

Questions and Answers on the Barro Blanco Hydropower Project in Panama, 7 August 2017

1. What is the Barro Blanco project?

The Barro Blanco project is a hydroelectric power project in the Republic of Panama, with an installed capacity of approximately 29 MW and an estimated annual power production of 140,000 MWh per year. The company developing the project is named Generadora del Istmo S. A. (Genisa), a renowned renewable energy developer in the region. The project is located in the Tabasará River, Province of Chiriqui, District of Tolé, approximately 1.5 km from the Pan-American Highway. All the project's structures (i.e. concrete arch dam, access roads, embankments, powerhouse and substations) are located on private property belonging to Genisa and within the District of Tolé.

The project consists of a 55-meter high dam (measured from the riverbed to the crest) with powerhouse integrated in the foot of the dam. It includes a reservoir of approximately 25 million m³, covering approximately 250 ha (i.e. 2.50 km²), at 103m above sea level. The maximum flood level, during extreme conditions (once in 100-year probability), is 106-107 meters above sea level (temporarily increasing the reservoir size to 258 ha). This increase in the water level occurs naturally, regardless of the project's construction.

2. How was the land acquired?

Genisa acquired on a willing buyer-willing seller basis 100% of the land required for the project's dam, power house, access roads, transmission lines, and substations. For the project's reservoir, Genisa successfully acquired 97% of the required land. Land acquisition negotiations took place in good faith and the landowners were paid fair market values for their land, on time and following the requirements of the Panamanian Law.

As it is typical for infrastructure projects of this nature, not all of the land required for the Barro Blanco project could be procured on a willing buyer-willing seller basis. However, in Panama, when renewable energy projects are considered to be of national interest the government allows the developers to apply for eminent domain.

Genisa faced two landowners who did not want to sell their land, and thus a process of eminent domain was required for a total of 4.8 ha. The Comarca Ngäbe-Buglé also refused to sell a total of 5.8 ha of land required for the project reservoir. The status of the eminent domain process is described below.

3. Genisa and the Comarca Ngäbe-Buglé

Downstream the Comarca, the Tabasará River forms the border of a territory called Annex Area to the Comarca (the Annex Area). This territory, which is inside of the Chiriqui Province (and does not border the Comarca), was carved out in 1997 when the Comarca was formed, and was annexed to the Comarca because the people living there identify themselves with the Ngäbe-Buglé culture. Within the flooded area there are three different areas where the Tabasara River borders on this Annex Area, totalling 5.8 ha.

Apart from these limited areas required for the reservoir, no road or other project facility is located within the Comarca or its Annex Area. The project's entire infrastructure is located in private property belonging to Genisa and within the District of Tolé.

4. How will affected people be compensated for land acquisition and livelihood loss?

The process of undertaking the land acquisition, including community consultation, land measurements and property valuation, falls under responsibility of the Government according to the process defined by the Panamanian law. In order to comply with Lenders' requirements over and above Panamanian Law, Genisa was required by the lenders to follow up the land acquisition process, and to offer support and assistance to the government as needed.

To this end, both the company and the government consulted the possessors and discussed compensation, including potential economic losses associated with the land, as well as community development assistance options. However, these discussions were not conclusive due to the wilful non-participation of some of the affected parties. A forced easement process was initiated by the Panamanian Government following the Comarca Ngäbe-Buglé's refusal to sell the 5.8 ha of land to be flooded by the reservoir. The process is in its finalization stage - appropriate compensation is being determined by an independent consultant taking in consideration the fair market value of the flooded land, structures and

crops. Following the recommendations of the UN, compensation will be provided up to the 106 masl. Genisa is fully committed to make the required compensation payments once they are so instructed by the Government, and has presented several letters to the Government requesting them to expedite this process.

5. How will impact on cultural artefacts be addressed?

Some local communities have lost access to cultural artefacts, namely two petroglyphs located within the reservoir area. Genisa, through specialized external archaeological consultancy, presented to the National Directorate for Cultural Heritage of Panama a rescue and conservation procedure for the petroglyphs and cultural heritage, the methodology of which was reviewed and approved by the regional Ngäbe-Buglé authority in May 2013. However, local opposition groups blocked access to the petroglyphs in 2015 as part of their resistance to the project, hence the proposed mitigation measures were not implemented.

The conservation and rescue for the petroglyphs is part of the Varela-Carrera agreement and falls under the responsibility of the Panamanian Government. The Government has also proposed to agree on the locations and dates of cultural celebration in order to adjust the reservoir levels and allow cultural activities to take place.

6. Did large numbers of members of the Ngäbe Buglé communities face involuntary resettlement?

Although no inhabitants living below the reservoir's normal operating level 103 masl were identified during initial surveys undertaken by an independent topographic consultant (as part of the project's Environmental and Social Impact Assessment), as well as by Genisa and the National Environmental Agency (ANAM), a number of structures were found a couple of years later during a United Nations visit to the indigenous community. The project has implied the loss of approximately six buildings located in the Quiabda and Quebrada Caña, affecting a limited number of individuals (the UNDP has estimated their number to be 40 to 50, including the indirectly impacted extended family members). Losses will be compensated as per UN recommendations and beyond the requirements of the Panamanian Law. Schools have not been affected by project as these lie several meters above the maximum operational water level.

7. How much money is involved?

FMO has invested USD 28mln.

8. Is all money disbursed?

Yes.

9. Who are the other partners in the project, besides FMO and Genisa?

The co-lenders are DEG (the German development institution) and CABEL (Central American Bank for Economic Integration).

10. Was free, prior and informed consent (FPIC) secured before and during the project?

FPIC was not an explicit part of the review preceding the investment decision, as FPIC was not a requirement under FMO's investment criteria in force at that time, based on the IFC Performance Standards issued in 2006.

11. How did FMO determine the environmental and social risks?

FMO applies the International Finance Corporation (IFC) Performance Standards in its due diligence procedures. The Barro Blanco loan agreement was signed at a time when an older version of the IFC Performance Standards (2006) was in force; projects signed today are bound to comply with the 2012 version.

Together with the other lenders, FMO appraises the risk level of each project, and tailors its risk assessment procedures to that risk level. In this case, the environmental and social risk category assigned was A (highest level), as defined in the IFC Performance Standards. Following this classification FMO and the other lenders undertook an in-depth appraisal of environmental and social risks and impacts, using both in-house experts and independent consultants. The same applies for monitoring the situation

after the investment decision, which involves one or multiple monitoring visits per year during the construction and operation phases of a typical energy project.

12. Who will benefit from the project?

Panamanian households and companies will benefit from the 140,000 MWh of reliable electricity the project will produce annually. This is equivalent to over 1.5% of the total country's consumption and to the electricity consumption of approximately 64,000 inhabitants, reducing the country's need to import approximately 180,000 barrels of fuel oil per year.

The project also brings benefits to the local communities in the form of employment and via a variety of local community development programs. Currently, the project is constructing a road between the Cocle and Nancito communities, and is providing 24-hour free-of-charge water transportation service to all community members living within the vicinity of the reservoir who want to cross the reservoir. Besides this, the Government of Panama has, based on a dialogue and negotiation process, committed to various benefit sharing community investments in the Ngäbe-Buglé Comarca. Other community projects will be discussed during the operational phase of the project.

The Supreme Court of Panama confirmed that this project is of national interest to Panamanian society. Lenders have supported the project believing it to be of interest to Republic of Panama because it will deliver reliable and clean energy, contributing to: (i) the reduction of greenhouse gas emissions, (ii) the availability of reliable and affordable electricity to households and industry, and (iii) reduced reliance on the import of fuel and electricity from abroad.

13. Has the indigenous community reached any agreement on the project?

Genisa engaged the Comarca leaders from the inception of the project to negotiate an agreement for the compensation of the use of Annex Land affected by the reservoir. Genisa signed an agreement with the Cacique of the Comarca for the use of and compensation for that land, which was in similar in form to other agreements the government has reached with traditional authorities of the Comarca in other matters. A second agreement was signed with the Regional Congress of Kadriri and ratified by the majority of the Regional Congress delegates and by the Board of the Ngäbe-Buglé General Congress.

A third and final agreement was tabled between the President of Panama Juan Carlos Varela and the Cacica General Silvia Carrera (known as the Varela-Carrera agreement). It defined the measures to be taken by the Government of Panama in order to address the remaining cultural, social, economic and environmental impacts on the affected communities. This agreement was approved by the Government of Panama and indigenous representatives of the Comarca in August 2016 but it was not ratified by the Ngäbe-Buglé General Congress, hence an indigenous Commission was appointed to review the content of the agreement. The Varela-Carrera agreement was ratified by Ngäbe-Buglé General Congress in April 2017, and the next step for its successful implementation is to set up a participatory commission between the General Congress and the Government.

Genisa was not invited as a party to the dialogues that led to the approval and ratification of the Varela-Carrera agreement. However Genisa and the lenders, including FMO, offered their support and assistance to all dialogue processes.

14. Are the local indigenous peoples intimidated and repressed?

Although we have seen this being stated in the media, we have not been presented with any credible reports or evidence for Ngäbe or Buglé community members having been intimidated or repressed in the context of the Barro Blanco project. In the past, protests on the Pan-American Highway and in other parts of Panama have escalated into a violent situation in which protestors have been hurt and one person died. It is important to emphasize that in none of these situations Genisa staff or persons hired by Genisa were involved. The right of speech for those who speak up for their rights and the livelihoods of people are of very high value to FMO. Every individual should be safe when defending their position. FMO rejects and condemns any violence against those individuals or groups.

15. What was the conclusion of the independent complaint expert panel on FMO's approach?

An independent expert panel investigated a formal complaint issued by Mr. Manolo Miranda on behalf of the M10 movement and by the Cacica General Silvia Carrera, and concluded that at the time of credit approval the lenders did not have sufficient information (not the right level of analysis) available regarding consultation and the impacts on indigenous peoples. However, the panel also concluded that this information gap was adequately filled in at a later stage, and was adequately reflected in a revised environmental and social action plan. In addition, the panel concluded that lenders should have performed a more thorough legal opinion on the two agreements signed between the company and the formal Ngäbe-Buglé community representatives.

16. What happened after the panel published its conclusion?

As expressed in the FMO Management Response to the report, FMO has committed to strengthen elements of its approval process for very high risk projects, notably regarding the level of analysis available at the time of credit approval and at the moment of finalizing the environmental and social action plan. FMO also committed to offer the services of an independent mediator (FMO would help in identifying acceptable persons and would contribute part of the funding for their services) to help establish and implement a process of dialogue between the Ngäbe-Buglé communities, the government, the company and other relevant stakeholders. While this offer was not taken up by the Panamanian parties, the offer still stands. The panel continues to monitor FMO's and DEG's follow up on the recommendations made. You can find their reports [here](#).

17. Has the Barro Blanco project been de-registered under the UN Clean Development Mechanism?

The UN has not de-registered the project under the CDM. The Ministry of Environment of Panama withdrew their Letter of Approval to the CDM board for Barro Blanco based on the argument that the project capacity was amended after the CDM application was received, something that Genisa does not agree on. The Ministry recommended Genisa to start a new application process in order to obtain the certification. GENISA respectfully disagrees based on the fact that the final version of the CDM application was made three months after the National Environment Authority (Now Ministry of the Environment) approved the increase in the power capacity of the Barro Blanco Hydroelectric Project. According to Genisa, the Clean Development Mechanism project certification was awarded one year after the National Environmental Authority approved the projects installed capacity modification, which is not in line with arguments of the Ministry of Environment.

18. What is the current status of the project?

The project's construction has been completed. The last tests required for the project's operation have been finalised. During these tests the water level was increased up to the designed maximum operating level of 103 meters above sea level (masl), reached in the rainy season of 2016. As a part of the final tests, the level of the reservoir was lowered again to 80 masl, at the end of March 2017. Genisa therefore notified the Panamanian National Energy Regulator (ASEP) about the completion of all the required construction and operation tests. ASEP has then provided the project with the authorization to start operations.

The power plant's dispatch is managed by the National Dispatch Centre (CND) of Panama. A slight variation on the reservoir's level can be expected daily depending on the level of rainfall received in the catchment area and its dispatch.