

PROJECT UPDATE

UNLOCKING THE POTENTIAL

A large industrial facility under construction. The scene is dominated by a massive, cylindrical, ribbed structure, likely a reactor or storage tank, which is the central focus. This structure is surrounded by a complex network of red metal scaffolding. Several workers, dressed in light blue coveralls and red hard hats, are positioned at various levels of the scaffolding, engaged in construction or maintenance work. The background shows the structural steel framework of the building, with vertical and horizontal beams. The lighting is bright, suggesting an indoor or well-lit outdoor environment. The overall atmosphere is one of active industrial development.

Sapphire plant
under construction

Octal Petrochemicals is developing a PET and APET based global hub in Salalah at a combined investment of more than \$1 billion with the export potential in excess of a billion dollar. Akshay Bhatnagar takes stock of the project that is expected to shake the global PET and APET based packaging industry in an exclusive visit to Octal's production facilities in Salalah

Last year when we met Nicholas Barakat, the managing director of Octal Petrochemicals, he talked about contributing over \$500 million to Oman's export kitty in a year's time. He also shared his vision of Octal becoming the world's largest producer of amorphous polyethylene terephthalate (APET) sheets and the Middle East's largest producer of PET resins based out of Salalah. It sounded quite ambitious at that time. Why? Oman's non oil exports were pegged at \$1 billion in 2007 as per preliminary estimates. Once Octal gets operational in full steam, it will be the single largest contributor to Oman's non oil exports with a product which is one of the fastest growing packaging materials! Sounds unbelievable but it is true. Hats off to Octal for being the visionary to use Oman as a base to import raw materials from all over the world and convert them into a world-class packaging product using proprietary cutting edge technology and ship them out from the strategic location of Salalah to all over the world.

Seeding the market

OER Dossier team went to the company's production complex in Salalah in April to take stock of the development made so far. As we reached near the Octal plant located in Salalah Free Zone, from outside the facility appeared to be quite modest, but it was quite different once we entered the premises. Brij B. Malhotra, group director (technical)-resin and PJ Corcoran, group director-packaging materials, took us around the production complex spread over 47 hectares.



Our first stop was 'crystal' plant that started operations in December 2006. "The automatic plant has a combined capacity to produce 30,000 tonnes of APET sheets per annum and is the most modern plant of its kind. Our machines run faster and better than anyone else in the world," informed Corcoran. It is manned by 50-persons. It produces 120 tonnes of APET sheets every day using imported PET pellets as the input. The three proprietary production lines, mostly imported from Europe, are run 24X7 by specially trained operators. The products are exported all over the world. Fluor Corporation, the world's largest publicly owned engineering, procurement, construction and maintenance services company, has provided the technical advisory and project management services to Octal. The crystal plant is more like testing waters for Octal as it gears up to

get into the big league. It will be used for serving the needs of global buyers looking for comparatively smaller quantities with tailor-made requirements.

Expansion mode

Moving on, we stepped out of Crystal to check out 'Sapphire', the new plant that is coming up nearby in the same complex. Part of the first phase of expansion, Sapphire will have a production capacity of 300,000 tonnes of PET and APET per annum. "The mechanical work will be over by July and the commercial production will start by the first week of September. The entire equipment required for the plant is on site and we need to just install it as the plant gets ready," informed Malhotra.

Almost 400 construction and engineering workers are busy erecting the plant.

Malhotra said the number will go up to 650 soon. We could see lot of Chinese technicians at the site. On probing, Malhotra said, "The civil work is contracted to local companies but a Chinese company with extensive experience in constructing polyester process plants is also working on the project."

He added, "With the start of Sapphire, our total staff strength will go upto 400 employees."

What's so unique about Sapphire? Malhotra replied, "We have eliminated the process of cleaning and melting the PTA pellets. We will keep PET in melted stage

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and use it directly as an input. It also means low energy consumption, high quality consistency with no dust or contamination and absolute capital control. It results in a huge cost advantage for us, significant energy reduction and a much lower carbon foot print when compared to the competition."

Octal is also investing \$50 million in constructing 'tank farm', the first liquid chemicals terminal in Salalah and a key element of the strategy to become a global supplier. It is expected to be ready by June this year. Located at the Port of Salalah, the first phase of the terminal comprises two 5,000 metric ton

Altering the market equation

Nicholas Barakat, managing director, Octal Petrochemicals in a freewheeling chat with Akshay Bhatnagar talks about the company's strategy to take up the pole position in the global PET and APET market

What kind of response you have received from the international buyers?

Absolutely fantastic. Recently we were at Interpack 2008, the global packaging show held every three years in Germany. There we met senior representatives of over 50 global PET players and top 15 consumer brands. We had serious business parleys with them that could lead to business valued at \$500 million. Our facilities at Salalah are the most modern and cost effective in the world. Octal has placed Oman as the leader on the world map in the PET and APET market.

Recently, a senior member of the Packaging Council of Europe visited us. He said the development will drive the global market growth. A large multinational buyer also sent a team of seven people recently to audit our plant.

Another senior executive of a very large global buyer has evinced interest in our products and his technical team is currently



evaluating our offering. This one account will be worth 40,000 tonnes per annum with a business value of \$75 million.

What is your market strategy?

The global packaging industry is worth \$500 billion. As the manufacturer of PET resin and APET sheets, our strategy is to target large global buyers in the packaging business and support thermoform-

ers worldwide. We are also focusing on large supermarket chains and leading consumer brands. Our products have applications in any product that could be packaged in clear rigid plastic. We are focusing on fast moving consumer products, electronic items, packaged food, etc. APET is light in weight, one-seventh of the weight of glass. It offers glass like transparency. It looks good on the shelf, has excellent mechanical properties and 100 per cent recyclable.

Built with an innovative technology and on a very large scale, our PET resin will manufactured from reactors which in size are in the world's top 5 per cent in the world. Nobody in the world can match our quality-offering.

What is your game-plan on the downstream front?

Our definition of downstream is quite different from others. We are committed to producing the best quality product



**Crystal plant
in operation**

at the lowest possible cost. We are looking at Oman as a platform to integrate and downstream the best offerings of the Middle East. Our marketing is done offshore. We have a robust IT system in place that enables us to service our customers from anywhere in the world. We have installed fibre optics and set up microwave link between the plants and the port. We will bring all the raw material required to Oman and export to all over the world including Europe, US and Asia using the strategic location of Salalah port. We plan to put together several industries and invite investors who want to use our products to build plants downstream.

Can you elaborate more on the new product streams that you are planning?

Can't divulge more information at this stage but to give you an example, we are going to make an announcement soon on the acquisition side. We have identified significant opportunities for cost reduction of the equipments. We are currently working with the Indian subsidiary of a leading US multinational to make the equipments. As I said earlier the strategy is to innovate technologically and offer quality products, to better position PET/APET as the packaging material of choice.

How do you plan to fund the expansion?

The existing investment pool is in place for the expansion and we are considering additional institutional investors from the Middle East which have expressed interest in the new 500,000 tonne PET resin plant. Our traditional model is to use 50/50 equity and debt and the plan is to keep to the model to ensure the company is well capitalized.

Do you plan to go public?

It is too early to talk about it as we are busy building the capacity to become one of the largest companies in Oman. We are considering multiple liquidity options including IPO and other opportunities. In the event of an IPO, preference would be to get listed on the Muscat Securities Market and make shares available to a large audience of Omani investors.

What is your vision for the company beyond 2011?

The packaging industry is very dynamic and we must anticipate new technologies to meet increasing demand. Octal wants to become the world's leading manufacturer of clear rigid packaging material for the packaging of foods and consumer products. This means vertical and horizontal capacity addition in some very targeted fields. In 2011, we will be very active in Europe and the US with key alliance with international converters.

stainless steel tanks designed to receive mono-ethylene glycol (MEG). Saudi Basic Industries Corporation (SABIC), the world's largest MEG producer, will supply Octal's requirements through the new terminal. Octal will pump feedstock chemicals off ship to the tanks and then pipe them underground for 1,000 metres to the main processing plant. The second phase of the terminal, due to be completed by September, 2009, will add a third 5,000 metric ton tank to accommodate expansion at the factory site. The third phase, which will reach completion in 2011, will increase capacity by a further six tanks. All the tanks will be located within a 12,600-square metre

When you look at a clear rigid plastic, the sheet gets punched to make a box, tray, cup or whatever we need. This results in 30-45 per cent wastage. The waste, which is of very high quality, originates mostly in Europe and US. We are looking at two recycling sites in the Europe and US on which to expand and support our thermoformer customers.

We are doing research on how best to optimize downstream and increase productivity of the thermoforming process. We are interested in the Indian market as it offers great potential for packaging and are reviewing several options on how best to enter the market. The next targeted market for us is China. We have an office of three people there currently. We have just started getting business for export from there. We also plan to partner with a western company and we will go after consumer packaging and cosmetics packaging business.

Octal means eight. When we started Octal, we had the vision of creating eight companies to be the absolute largest player in PET businesses. We are also looking at going beyond polyester chain. We are also looking at other plastics for which we are in the process of filing a patent on this front in US.



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- 1. PJ Corcoran (right) explaining the production process to Akshay Bhatnagar (left)
- 2. Aerial view of the under construction Sapphire plant
- 3. Brij B. Malhotra making a presentation on Octal's facilities
- 4. Huge reactors waiting to get installed at Sapphire



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area reserved for Octal at the Port of Salalah.

Giant stride

As we looked beyond the construction site, we found several huge reactors lined in the equipment lay down area just opposite the Sapphire plant. Malhotra answered our query: "The reactors have been imported for Sapphire and they will be installed in the coming weeks." But what about the vast stretch of land? "It is under lease from the Salalah Free Zone. In the second phase of our expansion, we will build there a 500,000 tonnes of production capacity in bottle grade PET resins by May 2010. It will

make us one of the world's largest polyester producers with 800,000 tonnes of annual capacity. Fluor Corporation has been retained as technical advisor for the expansion."

He added, "The team working on Sapphire will work on the new facility on completion of the first phase of expansion." The new production capacity will be added in two stages – 250,000 tonnes by March 2010 and the remaining 250,000 by May of the same year. The company is targeting the soft drink and bottled water markets in Europe, the US and Middle East through its move into PET. He informed, "Bottle grade PET's total demand in the

world today is 13 million tonnes per year. It is growing at a rate of 1 million per year and Salalah is the ideal location to manufacture and export it worldwide."

Prudent financing

The initial funding of \$300 million required to complete Phase 1 was provided by Chemlink Capital Ltd. along with institutional and individual investors in Oman, Saudi Arabia and Kuwait. BankMuscat is the financial advisor to the project. Suhail Bahwan Group, BankMuscat, Muscat Overseas, Malatan Trading, DIDIC, Oman and Emirate Investment Company, Oman Investment Company and National Investment Fund Company



are Octal Petrochemicals' founding partners. For the second phase of expansion, Octal will be raising \$250 million from the current shareholders besides two more investors from the region.

Barakat said, "Total investment on the site is expected to be as much as \$1.2 billion upon completion. Global export sales capacity is expected to reach a running rate of US\$500 million by the end of this year and net exports will reach \$1.1 billion with the completion of our expansion by the end of 2011."

Way forward

Barakat is quite clear on his expectation

from Octal – with a strong logistic platform from Salalah, capture 20 per cent share of the APET sheet market valued at more than \$2.25 billion and considered one of the largest and fastest growing polymer applications; become the world's largest producer of APET sheet packaging and; the Middle East's largest producer of PET resins.

But what about the competition for Octal in the global market? "It is a fast growing market and there is enough business in the world. We will help in growing the global market. We have developed dedicated capacity for APET production, a process which is more efficient and saves

customers' money. We are introducing consistent standards for gloss, uniformity, clarity and gauge control to help thermoformers deliver more production, higher yields, and more consistent end-tray quality," Barakat said.

Corcoran added, "With gauge held to less than one per cent variation – a new standard for APET – packaging manufacturers now know exactly how many trays they will produce per metric ton of APET. This can mean savings of between three to eight per cent over other materials, a dramatic cost reduction when you consider the massive volume requirements of the biggest packaging companies."