conventions from below:

NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

- Others

The project is strongly linked with a number of national legislations, strategies and plans of the government of Türkiye, these are outlined in the table below:

Plan or strategy:	Description of consistency
<p>The Fifth National Communication of Türkiye to the UNFCCC.</p> <p><i>And</i></p> <p>The National Climate Change Strategy (NCCS) of 2010 and subsequent National Climate Change Action Plans (NCCAPs).</p> <p><i>And</i></p> <p>Türkiye's Nationally Determined Contribution</p>	<p>The 5<sup>th</sup> National Communication of Türkiye to the UNFCCC was formally published and submitted in 2013. The 5<sup>th</sup> NC places critical importance on energy efficiency technologies and low emissions pilot solutions for Türkiye. The GEF project represents both an innovative policy package promoting low-cost EE wooden housing with particular emphasis on CLT technology which is unproven in Türkiye and can therefore be viewed as new and innovative. It is also new and innovative for UNDP which has a lot of experience with EE in buildings projects but this is the first project to specifically promote wood technologies for GHG reduction and increased carbon sequestration.</p> <p>Finally, Türkiye has adopted its INDC as "up to 21 per cent reduction in GHG emissions from the Business as Usual level by 2030. This includes economy-wide scope and coverage including energy and industrial processes and product use. This project will support Türkiye's efforts on achieving its targets for climate change mitigation through the adoption of energy-efficient wooden buildings in the construction sector which currently has a reasonable amount of energy consumption share with the goal of reducing at least 197 716 tonnes of CO<sub>2</sub>e per annum by the end of the project.</p>
Türkiye 10th National Development Program 2014-2018.	The 10 <sup>th</sup> National Development Plan specifically outlines the housing sector as an important priority. The project is directly consistent with this development goal and works to achieve the goals of supporting the work of the General Directorate of Forestry in the area of energy efficiency.
Energy efficiency laws: "Energy Efficiency Law no. 5627" 2007; Official Gazette no. 27035 "Regulation On Increasing Efficiency in the use of Energy Resources and Energy.	The project supports the purpose of these laws by increasing energy efficiency through promoting the use of environmentally friendly new wooden houses.
Türkiye's Sustainable Development Report 2012.	The report outlines the need for improved housing for the Turkish population as a Sustainable Development priority.

## 8. Knowledge Management

**Elaborate the "Knowledge Management Approach" for the project, including a budget, key deliverables and a timeline, and explain how it will contribute to the project's overall impact.**

The project will undertake knowledge management activities through the development of a project website which will make available information about all of the work that the project is carrying out. In addition, the project will carry out knowledge management activities through regular UNDP channels concerning communications, outreach and knowledge management. In particular, the project will learn the lessons and apply the results from the UNDP GEF "Energy Efficient Buildings" Project in Türkiye (GEF ID: 2492) which has been completed in April 2017. A lessons-learned study has been prepared for this project and can be made available, upon request.

Under Outcome 5, the project will produce a number of knowledge outputs. The most important products: a web-portal for the construction companies and architects to maintain communication, disseminate lessons learned, Q&A section technical support, knowledge management, best practice sharing; promotion materials on wood buildings for construction companies (short films, brochures); preparing "Handbook of Architect" on how to prepare wood building together with Chamber of Architects and organizing a training program for training of trainers; preparing "Handbook of Civil Engineer" on how to construct wood building together with the Chamber of Civil Engineers and organizing a training program for training of trainers. These knowledge outputs will be used in Türkiye for promoting the use of CLT, but can also be used in other programmes and projects working on similar topics.

From year 3 onwards, an annual national conference on CLT will be organised (in total 4 conferences throughout the project lifetime). Outputs of this conference will be shared with the public. The project will also carry out mid-term and final evaluations, the evaluation documents can be downloaded from the public UNDP website: [web.undp.org/gef/evaluation.shtml](http://web.undp.org/gef/evaluation.shtml)

The following table lists the key deliverables and timelines:

Key deliverable	Timeline
Guidelines for the implementation of the MRV system (data collection protocols, analysis and reporting details)	Year 1
A toolbox developed within FEMS (Forest Ecosystem Management System) to integrate the competitive EE wooden buildings into the existing forest management scheme, including the MRV system	Year 3
Knowledge products including videos, written materials, articles etc.	Year 1-5
Short video prepared and disseminated to promote the benefits of low cost EE wooden buildings, using the pilot demonstration projects	Year 3-6
Project website and outreach to promote the benefits of low cost EE wooden building, having the necessary links, the related standards, legislation, the guideline, the producers, the products, pilot projects	Year 1-6

Preparation of promotion materials on wood buildings for construction companies (short films, brochures)	Year 2
Web-portal for the construction companies and architects to maintain communication, disseminate lessons learned, Q&A section technical support, knowledge management, best practice sharing	Year 2-6

The majority of activities are implemented under Output 4.1. (National Marketing Strategy and Public Awareness Campaign on the benefits of low cost EE wooden buildings developed) and Output 5.1. (Marketing materials created and disseminated to construction companies on the benefits of CLT for new low cost EE wooden building construction). Sufficient budget has been reserved for these activities.

## 9. Monitoring and Evaluation

### Describe the budgeted M and E plan

Project monitoring and evaluation will be conducted in accordance with the established standard UNDP and GEF procedures described in further detail in chapter VI of the Project Document. 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. The project monitoring and evaluation plan will also facilitate learning and ensure knowledge is shared and widely disseminated to support the scaling up and replication of project results.

Project-level monitoring and evaluation will be undertaken in compliance with UNDP requirements as outlined in the UNDP POPP and UNDP Evaluation Policy. The UNDP Country Office is responsible for ensuring full compliance with all UNDP project monitoring, quality assurance, risk management, and evaluation requirements. Additional mandatory GEF-specific M&E requirements will be undertaken in accordance with the GEF Monitoring Policy and the GEF Evaluation Policy and other relevant GEF policies. The costed M&E plan in chapter VI, and the Monitoring plan in Annex I of the CEO ER Document and Annex 3 for the Project Document, will guide the GEF-specific M&E activities to be undertaken by this project. 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.

A project inception workshop will be held within 60 days of project CEO endorsement, the results will be summarized in the Inception Report. The annual GEF PIR covering the reporting period July (previous year) to June (current year) will be completed for each year of project implementation. 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 quality rating of the previous year's PIR will be used to inform the preparation of the subsequent PIR. The Mid-term Review

(MTR) will be carried out between 2nd and 3rd PIR of the project during the mid-point of project implementation. An independent Terminal Evaluation (TE) will take place upon completion of all major project outputs and activities.

The key steps of the project's M&E plan and their indicative budget is summarized in the table below.

GEF M&E requirements	Indicative costs (US\$)	Time frame
<b>Inception Workshop</b>	Total: 40,000	Within 60 days of CEO endorsement of this project.
<b>Inception Report</b>	Total: 14,000	Within 90 days of CEO endorsement of this project.
<b>M&amp;E of GEF core indicators and project results framework</b>	6,000	Annually and at mid-point and closure
<b>GEF Project Implementation Report (PIR)</b>	9,070	Annually typically between June-August
<b>Monitoring all risks (UNDP risk register)</b>	None	On-going
<b>Monitoring of stakeholder engagement plan</b>	9,070	On-going.
<b>Monitoring of gender action plan</b>	9,070	On-going.
<b>Monitoring of ESS and management plans</b>	9,070	On-going.
<b>Supervision missions</b>	None <sup>[1]</sup>	Annually
<b>Oversight missions</b>	None	Troubleshooting as needed
<b>Independent Mid-term Review (MTR): costs associated with conducting the independent review/evaluation to be commissioned by UNDP not the Implementing Partner or PMU.</b>	20,000	1 July 2026
<b>Independent Terminal Evaluation (TE): costs associated with conducting the independent evaluation to be commissioned by UNDP not the Implementing Partner or the PMU.</b>	25,000	1 April 2029
<b>TOTAL indicative Cost</b>	<b>141,280</b>	



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[1] The costs of UNDP Country Office and BPPS NCE-VF Unit's participation and time are charged to the GEF Agency Fee

## 10. Benefits

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

The major socioeconomic benefit to be delivered by the project is the creation of new job opportunities by establishing CLT as a new, green building material. New employment will be created in various sectors of the economy, including forestry, wood processing companies (producing CLT), construction companies, engineering and architectural companies. However, there is no quantitative information available from studies on the job effects from CLT. It is mentioned that there is shifting in jobs (fewer jobs on the construction site, as construction is faster, and more jobs in forestry and CLT production), but no information on job effects is available. Through the cost-effectiveness of CLT over traditional building materials, new investment opportunities for the private sector will be created.

There are benefits on the local level due to the shorter construction time for CLT buildings. In interviews, Turkish construction companies confirmed that the construction time of an average building is reduced from 15 months to 9 months (minus 40%). It also needs to be considered that CLT panels are pre-fabricated, so there is less local pollution and noise compared to standard buildings made out of concrete and steel. A study on a CLT building in the UK confirmed that there were only 111 deliveries to site required compared to 800 deliveries for a building with an equivalent concrete frame[1]. This is a reduction of 86%.

A specific emphasis throughout the project implementation will also be placed on gender-related aspects by including gender-specific indicators into the project results framework, collecting gender-disaggregated data on the project impact during its implementation and specifically encouraging female experts and business owners to participate in awareness raising and training as well as in the implementation of CLT buildings. Various women's associations will be involved in the project to ensure the strong participation of women.

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[1] <https://constructionmanagemagazine.com/clt-coming-age/>

## 11. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

**Overall Project/Program Risk Classification \***

PIF	CEO Endorsement/Approval	MTR	TE
Medium/Moderate			
<b>Measures to address identified risks and impacts</b> Elaborate on the types and risk classifications/ratings of any identified environmental and social risks and impacts (considering the GEF ESS Minimum Standards) and any measures undertaken as well as planned management measures to address these risks during implementation.			

## Annex K: Social and Environmental Screening Procedure (SESP)

### Project Information

<i>Project Information</i>	
1. Project Title	Promoting Low Cost Energy Efficient Wooden Buildings in Türkiye
2. Project Number	5673
3. Location (Global/Region/Country)	Türkiye

### Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

<b>QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?</b>
<i>Briefly describe in the space below how the Project mainstreams the human-rights based approach</i>

The project fully considers the human rights-based approach and does not lead to any adverse impacts on enjoyment of the human rights (civil, political, economic, environmental, social or cultural) of any key or potential stakeholders, communities involved or wide population. The project provides innovation and financial mechanism in wood-based technologies with a human rights-based approach towards using wood in construction, free of any prejudice or discrimination. The project will be open to all stakeholders and there is no chance that the project could potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups. The project will support meaningful participation and inclusion of all stakeholders in process that may impact them including design, implementation and monitoring of the project through capacity building, creating and enabling environment for participation from public and private sector. Considering the fact that the forests belong to state and forestry sector is dominated with state's planning and marketing strategy, helping to promote the massive wood in construction sector with participation of academia, private sector, NGOs and public sector in policy formulation will mainstream the human-rights based approach.

***Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment***

Women are underrepresented in the construction industry in T?rkiye, in particular in construction using wood technologies. The Project has prepared a Gender Action Plan to improve women's participation during Project implementation, by provide access to opportunities and benefits, involve women during consultations, considering women and men equally as end users of wooden buildings, and ensure equal participation in decision making processes.

The Project's result framework includes special measures and indicators to address any gender inequality.

***Briefly describe in the space below how the Project mainstreams environmental sustainability***

The project supports implementation of national environmental sustainability priorities identified in the UNDAF, Government of T?rkiye, and international agreements such as UNCBD and UNFCCC, and the Paris Accord through strengthening environmental management capacity of all partners from the public to the private sector in forestry and construction sector and by promoting low carbon, climate resilient construction in T?rkiye using sustainable wood technologies.

Promoting energy-efficiency in buildings means promoting and mainstreaming environmental sustainability as by promoting the switch away from use of concrete and cement in construction, the project is following a new and innovative approach towards sustainable development, including promoting low cost climate resilient wooden buildings which are environmentally sustainable. The project mainstreams environmental sustainability by promoting a sustainable approach towards construction while at the same time reducing CO2 emissions from improved efficiency. All forests in T?rkiye are owned and managed by the State meaning that private companies are only allowed to cut trees and produce timber if they have a permit. The allowable cut in T?rkiye is 17.6 million m<sup>3</sup> per annum while the annual average growth rate in forested land in T?rkiye is 33 million m<sup>3</sup> per annum which is almost double the allowable cut. This means that the sustainable forest management practices will be followed with regards to this project and there is no risk that the increased use of wood products will result in more forest being harvested than the allowable cut.

The project also addresses environment and development linkages such as job creation, high carbon storage, and disaster risk reduction due to having wood building advantages as has been described in the PIF document. A assessment of this project towards the National Determined Contribution of T?rkiye under the Paris Accord and to Sustainable Forest Management criteria and indicators will be carried out during the PPG phase as part of the ESMF.

**Part B. Identifying and Managing Social and Environmental Risks**

<p><b>QUESTION 2:</b></p> <p><b>What are the Potential Social and Environmental Risks?</b></p> <p><i>Note: Describe briefly potential social and environmental risks identified in Attachment 1 ? Risk Screening Checklist (based on any ?Yes? responses). If no risks have been identified in Attachment 1 then note ?No Risks Identified? and skip to Question 4 and Select ?Low Risk?. Questions 5 and 6 not required</i></p>	<p><b>QUESTION 3: What is the level of significance of the potential social and environmental risks?</b></p> <p><i>Note: Respond to Questions 4 and 5 below before proceeding to Question 6</i></p>	<p><b>QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?</b></p>
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<b><i>Risk Description</i></b> <b><i>(as in SESP Attachment 1. Social and Environmental Risk Screening Checklist)</i></b>	<b><i>Impact and Probability (1-5)</i></b>	<b><i>Significance (Low, Moderate, High)</i></b>	<b><i>Comments</i></b>	<b><i>Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.</i></b>
<p>Risk 1</p> <p>Adverse Impacts on Gender</p> <p>Principle 2.3</p>	<p>I:2</p> <p>P:2</p>	Moderate	<p><b>Gender</b></p> <p>Women did raise concerns.</p> <p>The Gender Analysis that was prepared for the Project highlighted the underrepresentation of women in the construction and wood sector, and the domination of men, particularly in informal relations.</p>	<p>The Project will implement the Gender Action Plan prepared for the Project, including Component specific mitigation measures.</p> <p>Gender equality will be mainstreamed throughout the project, by promoting a gender responsive perspective and avoiding existing inequalities and not strengthening male exclusive structures.</p>

Risk 2	I = 1	Low	<p><b>Impacts on forest resources</b></p> <p>The Project will directly contribute to the financing of 6 buildings, subsidize professional services for an additional 25 buildings, and set up a Financial Support Mechanism to promote the construction of wooden buildings, with a target of 200 new buildings per year.</p> <p>Given that the construction of one wooden building with a surface area of 1 330 m<sup>2</sup> requires approximately 220 m<sup>3</sup> of timber:</p> <p>The construction of 6 buildings under Phase I would require approximately 1 320 m<sup>3</sup> of timber, representing less than 0,01% of the annual wood production.</p> <p>The construction of 25 buildings under Phase II would represent approximately 0,02% of the annual wood production.</p> <p>The construction of 200 buildings per year under Phase III would represent approximately 0,2 % of annual production. Over 1 500 wooden buildings would have to be built each year to reach 1% of the available wood supply.</p>	<p>At the end of the project the demand for wood to produce CLT for Project supported activities is expected to be approximately 44 000 m<sup>3</sup> per year, which is less than 0,2% of the current annual wood production of 25-30 million m<sup>3</sup>. Even if one takes into account that CLT production will use a subset of the wood production, the overall demand is unlikely to reach 0,5 % of the production of preferred tree species. Thus, the Project will not have a significant effect on demand</p> <p>Furthermore, the demand for CLT production could be accommodated within current production, if the efficiency of the supply chain is improved, for example by redirecting some of the high value wood from butt and middle logs, which is currently purchased to produce MDF, to CLT production. MDF would still be produced from available top logs, crowns, branches, or sawmill chips, thus minimizing the risk of displacing workers currently employed by the highly mechanized MDF production units.</p> <p>Furthermore, the current forest management and planning is conservative, in part because of low demand. Increased logging would still be sustainable, but would reduce the rate of growth of the forest stock.</p> <p>Since the Project will not have a significant impact on demand, the</p>
Impacts on Forest Resources	P =1			
Principle 3				
Standard 1.11				

Risk 3	I=4	Moderate	<p><b>Land ownership issues</b></p> <p>Available literature suggests that a backlog of unresolved legacy land disputes subsists from the process of nationalization of forested land. The size of this backlog and the validity of such claims could not be ascertained during the preparation of the ESMF, and the claims could in some instances intersect with other social considerations. Land disputes are not an unusual feature of forest management. Established procedures for addressing these disputes exists, and an unknown portion of these claims could be under court review.</p>	<p>UNDP is already supporting consultative processes as part of its existing support to the Forest Sector. The risk is evaluated as being moderate, given that the activities directly promoted by the Project are unlikely to intersect with such disputes.</p>
Land ownership issues	P=2			
Principle 3				
Standard 1.11				



<p>Risk 4</p> <p>Use of forest resources that could be vulnerable to climate change</p> <p>Principle 3</p> <p>Standard 2.3</p>	<p>I=1</p> <p>P=1</p>	<p>Low</p>	<p><b>The Project could promote activities that rely on forest resources that could be affected by climate change.</b></p> <p>The above Climate Change baseline suggests a complex relationship between climate variables and tree growth and regeneration that is not fully understood globally, thus making it difficult to predict the impact of climate change on forest production in Türkiye, particularly given the limited availability of data specific to Türkiye. Forest production is species specific, location specific, and depends on the species composition/competition, topography/altitude, genetic stock, the age and density of the stands, in addition to the temperature profile, the precipitation profile, and soil water balance at different depths.</p> <p>There is no documented scientific basis to predict a drop or an increase in the availability of sustainably produced timber in Türkiye, in the short to medium term. What will happen long-term can only be speculation.</p>	<p>The key short to medium-term factor is that the areas managed by OGM remain in production, and that current management practices are maintained. Nonetheless, sustainably managing Türkiye's forests in a context of climate change will be a major challenge for OGM and might in the long-term involve genetic selection and assisted migration.</p> <p>Further analysis and modelling of ongoing trends, using the tree ring, as well as the regeneration and species composition data that is collected during the preparation of management plans, would help reduce the level of uncertainty and help identify appropriate mitigation measures. The Project should consider supporting such activities, either through workshops or by subsidizing critical research.</p>
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Risk 5	I = 3	Moderate	<p><b>All of these risks are related to the construction activities supported by the Project and will be addressed through Contractor Environmental and Social Management Plans (ESMPs).</b></p> <p>The scope and nature of the buildings supported by the Project do not meet the commonly accepted definition or exceed the threshold for large infrastructure project, such as roads, power plants, hydropower dams and reservoirs, power lines, water supply and sewerage, or even for medium size infrastructure.</p> <p>Building construction very rarely undergoes an environmental and social impact assessment, and certainly not for buildings of the size being considered.</p> <p>Turkish EIA regulations do not require an ESIA for the type and number of buildings associated with the Project.</p> <p>It can be assumed that any location specific environmental or social issues will be adequately addressed by local authorities during the mandatory construction permitting process for each of these buildings.</p>	<p>The Project should ensure compliance with local authority bylaws regarding location specific environmental or social issues, by learning about the relevant bylaws, and by visiting the site and consulting neighbouring individuals and communities.</p> <p>More importantly, the Project will include measures to address environment health and safety (EHS) risks, including workplace incidents, accidents, injuries, diseases, labour code infractions, sexual exploitation and abuse, and sexual harassment. Any serious accident or non-compliance could compromise the public's perception of the Project and derail its implementation.</p> <p>Accordingly, the Project will ensure that construction activities are in compliance with Turkish Labour Act 4857, as well as Law 6331 of 20 June 2012 regulating duties, authority, responsibility, rights and obligations of employers and workers in order to ensure occupational health and safety at workplaces and to improve existing health and safety conditions, and that it meets UNDP requirements, as detailed in the minimum EHS criteria.</p> <p><b>Phase I: Performance Based Grants for up to 25% of the total construction cost</b></p> <p>? Requests for</p>
Risk and Impacts from construction activities	P = 5			
Principle 3				
Standard 3.1				
Standard 3.2				
Standard 3.4				
Standard 3.7				
Standard 3.8				
Standard 7.1				
Standard 7.2				
Standard 7.5				

### Phase II ? Replication Phase with GEF support for Technical Assistance

The support provided during Phase II is smaller (less than US\$ 30 000 per building) and mostly focused on activities upstream from construction, such as architectural designs.

- ? As in Phase I, the Project should ensure that the construction permit took into account location specific environmental and social issues, if the requested support is for activities downstream from permitting.
- ? The Project should also ensure that the EHS related process described above for Phase I is followed, if the requested support is for activities downstream from the selection of the general contractor. This obligation would extinguish upon completion of the Project.

### Phase III ? Commercialization Phase with no GEF support

Given that UNDP's support will help establish the FSM, but will not bankroll it over the longer term, the main environmental and social risks arising from the FSM under Phase III is that the Project might be indirectly associated with the poor environmental and social performance of a beneficiary entity.

The Project will address this risk by ensuring that the FSM operations manual includes a streamlined environmental and social due diligence process for the entities applying for FSM support, analogous to the due diligence that will be done regarding financial management and credit worthiness. This due diligence should focus on the documented record in terms of non-compliances with applicable environmental and social regulations, including labour and gender. Entities or persons associated with any such serious non-compliances should be excluded from FSM support.

[add additional rows as needed]

#### QUESTION 4: What is the overall Project risk categorization?

Select one (see [SESP](#) for guidance)

Comments

	<i>Low Risk</i>	?	
	<i>Moderate Risk</i>	X ?	
	<i>High Risk</i>	?	
	<b>QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?</b>		
	Check all that apply		<b>Comments</b>
	<i>Principle 1: Human Rights</i>	?	
	<i>Principle 2: Gender Equality and Women's Empowerment</i>	X	<p>The Gender Analysis highlighted the need for proactive measures to promote Gender Equality and Women's Empowerment (GEWE) in the Project.</p> <p>The Project will implement a Gender Action Plan:</p>
	<i>1. Biodiversity Conservation and Natural Resource Management</i>	X	<p>The implementation of functional planning has reduced the likelihood that wood used for CLT production could come from old growth forests. Moreover, construction using CLT do not require wood from the largest trees, contrary to traditional wooden construction.</p> <p>The risk will be further decreased when the new Legal Notice regarding biodiversity is adopted and implemented.</p>
	<i>2. Climate Change Mitigation and Adaptation</i>	X	<p>The use of wood for building construction will create a carbon reservoir that contributes to mitigation efforts.</p> <p>Project activities are not vulnerable to climate change.</p>

	<b>3. Community Health, Safety and Working Conditions</b>	<b>X</b>	Project involvement in construction activities requires that contractors will be held to international best practices in terms of environment, health and safety, and labour conditions.  The ESMF proposes measures to ensure that this is done.
	<b>4. Cultural Heritage</b>	<b>?</b>	In the event of a chance find during construction of wooden houses, a chance find procedure will be applied to the contractors involved
	<b>5. Displacement and Resettlement</b>	<b>?</b>	Construction activities will take place on sites that are already owned by the concerned persons or entities.
	<b>6. Indigenous Peoples</b>	<b>?</b>	NA
	<b>7. Pollution Prevention and Resource Efficiency</b>	<b>X</b>	The ESMF proposes measures to minimize pollution during construction activities.

### Final Sign Off

<b>Signature</b>	<b>Date</b>	<b>Description</b>
QA Assessor		UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have 'checked' to ensure that the SESP is adequately conducted.
QA Approver		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have 'cleared' the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases, PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

## SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental <u>Risks</u>	
<b>Principles 1: Human Rights</b>	<b>Answer (Yes/No)</b>
1. Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2. Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? [1]	No
3. Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4. Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No
5. Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6. Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7. Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8. Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
<b>Principle 2: Gender Equality and Women's Empowerment</b>	
1. Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	Nos
2. Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3. Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	Yes

<p>4. Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services?</p> <p><i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i></p>	No
<b>Principle 3: Environmental Sustainability:</b> Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below	
<b>Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management</b>	
<p>1.1 Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?</p> <p><i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i></p>	No
<p>1.2 Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?</p>	No
<p>1.3 Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods?</p> <p>(Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)</p>	No
<p>1.4 Would Project activities pose risks to endangered species?</p>	No
<p>1.5 Would the Project pose a risk of introducing invasive alien species?</p>	No
<p>1.6 Does the Project involve harvesting of natural forests, plantation development, or reforestation?</p>	No
<p>1.7 Does the Project involve the production and/or harvesting of fish populations or other aquatic species?</p>	No
<p>1.8 Does the Project involve significant extraction, diversion or containment of surface or ground water?</p> <p><i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i></p>	No
<p>1.9 Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)</p>	No

1.10 Would the Project generate potential adverse transboundary or global environmental concerns?	No
<p>1.11 Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area?</p> <p><i>For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.</i></p>	Yes
<b>Standard 2: Climate Change Mitigation and Adaptation</b>	
2.1 Will the proposed Project result in significant[2] <sup>2</sup> greenhouse gas emissions or may exacerbate climate change?	No
2.2 Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	No
<p>2.3 Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)?</p> <p><i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i></p>	Yes
<b>Standard 3: Community Health, Safety and Working Conditions</b>	
3.1 Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	Yes
3.2 Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	Yes
3.3 Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4 Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	Yes
3.5 Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No



3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	Yes
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labour standards (i.e. principles and standards of ILO fundamental conventions)?	Yes
3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
<b>Standard 4: Cultural Heritage</b>		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
<b>Standard 5: Displacement and Resettlement</b>		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions ? even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions? <sup>[3]</sup>	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	No
<b>Standard 6: Indigenous Peoples</b>		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No

<p>6.3 Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)?</p> <p><i>If the answer to the screening question 6.3 is ?yes? the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.</i></p>	No
<p>6.4 Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?</p>	No
<p>6.5 Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?</p>	No
<p>6.6 Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?</p>	No
<p>6.7 Would the Project adversely affect the development priorities of indigenous peoples as defined by them?</p>	No
<p>6.8 Would the Project potentially affect the physical and cultural survival of indigenous peoples?</p>	No
<p>6.9 Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?</p>	No
<b>Standard 7: Pollution Prevention and Resource Efficiency</b>	
<p>7.1 Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?</p>	Yes
<p>7.2 Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?</p>	Yes
<p>7.3 Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs?</p> <p><i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol</i></p>	No
<p>7.4 Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?</p>	No

7.5 Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	Yes
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[1] Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

[2] In regards to CO<sub>2</sub>, "significant emissions" corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

[3] Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

#### Supporting Documents

Upload available ESS supporting documents.

Title	Module	Submitted
5673 Wooden Buildings_Annex L (8) ESMF_final	CEO Endorsement ESS	
5673 Wooden Buildings_Annex K (7) SESP_final	CEO Endorsement ESS	

**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).**

Annex A: Project Results Framework

(either copy and paste here the framework from the Agency document, or provide a reference to the page in the project document where the framework could be found).

<b>This project will contribute to the following Sustainable Development Goal (s):</b> SDG 8, SDG 9, SDG 11, SDG 12, SDG 13, SDG 15				
<b>This project will contribute to the following country outcome (UNDAF/CPD, RPD, GPD):</b> <i>NATIONAL PRIORITY OR GOAL:</i> <i>Tenth NDP 2.3. Liveable Places, Sustainable Environment.</i> <i>UNDCS OUTCOME INVOLVING UNDP:</i> <i>1.3. By 2020, improved implementation of more effective policies and practices on sustainable environment, climate change, biodiversity by national, local authorities and stakeholders including resilience of the system/communities to disasters</i> <i>RELATED STRATEGIC PLAN OUTCOME:</i> <i>1.3.1. Enabling legal frameworks and models for conservation and sustainable use of biodiversity and ecosystems in place; and</i> <i>1.3.2. Scaled up actions on climate change adaptation and mitigation across sectors</i>				
	<b>Objective and Outcome Indicators</b>  <b>(no more than a total of 20 indicators)</b>	<b>Baseline<sup>[1]</sup></b>	<b>Mid-term Target<sup>[2]</sup></b>	<b>End of Project Target</b>
<b>Project Objective:</b>	<u><b>Mandatory Indicator 1:</b></u> # direct project beneficiaries disaggregated by gender (individual people) <sup>[3]</sup>  <i>(see methodology available from BPPS NCE-VF)</i>	Female 0  Male 0  Total 0	Female 65  Male 115  Total 180	Female 315  Male 585  Total 900
	<u><b>Indicator 2:</b></u> # indirect project beneficiaries disaggregated by gender (individual people)	Female 0  Male 0  Total 0	Female 420  Male 780  Total 1,200	Female 5,250  Male 9,750  Total 15,000

	<u><b>Mandatory GEF Core Indicators 2 - 5:</b></u>  Indicator 3: Emissions avoided Outside AFOLU  Indicator 4: Energy saved  Indicator 5: Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment	0  0  Female 0  Male 0  Total 0	12,000 t CO2e  108 TJ  Female 65  Male 115  Total 180	165,715 t CO2e  1,433 TJ  Female 315  Male 585  Total 900
<b>Project component 1</b>	<b>Policy, Legislative, and Regulatory Support</b>			
<b>Project Outcome</b> <sup>[4] 1</sup>  <b>Enhanced Legislation and Regulations</b>	<i>Indicator 6: National strategy on low cost energy efficient wooden buildings</i>	<i>No national strategy</i>	<i>1 National strategy on low cost energy efficient wooden buildings is prepared</i>  <i>At least 10 stakeholders have actively participated in the development of the strategy</i>	<i>1 National strategy on low cost energy efficient wooden buildings is prepared</i>  <i>At least 10 stakeholders have actively participated in the development of the strategy</i>
	<i>Indicator 7: Legal and regulatory framework on low cost energy efficient wooden buildings</i>	<i>No standards and guidelines</i>	<i>1 new standard has been prepared</i>  <i>1 new guideline has been prepared</i>	<i>1 new standard has been prepared</i>  <i>1 new guideline has been prepared</i>

<b>Outputs to achieve Outcome 1</b>	<p>1.1. Report on EU and other country legislation, regulations, standards and programmes aimed at promoting wood based construction and assessment of their relevance for Türkiye, including relevant entrypoints for gender responsive legislative framework, prepared.</p> <p>1.2 Joint policy and working documents elaborated (among General Directorate of Forestry (GDF), and General Directorate of Vocational Services (GDVS) of Ministry of Environment, Urbanization and Climate Change (MoEUCC))</p> <p>1.3 National Strategy for low cost energy-efficient wooden buildings, including near zero emission buildings (NZEB) to support development in urban areas elaborated with gender responsive approach</p> <p>1.4. National Standards, legislation and guidelines for designing and using timber for construction in Türkiye prepared, considering the different needs of women and men</p> <p>1.5. Legislation that promotes government programmes to support low cost energy efficient wooden buildings prepared, considering the gender mainstreaming where possible</p> <p>1.6. MRV system ready to monitor and evaluate GHG reductions associated with low cost wooden housing ? including calculations of GHG reductions</p> <p>1.7. At least (3) municipalities, selected by a criterion including gender responsive selection criteria, developed Low Cost EE Wooden Housing Strategy Documents (introductory information, promotion and guidelines)</p> <p>1.8. Environmental measures developed and in place to ensure the wood for CLT is produced in a sustainable way</p>			
<b>Outcome 2</b>  <b>Stronger Institutional Support within the Ministry of Agriculture and Forestry and GDF for supporting construction from wood in Türkiye</b>	<i>Indicator 8: Institutional structure to support low cost energy efficient buildings</i>	No Wood Promotion for Sustainable Wood Construction Working Unit	Wood Promotion for Sustainable Wood Construction Working Unit is established under GDF	Wood Promotion for Sustainable Wood Construction Working Unit is operational
<b>Outputs to achieve Outcome 2</b>	<p>2.1. Established and operationalized Wood Promotion for Sustainable Wood Construction Working Unit within the General Directorate of Forestry with gender balanced representation to the extent possible</p> <p>2.2 Revised GDF bidding procedure to support the massive wood sector</p>			
<b>Project component 2</b>	<b>Phased Financial Support Mechanism (including demo projects)</b>			

<b>Outcome 3</b>  <b>Phased Financial Support Mechanism (FSM) is operational and project providing incentives to SMEs for greater use of wood in construction in T?rkiye</b>	<i>Indicator 9: Total capacity of CLT and other wood technologies production by wood companies benefited from the FSM</i>	<i>3,000 m? p.a. CLT production capacity</i>	<i>CLT production capacity of 12,000 m? p.a. is available</i>	<i>CLT production capacity of 110,000 m? p.a. is available</i>
	<i>Indicator 10: M? of buildings using wood/CLT</i>	<i>0</i>	<i>6 pilot projects with total of 8,400 m? using CLT and/or other wood technologies (Phase I) supported using a combination of Performance-Based Payments and/or technical assistance are under construction</i>  <i>25 pilot projects with total floor area of at least 35,000 m2 using CLT and/or other wood technologies (Phase II) supported with technical assistance are under construction</i>	<i>Additional 380 wooden buildings using CLT and/or other wood technologies and an additional 532,000 m2 of buildings using wood/CLT are being built by the end of the project without any GEF support and/or technical assistance</i>

<b>Outputs to achieve Outcome 3</b>	<p>3.1. Feasibility studies to support the investment of SME's in wood and construction sectors finalized</p> <p>3.2. Phased Financial Support Mechanism (FSM) for supporting forestry small and medium size entrepreneurship (forestry SMEs) and/or construction companies to produce wood materials and construct energy efficient wooden buildings established with gender responsive approach</p> <p>3.3. Phase I: At least 6 buildings with a total floor space of 8,400 m<sup>2</sup> are constructed using CLT technologies, with support from the Phased FSM</p> <p>3.4 Phase II: Replication phase based on Performance-Based Payments implemented</p> <p>3.5 Phase III - Commercialization Phase with no GEF support implemented</p>			
<b>Project component 3</b>	<b>Public Awareness Campaign and Training Programmes for Construction Companies on Benefits of Wooden Houses</b>			
<b>Outcome 4</b>  <b>Increased awareness about the benefits of using wood in construction</b>	<i>Indicator 11: Capacity on low cost energy efficient wooden buildings in construction sector</i>	<i>No capacity in the construction sector for building with CLT, low cost energy efficient buildings</i>	<i>1 annual national CLT workshop held (1 per year starting in year 3)</i>  <i>Minimum 80 participants from the construction sector, out of which at least 35% are women</i>	<i>4 national CLT workshops have been held starting in year 2 and once per year</i>  <i>Minimum 400 participants from the construction sector, out of which at least 35% are women.</i>
	<i>Indicator 12: Municipalities interested in competitive energy efficient wooden buildings</i>	<i>No interest of municipalities in energy efficient wooden buildings</i>	<i>20 promotional meetings and seminars with Municipalities have been held</i>	<i>50 promotional meetings and seminars with Municipalities have been held</i>
<b>Outputs to achieve Outcome 4</b>	<p>4.1. National Marketing Strategy and Public Awareness Campaign on the benefits of low cost EE wooden buildings developed with participation of women professionals (4 national workshops, minimum 400 participants)</p>			



<b>Outcome 5</b>  <b>Increased training and capacity building on using wood in construction</b>	<i>Indicator 13: Training and capacity building on low cost energy efficient wooden buildings in construction sector</i>	<i>No training offered</i>	<i>4 capacity building and awareness raising workshop prepared and held</i>  <i>Minimum 100 participants from the construction sector, out of which at least 35% are women</i>	<i>10 capacity building and awareness raising workshops prepared and held</i>  <i>Minimum 500 participants from the construction sector, out of which at least 35% are women</i>
<b>Outputs to achieve Outcome 5</b>	<p>5.1. Marketing materials created and disseminated with gender responsive communication principles to construction companies on the benefits of CLT for new low cost EE wooden building construction</p> <p>5.2. Detailed training programmes for stakeholders, including participation of women investors and entrepreneurs, on the financial support mechanism elaborated</p> <p>5.3. Capacity Building and Training provided to construction companies in T?rkiye on the benefits of using wood for construction (includes training and awareness raising related to the financial support mechanism) which includes at least 5 capacity building and awareness raising workshops (minimum 500 participants with a target of 30% women participants)</p> <p>5.4. Good quality CLT production in line with the required standards is ensured with gender responsive communication principles</p>			

[1] *Baseline, mid-term and end of project target levels must be expressed in the same neutral unit of analysis as the corresponding indicator. Baseline is the current/original status or condition and needs to be quantified. The baseline can be zero when appropriate given the project has not started. The baseline must be established before the project document is submitted to the GEF for final approval. The baseline values will be used to measure the success of the project through implementation monitoring and evaluation.*

[2] *Target is the change in the baseline value that will be achieved by the mid-term review and then again by the terminal evaluation.*

[3] *Provide total number of all direct project beneficiaries expected to benefit from all project activities until project closure. Separate the total number by female and male. This indicator captures the number of individual people who receive targeted support from a given GEF project and/or who use the specific resources that the project maintains or enhances. Support is defined as direct assistance*

*from the project. Direct beneficiaries are all individuals receiving targeted support from a given project. Targeted support is the intentional and direct assistance of a project to individuals or groups of individuals who are aware that they are receiving that support and/or who use the specific resources.*

[4] Outcomes are medium term results that the project makes a contribution towards, and that are designed to help achieve the longer-term objective. Achievement of outcomes will be influenced both by project outputs and additional factors that may be outside the direct control of the project.

## **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).**

# Annex B: Response to Project Reviews

(from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion, and responses to comments from the Convention Secretariat and STAP at PIF).

### GEF Sec Comments

Comments	Responses
Show a plan that will facilitate a certification system for companies in Türkiye in using wood for construction	The integration of sustainable forest certification systems into CLT production is covered under activity 1.8.1.
Add project activities that will help develop new codes and standards for energy efficient wooden buildings for the country (this is essential for the CEO ER)	The development of National Standards is now included in activity 1.4.5.
Indicate the locations of the demo projects	Information is included in section 1b. Pilot project 1 (Museum and Visitor Centre of GDF) will be implemented in Ankara. The location of other pilot projects will be determined during the course of the project.
On page of the PIF, please revise the GHG emission target from 434,926 million tonnes to 434,926 tonnes	The figure has been modified in the PIF.
For Knowledge Management, please full address the following issues (list provided)	Section on Knowledge Management has been expanded to respond to comments, see section 8.

### GEF TF Council Comments

Comments	Responses
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Please confirm that the project will not promote or expand industrial scale logging in primary forests	<p>It is confirmed that the project does not promote or expand industrial scale logging in primary forests. To achieve the project target of 0.58 million m<sup>3</sup> of buildings constructed with CLT, a total volume of around 200,000 m<sup>3</sup> of wood is required. To produce this volume of wood for CLT production, harvesting of 400,000 m<sup>3</sup> of log is required.</p> <p>Annual production volume for Black Pine and Turkish Red Pine (these are best suited for CLT production) has been above 5 million m<sup>3</sup> for both types of wood over the last years. The required quantity of wood for achieving the project target (only 8% of the annual production of Black Pine and Turkish Red Pine) will not come from additional cutting, but from reverting the use of wood towards CLT production. From the total domestic wood production of 26 million m<sup>3</sup>, only 1.5% will be used for CLT production.</p>
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#### STAP

What STAP looks for	Response	UNDP response to STAP comments
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<p>Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?</p>	<p>The mechanisms of change emerging from the linked activities and outcomes are reasonable. One big question is whether the public information campaign will generate sufficient public interest in investing in buildings incorporating a largely unknown technology to increase the share in the new construction by a factor of six in a few years (by 2026). Further to this, some research (for example, Mallo &amp; Espinosa, 2014 - Outlook for CLT, Bioresource, 9, 4) have indicated that one of the challenges to the adoption of CLT is that many people do not completely trust the durability of wood as a building material. It is recommended that the project proponents seriously consider how this will be addressed in order to achieve the ambitious objectives.</p>	<p>The lack of awareness of potential users on the benefits of CLT has been identified as a main barrier, potential building owners and users, construction companies, architects and the SMEs to produce wooden construction materials are not fully aware of the benefits of wooden buildings and construction materials over concrete and steel, as wooden construction materials are not common in Türkiye. Efforts in Component 3 have been strengthened to overcome that barrier.</p> <p>The 6 pilot projects are seen to have a key role in convincing stakeholders on all levels of the benefits of CLT. Therefore, pilot projects have been identified during the PPG phase and</p>
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<p>Are the mechanisms of change plausible, and is there a well-informed identification of the underlying assumptions?</p>	<p>Furthermore, one of the assumptions in the PIF is the claim that CLT buildings are 5% cheaper than traditional building materials (paragraphs 12 and 14). However, a quick review of the literature on CLT suggests that the cost competitiveness of CLT building in contrast to traditional buildings depends on building type and application. In some cases, CLT building turns out more expensive than traditional.</p>	<p>As part of the PPG work, a cost analysis for a hypothetical building in T?rkiye was carried out. The sample project selected for the cost analysis was assumed to have 6 floors, 3,595 sqm total construction area and would have 18 flats as well as 3 shops. Three construction options were evaluated: (a) a combination of CLT, Glued Laminated Timber (?Glulam? or ?GLT?) and Structural Timber (?ST?), (b) a combination of CLT and ST and (c) concrete. Costs of the concrete option were collected from interviews with construction experts, costs of CLT were based on estimates upon consultations with sector players, experts and technical advisors. The</p>
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<p>Are the benefits truly global environmental benefits, and are they measurable ?</p>	<p>Yes. However, more information is needed on how the GEBs were calculated. Firstly, three aspects need to be considered for calculating the mitigation benefits:</p> <p>(1) avoided embodied energy compared to using concrete and steel</p> <p>(2) energy efficiency to be achieved by building with CLT ? contrary to the assertion at the end of paragraph 22 of the PIF that the amount of heating or cooling between CLT and concrete buildings are more or less the same, some research shows that CLT buildings are more energy efficient and the energy efficiency is dependent on the height of the building ? that is high rise or low rise building (Guo et al. 2017. Sustainability 2017, 9, 1426; <a href="https://www.mdpi.com/2071-1050/9/8/1426">https://www.mdpi.com/2071-1050/9/8/1426</a> and Tommaso Scalet, 2015. <a href="https://www.theseus.fi/bitstream/handle/10024/102020/Bachelor%20Thesis_Tommaso%20Scalet.pdf?sequence=1">https://www.theseus.fi/bitstream/handle/10024/102020/Bachelor%20Thesis_Tommaso%20Scalet.pdf?sequence=1</a>).</p> <p>(3) carbon emissions due to cutting down trees. This would reduce the project's benefits. STAP recommends that these factors should be considered in preparing an accurate estimation of the climate mitigation benefits of the project.</p>	<p>(1) These are considered in the GHG emission factor applied, which is based on the work of the Yale School of Forestry.</p> <p>(2) The regulation ?TS 825: Thermal Insulation Requirements for Buildings Standard? defines the U-value for specific building components (wall, window, roof, ground floor) as well as for the 4 climate zones in T?rkiye. It is assumed that both standard building materials (concrete, bricks, etc) and CLT are used in a way that the minimum requirements of the regulation are used. The project does not look at additional energy efficiency savings by increasing the thickness of CLT and/or applying additional insulation materials in</p>
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Are indicators, or methodologies, provided to demonstrate how the global environmental benefits will be measured and monitored during project implementation?	Yes. The energy savings and the net GHG emissions reductions from building wooden buildings instead of using traditional energy intensive construction materials are clearly demonstrated. Another potential benefit ? the value of the carbon captured in the wooden buildings for many decades - is not mentioned. It could be significant albeit highly uncertain because it depends on where the wood comes from, and what would have happened to the mature forests if the wood had not been harvested, etc. Perhaps Table 1-2 provides some information but it is not included in the PIF. STAP suggests that the project team look into the potentially sequestered carbon stored in wooden buildings.	As the project does not increase cutting of wood, but is only reverting the use of wood towards CLT production, there is no carbon sequestration effect.
What activities will be implemented to increase the project's resilience to climate change?	Partly considered in the PIF. Integrated forest management approaches will be used to help forests adapt to climate change, but there is no indication of the possible impacts on wooden buildings. STAP suggests that the project team design a climate impact assessment for the wooden buildings and explore adaptation options because these wooden houses are intended to serve for many decades, possibly a century, during which climate attributes important to them (mean temperatures and extremes, mean precipitation and extremes, extreme wind conditions, and others) will certainly change.	The assessment of climate impacts has been included in Output 1.4 of the project. It will be investigated which changes have to be considered in the thermal insulation requirements (the requirements already define four climate zones in T?rkiye based on heating degree days) in case there are changes in the climate attributes.

Will incremental adaptation be required, or more fundamental transformational change to achieve long term sustainability?	<p>The objective is a fundamental transformation over the long term: considerably increase the share of wooden buildings from its present negligible level. Furthermore, paragraph 24 indicates that the project will not result in deforestation based on the allowable cut and the high growth rate on forest land in T?rkiye which is well managed by the government. However, in order to make the project foolproof, the project should incorporate a policy to ensure that a tree is replanted for everyone harvested for building construction. This will ensure that deforestation is avoided, and the overall project is climate neutral.</p>	<p>This is already considered, as GDF is already carrying out sizeable reforestation investments. The table below lists the reforestation carried out between 2016 and 2019 (figures for 2019 are not final).</p> <table><tr><td>2016</td><td>57,115 ha</td></tr><tr><td>2017</td><td>54,726 ha</td></tr><tr><td>2018</td><td>54,854 ha</td></tr><tr><td>2019</td><td>26,855 ha</td></tr></table>	2016	57,115 ha	2017	54,726 ha	2018	54,854 ha	2019	26,855 ha
2016	57,115 ha									
2017	54,726 ha									
2018	54,854 ha									
2019	26,855 ha									



What are the stakeholder s? roles, and how will their combined roles contribute to robust project design, to achieving global environmental outcomes, and to lessons learned and knowledge?	This is a major deficiency in the PIF. Table 1-4 contains a lengthy description of the stakeholders to be involved in the project but almost nothing about their actual roles and contributions to the project. STAP recommends that the project team shorten the descriptions of the general mandates of the stakeholders drastically and provide descriptions of their roles and functions in the project.	Annex J of CEO ER document (Annex 6 of the ProDoc) includes the Stakeholder Engagement Plan. The current version, which was updated during the PPG phase, now clearly describes the role of each key stakeholder in the project.
Have gender differentiated risks and opportunities been identified, and were preliminary response measures described that would address these differences ?	The PIF mentions gender equality in very general terms. STAP advises the project team to prepare a gender analysis in order to address gender issues properly.	During the PPG phase, a Gender Analysis and Gender Action Plan have been developed to reflect gender mainstreaming perspectives of both UNDP and GEF. These can be found in Annex M of CEO ER document (Annex 9 of the ProDoc).

<p>Are the identified risks valid and comprehensive? Are the risks specifically for things outside the project's control?</p>	<p>The identified risks are valid and comprehensive, the risk management strategy is reasonable. But an important potential risk is ignored. Part II, paragraph 5 mentions that wood consumption is growing fast and already exceeds domestic production by about 5 million m<sup>3</sup>. What will be the source of wood for the significantly increased number of wood buildings? If it is coming from domestic sources, there is an opportunity cost of not using this wood for other purposes. If the wood required for these buildings comes from imports, the drastic devaluation of the Turkish Lira against most currencies in 2018 profoundly changes the cost of wooden buildings compared to when the present estimates were made - unless the cost of traditional building materials were affected similarly. STAP suggests to undertake a thorough comparative assessment of the costs and the currency risks for the two main material sources (wood vs traditional) to make sure that wooden houses remain cost competitive under the new circumstances. Moreover, Risk 1 New policies and legislation not enacted is a low probability (the Ministry of Agriculture and Forestry supports the project), but a very high consequence risk, because if "lobbying" for these enabling conditions fails, it is difficult to [rest of text cut off]</p>	<p>To achieve the project target of 0.58 million m<sup>3</sup> of buildings constructed with CLT, a total volume of around 200,000 m<sup>3</sup> of wood is required. To produce this volume of wood for CLT production, harvesting of 400,000 m<sup>3</sup> of log is required. As it can be seen in the below graph the production volume for Black Pine and Turkish Red Pine has been above 5 million m<sup>3</sup> for both types of wood over the last years. The required quantity of wood for achieving the project target (only 8% of the annual production) will not come from additional cutting, but from reverting the use of wood towards CLT production. From the total annual wood production in Türkiye (26 million</p>
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<p>What technical and institutional capacity, and information, will be needed to address climate risks and resilience enhancement measures?</p>	<p>STAP recommends involving climate scientists to produce plausible scenarios of climate change for all regions where wooden buildings may be constructed (everywhere in Türkiye, according to the PIF) and engineers to assess the impacts and adaptation options for the wooden buildings for the next 100 years in all these regions.</p>	<p>The assessment of climate impacts has been included in Output 1.4 of the project. It will be investigated which changes have to be considered in the thermal insulation requirements (the requirements already define four climate zones in Türkiye based on heating degree days). The thermal requirements only define the U-value of a building component, but don't require a specific building material to be used. Therefore, all building materials (including wood) are treated equally and climate attributes will have to be considered by building component.</p>
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<p>What overall approach will be taken, and what knowledge management indicators and metrics will be used?</p>	<p>Knowledge management is practically nonexistent in the PIF. Since the project is expected to involve various types of innovation and is likely to face different challenges during its implementation, lots of lessons are expected to arise that would be valuable to those considering similar projects. A project website and regular UNDP channels are certainly useful options for information dissemination, but the project deserves more. STAP recommends that the project team prepare a more detailed KM plan, including KM indicators and metrics. The related STAP document Managing knowledge for a sustainable future <a href="https://www.thegef.org/sites/default/files/publications/STAP%20Report%20on%20KM.pdf">https://www.thegef.org/sites/default/files/publications/STAP%20Report%20on%20KM.pdf</a> is a good source of advice.</p>	<p>The description of knowledge management activities can be found in chapter VI Monitoring and Evaluation (M&amp;E) Plan. The section lists all knowledge management activities carried out under the different components.</p>
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**ANNEX C: Status of Utilization of Project Preparation Grant (PPG).**  
**(Provide detailed funding amount of the PPG activities financing status**  
**in the table below:**

## Annex C: Status of Utilization of Project Preparation Grant (PPG)

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

PPG Grant Approved at PIF: USD <b>100,000</b>			
<i><b>Project Preparation Activities Implemented</b></i>	<i><b>GETF Amount (\$)</b></i>		
	<i><b>Budgeted Amount</b></i>	<i><b>Amount Spent To date</b></i>	<i><b>Amount Committed</b></i>
Component A: Preparatory Technical Studies & Reviews	60,000	60,000	0
Component B: Formulation of the UNDP-GEF Project Document, CEO Endorsement Request, and Mandatory and Project Specific Annexes	30,000	29,582	418
Component C: Validation Workshop and Report	10,000	10,000	0
<b>Total</b>	<b>100,000</b>	<b>99,582</b>	<b>418</b>

If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue to undertake exclusively preparation activities up to one year of CEO Endorsement/approval date. No later than one year from CEO endorsement/approval date. Agencies should report closing of PPG to Trustee in its Quarterly Report.

## ANNEX D: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

Annex E: Project Map(s) and Coordinates

Please attach the geographical location of the project area, if possible.

The project will be implemented on the territory of Türkiye. Pilot project 1 (Museum and Visitor Centre of GDF) will be implemented in Ankara, pilot project 2 (Student Centre at Boğaziçi University) in Istanbul. The location of other pilot projects will be determined during the course of the project but all will be on the territory of Türkiye. The figure below shows the map of Türkiye.



Figure 9: Map of Turkey

## ANNEX E: Project Budget Table

Please attach a project budget table.

Expenditure Category	Detailed Description n	Component (USDeq.)						Total (USDe q.)	Responsib le Entity
		Compo nent 1	Compo nent 2	Compo nent 3	Sub- Total	M& E	PMC		(Executing Entity receiving funds from the GEF Agency)[1]
		Sub- compon ent 1.1	Sub- compon ent 2.1	Sub- compon ent 3.1					
Equipment	UNDP: For necessary personal protective equipment (PPE) against Covid-19 infection before, during and after the constructio n activities (USD 10,000)		10,000		10,000			10,000	Ministry with UNDP Implement ation Support
Equipment/Ve hicles	The Ministry (IP): For office (IT) equipment of the PMU (such as lap-top computers, monitors, printer, etc.)				-		7,179	7,179	Ministry
Contractual Services ? Individual	UNDP: Technical Contributio n of following functions to Component 2: PBP Task Manager (85%), PBP Task Associate (85%)		312,696		312,69 6			312,69 6	Ministry with UNDP Implement ation Support

<b>Contractual Services ? Individual</b>	The Ministry (IP): Administrative and Operational contribution to the project implementation: Project Associate (100%)				-		86,544	86,544	Ministry
<b>Contractual Services ? Company</b>	The Ministry (IP): Cost of subcontracts for services described under Activity 1.6.5 ? USD 150,000, Activity 1.8.1 ? USD 50,000 and 1.8.2 ? USD 150,000	350,000			350,000			350,000	Ministry



Contractual Services ? Company	Cost of subcontract s for services under Activity UNDP: Sub-budget category for Technical Assistance For 6 pilot buildings (in total USD 243,000) 3.3.1 ? USD 90,000 (Architectu ral conceptual and detailed design support for the pilot buildings)		90,000		90,000			90,000	Ministry with UNDP Implement ation Support
	UNDP: Sub-budget category for Technical Assistance For 6 pilot buildings (in total USD 243,000) 3.3.2 - USD 48,000 (Structural analysis of the pilot buildings)		48,000		48,000			48,000	Ministry with UNDP Implement ation Support

UNDP: Sub-budget category for Technical Assistance For 6 pilot buildings (in total USD 243,000) 3.3.3 ? USD 60,000, (Detailed constructio n plan support for pilot buildings)		60,000		60,000			60,000	Ministry with UNDP Implement ation Support
Cost of subcontract s for services under Activity UNDP: Sub-budget category for Technical Assistance For 6 pilot buildings (in total USD 243,000) 3.3.4 - USD 45,000, (Support for getting the permits, organising final changes etc. for pilot buildings)		45,000		45,000			45,000	Ministry with UNDP Implement ation Support

	UNDP: Sub-budget category for Technical Assistance For phase 2 (in total USD 201,500) 3.3.7 ? USD 18,000, (Control and quality assurance support)		18,000		18,000			18,000	Ministry with UNDP Implement ation Support
	UNDP: Sub-budget category for Technical Assistance For phase 2 (in total USD 201,500) 3.3.8 ? USD 24,000, (Preparatio n of knowledge products)		24,000		24,000			24,000	Ministry with UNDP Implement ation Support
	UNDP: Sub-budget category for Technical Assistance For phase 2 (in total USD 201,500) 3.4.2 ? USD 20,000, (Contract manageme nt for disseminati on, 25 pilot buildings)		20,000		20,000			20,000	Ministry with UNDP Implement ation Support

	UNDP: Sub-budget category for Technical Assistance For phase 2 (in total USD 201,500) 3.4.4 - USD 139,500 (Technical assistance per requiremen t to selected partners, 25 pilot buildings)		139,500		139,500			139,500	Ministry with UNDP Implement ation Support
	UNDP Sub-budget category for Performanc e-Based Payments (INV): 3.2.3 ? USD 260,002 (CLT press support for the CLT production)		260,002		260,002			260,002	Ministry with UNDP Implement ation Support

	<p>UNDP Sub-budget category for Performance-Based Payments (INV): 3.2.3 ? USD 647,000 (Total amount of Performance-Based Payment agreements for 6 pilot buildings in Phase I. Note that up to 25% of the total building cost (and a maximum amount of \$250,000 per demonstration project) will be provided only for the first 6 demonstration projects (6 pilot buildings) in Phase I under PBPs agreements. This approach also considered as the low-value performance based payment arrangement. The total investment cost of each pilot building to which the subsidy will be applied and the exact amount of</p>								<p>Ministry with UNDP Implementation Support</p>
		647,000		647,000				647,000	

	UNDP: Sub-budget category others 3.3.6 ? USD 18,000, (organisatio n of launch events for the pilot buildings for further disseminati on)		18,000		18,000			18,000	Ministry with UNDP Implement ation Support
<b>Contractual Services ? Company</b>	The Ministry (IP): Cost of subcontract s for services under Activity 4.1.6 ? USD 10,000			10,000	10,000			10,000	Ministry
	The Ministry (IP): Cost of subcontract s for services under Activity 5.1.2 ? USD 3,491			3,491	3,491			3,491	Ministry
	The Ministry (IP): Cost of subcontract s for services under Activity 5.3.1 ? USD 42,000			42,000	42,000			42,000	Ministry

	The Ministry (IP): Cost of subcontract s for services under Activity 5.3.2 - USD 42,000			42,000	42,000			42,000	Ministry
	The Ministry (IP): Cost of subcontract s for services under Activity 5.4.2 ? USD 30,000			30,000	30,000			30,000	Ministry

<p><b>International Consultants</b></p>	<p>The Ministry (IP): Services of international consultants for: - International Legislation Expert on Wood will contribute to the preparation of the report on legislation and standards of EU to promote competitive EE Wooden buildings in Türkiye (Act. 1.1.1, 1.1.2, 1.1.4, 1.4.5) ( 30 working days x \$ 800 per day)</p>	<p>24,000</p>			<p>24,000</p>			<p>24,000</p>	<p>Ministry</p>
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	<p>The Ministry (IP): Services of international consultants for:</p> <ul style="list-style-type: none"> <li>- International Expert on Wood, Wooden Buildings will contribute to the preparation of the national strategy and strategy document for the municipalities (Act. 1.3.2, 1.7.2) ( 27,5 working days x \$ 800 per day)</li> </ul>	22,000			22,000			22,000	Ministry
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<p><b>International Consultants</b></p>	<p>The Ministry (IP): Services of international consultants for: - International Expert (Chief Technical Advisor) on Wood, Wooden Buildings will be guiding CLT production and effective use of CLT in construction of the wooden buildings, provide support to the realization of the pilot projects (Act. 3.2.3, 3.3.1, 3.3.5, 3.4.4) (110 working days x \$ 800 per day over 2 years)</p>		<p>88,000</p>		<p>88,000</p>			<p>88,000</p>	<p>Ministry</p>
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	The Ministry (IP): Services of international consultants for: - Third Party International Expert to review the Investment Cost and the Subsidy Cost for the Demo Investment Buildings (17.5 working days at \$800 per day)		14,000		14,000			14,000	Ministry
<b>International Consultants</b>	The Ministry (IP): International Expert on Wood, Wooden Buildings will increase the capacity on CLT production and construction with CLT through supporting series of workshops, preparation of guidelines (Act. 4.1.7, 5.3.1, 5.3.2) (35 working days x \$ 800 per day)			28,000	28,000			28,000	Ministry

<b>International Consultants</b>	The Ministry (IP): Services of consultants for: Project Mid-term Evaluation Expert (20 working days x \$ 1.000 per day)				-	20,000		20,000	Ministry
	The Ministry (IP): Services of consultants for: Project Terminal Evaluation Expert (25 working days x \$ 1.000 per day)					25,000		25,000	Ministry

<p><b>Local Consultants</b></p>	<p>The Ministry (IP): Services of national consultants for: Chief Technical Advisor will lead the preparation of GDF-GDVS policy document, National strategy, strategies for municipalities, Wood Promotion for Sustainable Wood Construction Working Unit (Act. 1.2.1, 1.2.4, 1.3.1, 1.3.2, 1.3.4, 1.7.1, 2.1.1, 2.1.2) (65 working days x \$ 500 per day)</p>	<p>32,500</p>			<p>32,500</p>			<p>32,500</p>	<p>Ministry</p>
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	National Expert on Communication will support the preparation of the National Strategy, developing strategy for the promotion of the Low Cost EE Wooden buildings (Act. 1.3.1, 1.3.2) (30 working days x \$ 500 per day)	15,000			15,000			15,000	Ministry
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	National Expert on Forest Biodiversity Conservation will support the preparation of the National Strategy, facilitating and writing down the sections for forest biodiversity conservation issues in providing the parts related to promotion of the Low Cost EE Wooden buildings (Act. 1.3.1, 1.3.2) (25 working days x \$ 500 per day)	12,500			12,500			12,500	Ministry
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	<p>National Expert on Institutional, Legislation of Wood and Wooden Buildings will be working in close collaboration with International EU Wooden Construction Legislation Expert to deliver report on legislation and standards of EU, contribute to the national strategy, participating to the development of national standard, guidelines and draft legislation, promotion of the national standards, facilitating discussions on bidding procedure of GDF within wood sector (Act.1.1.1, 1.1.2, 1.1.4, 1.3.2, 1.4.2, 1.4.3, 1.4.5, 1.5.1, 1.5.2, 2.2.2) (100 working days x \$ 500 per day)</p>	50,000			50,000			50,000	Ministry
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	National Expert on Monitoring and Greenhouse Emissions will be responsible in development of MRV and relevant documentation (Act. 1.6.1, 1.6.4, 1.6.6) (50 working days x \$ 500 per day)	25,000			25,000			25,000	Ministry
	National Expert on Sustainable Forest Management will contribute to the national strategy and development of certification system for the sustainable management of forests where the wood for the CLT will be provided (Act. 1.3.1, 1.3.2, 1.8.1) (40 working days x \$ 500 per day)	20,000			20,000			20,000	Ministry

	<p>National Expert on Wood, Wooden Buildings will provide know-how on CLT and constructing with CLT in preparation of National Strategy, national standards, design and documentation of the MRV system, strategy for the municipalities. Depending on the expertise one or four different consultants can work for this task (Act. 1.3.1, 1.3.2, 1.4.3, 1.6.1, 1.6.4, 1.6.6, 1.7.2) (80 working days x \$ 500 per day)</p>	40,000			40,000			40,000	Ministry
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<p><b>Local Consultants</b></p>	<p>The Ministry (IP): Services of national consultants for: - Chief Technical Advisor will support the implementation of the training programs for construction and wood sectors (Act. 5.3.3, 5.3.4) (25 working days x \$ 500 per day)</p>			<p>12,500</p>	<p>12,500</p>			<p>12,500</p>	<p>Ministry</p>
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	<p>The Ministry (IP): Services of national consultants for:</p> <ul style="list-style-type: none"> <li>- National Expert on Communication will provide technical assistance for the dissemination strategy and materials, training activities and capacity building of the stakeholders and other representatives of the wood and construction sectors (Act. 4.1.2, 4.1.3, 4.1.5, 4.1.6, 4.1.7, 5.2.1, 5.2.2, 5.2.3, 5.3.1, 5.3.2, 5.3.4) (200 working days x \$ 500 per day)</li> </ul>			100,000	100,000		100,000	Ministry
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	<p>The Ministry (IP): Services of national consultants for:</p> <ul style="list-style-type: none"> <li>- National Expert on Wood, Wooden Buildings will increase the capacity on CLT production and construction with CLT through supporting series of workshops, preparation of guidelines (Act. 5.3.1, 5.3.2, 5.4.2,) (150 working days x \$ 500 per day)</li> </ul>			75,000	75,000			75,000	Ministry
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<p><b>Local Consultants</b></p>	<p>The Ministry (IP): Services of national consultants for: - Chief Technical Advisor will provide overall guidance to the production of CLT and dissemination of the low cost EE wooden buildings, realization of the pilot projects and phased financial support system (Act. 3.1.1, 3.1.2, 3.1.3, 3.2.1, 3.2.2, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.4.1, 3.5.1, 3.5.2) (100 working days x \$ 500 per day)</p>		50,000		50,000			50,000	Ministry
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	<p>The Ministry (IP): Services of national consultants for:</p> <ul style="list-style-type: none"> <li>- National Expert on Finance, Economical Analysis will provide technical assistance and develop tools/means to increase the financial potential of the SME?s in wood and construction sector, conduct life-cycle assessment of CLT, identify FSM and make SME?s using FSM effectively (Act. 3.1.1, 3.1.2, 3.1.3, 3.2.1, 3.2.2, 3.2.4) (50 working days x \$ 500 per day)</li> </ul>		25,000		25,000			25,000	Ministry
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	<p>The Ministry (IP): Services of national consultants for:</p> <ul style="list-style-type: none"> <li>- National Expert on Monitoring and Greenhouse Emissions will be conducting life-cycle assessment regarding the CO2 emissions (Act. 3.1.1) (30 working days x \$ 500 per day)</li> </ul>		15,000		15,000			15,000	Ministry
	<p>The Ministry (IP): Services of national consultants for:</p> <ul style="list-style-type: none"> <li>- Third Party National Expert to review the Investment Cost and the Subsidy Cost for the Demo Investment Buildings (35 working days @ \$500 per day)</li> </ul>		17,500		17,500			17,500	Ministry



<b>Trainings, Workshops, Meetings</b>	The Ministry (IP): Costs of training sessions, workshops and other events under Component 1 (including venue, catering, information materials, etc.) for Activity 1.1.3, 1.2.3, 1.3.3, 1.4.4, 1.6.2	42,000			42,000			42,000	Ministry
<b>Trainings, Workshops, Meetings</b>	The Ministry (IP): Costs and other training sessions and workshops, events under Component 3 (including venue, catering, information materials, etc.) for Activity 4.1.3, 4.1.4, 4.1.7, 5.2.1, 5.2.2, 5.2.3, 5.3.4			215,002	215,002			215,002	Ministry
<b>Trainings, Workshops, Meetings</b>	The Ministry (IP): Cost of Inception Workshop of the Project				-	40,000		40,000	Ministry

<b>Travel</b>	The Ministry (IP): In-country travel of local consultants and international travel of international consultant for Component 1	140,563			140,563			140,563	Ministry
<b>Travel</b>	UNDP: In-country travel of local consultants and international travel of international consultant for Component 2 in addition to travels of PBP Task Manager and PBP Task Associate		33,431		33,431			33,431	Ministry with UNDP Implementation Support
<b>Travel</b>	The Ministry (IP): In-country travel of local consultants and international travel of international consultant for Component 3			156,583	156,583			156,583	Ministry

<b>Travel</b>	The Ministry (IP): Travel costs of Monitoring and Evaluation Activities				-	56,280		56,280	Ministry
<b>Other Operating Costs</b>	The Ministry (IP): Costs of printing and publishing information materials for dissemination of the results of Component 1	17,500			17,500			17,500	Ministry
<b>Other Operating Costs</b>	The Ministry (IP): Costs of printing and publishing information materials for dissemination of the results of Component 3			37,000	37,000			37,000	Ministry
<b>Other Operating Costs</b>	The Ministry (IP): NGO execution fee for the management and reporting of the project activities (%5 of the reported expenditures)				-		70,405	70,405	Ministry

<b>Other Operating Costs</b>	The Ministry (IP): Budget set up for Miscellaneous expenses of the project				-		700	700	Ministry
<b>Other Operating Costs</b>	UNDP: Budget set up for assurance activities such as audit fees, costs of capacity Assessments, spot-checks. (8 spotchecks x \$ 1.700, 1 micro-assessment x \$ 2.524)				-		16,124	16,124	Ministry with UNDP Implementation Support
<b>Grand Total</b>		<b>791,063</b>	<b>1,935,129</b>	<b>751,576</b>	<b>3,477,768</b>	<b>141,280</b>	<b>180,952</b>	<b>3,800,000</b>	

#### ANNEX F: (For NGI only) Termsheet

Instructions. Please submit an finalized termsheet in this section. The NGI Program Call for Proposals provided a template in Annex A of the Call for Proposals that can be used by the Agency. Agencies can use their own termsheets but must add sections on Currency Risk, Co-financing Ratio and Financial Additionality as defined in the template provided in Annex A of the Call for proposals. Termsheets submitted at CEO endorsement stage should include final terms and conditions of the financing.

n/a

#### ANNEX G: (For NGI only) Reflows

Instructions. Please submit a reflows table as provided in Annex B of the NGI Program Call for Proposals and the Trustee excel sheet for reflows (as provided by the Secretariat or the Trustee) in the Document Section of the CEO endorsement. The Agencies is required to quantify any expected financial return/gains/interests earned on non-grant instruments that will be transferred to the GEF Trust Fund as noted in the Guidelines on the Project and Program Cycle Policy. Partner Agencies will be required to comply with the reflows procedures established in their respective Financial Procedures Agreement with the GEF Trustee. Agencies are welcomed to provide assumptions that explain expected financial reflow schedules.

n/a

**ANNEX H: (For NGI only) Agency Capacity to generate reflows**

Instructions. The GEF Agency submitting the CEO endorsement request is required to respond to any questions raised as part of the PIF review process that required clarifications on the Agency Capacity to manage reflows. This Annex seeks to demonstrate Agencies' capacity and eligibility to administer NGI resources as established in the Guidelines on the Project and Program Cycle Policy, GEF/C.52/Inf.06/Rev.01, June 9, 2017 (Annex 5).

n/a