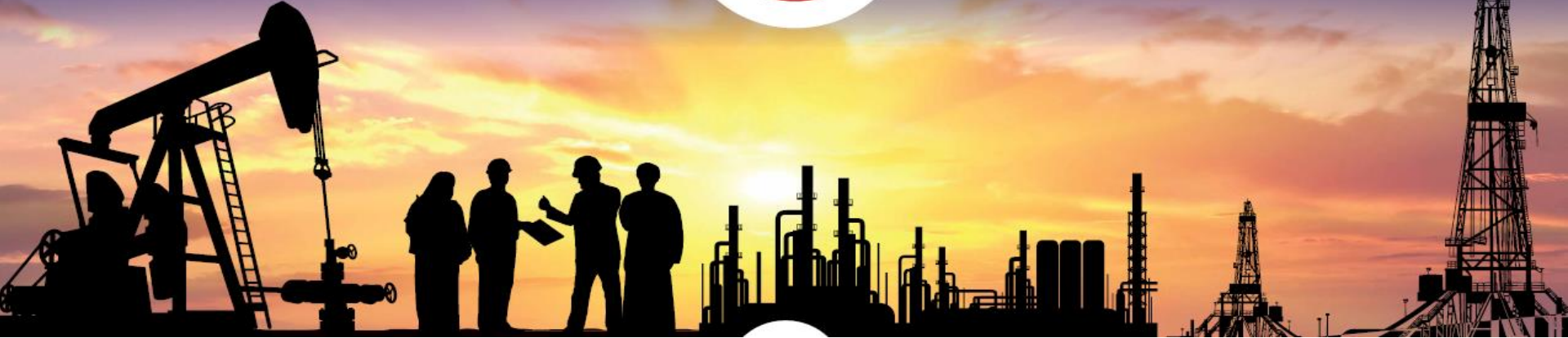


Business opportunities
in the oil and gas industry
In-Country Value

18 December 2013, Sultanate of Oman



الفرص الاستثمارية في
قطاع النفط و الغاز
القيمة المحلية المضافة
١٨ ديسمبر ٢٠١٣، سلطنة عمان



Promote switchboard manufacturing capability and product portfolio

Presented by:

18th of December 2013



شركة تنمية نفط عُمان
Petroleum Development Oman



Safety briefing and lodging



Emergency contacts

Mr. Kashif - loss prevention manager - Mob : 98089044

Emergency alarm / fire drills

Fire drills, emergency alarms (if any), assembly points to be announced by then hotel loss prevention staff

Prayer rooms

ladies prayer room & gents Prayer room are located in the Third floor

Toilets

available in Oman Auditorium & Boshar area

Coffee / tea

Provided outside the workshop room

Arrangements for smokers

allowed only outside the hotel Promises

Meeting agenda



1. Purpose of this workshop
2. Industry Data
3. ICV creation through the opportunity
4. Specifications
5. Scope of the opportunity
6. Key ICV elements
7. Targeted parties
8. Contact details and support
9. FAQ
10. Q&A session



Purpose of this workshop

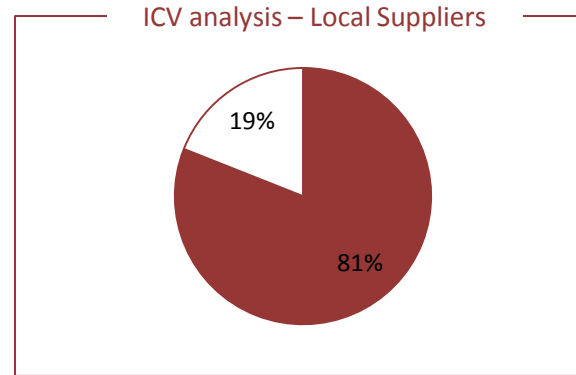
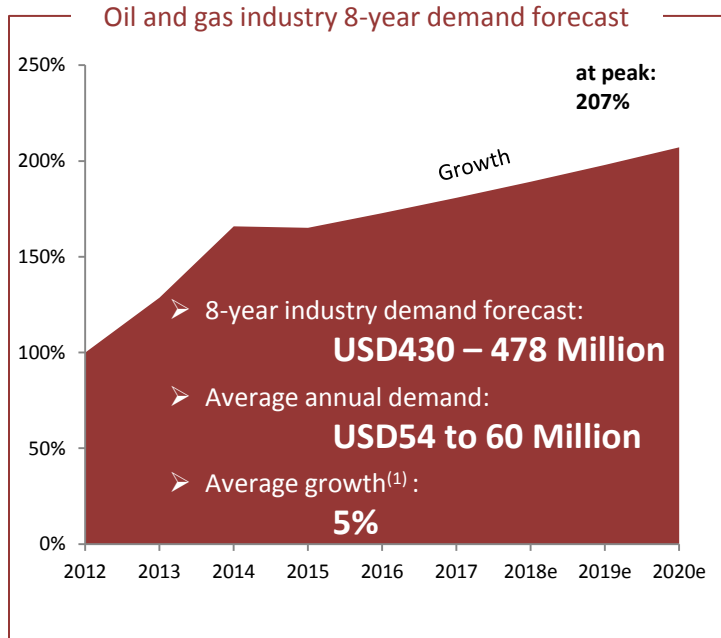
Purpose of the workshop

- To share the scope of one of the priority opportunities with the business communities.
- To register interest of the business communities.
- To set an initial dialogue between the oil and gas industry and business communities.
- To exchange ICV development best practices
- This workshop is NOT an contractual commitment with any business entity

More information on the ICV blueprint or on other opportunities could be found in the brochure and catalogue distributed today or by visiting www.incountryvalueoman.net

Industry demand data

Industry demand data was the main trigger for the development of the opportunity



Category Overview – Switchboards

- Switchboards industry demand is between USD430 – 478 Mln
- Currently the market capacity provides 19% of the industry demand (10% of PDO demand)
- The remaining 81% of the demand is mainly addressed through imports is with range of USD348 to 387 Mln
- Switchboards are used to distribute the main power source to smaller feeders, thus its use is highly applicable across any industry including the oil and gas

(1) CAGR: compound annual growth rate



ICV creation through the opportunity

We are expecting that this opportunity would increase ICV by:

Potential job creation related to the opportunity

84 – 94 Jobs

Potential ICV related to the opportunity*

USD206 – 230 Mln

ICV value is decreased from opportunity size due to importation of raw material / components and need for employment of expatriates at the initial stage

Feasibility of implementation

High for manufacturing

Impact

- Improvement of current quality level can enhance exportability of supplier products
- Product developments requires investment in labs which can consequently increase the maintenance and testing service for those products
- Other industries can be impacted, such as cables and steel fabrication

Feasibility

- Established manufacturers for low and medium voltage switchboards require quality improvement
- Manufacturing high voltage switchboards requires considerable investment in upgrading facilities and sophisticated testing labs
- However, the technology involved in high voltage switchboards can be developed locally



Technical specification to be followed.

The level and priority of meeting the PDO standards can be summarized as below:

Priority level	Document	% to PDO Specs
1	Contract document	4
2	PDO SPs	6
3	Shell DEPs	20
4	IECs	70
Total		100

Constraints...

It has been noticed that, most of the None OEM manufactures when developing such products use a transfer technologies from OEM. However, the technologies being offered are generally outdated. Investors are therefore required to take care of this issue.

Scope of the opportunity



Category: MV Electrical Switchgear – AVME 4.10.5, 6, 7,71 & 9

Opportunity

Manufacture of MV Electrical Switchgear

The MV Switchgears 6.6, 11 and 33 kV.

1. Currently, the Local Manufactures of Low Voltage Switchgear (415V) meets 80% of the local demand.
2. Only one local Manufacture has been approved for Manufacturing Air Insulated Switchgear and meets 10% of PDO requirements.
3. No local manufacture of Gas Insulated Switchgears
4. No local Manufacture for Ring Main Units type of switchgears.
5. Common products with world wide demand.

Scope of Work.

Interested Parties can set-up their facilities capable of designing, manufacturing, constructing, testing, parking and provide the necessary support for installation and commissioning including the after sell services.

Maintenance scope is not considered as part of the manufacture scope.

Scope of the opportunity

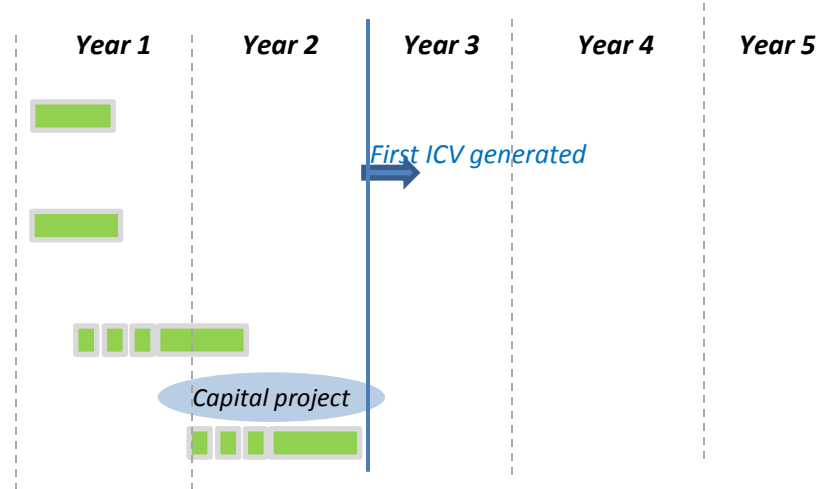
Category: MV Electrical Switchgear – AVME 4.10.5, 6, 7,71 & 9

Opportunity

Manufacture of MV Electrical Switchgear

Development Phases / Streams

1. Set up technical group to assess and support quality improvement of current products (LV and MV)
2. Align industry demand and specs for HV switchboards and secure minimum demand for investor
3. Provide technical support and product specification for new product development
4. Invest manufacturing facility upgrade



Target parties



- Original Manufacture (OEM)
- International investors
- International EPC contractors
- Local EPC contractors
- GCC investors
- GCC manufacturers
- Local manufacturers
- Local fabrication workshops
- Local agents
- Local suppliers
- Local entrepreneurs
- Omani Banks
- Local Investment Companies.



Contact details and support

Lead operator(s) contact details:

Saif H. M. Al-Harthy -UIE/4

HD INTEGRITY & STANDARDS, POWER SYSTEMS

Petroleum Development Oman (PDO)

Operators support to potential Investors:

1. Can arrange site visits to see some current used Switchgears.
2. Can improve contract requirements to offer better opportunities to local manufactures once approved.
3. Can assist in assessing local engineering candidates and planning of their developments.
4. Can assist in providing the current technical specifications in line with legal requirements.
5. Can assist in arranging for an immediate visit to review the product development and type testing.

Other stakeholders:

1. Petrogas
2. OGC
3. Oxy
4. Daleel
5. OLNK
6. Orpic
7. OOCEP
8. OPAL
9. MOG
10. Local Manufactures

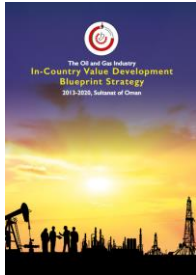
ICV PMO contact details

Website: www.incountryvalueoman.net

Materials and follow-up



For more information:



Brochure



Catalogue of opportunities



Website

For follow-up:

Register interest by contacting the PMO on: www.incountryvalueoman.net

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Thank you for your contribution!

Our mission:

***Developing a competitive and sustainable local supply
market... Together!***