

Work of the Future as PDO Transforms

Petroleum Development Oman (PDO) will turn to a fully-fledged energy company over the next decade encompassing hydrocarbon and renewable energy generation and water management, an official from PDO said. The majority state-owned firm has already taken strides in fields of alternate energy with projects such as Glasspoint Miraah and Ras Al Hamra redevelopment and “has a goal to play a major part in Oman’s solar and renewable future.” Raoul Restucci, Managing Director of PDO, outlines the NOC’s future plans in an interview with Brian Cozzolino, Research Analyst, Gulf Intelligence.



CEO SERIES

Brian Cozzolino: *Let's begin with an outlook for PDO's production.*

Raoul Restucci: I have the privilege to work in a company that in a difficult, challenging, price environment has continued to grow. The 550,000 barrels per day (b/d) in 2005 reached 600,000 b/d recently and we'll be growing to 650,000 b/d and 700,000 b/d over the next 5 to 10 years.

There's a need and there's an opportunity in Oman for employment creation; it's about delivering new value streams, and from an opportunity perspective, we're well positioned to actually play a key role in some of those emerging new industries and we need to understand how to best position ourselves.

PDO has many examples where we're well ahead of the curve. PDO's WRFM (well reservoir facilities management) and Exception-based surveillance programme for instance is a best practice globally that we're planning to monetize into a new value stream. We're setting up a new company to launch it in the region and beyond.

Sean Evers: *You're essentially saying you're going to grow the business 20% or somewhere in that direction – where is that 20% going to come from?*

Raoul Restucci: It's not in terms of initial value streams. We're focusing on leveraging our human capital which is a competitive advantage we have in this region and arguably in many locations globally. It's recognizing that although the solar business is at an early, if not

embryonic, stage in Oman, the opportunity is absolutely huge. And we're doing a lot about it.

We're currently developing, together with Glasspoint, the largest solar steam plant in the world. Phase one is on stream, phase two is on the way. We're removing the pilot plant to install new technology for phase three. We're increasing efficiencies while progressing a more modular approach that will further reduce total costs.

We are also in the process of completing installation of 19,500 PV cells in our car park. Six megawatts to support PDO Headoffice requirements. It's less about the solar itself and more about how we run the operation, how we maintain, how we understand the supply chain, how we understand how well positioned Oman is to play in that space.

By the end of the year we'll be tendering out for 100 MW in our installations. We're working together with OPWP and engaging with them to see how we can assist them in their 500 MW project.

Brian Cozzolino: *In this new activity that PDO moves into, renewables, water, etc. – would you envisage the requirement to hire more staff beyond your 9,000 currently and what staff skill sets will they need to have?*

Raoul Restucci: I don't believe we need to grow our headcount because of the dramatic efficiency which we're seeing; exception-based surveillance enables our systems to identify the problems with our wells and now we're focusing on

fixing and not finding problems. Within two or three years, we won't even be doing that; we'll be elevating the deployment of the staff to other activities. So that's a continuous journey. I don't think you're looking at significant increases in the establishment. What you are working on is establishing a supply chain for the industry, in this case, the renewable industry, where the employment and market opportunity is absolutely huge.

Brian Cozzolino: *In that regard, do you think Oman is behind or ahead of the curve on renewables? Obviously, it's quite an active project throughout the region. We've seen very big developments in Abu Dhabi and Riyadh and so on.*

Raoul Restucci: There's a lot going on but much tends to be in individual silos, so the integration under one authority, one management, will enable and accelerate the whole process significantly. But I'm confident that we're starting to see a lot of engagement, a lot of alignment. If you look at the key projects around the region, in Abu Dhabi, in Dubai, in Morocco, in Jordan, in Saudi, major plans and ambitions have been announced, but with less emphasis on the in-country value, and local supply chains. And that's an area where we've done extremely well in - as an industry in oil and gas, and we can easily transform that to renewables.

Brian Cozzolino: *You have been quoted previously as saying that you're going to identify sweet spots in the context of*

PDO's new business opportunity that you will look to build. I'm curious how do you set the criteria for identifying a sweet spot? Is it a pull approach of seeing what the demand in the market is – for example – demand for solar energy so you then try and meet that. Or are you going to take a different approach, where you identify what you are really good at and then push that out as a service or product?

Raoul Restucci: It's a combination of both. There's no doubt that we'll focus on areas where we believe we understand the business model. And that's a key challenge. If you look at the coal, steel and electrical industries, major providers like RWE, EON, EDF, are really struggling to move into a new business models. Similarly, for oil and gas where the margins tend to be pretty high at \$40 or more, to move into the renewables business where the margins can be incredibly thin and where the manufacturing often suffers from oversupply and where many companies have gone bust, it's critical to understand what it takes to win.

Brian Cozzolino: *Is it a downstream approach?*

Raoul Restucci: Yes and that requires a very different mentality, rigour and leadership. Lean, efficient and stable processes and, often, you're having to set up and spin off different entities because that don't suffer from overheads and legacy business models and are simply unable to manage large capital-intensive projects with efficient downstream types of operations.

Sean Evers: When you consider that, how do you think PDO and national oil companies in general can manage their dual mandate of profit and the national commitment to employment. For example, if

“ We will open training programs to the industry, and we've got some world class facilities for this.”

ARAMCO goes public, it will be very difficult to see how it maintains that dual obligation. Similar developments in ADNOC. How do you see that going forward as a challenge?

Raoul Restucci: I struggle with the understanding of the conflict. They go hand in hand. We don't do ICV because it's a corporate social responsibility need; we do ICV because it's simply good business. When you look at the direct, indirect and induced values that you create through that new supply chain, it's just enormous, and dramatically improves costs.

The renewables business in the region is expected to grow in excess of 200,000 people over the next five years and will see more than \$200 billion dollars being invested in the same period. We want a piece of that. So it's not about establishing huge new organizational upgrades; it's more about ensuring that the supply chain is delivered and that it's also very sustainable.

Brian Cozzolino: *In terms of grabbing some of this opportunity that PDO will be driving, what should the private sector supply chain in Oman be doing now in order to get ready to transform themselves?*

Raoul Restucci: It starts with the private sector recognizing that it needs to really step up in terms of creating employment opportunities for Omanis. Secondly, it's about working with government and seeking legislation that will enable the private sector to grow. Less talking and more doing. We are engaging monthly with TRC on how

we can progress key technologies and we've engaged recently with government to look at curriculums and review how we help each other. We're also challenging the Cloud constraints because at the moment that's a significant disadvantage – we won't be able to secure a step change in digitalization unless Cloud access is opened up. There are also a number of technologies that we want to test, a number of algorithms, sub-surface simulation technologies that we want to avail of but we're currently unable to do that because of sovereign data transfer constraints.

Brian Cozzolino: *What impact will digital technologies have on the energy industry in the Middle East over the next decade?*

Raoul Restucci: I think the impact will be transformational. We've been on this journey for quite some time. Three years ago, we used to manage 50,000 data points in production. Today, we manage a billion data points a day and unless you've got augmented facilities to deal with that, we're going to really struggle to manage. I really wonder who is ready and positioned for it. There's a lot of discussion in terms of what we need to be doing and a lot of companies are focusing on transforming the digital expertise into value.

Brian Cozzolino: *Which aspect of Middle East or Oman energy operations will digital technologies impact most? Health and safety, development, production, maintenance or integrated planning?*

Raoul Restucci: I would say it will

have a dramatic impact on all. On safety, we drive the equivalent to the moon and back every single day. We can reduce this exposure and cost significantly. The key is how you monetize production - that's where the dollar needs to be made. You can have the most efficient maintenance program, but if you don't deliver more barrels, there's a bust there somewhere. So it's really about determining what the key driver will be that will make the bigger difference to monetization, value-creation and production and we see enormous opportunities on maintenance, on exploration, on seismic and on safety. And this is not only in terms of logistical improvements but also in asset integrity assessments.

Brian Cozzolino: *Do you think early or accelerated adoption of these tools by PDO and the skills around deploying them, could give you an opportunity as you transform to offer that as a professional service in the market? And going forward, where could you possibly take some of this expertise and offer it into regional markets?*

Raoul Restucci: In some areas, we're really at an advanced stage and in others, we're lagging. At this stage, we have 23 digitization projects. The reality is that there's probably another 50 to 100 which are just clambering at the door and we're trying to control them. There are the Microsofts and Oracles of this world who can't wait to provide us with their own bespoke solution. But they also want our data and we're saying, no, let's first make sure that we've got our common data systems to enable various plug and play arrangements.

Again, it all comes down to understanding where you can create the most value. We've got a fantastic portfolio within our concession and



we've been growing in a challenging period. We've got so much human capital, so much know-how. We recently presented to the Board, opportunities in PDO Services, PDO International, and transforming PDO into Energy Development Oman (EDO), which covers these additional streams. On the services side, there are also many areas that we can add considerable value - as a contractor, a subcontractor or in service delivery, because we've got best practice in a number of areas; that's what we're focusing on.

Brian Cozzolino: *How will the new PDO present itself in 2018?*

Raoul Restucci: We have three or four areas that go outside our normal mandate, where we will start sharing expertise and know-how with other entities. We will open training programs to the industry, and we've got some world class facilities for this. We have established a dedicated company that is integrating with national entities to monetize in house systems and create value for Oman Inc. – to demonstrate how we manage sub-surface data and system optimization and acceleration of field development plans. You're going to also see project management consultancy on a number of themes. ■