





# CREATING *a Better* TOMORROW

PERDAMAN INDUSTRIES TALKS TO IRJ ABOUT A  
LANDMARK COAL-TO-UREA PROJECT







Did you know that despite the bounteous supply of coal in Western Australia, gasification has not been considered in the region?

That is, until now. Perdaman Chemicals and Fertilisers of Western Australia are about to introduce gasification to their home turf with a \$2.5 billion US dollars urea manufacturing plant at Collie, Western Australia.

IRJ caught up with Andreas Walewski, Corporate Director of Perdaman Industries, to talk about how the Collie plant, capable of transforming sub-

bituminous coal into urea, is set to change the face of urea manufacturing and open up new opportunities for coal in Australia.

### **Perdaman: Spotting Urea Plant Potential**

Walewski cut his teeth in the industry back in Germany with IBM in 1985.

"I decided to migrate to Australia so we came here and I worked for a law firm for several years before starting my own accounting and advisory practise helping overseas companies setting up



Andreas Walewski,  
Corporate Director of Perdaman  
Chemicals and Fertilisers

businesses in Australia," he says.

In doing so, Walewski went to work for Burrup Fertilisers where he met Vikas Rambal, Chairman and Managing Director of Perdaman today.

"Mr. Rambal was also a shareholder of Burrup and we left at the same time and started Perdaman," Walewski says.

"Mr Rambal, who is a Chemical Engineer, is very much a downstream processing person who has successfully built fertiliser plants in India and in Australia. Downstream processing is what we do best and we felt there was a real increase in demand for urea and there's an opportunity to tap into that by developing a urea plant."

He recalls how both he and Mr. Rambal initially began searching to build a gas-based plant.



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From left to right:  
Honourable Colin Barnett MEd MLA, Premier of Western Australia,  
Minister for State Development Mr. Vikas Rambal, Managing Director  
of Perdaman Chemicals & Fertilisers Mr. Joseph McCarthy, Director  
(Projects) of Perdaman Chemicals & Fertiliser

“Despite all of the gas that we have here in Western Australia the vast majority is exported in the form of LNG so there’s actually very little gas available for local downstream industries. We looked for alternatives and we found coal in the Collie region which is 200 kilometres south of Perth and it is very suitable for gasification,” he says.

Australian research bodies sent this coal for testing in Germany with great results.

“They found it to be very suitable coal which meant that we had the first ingredient; the feedstock,” Walewski explains.

“Equally important is the coal’s location in the Collie region because it is a developed area with a lot of industry - alumina, power generation and the like - so the infrastructure is very good, including a port that can take all types of ships including Panamax size.”

## An Ideal Setting

Walewski explains that the availability of suitable coal, existing infrastructure and the site’s proximity to the Western Australian coast were all determining factors in embarking upon the Collie Urea plant.

“We started this project in 2007. The first 12 months were spent looking for our location. Then the Western Australian government decided to create the Shotts Industrial Park near Collie and we entered into a coal supply agreement with Griffin Coal. That’s when the project started in earnest and since then we have moved forward on all fronts,” he says.

“We’re at the stage of finalizing agreements with the rail services providers and the Port of Bunbury. Importantly, we have signed up the technology providers. For the gasification and gas clean up we have Shell. For the ammonia production it’s Halldor Topsoe A/S and for the urea we have Stamicarbon, so we have reputable, experienced and highly regarded technology providers.”



“Perdaman have also entered into a binding agreement with Samsung Engineering and IKPT (Inti Karya Persada Teknik of Indonesia) for the Engineering Procurement Construction work.”

“The EPC contractors are working on the first phase of the project and when we achieve financial close, which is targeted for the second quarter of next year, then we will all move forward together to build the plant,” Walewski says.

Samsung C&T Corporation, a separate part of the Samsung Group, have also pledged to invest \$30 million US dollars in equity.

“It is a sign of their support and trust that the project will be realised. Samsung regards Australia as a place where they want to do business. They see our project as an introduction into Australia, so they’re putting a lot of emphasis on our urea plant,” Walewski explains.

### The Financial Close

Perdaman’s sights are firmly set on the next goal; financial close.

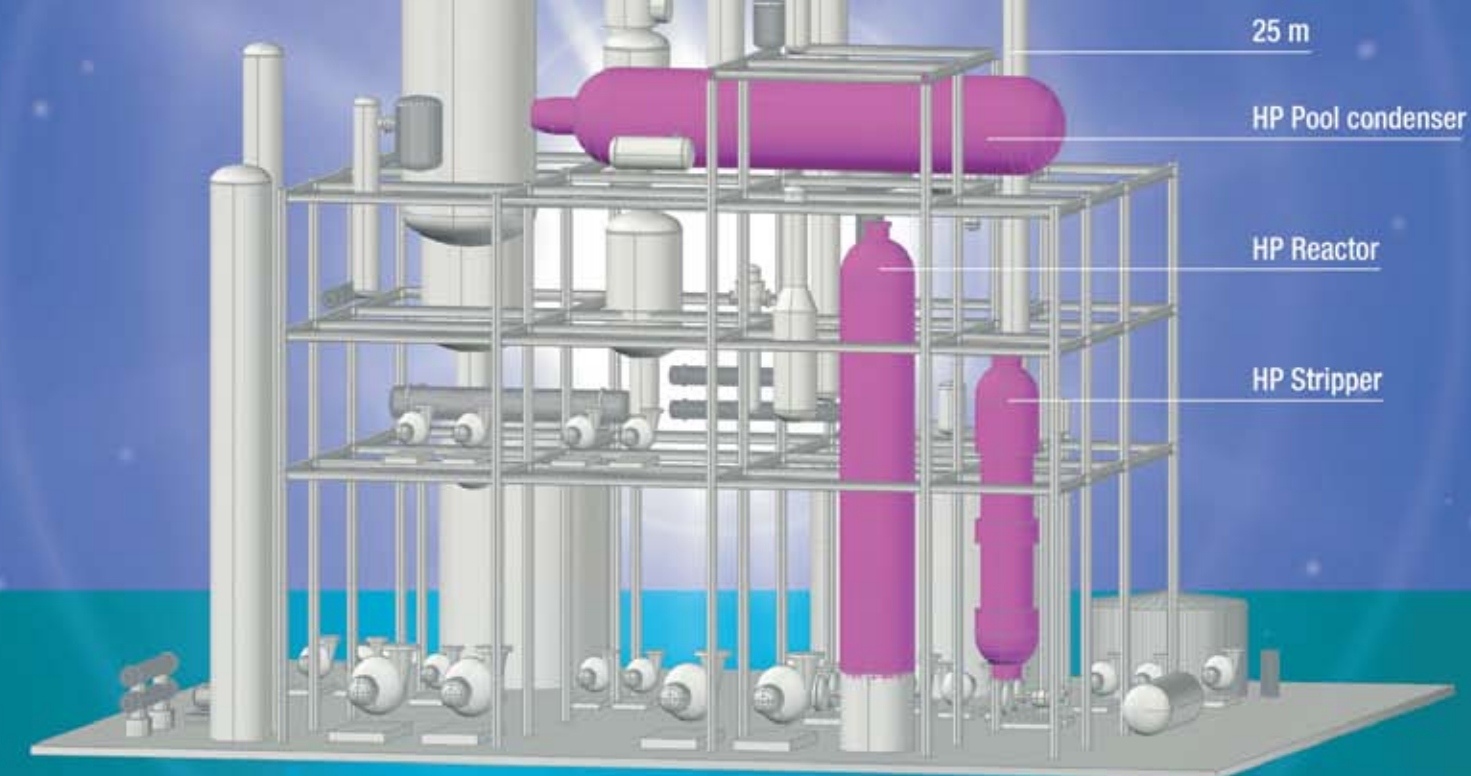
“We’ve appointed Société Générale as our financial advisors. They have extensive experience in

project financing for resources and fertilizer projects,” Walewski says.

“They’re particularly well regarded and well-connected internationally. We have to raise around \$2 billion U.S. in debt and that will be difficult to fund through Australian banks alone so we are looking at a relatively large number of banks – Australian as well as international banks – and also export credit agencies from countries like Korea and Germany where a lot of the equipment will come from.”

In the wake of the global economic downturn, Walewski explains how the market upset has helped Perdaman overall.

“On balance, the global economic crisis has helped us. When we first started the project, contractors told us they were very busy and didn’t have much time to talk to us. We were being told that we have to factor in 10 per cent year-on-year cost escalation to work out the capital expenditure and that would have made the project very difficult. This has now completely changed. When we have been negotiating with other construction companies over the last 12 months, there has been a change in



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attitude and certainly a worldwide interest. We had companies from Korea and also from Japan, China, Germany, Italy, the United Kingdom and America interested in building the plant,” he says.

“The cost of materials like steel has come down and is unlikely to increase the way it was escalating a few years ago. I think the crisis has reduced our ultimate expenditure and increased our access to manpower and resources. It’s fair to say that there’s more availability of workers and staff in Western Australia than two years ago.”

### The Future of Perdaman’s Collie Urea Project

Once the company has achieved its targets for the coming financial close, Perdaman will focus its attention on production.

“We want to build a flagship project which puts Collie on the map. This is the first commercial gasification project in Australia. Obviously, gasification is proven elsewhere, but in Australia despite the fact that we have so much coal, it hasn’t been applied here. The project also has the potential to be the world’s largest integrated CCS (Carbon Capture and Storage) sequestration site. Once it’s up and

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running this will be the largest urea plant in the world based on coal gasification," Walewski says.

As the company cast its focus beyond the next financial goal, Walewski highlights one common aspect in all of Perdaman's progress on the Collie urea project; the successful relationships it is building with the local communities, business partners and the Western Australian Government.

*"The government has been very supportive and is helping us to navigate and expedite the approvals*


*processes. Obviously they have to be quite stringent, but having Western Australian government support has speeded up the process," he says.*


Perdaman is currently undertaking the key environmental approvals process, which includes comprehensive Public Environmental Review of all the details of the project, which are set out in a formal document to enable members of the community to make comments. The company has already begun consulting extensively so it is aware of any concerns that might arise, from water supply issues to CO2

emissions. As the Collie urea project focus moves towards production, Perdaman believes it can satisfy the environmental and social issues related to a project of this scale.

"If you compare our plant with something like a traditional coal-fired power station we emit a fraction of the nitrous oxides and sulphur oxides. In terms of air emissions, the issue relates mainly to CO2 and in that regard we are working with the Western Australian Government and other industry players who are examining the potential for a geo-sequestration site just 70 kilometres from our site," Walewski explains.

*"There is potential for Perdaman to be the first commercial customer for that geosequestration site because most of our CO2 will be in a pure form that could be relatively easily sequestered."*

With strong business and community relationships, a supportive government, a firm financial focus and an expert team, Perdaman's Collie coal to urea project will be a first for Western Australia and a big step for the worldwide industry. 



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