

UNEP GEF PIR Fiscal Year 2021

Reporting from 1 July 2020 to 30 June 2021

1. PROJECT IDENTIFICATION

1.1. Project details

Identification Table	GEF ID.: 5299	Umoja no.: SB-011418
Project Title	Delivering the transition to energy efficient lighting	
Duration months	Planned	36
	Extension(s)	(Currently being processed) N/A
Division(s) Implementing the project	UNEP, Economy Division, Energy & Climate Branch, Climate Mitigation Unit	
Name of co-implementing Agency	N/A	
Executing Agency(ies)	Ministry of Hydrocarbons and Energy (MHE); Ministry of Environment and Water (MMAyA)	
Names of Other Project Partners	United for Efficiency (U4E)	
Project Type	Medium Size Project	
Project Scope	National	
Region	Latin America and Caribbean	
Countries	Bolivia	
Programme of Work	Programme of Work 2020-2021, subprogramme 1: climate change.	
GEF Focal Area(s)	Climate Change	
UNSDCF / UNDAF linkages	<u>Effect 2.1 (2022).</u> Strengthened production systems -which are sustainable, resilient, inclusive and egalitarian- guarantee security and sovereignty food and nutrition, based on decent work, technological development and the strengthening of a plural economy, preserving and improving the functions of Mother Earth: water, soils, forests and biodiversity, within the framework of the life systems.	
Link to relevant SDG target(s) and SDG indicator(s)	<u>SDG 13:</u> Take urgent action to combat climate change and its impacts. <u>Target 13.2:</u> Integrate climate change measures into national policies, strategies and planning <u>Indicator 13.2.2:</u> Total greenhouse gas emissions per year	
GEF financing amount	US\$ 3,059,361	
Co-financing amount	US\$ 13,467,575	
Date of CEO Endorsement	June 13 th 2016	
Start of Implementation	April 30 th 2019	

Date of first disbursement	April 3rd 2020	
Total disbursement as of 30 June 2021	US\$ 673,432	
Total expenditure as of 30 June 2021	US\$ 318,238	
Expected Mid-Term Review Date	August 2022	
Completion Date	Planned	31 st December 2021
	Revised	31 st December 2023 (pending approval)
Expected Terminal Evaluation Date	January 2022 (January 2024 once the extension request is approved)	
Expected Financial Closure Date	31 st January 2023 (31 st January 2025 once the extension request is approved)	

1.2. Project description

The project aims at accelerating the transition to energy efficient lighting technologies in Bolivia through the development of a national efficient lighting policy and practical innovative interventions that ensure success of the transition, thereby reducing electricity demand and consumption and the related GHG emissions.

- Component 1: National policy and regulation development to promote the rapid transition to efficient lighting.
- Component 2: Creation of monitoring, verification and enforcement (MVE) capacities to ensure effective transition to efficient lighting.
- Component 3: Ensuring environmentally sound management for a sustainable transition to efficient lighting, including a national plan to collect, recycle and/or responsibly dispose of spent lighting products that may contain valuable and/or hazardous materials;
- Component 4: Lighting innovation: accelerating the use of Solid-State Lighting (including light emitting diodes (LEDs)) and controls, mainly through a demonstration program for locally appropriate LEDs in three municipalities (to be defined).

1.3. History of project revisions

Version	Date (DD/MM/YYYY)	Main changes introduced in this revision
Rev0 (CEO ED)	13/06/2016	Project as endorsed by the GEF.
Rev1	August 2021 ¹	- Requested extension up to 2023 - Revision of budget and workplan to adapt to the new duration of the project

2. OVERVIEW OF PROJECT STATUS

2.1. UNEP Subprogramme(s)

Insert the Subprogramme(s) and biennia of the PoW to which the project contributes	Specify the relevant Expected Accomplishment(s) & Indicator(s) <u>Expected accomplishment:</u> (b) Countries increasingly adopt and/or
--	---

¹ As of July 31st 2021, rev1 is not yet officially approved. Formal revision of the agreement is expected to be concluded in August 2021.

	<p>implement low greenhouse gas emission development strategies and invest in clean technologies</p> <p><u>Indicators:</u></p> <p>(i) Number of countries supported by UNEP that make progress in adopting and/or implementing low greenhouse gas emission development plans, strategies and/or policies</p> <p>(ii) Climate finance invested by countries or institutions for clean energy, energy efficiency and/or amount of decarbonized assets</p>
<p>The project will support Bolivia to adopt and implement low-emission development policies, standards and regulations. Such actions will increase investment in clean technologies and support it to achieve its NDC. By demonstrating low-carbon technologies (component 1), introducing an adequate set of policies and regulations (component 2) and providing support in the management of wastes (component 3), the project is expected to contribute towards having a strengthened, more resilient and sustainable production system.</p> <p>Up to June 2021, only preliminary actions have been undertaken by the lead executing ministries. Progress is expected for S2 of 2021.</p>	

2.2. GEF Core Indicators (for all GEF 6 and later projects):

GEF Core Indicators	N/A
Not applicable. This is a GEF-5 project.	

2.3. Implementation status and risk

	FY 2020	FY 2021	FY 2022	FY 2023
PIR #	1 st	2 nd	3 rd	4 th
Rating towards outcomes (section 3.1)	Not rated	MU		
Rating towards outputs (section 3.2)	U	MU		
Risk rating (section 3.3)	S	S		

Progress towards outputs and outcomes is marginally unsatisfactory (MU), and the risk is considered to be substantial (S).

The Official implementation start date for this project is 30 April 2019 (i.e. agreement signature date). However, funds transfer request forms from the two executing ministries were received only in March 2020 once the bank accounts were duly prepared by the ministries. This delay was due in part to political instability affecting the country since October 2019. Administrative complexity was further worsened by the Covid-19 pandemic since March 2020. Although the first cash advance was delivered on April 3rd 2020, funds were effectively available to the ministries only in July 2020, as the SWIFT transfer could not be processed successfully, and the funds were withheld by the Central Bank of Bolivia.

Actual actions began in the second semester of 2020, with the appointment of a project manager for the Ministry of Energy, but a new change in authorities took place after the presidential elections held in October of that year. With the arrival of new authorities, the merging of the Ministry of Energies with the Ministry of Hydrocarbons and the decision from the Ministry to replace the previously appointed project manager, the project suffered further delays between the last quarter of 2020 and the first quarter of 2021, when new focal points were appointed for the project by the Ministry of Hydrocarbons and Energy (MHE). As of July 2021, the project is yet to constitute its Steering Committee.

The project partner U4E began execution of its obligations under the approved workplan during the second semester of 2020, when actual actions from the leading executing ministries were expected to start. Despite delays from the ministries, U4E has continued to undertake most of the activities in their workplan, commencing to engage the global manufacturers supplying in the region and working on the Monitoring, Verification and Enforcement (MVE) and regulatory framework; however, coordination with the ministries has been challenging.

As a consequence of these issues experienced over the reporting period, the project is rated MU for progress both on outcomes and outputs.

Despite all these challenges, the project now faces a unique opportunity to finally take off. A new project manager has been appointed in the lead executing agency (the MHE), and the Steering Committee will be officially appointed in August 2021, when the first meeting will take place. Both ministries have conformed their technical teams, contact with co-financers Phillips and IBNORCA has been re-established, and positive signals are coming from the national government (e.g. the passing of a decree that exempts efficient lighting equipment from import tariffs and the country participation in the development of regional standards with Brazil, Paraguay and Chile). And more importantly, the socio-political crisis seems behind, giving the project a sense of stability it did not enjoy up to this point.

Nonetheless, risks have materialized in the past resulting in an almost complete paralysis of activities from the lead executing agencies, and some of these risks (e.g. weak administrative and procurement capacity, potential COVID outbreaks) are still latent to date. Thus, the positive outlook depicted in the previous paragraph needs to be interpreted with significant caution.

2.4. Co-financing

<p>Planned Co-finance Total: \$13,467,575</p> <p>Actual to date: 0.22%</p>	<p>Negotiations are beginning with the private sector (Phillips) and with the municipalities where the pilots will be implemented. Co-financing from public ministries (86% of total expected co-financing) is expected to materialize along with project execution.</p>
--	--

2.5. Stakeholder engagement

<p>Stakeholder engagement</p>	<p>Working groups are being formed with the normative regulatory technical segments, to build consensus and buy-in with the National Electricity Enterprise (ENDE), the Federation of Municipal Associations (FAM), the Authority of Electricity and Nuclear Technology (AETN), the Bolivian Institute of Normalization and Quality (IBNORCA), the Bolivian Institute of Metrology (IBMETRO) and the Executive Committee of Bolivian Universities (CEUB). The process to build this engagement is expected to begin in the upcoming Steering Committee Meeting.</p>
--------------------------------------	---

2.6. Gender

<p>Gender mainstreaming</p>	<p>The process of hiring personnel that will carry out the Gender Mainstreaming process has just begun, with efforts to mainstream gender in the project to begin in the second half of 2021.</p>
------------------------------------	---

2.7. Environmental and social safeguards management

<p>Environmental and social safeguards management</p>	<p>Over the reporting period there was no environmental or social issues to be managed as the project was not yet implementing technical activities. Consideration of key potential environmental and social impacts from project activities are being considered in the design of such, including the project pilots. The project aims to enhance the environmentally-sound management of hazardous waste of lamps.</p>
--	--

2.8. Knowledge management

Knowledge activities and products	The Ministry of Hydrocarbons and Energy (MHE), as a result of the management of several projects in energy efficiency, has generated personnel and guidelines that will support the execution of this project. Specific K&M actions from the project will be implemented in parallel with the project interventions, which will begin over the next reporting period.
--	---

2.9. Stories to be shared

Stories to be shared	This project is just starting and it is not a mature project; positive outcomes will be developed over the future reporting periods.
-----------------------------	--

3. PROJECT PERFORMANCE AND RISK

Based on inputs by the Project Manager, the **UNEP Task Manager**² will make an overall assessment and provide ratings of:

- (i) Progress towards achieving the project Results(s)- see section 3.1
- (ii) Implementation progress – see section 3.2

Section 3.3 on Risk should be first completed by the Project Manager. The UNEP Task Manager will subsequently enter his/her own ratings in the appropriate column.

3.1 Rating of progress towards achieving the project outcomes

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2021	Progress rating ³
--------------------------------	-----------	----------------	-----------------	-----------------------	--	------------------------------

² For joint projects and where applicable ratings should also be discussed with the Task Manager of co-implementing agency.

³ Use GEF Secretariat required six-point scale system: Highly Satisfactory (HS), Satisfactory (S), Marginally Satisfactory (MS), Marginally Unsatisfactory (MU), Unsatisfactory (U), and Highly Unsatisfactory (HU).

<p>Objective: To accelerate the transition to energy efficient lighting technologies in Bolivia through the development of a national efficient lighting policy and practical innovative interventions that ensure success of the transition, thereby reducing electricity demand and consumption and the related GHG emissions.</p>	<p>A) The amount of Energy Savings in the lighting sector in Bolivia</p> <p>B) The amount of CO2eq emissions avoided in the lighting sector in Bolivia</p> <p>C) Market share of lamps entered in the Bolivian market: IL / Hal / CFL / LED / others at the end of the project but also at each MEPS adoption</p> <p>D) National framework to collect, recycle and/or dispose of spent lighting products endorsed by the government</p>	<p>A) 0 MWh</p> <p>B) 0 tCO2eq</p> <p>C) In 2016: IL: 69%; Hal: 5%; CFL: 16%; LED: 2%; Others: 8%</p> <p>In 2018: IL: 56.5%; Hal: 5%; CFL: 28%; LED: 2.5%; Others: 8%</p> <p>In 2021: IL: 38.5%; Hal: 4.5%; CFL: 46%; LED: 3%; Others: 8%</p> <p>In 2025: IL: 14%; Hal: 4%; CFL: 70%; LED: 4%; Others: 8%</p> <p>0</p>		<p>A) Direct: 532 MWh Direct post-project: 7,970 GWh</p> <p>B) Direct: 233 tCO2eq Direct post-project: 3,500 ktCO2eq</p> <p>C) In 2018:⁴ IL: 55.5%; Hal: 4%; CFL: 29%; LED: 3.5%; Others: 8%</p> <p>In 2021: IL: 22.5%; Hal: 4%; CFL: 62%; LED: 3.5%; Others: 8%</p> <p>In 2025: IL: 9%; Hal: 1%; CFL: 68.5%; LED: 13.5%; Others: 8%</p> <p>1</p>	<p>The project has been delayed due to several factors, but to date there is a more politically stable environment. It is estimated that in this environment the results of each component will be able to be achieved once the project is extended.</p>	<p>MU</p>
---	---	--	--	--	--	-----------

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2021	Progress rating ³
Outcome 1.1: National efficient lighting strategy employing the integrated policy approach to phasing out inefficient incandescent lamps endorsed.	1) Number of National efficient lighting strategy endorsed by the government	0 (No)	NA	1 (Yes)	A normative (number 8007) on LED lighting is under construction together with IBNORCA. It is expected that this normative will be enacted in the second half of the year with sectorial normative frameworks	MS
	2) Standardized and comprehensive MEPS for efficient lighting adopted by the government	0	NA	1	Due to the merge of the Ministries (Energy and Hydrocarbons) the MEPS process was delayed.	U
	3) Number of private sector actors participating in the strategy development	0	NA	2	Philips and IBNORCA have been contacted and initial contacts have been established. This will be further pursued over the following reporting period. Departmental and municipal authorities, operators of the environmental management of lamps in Bolivia have been identified initially. Through the project initiation workshop, the first contact was made with the mentioned actors.	MS
Outcome 2.1: Capacities to Monitor, Verify and Enforce energy efficient lighting products are created in Bolivia	4) Number of regulations establishing the MVE system are adopted by the government	0	NA	1	Ongoing diagnostic study was prepared. This will serve as an input for MVE Indicators	MU
	5) Increase in the number of laboratories certified to assess MEPS and labels for lighting products	0	NA	At least 1	The laboratory operations strategy is under construction to be implemented by the first quarter of 2022	MU
Outcome 3.1: Government of Bolivia is able to enact a national plan to collect, recycle and/or responsibly dispose of spent lighting products that may contain valuable and/or hazardous materials.	6) Number of Collection & Recycling System Organization (CRSO) business models designed	0	NA	1	The business models for CRSO have been delayed, together with the rest of the project activities. A strategy is being developed by the MMAyA. An updated baseline is required to establish the CRSO and ESM, this activity will take place in the second semester of 2021.	MU

⁴ The STAP/GEF model used to create the BAU and the project scenarios for the market transition is based on standards and labels regulations adopted by the government which are assumed to be enforced in two phases, the first MEPS will be adopted by 2021 which is after the completion of the project. Therefore, the STAP model shows the same technology rates for the GEF scenario than for the BAU in 2018 (IL/Hal/CFL/LED/others - 56.5%/5%/28%/2.5%/8%). However, the project aims to boost the efficient lighting market (CFL and LED shares) during the project period through communication campaigns and demonstration programs. Therefore, the target for the market share of these technologies in 2018 is at least 29% for CFL and 3.5% for LED, even if this is not shown in the STAP/GEF model.

Project objective and Outcomes	Indicator	Baseline level	Mid-term target	End-of-project target	Summary by the EA of attainment of the indicator & target as of 30 June 2021	Progress rating ³
<p>Outcome 4.1: Consensus reached by consumers and decision makers in government and private sector on the increased use of solid state lighting and lighting controls in the domestic, commercial/industrial and outdoor lighting applications.</p>	7) The national efficient lighting strategy includes in its objectives the increasing use of solid state lighting and lighting controls	0 (No)	NA	1 (Yes)	One preliminary study, the adoption of an efficient lighting strategy, was conducted to identify the best conditions. Two additional will be undertaken in the second half of 2021.	MS
			NA			
<p>Outcome 4.2: Municipal governments made aware of the benefits of advanced lighting systems through demonstration programs of locally appropriate street lighting LEDs and controls.</p>	8) Number of municipalities that have procured LEDs	0	NA	3	Municipalities have been identified, but they need to be confirmed and approved by the Steering Committee once this is operational.	MU
	9) Number of male and female beneficiaries of the above-mentioned outcome determined	0	NA NA	TBD during the formulation of the Gender Action Plan	Gender mainstreaming will be tackled down at all stages of the project. It is delayed as the rest of the project.	MS

3.2 Rating of progress implementation towards delivery of outputs

Outputs/Activities ⁵	Expected completion date ⁶ (as per REV1)	Implementation status as of 30 June 2020 (%)	Implementation status as of 30 June 2021 (%)	Progress rating justification ⁷ , description of challenges faced and explanations for any delay	Progress rating ⁸
COMPONENT 1:					
Output 1.1.1: Comprehensive policies developed to ensure a successful transition to an efficient lighting market to support Bolivia in its efforts, and standards and labeling activities harmonized regionally to achieve maximum lighting market transformation.	July 2022	0%	5%	A Supreme Decree was approved to encourage the use of efficient lighting with 0 taxes for imports, for the coming three years. Further actions will be implemented once the full technical team is appointed. U4E Regional Coordinator and Energy Efficient expert have review technical documents available on the current energy framework and local laws, and commenced engagement with the global manufacturers supplying the Bolivia and regional market.	MS
Output 1.1.2: National legislation to establish and enforce minimum energy performance standards (MEPS) for lamps developed.	August 2022	0%	0%	This activity is set to start in the second semester of 2021	U
Output 1.1.3: Monitoring, verification and enforcement (MVE) frameworks	March 2022	0%	5%	U4E Technical experts on Monitoring, Verification and Enforcement (MVE) activities – the Efficiency Valuation Organization (EVO) – have been contracted through a Small-Scale Funding Agreement (SSFA) and related budget and implementation plan has been developed. The experts have already been working on the preliminary review of technical documents.	MS
Output 1.1.4: Enabling regulatory environment and legal frameworks in place, to ensure environmentally sound life-cycle management of lamps.	March 2022	0%	15%	Recruitment of U4E technical expert on Environmentally Sound Management has been completed in December 2020. The package of legal framework is under construction	MS
Output 1.1.5: Public communications and awareness raising activities designed to increase public acceptance of high efficiency products, with an understanding of economic and environmental benefits.	December 2023	0%	10%	The strategy is being designed and communication products will be ready by Jun 2022	MS

⁵ Outputs and activities (or deliverables) as described in the project logframe (and workplan) or in any updated project revision.

⁶ The completion dates should be as per latest workplan (latest project revision).

⁷ As much as possible, describe in terms of immediate gains to target groups, e.g. access to project deliverables, participation in receiving services; gains in knowledge, etc.

⁸ To be provided by the UNEP Task Manager

Outputs/Activities ⁵	Expected completion date ⁶ (as per REV1)	Implementation status as of 30 June 2020 (%)	Implementation status as of 30 June 2021 (%)	Progress rating justification ⁷ , description of challenges faced and explanations for any delay	Progress rating ⁸
COMPONENT 2:					
Output 2.1.1: Legal and administrative processes of monitoring, verification and enforcement to improve compliance with national or regional standards developed.	June 2023	0%	20%	U4E Technical experts on Monitoring, Verification and Enforcement (MVE) activities – the Efficiency Valuation Organization (EVO) – have been contracted through a Small-Scale Funding Agreement (SSFA) and related budget and implementation plan has been developed. The experts have already been working on the preliminary review of technical documents. Note that Bolivia is participating in the development of regional standards together with Brazil, Paraguay, and Chile.	MS
Output 2.1.2: Technical training and support to government authorities and customs administrations delivered.	March 2022	0%	20%	Agreements with Customs have been signed which enables training to take place.	MS
Output 2.1.3: Technical training and support to national laboratories to verify compliance with standards and promote regional cooperation provided.	October 2023	0%	0%	Technical team has not yet been established	U
COMPONENT 3:					
Output 3.1.1: National framework and strategy for environmentally sound management of lighting products developed.	Sep 2022	0%	5%	Recruitment of U4E technical expert on Environmentally Sound Management has been completed in December 2020. The incorporation of technical and administrative personnel to the project by the MMAyA is likewise in process.	
Output 3.1.2: Training to governmental authorities, retailers and collection services provided.	June 2023	0%	5%	The departmental and municipal actors, operators of the environmental management of lamps in Bolivia, have been initially identified. Through the project initiation workshop, the first contact was made with the mentioned actors. It is planned to hold a forum for the socialization of the project in the 3 regions of the country with the participation of the municipalities.	
Output 3.1.3: Awareness raising and communication campaigns to promote collection and recycling of spent lamps carried out.	October 2023	0%	10%	The project logo proposal has been prepared to be used in all the diffusion and promotion media of the project. Some promotional materials for the project (banners) have been prepared. The project has been promoted on social networks.	

Outputs/Activities ⁵	Expected completion date ⁶ (as per REV1)	Implementation status as of 30 June 2020 (%)	Implementation status as of 30 June 2021 (%)	Progress rating justification ⁷ , description of challenges faced and explanations for any delay	Progress rating ⁸
Output 3.1.4: Waste management systems for spent lamps, including the design of a collection and recycling service organization (CRSO), and international coordination for the environmentally sound export/import of lamp waste developed	June 2023	0%	10%	Information gathered and operators of environmental management of disused lamps in Bolivia are being identified. In the following semester, the information will be supplemented on the current operative management in Bolivia.	
COMPONENT 4:					
Output 4.1.1: National efficient lighting strategy with more stringent MEPS, taking into account advanced lighting technologies and systems, further developed.	January 2022	0%	50%	Studies have been conducted to advance the national strategy to standardize the technology that will be used in the identified municipalities.	MS
Output 4.1.2: Supporting policies delivered to increase user acceptance and demand for high efficiency products and systems.	October 2022	0%	50%	Domestic lighting policies will be designed and implemented by the end of the year	MS
Output 4.1.3: MVE scheme to ensure high quality products that will deliver the expected energy saving and GHG emission reduction benefits developed.	August 2022	0%	10%	Technical teams have just been established. Work on the required procurement specifications guide based on the U4E model lighting regulations to international best practice norms, commenced during S2 2020. The detailed local adaptation for Bolivia is expected to progress into 2022 as planned, with the local market assessment data and analysis informing the final product/protocol to be recommended for adoption by Bolivia for public related procurement.	MS
Output 4.2.1: Demonstration program for locally appropriate LEDs and lighting controls for Bolivia's selected stakeholder groups (i.e. public lighting consumers) designed and delivered.	February 2022	0%	20%	The strategy to identify the best pathway for the demonstration programs is being conducted	MU
Output 4.2.2: LED and controls systems procured and installed through the demonstration program.	February 2022	0%	20%	Awaiting confirmation of the Steering Committee to establish the location of the demonstration projects	MU
Output 4.2.3: Gender mainstreaming in Outputs 4.2.1 and 4.2.2 conducted	June 2022	0%	10%	The gender expert has been recently hired	S

3.3. Risk Rating

Table A. Risk-log

Risk	Risk affecting:	Risk Rating							Variation respect to last rating	
	Outcome outputs /	CEO ED	PIR 2020 ⁹	PIR 2021	PIR 2022	PIR 2023	MTR	PIR 2024	Δ	Justification
<p><u>Political prioritization</u> Different government priorities may lead to recommended policies not being implemented and/or enforced.</p>	Outcomes 1 and 3	M	n.a	L					=	In the past decade, energy efficiency has been on the political agenda, as evidenced by the National Energy Efficiency Program, and is likely to remain so. While there is still a risk that recommended policies may not be prioritized, find the required support to become binding and/or be enforced by the authorities, at this point this risk is considered low. Nonetheless, it will be further reassessed along the implementation of the workplan takes place.
<p><u>Stakeholder contributions (inc. co-financing)</u> Reduced interest, involvement or contributions from identified stakeholders may lead to delays and/or other challenges during project execution (e.g. low commitment of local laboratories to strengthen their capacity for testing of lighting products, Low-level participation from the private sector actors including lighting technology manufacturers and distributors)</p>	Outcome 2, Output 2.2; Outcome 3	L	n.a	L					=	No changes have been registered with regard to the risk defined in the project document. This element will be reassessed once the various activities in the workplan involving the private sector begin to take place.
<p><u>Coordination of baseline activities</u> Delays in the implementation of external activities may affect execution of the activities under this project</p>	All outcomes	M	n.a	L					↓	There are no critical / risky external activities identified for the upcoming year of project execution.
<p><u>Stakeholder engagement</u> The designed and executed energy efficiency in lighting and waste management communication campaigns are not effective in terms of educating and raising</p>	Outcome 3.1	L	n.a	L					=	This risk has been taken into account in the design of the information and awareness raising campaigning (output 3.1.3)

⁹ During PIR 2020 risks were not assessed as the project had not yet started with actual implementation.

awareness of consumers with regard to the benefits of using LEDs, CFLs and efficient tubular fluorescent lamps (TLs).										
<u>Cost / redistributive risk</u> The additional cost related to waste management activities is higher than expected, raising issues on who should bear these costs and/or reluctance to do so from the private sector and/or consumers	Outcome 3.1 (management system to be proposed as part of Output 3.1.4)	M	n.a	L					=	This risk has been taken into account in the design of activities under component 3, which will identify the best collection and recycling service organization (CRSO) to collect the discarded lamps and look for a regional partner to do the recycling.
<u>Environmental risk</u> Spill of hazardous substances from the transportation of lamps to off-grid communities may affect the environment and health	Output 3.1.4 (during project execution) and outcome 3.1 (post-project risk)	L	n.a	L					=	No changes have been registered with regard to the risk defined in the project document. Note that the lamps directly distributed by the project will be LED lamps and under government-led initiatives. LED lamps do not contain mercury which limits the negative impacts in case of an accident during transportation. The project will advise the government while doing the procurement specifications for these initiatives to have provisions for the collection of any waste lamps; and recommendations from component 3 will include instructions of proper management from off-grid communities.
<u>Political, social, and economic instability</u> Socio-economic crises (including situations of civil unrest, economic crisis, etc.) affects the execution of project activities (e.g. face-to-face activities but also the timing of communicational campaigns, pilots, etc.)	All outputs (but mainly 1.1.5, 3.1.2, 3.1.3, 4.2.1, 4.2.2)	n.a	S	M					↓	After the presidential elections in the end of 2019, Bolivia underwent episodes of civil unrest leading to the resignation of the former authorities, an interim government and a new presidential election taking place in October of 2020. This has had a severe impact in the project, which has been virtually paralyzed over the last two years due to the social and political crisis. Despite this, the new authorities have successfully taken office and the situation is starting to normalize. While the likelihood of this risk has decreased, the potential impact on such events can be extremely harmful for the implementation of the project. Hence, this risk is still reported as “medium” (M).
<u>Political continuity</u> Change in national or sub-national authorities affects the execution of project activities (e.g. temporary lack of designated authorities, overload of work in government officials during transition, change in technical / administrative personnel formerly assigned to the project, induction of new	All outputs as the project is executed by two ministries (Ministry of Hydrocarbons and Energy and Ministry of Environment and Water)	n.a	S	M					↓	As a result of the crisis described in the previous row, between 2019 and 2021 Bolivia underwent numerous changes in national authorities, including officials in the two ministries that are acting as executing agencies. At present, authorities have been appointed and the current executive branch is expected to remain in office until 2025. Although this risk has reduced from “substantive” (S) to “medium” (M), there is still potential for delays arising from rotation of authorities (administrative, technical, political).

personnel)										
<u>Environmental & sanitary conditions</u> The COVID-19 pandemic may result in quarantine and travel restrictions that affect execution of the project (e.g. implementation of pilots and capacity building activities).	All outputs (but mainly 1.1.5, 3.1.2, 3.1.3, 4.2.1, 4.2.2)	n.a	S	L					=	There are no national COVID-19 restrictions, however, departments and municipalities have the authority to impose COVID-19 restrictions at the local level. Many cities and municipal governments in Bolivia are re-implementing mandatory transit restrictions during the afternoon and weekend hours. These restrictions may be imposed without notice or limited. As vaccination progresses, it is expected that restrictions are gradually lifted.
<u>Administrative and procurement risk</u> The complexity and/or length of administrative process in the ministries may cause delays in the organization of meetings, reporting and the procurement of good and services required for the execution of the project.	All outcomes	n.a	n.a	S					↑	The complexity of administrative processes has been identified as a potential source of delays, especially when high-level written authorization is needed for the organization of official events, meetings and for the procurement of goods and services. This has materialized for instance in long delays in the conformation of the steering committee, as formal ministerial communications were required. As of June 30 th 2021, the Steering Committee has not yet been established.
<u>Management risk</u> Inadequate/insufficient capacities in the execution agency generate delays and/or low-quality reporting, hindering the timely implementation of technical activities, the supervision plan and the adjustment of project documents	All outcomes			S					↑	A permanent project manager for the MHE (lead executing agency) was only appointed in July 2021. Reporting in general and revision of project documents (workplan, budget, TORs for the hiring of consultants) has been challenging, requiring substantive involvement on behalf of the implementing agency and U4E.
Consolidated project risk		n.a	S	S					=	Although the perspectives in the project have improved as compared to the previous PIR, at the time of preparing the current report there are still several risks (e.g. admin. and procurement risks, political continuity, lock-down risk, etc.) that can materialize into significant delays or altogether the paralysis of critical project activities.

Table B. Outstanding medium & high risks

Risk	Actions decided during the previous reporting instance (PIR _{t-1} , MTR, etc.)	Actions undertaken this reporting period	effectively this reporting	Additional mitigation measures for the next periods		
				What	When	By whom

<p><u>Political, social, and economic instability; political continuity</u> Political and socio-economic crises affects the execution of project activities, including leading to changes in authorities in charge of project execution and technical staff</p>	<p>Work with government counterparts at high-level to ensure political commitment</p>	<p>The implementing agency and U4E have held follow up meetings with the new authorities to resume project activities. Weekly meetings have been implemented as soon as a new project team was appointed by the ministries, to support with execution, the revision / update of the workplan and the conformation of the Steering Committee.</p>	<ol style="list-style-type: none"> 1. Hold quarterly meetings with the national project directors of each ministry to evaluate political and socio-economic risks and identify actions 2. Prepare a cloud filing system, to ensure institutional memory is maintained if ministerial authorities change 3. Prepare a personnel turnover contingency plan, that includes a matrix identifying key positions (including in relevant stakeholders), their role in the project, the decisions they supply and the information they should receive. This will also be a part of the knowledge management of the project. 	<ol style="list-style-type: none"> 1. Start of each quarter, with first to be held in October 2021 2. Each steering committee meeting 3. October 2021 	<ol style="list-style-type: none"> 1. Organized by the project managers, with Project managers in both ministries in close coordination with the task manager.
<p><u>Administrative and procurement risk</u> The complexity and/or length of administrative process in the ministries may cause delays in the organization of meetings, reporting and the procurement of good and services required for the execution of the project.</p>	<p>N/A</p>	<p>N/A</p>	<ol style="list-style-type: none"> 1. Develop a risk-based procurement plan for S2 2021 and S1 2022, identifying key procurement processes for each semester, and including an assessment of the complexity and potential risks involved in each process. 	<ol style="list-style-type: none"> 1. September 2021 	<ol style="list-style-type: none"> 1. Project manager in each ministry
<p><u>Management risk</u> Inadequate/insufficient capacities in the agency generate delays in technical execution and/or low-quality reporting, hindering the timely implementation of technical activities, the supervision plan and the adjustment of project documents.</p>	<p>N/A</p>	<p>N/A</p>	<ol style="list-style-type: none"> 1. Finalize extension of the project agreement. 2. Constitute the Steering Committee and hold first committee meeting (face-to-face). 3. Present a detailed status on the supervision plan and management challenges in the first Steering Committee meeting to discuss on progress, challenges and risks (including the risk of project cancellation) 	<ol style="list-style-type: none"> 1. August 2021 2. September 2021 3. September 2021 	<ol style="list-style-type: none"> 1. Project manager from each ministry, focal point in each ministry with the delegation of authority to amend the original agreement (vice minister); 2. Project manager in each

			4. Appoint English-speaking team members to comply with reporting as per the Project Cooperation Agreement.	4. August 2021	ministry; technical / political focal points in each ministry. 3. Task Manager 4. Project manager in each ministry
--	--	--	---	----------------	--

High Risk (H): There is a probability of greater than 75% that **assumptions** may fail to hold or materialize, and/or the project may face high risks.
Significant Risk (S): There is a probability of between 51% and 75% that **assumptions** may fail to hold and/or the project may face substantial risks.
Medium Risk (M): There is a probability of between 26% and 50% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.
Low Risk (L): There is a probability of up to 25% that **assumptions** may fail to hold or materialize, and/or the project may face only modest risks.