UOBKayHian

SINGAPORE

18 October 2013

Initiate Coverage

RH PETROGAS (RHP SP)

Right Sector, Right Time

Most balanced upstream O&G company listed on SGX. RH Petrogas (RHP) is an independent upstream company focused on the exploration, development and production of oil & gas (O&G) in Southeast Asia. It transformed from an electronics manufacturing company into an O&G company in 2009. Today, it has a diversified E&P portfolio with five production sharing contracts (PSC) in the bag with production of 4,300boepd in 2012.

- **S$1.60 based on NPV and risking model.** We initiate coverage on RHP with a BUY and target price (TP) of S$1.60.
- **Downside to our TP at S$1.00.** Assuming if investors attach no value to its near-production asset in China, Fuyu 1, we think the downside for RHP's share price to our TP is capped at S$1.00.
- **In a blue-sky scenario, RHP could be worth S$2.02 in 2014 and S$3.21 in 2015.** We also present our alternative valuation method for RHP in 2014 and 2015, by valuing RHP's assets individually, as its share price would likely re-rate upwards if its exploration and development initiatives are successful.
- **Undervalued E&P play.** While we believe KrisEnergy is a good investment in the long run, we believe RHP's valuations should re-rate towards KrisEnergy's valuations as the latter is trading at a significant discount despite both companies having similar 2P+2C (refer to Appendix III for technical description) figures.
- **Potential upside risks are:** a) faster-than-expected commercial development schedule for Fuyu 1, China, b) successful exploration programme in its exploration assets, c) higher-than-expected oil prices, resulting in higher NPVs, and d) value-accretive acquisition of new petroleum blocks in Southeast Asia.
- **Potential downside risks are:** a) delays in getting its overall development plan (ODP) approved for Fuyu 1, b) oil prices below our average oil forecast in the medium term of US$100/bbl, and c) exploration failure, which would impact investors' sentiments.

Key Financials

Year to 31 Dec (US$m)	2011	2012	2013F	2014F	2015F
Net Turnover	89	86	96	135	176
EBITDA	34	29	24	38	63
Operating Profit	21	18	14	23	45
Net Profit (reported/actual)	3	6	3	7	15
Net Profit (adjusted)	3	6	3	7	15
EPS (US$ cent)	0.6	1.2	0.5	0.9	2.0
PE (x)	93.4	50.9	129.4	63.2	29.8
P/B (x)	2.5	1.7	2.0	2.3	2.1
EV/EBITDA (x)	13.0	15.1	18.1	11.5	7.0
Dividend Yield (%)	0.0	0.0	0.0	0.0	0.0
Net Margin (%)	3.3	7.1	3.0	5.1	8.4
Net Debt/(Cash) to Equity (%)	51.3	7.6	1.0	13.9	27.4
Interest Cover (x)	19.1	13.2	11.5	10.6	12.2
ROE (%)	2.7	4.2	1.6	3.7	7.4
Consensus Net Profit	-	-	1	7	19
UOBKH/Consensus (x)	-	-	2.85	0.99	0.78

Source: Bloomberg, UOB Kay Hian

Refer to last page for important disclosures.

BUY

Share Price	**S$0.71**
Target Price	**S$1.60**
Upside	**+125.4%**

Company Description

RHP is a E&P company with O&G assets in Indonesia, China and Malaysia.

Stock Data

GICS sector	Energy
Bloomberg ticker:	RHP SP
Shares issued (m):	731.3
Market cap (S$m):	526.5
Market cap (US$m):	425.2
3-mth avg daily t'over (US$m):	1.7

Price Performance (%)

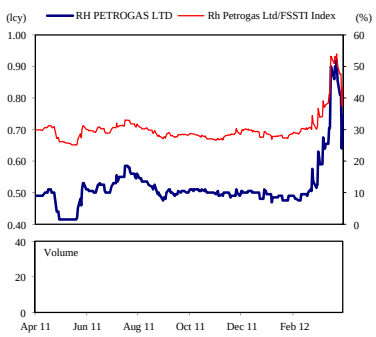
52-week high/low S$0.945/S$0.415

1mth	3mth	6mth	1yr	YTD
14.3	42.6	42.6	46.9	37.1

Major Shareholders	%
Woodsville International	29.0
Smartphone Investments	18.2

FY13 NAV/Share (S$)	0.30
FY13 Net Debt/Share (S$)	0.00

Price Chart



Source: Bloomberg

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This report is based on the closing prices of 18 Oct 13.

Investment Highlights

Most balanced upstream O&G company listed on SGX. RHP is an independent upstream company focused on the exploration, development and production of O&G in Southeast Asia. It transformed from an electronics manufacturing company into an O&G company in 2009 when it acquired its first oil concession in China – Fuyu 1. Today, it owns five assets across the exploration, development and production phases in the E&P business and is a relatively undervalued company compared to its SGX-listed peers, in our view.

S$1.60 based on NPV and risking model. We initiate coverage on RHP with a BUY and target price of S$1.60. This implies 125.4% upside from its last closing price of S$0.71. Our valuation is based on the NPV of the company's current production/near-production fields, plus risked estimates of its 2C resources and prospective resources, less net debt adjusted for its committed capex and new funds raised from its recent private placement exercise.

Downside risk at S$1.00. We think investors would need to take note of RHP's ODP approval for Fuyu 1 as this is a near-term catalyst, in our view. Assuming investors attach no value to Fuyu 1, we think the downside for RHP's share price to our TP is capped at S$1.00. However, we think it would be a good chance to accumulate RHP's shares if that happens as RHP would be able to sell off the oilfield to another investor if it decides not to play the waiting game.

In a blue-sky scenario, RHP could be worth S$2.02 in 2014 and S$3.21 in 2015. We also present our alternative valuation method for RHP in 2014 and 2015, by valuing RHP's assets individually, as its share price would likely re-rate upwards if its exploration and development initiatives in the near term are successful.

Familiarity with Asia to reduce operational risks. We like RHP's focus on onshore O&G assets in Asia, particularly Southeast Asia. Drilling and seismic data are often costly, but a good understanding of the characteristics of a region's O&G assets would mitigate these expensive cost structures. A deep local knowledge would also enhance the likelihood of purchasing good O&G assets in the region.

Backed by a strong controlling shareholder who is keen to grow RHP. Rimbunan Hijau Group (RH Group), owned by Tan Sri Datuk Sir Tiong Hiew King, controls 64.7% of RHP (post-placement). Tan Sri Datuk Sir Tiong, known as the timber king of Malaysia, was ranked as the ninth-richest man in Malaysia by Forbes in Mar 13. We believe his strong business acumen and business network will enhance RHP's overall value in the longer term.

Stable baseload earnings from Indonesia, with a chance to triple production in 2015. Armed with two producing assets in Indonesia - Island production sharing contract (PSC) and Basin PSC, RHP produced O&G at a production rate of 4,300bopd in 2012. If its planned development programmes are successful, RHP could triple its production rate by end-15 or early-16.

Raising funds to fund future growth. On 2 Oct 13, RHP proposed a private placement of up to 116m new shares at S$0.63 each and the exercise has been completed on 16 Oct 13. Its enlarged share capital is now 731.3m shares and RHP raised net proceeds of S$70.2m. We are positive on the proposed exercise as the company would have additional cash to fund its drilling programme over the next 12-24 months.

Valuation

S$1.60 based on NPV and risking model. We initiate coverage on RHP with a BUY and target price of S$1.60. This implies 125.4% upside from its last closing price of S$0.71. Our valuation is based on the NPV of the company's current production/near-production fields, plus risked estimates of its 2C resources and prospective resources, less net debt adjusted for its committed capex and new funds raised from its recent private placement exercise.

Figure 1: NPV And Risking Model

	Country	Working Interest (%)	2P Reserves (mmboe)	2C Reserves (mmboe)	Prospective Resources (mmboe)	Risking (%)	US$/boe	Value (US$m)	Value (S$m)
Production/Near-production									
Basin PSC, Indonesia	Indonesia	60%	9.0			100.0%	17.6	158.7	198.4
Island PSC, Indonesia	Indonesia	33%	2.0			100.0%	15.6	31.1	38.9
Fuyu-1 Shallow Oil	China	49%		35.0		100.0%	10.7	374.4	467.9
Sub-total			**11.0**	**35.0**	**0.0**			**564.2**	**705.2**
Development/Pre-Development									
Basin PSC, Indonesia - North Klalin	Indonesia	60%		9.5		50.0%	8.4	39.9	49.9
Island PSC, Indonesia - TBC	Indonesia	33%		7.0		50.0%	7.8	27.3	34.1
Island PSC, Indonesia - Koi	Indonesia	33%		5.0		50.0%	7.8	19.5	24.4
Island PSC, Indonesia - North Sele	Indonesia	33%		5.7		50.0%	7.8	22.2	27.8
Island PSC, Indonesia - Zircon	Indonesia	33%			14.0	15.0%	7.8	16.4	20.5
Sub-total			**0.0**	**27.2**	**14.0**			**125.3**	**156.6**
Exploration									
Basin PSC, Indonesia	Indonesia	66%			432	15.0%	1.7	110.2	137.7
Island PSC, Indonesia	Indonesia	33%			400	15.0%	1.6	96.0	120.0
Fuyu-1 Deep Gas	China	49%			27	15.0%	2.0	8.1	10.1
West Belida PSC, Indonesia	Indonesia	94%			5	15.0%	1.6	1.2	1.5
SK331 PSC, Malaysia	Malaysia	80%			180	15.0%	1.0	27.0	33.8
Sub-total			**0.0**	**0.0**	**1044.0**			**242.5**	**303.1**
Total Value (US$m)		932.0							
Total Value (S$m)		1,165.0							
Net Debt (S$m)		(39.8)							
Minus Committed Capex (S$m)		(28.4)							
Plus Net Proceeds from Placement (S$m)		70.2							
Total Equity Value (S$m)		**1,167.0**							
Existing Shares Outstanding (m)		615.3							
New Shares from Placement (m)		116.0							
Diluted Shares Post Placement (m)		731.3							
NAV per Share (S$)		**1.60**							

Source: UOB Kay Hian

METHODOLOGY

We build discrete DCF models for all of RHP's assets (excluding exploration) and adopt three valuation classes to better categorise the different asset risk profiles:

a) Producing/Near-producing assets

b) Development/Pre-development assets

c) Exploration assets

This use of valuation classes is broadly in line with the Society of Petroleum Engineers' (SPE) resource classification system, project maturity sub-classes and industry risking factors (see Appendix IV).

Risking factors as recommended by SPE. We are taking a conservative standpoint in applying our risking factors as recommended by the SPE. For RHP's producing assets (Island and Basin) and its asset planned for development (Fuyu 1), we applied 100% risking factors. For its development and appraisal fields, we applied 50% risking factors and a conservative 15% for its fields at the exploration stage, although most of these prospective resources do qualify as prospects where a higher risking factor of 25% could be used.

PRODUCING/NEAR-PRODUCING ASSETS

RHP has 11mmboe of 2P reserves associated with producing assets and 35mmboe of 2C resources that are close to production, which we value at S$705.2m. We have not applied a risking factor to this valuation as the firm's 2P reserve estimates are supported by independently verified production data, the continuous production history of the assets and the relative stability of the fiscal regimes in which they operate. We value Island and Basin's producing assets at S$0.32 per share. Being the only two producing assets, this figure represents 20.3% of our valuation for RHP's shares. For its near-producing asset, Fuyu 1, we value it at S$0.64 per share. This represents 40.2% of our valuation for RHP's shares. Being the single largest contributor to our valuation, this highlights that RHP's asset in China is principally exposed to development and execution risk, rather than exploration risk.

Key assumptions for Island & Basin's producing assets are: a) Both PSCs will expire in 2020, b) we assume that crude oil from both concessions are benchmarked to Indonesian Crude Price (ICP), c) first-tranche petroleum of 20%, with the remainder available for cost recovery, d) pre-tax government-contractor split set at 73%:27%, e) corporate tax rate of 45% on profit oil, f) average oil price of US$100/bbl with an annual increase of 2%, and g) a discount rate of 10%, which is higher than RHP's WACC of 7.5% currently.

Key assumptions for Fuyu 1 in China are: a) The PSC will expire in 2038, b) RHP obtains its ODP by end-13, c) once commercial production is achieved, crude oil sales would be first subject to a 5% value-added-tax (VAT) and royalty payment on a graduated scale that starts from a low of 2% to a high of 12.5%, d) cost recovery limit is 65% of annual gross production, e) profit oil to be split 51%:49% in favour of China National Petroleum Corporation (CNPC), f) Fuyu 1's crude oil is sold to CNPC at an average discount of US$16.80/bbl to Brent price, g) average oil price of US$100/bbl with an annual increase of 2%, h) corporate tax rate of 25%, and i) discount rate of 10%, which is higher than RHP's WACC of 7.5% currently.

DEVELOPMENT/PRE-DEVELOPMENT ASSETS

We classify development assets as projects that have been sanctioned, or are on the verge of being sanctioned. RHP has 27.2mmboe of 2C resources and 14mmboe of prospective resources, which we value at S$156.6m. By definition, resources carry a higher level of risk than reserves, as they are yet to be proven commercial. Therefore, we applied 50% risking factors for its 2C resources, as recommended by SPE.

EXPLORATION ASSETS

We classify exploration assets as projects, whose estimated petroleum resources, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects.

The key to augmenting shareholder value comes through exploration, as success here has the ability to add significant reserves. RHP has built up a sizeable portfolio of exploration acreage, which has the ability to add significant O&G reserves. The portfolio is mixed, combining low-risk exploration wells near production and discoveries along with high-impact wildcat wells. Given that resources within this category carry the highest level of risk, we applied a conservative 15% risking factor for these prospective resources.

RHP has some 1,044mmboe of prospective resources categorised under this asset class, which we value at S$303.1m. The two most important assets in this exploration asset analysis is the likelihood of success in its existing producing fields ie Island and Basin, which are both based in Indonesia, which comprise 78.6% of RHP's total exploration inventory.

VALUATION JUSTIFIABLE FROM A US$/BOE PERSPECTIVE

Some investors may argue that the NPV and risking model may not be truly reflective of an E&P company's value as it does not reflect the additional value of the company when 2C resources are upgraded into reserves. Hence we believe that the implied NPV per boe (US$/boe) is a useful gauge to crosscheck on the value of an O&G asset as certain assets could be valued using a higher US$/boe assumption when resources are upgraded into reserves. By using this method, we would value RHP's reserves and resources separately and this would result in value enhancement when prospective resources are upgraded to contingent resources and when contingent resources are upgraded into reserves. This would be similar to valuing the relative net asset value (RNAV) of a property company.

Production assets would have higher US$/boe values. As a rule of thumb, oil-based assets should have a higher US$/boe value compared with gas-based assets. Also, production assets would have the highest US$/boe value while development assets and exploration assets are generally are valued at 50% and 10% of production assets respectively from a US$/boe perspective.

Figure 2: Market Valuation Of Singapore E&P Companies

Company	Ticker	Enterprise Value (US$m)	Net 2P (mmboe)	Net 2C (mmboe)	Net Unrisked Prospective (PR) (mmboe)	EV/2P (US$/boe)	EV/(2P+2C) (US$/boe)	EV/(2P+2C+PR) (US$/boe)
RH Petrogas	RHP SP	454.4	11.0	62.2	1,058.0	41.3	6.2	0.4
Kris Energy	KRIS SP	988.3	31.8	44.6	1,480.0	31.1	12.9	0.6
Interra Energy	ITRR SP	140.1	13.9	-	54.9	10.1	-	2.0
Mirach Energy	MENR SP	248.8	-	2.4	213.9	-	-	1.2
Loyz Energy	LOYZ SP	109.0	6.2	6.8	-	17.6	8.4	-
Ramba Energy	RMBA SP	149.9	7.1	-	281.6	21.1	-	0.5
Average (Singapore)						**20.2**	**9.2**	**0.9**

Source: Bloomberg, RHP, UOB Kay Hian

Figure 3: Market Valuation Of Global E&P Companies

Company	Ticker	Enterprise Value (US$m)	Net 2P (mmboe)	Net 2C (mmboe)	Net Unrisked Prospective (PR) (mmboe)	EV/2P (US$/boe)	EV/(2P+2C) (US$/boe)	EV/(2P+2C+PR) (US$/boe)
Royal Dutch Shell	RDSA LN	230,406.5	13,556.0	-	-	17.0	-	-
British Petroleum	BP/ LN	151,009.3	11,685.0	-	-	12.9	-	-
Chevron	CVX US	227,725.2	11,300.0	-	-	20.2	-	-
Exxon Mobil	XOM US	403,266.9	25,200.0	-	-	16.0	-	-
ConocoPhilips	COP US	105,878.9	8,600.0	43,000.0	-	12.3	2.1	-
Petro China	857 HK	315,865.0	11,018.0	-	-	28.7	-	-
CNOOC	883 HK	95,955.9	4,329.0	-	-	22.2	-	-
Sinopec	386 HK	140,552.6	3,964.0	-	-	35.5	-	-
Oil & Natural Gas Corporation	ONGC IN	39,362.3	1,451.0	-	-	27.1	-	-
PPT Exploration & Production	PTTEP TB	23,381.7	1,786.0	2,200.0	-	13.1	5.9	-
Average (Singapore)						**20.5**	**4.0**	**0.0**

Source: Bloomberg, RHP, UOB Kay Hian

Right sector, right time. Following the listing of KrisEnergy and Rex International this year, the E&P space has become more vibrant. Both listings have done very well so far. Thus, we took a closer look into how both compare to RHP's valuations, especially KrisEnergy, who has a similar portfolio of assets to RHP.

RHP to re-rate. RHP would look very expensive from an EV/2P perspective right now but this is due to the low-base effect of its existing 2P reserves. If its Fuyu 1 block is upgraded from 2C resources to 2P reserves (35mmboe), its EV/2P would be reduced significantly to US$9.9/boe, well below its peers in Singapore and its peers who are global E&P companies.

RHP and KrisEnergy are comparable. RHP and KrisEnergy have similar 2P reserves and 2C resources although KrisEnergy has more unrisked prospective resources at 1.5b boe compared to RHP's 1.1b boe. The business operations of both companies are also based in Asia.

Gap to narrow down. We believe that RHP should trade closer to KrisEnergy for two key reasons ie a) RHP's revenues are similar to KrisEnergy's but RHP is profitable compared to KrisEnergy and b) RHP would continue to be profitable, especially with the ramp-up of production from its Fuyu 1 block while KrisEnergy is only expected to turn profitable in 2015.

Portfolio reallocation? While we believe KrisEnergy is a good investment in the long run, we believe RHP's valuations should re-rate towards KrisEnergy's valuations as the latter is trading at a significant discount despite both companies having similar 2P+2C figures. Besides, RHP has an upper hand as it is already producing O&G.

LUCRATIVE UPSIDE – CHANCE OF TRIPLING OR QUADRUPLING

RHP could be worth S$2.02 in 2014 and S$3.21 in 2015. We also present our alternative valuation method for RHP in 2014 and 2015, by valuing RHP's assets individually as its share price would likely re-rate upwards if its exploration and development initiatives in the near term (highlighted in the next section of this report) are successful (Note: these values assume a blue-sky scenario.)

Figure 4: RHP Could Be Worth S$2.02 In FY14 (at this point, we have not revalued its exploration assets yet!)

Production/Near-production	Country	Working Interest (%)	2P Reserves (mmboe)	2C Reserves (mmboe)	Prospective Resources (mmboe)	Risking (%)	US$/boe	Value (US$m)	Value (S$m)
Basin PSC, Indonesia	Indonesia	60%	9.0			100.0%	17.6	158.4	198.0
Island PSC, Indonesia	Indonesia	33%	2.0			100.0%	15.6	31.2	39.0
Fuyu-1 Shallow Oil (Phase 1)	China	49%	17.5			100.0%	20.0	350.0	437.5
Fuyu 1 Shallow Oil (Phase 2)	China	49%		17.5		100.0%	10.7	187.3	234.1
Basin PSC, Indonesia - North Klalin	Indonesia	60%	9.5			100.0%	17.6	167.2	209.0
Island PSC, Indonesia - TBC	Indonesia	33%	7.0			100.0%	15.6	109.2	136.5
Sub-total			**28.5**	**0.0**	**0.0**			**894.1**	**1117.6**
Development/Pre-Development		**Working interest**				**Risking**	**US$/boe**	**Value (US$m)**	**Value (S$m)**
Island PSC, Indonesia - Koi	Indonesia	33%		5.0		50.0%	7.8	19.5	24.4
Island PSC, Indonesia - North Sele	Indonesia	33%		5.7		50.0%	7.8	22.2	27.8
Island PSC, Indonesia - Zircon	Indonesia	33%		14.0		50.0%	7.8	0.0	0.0
Sub-total			**0.0**	**24.7**	**0.0**			**41.7**	**52.2**
Exploration		**Working interest**				**Risking**	**US$/boe**	**Value (US$m)**	**Value (S$m)**
Basin PSC, Indonesia	Indonesia	66%			432	15.0%	1.7	110.2	137.7
Island PSC, Indonesia	Indonesia	33%			400	15.0%	1.6	96.0	120.0
Fuyu-1 Deep Gas	China	49%			27	15.0%	2.0	8.1	10.1
West Belida PSC, Indonesia	Indonesia	94%			5	15.0%	1.6	1.2	1.5
SK331 PSC, Malaysia	Malaysia	80%			180	15.0%	1.0	27.0	33.8
Sub-total			**0.0**	**0.0**	**1044.0**			**242.5**	**303.1**
Total Value (US$m)		1,178.2							
Total Value (S$m)		1,472.8							
Net Debt (S$m)		(39.8)							
Minus Committed Capex (S$m)		(28.4)							
Plus Net Proceeds from Placement (S$m)		70.2							
Total Equity Value (S$m)		**1,474.8**							
Existing Shares Outstanding (m)		615.3							
New Shares from Placement (m)		116.0							
Diluted Shares Post Placement (m)		731.3							
NAV per Share (S$)		**2.02**							

Source: UOB Kay Hian

Figure 5: Shares Could Be Worth As High As S$3.21 By 2015

	Country	Working Interest (%)	2P Reserves (mmboe)	2C Reserves (mmboe)	Prospective Resources (mmboe)	Risking (%)	US$/boe	Value (US$m)	Value (S$m)
Production/Near-production									
Basin PSC, Indonesia	Indonesia	60%	9.0			100.0%	17.6	158.4	198.0
Island PSC, Indonesia	Indonesia	33%	2.0			100.0%	15.6	31.2	39.0
Fuyu-1 Shallow Oil	China	49%	35.0			100.0%	20.0	700.0	875.0
Basin PSC, Indonesia - North Klalin	Indonesia	60%	9.5			100.0%	17.6	167.2	209.0
Island PSC, Indonesia - TBC	Indonesia	33%	7.0			100.0%	15.6	109.2	136.5
Island PSC, Indonesia - Koi	Indonesia	33%	5.0			100.0%	15.6	78.0	97.5
Island PSC, Indonesia - Zircon	Indonesia	33%	14.0			100.0%	15.6	218.4	273.0
Sub-total			**81.5**	**0.0**	**0.0**			**1462.4**	**1828.0**
Development/Pre-Development									
Island PSC, Indonesia - North Sele	Indonesia	33%		5.7		50.0%	7.8	22.2	27.8
Fuyu-1 Deep Gas	China	49%		27		50.0%	10.7	144.5	180.6
West Belida PSC, Indonesia	Indonesia	94%		5		50.0%	7.8	19.5	24.4
Sub-total			**0.0**	**37.7**	**0.0**			**186.2**	**232.7**
Exploration									
Basin PSC, Indonesia	Indonesia	66%			432	15.0%	1.7	110.2	137.7
Island PSC, Indonesia	Indonesia	33%			386	15.0%	1.6	92.6	115.8
SK331 PSC, Malaysia	Malaysia	80%			180	15.0%	1.0	27.0	33.8
Sub-total			**0.0**	**0.0**	**998.0**			**229.8**	**287.3**
Total Value (US$m)		1,878.4							
Total Value (S$m)		2,348.0							
Net Debt (S$m)		(39.8)							
Minus Committed Capex (S$m)		(28.4)							
Plus Net Proceeds from Placement (S$m)		70.2							
Total Equity Value (S$m)		**2,350.0**							
Existing Shares Outstanding		615.3							
New Shares from Placement		116.0							
Diluted Shares Post Placement		731.3							
NAV per Share (S$)		**3.21**							

Source: UOB Kay Hian

Returns are still lucrative even if we remove China from our valuations. We think the single largest risk for RHP is probably tied to its ODP approval in China. If we strip out the value of Fuyu 1 from our 2015 valuation, our NAV would still stand at S$2.02/share, offering investors more than a double-bagger.

RHP's Assets In A Nutshell

RHP has a diversified portfolio with assets in prolific basins. RHP has five assets located in three countries. It has two producing oilfields – Salawati Kepala Burung in West Papua, Indonesia (Island) and Kepala Burung in West Papua, Indonesia (Basin). Its oilfield in China (Fuyu-1) in Jilin, China, is at the development stage. The two remaining oilfields are located in Sumatra, Indonesia (West Belida) and Sarawak, Malaysia (SK 331).

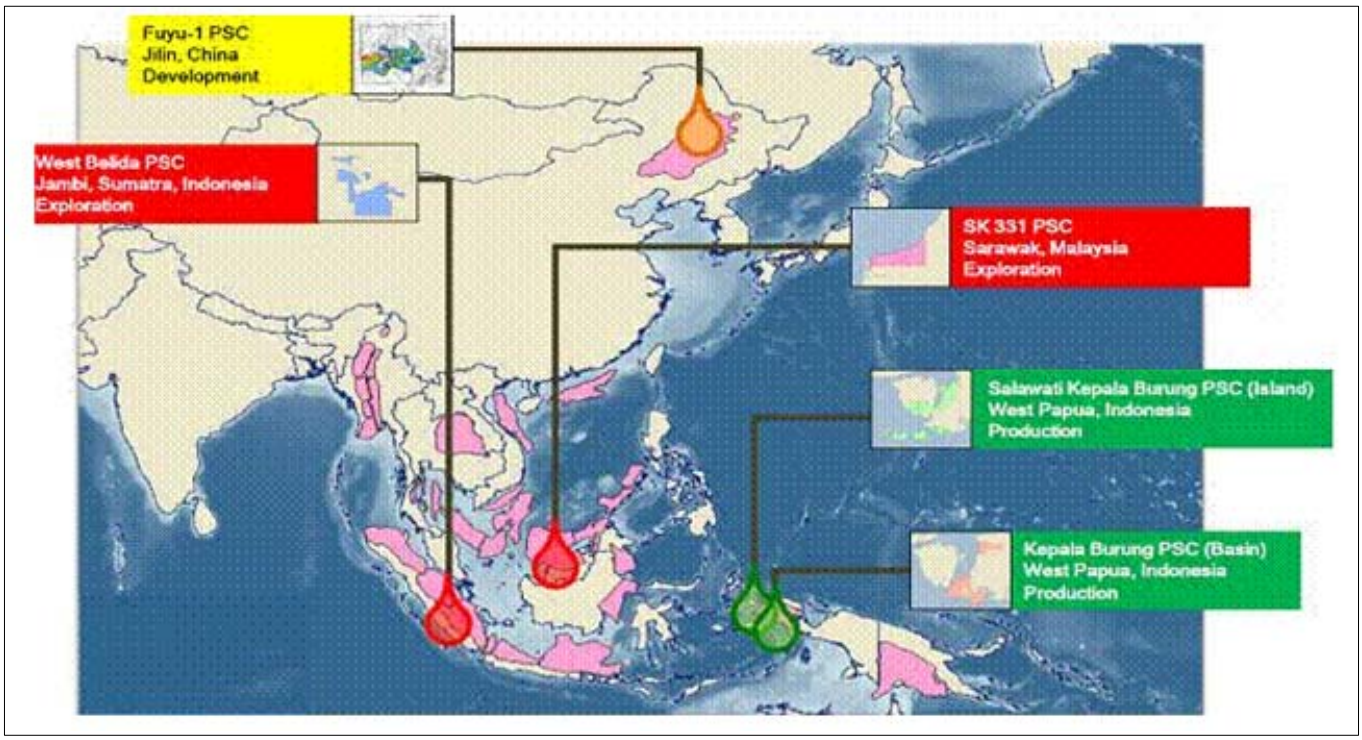
Balanced portfolio with decent resources and reserves. Presently, RHP has 11mmboe of 2P reserves, 62mmboe of 2C contingent resources and 1,044mmboe of unrisked prospective resources. It owns a 60% stake in its Basin PSC in Indonesia, a 33% stake in its Island PSC in Indonesia, a 49% stake in its Fuyu 1 PSC in China, a 94% stake in its West Belida PSC in Indonesia and an 80% stake in its SK331 PSC in Malaysia.

Figure 6: Reserves And Resources

	Country	Working Interest (%)	2P Reserves (mmboe)	2C Reserves (mmboe)	Prospective Resources (mmboe)	Contract Expiry Date	Onshore/ Offshore
Production/Near-production							
Basin PSC, Indonesia	Indonesia	60%	9.0			2020	Onshore
Island PSC, Indonesia	Indonesia	33%	2.0			2020	Onshore & Offshore
Fuyu-1 Shallow Oil	China	49%		35.0		2038	Onshore
Sub-total			**11.0**	**35.0**	**0.0**	**n.a.**	**n.a.**
Development/Pre-Development							
Basin PSC, Indonesia - North Klalin	Indonesia	60%		9.5		2020	Onshore
Island PSC, Indonesia - TBC	Indonesia	33%		7.0		2020	Offshore
Island PSC, Indonesia - Koi	Indonesia	33%		5.0		2020	Offshore
Island PSC, Indonesia - North Sele	Indonesia	33%		5.7		2020	Offshore
Island PSC, Indonesia - Zircon	Indonesia	33%			14.0	2020	Offshore
Sub-total			**0.0**	**27.2**	**14.0**	**n.a.**	**n.a.**
Exploration							
Basin PSC, Indonesia	Indonesia	66%			432	2020	Onshore
Island PSC, Indonesia	Indonesia	33%			400	2020	Onshore & Offshore
Fuyu-1 Deep Gas	China	49%			27	2038	Onshore
West Belida PSC, Indonesia	Indonesia	94%			5	2039	Onshore
SK331 PSC, Malaysia	Malaysia	80%			180	2039	Onshore
Sub-total			**0.0**	**0.0**	**1,044.0**	**n.a.**	**n.a.**

Source: RHP

Figure 7: Diversified Portfolio In Different Stages Across Asia



Source: RHP

Operates three of its five oilfields. RHP is both an operator and shareholder for three of its five oilfields ie Fuyu 1 in China, West Belida in Indonesia and SK331 in Malaysia.

Focusing on onshore opportunities. Apart from its Island PSC in Indonesia, all of RHP's oilfields are onshore concessions and are in close proximity to existing fields, which are already producing O&G. We understand that management will continue to focus on onshore oilfields as exploration and development costs are cheaper compared to offshore oilfields.

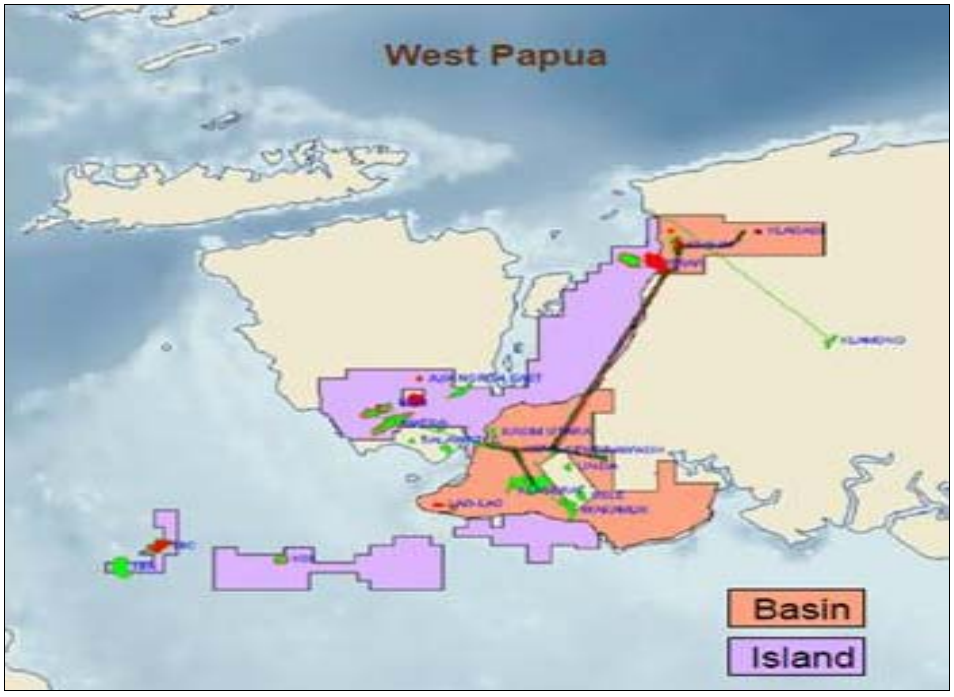
More about its PSCs. In the next section of this report, we will discuss about RHP's assets in more detail.

a) Basin PSC, West Papua, Indonesia – *Slow And Steady*

Acquired in 2010. RHP acquired a 60% stake in Basin PSC from both Lundin Petroleum and Pearl Oil Holdings in Dec 10. Back then, Lundin held a 25.9% stake while Pearl Oil held a 34.1% stake in this concession. The oilfield covers a gross area of 872 sq km and is an onshore concession. Based on our back-of-the-envelope calculations, RHP paid some US$5.35/bbl for the proved and probable reserves in this transaction.

PetroChina is the operator. PetroChina, who owns a 30% stake in the concession is the sole field operator while Pertamina owns the remaining 10%. This PSC expires on 15 Oct 20 and has 9mmboe of 2P reserves, 10mmboe of 2C resources and 432mmboe of unrisked prospective resources.

Figure 8: Basin PSC (in orange)



Source: RHP

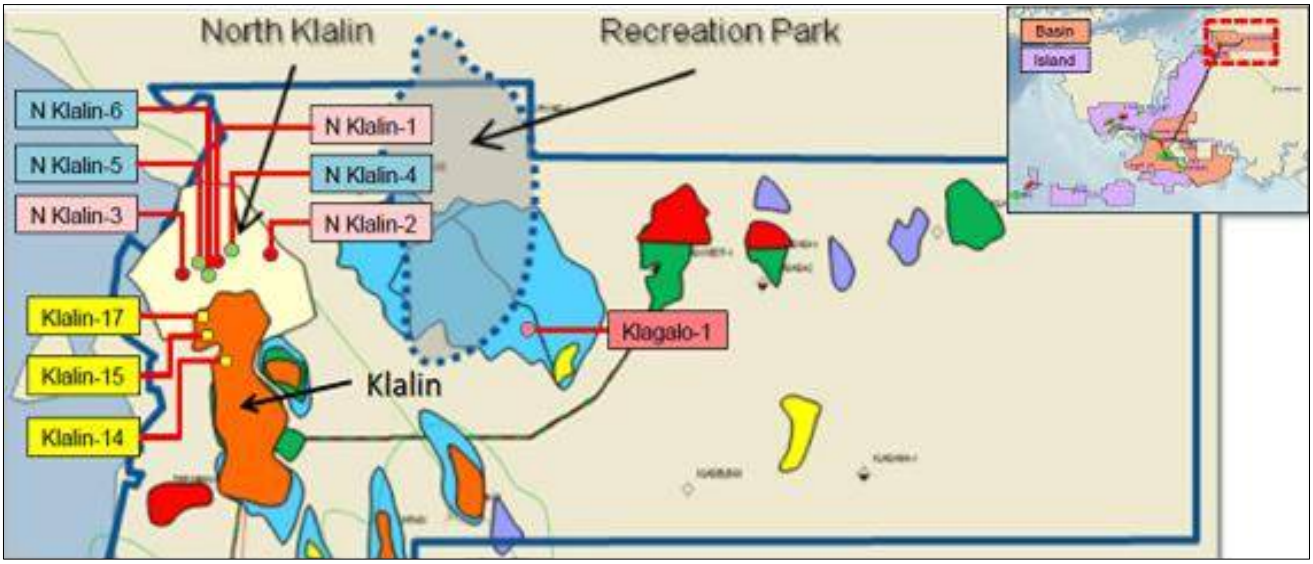
Likely to extend its contract till 2030. The Basin PSC has been producing oil for more than 40 years and the current production composition is 92% oil and 8% gas. We understand that management is currently applying to extend this PSC to 2030, with approval expected in 2015. If this application is successful, we believe that there would be upside to its 2P reserves and 2C resources, enhancing its NAV.

When valuing Basin PSC, our key assumptions are: a) the PSCs will expire in 2020, b) we assume that crude oil from both concessions are benchmarked to ICP, c) first tranche petroleum of 20%, with the remainder available for cost recovery, d) pre-tax government-contractor split set at 73%:27%, and e) corporate tax rate of 45% on profit oil.

Near-term focus – Klalin and North Klalin Complex. Presently, RHP has 9.5mmboe of 2C resources in the North Klalin Complex, which could be upgraded into 2P reserves once its plan of development (POD) is approved. It hopes to obtain its POD by 2Q14 if its exploration and development efforts are deemed successful by management.

Activities in the Klalin and North Klalin complex to remain robust. Recently, RHP has successfully completed two appraisal wells at North Klalin-2 and 3, while North Klalin-1 has been put on production in Mar 12. Management will continue to drill appraisal wells (highlighted in blue in Figure 9) and if its efforts are deemed successful, a finalised POD will be submitted to the government. Klalin-14, 15 and 17 on the other hand is being developed to boost production at the Basin PSC.

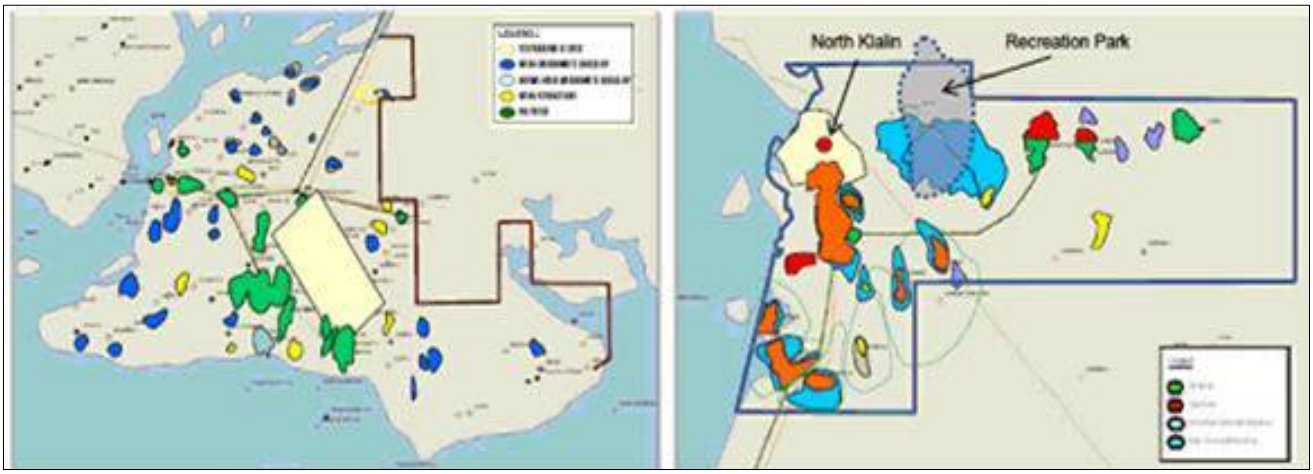
Figure 9: Klalin And North Klalin Complex



Source: RHP

Let us not forget the other prospects. Besides the contingent resources, there are some 432mmboe of unrisked prospective resources in the Basin PSC in the Walio and Arar area.

Figure 10: Walio (Left) And Arar Area (Right)



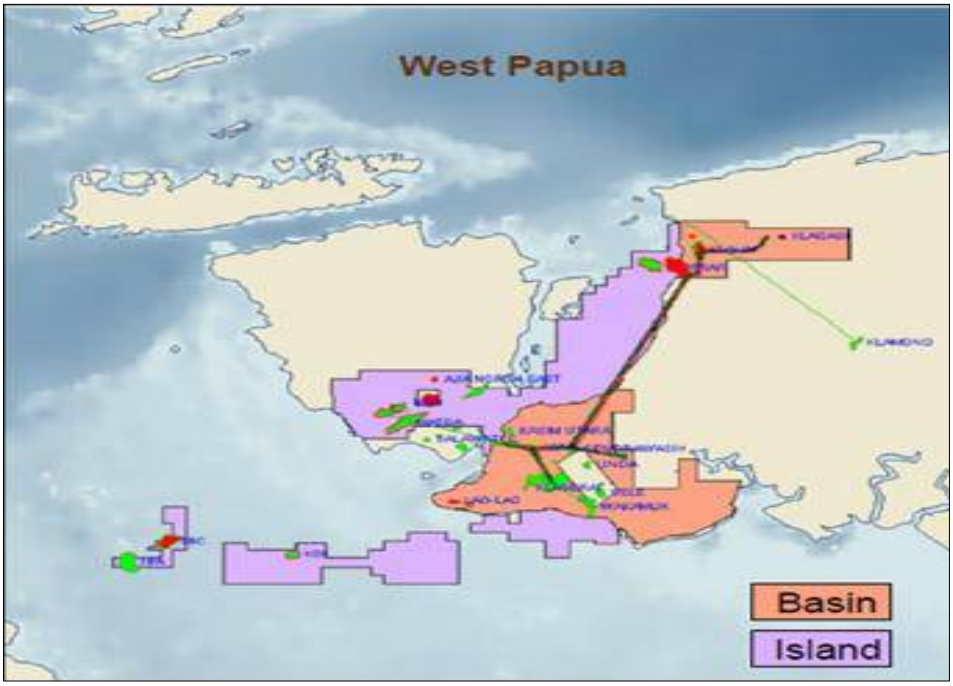
Source: RHP

b) Island PSC, West Papua, Indonesia – *Prospects Are Encouraging*

Acquired in 2010. RHP acquired a 33% stake in Island PSC from both Lundin Petroleum and Pearl Oil Holdings in Dec 10. Back then, Lundin held a 14.5% stake while Pearl Oil held an 18.7% stake in this concession. The oilfield covers a gross area of 1,097 sq km and is both an offshore and onshore concession. Based on our back-of the envelope calculations, RHP paid some US$5.35/bbl for the proved and probable reserves in this transaction.

PetroChina and Pertamiona are joint operators. PetroChina, owns a 17% stake while the remaining 50% is held by Pertamina. Both PetroChina and Pertamina are joint operators in this oilfield. The PSC expires on 22 Apr 20. It has 2mm boe of 2P reserves, 18mmboe of 2C resources and 400mmboe of unrisked prospective resources.

Figure 11: Island PSC (in purple)



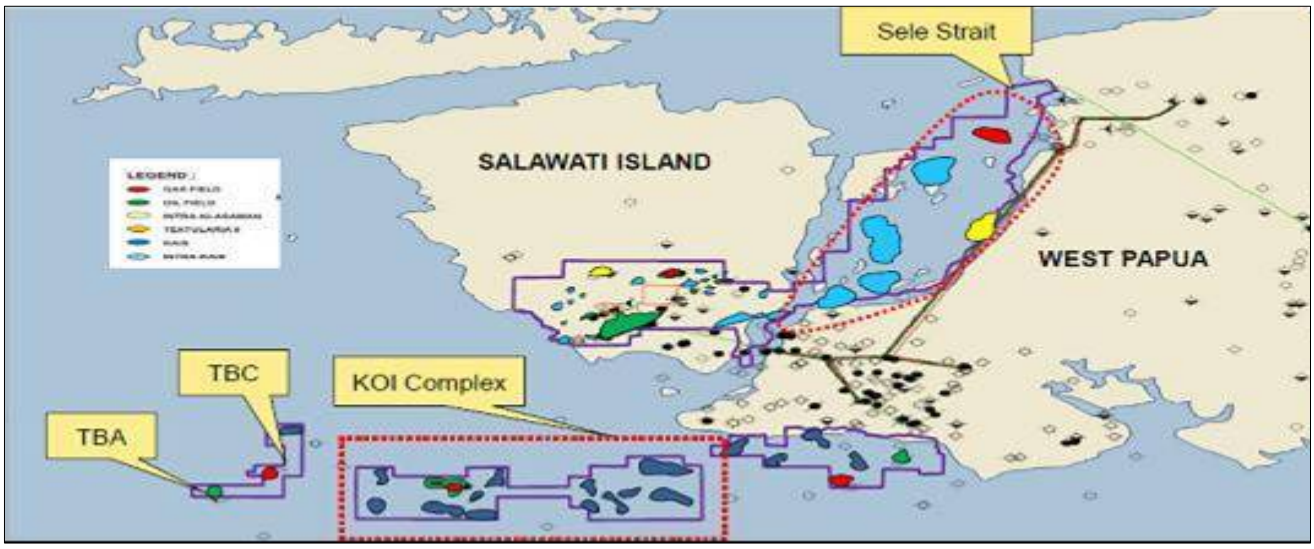
Source: RHP

Likely to extend its contract till 2030. The Island PSC has been producing oil for more has been producing for more than 15 years and the current production composition is similar to Basin PSC - 92% oil and 8% gas. We understand management is currently applying to extend this PSC to 2030, with a reply expected in 2015. If this application is successful, we believe there would be upside to its 2P reserves and 2C resources, enhancing its NAV.

When valuing Island PSC, our key assumptions are: a) the PSCs will expire in 2020, b) crude oil prices from both concessions are benchmarked to Indonesian Crude Price (ICP), c) first tranche petroleum of 20%, with the remainder available for cost recovery, d) pre-tax government-contractor split set at 73% to 27%, and e) corporate tax rate of 45% on profit oil.

Near-term focus – TBA, TBC and KOI complex. Several prospects have been identified in Island PSC ie offshore KOI Complex and Sele Strait. These leads and prospects have estimated net unrisked prospective resources of 386mmboe. The Basin PSC also has 17.7mmboe of 2C resources in offshore TBC, KOI and North Sele.

Figure 12: Location Of TBA, TBC, KOI Complexes And Sele Strait



Source: RHP

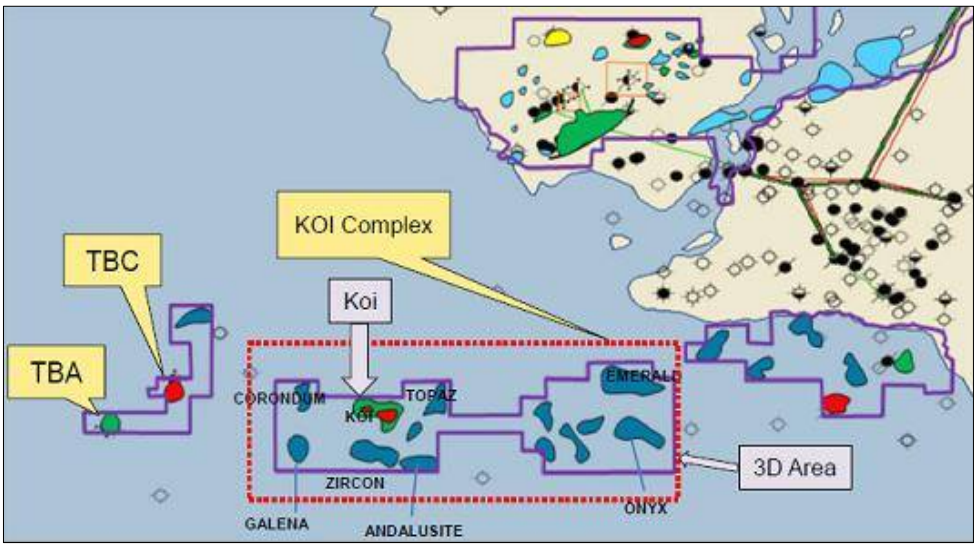
TBA to be reactivated. Management intends to reactivate the TBA oilfield (included in RHP's 2mmboe of 2P reserves in Island PSC) in 2Q14. RHP is now tendering for a floating production, storage and offloading (FPSO) vessel to bring this field back to production. Based on preliminary estimates, the reactivation of this oil field would enhance RHP's oil production by 350bbls/day, net to RHP.

To submit revised POD in 4Q13 for TBC. With 7mmboe of 2C resources at TBC, management intends to submit a revised POD in 4Q13. Upon approval of the POD, this would upgrade Island PSC's 2P reserves by more than 300%, enhancing our NAV valuation for RHP. Barring any unforeseen circumstances, management believes that production should begin in late-2014.

Encouraging prospects within the KOI Complex. Within the shallow-water KOI Complex, a discovery well, named Koi-1 was drilled in year 2000 and the results were encouraging as the well flowed 980bopd and 2.7mmscfd, resulting in 5mmboe of 2C resources. With the encouraging results of Koi-1, management believes there is a larger prospect with 14mmboe of unrisked prospective resources – named Zircon by management – which is a much larger prospect structurally updip and adjacent to Koi.

Exploration well called Zircon-1 drilled on 5 Sep 13. Management embarked on a multi-well high-impact drilling programme, targeting the Zircon prospect (blue blob shown in Figure 13). The drilling rig has drilled its first well named Zircon-1 and the results were encouraging although management is still running tests to determine the final outcome. We expect the final results to be announced anytime soon.

Figure 13: Zooming Into The KOI Complex

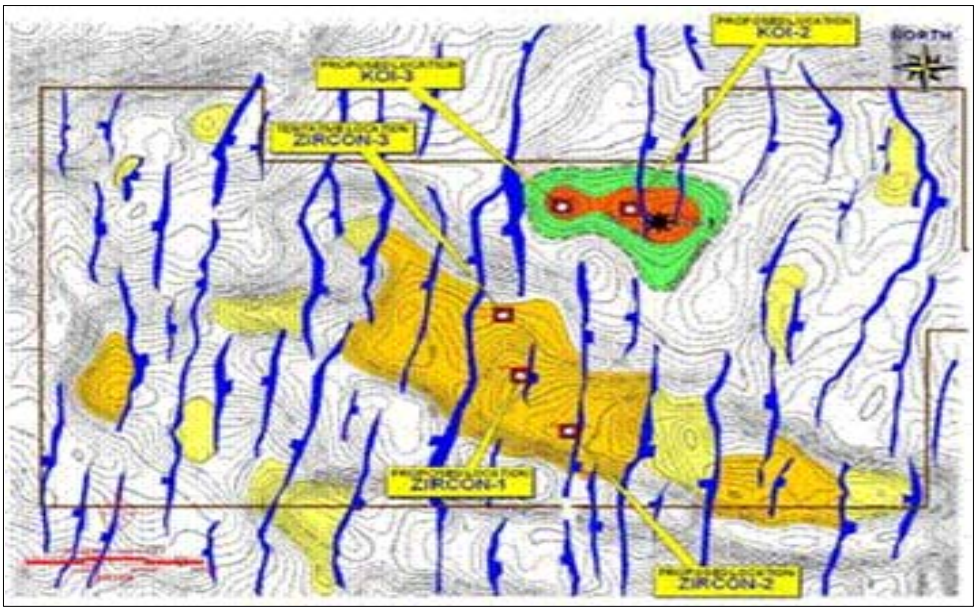


Source: RHP

Koi-2 is next. After completion of Zircon-1, RHP will deploy its drilling rig to drill the Koi-2 appraisal well to appraise the Koi-1 discovery. Depending on the results from the drilling campaign, management may plan three additional wells to be drilled to further appraise the discoveries.

Successful discovery would enhance RHP's NPV. Assuming positive results from its drilling campaign, it would enhance RHP's 2P reserves and 2C resources, resulting in upside to our NPV valuation. In a blue -sky scenario, we understand the Zircon prospect could produce up to 30,000 boepd and this would enhance RHP's production of oil by 10,000 boepd given that it only owns a 33% working interest in this PSC. This would enhance our NPV valuation by some S$0.37.

Figure 14: Map Of RHP's Koi Discovery And Zircon Prospect



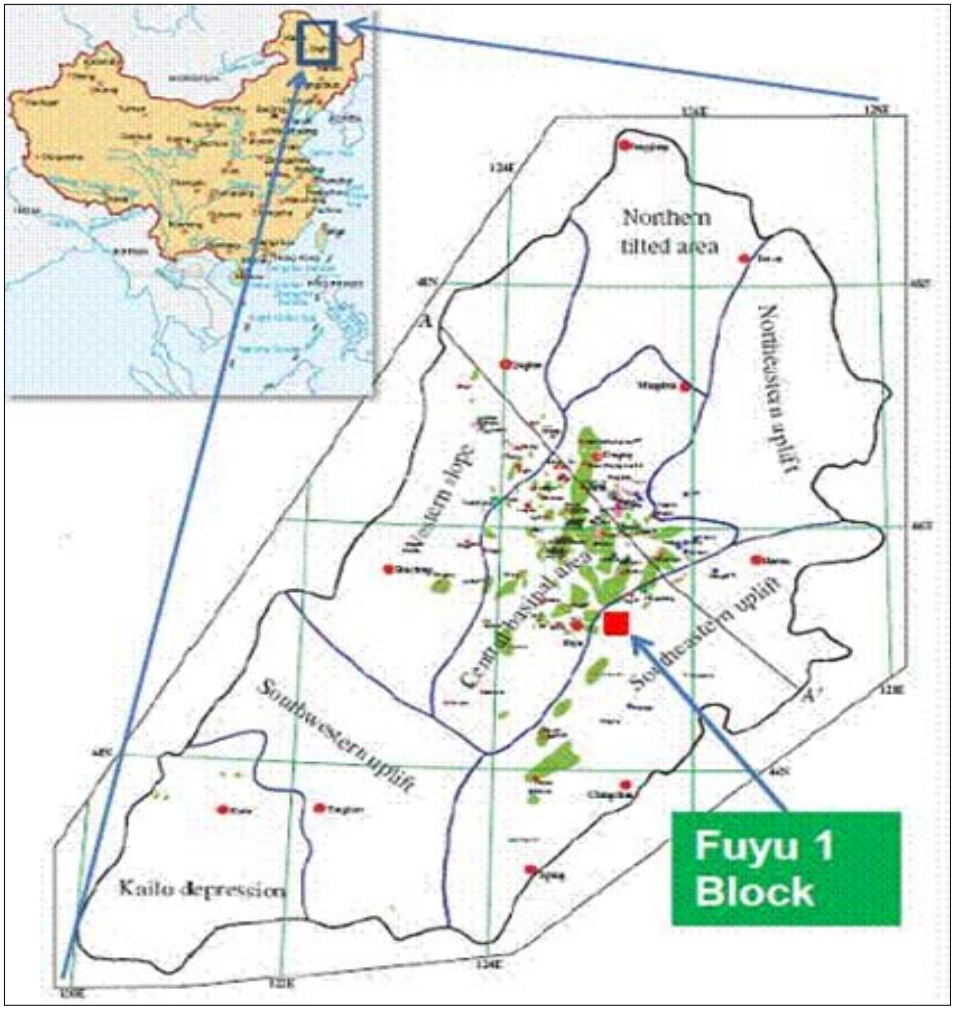
Source: RHP

c) Fuyu 1 PSC, China – *Make Or Break*

A brief history on Fuyu 1. The Fuyu 1 block is located south-east of the Fuyu 1 oilfield in the Jilin province of northern China. The present topography of the area around the Fuyu 1 Block is dominated by a nearly featureless flatland and gentle undulating hills dissected by rivers and lakes. The elevation is between 140m to 160m above sea level.

In a prolific basin. The Songliao basin, a large intracratonic rift basin, is one of the largest petroleum-producing regions in China, and in which major oilfields such as Daqing, Fuyu and XinMin. The Fuyu 1 Block is located south-east of the central basinal part of the Songliao basin, at the western edge of the southern uplift. The location of the Fuyu 1 Block is indicated in the location plan set out in page 19 of this Circular.

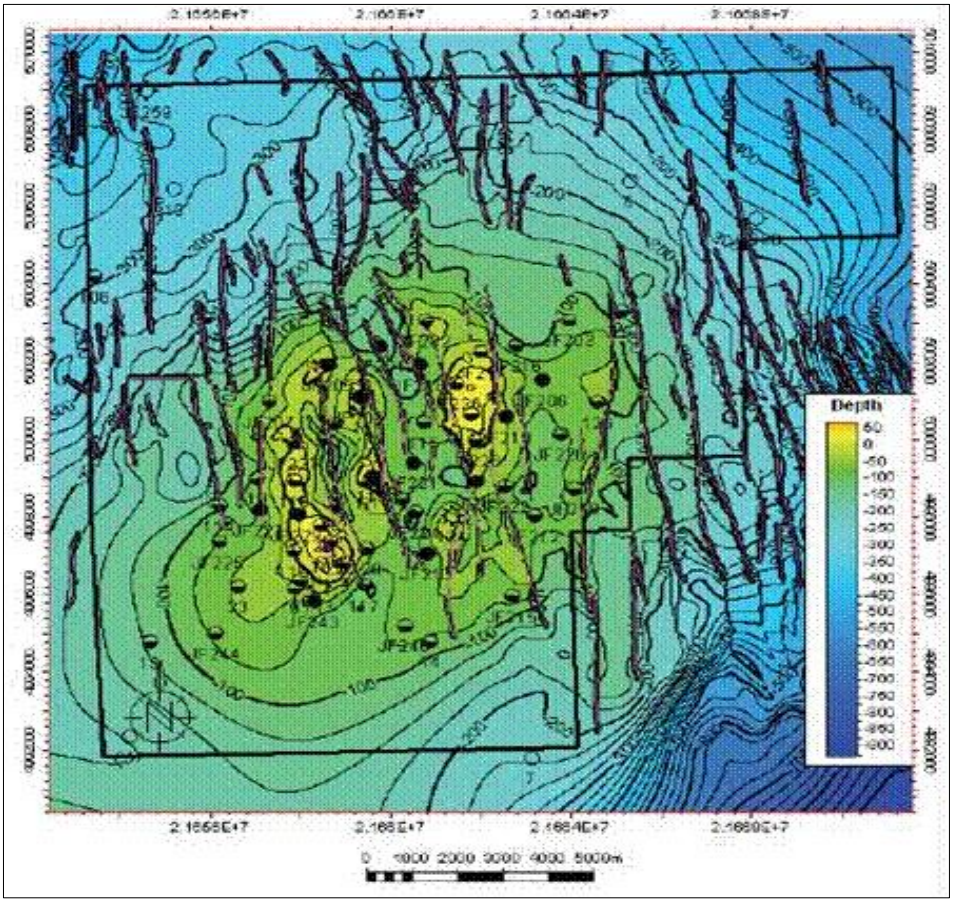
Figure 15: Location Of The Fuyu 1 Oilfield In Northeast China



Source: RHP

CNPC did some work in on Fuyu 1 in 1984. The Fuyu 1 Block was explored by CNPC in 1984. A few of the wells had oil shows, but the oil did not flow to the surface during conventional well test. A particular well, Fuyu 119 well, was further tested in August 1984 using the thermal recovery Huff 'n' Puff method. During the test, the initial production was 8.7 tonnes of oil per day which declined over 35 days, providing an average of 2.38 tonnes per day over the well test period. The crude oil produced was heavy oil. After the discovery of oil, the Fuyu 1 Block was not developed due to the heavy oil reservoir's low permeability, multiple thin reservoir sand layers, low oil saturation and the oilfield being compartmentalised by shale barriers and faults.

Figure 16: A Technical By GCA On Fuyu 1



Source: RHP, Gaffney, Cline and Associates (GCA)

Production not commercially viable previously but could be today. However, with advancements in technology, high oil prices, the relatively low cost of developing the shallow oil reservoir and the low cost of oil production in the PRC, the development and production of oil at the Fuyu 1 Block could potentially become more commercially viable, as compared to about 20 years ago.

First onshore asset. Recall that RHP diversified its electronics manufacturing business into O&G by acquiring KRL, which is the holder of the Fuyu 1 PSC in Jilin Province, China. The oilfield is located in the Southeastern part of the Songliao Basin in Jilin Province, Northeast China (Figure 15).

Located in a prolific basin. It is worth noting that RHP's oilfield is located near CNPC-operated Daqing oilfield, which is China's largest oilfield. Since production in 1960, more than 2b tonnes of oil have been lifted from the Daqing oilfield. This is positive for the RHP's oilfield as it is located in a prolific basin.

Operatorship in the bag. Presently, RHP owns a 100% stake in the Fuyu 1 PSC and is the operator of the oilfield, but upon approval of the ODP for Phase 1 by NDRC, CNPC is expected to have 51% of the ownership in the oilfield. This PSC expires in 2038 and has 35mmboe of 2C resources with 27mmboe of unrisked prospective resources. We like the fact that RHP is the operator of the field as the operator serves as the overall manager and decision-maker of the oil field.

Our key assumptions for this PSC are: a) The PSC will expire in 2038, b) RHP should obtain its ODP by the end of 2014, c) once commercial production is achieved, crude oil sales would be first subject to a 5% value-added-tax (VAT) and royalty payment on a graduated scale that starts from a low of 2% to a high of 12.5%, d) cost recovery limit is 65% of annual gross production, e) profit oil to be split at 51%:49% in favour of CNPC, f) Fuyu 1's crude oil is sold to CNPC at an average discount of US$16.80/bbl to Brent price, and g) corporate tax rate of 25%.

So near yet so far. Essentially, the Fuyu 1 PSC is a key re-rating catalyst for RHP but it is also a key risk when investing in the company. Recall that the development has been delayed by some four years since 2009, due to the financial crisis and leadership changes in CNPC and PetroChina. The good news is that CNPC has approved RHP's development plans internally in Aug 12 and is currently pending final approval from the National Development and Reform Commission (NDRC). Management is guiding that the approval should be received by 4Q13, barring any unforeseen circumstances.

What if the ODP approval is further delayed? Given that the equity market is generally efficient, we believe that RHP's would trade towards S$1.00, in a worst-case scenario. This is assuming that investors discounts the NPV of Fuyu 1 from our valuations, which is inaccurate in our view given that RHP could potentially sell off the oilfield to another investor for cash if it decides not to play the waiting game.

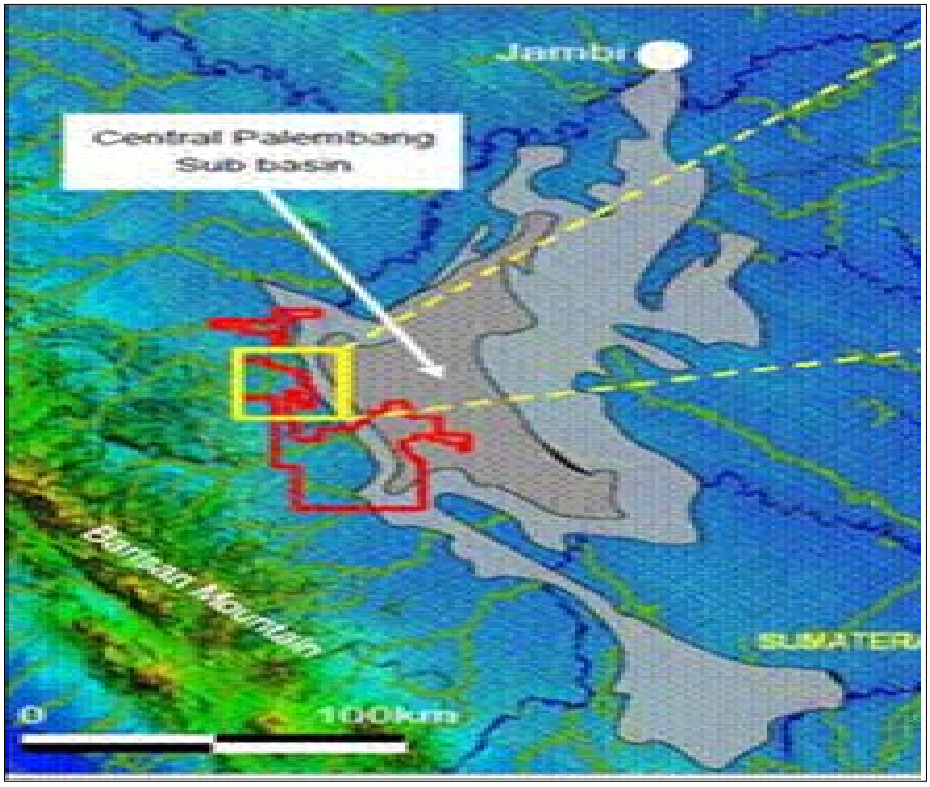
Primary reserves set to increase post-approval of ODP. On the bright side, RHP would be able to upgrade some 50% of its existing 2C resources in Fuyu 1 to 2P resources if the NDRC approves the first phase of the project. While this is positive, we will not change our valuation of RHP shares as we have assumed that RHP should receive approval for its ODP by 4Q13.

d) West Belida PSC, South Sumatra, Indonesia – *Longer-term Play*

Awarded in 2009. RHP was awarded the West Belida PSC in May 09. The concession covers an area of 1,402 sq km and is 94% owned by RHP. The remaining 6% is owned by PT Bayu Energy Lestari. The concession is located in the prolific South Sumatra Basin next to known producing trend of Piano, Gambang and Kenong fields and is in close proximity to existing infrastructure.

Operator in this field. RHP is the operator in this onshore oilfield, which would expire in 2039. It has some 5mmboe of unrisked prospective resources.

Figure 17: Location Of West Belida Off Sumatra



Source: RHP

First well shows positive results. RHP drilled its first exploration well – Gitar-1 well – in 2012 that reached a total depth of 4,000 ft in Nov 12 and the results were positive as some 800ft gross column of hydrocarbons showed. The company plans to drill its second well in 2014. If the results are positive, there could be an additional 5mmboe of 2C resources in the bag by the end of 2014.

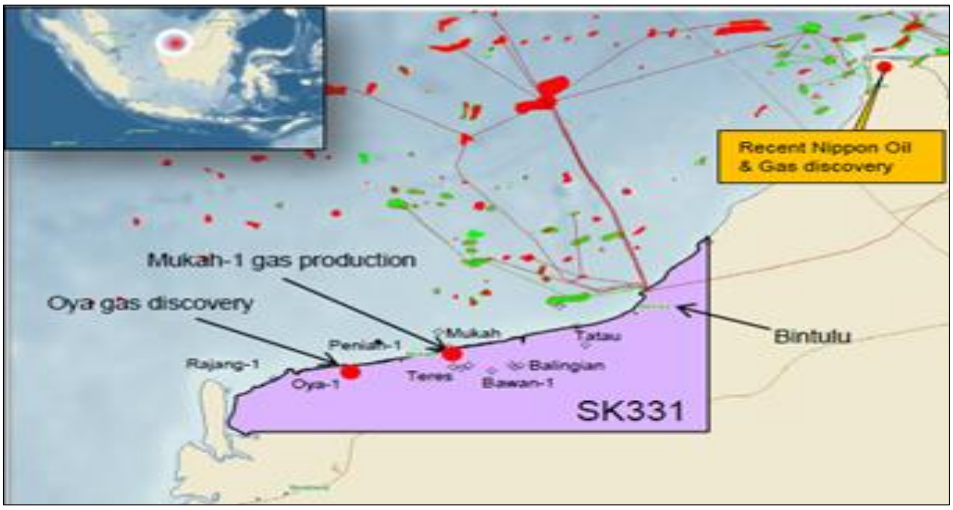
2,000 boepd expected. Management guided the field could produce up to 2,000 boepd per day if development efforts are successful. While this is positive news, it is a longer term play as the production plan is targeted to be submitted only in 2016 while production would begin in 2017, barring any unforeseen circumstances.

e) SK331 PSC, Sarawak, Malaysia – *Largest Asset By Gross Area*

Awarded very recently. The SK331 PSC is RHP's first asset in Malaysia and is the largest of its five assets in terms of gross area, covering 11,600 sq km. It was awarded to RHP in Dec 09 and will expire in 2039. It is an onshore extension of the Balingian basin, which contains O&G fields offshore. Hence there is very good potential for O&G in management's view.

Also an operator in this field. RHP owns a 80% stake in this PSC while Petronas Carigali owns the remaining 20%. It has some 180mmboe of unrisked prospective resources.

Figure 18: SK331 – RHP's First Malaysian Asset



Source: RHP

Prospects are positive on two counts: a) it is also located close to Nippon Oil's recent O&G discovery, which is an onshore discovery, and b) there were past discoveries within RHP's block ie Oya-1 (1993), which tested 7.3mmscfd and Mukah-1 (1938), which produced 1mmscfd for one year.

Wasting no time. RHP has completed an aerogravity/aeromagnetic survey in Aug 2013 and has plans to drill an exploration well in early-15. If the results are successful, it would be positive for RHP as it could convert its prospective resources into 2C contingent resources and eventually into 2P reserves.

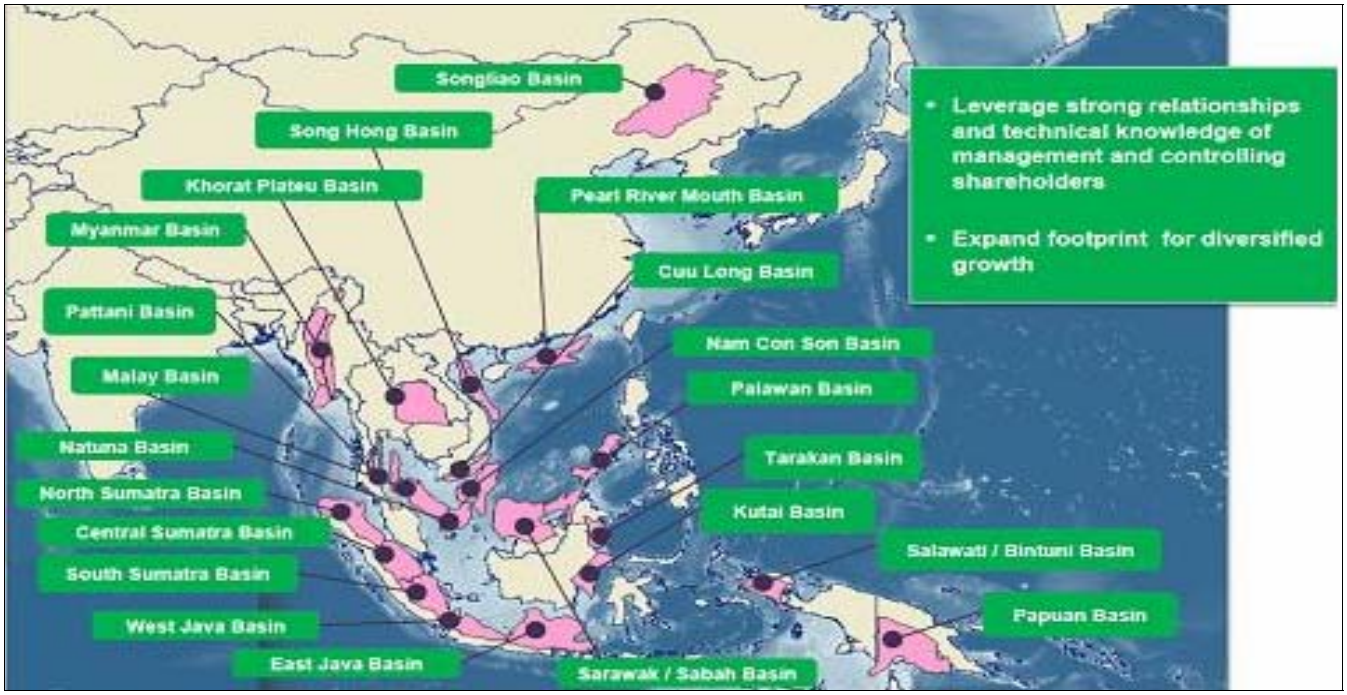
TO EXPAND FOOTPRINT IN ASIA FOR DIVERSIFIED GROWTH – *MYANMAR COULD BE NEXT?*

Good track record. The acquisition of Island and Basin are strong testimonies of the senior management's abilities to sniff out good opportunities when there are any.

The search for O&G should never end. As RHP produces more O&G, its cash pile would increase as it monetises its reserves. Besides exploring for O&G in its existing oilfields, it could also grow its reserves and resources via acquisitions as it should deploy the cash to grow shareholders' value, ultimately.

To leverage on RH Group's network. Backed by a strong controlling shareholder, we believe RHP's management could leverage on RH Group's business network for its next acquisition target. We note that management would have preference for onshore concessions which are rich in oil (rather than gas) and located close to producing basins in Asia.

Figure 19: Areas Of Focus



Source: RHP

Myanmar could be next. Management is not hiding its intentions to make an entry into Myanmar's lucrative O&G industry, given that the US sanction has been lifted. While investors may be confused with RHP's exit from a farm-in option (option to own a stake in the concession) for a 50% stake in the M-1 offshore block in Myanmar, we believe the move is merely a prelude to a more exciting venture.

Financials

Revenue remained steady. RHP's 2Q13 revenue of US$20.1m was 6.3% better than 2Q12's revenue due to an increase in production during the quarter. On a yoy basis, 1H13 revenue dipped 4% yoy, mainly attributable to operational issues faced in one of its oilfields in 1Q13, which resulted in lower production.

Figure 20: Profit & Loss

Year to 31 Dec (US$m)	2010	2011	2012	2013F	2014F	2015F
Revenue	**50.8**	**89.4**	**86.4**	**95.9**	**135.0**	**176.0**
Cost of Sales	(38.9)	(56.8)	(54.2)	(56.3)	(80.1)	(102.0)
Gross Profit	**11.9**	**32.6**	**32.2**	**39.7**	**54.9**	**74.1**
Other Income	0.5	0.6	0.0	0.0	5.1	16.6
Administrative Expenses	(3.0)	(5.3)	(5.3)	(7.9)	(11.1)	(14.5)
Other Expenses	4.0	6.1	2.3	(7.4)	(10.4)	(13.6)
EBITDA	**13.3**	**34.0**	**29.3**	**24.4**	**38.4**	**62.6**
Depreciation & Amortisation	(6.5)	(13.4)	(10.8)	(10.4)	(15.0)	(17.6)
Finance Costs	(0.1)	(1.8)	(2.2)	(2.1)	(3.6)	(5.1)
PBT	**6.8**	**18.8**	**16.2**	**11.9**	**19.8**	**39.8**
Income Tax	(5.0)	(15.9)	(10.1)	(9.0)	(12.9)	(25.1)
Profit After Tax	**1.8**	**2.9**	**6.1**	**2.9**	**6.9**	**14.7**
MI	-	-	-	-	-	-
Profit/(Loss) from Discontinued Operations	(0.2)	-	-	-	-	-
Net Profit	**1.6**	**2.9**	**6.1**	**2.9**	**6.9**	**14.7**
Average Oil Production (bopd)	**4,820**	**4,800**	**4,300**	**5,309**	**7,341**	**10,915**

Source: UOB Kay Hian

Higher production costs weighed down gross margins. RHP recorded a 17% yoy increase in cost of sales in 2Q13 due to higher production costs from both its Island and Basin PSCs coupled with lower average oil price realised for its sale of O&G. Its 1H13 gross margin of 3.1% was also lower than 1H12's 3.9%. This was attributable to higher production costs and lower average oil price realised for its sale of O&G.

2Q13 earnings weighted down by write-offs. RHP recorded a net loss of US$4.9m in 2Q13 (2Q12: net profit of US$0.8m), mainly attributable to the write-off of consideration paid for seismic option and two unsuccessful exploration wells totalling US$6.6m. Stripping these two items, net profit would have been US$1.7m. RHP made a net loss of US$4.3m in 1H13 (1H12: net profit of US$2.1m) due to the write-offs. Stripping the write-offs, a net profit would have been US$2.4m.

Interest expenses up. We note a surge in both long-term and short-term borrowings ytd. RHP's finance cost for 2Q13 rose 41% yoy due to an increase in interest expense from additional bank borrowings. However, we expect lower interest expenses in 2H13, especially in 4Q13 as RHP may pay off some of its bank borrowings via its operating cash flows and new funds raised from its private placement exercise.

Balance sheet to turn net cash by end-October. Upon completion of its proposed private placement, RHP's balance sheet would turn net cash by end-October. We project net debt to rise quickly in FY14-15 as RHP steps up exploration and development of its assets. That said, we expect RHP to keep its long-term net gearing ratio at 50% or lower, so as to strike a balance between the need to maintain balance sheet flexibility for future acquisitions and potential development cost escalations.

RHP last conducted a capital-raising exercise in Sep 09, issuing 54.5m new shares at S$0.80 each to raise net proceeds of S$41.6m, mainly to finance the acquisition of Fuyu 1.

Figure 21: Balance Sheet

Year to 31 Dec (US$m)	2010	2011	2012	2013F	2014F	2015F
Non-current assets						
Oil & Gas Properties	63.1	64.6	67.7	125.2	159.2	190.6
Other Property, Plant & Equipment	1.6	1.2	0.9	0.9	0.9	0.9
Exploration & Evaluation Assets	37.0	53.4	66.6	66.6	66.6	66.6
Goodwill	139.9	139.9	139.9	139.9	139.9	139.9
Investment in Subsidiaries	-	-	-	-	-	-
	241.5	**259.1**	**275.0**	**332.6**	**366.6**	**397.9**
Current Assets						
Inventories	7.3	5.0	6.5	7.9	11.1	14.5
Other Current Assets	1.4	0.9	0.5	0.5		
Trade & Other Receivables	26.3	5.5	8.8	9.2	12.9	16.9
Amounts Due from Subsidiaries	-	-	0.0	0.0	0.0	0.0
Cash & Short-term Deposits	5.6	23.6	28.6	40.4	45.7	45.9
	40.6	**35.1**	**44.5**	**58.0**	**69.7**	**77.3**
Total Assets	**282.1**	**294.3**	**319.5**	**390.6**	**436.3**	**475.2**
Current liabilities						
Income Tax Payable	2.2	2.4	2.8	2.8	2.8	2.8
Trade & Other Payables	74.6	49.2	49.4	52.6	74.0	96.5
Derivatives	-	3.2	0.5	0.5	0.5	0.5
Loans & Borrowings	-	1.4	5.3	5.3	35.3	65.3
	76.7	**56.2**	**58.0**	**61.1**	**112.6**	**165.0**
Non-current Liabilities						
Provisions	2.8	3.0	2.4	2.4	2.4	2.4
Deferred Tax Liabilities	31.5	37.6	39.8	39.8	39.8	39.8
Loans & Borrowings	52.9	78.6	37.0	37.0	37.0	37.0
Other Liabilities	9.1	9.0	1.3	66.4	53.7	25.4
	96.3	**128.3**	**80.5**	**145.6**	**132.9**	**104.6**
Total Liabilities	**173.1**	**184.5**	**138.5**	**206.8**	**245.5**	**269.7**
Equity Attributable to Owners of the Company						
Share Capital	137.6	138.2	199.6	199.6	199.6	199.6
Reserves	(28.6)	(28.4)	(18.6)	(15.8)	(8.8)	5.9
Total Equity	**109.0**	**109.8**	**181.0**	**183.9**	**190.8**	**205.6**

Source: UOB Kay Hian

FCF to remain negative in 2014-15. RHP is expected to incur negative free cash flow (FCF) due to the high capex needed to drill exploration prospects and add to reserves via field development drilling.

US$23m earmarked for capital expenditure. In 2H13, RHP will be drilling two development wells (could potentially drill an additional 30 development wells if Fuyu 1's ODP is approved), two exploration wells and four appraisal wells in the Island and Basin PSCs. Most of the development wells planned for Island and Basin should be seen as maintenance capex, in our view, as these wells would be required to keep daily net lifting at the 4,000-4,200bopd levels. Besides that, RHP would also embark on further geological studies in West Belida, Indonesia and aerogravity/aeromagnetic surveys in SK331, Malaysia.

Figure 22: RHP's Work Programme To Unlock Value From Existing Assets

PSC	Q1 2013	Q2 2013	Q3 2013	Q4 2013
Basin	1 appraisal well	1 development well	2 development wells	1 exploration well
Island			1 exploration well 1 appraisal well	3 appraisal wells (contingent)
West Belida		Seismic Reprocessing	G&G	G&G
Fuyu-1				30 development wells * *Contingent upon final ODP approval*
SK331			Aerogravity / Aeromagnetic survey	Surface Geochemistry

Source: RHP

Development & Production

FUYU 1

More about our assumptions on Fuyu 1. When RHP acquired KRL, Gaffney, Cline and Associates (GCA), a specialist in O&G consultancy, was hired to provide an independent valuation of the Fuyu 1 block. GCA development a detailed development blueprint for the oilfield and we relied on the development plan and made adjustments before arriving at our base case development and production profile.

ODP to be approved before end-13. Our base case assumes the approval for its ODP before the end of 2013. We understand that 30 production/injection wells will be drilled once approval is granted.

Production to ramp up through to 2027. In a report by GCA back in 2009, the production for the Fuyu 1 oilfield will be on an uptrend for at least 10 years due to the sheer number of wells being drilled. As the ODP approval has been delayed, we believe that the production profile will be similar to GCA's technical predictions but production is to start in 2014 instead of 2009.

Production to surge in 2014. We expect RHP's daily net lifting to increase to more than 6,000bopd towards the end of FY2014, driven by the ramp-up of initial production in Fuyu 1, China. This is based on management's target to drill some 100-120 wells per year.

Overall production – *To hit more than 26,000 bopd per day by 2018*

26,000 bopd in 2018. By end-18, our assumptions show that RHP could be producing more than 26,000 bopd, with further upside to our assumptions. Upside to our estimates would come from: a) acquisition of new producing oilfields, b) successful exploration and development initiatives, and c) higher-than-expected production from Fuyu 1.

Figure 23: RHP's forecasted year end production rates

(bopd)	2012	2013F	2014F	2015F	2016F	2017F	2018F	2019F	2020F
Basin	3,701	4,610	5,430	6,197	6,612	5,831	5,656	5,486	5,322
Island	599	699	904	1,205	1,488	1,237	1,100	1,067	941
Fuyu 1			1,007	2,013	3,020	4,026	5,033	6,039	7,046
TBC & TBA				1,500	1,650	1,815	1,452	1,162	929
Zircon & Koi					10,000	11,500	13,225	10,580	8,993
Total	**4,300**	**5,309**	**7,341**	**10,915**	**22,770**	**24,409**	**26,465**	**24,334**	**23,230**

Source: UOB Kay Hian, RHP

Key Risks

Exploration risk. This is a large risk for all E&P companies as monetary resources and time invested into E&P activities might not result in meaningful results, which in turn, will involve write-offs and impact profitability. The mitigation in RHP's case is that at the current price level, investors are paying minimal costs for its exploration portfolio. Also, RHP's assets are located strategically close to oilfields that are at the production stage, thereby increasing its chances of striking oil.

Development risk. The development operations in the O&G industry are affected by development risks such as blowouts, oil spills and geological uncertainties. Furthermore, estimation of the O&G reserves in the subsurface is made by inferring subsurface conditions from limited data such as seismic data and wells that only penetrate a small fraction of potential and actual reservoirs. Fuyu-1 represents the single largest contributor to our valuation of RHP's asset. A delay in obtaining approval for its ODP or poor execution would impact our overall valuation. A source of risk mitigation is the upgrading of its exploration assets into 2C resources and its 2C resources into 2P reserves.

Production risk. The performance of production operations in the O&G industry is subject to adverse production operating conditions, such as delays in obtaining governmental approvals or consents, extreme weather conditions or any other adverse geological and mechanical conditions, which may affect production. Transportation of the O&G could also face obstacles.

Reliant on the discovery and production of replacement reserves. Assuming that RHP successfully commercialises its oil concessions, it must still continually explore, develop and acquire new hydrocarbon reserves to replace those produced and sold. Hence, it needs to continuously embark on E&P initiatives to seek additional reserves, exposing investors to the risk that economically recoverable reserves will not be discovered.

Reserves/resources failure risk. Unexpected geological complexities could sometime have an adverse effect on the recoverability of previously stated reserves/resources.

Oil price risk. Our valuation for RHP's production and development assets are sensitive to oil prices and discount rates assumed in our NPV model. If oil prices were to retreat to significantly lower levels for sustained periods, this would have negative implications. That said, we note that it has a put option in Fuyu 1, China to sell the produced oil at a hurdle rate of USD70/bbl.

Higher-than-expected field decline rates. We are estimating relatively benign 10-12% rates of decline p.a. for RHP's mature assets in Island and Basin in Indonesia and Fuyu in China. A higher-than-expected rate of decline in production would negatively impact its NPV.

Key management-team risk. The success of all E&P companies is highly attributable to its senior management team which has strong experience in petroleum engineering and geological studies. As most of the senior management team joined RHP along with Dr Tony Tan, the departure of his team may have an adverse impact on the operations of the company and sentiment on its share price. To mitigate this risk, we understand that all RHP's employees are incentivised with employee stock options (refer to Appendix II for key management information).

Acquisition risk. RHP will eventually need to acquire new assets to ensure that its growth is sustainable. Hence there is a risk for management to overpay for these new assets, resulting in dilution to NAV. However, we do believe that this risk is fairly low, as evidenced by management's decision to reject a farm-in option for a 50% stake in an offshore oilfield in Myanmar recently due to the smaller payoff.

Regulatory risk. Returns in the E&P business are highly dependent on the petroleum regimes in the respective countries. Hence RHP is exposed to regulatory risks such as: a) change in fiscal terms (eg profit share split, price controls and tax rates), b) uncertain energy policies, and c) government leadership changes. This risk was realised in RHP's case when the change in the Chinese government's leadership caused the development approval for RHP's Fuyu-1 to be delayed ever since 2011. In the near term, investors should look out for the upcoming election in Indonesia, though we view the risk as small.

Currency risk. The bulk of RHP's income is denominated in US dollars. Although it attempts to mitigate the currency risk by contracting most of its costs in US dollars, the hedge is less than 100%.

Competition. The O&G industry is highly competitive. RHP faces potential competition in the following forms: a) acquisition of E&P licenses through bidding processes run by government authorities, b) alternative energy sources that may compete with or reduce demand for oil & gas, c) purchase of capital equipment that may be scarce, and d) employment of highly skilled personnel and professional staff.

Conclusion

Prospects are positive on the following four counts: a) backed by a strong management team and a solid controlling shareholder, which is likely to enhance shareholders' value, b) relatively undervalued investment compared with other E&P companies, c) multiple re-rating catalysts in the near term, and d) favourable oil prices in the medium term.

Relatively cheaper M&A target listed on SGX. While we believe KrisEnergy is a good investment in the long run, we believe that RHP's valuations should re-rate towards KrisEnergy's valuations as the latter is trading at a significant discount despite both companies having similar 2P+2C figures. Besides, RHP has the upper hand as it is already producing O&G. This would make RHP an attractive M&A target if an investor is looking to acquire an E&P company on the SGX.

Biggest risk rests in China but downside risk to our TP is capped at S$1.00. We think investors would need to take note of RHP's ODP approval for Fuyu 1 as this is a near-term catalyst in our view. Assuming that investors attach no value to Fuyu 1, we think the downside for RHP's share price to our TP would be capped at S$1.00. However, we think it would be a good chance to accumulate RHP's shares if that happens, as RHP would be able to sell off the oilfield to another investor if it decides not to play the waiting game.

Could be a double- or triple-bagger in 2-3 years. While there is potential downside to our valuations, the potential upside is even more lucrative in our view as the stock could be a double or triple bagger in 2-3 years, in a blue sky scenario.

Potential upside risks are: a) faster-than-expected commercial development schedule for Fuyu 1, b) successful exploration programme in Indonesia (Island, Basin, West Belida), China (Fuyu 1) and Malaysia (SK331), thereby adding to recoverable reserves/resources, c) higher-than-expected oil prices, resulting in higher NPVs, and d) value-accretive acquisition of new petroleum blocks in South East Asia, where management has significant operating experience.

Potential downside risks are: a) delays in getting its ODP approved for Fuyu 1, b) higher-than-expected increase in costs for Island, Basin and Fuyu blocks, resulting in lower NPVs, c) lower-than-expected oil prices than our forecast of US$100/bbl in 2013, and d) exploration failure, which would impact cash holdings and investors' sentiments.

Figure 24: Profit & Loss

Year to 31 Dec (US$m)	2012	2013F	2014F	2015F
Net turnover	**86**	**96**	**135**	**176**
EBITDA	29	24	38	63
Depreciation & Amortisation	11	10	15	18
EBIT	18	14	23	45
Total Other Non-operating Income	0	0	0	0
Associate Contributions	0	0	0	0
Net Interest Income/(Expense)	(2)	(2)	(4)	(5)
Pre-tax Profit	**16**	**12**	**20**	**40**
Tax	(10)	(9)	(13)	(25)
Minorities	0	0	0	0
Preferred Dividends	0	0	0	0
Net Profit	**6**	**3**	**7**	**15**
Net Profit (adjusted)	6	3	7	15

Source: RHP, UOB Kay Hian

Figure 25: Balance Sheet

Year to 31 Dec (US$m)	2012	2013F	2014F	2015F
Operating	**19**	**15**	**34**	**39**
Pre-tax Profit	16	12	20	40
Tax	(8)	(9)	(13)	(25)
Depreciation & Amortisation	11	10	15	18
Associates	0	0	0	0
Working Capital Changes	(6)	4	21	22
Non-cash Items	0	0	0	0
Other Operating Cashflows	5	(2)	(9)	(15)
Investing	**(29)**	**(68)**	**(49)**	**(49)**
Capex (Growth)	(28)	(68)	(49)	(49)
Capex (Maintenance)	0	0	0	0
Investments	0	0	0	0
Proceeds from Sale of Assets	0	0	0	0
Others	(1)	0	0	0
Financing	**14**	**73**	**30**	**20**
Dividend Payments	0	0	0	0
Issue of Shares	0	73	0	0
Proceeds from Borrowings	44	0	30	20
Loan Repayment	(29)	0	0	0
Others/Interest Paid	(2)	0	0	0
Net Cash Inflow (Outflow)	**4**	**20**	**15**	**10**
Beginning Cash & Cash Equivalent	**21**	**25**	**40**	**46**
Changes Due to Forex Impact	4	(5)	(10)	(10)
Ending Cash & Cash Equivalent	**29**	**40**	**46**	**46**

Source: RHP, UOB Kay Hian

Figure 26: Cash Flow

Year to 31 Dec (US$m)	2012	2013F	2014F	2015F
Fixed Assets	69	126	160	191
Other LT Assets	206	206	206	206
Cash/ST Investment	29	40	46	46
Other Current Assets	16	18	24	31
Total Assets	**319**	**391**	**436**	**475**
ST Debt	5	5	35	65
Other Current Liabilities	53	56	77	100
LT Debt	37	37	37	37
Other LT Liabilities	43	109	96	68
Shareholders' Equity	181	184	191	206
Minority Interest	0	0	0	0
Total Liabilities & Equity	**319**	**391**	**436**	**475**

Source: Source: RHP, UOB Kay Hian

Figure 27: Ratios

Year to 31 Dec (%)	2012	2013F	2014F	2015F
Profitability				
EBITDA Margin	33.9	25.4	28.5	35.5
Pre-tax Margin	18.8	12.4	14.7	22.6
Net Margin	7.1	3.0	5.1	8.4
ROA	2.0	0.8	1.7	3.2
ROE	4.2	1.6	3.7	7.4
Growth				
Turnover	(3.4)	11.1	40.7	30.4
EBITDA	(14.0)	(16.6)	57.6	62.7
Pre-tax Profit	(13.9)	(26.6)	66.8	100.8
Net Profit	108.2	(53.2)	143.2	112.3
Net Profit (adjusted)	108.2	(53.2)	143.2	112.3
EPS	83.5	(60.6)	104.7	112.3
Leverage				
Debt to Total Capital	18.9	18.7	27.5	33.2
Debt to Equity	23.4	23.0	37.9	49.8
Net Debt/(Cash) to Equity	7.6	1.0	13.9	27.4
Interest Cover (x)	13.2	11.5	10.6	12.2

Source: RHP, UOB Kay Hian

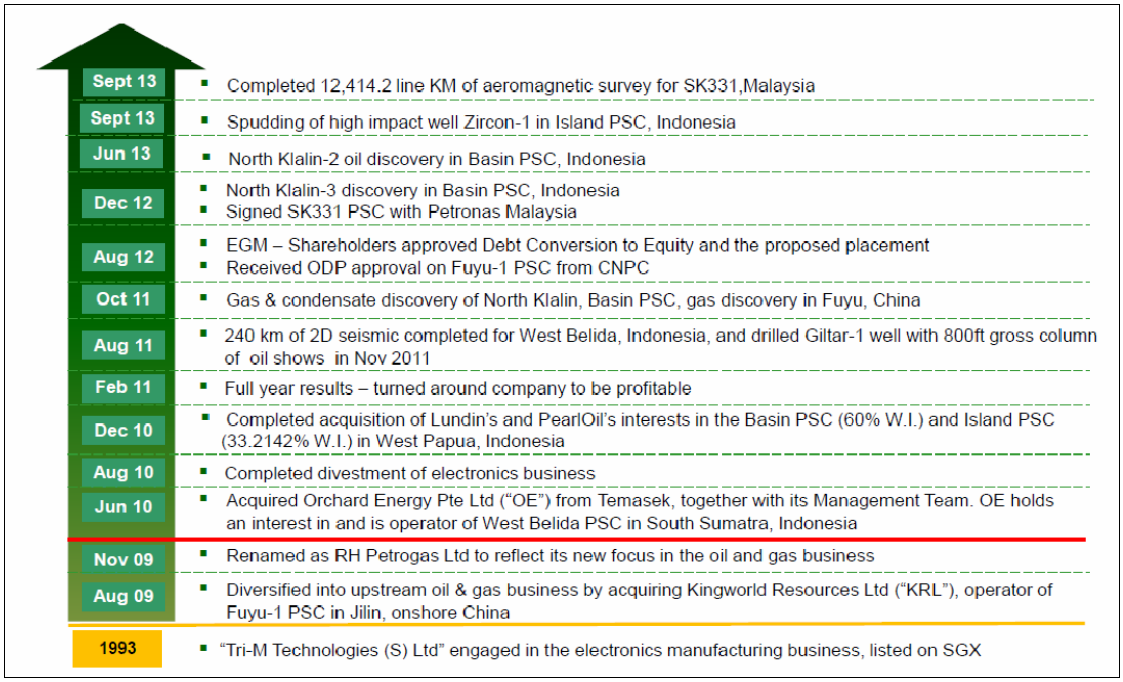
Appendix I – Company Overview

FORMERLY TRI-M TECHNOLOGIES

Converted into an E&P company in 2009. RHP was formerly known as Tri-M Technologies, a Singapore-listed electronics manufacturing company. The dire state of the electronics business, coupled with a potential delisting from the Singapore Stock Exchange (SGX), triggered transformation initiatives. In Aug 09, the company diversified into the upstream O&G business by acquiring Kingworld Resources Ltd (KRL), which holds the Fuyu 1 PSC in Jilin Province, China. Subsequently, the company was renamed RH Petrogas.

The company then completed its second acquisition in Jun 10, snapping up Orchard Energy, which owns the West Belida Greenfield PSC in Indonesia. Together in the acquisition was Orchard Energy's senior management team, led by Dr Tony Tan. Subsequently, RHP divested its electronics manufacturing business and acquired Lundin's and Pearl Oil's interests in the Basin PSC and Island PSC in Indonesia. Most recently, it signed its first PSC in Malaysia with Petronas for an 80% stake in an onshore concession (SK331).

Timeline Of Key Events



Source: RHP

Controlling shareholder is Malaysia's ninth-richest person according to Forbes. Rimbunan Hijau Group (RH Group), founded by RHP's chairman Tan Sri Datuk Sir Tiong Hiew King, controls 64.7% of RHP. This is a conglomerate headquartered in Sarawak, Malaysia, with businesses in forestry, palm oil, media, infocomm technology (ICT), hospitality, biotech, property and O&G. Tan Sri Datuk Sir Tiong, known as the timber king of Malaysia, was also ranked the ninth-richest man in Malaysia by Forbes in Mar 13. Other listed companies owned by Tan Sri Datuk Sir Tiong include: Subur Tiasa, Jaya Tiasa, Rimbunan Sawit and Media Chinese International. We understand he is very keen to build RHP into one of the largest O&G independent companies in Asia.

Snapshot Of RHP's Chairman

Source: RHP

RH GROUP HAS FIVE MAIN BUSINESS SEGMENTS

a) Forestry. RH Group is a leading player in the global forestry and timber business. It has operations in Malaysia, Papua New Guinea, New Zealand, Russia, Equatorial Guinea and Gabon. It owns two companies which are listed on the Main Board of Bursa Malaysia - Jaya Tiasa Holdings (JT MK/NOT RATED) and Subur Tiasa Holdings (STH MK/NOT RATED).

b) Oil Palm. RH Group's oil palm business started in 1998 and its listed subsidiary, Rimbunan Sawit (RSAW MK/NOT RATED), is a significant player in Sarawak's oil palm industry.

c) Media. Media Chinese International, listed in Hong Kong and Kuala Lumpur, is one of the largest global Chinese-language media groups. The dual-listed company was formed by the merger of Ming Pao Enterprise, Sin Chew Media and Nanyang Press Holdings. Its product portfolio in Southeast Asia, Greater China and North America comprises 5 daily newspapers in 13 editions and 3 free newspapers with a total daily circulation of about 1m copies, as well as about 30 magazines.

d) Information Technology (IT). The RH Group ventured into the IT business in 1995 and is involved in the production of optical fibres, optical cables and associated devices and accessories.

e) Hospitality. In Sep 06, RH opened RH Hotel. It owns RH Tours & Travel Agency in Malaysia and Charming Holidays in Hong Kong. Charming Holidays continues to expand its brand to the North American market, targeting the outbound travel sector. It has set up operations in the major cities of Toronto, Vancouver, New York, San Francisco and Los Angeles.

f) Others. RH Group also has extensive investments in a number of other industries including, property development, trading & retail services, plastic manufacturing, aquaculture, human capital development, education and biotechnology.

Business Interests Of RH Group

RH Group					
Forestry	**Oil Palm**	**Media**	**Infocomm Tech**	**Hospitality**	**Others**
• Jaya Tiasa Holdings • Subur Tiasa Holdings • Mafrica Corporation • Rimbunan Hijau [PNG]	• Jaya Tiasa Holdings • Subur Tiasa Holdings • Mafrica Corporation • Rimbunan Sawit Holdings • Golden Star Ace • Sinar Tiasa • RH Lundu Palm Oil Mill • RH Selangau Palm Oil	• Sin Chew Media • Guang Ming Ribao • Ming Pao • Nanyang Siang Pau • China Press • The National • Yazhou Zhoukan	• Comserv (Sarawak) • Optical Communication • PenangFON	• RH Hotel • RH Tours & Travel Agency • Charming Holidays • Travel Planners [PNG]	• RH Academy • Borneo Infrastructure Development • Dynasty Development • The Neil Group • RH Vision • Rimbunan Hijau General Trading • Rejang Green Agriculture Supplies • RH Trading

Source: RHP

Top 8 shareholders own 69.7% of RHP, post placement. Post placement, RH Group owns 64.7% of RHP via Woodsville International (29.0%), Smartphone Investments (18.2%) and RH Capital (17.5%). The single largest institutional shareholder is Maybank Kim Eng Securities with a 3.9% stake.

Top 8 Major Shareholders As At 10 Oct 13 (pre-placement)

	Major shareholders	No. of Shares (m)	Stake (%)
1	Woodsville International (RH Group)	212.1	29.0
2	Smartphone Investments (RH Group)	132.8	18.2
3	RH Capital (RH Group)	127.9	17.5
4	Maybank Kim Eng Securities	28.6	3.9
5	Tiong Kiew Chiong	5.0	0.7
6	Tan Jee-Theng	2.4	0.3
7	Tiong Hiew King	0.6	0.1
8	Ng Choong Joo	0.0	0.0
	Total	**509.4**	**69.7**

Source: Bloomberg

Appendix II – Key Management

SENIOR-MANAGEMENT TEAM WAS FROM ORCHARD ENERGY, LINKED TO SINGAPORE'S TEMASEK

Inherited a highly experienced management team. Most of RHP's senior management team came from Orchard Energy, a Temasek-owned company. Led by Dr Tony Tan, the team has accumulated a wealth of experience in the E&P business before joining RHP.

Dr Tan Jee-Theng Tony, CEO and Executive Director

Dr Tan joined RHP in Jun 10 and has more than 30 years of international petroleum E&P and M&A expertise. He was the CEO of Orchard Energy Pte Ltd from Jan 09. Between 2000 and 2008, he was the senior vice-president, exploration & production, of Singapore Petroleum Company (SPC). Prior to SPC, he was the CEO of Gaffney, Cline & Associates' Asia Pacific office, an international petroleum and management consultancy firm. He had also worked in international oil companies in Trinidad, the North Sea, Denmark and China.

He graduated from University of Malaya with Bachelor of Science degree in Geology with first-class honours. He also holds a Master of Science degree from Carleton University, Canada and obtained his PhD in Geology in the same university. He also has a Certificate in Corporate Finance from Wharton-Singapore Management University.

Mr Francis Chang, Vice President – Exploration & Production

Mr Francis Chang has more than 35 years of experience with US-based major and independent oil companies. Prior to joining RHP, he worked in major producing basins around the world, particularly in the Asia Pacific region. He held management and executive positions for eight years with GNT International Group, Texas American Resources, and Kerr McGee/Anadarko Petroleum (based in China).

He graduated from the National Taiwan University with a Bachelor of Science degree in Geology in 1976

Mr Samuel Chong, Vice President – Commercial

Mr Samuel Chong has more than 20 years of experience in both upstream and downstream sectors within the O&G industry. He spent 18 years with SPC and was responsible for many successful acquisitions and JVs. He led SPC's E&P asset team and was responsible for managing the company's portfolio of E&P assets.

He graduated from the National University of Singapore with a Bachelor of Business Administration degree in 1991, majoring in finance.

Mr Edwin Tan, Vice President – Legal

Mr. Edwin Tan has more than 18 years of experience in corporate law and was previously the legal counsel at SPC before joining RHP. He was responsible for wide spectrum of projects during his time with SPC. Prior to joining SPC, he was in legal practice with Shook Lin & Bok and Khattar Wong & Partners, which are both in Singapore.

He graduated with a Bachelor of Arts with Honours in Law from the University of Kent in England.

Mr Then Guang Yaw, Vice President – Finance

Mr Then joined RHP in 2006 as an Internal Audit Manager. Prior to joining RHP, he was a financial controller in a company of the RH Group for six years in South America.

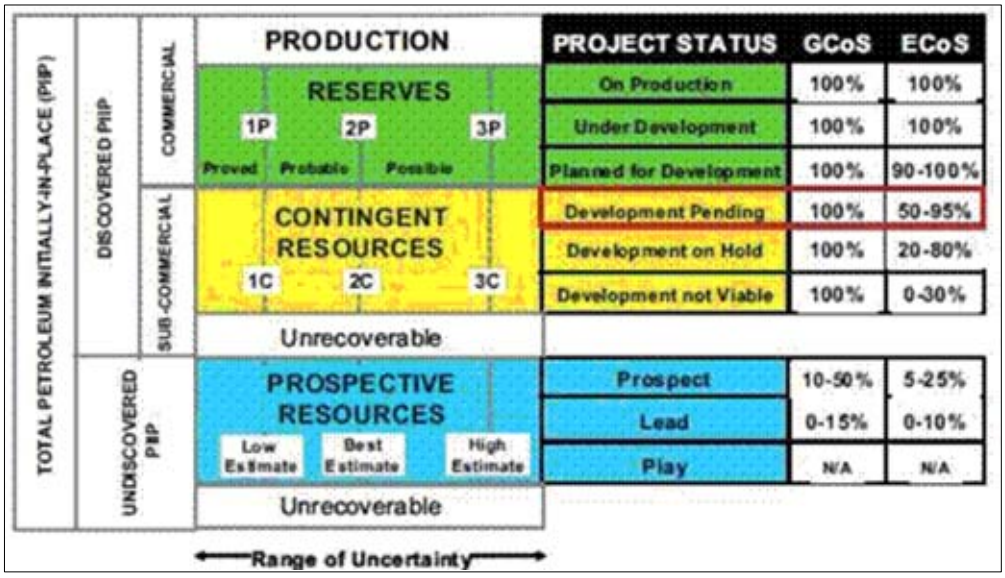
He is a fellow of the Association of Chartered Certified Accountant.

Appendix III – Glossary Of Technical Terms

1C	low estimate scenario of contingent resources
1P	proved reserves
2C	best estimate scenario of contingent resources
2P	proved plus probable reserves
3C	high estimate scenario of contingent resources
3P	proved plus probable plus possible reserves
AAPG	American Association of Petroleum Geologists
ADP	Asset Development Plan
API	American Petroleum Institute
bbl	barrels
BOPD	barrels of oil per day
BTU	British thermal units
Capex	capital expenditure
FPSO	floating production, storage, and offloading vessel
FSO	floating storage and offloading vessel
MBBL	thousands of barrels
MBOE	thousands of barrels of oil equivalent
MBOEPD	thousands of barrels of oil equivalent per day
MBOPD	thousands of barrels of oil per day
MCF	thousands of cubic feet
MCF/MBBL	thousands of cubic feet per thousand barrels
mmboe	million barrels of oil equivalent
MMBTU	millions of British thermal units
MMBTU/MCF	millions of British thermal units per thousand cubic feet
MMCF	millions of cubic feet
MMCFD	millions of cubic feet of gas per day
NRV	net rock volume
NSAI	Netherland, Sewell & Associates, Inc.
ODP	overall development plan
OGIP	original gas-in-place
OHIP	original hydrocarbons-in-place
OOIP	original oil-in-place
OPEX	operating expenses
Pg	probability of geologic success
POD	Plan of Development
PSC	Production Sharing Contract
RB/STB	reservoir barrels per stock tank barrel
SCF	standard cubic feet
SCF/ft3	standard cubic feet per reservoir cubic foot
SCF/STB	standard cubic feet per stock tank barrel
SGg	specific gravity of gas
SP	spill point
SPE	Society of Petroleum Engineers
SPE	Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information promulgated by the SPE
TAC	technical assistance contract
TCF	trillions of cubic feet

Appendix IV – Petroleum Reserves And Resources Classification And Definitions

Industry Risking Factors

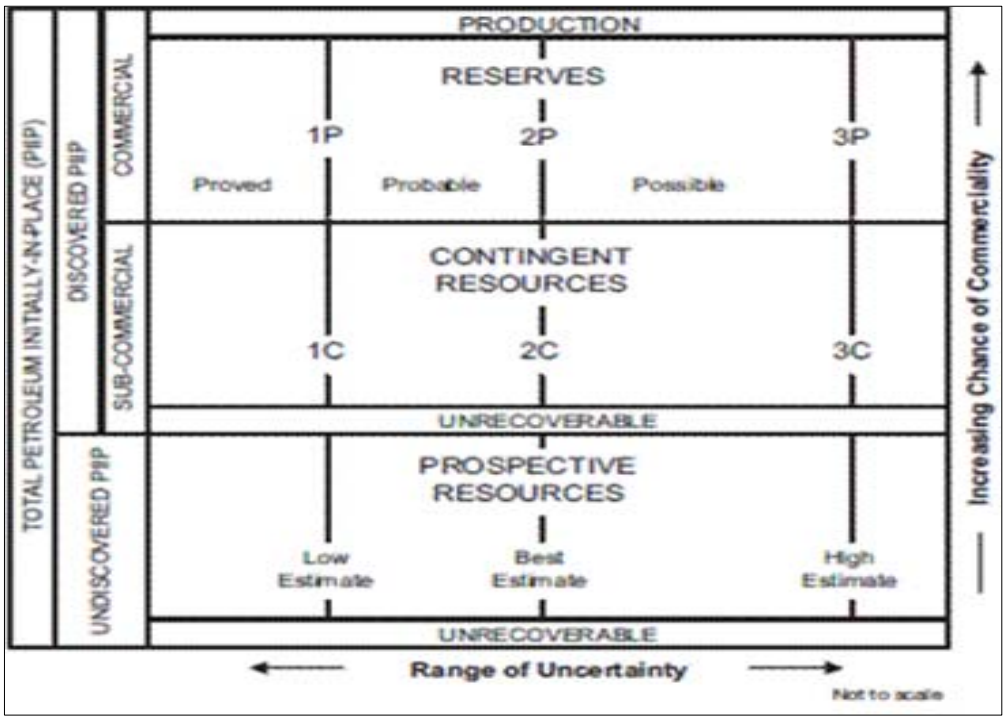


Source: Society of Petroleum Engineers

Petroleum is defined as a naturally occurring mixture consisting of hydrocarbons in the gaseous, liquid, or solid phase. Petroleum may also contain non-hydrocarbons, common examples of which are carbon dioxide, nitrogen, hydrogen sulfide and sulfur. In rare cases, non-hydrocarbon content could be greater than 50%.

The term “resources” as used herein is intended to encompass all quantities of petroleum naturally occurring on or within the Earth’s crust, discovered and undiscovered (recoverable and unrecoverable), plus those quantities already produced. Further, it includes all types of petroleum whether currently considered “conventional” or “unconventional.” Figure 32 is a graphical representation of the Society of Petroleum Engineers (SPE)/World Petroleum Council (WPC)/American Association of Petroleum Geologists (AAPG)/Society of Petroleum Evaluation Engineers (SPEE) resources classification system. The system defines the major recoverable resources classes: production, reserves, contingent resources, prospective resources and unrecoverable petroleum.

Resources Classification Framework



Source: Society of Petroleum Engineers

Range of uncertainty reflects a range of estimated quantities potentially recoverable from an accumulation by a project, while the vertical axis represents the Chance of Commerciality, ie, the chance that the project that will be developed and reach commercial producing status. The following definitions apply to the major sub-divisions within the resources classification:

Total petroleum initially-in-place is the quantity of petroleum estimated to exist originally in naturally occurring accumulations. It includes the quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production plus those estimated quantities in accumulations yet to be discovered (equivalent to “total resources”).

Discovered petroleum initially-in-place is the quantity of petroleum that is estimated, as of a given date, to be contained in known accumulations prior to production.

Production is the cumulative quantity of petroleum that has been recovered at a given date. While all recoverable resources are estimated and production is measured in terms of the sales product specifications, raw production (sales plus non-sales) quantities are also measured and required to support engineering analyses based on reservoir voidage.

Multiple development projects may be applied to each known accumulation, and each project will recover an estimated portion of the initially-in-place quantities. The projects shall be subdivided into commercial and sub-commercial, with the estimated recoverable quantities being classified as reserves as well as contingent resources.

Reserves are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Reserves must further satisfy four criterion: they must be discovered, recoverable, commercial, and remaining (as of the evaluation date) based on the development project(s) applied. Reserves are further categorised in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterised by development and production status.

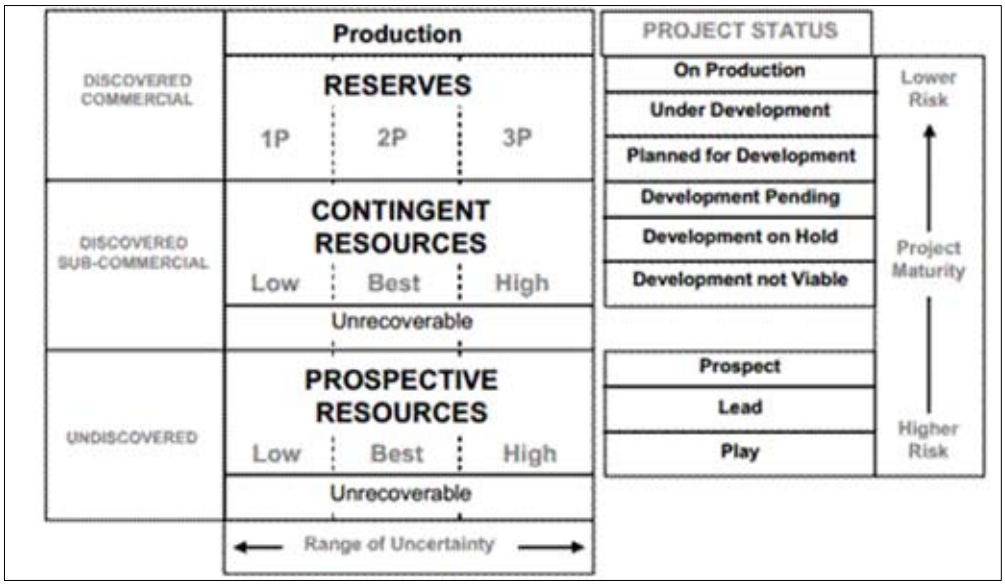
Contingent resources are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations, but the applied project(s) are not yet considered mature enough for commercial development due to one or more contingencies. Contingent resources may include, for example, projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent resources are further categorised in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterised by their economic status.

Undiscovered petroleum initially-in-place is the quantity of petroleum estimated, as of a given date, to be contained within accumulations yet to be discovered.

Prospective resources are the quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated chance of discovery and a chance of development. Prospective resources are further sub-divided in accordance with the level of certainty associated with recoverable estimates assuming their discovery and development and may be sub-classified based on project maturity.

Unrecoverable is the portion of discovered or undiscovered petroleum initially-in-place quantities which are estimated, as of a given date, not to be recoverable by future development projects. A portion of these quantities may become recoverable in the future as commercial circumstances change or technological developments occur. The remaining portion may never be recovered due to physical/chemical constraints represented by subsurface interaction of fluids and reservoir rocks.

Project Status Categories/Commercial Risk



Source: Society of Petroleum Engineers

Recoverable Resources Classes And Sub-Classes

Class/Sub-Class	Definition	Guidelines
Reserves	Reserves are those quantities of petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions.	Reserves must satisfy four criteria: they must be discovered, recoverable, commercial, and remaining based on the development project(s) applied. Reserves are further subdivided in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterised by their development and production status. To be included in the reserves class, a project must be sufficiently defined to establish its commercial viability. There must be a reasonable expectation that all required internal and external approvals will be forthcoming, and there is evidence of firm intention to proceed with development within a reasonable time frame. A reasonable time frame for the initiation of development depends on the specific circumstances and varies according to the scope of the project. While 5 years are recommended as a benchmark, a longer time frame could be applied where, for example, development of economic projects are deferred at the option of the producer for, among other things, market-related reasons, or to meet contractual or strategic objectives. In all cases, the justification for classification as reserves should be clearly documented. To be included in the reserves class, there must be a high confidence in the commercial productability of the reservoir as supported by actual production or formation tests. In certain cases, Reserves may be assigned on the basis of well logs and/or core analysis that indicate that the subject reservoir is hydrocarbon-bearing and is analogous to reservoirs in the same area that are producing or have demonstrated the ability to produce on formation tests.
On Production	The development project is currently producing and selling petroleum to market.	The key criteria is that the project is receiving income from sales, rather than the approved development project necessarily being complete. This is the point at which the project “chance of commerciality” can be said to be 100%. The project “decision gate” is the decision to initiate commercial production from the project.
Approved for Development	All necessary approvals have been obtained, capital funds have been committed, and implementation of the development project is under way.	At this point, it must be certain that the development project is going ahead. The project must not be subject to any contingencies such as outstanding regulatory approvals or sales contracts. Forecast capital expenditures should be included in the reporting entity’s current or following year’s approved budget. The project “decision gate” is the decision to start investing capital in the construction of production facilities and/or drilling development wells.

Recoverable Resources Classes And Sub-Classes (cont'd)

Class/Sub-Class	Definition	Guidelines
Justified for Development	Implementation of the development project is justified on the basis of reasonable forecast commercial conditions at the time of reporting, and there are reasonable expectations that all necessary approvals/contracts will be obtained.	In order to move to this level of project maturity, and hence have reserves associated with it, the development project must be commercially viable at the time of reporting, based on the reporting entity's assumptions of future prices, costs, etc. ("forecast case") and the specific circumstances of the project. Evidence of a firm intention to proceed with development within a reasonable time frame will be sufficient to demonstrate commerciality. There should be a development plan in sufficient detail to support the assessment of commerciality and a reasonable expectation that any regulatory approvals or sales contracts required prior to project implementation will be forthcoming. Other than such approvals/contracts, there should be no known contingencies that could preclude the development from proceeding within a reasonable timeframe. The project "decision gate" is the decision by the reporting entity and its partners, if any, that the project has reached a level of technical and commercial maturity sufficient to justify proceeding with development at that point in time.
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.	Contingent Resources may include, eg projects for which there are currently no viable markets, or where commercial recovery is dependent on technology under development, or where evaluation of the accumulation is insufficient to clearly assess commerciality. Contingent Resources are further categorised in accordance with the level of certainty associated with the estimates and may be sub-classified based on project maturity and/or characterized by their economic status.
Development Pending	A discovered accumulation where project activities are ongoing to justify commercial development in the foreseeable future.	The project is seen to have reasonable potential for eventual commercial development, to the extent that further data acquisition (eg drilling, seismic data) and/or evaluations are currently ongoing with a view to confirming that the project is commercially viable and providing the basis for selection of an appropriate development plan. The critical contingencies have been identified and are reasonably expected to be resolved within a reasonable time frame. Note that disappointing appraisal/evaluation results could lead to a reclassification of the project to "On Hold" or "Not Viable" status. The project "decision gate" is the decision to undertake further data acquisition and/or studies designed to move the project to a level of technical and commercial maturity at which a decision can be made to proceed with development and production.
Development Unclarified or on Hold	A discovered accumulation where project activities are on hold and/or where justification as a commercial development may be subject to significant delay.	The project is seen to have potential for eventual commercial development, but further appraisal/evaluation activities are on hold pending the removal of significant contingencies external to the project, or substantial further appraisal/ evaluation activities are required to clarify the potential for eventual commercial development. Development may be subject to a significant time delay. Note that a change in circumstances, such that there is no longer a reasonable expectation that a critical contingency can be removed in the foreseeable future, for example, could lead to a reclassification of the project to "Not Viable" status.

Recoverable Resources Classes And Sub-Classes (cont'd)

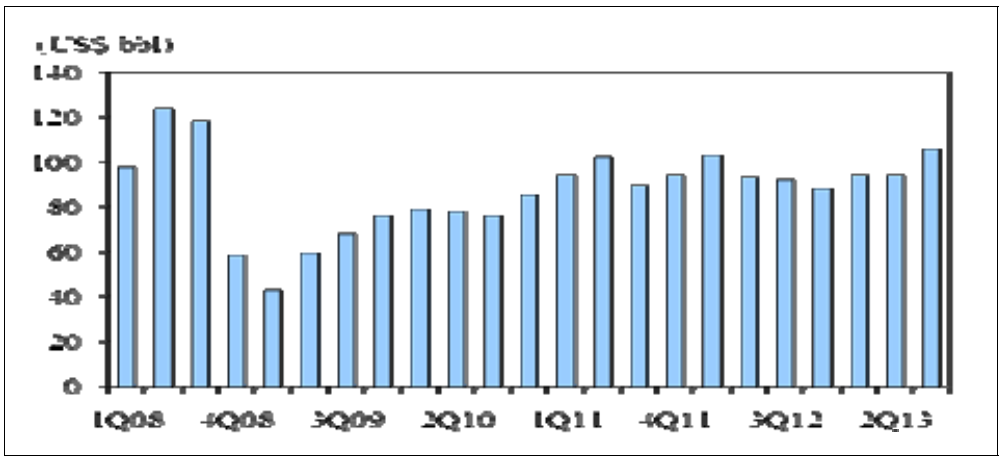
Class/Sub-Class	Definition	Guidelines
Development Not Viable	A discovered accumulation for which there are no current plans to develop or to acquire additional data at the time due to limited production potential.	The project "decision gate" is the decision to either proceed with additional evaluation designed to clarify the potential for eventual commercial development or to temporarily suspend or delay further activities pending resolution of external contingencies. The project is not seen to have potential for eventual commercial development at the time of reporting, but the theoretically recoverable quantities are recorded so that the potential opportunity will be recognized in the event of a major change in technology or commercial conditions. The project "decision gate" is the decision not to undertake any further data acquisition or studies on the project for the foreseeable future.
Prospective Resources	Those quantities of petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.	Potential accumulations are evaluated according to their chance of discovery and, assuming a discovery, the estimated quantities that would be recoverable under defined development projects. It is recognized that the development programs will be of significantly less detail and depend more heavily on analog developments in the earlier phases of exploration.
Prospect	A project associated with a potential accumulation that is sufficiently well defined to represent a viable drilling target.	Project activities are focused on assessing the chance of discovery and, assuming discovery, the range of potential recoverable quantities under a commercial development programme.
Lead	A project associated with a potential accumulation that is currently poorly defined and requires more data acquisition and/or evaluation in order to be classified as a prospect.	Project activities are focused on acquiring additional data and/or undertaking further evaluation designed to confirm whether or not the lead can be matured into a prospect. Such evaluation includes the assessment of the chance of discovery and, assuming discovery, the range of potential recovery under feasible development scenarios.
Play	A project associated with a prospective trend of potential prospects, but which requires more data acquisition and/or evaluation in order to define specific leads or prospects.	Project activities are focused on acquiring additional data and/or undertaking further evaluation designed to define specific leads or prospects for more detailed analysis of their chance of discovery and, assuming discovery, the range of potential recovery under hypothetical development scenarios.

Source: Society of Petroleum Engineers

Appendix V – Oil Price Outlook

Oil prices are supported by geopolitical tensions. The prices of WTI crude oil and Brent oil held steady above the US$104/bbl and US$111/bbl over the past one month respectively, mainly due to the political tensions in Egypt and Syria. Meanwhile, the stabilising economy in China and the easing of recession in European economies also helped to boost crude prices. In our view, the geopolitical challenges as well as the modest demand growth would continue to support crude oil prices at above US$90/bbl in 2014.

Average Oil Price



Source: Bloomberg

Asia Pacific to drive global oil demand. Since 2009, global oil demand is on a rising trend. According to Wood Mackenzie, oil demand is estimated to increase from 27.7b bbl in 2013 to 29.8b bbl in 2018, translating to a 1.4% average annual growth. Particularly, demand growth from Asia Pacific will surpass the total increase in demand from the rest of the regions, with 1.2b bbl of additional demand expected from 2013 to 2018, translating to an annual growth of 2.5%. China and Japan are currently the largest oil demand centres in Asia, but oil demand from India is expected to surpass that from Japan by 2015, driven by the transport sector.

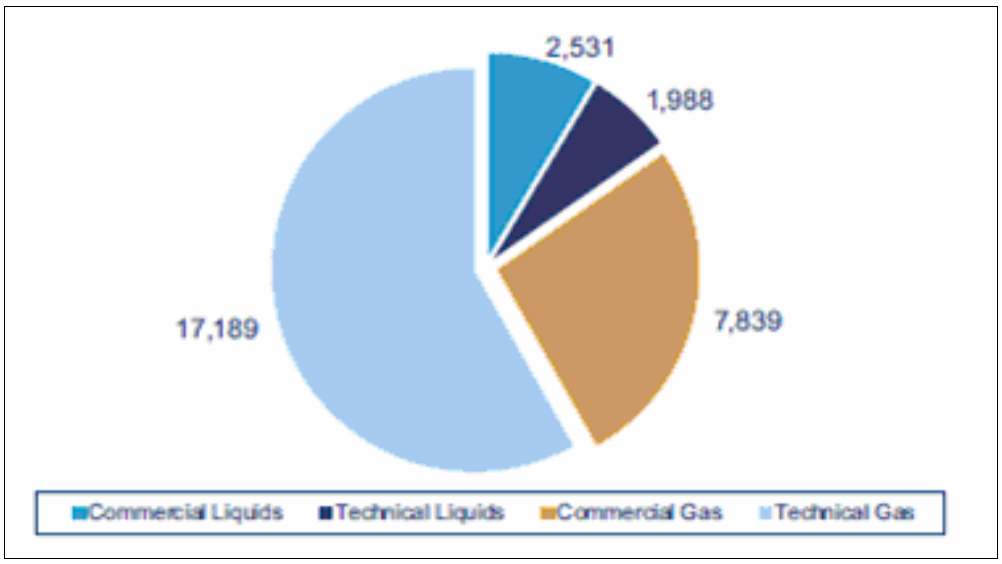
Closer look at Southeast Asia regional O&G market. Southeast Asia holds about 60.9b bbl of O&G reserves, according to Wood Mackenzie. The reserves are mainly in Indonesia and Malaysia, accounting for 48% and 25% respectively. About 80% of the reserves are gas, signalling the production from Southeast Asia would be bias towards gas going forward. Southeast Asia's oil demand is on an uptrend since 2008, with Indonesia being the largest consumption country; accounting for about 42% of total demand of 1.6b bbl in 2012. On the other hand, Southeast Asia countries consumed about 810m bbl (+6.5% yoy) in 2012.

Appendix VI – Indonesia Overview

Oil production declining in Indonesia. Indonesia's recent hydrocarbon industry has highlighted two dominant trends - declining oil production and rising gas output. Since 2005, the Indonesian government has increased the number of new exploration blocks on offer across the country in a bid to spur a wave of new discoveries. So far, no major success stories have emerged as the average size of hydrocarbon discoveries in Indonesia has remained low since early-2000. However, with an increasing number of frontier exploration wells in West Papua set to be drilled in 2013-14, major discoveries could still be on the agenda.

Mainly gas reserves. According to Wood Mackenzie, Indonesia has 29,547mmboe of remaining commercial and technical oil & gas reserves. Gas accounts for a significant portion of Indonesia's petroleum reserves (contributing 85% on a commercial and technical basis, and 76% on a commercial basis), and continues to be a primary energy source for Indonesia. The largest remaining gas reserves in Indonesia are in Sumatra, West Papua, Natuna Sea and East Kalimantan.

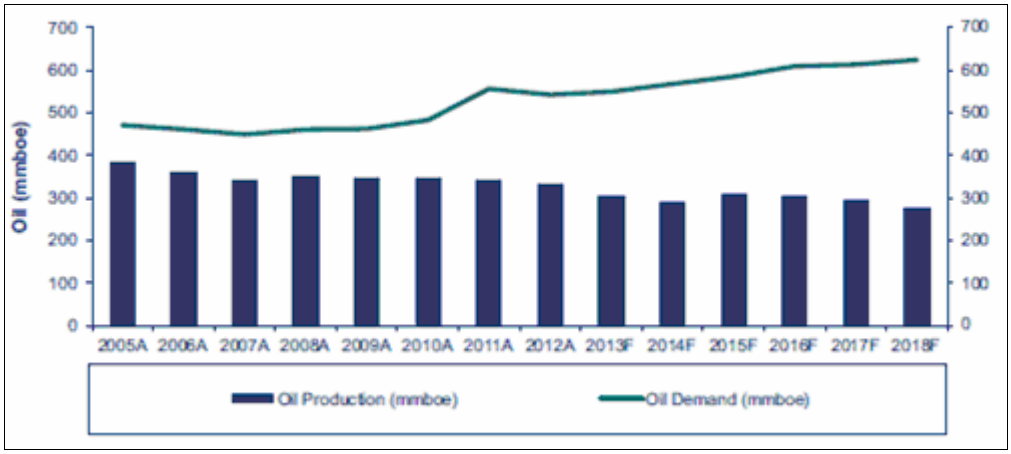
Indonesia – Commercial And Technical Oil & Gas Reserves (mmboe) – 2012



Source: Wood Mackenzie

Indonesia has been a net importer of oil since 2004. As smaller new oil developments are struggling to replace output from mature oilfields, Indonesia's oil production has been declining since 2004. The trend is set to continue, partially offset by the ramp-up of production from the 160,000bpd Banyu Urip field from 2014. However, there are few other new oil developments of scale currently planned in the country.

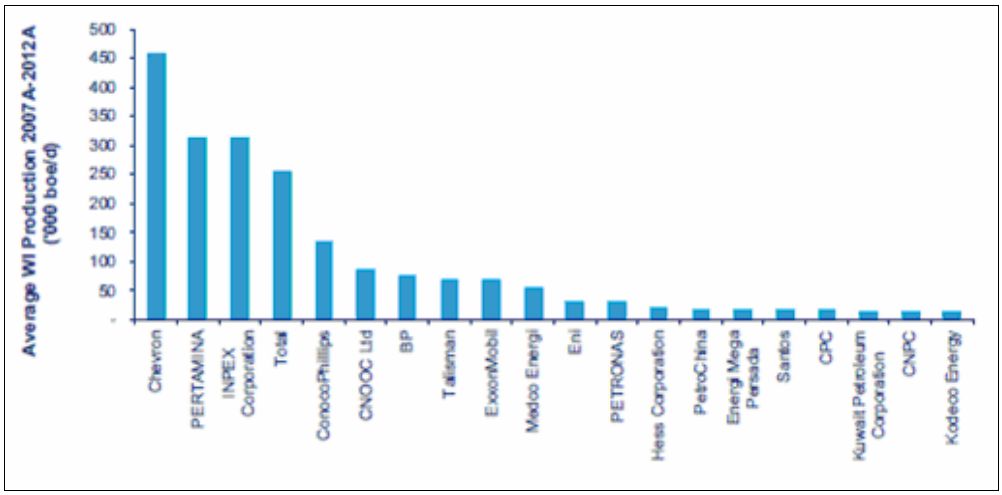
Indonesia – Oil Supply And Demand



Source: Wood Mackenzie

Chevron is the leading producer in Indonesia with 457,000boed of average working interest production in 2007-12, driven by its operations in the CPI Area, which includes the large Minas and Duri oil developments. Other major players include INPEX and Total, which have significant production through the Offshore Mahakam PSC that supplies the majority of the gas feedstock into the Bontang LNG facility.

Indonesia – Average Average WI Production, 2007-12



Source: Wood Mackenzie

As of 18 October 2013, the analyst and his/her immediate family do not hold positions in the securities recommended in this report.

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MCI (P) 122/03/2013
RCB Regn. No. 198700235E