

SOTRAMI – PLANT ELECTRIFICATION PROJECT – A co-financed project between SBGA and SOTRAMI

SUMMARY

This project's objective is to bring the grid to the processing plant of SOTRAMI S.A. in order to save greenhouse gas and air pollutant emissions that are currently emitted through production of electricity with a diesel generator. The village of Santa Filomena, adjacent to the mine, has been connected to the grid through a state rural electrification programme in 2014. However, the processing plant located 10 km downhill from the village still relies on generators for its operations.

This project includes:

- 10 km of primary air lines 30-22.9 kV, from the village of Jaqui to the plant;
- Underground lines 30-22.9 kV, from the last pole to the interior of the plant;
- A substation with a 500 kVA capacity;

DESCRIPTION	USD*
Equipment	150,000
Transport	30,000
Set-up	30,000
<i>Total direct costs</i>	<i>210,000</i>
Overheads and utilities	30,000
Total excluding VAT	240,000

*These amounts have been converted in USD and rounded from the original document.

The construction will start in January 2015 and completion is planned to last one month. The project will be co-financed by SOTRAMI SA and the SBGA Better Gold Fund (55%/45%). The offer was produced by an infrastructure consultant: Juan Gordillo, Ingenier Mecánico Electricista, Reg. del Colegio de Ingenieros N°73100. Thomas Hentschel of Project Consult and the BGI local representative, Mr. Medina, have reviewed the project and have given a favorable opinion regarding its feasibility and budget.

ENVIRONMENTAL IMPACT

The connection to the grid will **avoid the yearly consumption of 80'000 gallons of diesel**, which corresponds to emissions of **800 tons of CO₂ equivalent**. On the other hand, the new consumption of electricity will indirectly emit **250 tons of CO₂ equivalent**.

Source for consumption and savings: Board of Directors of SOTRAMI S.A.

Source for emission factors: World Ressource Institute (2009). GHG Protocol for stationary combustion. Version 4.1.

This investment will also generate savings that will enable the company, a world model of medium scale artisanal mine operation, to remain competitive and continue being an essential link in the chain for the 2,000 miners of the Santa Filomena community.