



# PNG Gas Commercialisation Update

1 February 2007



# PNG Gas Commercialisation Update

## ➤ Summary

- Strong interest from credible gas buyers and developers wishing to purchase gas or develop projects in PNG
- Need to re-evaluate PNG Gas Project based on APC withdrawal
- Undertaken comprehensive review of gas development options which have shown tangible projects with greater return and value potential than PNG pipeline
  - LNG Projects
  - Petrochemicals
  - Gas sales to resource projects
  - The world has caught up with and passed the PNG Gas Project



# PNG Gas Commercialisation Update

## → Summary

- Targeting projects with access to world gas and liquids pricing
  - Material increase in core pricing over last 2 years
  - Strong and sustained demand
- Strategic importance of being front runner in LNG and infrastructure development
- Major boost to PNG economy, with significant in-country development rather than pipeline export
- PNG has pre-requisites for major gas developments
  - Major resource base
  - Credible LNG developer partners
  - Attractive fiscal regime
  - Competitively priced labour
  - Substantial existing infrastructure





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## ➔ Development Options

➔ Kutubu Field is a key strategic resource and infrastructure hub. Value to all developments. Number of options being evaluated:

➔ Join ExxonMobil in Hides/Angore based development

➔ Join with BG for Kutubu led LNG development

➔ Commit resource to petrochemicals development  
Methanol/Fertiliser

➔ Analysing most attractive option for OSH and JV, with decision by mid 2007



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## → Development Options

- OSH and BG engaged in LNG feasibility study through second half of 2006
- Reviewed capital costs, project structure, development issues
- Reviewed initial 3-4 mtpa based on Kutubu resource plus other fields in OSH portfolio
- Studies indicate a robust potential project (with capex contingency)
- Target Development for 1st gas 2012



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## ↳ Development Options

- ↳ BG very credible LNG company
- ↳ Proven development record
- ↳ Proven marketer, with flexibility of offtake
- ↳ Discussions continuing on project structure and entry conditions
- ↳ Must be competitive with other options





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## → Development Options

- ExxonMobil recently completed analysis on LNG option using Hides/Angore as a core resource
- Have approached Kutubu and Juha field groups to join in the potential development
- Targeting moderate size single train, subject to final resource commitment, with 1<sup>st</sup> gas 2013
- ExxonMobil has excellent LNG development credentials



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## ↳ Development Options

- ↳ Mature opportunities to supply gas to Petrochemicals and Fertiliser Plant in Port Moresby
- ↳ Production range 90PJ/pa to 136PJ/a
- ↳ Product price with linkage to international energy markets
- ↳ Strong fit to Kutubu field resource base
- ↳ Largely controlled by Kutubu Group
- ↳ Targeted delivery of 1<sup>st</sup> gas 2011





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## → Way Forward

### → LNG

### → ExxonMobil led Project

- Negotiations for Project entry with Kutubu and Juha JV's

- Negotiations with PNG Government on key fiscal issues

### → Kutubu led Project

- Negotiations with BG on project structure and entry conditions



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- ➔ Petrochemicals
  - ➔ Negotiations on contract terms and completion of final feasibility work
  - ➔ Land access arrangements
- ➔ Other Options being reviewed
- ➔ Targeting decision on which final project(s) to pursue by mid 2007



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## → Comparisons

→ Analysis indicates value and return ranking

→ LNG

→ Petrochemicals

→ Pipeline

→ Important access to world energy markets (direct or indirect)

→ Scale of investment and return

→ In-country development in PNG significantly increased through LNG and Petrochemicals developments

→ Significant expansion of infrastructure and involvement of expanded field portfolio





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## → Comparisons

### → Australian East Coast Gas Market constrained

- Significant discount to world prices
- Clear need for further gas supply and diversification

### → Gas prices will rise but with natural cap due to abundant supplies of coal as energy source

### → Ability to energy switch gas to coal if prices get too high

### → Environmental conditions



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- **Other complementary activities**
  - Significant expansion of appraisal and exploration programme for gas
    - Juha wells
    - Kimu/Korobosea
    - Barikewa
    - Mogulu
  - Aimed at increasing contractable gas
  - Targeting early Juha development, subject to resource delineation
  - Significant remaining production potential in existing oil fields and exploration
  - Increasing contribution from Middle East operations