

Procurement of a biomass boiler to operate a green industrial laundry site in Dominican Republic



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Quick facts



Type of procurement: **regional industrial laundry site, based on Cleaner Production**



Year of inception: **2012**



Type of business: **Tourism complex**



Organisation name: **Grupo Puntacana**



Number of staff: **2,000**



Country/region: **Punta Cana, Dominican Republic**



Procurement value: **2,000,000 USD for the installation of a biomass boiler in an industrial laundry site**

Background information

6.2 million tourists visited the Dominican Republic in 2017, representing approximately 77% of national GDP¹. The tourism industry in the Dominican Republic has developed following an "all inclusive" operation model operation.

Three distinct areas concentrate most of tourism activities in the country: Santo Domingo, Puerto Plata and Punta Cana; the latter concentrates 60% of all hotel rooms and arrivals in the country, with an average occupation rate of 67% in 2017. Grupo Puntacana has triggered the development of the Punta Cana region.

The challenge

In Punta Cana, most hotels operate following an all-inclusive model; this implies large volumes of textiles (bed linen, towels, tablecloths, uniforms, curtains etc.), which are frequently changed.

Improper treatment of wastewater from the laundry of hotels located in the coastal zone of Punta Cana has important ecological impacts in the region. To minimize these negative impacts, Grupo Puntacana decided to re-think its laundry operations to reduce costs by lowering water and energy consumption and giving preference to the use of biodegradable chemicals.

The strategy

Grupo Puntacana created **the first green industrial laundry site, based on Cleaner Production, whose main energy source is steam generated by a biomass boiler.**

To mitigate risks related to the high investment costs on the site, **the business model targeted not only providing laundry services to Grupo Puntacana hotels, but also to other businesses from the region including hotels and the Punta Cana airport.**



Biomass boiler, at Punta Cana Laundry Service.

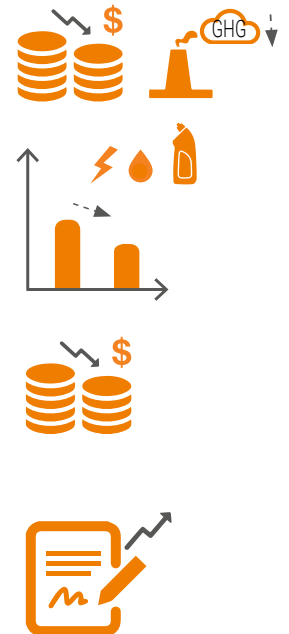
¹ Source: Dominican Republic Central Bank, 2017

Impacts

In 2018, Punta Cana Laundry Service provided low carbon and environmentally friendly laundry services to 12 hotels (representing 4,000 rooms) in the area of Punta Cana, Bavaro and Bayahibe, as well as to Punta Cana airport personnel (3.6 million arrivals registered at Punta Cana airport in 2017).

Return on investment was achieved after three years of operation and the following benefits were measured:

- ➡ The replacement of two fossil fuel boilers with a biomass boiler in 2012 enabled **annual fuel costs to be reduced from 11,000 USD to 2,000 USD**; **GHG emissions of the industrial laundry site dropped from 6,455,025 Kg/CO₂ to 1,075,838 Kg/CO₂**;
- ➡ Pooling the needs from 12 hotels and an airport and centralizing the provision of laundry services in one sustainable industrial site enabled economies of scale. This meant **lowering water, energy and detergent requirements**, compared with traditional laundries that hotels used to operate in their respective premises. Risks related to wastewater from hotel laundries leaking into the marine environment have also been reduced;
- ➡ **Substantial cost savings for hotels** using Punta Cana Laundry Service, as they are no longer required to operate and maintain laundry equipment in their own premises;
- ➡ As Punta Cana Laundry Service operates following international hygiene standards and is fully automated, the probability of bacterial contamination has been reduced to a minimum, hence improving quality of stay and comfort to the guests;
- ➡ **Punta Cana Laundry Service created 64 direct and indirect jobs**;



In 2013, Grupo Puntacana received a Cleaner Production award² issued by the Ministry of the Environment of the Dominican Republic, which enhanced its brand reputation and visibility of sustainable initiatives.

² More information is available at: <http://www.puntacanablogs.com/blog/grupo-puntacana-recipe-premio-a-la-produccion-mas-limpia>

"One of the most important achievements is to be able to provide services to hotels in the area, which means cost savings, but also mitigation of environmental impacts - which ultimately preserves our destination"




- Naudy Meneses, Manager, Punta Cana Laundry Service




Lessons learned

- ✓ **Following cleaner production protocols enabled the significant reduction of environmental impacts of laundry operations**, while maintaining a viable business model;
- ✓ **Turning the industrial laundry site into a service provider to other businesses helped support investment costs**, while collectively maximizing environmental benefits in the Punta Cana area.

For further information

-  <http://www.grupopuntacana.com.do/empresas/punta-cana-laundry-services>
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