

9 May 2013



**Hardy Oil and Gas plc**  
(LSE: HDY)  
**Interim Management Statement**

Hardy Oil and Gas plc ('Hardy' or 'the Company'), the oil and gas exploration and production company with assets in India, today issues its Interim Management Statement for the period from 1 January 2013 to the date of this announcement.

**Summary**

- D3 – Interpretation of PSDM processing of 3D seismic data of 1,292 km<sup>2</sup> covering the eastern area of the block is in progress and new exploratory locations are being identified
- D3 – Declaration of commerciality (DOC) for the Dhirubhai 39 and 41 natural gas discoveries is under review by the Government of India (GOI)
- PY-3 – Continued work towards the submission to partners and the GOI of a full field development plan
- GS-01 – Field development plan for Dhirubhai 33 natural gas discovery is with the GOI for review, discussions continue to increase our interest
- CY-OS/2 – Hon'ble tribunal ruled in the Company's favour, allowing for a further three years to appraise the Ganesha-1 natural gas discovery and awarded interest and costs to the Company (contingent asset - \$24.8 million)
- Cash and short term investments at 31 March 2013 amounted to \$28.6 million which is sufficient for the Company's committed exploration drilling programme; Hardy has no debt

**Outlook**

- D3 – The operator has recently notified partners that, due to rig availability, drilling is expected to commence in the first quarter of 2014. The GOI's review of a declaration of commerciality proposal will continue
- GS-01 – Secure approval of field development plan in second half of 2013
- PY-3– Submit the full field development plan for approval and secure timely approvals from partners and the GOI with the aim of recommencing production in 2014
- CY-OS/2 – GOI to re-instate the block following which, initiate planning for the appraisal of the Ganesha-1 natural gas discovery

Ian MacKenzie, Chief Executive Officer of Hardy, commented:

*"Our primary objective remains to take the Company closer to realising production from our D3, PY-3 and GS-01 blocks. Although the change to the D3 drilling schedule was not*

*anticipated, we continue to work on securing key stakeholders' approvals as well as progressing our planning, appraisal and exploration activities."*

For further information please visit [www.hardyoil.com](http://www.hardyoil.com) or contact:

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## **REVIEW OF OPERATIONS**

The Company's exploration and production assets are based in India and are held through its wholly owned subsidiary Hardy Exploration & Production (India) Inc. (HEPI).

### **Health Safety and Environment**

The Company is committed to excellent health and safety practices which are at the forefront in all of our activities. Although all offshore activities are currently suspended, maintaining high HSE standards throughout the organisation remains core to all our undertakings. The Company's HSE policy document was reviewed and amended with increased focus on leadership and accountability.

### **Block KG-DWN-2003/1 (D3): *Exploration (Hardy 10 per cent interest)***

**Update** – The joint venture continued to undertake a number of geotechnical studies, including the interpretation of PSDM seismic data, with a focus on assessing the potential of the eastern area of the block and high grading prospects, including testing deeper play types. In March 2013 the operator of the D3 block presented, to the blocks Management Committee, a work programme and budget for the fiscal year ending 31 March 2014. The work programme provided for the drilling of an exploration well in the second quarter of 2013 and another by the end of the year. On 7 May 2013 the operator notified partners that due to rig availability constraints exploration drilling on the D3 block is now expected to commence in the first quarter of 2014. Current GOI policy allows for the block's phase 1 exploration period to be extended up to December 2014.

A revised proposal for the DOC for the Dhirubhai 39 and 41 natural gas discoveries, submitted in 2012, remained under review by the GOI. The proposed development plan provides for a dry gas, sub-sea cluster development with the flexibility to add in additional wells and to include possible adjoining area of discoveries.

**Outlook** - The deep-water drillship Dhirubhai Deepwater KG2, contracted to the D3 joint venture operator, Reliance Industries Limited (Reliance), is currently operating in Indian waters. Our objective is to facilitate the drilling of two further exploration wells prior to the end of 2013. Unfortunately we are a minority partner and the timing of recommencement of drilling is at the discretion of the operator. The latest correspondence with the operator indicates that drilling is to commence in the first quarter of 2014. The GOI's review of the D3 DOC proposal will likely continue through 2013.

**Background** - Situated in the Krishna Godavari Basin, a prolific petroleum province on the East coast of India, the D3 exploration licence encompasses an area of 3,288 km<sup>2</sup>, in water depths of 400 m to 2,200 m, and is located approximately 45 km offshore. The D3 block is operated by Reliance which holds a 60 per cent participating interest, BP and Hardy hold participating interests of 30 per cent and 10 per cent respectively. To date, four consecutive gas discoveries have been made via the Dhirubhai 39, 41, 44 and 52

(KGV-D3-A1, B1, R1 and W1) exploration wells. The joint venture has acquired approximately 3,250 km<sup>2</sup> of 3D seismic data over the block.

**Block CY-OS 90/1 (PY-3): Oil Field (Hardy 18 per cent interest – Operator)**

We continue to work with partners and GOI to plan for the timely recommencement of production.

**Outlook** - Submit a comprehensive full field development plan to the GOI for approval after which we will secure appropriate offshore production and storage facilities and initiate planning for a development drilling programme to recommence production in 2014.

**Background** - The PY-3 field is located off the east coast of India 80 km south of Pondicherry in water depths between 40 m and 450 m. The Cauvery Basin was developed in the late Jurassic / early Cretaceous period and straddles the present-day east coast of India. The licence, which covers 81 km<sup>2</sup>, produces high quality light crude oil (49° API).

**Block GS-OSN-2000/1 (GS-01): Appraisal (Hardy 10 per cent interest)**

**Operations** - A detailed field development plan, for the Dhirubhai 33 natural gas discovery, has been submitted to GOI for review and approval. The development plan provides for several dry tree wells, an unmanned platform, multiphase pipeline to shore and onshore processing and export facilities.

**Outlook** – Conclude discussions with our joint venture partner to increase our interest in the block. A priority in the remainder of 2013 will be to secure GOI approval of the field development plan and initiate planning for development.

**Background** – In 2011, the GS-01 joint venture secured the GOI's approval for a DOC proposal for the Dhirubhai 33 discovery (GS01-B1, drilled in 2007) which flow-tested at a rate of 18.6 mmscfd gas with 415 bbl/d of condensate through a 56/64 inch choke at flowing tubing head pressure of 1,346 psi. The GS-01 licence is located in the Gujarat-Saurashtra offshore basin off the west coast of India, northwest of the prolific Bombay High oil field, with water depths varying between 80 m and 150 m. The retained discovery area covers 600 km<sup>2</sup>

**Block CY-OS/2: Appraisal (Hardy 75 per cent interest – Operator)**

**Operations** – The formal dispute resolution process, to extend the expiry date of the CY-OS/2 licence, progressed throughout the year. On 4 February 2013 the Company announced that the joint venture was successful in obtaining an extension of the CY-OS/2 licence. A brief summary of the Hon'ble Tribunal's award is provided below;

*Dispute* - Hardy along with Gas Authority of India Limited (GAIL) and Oil & Natural Gas Corporation (ONGC) are a party and operator to a Production Sharing Contract (PSC) for the CY-OS/2 block. Hardy holds 75 per cent participating interest<sup>1</sup> in the block. Hardy and GAIL declared a gas discovery on 8 January 2007 which discovery qualified as Non Associated Natural Gas (NANG) under the terms of the PSC. The Government of India, Ministry of Petroleum and Natural Gas (MOPNG) however, stated that the discovery being Oil and the commerciality of the block not having been declared within 24 months from the date of the notification of the discovery, the block stood relinquished. Hardy had disputed the characterisation of the discovery as oil and the consequential relinquishment.

*Hon'ble Tribunal* - This dispute was referred to Arbitration under the PSC to a Tribunal consisting of 3 Arbitrators who were former Chief Justices of India. The Hon'ble Tribunal passed the award on 2 February 2013 at Kuala Lumpur, Malaysia.

*Award summary* - The Hon'ble tribunal has awarded and directed as follows:

- a) The Ganesha-1 discovery made by Hardy and GAIL is NANG;
- b) The order of relinquishment by the MOPNG was illegal, being on the erroneous impression that the discovery was oil;
- c) That the parties shall be immediately relegated to the position in which they stood prior to the order of relinquishment and the block shall be restored to Hardy and GAIL;
- d) Hardy shall be entitled to a period of 3 years from the date on which the block is restored to it, to carry out further appraisal;
- e) MOPNG shall pay to Hardy and GAIL interest at the simple rate of 9 per cent per annum on the amount of Rs.5.0 billion spent by them on the block, from the date of relinquishment till the date on which the block is restored (approximately \$24.6 million net to Hardy).

**Outlook** – Once the MOPNG has restored the licence to the CY-OS/2 joint venture, Hardy will recommence work on the appraisal of the Ganesha-1 natural gas discovery. We are in correspondence with the MOPNG to fulfil the direction of the Hon'ble tribunal at the earliest.

**Background** – Hardy is the operator of the CY-OS/2 exploration block and holds a 75 per cent participating interest<sup>1</sup>, through its wholly owned subsidiary Hardy Exploration & Production (India) Inc and GAIL holds the remaining 25 per cent participating interest. The block is located in the northern part of the Cauvery Basin immediately offshore from Pondicherry, India and covers approximately 859 km<sup>2</sup>. The licence comprises of two

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<sup>1</sup> CY-OS/2 – In the event of a declaration of commerciality, the Government of India's nominee is entitled to assume a 30 per cent participating interest in the block. As a result Hardy's participating interest would be 52.5 per cent.

retained areas with the Ganesha-1 natural gas discovery located in the northern area, which comprises an area of approximately 300 km<sup>2</sup>.

Ganesha-1 - The natural gas discovery Ganesha-1, announced in January 2007, was drilled to a depth of 4,089 metres, encountering sandstone reservoir within the Cretaceous section. The well flow tested at a peak rate of 10.7 mmscfd. The Company published a competent person report, prepared by Gaffney, Cline & Associates, dated March 2011, which estimates gross 2C Contingent Resources of approximately 130 BCF.

### **GROUP OUTLOOK**

The D3 exploration licence in the Krishna Godavari Basin remains at the core of our organic growth potential. Four consecutive gas discoveries have been made in the block and the GOI is reviewing a declaration of commerciality proposal. Further exploration drilling is expected to commence in the first quarter of 2014. The Krishna Godavari Basin is an emerging world-class petroleum province and, together with rapidly improving Indian gas pipeline infrastructure and high demand for gas, the prospects for the economic development of gas resources in this area are excellent.

The CY-OS/2 award is very encouraging and we will provide updates as we continue to re-engage with the GOI to advance appraisal activity on this block.

Our primary objectives are to build on the current momentum by securing key stakeholder's approvals and initiating activity to take us closer to realising production from our D3, PY-3 and GS-01 blocks. We have clear deliverables for each asset in 2013 and management are fully accountable for the implementation of the agreed plans. Energy demand in India is growing at an exceptional rate and there are indications that a more collaborative approach by the GOI is taking hold. We believe that these external factors should complement our efforts.

The Company remains in a strong working capital position from which to fund its planned work activity.

## GLOSSARY OF TERMS

2C Contingent Resources	Those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development projects, but which are not currently considered to be commercially recoverable due to one or more contingencies
2D/3D	two dimensional/three dimensional
\$	United States Dollar
API°	American Petroleum Institute gravity
bbld	stock tank barrel per day
BCF	Billion cubic feet
BP	BP plc
CY-OS/2	Offshore exploration licence CY-OS/2 located on the east coast of India
D3	Exploration licence KG-DWN-2003/1
DGH	Directorate General of Hydrocarbons
Dhirubhai 33	gas discovery on GS-01-B1 announced on 15 May 2007
Dhirubhai 39	gas discovery on KGV-D3-A1 announced on 13 February 2008
Dhirubhai 41	gas discovery on KGV-D3-B1 announced on 1 April 2008
Dhirubhai 44	gas discovery on KGV-D3-R1 announced on 22 December 2009
Dhirubhai 52	gas discovery on KGV-D3-W1 announced on 31 August 2010
DOC	Declaration of Commerciality
GAIL	Gas Authority of India Limited
Ganesh-1	Non-associated natural gas discovery on Fan-A1 well located in CY-OS/2
GOI	Government of India
GS-01	Exploration licence GS-OSN-2000/1
Hardy	Hardy Oil and Gas plc
HEPI	Hardy Exploration & Production (India) Inc
HSE	Health Safety and Environment
km	kilometre
km <sup>2</sup>	square kilometre
LSE	London Stock Exchange
m	metre
mmscfd	million standard cubic feet per day
MOPNG	the Ministry of Petroleum and Natural Gas of the Government of India
NANG	non associated natural gas
ONGC	Oil & Natural Gas Corporation
Prospective Resources	those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations
Rs.	Indian rupee
PSC	production sharing contract

PSDM	pre-stacked depth migration
psi	pounds per square inch
PY-3	licence CY-OS-90/1
Reliance the Company	Reliance Industries Limited Hardy Oil and Gas plc

## **NOTES TO THE EDITORS**

Hardy Oil and Gas plc is an upstream oil and gas company focused on India. Its portfolio includes a blend of exploration, appraisal, and production assets. Hardy's goal is to evaluate and exploit its asset base with a view to creating significant value for its shareholders.

Hardy is the operator of an offshore oil field in India's Cauvery basin. Hardy also has interests in three offshore exploration blocks in India's Saurashtra, Cauvery, and Krishna Godavari basins.

Hardy is incorporated under the laws of the Isle of Man and headquartered in Aberdeen, UK. Ordinary shares of Hardy were admitted to the Official List and the London Stock Exchange's market for listed securities effective 20 February 2008 under the symbol HDY.

The Company's Indian assets are held through the wholly owned subsidiary Hardy Exploration & Production (India) Inc, located in Chennai, India.

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