

**Additional Verification Report for Carbon Offset Units
(CoUs) for Project
(UCR ID Number: 417)**

Project Title
**“52.5 MW BUNDLED SMALL HYDRO POWER
PROJECT BY ATIAIA”**



Project Owner details:

**ATIAIA ENERGIA S.A. / GRUPO CORNÉLIO
BRENNAND**

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Additional Verification for Large Hydel Projects (> 15MW installed capacity)

Scoring Criteria	
Level 1	There are significant gaps relative to basic good practice.
Level 2	Most relevant elements of basic good practice have been undertaken but there is one significant gap.
Level 3	Describes basic good practice on the sustainability topic.
Level 4	All elements of basic good practice have been undertaken and in one or more cases exceeded.
Level 5	Describes proven best practice on a particular sustainability issue that is demonstrable in multiple country contexts.

Considering the UCR Program Additional Verification Guidance document for Large Hydel Projects (> 15MW installed capacity) version 1.0 dated June 2024, verification team have conducted independent research to search for objective evidence related to the project. Sufficient documented objective evidence has been found from the information available in the public domain. The overall project scoring is of **Level 5**; Below are the categorical findings and conclusion by the verification team.

A. Environmental and Social benefits

List of Documents Verified

1. SHP AREADO: Monitoring Report of Liquid Discharge Measurements Dec 2023
2. SHP AREADO: Monitoring Report of Water Quality Dec 2023
3. SHP AREADO: Monitoring of Groundwater Water Level: Sep 2023
4. SHP AREADO: Annual Report Monitoring Program of Waste (Dangerous And Non-Dangerous): Sep 2023
5. SHP AREADO: Environmental Education Program - Pea Da Areado PCH Areado Areado Energia S/A Energia S/A – Dec 2020
6. SHP BANDEIRANTE: Monitoring Report of Water Quality Sep 2023
7. SHP BANDEIRANTE: Monitoring of Groundwater Water Level: Mar 2023
8. SHP BANDEIRANTE: Annual Report Monitoring Program of Waste (Dangerous And Non-Dangerous): Apr 2023
9. SHP BANDEIRANTE: Environmental Plan Conservation And Use Of Mato Grosso Do Sul Surrounding The Reservoir Artificial – Pacuera
10. SHP BANDEIRANTE: Environmental Education Program – April 2023
11. SHP PEDRA FURADA: Monitoring Report of Water Quality Sep 2023
12. SHP PEDRA FURADA: Hydro sedimentation Report: Dec 2023
13. Sustainability Report - 2022

List of Observations

SHP AREADO:

1. Expectations on the part of the region's population regarding the benefits that a project of this nature can trigger with an increase in economic activities. In the specific case of the implementation of PCH Areado, the fact that four similar works recently took place in the same region makes the prospects more realistic.
2. Political mobilization of the local population that occurs from the first studies carried out in the region, including the socio-environmental surveys necessary to prepare environmental and engineering studies. This occurs naturally due to the arrival of researchers from different areas to carry out field studies.
3. Giving plant nurseries and Planting fruit trees in the local rural community
4. Providing Health Insurance to his employees
5. Carrying out Socio-Environmental Education Programs covering adults and children from the local community.

SHP BANDEIRANTE:

1. Giving plant nurseries and Planting fruit trees in the local rural community
2. Providing Health Insurance to his employees
3. Carrying out Socio-Environmental Education Programs covering adults and children from the local community.

SHP PEDRA FURADA:

1. Giving plant nurseries and Planting fruit trees in the local rural community
2. Providing Health Insurance to his employees
3. Carrying out Socio-Environmental Education Programs covering adults and children from the local community.

Concluding Remarks and Level of Opinion

Environmental Education Programme:



Laboratory



Análise de Cianobactérias



Análise de cloreto



Análise de Clorofila



Análise de Fósforo

Development of Nursery and plantation



Collection of seeds to prepare seedlings at Fazenda 5R. PCH Areado, Chapadão do Sul, Mato Grosso do Sul. Photo: Fazenda 5R.



Seedlings prepared for planting in the PCH Areado Reforestation Strip, Chapadão do Sul, Mato Grosso do Sul.

Level of Opinion: Level 5

B. Project benefits

List of Documents Verified

1. ATIAIA ENERGIA S.A. / GRUPO CORNÉLIO BRENNAND Website:
<https://gcb.com.br/>
2. <https://certificadas.gptw.com.br/06015859000150>
3. Sustainability Annual Report <https://gcb.com.br/esg/>

List of Observations

1. The project benefits verified are over and above stated in the UCR general verification report.
2. At ATIAIA Employee Welfare initiatives focus on inclusive welfare of employees and addresses concerns like Training, Health Care, Insurance and Routine Health Check-ups etc.
3. Carrying out Socio-Environmental Education Programs covering adults and children from the local community.
4. Ability to innovate sustainably and leverage sustainability as a form of innovation, new business and differentiation. Evaluate partnerships and investment in startups that work on causes with social and environmental impact (focusing, for example, on the development of environmentally friendly technologies and low-carbon economies) and inclusive processes.
5. Implementation of the SOMOS Program with a focus on encouraging diversity, gender equality and female empowerment.
6. Areado: the creation of more than 400 jobs and training of workers to the job.
7. Bandeirante: Income generation through the creation of more than 500 jobs and training of workers to the job.
8. Pedra Furada: Income generation through the creation of more than 300 jobs and training of workers to the job.

Concluding Remarks and Level of Opinion

Reforestation



General characterization in April 2021 of the area under reforestation.



General characterization in March 2022 of the area under reforestation.

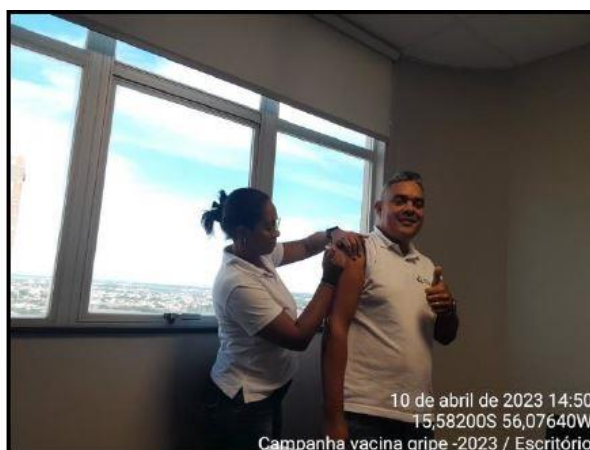


Seedling plant for reforestation at SHP Pedra Furada



Seedling plant for reforestation at SHP Pedra Furada

H1N1 Flu vaccine campaign Office and PCH's



Occupational Health and Safety



Level of Opinion: Level 5

C. Project affected communities and livelihood or Resettlement

List of Documents Verified

1. SHP AREADO: Environmental Management Plan – Nov 2023
2. SHP BANDEIRANTE: Environmental Management Plan – Aug 2023
3. CONAMA RESOLUTION No. 357, OF MARCH 17, 2005

List of Observations

1. By Brazilian Law, all hydro power under 30MW are considered Small Hydro Power. To be granted with an Operation and Environmental License, these SHP's must have no or minor negative impact
2. There were no resettlement. The small areas affected were inhabited.
3. There were no people affected negatively, but there were many positive developments for the region such as: jobs generation and environmental education.
4. All riparian lands are protected by law in Brazil and the SHP are obliged to protect, restore and monitor.
5. No sacred sites impacted in the region.
6. Flow Agreement: The SHPs are all run-of-river and are obliged by the Environmental Entity to keep a minimum flow rate. This is established by CONAMA Resolution 357/2005 (National Environmental Council)
7. Support new industries: The access to cheaper energy facilitates the commercial and industrial development in the region.

Concluding Remarks and Level of Opinion



Record of delivery of information material to neighbouring rural properties

Level of Opinion: Level 5

D. Biodiversity and Invasive Species

List of Documents Verified

1. Annual Report Monitoring Program of Aquatic Communities
2. Sustainability Report - 2022

List of Observations

1. Company has Investment in conservation and maintenance of aquatic fauna in the areas influenced by the SHP's.
2. SHP Areado: Creation of a Permanent Preservation Area of 181.06 hectares conserving native fauna and flora, including reforestation programs.
3. SHP Bandeirante: Creation of a Permanent Preservation Area of 250 hectares conserving native fauna and flora, including reforestation programs.
4. SHP Pedra Furada: Creation of a Permanent Preservation Area of 30.4 hectares conserving native fauna and flora, including reforestation programs.

Concluding Remarks and Level of Opinion

Fisheries management plan



Local sampling of aquatic communities and ichthyofauna upstream, in the Sucuriú River.



Collection of periphyton in the reservoir in the campaign to monitor aquatic communities in the Sucuriú River.



Immature form (nauplius) of Copépoda microcrustacean from the Calanoida group recorded in the March 2023 campaign in the Sucuriú river. Microscope photography at 100x magnification.



Specimen of *Leporinus octofasciatus* (red piau) registered and released in September 2022 using a gill net. Sucuriú River



Specimen of *Megalancistrus parananus* (pineapple pleco) registered and released in September 2022 using waiting networks upstream of SHP Bandeirante.



Specimen of *Leporinus friderici* (piau-três-pintas) recorded and released, using a gill net, in the PCH Bandeirante reservoir in March 2023.

Conservation of Biodiversity



Signage implemented in the Environmental Protection Zone - ZPA of SHP Bandeirante, Água Clara, Mato Grosso do Sul. Determination of environmental preservation and prohibition of hunting, fishing and plant exploitation.



Signage implemented in the Environmental Protection Zone-ZPA of PCH Areado, Chapadão do Sul, Mato Grosso do Sul. Determination of environmental preservation and prohibition of hunting, fishing and plant exploitation.



Analysis of invasive plant species at SHP Pedra Furada



Determining and quantifying species at SHP Pedra Furada.



Due to its habit of sheltering in vegetation, the yellow tree frog (*Hypsiboas raniceps*) will benefit from the growth of aquatic macrophytes in the reservoir. SHP Bandeirante



Record of coati (*Nasua nasua*) viewed and photographed in riparian forest in the axis area, during the dry period. SHP Bandeirante.



The giant anteater (*Myrmecophaga tridactyla*) recorded visually in the upstream area of the PCH dam axis.
PCH Bandeirante



The tapir (*Tapirus terrestris*) is a mammal considered a target for hunting for human consumption and also causing economic losses for agriculture. SHP Bandeirante

Level of Opinion: Level 5

Attestation:



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18th June 2024