



## Project Implementation Report

(1 July 2022 – 30 June 2023)

<b>Project Title:</b>	Reducing Argentina's greenhouse gas emissions from the energy sector through the utilization of organic waste for energy generation in agriculture and agroindustries.
<b>GEF ID:</b>	9053
<b>UNIDO ID:</b>	140251
<b>GEF Replenishment Cycle:</b>	<i>GEF-6</i>
<b>Country(ies):</b>	Argentina
<b>Region:</b>	LAC - Latin America and Caribbean
<b>GEF Focal Area:</b>	<i>Climate Change Mitigation (CCM)</i>
<b>Integrated Approach Pilot (IAP) Programs<sup>1</sup>:</b>	<i>N/A</i>
<b>Stand-alone / Child Project:</b>	Stand alone
<b>Implementing Department/Division:</b>	<i>ENE / ETI</i>
<b>Co-Implementing Agency:</b>	<i>N/A</i>
<b>Executing Agency(ies):</b>	Fundacion ArgenINTA (Project Execution Agreement under negotiations)
<b>Project Type:</b>	<i>Full-Sized Project (FSP)</i>
<b>Project Duration:</b>	<i>60 months</i>
<b>Extension(s):</b>	<i>1</i>
<b>GEF Project Financing:</b>	6,000,000 USD
<b>Agency Fee:</b>	570,000 USD
<b>Co-financing Amount:</b>	38,460,000 USD
<b>Date of CEO Endorsement/Approval:</b>	<i>8/10/2017</i>
<b>UNIDO Approval Date:</b>	<i>8/24/2017</i>
<b>Actual Implementation Start:</b>	<i>10/30/2017</i>
<b>Cumulative disbursement as of 30 June 2023:</b>	57,870.85 USD
<b>Mid-term Review (MTR) Date:</b>	<i>10/31/2023</i>

<sup>1</sup> Only for **GEF-6 projects**, if applicable

<b>Original Project Completion Date:</b>	12/31/2025
<b>Project Completion Date as reported in FY22:</b>	12/31/2025
<b>Current SAP Completion Date:</b>	12/31/2024
<b>Expected Project Completion Date:</b>	12/31/2025
<b>Expected Terminal Evaluation (TE) Date:</b>	12/31/2025
<b>Expected Financial Closure Date:</b>	12/31/2026
<b>UNIDO Project Manager<sup>2</sup>:</b>	Petra SCHWAGER

## I. Brief description of project and status overview

Project Objective							
<p>Objective: To reduce GHG emissions from Argentina's energy sector by the utilization of organic residues and waste for the generation of heat and electricity in the agro-industrial sector</p> <p>A two-pronged solution is proposed, i.e.: (i) to enhance and consolidate the know-how, skills and mechanisms for the efficient delivery of bioenergy projects to the target beneficiaries; and (ii) to establish a conducive policy and regulatory framework for bioenergy projects, including access to finance. Enhanced coordination between stakeholders is a transversal theme and involves line ministries, public research institutes, local authorities and sector organizations.</p> <p>The proposed solution builds on the assumptions that: (a) required bioenergy technology is available in Argentina; (b) the investment climate in Argentina will normalize during the project period; and (c) the Government will continue support for renewable energy technologies and extend incentives to bioenergy projects. Demonstration is deemed particularly relevant for wet biomass technology (biogas produced by anaerobic digestion plants) to fine-tune operational aspects and generate a body of positive experiences.</p> <p>The Project will increase market penetration of bioenergy technologies by enabling agribusinesses, project developers, and local authorities to develop and promote technologically mature energy projects based on standardized components and approaches.</p>							
<table border="1"> <thead> <tr> <th colspan="2">Project Core Indicators</th> <th>Expected at Endorsement/Approval stage</th> </tr> </thead> <tbody> <tr> <td>6</td> <td>Greenhouse Gas Emissions Mitigated (metric tons of CO<sub>2</sub>e)</td> <td>2,000,000 metric tons of CO<sub>2</sub>e</td> </tr> </tbody> </table>		Project Core Indicators		Expected at Endorsement/Approval stage	6	Greenhouse Gas Emissions Mitigated (metric tons of CO <sub>2</sub> e)	2,000,000 metric tons of CO <sub>2</sub> e
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Baseline
The overall baseline project consists of a set of public and private initiatives and activities aimed at pushing

<sup>2</sup> Person responsible for report content

forward the bioenergy agenda in Argentina. Given the federal structure of the country, with decentralized public agencies and replicated, autonomous government structures in the provinces, the total number of stakeholders and initiatives is very substantial.

The development of bioenergy under the baseline scenario in Argentina is characterized by:

- a stagnant project portfolio;
- an ineffective, fragmented institutional framework for knowledge management, technical assistance and technology development;
- a poorly articulated regulatory framework elevating the risk profile of investments;
- weak ownership of the subject bioenergy impeding full recognition of the socio-economic and environmental benefits of bioenergy;
- low, insufficient market prices paid for biomass-based electricity supplied to the grid;
- a lack of policy and financial incentives for thermal bioenergy applications and solid biofuels.

As a result, it can be expected that targets set by the Government for biomass-based electricity generation will not be attained. In the absence of a strong market pull and long-term vision, Argentina’s manufacturing and service industries will be reluctant to enter the bioenergy market, which would be a lost opportunity in terms of job creation, indigenous technological research and development, and economic value creation.

At the endorsement stage, a new legislation on decentralised renewable energy was adopted. Due to the delay in commencing execution of the project, further legal changes have taken place, with additional regulatory elements being passed. In addition, significant institutional changes have taken place. The main counterpart agency has changed its organizational form in 2019, and the main execution agency identified UCAR has been dissolved in the process.

In April 2020, the government nominated Fundación ArgenINTA as the new Execution Entity of the project. In 2020, UNIDO amended and finalized the execution agreement following in-depth negotiations with MINAGRI and ArgenINTA. The final endorsement of this agreement has been pending since March 2021.

Please refer to the explanatory note at the end of the document and select corresponding ratings for the current reporting period, i.e. FY23. Please also provide a short justification for the selected ratings for FY23.

In view of the GEF Secretariat’s intent to start following the ability of projects to adopt the concept of adaptive management<sup>3</sup>, Agencies are expected to closely monitor changes that occur from year to year and demonstrate that they are not simply implementing plans but modifying them in response to developments and circumstances or understanding. In order to facilitate with this assessment, please introduce the ratings as reported in the previous reporting cycle, i.e. FY22, in the last column.

<b>Overall Ratings<sup>4</sup></b>	<b>FY23</b>	<b>FY22</b>
Global Environmental Objectives (GEOs) / Development Objectives (DOs) Rating	<i>Unknown</i>	<i>Unknown</i>

<sup>3</sup> Adaptive management in the context of an intentional approach to decision-making and adjustments in response to new available information, evidence gathered from monitoring, evaluation or research, and experience acquired from implementation, to ensure that the goals of the activity are being reached efficiently

<sup>4</sup> Please refer to the explanatory note at the end of the document and assure that the indicated ratings correspond to the narrative of the report

<i>The project execution has not started and rating cannot be provided.</i>		
Implementation Progress <b>(IP)</b> Rating	<i>Unsatisfactory (U)</i>	<i>Unsatisfactory (U)</i>
<i>The project execution has not started.</i>		
Overall <b>Risk</b> Rating	<i>High Risk (H)</i>	<i>High Risk (H)</i>
<i>The project has a high risk. The project continues to face delays in the start of the execution which impact the overall project.</i>		

## II. Targeted results and progress to-date

Please describe the progress made in achieving the outputs against key performance indicator's targets in the project's **M&E Plan/Log-Frame at the time of CEO Endorsement/Approval**. Please expand the table as needed.

Project Strategy	KPIs/Indicators	Baseline	Target level	Progress in FY22
<b>Component 1 – Policy and regulatory framework</b>				
Outcome 1: Policy, regulation and financial incentives adopted to accelerate the market penetration of bioenergy systems based on agroindustrial residues.				
Output 1.1.1 Development and approval of policies, resolutions and financial incentives for distributed generation at the federal level and/or in selected provinces.	Operating Taskforce  Percentage of men and women participating in the Taskforce	(1.1.1) to be determined	(1.1.1) 21 in total (7 entities: 1 federal and 6 provinces; 3 areas: energy, environment, and grid access).	No progress to date
Output 1.1.2 Mainstreaming of bioenergy and waste valorization technologies into national rural development programmes.	(1.1.2) Number of rural development programmes supporting bioenergy initiatives in agroindustries.	(1.1.2) Nil (0)	(1.1.2) At least two (2) programmes	No progress to date
Output 1.1.3 Development and approval of technical regulations and standards for environmental and safety aspects of biomass and biogas energy installations, including management of digestate.	(1.1.3) Status technical regulation and standards for bioenergy systems at federal level.	(1.1.3) No regulation and standards proposed and made effective.	(1.3) Comprehensive regulation and standards approved.	No progress to date
Output 1.1.4 Implementation of a fast-track mechanism for bioenergy systems including a simplified EIA process.	(1.1.4a) Status fast-track mechanism for bioenergy projects (0..5);	(1.1.4a) Level "3" (proposed but not adopted ).	(1.1.4a) Level "5" (proposed and enforced).	No progress to date
	(1.1.4b) Proposal guidelines bioenergy projects;	(1.1.4b) No proposal (0)	(1.1.4b) Proposal submitted and accepted (1)	No progress to date

Output 1.1.5 Development and approval of policy and regulation to promote thermal energy utilization in the agroindustry sector.	(1.1.5) Status policy proposal for thermal bioenergy (0.5).	(1.1.5) Level "1" (no policy/regulation in place)	(1.1.5) Level "4" Policy/regulation adopted but not enforced.	No progress to date
Output 1.1.6 Development of proposals to mobilize investment capital for bioenergy projects under climate finance mechanisms.	(1.1.6) Number of proposals submitted to climate financiers.	(1.1.6) No (0) proposals submitted.	(1.1.6) At least one (1) proposal submitted	No progress to date
<b>Component 2 – Bioenergy Network for knowledge management and project delivery</b>				
Outcome 2.1 Knowledge management mechanisms and delivery skills for project development strengthened through the operationalization of a national Bioenergy Network under the Ministry of Agroindustry				
2.1.1 Establishment of a coordinating unit for the Bioenergy Network within the Ministry of Agroindustry.	(2.1.1) Status of coordinating unit within Ministry.	(2.1.1) No coordinating unit in place (0).	(2.1.1) Coordinating unit established (1).	No progress to date
2.1.2 Establishment of operational focal points for the Bioenergy Network hosted by designated public agencies in selected provinces.	(2.1.2) Number of operational focal points hosted.	(2.1.2) No operational focal points in provinces (0).	(2.1.2) Operational focal points in four (4) provinces.	No progress to date
2.1.3 Supportive studies and tools to enhance the national knowledge base on the utilization of agroindustrial residue streams for energy generation.	(2.1.3) Number of studies and tools delivered.	(2.1.3) No studies and tools delivered (0).	(2.1.3) At least 4 studies and 1 tool delivered	No progress to date
2.1.4 Capacity building, liaison activities and promotional events to accelerate bioenergy market development in selected provinces.	(2.1.4a) Number of bioenergy professionals trained (m/f)	(2.1.4a) No professionals trained (0);	(2.1.4a) 150 professionals trained (90m/60f);	No progress to date
	(2.1.4b) Number of liaison and promotional events held.	(2.1.4b) No events held (0)	(2.1.4b) At least six (6) events held	No progress to date
2.1.5 Exchange of experience with other similar bioenergy projects in countries in the region through seminars, workshops, site visits and publications	(2.1.5) Number of international events held.	((2.1.5) No events held (0).	(2.1.5) Two events held (2)	No progress to date
<b>Component 3 – Demonstration and investment in bioenergy projects</b>				
Outcome 3.1 Technical and economic feasibility of bioenergy projects based on agroindustrial residues demonstrated, and a project portfolio for upscaling of investment developed.				
3.1.1 Technical assistance for development of portfolio of bioenergy projects in collaboration with local project developers and partnerships.	(3.1.1) Number of bioenergy projects with completed prefeasibility studies.	(3.1.1) No prefeasibility studies.	(3.1.1) At least 15 projects with completed prefeasibility studies.	No progress to date
3.1.2 Implementation of a call for bioenergy project proposals, and ranking thereof in terms of technical and economic feasibility, socio-economic and environmental criteria.	(3.1.2) Status call of projects.	(3.1.2) No call issued (0)	(3.1.2) Call has been issued and submitted project proposals have been ranked.	No progress to date
3.1.3 Implementation of feasibility studies and project development for	(3.1.3) Number of feasibility and engineering studies conducted.	(3.1.3) No feasibility studies (0).	(3.1.3) Seven feasibility studies completed (7).	No progress to date

selected bioenergy projects in agroindustries.				
3.1.4 Implementation of selected bioenergy pilots based on agroindustrial residues demonstrating representative technologies and business models.	(3.1.4) Installed capacity for electricity generation (MW).	(3.1.4) 0 MW.	(3.1.4) 7.5 MW electricity.	No progress to date
3.1.5 Monitoring and optimization of operational aspects and technical performance of the installed demonstration pilots through technical support.	(3.1.5a) Technical availability per installed pilot plant (hr/yr)	(3.1.5a) not defined;		No progress to date
	(3.1.5b) Lessons learned	(3.1.5b) No lessons learned.	(3.1.5a) Average above 95%; <sup>5</sup> (3.1.5b) Operational lessons learned, systematized and shared.	No progress to date
3.1.6 Design and implementation of training activities for bioenergy project owners and operators.	(3.1.6) Number of plant operators trained (m/f).	(3.1.6) No operators trained (0; 0).	(3.1.6) 30 operators trained (18m; 12f).	No progress to date

### III. Project Risk Management

1. Please indicate the overall project-level risks and the related risk management measures: (i) as identified in the CEO Endorsement document, and (ii) progress to-date. Please expand the table as needed.

	(i) Risks at CEO stage	(i) Risk level FY 21	(i) Risk level FY 22	(i) Mitigation measures	(ii) Progress to-date	New defined risk <sup>6</sup>				
1	Inadequate governance structures and weak policies would hamper the implementation of bioenergy technologies in Argentina.	Low	Low	<p>Since PIF approval, policy support for renewable energy in Argentina has increased, as reflected in Law 27.191 and its regulation. As such, biomass and biogas are now formally recognized as renewable energy sources and are eligible under Special Programmes to deliver electric energy to the wholesale market. While the importance of distributed generation (DG) is acknowledged, a supportive legal framework for DG is not yet in place at the federal level; this limits the opportunities for smaller projects to sell surplus electricity to the grid and achieve financial closure. As yet, there is no policy to promote thermal applications of bioenergy.</p> <p>The recent transformation of the former Secretary of Energy into a Ministry (MINEM) is an important step forward. MINEM has become</p>	<p>Argentina has National Law on Climate Change Adaptation and Mitigation (Law 27.520 - <a href="https://www.argentina.gob.ar/normativa/nacional/ley-27520-333515/texto">https://www.argentina.gob.ar/normativa/nacional/ley-27520-333515/texto</a>). The law sets that every 5 years we must present a National Plan on Adaptation and Mitigation to Climate Change (NPAMCC). That Plan articulates with the NDC and LTS. As for biogas, the law includes:</p> <p>Related to biogas and biomass, you'll find in the document, the following measures:</p> <table border="1" style="width: 100%;"> <thead> <tr> <th>Mesure</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> </tr> </tbody> </table>	Mesure	Description			<input type="checkbox"/>
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<sup>5</sup> Excluding downtime due to scheduled maintenance; and based on the anticipated operation cycle (which may be season-bound).

<sup>6</sup> New risk added in reporting period. Check only if applicable.

				<p>increasingly involved in the PPG phase to ascertain alignment of the Project with sector priorities. Communication channels between the Ministry of Agroindustry and the MINEM are open and a shared agenda for bioenergy is evolving. Policy support for renewable energy will expectedly increase during the Project period. This project risk is therefore deemed low.</p>	<table border="1"> <tr> <td>Implement electricity generation projects from non-conventional renewable sources connected to the grid (Ministry of Energy).</td> <td>Reduction of GHG emissions produced by electricity generation, through the installation of generation plants from non-conventional renewable sources. It includes wind, solar, and small hydroelectric plants (with a capacity of less than 50 MW), and generation from biogas and biomass, among other renewable sources defined in Law No. 27191. The measure includes both existing and future plants.</td> </tr> <tr> <td>Produce energy from biogas generated in landfills (Ministry of Environment and Sustainable Development).</td> <td>Installation of pilot plants for the production of energy from biogas generated by the FORSU (organic fraction of solid waste) discarded by the inhabitants in landfills and installation of plants that capture and valorize the biogas generated in landfills or wastewater treatment plants.</td> </tr> <tr> <td>Promote the adoption of biogas for end-use in the transportation sector (Ministry of Energy)</td> <td>Development of regulatory instruments to promote the creation of markets linked to biogas and biomethane for final use in the transportation sector.</td> </tr> <tr> <td>Sustainable use of residual biomass from the agricultural and agroindustrial sector (Secretariat of Agriculture, Livestock and Fisheries).</td> <td>Utilization of organic residues derived from agricultural and agroindustrial sector processes, with the aim of using them to generate heat and electricity, which will reduce GHG emissions in Argentina. This will be addressed through the following substantive components: (i) Policy and regulatory network; (ii) Bioenergy network for knowledge management and project development; and (iii) Demonstration and investment in bioenergy projects.</td> </tr> </table>	Implement electricity generation projects from non-conventional renewable sources connected to the grid (Ministry of Energy).	Reduction of GHG emissions produced by electricity generation, through the installation of generation plants from non-conventional renewable sources. It includes wind, solar, and small hydroelectric plants (with a capacity of less than 50 MW), and generation from biogas and biomass, among other renewable sources defined in Law No. 27191. The measure includes both existing and future plants.	Produce energy from biogas generated in landfills (Ministry of Environment and Sustainable Development).	Installation of pilot plants for the production of energy from biogas generated by the FORSU (organic fraction of solid waste) discarded by the inhabitants in landfills and installation of plants that capture and valorize the biogas generated in landfills or wastewater treatment plants.	Promote the adoption of biogas for end-use in the transportation sector (Ministry of Energy)	Development of regulatory instruments to promote the creation of markets linked to biogas and biomethane for final use in the transportation sector.	Sustainable use of residual biomass from the agricultural and agroindustrial sector (Secretariat of Agriculture, Livestock and Fisheries).	Utilization of organic residues derived from agricultural and agroindustrial sector processes, with the aim of using them to generate heat and electricity, which will reduce GHG emissions in Argentina. This will be addressed through the following substantive components: (i) Policy and regulatory network; (ii) Bioenergy network for knowledge management and project development; and (iii) Demonstration and investment in bioenergy projects.	
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2	The Executing Partner would lack managerial and technical capacities to implement the Project.	Low	Low	<p>The managerial and technical capacities of the Executing Partner (Ministry of Agroindustry and its agency UCAR) have been assessed by UNIDO following a due diligence process, the outcomes thereof being positive. As such, this risk is evaluated as low. UNIDO will organize targeted workshops and training activities to ensure familiarity of the</p>	<p>In March of 2019 the Ministry of Agroindustry was converted into a Secretariat under the Ministry of Production and UCAR was dissolved as a consequence.</p> <p>On 16 September 2022, MINAGRI assigned to the Ministry of Environment and Sustainable Development (MAyDS) as the executing entity.</p> <p>With the confirmation of the new executing entity, UNIDO proceeded with the cancellation of the agreement with Fundación ArgenINTA, the</p>	<input type="checkbox"/>								

				counterparts with UNIDO and GEF procedures.	<p>evaluation of the new executing entity and the preparation of the new implementation agreement.</p> <p>In March 2023, the cancellation of the agreement with the ArgenINTA Foundation was finalized and in June the negotiations of the new agreement with MAyDS were completed. As of the date of the report, the signing of the new agreement is pending. However, the inception phase is expected to begin in September 2023, where the steps to face the delay of the project and the initiation of the Mid-Term Review will be defined.</p>	
3	Lack of adequate technology support would affect the success of biogas energy projects.	Medium	Medium	<p>Although bioenergy is investigated by science and technology institutions and universities in Argentina, there is a lack of coordination between research programmes and articulation with the industry and agricultural sector is rather poor. The PPG phase encountered serious difficulties to establish a clear baseline and to verify and consolidate information. The supply chain for bioenergy systems is not yet mature: suppliers tend to deliver 'as is' rather than assuring satisfactory system performance. This situation especially affects smaller agribusinesses and wet biomass applications. Since renewable energy project developers are mostly focused on grid-connected wind and solar power systems, initiatives for bioenergy projects mostly come from the agroindustries (including forestry).</p> <p>The Project will establish and deploy a Bioenergy Network to foster the exchange of know-how and information among stakeholders, and to actively support the development of a project portfolio in prioritized provinces. This approach aims to contribute to the professionalization of the bioenergy supply chain. With respect to the demonstration pilots, the Project will monitor operational performance and implement a series of activities to assure system performance (see output 3.1.5) and generate useful lessons for the sector. Notwithstanding, technical and operational issues will likely occur and need to be addressed carefully. Therefore, this risk is assessed as medium.</p>	<p>After three calls of the RENOVAR Program, the result has been a significant increase in the integration of all actors in the bioenergy supply chain. Currently, working groups have been formed, made up of technology providers, developers and producers.</p>	<input type="checkbox"/>
4	Financing of bioenergy projects would be hampered by a lack of confidence and high operational and financial risks.	Low	Low	<p>The implementation of several demonstration pilots is intended to prove the economic, financial and technical feasibility of bioenergy technologies for the prioritized agroindustries in Argentina. The demonstration plants are expected to address existing operational issues and accelerate the learning curve. Policy work in the field of installation safety and regulation will contribute to a higher level of standardization and compliance</p>	<p>The current financial crisis, with the absence of State financing from the voluntary market, has been increased by the situation that COVID-19 represents an increase in the fiscal deficit. In any case, the announcement of an agreement reached with the creditors governed by the New York Law, facilitates access to international financing aimed at the private sector in Argentina.</p>	<input type="checkbox"/>



				<p>with components standards. Guidelines and/or regulation for environmental and social impact can avoid potential legal issues and as such will contribute to reducing project risks.</p> <p>Under the assumption that the current interest in renewable energy by policy makers and investors is maintained, a positive financing climate for bioenergy projects can also be expected. As such, this risk has been assessed as low.</p>		
5	Lack of financial incentives would affect biogas market development after Project termination.	Medium	Medium	<p>Financial closure for bioenergy projects remains a challenging, especially for smaller projects that will not sell electricity to the wholesale market and for biogas projects in general. Specific incentives to promote heat and cogeneration are not in place. In order to widen the options for generating revenues, the Project aims to operationalize the fast-track mechanism for accessing the wholesale market, support legislation and regulation of distributed electricity generation, and promote markets for heat and solid biofuels. The Project will further advocate for opening FODER and/or other government facilities to smaller bioenergy projects. This will assist in starting up the market and achieving technical maturity. Since policy-making processes are not controlled by the Project, the likeliness of this risk is evaluated as medium; the impact of inadequate financial conditions on market development however, is high.</p> <p>The prevailing subsidized prices for natural gas and electricity are a key barrier that affects financial feasibility of renewable energy systems even for self-supply purposes. Political and social resistance to reduce these subsidies is considerable. By consequence, a competitive market for renewable energy technologies in Argentina may only develop in the medium/long term – and is beyond control of the Project.</p>	<p>The RENOVAR programme has created an incentive and clear pricing structure for power generation with renewable energy technologies.</p> <p>In July 2019, tax incentives were approved for distributed energy generators. In addition, in October 2019, tax benefits were approved for all investments in renewable electric energy, based on the integration of the national component in the electromechanical facilities of the generating plants.</p>	<input type="checkbox"/>
6	Implementation of project activities and pilot systems would be affected by inflation and currency risks.	Medium	Medium	<p>Inflation and currency risks are relevant for Argentina. Early 2016 the ARS exchange rate with the USD was released, causing a drop of about 50% in its value. By consequence, local products and wages have become cheaper in USD. This would increase the value of the GEF grant. However, inflation is likely to increase over the following years. As a mitigation measure, a 15% margin on local costs has been taken as a buffer for price inflation.</p>	<p>The devaluation of currency during the years 2019 and 2020 has had an impact on local price of products and wages.</p> <p>By 2023, there issues with devaluation and inflation could provide an additional burden to the implementation of the activities.</p>	

7	Social and gender issues with bioenergy systems would hamper replication and/or exacerbate social and gender inequalities.	Low	Low	<p>Gender equality, empowerment of women and access to sustainable energy are interrelated. It must be noted that the targeted sectors (energy, forestry, agroindustry) are typically male-dominated. Although the Project was not found sensitive in terms of gender and energy access, gender dimensions will be considered throughout the whole project cycle.</p> <p>Opportunities to include gender dimensions into the design of project activities mainly extend to: (i) capacity building and training activities, by promoting equal participation of women and men in training activities, both at managerial and technical levels; and (ii) design and selection of demonstration pilots, to ensure that socio-economic benefits are delivered in an equitable manner. The Project will regularly perform gender reviews (Output 4.1.2) and specifically, establish a gender baseline for the demonstration pilots as part of the selection process.</p> <p>Special attention will also be given to potential gender issues resulting from informal labor and the effect of environmental externalities. Although assumed of less relevance for Argentina, situations may occur affecting the position of women and vulnerable groups (elderly, children) in rural settlements, such as: recollection and transport of forestry and agricultural residues; land tenure; contamination of soils and aquifers. The envisaged gender screening is aimed at identifying such situations, propose corrective actions and raise red flags is necessary.</p>	No progress nor change in the risk level since project endorsement, as execution has not been initiated yet.	
8	Environmental factors, including the effects of global climate change, would cause bioenergy projects being delayed or abandoned.	Low	Low	<p>Local environmental factors are assessed during the feasibility and commissioning phase of the demonstration pilots. Where bioenergy systems are planned, these bring along transport of organic material, and some additional space for handling. The impact of biogas systems involves safety aspects related to the collection and piping of the combustible gas. Other risks include contamination of aquifers, nuisance, odors and public health risks and animal plagues.</p> <p>The GEF project will prepare the environmental, safety and social studies and paragraphs applicable to the bioenergy projects as required for the permitting process. A due diligence project development process, monitoring of operations, and corrective measures are foreseen to ensure operation will be within established</p>	No progress nor change in the risk level since project endorsement, as execution has not been initiated yet.	

				<p>parameters and in compliance with applicable regulation. Under these conditions, it is unlikely that bioenergy projects would be delayed or postponed during Project implementation.</p> <p>No climate change risks have been identified affecting the operation and sustainability of wet biomass systems (anaerobic digestion), as these are based on residues and effluents produced by the project owner. Moreover, effluent treatment systems fit into a strategy of adaptation to climate change by preserving local soils and aquifers.</p> <p>The supply of dry biomass may be affected by global climate change. Forestry and rice production are likely susceptible to changes in rainfall and temperature, or the increased occurrence of plagues; as a result production schemes may become less competitive. However, the effect of climate change on the feasibility of bioenergy projects will likely be small in the short to medium term.</p>	
9	Execution delays due to organizational changes in the government	Medium	Medium	<p>Monitoring of the project will be carried out from UNIDO HQ and constant communication with government counterparts will be established to have the information on time to act accordingly.</p>	<p>Monitoring of the project transferred to UNIDO HQ.</p> <p>Throughout the reporting period, UNIDO HQ participated in the negotiations with Ministry of Agriculture and Fundación ArgenINTA on the signature of the execution agreement. The final document is pending signature and negotiations continue beyond the reporting period.</p> <p>During the reporting period, UNIDO has been in continuous contact with MINAGRI and the GEF OFP to ensure the start of the execution of the project and prompt signature of the presidential decree for the registration of the project funds.</p>

2. If the project received a **sub-optimal risk rating (H, S)** in the previous reporting period, please state the **actions taken** since then to mitigate the relevant risks and improve the related risk rating. Please also elaborate on reasons that may have impeded any of the sub-optimal risk ratings from improving in the current reporting cycle; please indicate actions planned for the next reporting cycle to remediate this.

3. Please indicate any implication of the **COVID-19** pandemic on the progress of the project.

Argentina has lifted most of the COVID 19 related restrictions. Most restrictions have been lifted and the project's execution might get impacted in case new restrictions set by the Argentinean government, especially the capacity building activities. In such a case, the capacity building activities will be held online.

4. Please clarify if the project is facing delays and is expected to request an **extension**.

The project already had an extension due to the delays in the initiation of the execution. Another extension is not currently considered but it will be evaluated during the implementation.

5. Please provide the **main findings and recommendations of completed MTR**, and elaborate on any actions taken towards the recommendations included in the report.

N/A

#### IV. Environmental and Social Safeguards (ESS)

1. As part of the requirements for **projects from GEF-6 onwards**, and based on the screening as per the UNIDO Environmental and Social Safeguards Policies and Procedures (ESSPP), which category is the project?

Category A project

Category B project

Category C project

(By selecting Category C, I confirm that the E&S risks of the project have not escalated to Category A or B).

Please expand the table as needed.

	E&S risk	Mitigation measures undertaken during the reporting period	Monitoring methods and procedures used in the reporting period
(i) Risks identified in ESMP at time of CEO Endorsement	Effluent leakages (groundwater contamination, and soil pollution)	N/A – execution has not begun	N/A
	Gas leakages	N/A – execution has not begun	N/A
	Sulphur emissions	N/A – execution has not begun	N/A
	Deforestation	N/A – execution has not begun	N/A
	Increased transportation	N/A – execution has not begun	N/A
(ii) New risks identified during project implementation (if not applicable, please insert 'NA' in each box)	N/A	N/A	N/A

#### V. Stakeholder Engagement

1. Using the previous reporting period as a basis, please provide information on **progress, challenges and outcomes** regarding engagement of stakeholders in the project (based on the Stakeholder Engagement Plan or equivalent document submitted at CEO Endorsement/Approval).

The Ministry of Agriculture, Livestock and Fisheries (MINAGRI in Spanish) is the line ministry for the Project. The Argentinian Secretariat of Food, Bioeconomy and Regional Development of the Ministry of Agriculture, Livestock and Fisheries assigned Fundación ArgenINTA (<https://www.argeninta.org.ar/>) as the Executing Entity for project. Fundación ArgenINTA is a non-profit institution with the task to promote autonomous sustainable development of Argentina's agriculture and agroindustry with a regional and territorial focus

During the reporting period, UNIDO has been in continuous contact with MINAGRI and the GEF OFF to ensure the start of the execution of the project and prompt signature of the presidential decree for the registration of the project funds.

2. Please provide any feedback submitted by national counterparts, GEF OFF, co-financiers, and other partners/stakeholders of the project (e.g. private sector, CSOs, NGOs, etc.).

N/A

3. Please provide any **relevant stakeholder consultation** documents.

N/A

## VI. Gender Mainstreaming

1. Using the previous reporting period as a basis, please report on the **progress achieved on implementing gender-responsive measures and using gender-sensitive indicators**, as documented at CEO Endorsement/Approval (in the project results framework, gender action plan or equivalent),.

N/A

## VII. Knowledge Management

1. Using the previous reporting period as a basis, please elaborate on any **knowledge management activities / products**, as documented at CEO Endorsement / Approval.

N/A

2. Please list any **relevant knowledge management mechanisms / tools** that the project has generated.

N/A

## VIII. Implementation progress

**1. Using the previous reporting period as a basis, please provide information on progress, challenges and outcomes achieved/observed with regards to project implementation.**

The project has faced several delays since the beginning. As per the project document, the responsibility for the Project's execution lies with the Ministry of Agriculture (MINAGRI) and its Unit of Rural Change (UCAR in Spanish) was assigned to be the Execution Entity. At the time, the government of Argentina was facing several political issues and had frozen all public spending. This made it difficult to start any project that represented income of funds to the government because these were registered as public spending.

On 22 April 2019, MINAGRI informed us that the UCAR unit was dissolved due to organizational restructuring inside the Ministry and requested UNIDO to execute the project while they would designate a new executing entity.

On 31 July 2019, MINAGRI and UNIDO signed the implementation agreement. UNIDO office in Chile took on the role of the PMU, however, the GEF advised us that the execution should be done by a national institution, further delaying the start of the project.

On 14 April 2020, MINAGRI designated Fundación ArgenINTA as the new executing agency. From that moment, UNIDO initiated and sustained intense negotiations with ArgenINTA and the Ministry on the PEA.

Finally, on 27 February 2021, Fundación ArgenINTA agreed to sign the PEA. One of the key elements of the negotiations was that MINAGRI would cover certain costs of the execution, including the final audit of the project. For this, ArgenINTA and MINAGRI agreed to sign a separate agreement, which they have been negotiating since March 2021. Fundación ArgenINTA has stated that they will not submit the execution agreement with UNIDO until they have a signed agreement with the Ministry. In addition, both partners claimed that the COVID-19 crisis in the country has delayed their negotiations and the signing of their agreement.

MINAGRI officially informed UNIDO that, due to new government regulations, the Ministry needs to register the funds of the project, which will further delay the start of the project and the agreement between Fundación ArgenINTA and the Ministry. UNIDA has been in constant communication with MINAGRI has throughout the reporting period.

On 29 November 2021, a video conference was organised with the GEF OFP to inform them about situation and to request their support to speed the signing process. The GEF OFP expressed their commitment to the project and mentioned that they would try to intervene.

On 22 June 2022, the newly appointed GEF OFP sent a letter where they express their commitment to the project. However, the PEA was still not signed. For this reason, on 16 September 2022, MINAGRI assigned to the Ministry of Environment and Sustainable Development (MAYDS) as the executing entity.

With the confirmation of the new executing entity, UNIDO proceeded with the cancellation of the agreement with Fundación ArgenINTA, the evaluation of the new executing entity and the preparation of the new implementation agreement.

In March 2023, the cancellation of the agreement with the ArgenINTA Foundation was finalized and in June the negotiations of the new agreement with MAYDS were completed. As of the date of the report, the signing of the new agreement is pending. However, the inception phase is expected to begin in September 2023, where the steps to face the delay of the project and the initiation of the Mid-Term Review will be defined.

**2. Please briefly elaborate on any minor amendments<sup>7</sup> to the approved project that may have been introduced during the implementation period or indicate as not applicable (NA).**

Please tick each category for which a change has occurred and provide a description of the change in the related textbox. You may attach supporting documentation, as appropriate.

<input type="checkbox"/>	Results Framework	NA
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<sup>7</sup> As described in Annex 9 of the *GEF Project and Program Cycle Policy Guidelines*, **minor amendments** are changes to the project design or implementation that do not have significant impact on the project objectives or scope, or an increase of the GEF project financing up to 5%.

<input type="checkbox"/>	Components and Cost	NA
<input type="checkbox"/>	Institutional and Implementation Arrangements	NA
<input type="checkbox"/>	Financial Management	NA
<input type="checkbox"/>	Implementation Schedule	NA
<input type="checkbox"/>	Executing Entity	NA
<input type="checkbox"/>	Executing Entity Category	NA
<input type="checkbox"/>	Minor Project Objective Change	NA
<input type="checkbox"/>	Safeguards	NA
<input type="checkbox"/>	Risk Analysis	NA
<input type="checkbox"/>	Increase of GEF Project Financing Up to 5%	NA
<input type="checkbox"/>	Co-Financing	NA
<input type="checkbox"/>	Location of Project Activities	NA
<input type="checkbox"/>	Others	NA

### 3. Please provide progress related to the **financial implementation** of the project.

No major expenditures occurred during the reporting period since the project execution has not started.

## IX. Work Plan and Budget

1. Please provide **an updated project work plan and budget** for the remaining duration of the project, as per last approved project extension. Please expand/modify the table as needed.

Outputs by Project Component	Year 4				Year 5				GEF Grant Budget Available (US\$)	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
<b>Component 1 – Policy and regulatory framework</b>										
Outcome 1.1: Policy, regulation and financial incentives adopted to accelerate the market penetration of bioenergy systems based on agroindustrial residues										
Output 1.1.1 Development and submission for endorsement of policies, resolutions and financial incentives for distributed generation at the federal level and/or in selected provinces										USD 125.000
Output 1.1.2 Mainstreaming of bioenergy and waste valorization technologies into national rural development programmes										USD 75.000
Output 1.1.3 Development and submission for endorsement of technical regulations and standards for environmental and safety aspects of biomass and biogas energy installations, including management of digestate										USD 200.000
Output 1.1.4 Application of a fast-track mechanism for small-scale bioenergy systems including a simplified EIA process										USD 100.000
Output 1.1.5 Development and submission for endorsement of policy and regulation to promote thermal energy utilization in the agroindustry sector										USD 150.000

Output 1.1.6 Development of proposals to mobilize investment capital for bioenergy projects under climate finance mechanisms												USD 75.000
Output 1.1.7 Design of a MRV system incl. GHG emission calculation methodology specific to the sector												USD 125.000
<b>Component 2 - Bioenergy Network for knowledge management and project delivery</b>												
Outcome 2.1: Knowledge management mechanisms and delivery skills for project development strengthened through the operationalization of a national Bioenergy Network under the Ministry of Agroindustry												
Output 2.1.1 Establishment of a coordinating unit for the Bioenergy Network within the Ministry of Agroindustry												USD 360.000
Output 2.1.2 Establishment of operational focal points for the Bioenergy Network hosted by designated public agencies in selected provinces												USD 454.300
Output 2.1.3 Supportive studies and tools to enhance the national knowledge base on the utilization of agroindustrial residue streams for energy generation												USD 210.000
Output 2.1.4 Capacity building, liaison activities and promotional events to accelerate bioenergy market development in selected provinces												USD 130.000
Output 2.1.5 Exchange of experience with other similar bioenergy projects in countries in the region through seminars, workshops, site visits and publications												USD 75.000
<b>Component 3 - Demonstration and investment in bioenergy projects</b>												
Outcome 3.1: Technical and economic feasibility of bioenergy projects based on agroindustrial residues demonstrated and a project portfolio for upscaling of investment developed												
Output 3.1.1 Technical assistance for development of portfolio of bioenergy projects in collaboration with local project developers and partnerships												USD 325.000
Output 3.1.2 Implementation of a call for bioenergy project proposals, and ranking thereof in terms of technical and economic feasibility, socio-economic and environmental criteria												USD 0
Output 3.1.3 Implementation of feasibility studies and project development for selected bioenergy projects in agroindustries												USD 1.600.000
Output 3.1.4 Implementation of selected bioenergy pilots based on agroindustrial residues demonstrating representative technologies and business models												USD 150.000
Output 3.1.5 Monitoring and optimization of operational aspects and technical performance of the installed demonstration pilots through technical support												USD 0
Output 3.1.6 Design and implementation of training activities for bioenergy project owners and operators												USD 1.300.000
<b>Component 4 – Monitoring and Evaluation</b>												
Outcome 4.1: Monitoring plan prepared and implemented in coordination with UNIDO												
Output 4.1.1 Design and implementation of a Monitoring and Evaluation plan defining roles and responsibilities of implementing partners, reporting protocols, progress indicators and targets												USD 20.000
Output 4.1.2 Monitoring of project progress and compliance with UNIDO and GEF guidelines and safeguards on social (including gender) and environmental impact												USD 150.000
Output 4.1.3 Implementation of independent Mid-term Review and Terminal Evaluation												USD 90.000

## X. Synergies

### 1. Synergies achieved:

NA

### 3. Stories to be shared (Optional)

NA



## XI. GEO LOCATION INFORMATION

The Location Name, Latitude and Longitude are required fields insofar as an Agency chooses to enter a project location under the set format. The Geo Name ID is required in instances where the location is not exact, such as in the case of a city, as opposed to the exact site of a physical infrastructure. The Location & Activity Description fields are optional. Project longitude and latitude must follow the Decimal Degrees WGS84 format and Agencies are encouraged to use at least four decimal points for greater accuracy. Users may add as many locations as appropriate.

Web mapping applications such as [OpenStreetMap](#) or [GeoNames](#) use this format. Consider using a conversion tool as needed, such as: <https://coordinates-converter.com>

Please see the Geocoding User Guide by clicking [here](#)

Location Name	Latitude	Longitude	Geo Name ID	Location and Activity Description
Argentina – Province of Buenos Aires	-34.61787	-58.47748	12035668	Location: agroindustrial clusters (w/ focus on dry and wet biomass sectors) w/in province; Activity: technical assistance and funding for bioenergy projects
Argentina – Province of Corrientes	-29	-58	3435214	Location: agroindustrial clusters (w/ focus on dry and wet biomass sectors) w/in province; Activity: technical assistance and funding for bioenergy projects
Argentina – Province of Misiones	-26.81427	-54.34387	3430657	Location: agroindustrial clusters (w/ focus on dry and wet biomass sectors) w/in province; Activity: technical assistance and funding for bioenergy projects
Argentina– Province Entre Rios	-32	-59	3434137	Location: agroindustrial clusters (w/ focus

				on dry and wet biomass sectors) w/in province; Activity: technical assistance and funding for bioenergy projects
Argentina – Province of Santa Fe	-31	-61	3836276	Location: agroindustrial clusters (w/ focus on dry and wet biomass sectors) w/in province; Activity: technical assistance and funding for bioenergy projects
Argentina– Province of Cordoba	-32	-64	3860255	Location: agroindustrial clusters (w/ focus on dry and wet biomass sectors) w/in province; Activity: technical assistance and funding for bioenergy projects

**Please provide any further geo-referenced information and map where the project interventions is taking place as appropriate.**

NA
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## EXPLANATORY NOTE

1. **Timing & duration:** Each report covers a twelve-month period, i.e. 1 July 2022 – 30 June 2023.
2. **Responsibility:** The responsibility for preparing the report lies with the project manager in consultation with the Division Chief and Director.
3. **Evaluation:** For the report to be used effectively as a tool for annual self-evaluation, project counterparts need to be fully involved. The (main) counterpart can provide any additional information considered essential, including a simple rating of project progress.
4. **Results-based management:** The annual project/programme progress reports are required by the RBM programme component focal points to obtain information on outcomes observed.

Global Environmental Objectives (GEOs) / Development Objectives (DOs) ratings	
<b>Highly Satisfactory (HS)</b>	Project is expected to achieve or exceed <u>all</u> its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as “good practice”.
<b>Satisfactory (S)</b>	Project is expected to <u>achieve most</u> of its <u>major</u> global environmental objectives, and yields satisfactory global environmental benefits, with only minor shortcomings.
<b>Moderately Satisfactory (MS)</b>	Project is expected to <u>achieve most</u> of its major <u>relevant</u> objectives but with either significant shortcomings or modes overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environmental benefits.
<b>Moderately Unsatisfactory (MU)</b>	Project is expected to achieve <u>some</u> of its major global environmental objectives with major shortcomings or is expected to <u>achieve only some</u> of its major global environmental objectives.
<b>Unsatisfactory (U)</b>	Project is expected <u>not</u> to achieve <u>most</u> of its major global environmental objectives or to yield any satisfactory global environmental benefits.
<b>Highly Unsatisfactory (HU)</b>	The project has failed to achieve, and is not expected to achieve, <u>any</u> of its major global environmental objectives with no worthwhile benefits.

Implementation Progress (IP)	
<b>Highly Satisfactory (HS)</b>	Implementation of <u>all</u> components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as “good practice”.
<b>Satisfactory (S)</b>	Implementation of <u>most</u> components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action.
<b>Moderately Satisfactory (MS)</b>	Implementation of <u>some</u> components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.
<b>Moderately Unsatisfactory (MU)</b>	Implementation of <u>some</u> components is <u>not</u> in substantial compliance with the original/formally revised plan with most components requiring remedial action.
<b>Unsatisfactory (U)</b>	Implementation of <u>most</u> components in <u>not</u> in substantial compliance with the original/formally revised plan.
<b>Highly Unsatisfactory (HU)</b>	Implementation of <u>none</u> of the components is in substantial compliance with the original/formally revised plan.

Risk ratings	
Risk ratings will assess the overall risk of factors internal or external to the project which may affect implementation or prospects for achieving project objectives. Risk of projects should be rated on the following scale:	
<b>High Risk (H)</b>	There is a probability of greater than <b>75%</b> that assumptions may fail to hold or materialize, and/or the project may face high risks.
<b>Substantial Risk (S)</b>	There is a probability of between <b>51%</b> and <b>75%</b> that assumptions may fail to hold or materialize, and/or the project may face substantial risks.
<b>Moderate Risk (M)</b>	There is a probability of between <b>26%</b> and <b>50%</b> that assumptions may fail to hold or materialize, and/or the project may face only moderate risk.

**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 low risks.