



we build value

## SALINI IMPREGILO IN PERU

(2015 10 26)



*26 October 2015 – The Group, with its 50 years of experience in South America, works on a large-scale in this continent, and particularly in those countries that are showing a good capacity of meeting growth challenges in the medium to long-term period.*

Since 2014, the Group has been engaged in the construction of the new Lima metro in Peru, one of the planet's most populated cities. A metro system with important numbers: 35 km of underground lines, 35 stations, and a total construction value of approximately €3.5 billion. The Salini Impregilo Group will, thereby, transfer its excellent field expertise in the "railways and metro" sector. An expertise acquired by building more than 375 km of underground lines, which are among the largest in the world, including the ones completed in Paris, New York, San Francisco, St. Petersburg, and those currently under construction in Riyadh, Doha, Copenhagen, just to name a few.

Salini Impregilo began working in Peru in 1966 with the construction of the Mantaro Dam, just until a few years ago the largest power plant in the country. A plant built at an altitude of approximately 2,700 metres, with continuous challenges, not only due to the height and to the harsh climate, but also to the difficulty in diverting the Mantaro River.

Following the dam's construction, these projects were also initiated:

1. the construction of the homonymous Mantaro Hydroelectric Plant (1979) that, with a total power of 1,000 MW represented for 30 years the largest hydroelectric plant in the country
2. the Agua Azul Aqueduct (2000), built with the aim of improving the water service for 800,000 inhabitants of the northern area of the capital, Lima, offering a total annual water production of approximately 44.5 million cubic metres.

Besides the hydroelectric sector, which for several decades represented the Group's major field of interest in Peru, Salini Impregilo decided to enter the urban mobility sector.

## SALINI IMPREGILO'S PRESENCE IN PERU (value >20 million euro)

### MILESTONES – COMPLETED PROJECTS

- 1966 – Mantaro Dam

An arch gravity concrete dam: 82 m in height, 200 m in length (crest) and a volume of 157,000 m<sup>3</sup>. The dam's crest reaches an altitude of 2,697 m. The Mantaro River represented the heart of the development projects in Peru since the 40s, when the first studies were carried out. The work presented many challenges due to the deviation of the same Rio Mantaro, to the geological conditions of the land where the dam is located and, above all, to the area's harsh climate.

To build the dam, five worksites were opened simultaneously, the coordination of which required the construction of a 28 km direct link road, crossing the Danube Pass at 4,150 m a.s.l., and connecting Kichuas (home to the main worksite) to the Colcabamba-Pampas road.

- 1979 – Mantaro, Hydroelectric plant

On November 10, 1984, the third and final phase of the Mantaro Complex was inaugurated: the tailrace hydroelectric plant. This plant supplies 1,008 MW to the entire complex. The water is channelled towards the tailrace hydroelectric plant through a pipeline that connects the bridge to the passageway with an underground suction tunnel measuring 800 metres. Since 2012 it was the country's largest hydroelectric plant. Even today, when you visit the complex's facilities, one is overwhelmed by the sight of such a imposing project.

Over the years, the population of the villages prepared for the construction of this complex, grew to more than 11,000 people.

- 2000 - Agua Azul Aqueduct

The project's objective is to produce drinking water in the Rio Chillón reservoir, so as to improve and expand this service for the 800,000 inhabitants living in the northern area of Lima.

The system uses two different supply systems in relation to the water regime of Rio Chillón: 1) only from wells during the river's dry period and 2) from flowing water, during the rest of the year. It adapts perfectly to the hydrological conditions of the exploited river. The total annual water production amounts to approximately 44.5 million cubic metres, subsequently distributed to the end users.

## ONGOING PROJECTS

- 2014 - Lima Metro

Located in the urban area of the city of Lima, where there is currently only one elevated metro line, the new metro system is a strategic project for the capital and for the entire country.

The project, to be completed in five years, includes 35 km of underground lines divided between line 2 (27 km) and line 4 (8 km). It will build 35 stations (of different types), 2 storage areas and 2 interchange stations between the lines. Designed with cutting-edge technical solutions, the new metro will be able to meet the demands of citizens for a greater enjoyment of the city, while contributing to the reduction of air pollution levels.