

Oil sands resolution and response

A group of members requisitioned the circulation of a special resolution under the provisions of Section 338 of the Companies Act 2006. The resolution, the company's response and the supporting statement from the requisitionists are set out below.

"Special Resolution

That in order to address our concerns for the long term success of the Company arising from the risks associated with the Sunrise SAGD Project, we as shareholders of the Company direct that the Audit Committee or a Risk Committee of the Board commissions and reviews a report setting out the assumptions made by the Company in deciding to proceed with the Sunrise Project regarding future carbon prices, oil price volatility, demand for oil, anticipated regulation of greenhouse gas emissions and legal and reputational risks arising from local environmental damage and impairment of traditional livelihoods. The findings of the report and review should be reported to investors in the Business Review section of the Company's Annual Report presented to the Annual General Meeting in 2011."

The board **OPPOSES** this Resolution for the reasons given below:

BP response

The BP board welcomes the opportunity to respond to Resolution 25 which it **OPPOSES**.

BP's decision to create the joint venture with Husky and to consider investing in the Sunrise steam assisted gravity drainage (SAGD) project ('Sunrise') is aligned to BP's upstream growth strategy. Development of Canadian oil sands is a competitive source of renewal, leverages BP's reputation and capability in frontier technology development and creates value by integrating heavy oil and BP's refining business in North America. This strategy has been supported by the board and is based upon BP's view of the global energy supply and demand balance over the next 20 or 30 years, the rapid evolution of technology for the exploitation of oil sands and access to additional value creation through integration to BP's integrated fuel value chain.

The company has clear policies and processes for all its investment decisions. These, together with how the company evaluates risk, have been described in both the Annual Report and Accounts and the Sustainability Review. The same standards are applied to BP and partner-operated investments. These processes are subject to board review, and project delivery performance is subject to regular audit.

All investment proposals are evaluated using a consistent set of economic assumptions, including carbon and oil pricing; are tested against multiple sensitivities, and undergo rigorous assessment of financial and non-financial risk. BP has a group defined practice on environmental matters which requires a thorough review of the environmental issues and opportunities associated with any investment. The goal of this practice is to ensure that BP operates in a manner which is environmentally responsible, reduces waste, emissions and discharges and uses energy efficiently.

Whereas in this case, the investment is in a joint venture and involves the company in a non-operating role, due diligence takes place prior to entering any arrangement. Care is taken to ensure that appropriate policies, standards and practices are adopted. Given the strategy to build a material oil sands position in the BP

portfolio and the well defined and tested processes for investment decisions, your board believes strongly that there is no reason to select Sunrise for special review by a board committee. Sunrise is no different to any other BP investment decision. BP recognizes the concerns of shareholders but believes these are being addressed and sets out in further detail below how we are meeting these concerns. The board therefore recommends you vote **AGAINST** this resolution.

Operational risks

Recovery process

Canada's oil sands represent a significant, proven and secure source of oil supply for North America. Canada's oil sands are one of the largest known oil resources¹, second only to Saudi Arabia, with the potential to sustain substantial production levels for many decades.

Canadian oil sands, including Sunrise, are located in Northern Alberta. 20% of oil sands resources are at depths of less than 200ft and can be produced by mining. The remaining 80% is too deep to be mined and is being recovered using in situ processes.

SAGD is an in situ process where a horizontal producer well is located near the bottom of the reservoir. Steam is injected into a second horizontal well located approximately five metres above and parallel to the producer. The steam heats the bitumen allowing it to flow along the condensed steam to the lower well for production. Natural gas is the fuel source for the production of steam. Currently, in situ projects account for about 45% of overall oil sands production, with mining accounting for the remainder.² In situ SAGD, which will be used at Sunrise, is a process where technological advancement can be readily applied which will drive improvement in the production processes, and offers potential for improvement in efficiency and emissions. BP will not pursue Canadian oil sands mining projects.

Carbon pricing and potential regulation of greenhouse gas (GHG) emissions

BP incorporates an internal cost of carbon, which is materially above the current market price, into the evaluation of new investments irrespective of whether it is required by local regulation. This ensures that the company is aware of the potential impact of carbon price on investment viability, and prepares our business for a time when regulation leads to carbon being priced. It also drives innovation in energy efficiency and emissions reductions, and ensures that no one type of resource development is favoured over another.

GHG emissions

Recent independent studies which measure emissions from production through to consumption found the GHG emissions from oil sands are 5 to 15% higher than the average crude consumed in the United States.³ The same studies also note that GHG emissions from oil sands can be higher, equal to, or lower than conventional crude oils given that there is a wide range of emissions in both oil sands and conventional crudes. In situ diluent bitumen which is the product of Sunrise is at the low end of the 5 to 15% range.⁴

¹ Government of Alberta, Canada, 'Oil Reserves and Production' (2007).

² Canadian Association of Petroleum Producers, 2009.

³ Jacobs Consultancy, 'Life Cycle Assessment Comparison for North America and Imported Crude' (2009); and IHS Cambridge Energy Research Associates, 'Growth in the Canadian Oil Sands: Finding the New Balance' (2009).

⁴ Ibid.

Greenhouse gas reduction

In the short to medium term, GHG emissions can be reduced through a collection of steps aimed at enhanced energy efficiency:

1. At Sunrise the recovered bitumen will be mixed with a diluent and pumped to the BP refinery. The need for a two-stage process of upgrading and then refining is avoided and will reduce the GHG produced.
2. There are significant energy efficiency opportunities from reservoir management principally through the reduction of the steam oil ratio ('SOR') by optimising well placement and the pressure and temperature at which the reservoir operates. Best-in-class SOR has already moved from six in early developments to nearly two today, with further improvement possible through the application of technology. Co-generation to produce steam is being evaluated.

Carbon capture and storage (CCS) is a longer-term mitigation opportunity. The economics are currently challenged compared with the measures described above, and there is a lack of required infrastructure. BP is participating in a number of industry initiatives to progress CO₂ capture, transportation and storage. The first phase of Sunrise has been designed to allow future CCS retrofit.

Water

Water plays an important role in the development of in situ projects. For Sunrise, no water from the Athabasca River or its tributaries will be used for operations nor will any process water be discharged into that river. 90% of the water acquired for steam generation will be continuously recycled and the 7-8% required to make up operational losses of the water cycle will be taken from underground non-potable aquifers. The company intends to improve the recycle rate. The project is being designed so that there is no adverse impact on ground or surface water systems. SAGD projects do not involve tailings ponds.

Land

The surface footprint of Sunrise is being carefully managed to minimize impact on the eco system, animal corridors and sensitive areas. Constraints mapping has been completed which has allowed the Sunrise team to propose a development which avoids sensitive areas and mitigates any impact.

The resource will be developed over the next 40-50 years with a total physical footprint of some 5% of the lease area. 17% of this footprint will involve previously disturbed areas. At any given time the actual surface disturbance of Sunrise should not exceed 3% of the lease area. Well sites have been designed for multiple well pairs using horizontal wells to minimize surface disturbance and avoid natural water bodies. Regulation requires a reclamation plan to be put in place prior to project approval. All disturbed lands will be returned to a land capability equivalent or greater to its condition prior to development.

Local communities

Several local aboriginal communities have expressed interest in the project as local stakeholders. These include the Athabasca Chipewyan First Nation, Community of Fort McKay (including the First Nations and Métis Local 63), the Mikisew Cree First Nation and Métis Local 1935.

In 2003 Husky started consultation activities with stakeholders through public open houses and face-to-face meetings with interested parties. This consultation process continues and

project information is being shared with stakeholders through further meetings and community-based advisory committees where appropriate, as well as project updates and newsletters.

Bilateral agreements with respect to Sunrise have been put in place between Husky and the three First Nations groups and a memorandum of understanding has been established with Métis Local 1935. These agreements provide a framework for ongoing consultation activities related to the project and outline appropriate mitigation measures and economic development initiatives where applicable. Continued consultation throughout the life of the project is key such that feedback and enquiries can be listened to and open, transparent and respectful lines of communication and mutual understanding can be built.

Husky will be working to facilitate meaningful business and economic benefits for local and aboriginal communities. Husky continues to hold discussions with various groups which represent business interests and aboriginal business owners with Contractor Open Houses, Procurement Workshops and participation in regional business associations being planned.

Market risks

Supply and demand

World energy demand is projected to increase by around 40% between 2007 and 2030 with fossil fuels still satisfying as much as 80% of that demand by the end of that period.⁵ A growth in demand for power as developing countries industrialize and an increase in energy consumption for buildings, the service sector and transportation is behind this trend. Meeting this demand will require investment at more than \$1 trillion a year for the next 20 years; this is against a background of an incremental improvement to energy efficiency of 1.5% a year.⁶

In satisfying this demand, the competing forces of economic development, energy security and climate change will have to be met. BP is well placed to address these challenges responsibly by applying its experience and established practices and leveraging its technology and capability. No single technology or resource solution can meet these challenges. All available sources of energy will be required.

Meeting the increase in demand for oil and replacing supplies from mature fields will require the industry to find 60 million barrels a day of new production⁷ – equivalent to almost double the level of output from the entire Middle East today. Replacing supply and meeting demand is a very material challenge facing the industry with oil sands playing an important role.

Domestic oil production in the United States has declined by 35% since 1985.⁸ Oil sands will be a key resource over the coming years to meet US demand and be an important element of the energy security equation in North America.

Oil price volatility

The company recognizes the impact of oil price volatility and so ensures that it undertakes robust testing of its projects and investments against a range of oil price scenarios. As for other BP investments, the Sunrise project has undergone this testing as part of the wider projects approvals process.

⁵ IEA, 'World Economic Outlook' (2009).

⁶ Ibid.

⁷ Ibid.

⁸ BP, 'Statistical Review of World Energy' (2009).

Project decision process

BP has an established investment approvals process which provides a clear framework for decision making. Adherence to this process is mandatory for major projects. It has the following features:

- All projects are required to use a common approach for describing the strategic drivers, the key performance targets and evaluating the non-technical and reputational risks to the project. Economic indicators for the project are described together with information on greenhouse gas emissions.
- Proposals are considered against standard quantitative processes where alternative outcomes are compared. The company's investment appraisal assumptions provide reference data to model the economic impact of varying oil and gas prices, carbon prices and GDP growth forecasts.
- A range of functions within the company are required to give their assurance on risk and other issues relating to the project including health and safety, security and environmental issues. From an environmental aspect, BP has a group-defined practice on environmental matters which is a detailed specification of the environmental issues which are taken into account in determining whether or not to proceed with a project. The goal of the standard is to ensure that BP operates in an environmentally sound fashion by carrying out business in a manner which is environmentally responsible, reduces waste, emissions and discharges, and uses energy efficiently.

In Sunrise, BP has secured appropriate rights over all substantive business, policy and investment decisions including project approvals, capital and operating spend, work plans, and regulatory applications for agreements with third parties. The operating partners are obligated to deliver high standards of operating, ethical, and environmental performance and are subject to audit.

Conclusion

The development of Canadian oil sands in BP's portfolio:

- Provides a competitive source of hydrocarbon renewal both in terms of the range of oil prices and the price of carbon at which the project is viable.
- Creates additional value through the integration with the BP refineries in North America.
- Is to be undertaken using the steam assisted gravity drainage in situ process, which has the potential for improvement in efficiency through the application of BP's technology. BP will not pursue Canadian oil sands mining projects.
- Is to be sanctioned with board oversight using established processes and undertaken in a manner which fulfils BP's commitment to sustainability by adhering to BP's environment and social practice for new projects, which includes water management, land use and community relations.

Supporting statement from requisitionists

In December 2007, BP p.l.c. (the 'Company') announced a reversal in its oil sands policy by entering into a \$5 billion asset swap with Husky Energy whereby the Company will exchange 50% of its Toledo refinery for 50% of Husky's sunrise project (the 'Sunrise Project'). Given that the Company disposed of all of its oil sands assets in 1999 believing as Regional President Joseph Bryant said at the time that '(t)he growth potential of these properties in Canada did not compete with the potential of some of our other oil operations worldwide'⁹ and as CEO John Browne stated that '(t)hey are much higher cost (...) (i)t must be a straight judgment about costs and returns'¹⁰, this reversal was likely motivated by the significantly more bullish market for oil since 2004.

Concerns regarding: (i) the carbon intensity of the Sunrise Project at a time of anticipated regulation and pricing of greenhouse gas (GHG) emissions; (ii) forecasted carbon prices; (iii) the limitations and cost of emissions mitigation; and (iv) local environmental and livelihoods issues, mean that shareholders require assurances regarding the assumptions made by the company in deciding to proceed with the Sunrise Project about: (i) future carbon prices; (ii) oil price volatility; (iii) demand for oil; (iv) anticipated regulation of GHG emissions; and (v) other legal and reputational issues.

Operational Risks

At a time of growing international consensus regarding the need to regulate and price GHG emissions, there is a risk of significant costs arising from the Sunrise Project. It involves a method of oil production¹¹ that is among the most energy and carbon intensive of any used in the oil industry producing on average three times the GHG emissions of conventional production.¹²

The International Energy Agency has suggested the price of carbon emissions in industrialised countries will need to be \$50 per tonne in 2020 rising to \$110 by 2030 adding \$5 and \$11 respectively to the cost of producing a barrel of average oil sands.¹³ As the Sunrise Project is likely to be at the high end of the carbon intensity scale among oil sands projects the added cost is likely to be higher than the average.

A recent report raises concerns regarding the effectiveness of Carbon Capture and Storage (CCS) to address the GHG emissions of oil sands operations stating that, 'the overall reductions from upstream operations could be in the 10% to 30% range at the best process locations by 2020 and the 30% to 50% range industry wide by 2050'.¹⁴

⁹ Dow Jones News Service, 10 June 1999. Proposed BP Amoco Asset Sale Involves All Cdn Oil Assets.

¹⁰ International Petroleum Finance, 8 November 2004. BP Chief Confident Best Is Yet To Come.

¹¹ Steam Assisted Gravity Drainage (SAGD).

¹² Charpentier, A.D., Bergerson, J.A., and MacLean, H.L. 'Understanding the Canadian oil sands industry's greenhouse gas emissions' in Environ. Res. Lett. January-March 2009.

¹³ International Energy Agency, World Energy Outlook 2009.

¹⁴ WWF-UK and The Co-operative Financial Services, October 2009. Carbon Capture and Storage in the Albertan Oil Sands: A Dangerous Myth.

The cost of these marginal reductions for SAGD projects is estimated at \$200-290 per tonne. This compares unfavourably with estimates for CCS for coal-fired generation at \$60 to \$150 per tonne.¹⁵

There are also potential costs from land reclamation and costs and delays from potential litigation brought by local communities, increasingly affected by pollution, deforestation and wildlife disturbance, claiming breaches of the treaty rights protecting their traditional livelihoods.¹⁶

Market Risks

Given its high capital intensity, the profitability of the Sunrise Project depends on sustained high oil prices. Independent studies have cast doubt on the reliability of such market conditions suggesting that high oil prices constrain oil demand through economic contraction and consumer behaviour change.

Cambridge Energy Research Associates suggest that when oil prices rise above \$100/bbl GDP is constrained and alternatives gain increasing market share.¹⁷ Douglas Westwood analysing recessions since 1973 observed that when oil consumption breaches 4% of US GDP the US enters recession. They calculated that the oil price at which that happens is \$80/bbl at 2008 prices.¹⁸

Deutsche Bank suggests that over the next five years, increasingly tight supply will push oil prices higher triggering a move to much more efficient oil use through technology switching. This may reach a point at which efficiency gains overtake demand growth and a peak in global oil demand is reached. In their opinion, "The value of high capex intensity, long lead time, currently undeveloped oil, such as undeveloped Canadian heavy oil sands, oil shales, and Brazilian pre-salt and other ultra-deepwater plays could be far lower than the market currently expects."¹⁹

Long-term demand forecasts made by the IEA, OPEC and the US government have fallen by some 20% since 2006.²⁰ The IEA's most recent demand forecast for 2030 has been revised down from 116mb/d in its 2007 report to 105mb/d under its current reference scenario (in which climate change continues unchecked). Its more realistic 450ppm scenario puts 2030 demand at 89mb/d.²¹

Oil price volatility, resulting from both the economy's low tolerance to high oil prices and the drive to constrain oil demand to prevent climate change and enhance energy security, threatens the profitability of the Sunrise Project. Shareholders require assurances regarding the assumptions underpinning the Sunrise Project.

¹⁵ Ibid.

¹⁶ Alphonse Lameman and the Beaver Lake Cree Nation v Her Majesty the Queen Right of the Province of Alberta and the Attorney General of Canada.

¹⁷ Dawn of a New Age: Global Energy Scenarios for Strategic Decision Making-The Energy Future to 2030; Cambridge Energy Research Associates 2006 Multi-client Study. Cited in Macro-Economic Limits to Oil Price and 'non-conventional' Oil. Innovest Strategic Value Advisors. February 2009.

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¹⁸ Douglas Westwood Energy Business Analysts, 22 June 2009. Oil: What price can America afford? Available at: http://www.dw-1.com/files/files/438-06-09_-_Research_Note_-_Oil_-_What_Price_can_America_Afford_-_DWL_website_version.pdf

¹⁹ Deutsche Bank Global Market Research, 04 October 2009. The Peak Oil Market: Price Dynamics at the end of the oil age. P.5

²⁰ See OPEC World Oil Outlook, July 2009, p.74

²¹ International Energy Agency, World Energy Outlook 2009.