

# 2017 SEES A "BALANCE OF PRODESA"

Prodesa Medioambiente S.A. (Prodesa) can look back on a busy 2017 with key wood pellet plant project contracts received, under construction and completed in North America, Europe and Asia during the year. On paper it would certainly seem that the Spain-headed technology provider has achieved a "Balance of Projects" reflecting its engineering capacity and project execution skills.

**AT THE BEGINNING OF 2017** PRODESA handed over its largest ever pellet island engineering, procurement and construction (EPC) project to date – the 500 000 tonne per annum Colombo Energy plant in Greenwood, South Carolina (SC) in the United States (US). The plant, which has since been acquired by US-headed Enviva from the Portuguese pulp and paper major The Navigator Company, is seen by the company as a milestone achievement, both in terms of scale and geography.

– It was by far the single largest wood EPC contract that we have ever undertaken. We really pushed the boundaries on what we are able to achieve as a company, remarked José Ignacio Pedrajas, CEO for Prodesa in North America.

## Partnership with FutureMetrics

Certainly it seems that Colombo Energy, now Enviva Greenwood, has been a watershed project for the company in North America. Not only has the company landed at least three very different pellet projects in the region – one in the US and two in Canada – it has also entered into a unique partnership with US-headed pellet industry consultants FutureMetrics.

Under the agreement, FutureMetrics operations expert and pellet industry legend, John Swaan will lead a team that trains the operators of new Prodesa pellet plants throughout the startup and commissioning phases of the project. As FutureMetrics puts it, Swaan's "knowledge and wisdom will be applied to Prodesa's state-of-the-art new pellet plants to ensure that the operators have the shortest learning curve possible to reach safe and stable operations while producing high-quality wood pellets."

## New North American projects

The Prodesa – FutureMetrics commissioning and start-up team are likely to have a busy schedule ahead of them.

In the US, Prodesa has revealed that it is involved in a revamping project at a 112 000 tpa plant for an undisclosed client in Jasper, Tennessee (TN). Improvements being carried out include new dry product storage, new pellet mills feeding system, new automation and control system, new pellet silos discharging system and new truck and train loading systems.



In Canada, the company has at least three projects ongoing or about to start. For instance, it had signed a contract with a large "industrial group operating in Canada and the US" for detailed engineering with respect to the process and pelleting line for a proposed 185 000 tpa pellet plant. The project plans to use sawdust, shavings and woodchips as feedstock and the deal includes technology supply in a second phase, assuming the project goes ahead.

The second project is in a more advanced phase – Vancouver-headed Skeena Sawmills Ltd, a major British Columbia (BC) producer of Hemlock, Balsam Fir and Western Red Cedar wood products for the Pacific Rim and North American markets has contracted Prodesa to design, manufacture and supply a complete 96 000 tpa pellet plant for its sawmill in Terrace.

The sawmill produces around 200 million board feet ( $\approx 472\ 000\ m^3$ ) of sawn wood and the pellet plant will use residuals such as sawdust, planer shavings and woodchips as feedstock. The pellet plant project is part of a major investment plan by the company as the sawmill transitions to accommodate a larger share of smaller diameter logs sourced from second growth forest.

According to Pedrajas, the deciding point for the client's investment decision was the specific design and the high performance of the belt dryer in extreme environmental conditions. The selected dryer is a low temperature belt dryer with a capacity of 12 tonnes per hour. It will use hot air at 110°C which will come from two 5.5 MW natural gas burners.

## Technical consultancy

Finally, the company has been providing Sumitomo Corporation detailed technical analysis and evaluation consultancy services. Both the Pacific BioEnergy pellet plant in BC that Sumitomo acquired a major stake in July 2017 and also the 175 000 tpa sugarcane straw and bagasse pellet plant that Cosan Biomassa, the Su-

mitomo - Cosan joint venture, has in Jaú, Brazil.

## A first project in Vietnam

In Asia, Prodesa has been contracted by Eastwood Energy, a Vietnamese woodchip and pellet producer to supply a belt dryer and feeding system in an existing production facility. According to Prodesa's Asian Manager Victor Monge, Eastwood wants to increase its annual pellet production capacity to 80 000 and has opted for belt dryer and feeding system from Prodesa. The 130 m<sup>2</sup> dryer will provide up to 10 tonnes per hour of dry microchips and sawdust. The thermal energy required for the dryer will be supplied by a 5.6 MW biomass-fired hot water boiler, which will be provided by a local manufacturer following Prodesa's specifications.

– We secured this project thanks to our previous experience in Malaysia with the Green Pellet Sarawak project, said Victor Monge (above).

## CHP and pellets in Italy and Latvia

In Europe, the company is involved in two major integrated combined heat and power (CHP) and pellet projects, located in Italy and Latvia respectively. Both projects include debarking and chipping lines as both receive feedstock as roundwood. In southern Italy, Prodesa was awarded a turnkey EPC contract for a combined biomass power plant integrated with a 42 000 tpa pellet plant. A 4.2 MW biomass-fired hot water boiler will pass a 1 MWe Turboden ORC unit before feeding the belt dryer. The plant is nearing completion.

In Latvia, Prodesa together with Netherlands-headed biomass combustion technology providers HoSt have completed a greenfield 10 MW biomass-fired CHP integrated with a 110 000 tpa plant for Avoti SWP. The plant is under commissioning.

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