The new cogeneration power plant was part of the expansion project of the Trupan wood panel mill (Trupan Line № 2). Before this project, Trupan had steam generation capacity but no electric power generation capacity, so the Complex sourced all its electric power requirements from the grid. However, when the Trupan management evaluated the expansion project, it considered the surplus of biomass residues available in the region, and decided to build a new on-site biomass power plant with enough capacity to supply all the power needs of the Trupan Complex and additional power to the grid. From a technical perspective, this decision involved installing a high-pressure boiler and a steam turbine which meant going clearly beyond the traditional practice of the wood panel industry in Chile. Given that utilizing a high-pressure boiler implied a significant increase in cost compared to the more conventional low pressure boiler solution, the decision of building such power plant was based on the possibility of not relying on the local grid for power, on selling excess power to the grid and on the benefits from being a CDM project activity.

The project activity assists Chile’s sustainable growth by providing electricity to the Trupan Complex and to the SIC grid through biomass power generation. Without the Trupan power plant, not only there would have been no new clean energy injection to the SIC, but the Trupan Complex itself would have had to continue sourcing its power requirements from the grid. In addition, this project accomplishes an additional greenhouse gas (GHG) reduction benefit derived from a reduced disposal or uncontrolled burning of biomass residues, which results into less methane emissions.

The Trupan project activity participants believe that biomass power generation constitute a sustainable source of power generation that brings clear advantages to mitigate global warming. Using the available natural resources in a rational way, the Trupan project activity helps to enhance the development of renewable energy sources in Chile, in particular the use of biomass generated as a by-product of the forest industry, which has a significant potential in the country. The proposed project is a good example to demonstrate the viability of power generation as a source of revenue not only to the wood panel industry, but to all forest-related industries. Very few wood-panel producing facilities in Chile have on-site electric power generation capacity, making the Trupan cogeneration power plant facility quite unique and particular in its type. Although this technological improvement is consistent with Arauco’s internal policy of energy efficiency, this initiative must be recognized as an activity that goes beyond the common practice of the wood panel industry in Chile.