

TURNING UP THE PRESSURE IN THE GAS MARKET FOR SOUTH EAST ASIA

Enerproject SA is a leading gas compressor packager for gas turbine fuel pressure boosting, gas processing and gas recovery systems. After interviewing with us last year, General Manager Sales, Vito Notari returns to PI Magazine with an update of Enerproject's business activities.

Enerproject's targets are based around deliveries for the oil and gas sector to the onshore market. Enerproject's experience and growth across key markets such as, Indonesia and Thailand has been important in this last year. Growth in the oil and gas market as well as power generation has been recorded, with Notari stating "last year, we supplied almost 30 units Worldwide on Power Generation, 7 of which were for Thailand and 10 for the onshore Oil & Gas".

Vito Notari sees South East Asia in particular as a huge market. Because of this, during the last year Enerproject have collaborated with their representative in Thailand, Panjawit Controls Co.,



**VITO NOTARI, GM SALES,
ENERPROJECT SA**

to increase their local Service Team to "give better still support to our customers." Enerproject and Panjawit Controls Co. have also set up a warehouse to "improve our capability to supply consumables and spares in a short time" in order to provide a "just around the corner" style service. On a worldwide

basis, Notari was "proud to announce a new fully owned subsidiary in Darmstadt, Germany that started operation in August last year."

Enerproject has been involved in several important projects in Thailand. Through Thai Shinryo, Enerproject has delivered three units to DCAP for the Suvarnabhumi Airport in Bangkok. DCAP is an exciting joint venture between PTT Plc, EGAT Plc and Metropolitan Electricity Authority (MEA), which was specifically created to manage the new airports needs across power, steam and air conditioning. The compressors from Enerproject deliver high-pressure gas to a configuration of 2 x GE LM6000 gas turbines. Enerproject have now also committed to a project with Toyo Engineering in relation to the exciting SPP developments undertaken by Gulf JP. Enerproject has "signed a contract and delivered 6 units with Toyo, who is acting as EPC Contractor to Gulf JP. Each plant configuration (3 in total) has two Siemens SGT ▶





Other challenges faced by anyone using landfill gas are posed by its corrosive and reactive nature, but Enerproject have the technology to minimize the risk. Notari explains how “usually, the wet gas contains water vapor, Carbon dioxide (CO₂) and may contain trace of hydrogen sulfide. The combination of H₂S or CO₂ with H₂O is critical not only for the compressor, but for the entire process, because it create a high corrosive solution. Therefore, removal of water is necessary. With a coalescent filter at the compressor inlet, we have a preliminary separation of water vapor. By means of a heat exchange process we can still reduce further the water vapor content after the compression, in order to supply “dry” gas. In some cases, when the content of water vapor is very high, it could compromise the functionality of the compressor. Therefore, we have to install a more sophisticated separation/drying system in front of the compressor.” Notari added, “Each project has to be engineered on a case-by-case basis depending on the gas quality and quantity. In some cases, when the content of heavier hydrocarbons is very high the gas has to be treated before compression.”

The compressor packages delivered by Enerproject are finely tuned pieces of technology that require stringent aftercare. Notari notes that whilst “compressors as any other machine need maintenance”, through using “oil-lubricated screws, the requested maintenance is reduced to a minimum”. The aftercare package provided by Enerproject is robust, with their “CSD (Customer Service Department) is taking care world wide of these services.” In agreement with their customers, “interventions are performed once or twice per year with a planned outage of 2-4 days per year” adds Notari. All in all, the last year for Enerproject has been one of expansion and development, both in Asia and worldwide.

800 turbines and two Fuel Gas Compressors from Enerproject. We expect commercial operation to start in the fourth quarter of 2012”.

Grappling with the stringent requirements to control residual content of oil and liquids in compressed gas has kept Enerproject busy this year, making sure that their packages conform. As Notari explains, “with the right dimensioning and components you can reduce residual oil & liquids to values of less than 0.05 PPM W at any operating stage of the turbine. The stringent requirements for the manufacturers of the new DLE high efficient turbines mean that we have developed a 3-stage separator/filtering system to conform those needs. In some cases, in cold areas with long gas lines between compressor and turbine an additional filter has been installed just in front of the package to avoid condensation in the line.

Saying this, we can state that oil lubricated screw compressors are the right solution because of their higher efficiency and lower cost”.

Enerproject have also been involved with the sharp increase worldwide of the utilization of landfill gas. They have “supplied around 120 units mainly in Europe and Russia that are compressing biogas, landfill gas and associated gas (well known as flare gas). For all these types of gases, special attention has to be given to filtration and separation of condensation before and after the compression. Another interesting technical issue to deal with, in these applications, is the very low pressure at the inlet of the compressor!”

‘ENERPROJECT’S TARGETS ARE BASED AROUND DELIVERIES FOR THE POWER GENERATION MARKET, FOCUSED ON SPP PLANTS AND ALSO THE OIL & GAS SECTOR FOR ONSHORE APPLICATIONS. ENERPROJECT’S EXPERIENCE ACROSS KEY MARKETS SUCH AS INDONESIA AND THAILAND HAS BEEN IMPORTANT IN THIS LAST YEAR.

