

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



Manufacturing of valves

Presented by:



شركة تنمية نفط عمان
Petroleum Development Oman

December 18th, 2013



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 the 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. Context and background
5. Scope of the opportunity
6. Specifications & requirements
7. Q&A session

Purpose of this workshop



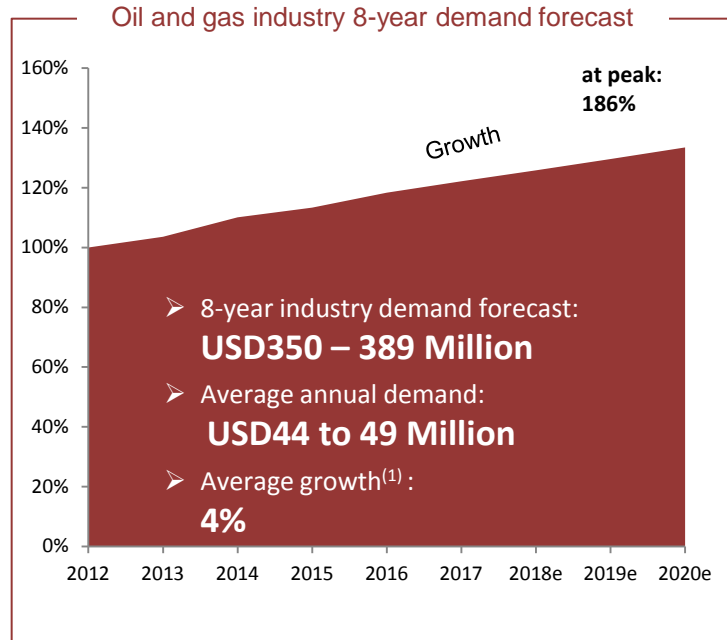
Purpose of the workshop

- To share the scope of one of the priority opportunities with the business community
- To register interest of the business community
- To set an initial dialogue between the oil and gas industry and business community
- 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.incountrypvalueoman.net

Industry demand data

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



Category Overview – Valves

- Currently the Oman industry demand is 100% addressed through imports.
- There is space to develop design and manufacturing capabilities in Oman for the categories highly demanded in Oil & gas Industries .

(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

295 – 328 Jobs

Potential ICV related to the opportunity*

USD66 – 75 Mln

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

Feasibility of implementation

High for manufacturing

Impact

- Establishment of manufacturing industry can increase business or promote new services providers for services such as maintenance, testing and inspection -
- Certification business can be improved by establishing manufacturing, testing and inspection facilities, promoting job opportunities for skilled professionals
- Creation of additional demand to develop forging and casting capacity and capability

Feasibility

- High demand gives sustainability for business development – implementation in phase and per product
- Required quality for certifications can be supported by operators
- Patents can be transferred through partnership with foreign suppliers



Context and background

- The valves are one of the key elements in oil & gas/ petrochemical fields
- Significant cost contribution in the project value.
- No manufacturer in Oman. Hence 100% out sourced from overseas.
- Wide range of product types available.
- Other than raw materials, the required resources could be made available in country.
- No environmental related issues.
- Scraps can be re-cycled.
- Post –order activities are more easy and local clients can avail vendor service quickly .
- Less logistic.



Scope of the opportunity

Category: Valves

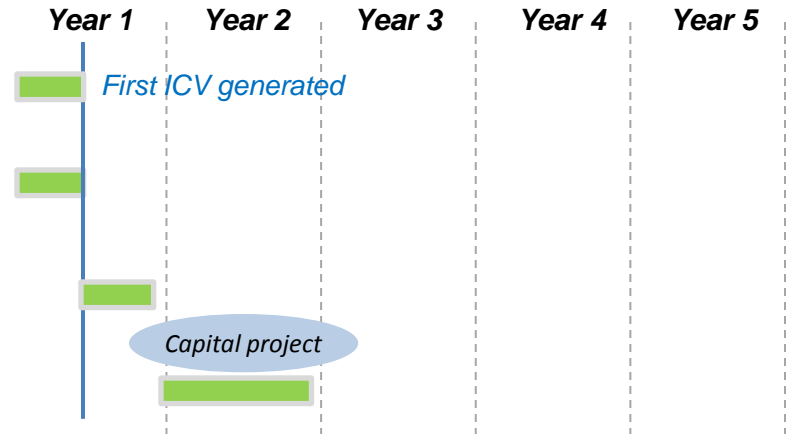
- Opportunity scope: Ball valves, GGC (Gate, Globe & check) and Mono flange valves
- The requirements above type of valves are significantly high (95%) in Oil& gas industry
- Opportunity developed due to the low complexity of design for the selected valves
- May have joint venture with any existing approved vendors of PDO/SHELL/Other Oman Operators and obtain know how of design and technology transfer
- To implement the opportunity there are basic requirements of technically competent man power, machinery & testing facilities

Key Success Factor

- Standardize specifications between operators to consolidate volumes
- Attract and encourage international suppliers to set JVs and transfer knowledge
- Request in-country value plan for investors

Development Phases / Streams

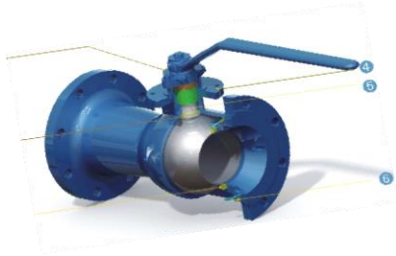
1. Validate cross-industry demand and develop business case
2. Establish valve manufacturing plan selecting waves for development of different type and ranges of valves
3. Consolidate minimum demand and support technical development of product
4. Invest and establish manufacturing facility



Scope of the opportunity



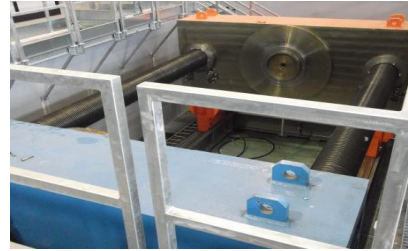
Proposed type of valves: (Ball /Gate / Globe /Check/Mono flange /DBB valves):



Context and background



Typical Machining & Testing facilities



Specifications and Requirements



Required facilities

- Workshop & Store.
- Engineering team to carry out design / drawings
- Machining / assembling and testing
- Painting & packing (can be out- sourced in country)
- Transportation and logistics

Required approval & certification

- ISO & API certification
- TAT(Type acceptance Test) approval

Specifications and Requirements



Ball Valves:

Type : Floating / Trunnion type valves

Material of construction : CS/SS/DSS/
CRA 625 /825 & weld overlay

Codes & standards: API6D /ISO 14313
/BS 5351/ ISO17292 /SP-2154

Gate Valves:

Type : Solid / flexible Wedge

Material of construction : CS /SS / DSS

Codes & Standards : API 600 /ISO 15761
/ ISO 10434 / API 602

Globe valves:

Type :Y-pattern

Material of construction : CS /SS / DSS

Codes & Standards : API 602 / ISO
15761 / BS 1873

Check valves:

Type : Swing / Dual plate

Material of construction : CS/SS/DSS

Codes & standards: API 594 / ISO
15761 / BS1868

Target parties



- SMEs
- International investors/manufacturers
- GCC investors
- GCC manufacturers
- Local manufacturers
- Local fabrication workshops
- Omani Banks

Contact details and support



Lead operator(s) contact details:

Mahesh UEP10S
PDO – Function static Group.

Operators support:

- Provide the technical standards & specifications.
- Will Clarify the technical requirements of pre – qualifications.

Other stakeholders:

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

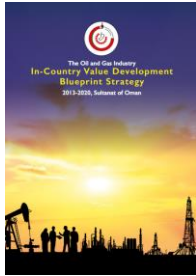
ICV PMO contact details

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: Website: www.incountryvalueoman.net

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Thank you for your contribution!

Our mission:

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