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Sustainability of Banpu growth strategy strengthened by energy technology and integration initiatives

Conventional energy business to be balanced and integrated with new energy businesses.

Banpu acquires foothold in upstream shale gas operation in largest gas field in US.

Former CEO of a leading energy conglomerate, Mr Anon Sirisaengtaksin, appointed as director.

Banpu Public Company Limited (Banpu), a pioneering Asian energy company, announces its intention to put greater strategic emphasis on new energy technologies, lower environmental-impact fuels and supply chain integration synergies. In addition to high-efficiency, low-emissions ('HELE') power and renewable energy, potential areas for new investment will now include 'unconventional' upstream gas production, energy supply chain management and smart energy systems. As a first step into unconventional gas, Banpu has made an investment in a shale gas operation in the Marcellus Shale, serving the high-demand markets of the US East Coast. To support its upstream gas strategy, Banpu has appointed Mr Anon Sirisaengtaksin as a director and executive advisor. Mr Sirisaengtaksin, former CEO of two PTT group companies brings over 30 years oil and gas sector experience.

Ms Somruedee Chaimongkol, Chief Executive Officer of Banpu (Banpu) spoke today at the company's annual general meeting (AGM) about the new strategy: "Banpu has been conducting an in-depth review since the end of last year. Our objective is both a 'smarter' and 'greener' strategy that maximizes long term shareholder and stakeholder value by leveraging our unique skills and strengths while mitigating risks and prioritizing principles of sustainability. Based on this review we are already starting to take some important first steps. While we will continue to strengthen our conventional energy business, we will also begin to balance this with a greener new energy business. Our move into solar photovoltaic power in Japan – and now into shale gas in the US are our first steps towards achieving this transformation. These investments put Banpu directly into the mainstream of the global energy revolution. We envisage Banpu evolving into a new kind of energy player: an Integrated Energy Supplier, fostering both vertical and horizontal supply chain synergies. It is only by managing the supply chain from upstream to downstream that we can ensure reliability of supply, continuous innovation, minimum socio-environmental impact and maximum economic synergy: the key building blocks for sustainability."



Our sustainability strategy will entail value-creating initiatives at each level of the energy supply chain. Upstream, Banpu will focus initially on unconventional gas investment in North America. Midstream, Banpu is evaluating synergies around managing fuel procurement for its own coalmining operations, with the possibility of developing this into a regional energy supply chain management business. Downstream, apart from its HELE and renewables-based power investments via Banpu Power, the company is also assessing the potential of a smart energy business. 'Smart energy' systems are defined as integrated solutions combining decentralized renewable energy sources, energy storage and information systems to optimize energy supply for consumers. Business plans around these themes and preliminary budgeting will be completed by the third quarter of 2016.

Ms. Chaimongkol explained how the new areas for expansion will leverage existing Banpu skillsets: "We will aim to build on our extensive knowledge of the power sector to develop a smart energy systems business. Banpu has been a pioneer in the power sector before and we are now innovating again. We also intend to strengthen our logistics, marketing, blending and trading skills around coal and then bring these skills to synergistic and parallel commodity flows. And by venturing into unconventional shale gas we will be stretching our upstream extractive skills into a new paradigm. It is in our DNA to embrace new technologies and new geographies. We have demonstrated our abilities in this regard many times before in our long history. For example when we first took positions in mines in China a decade ago we had virtually no underground experience at all, and very little experience in China. Now we have mastered underground mining and are achieving impressive productivity improvements in a range of different underground conditions in China and Australia."

As the first step in its new upstream gas strategy: Banpu has acquired a 29.4% stake in the Chaffee Corners Joint Exploration Agreement (JEA) which runs a low-cost unconventional operation in the northeast section of the Marcellus Shale play in Pennsylvania, for US\$112 million. Marcellus is the largest source of natural gas in the United States, and one of the biggest in the world.



Banpu's net interest in the Chaffee Corners JEA is equivalent to proved (or 'P1') reserves of 156 billion cubic feet of dry natural gas and target net output of around 21 million cubic feet per day for 2016. The gas is sold entirely into the US domestic market, mainly for power generation. The JEA is 65.4%-owned and operated by Talisman, a leading unconventional US-based player, which produces over 400 million cubic feet per day from the Marcellus play. The Marcellus Shale is estimated to hold around 85 trillion cubic feet in proved reserves and accounts for around one-fifth of the country's total gas production. Producers in the Marcellus field benefit from low transportation costs and proximity to the high-demand markets along the East Coast of the United States.

To support the new upstream strategy, Banpu has appointed Mr Anon Sirisaengtaksin, former CEO of a leading energy conglomerate as a director and executive advisor to Banpu in relation to its new upstream gas strategy. His appointment has been ratified by the AGM. Mr Anon brings over three decades of oil and gas sector experience to Banpu.

"The big picture here is that while we still see substantial value growth potential in our coal business, we are also beginning to make an investment in gas as a greener baseload fuel. Importantly, we are also diversifying our geographic risk profile by acquiring a footing in the US economy to balance our exposure to Asia. In terms of this first deal, we have conducted thorough due diligence over the past two years and are confident we are investing in a highly de-risked situation with proved reserves, market maturity, proven technology, favorable government regulations, a strong and experienced operating partner, an expert investment partner and access to an extensive information and talent pool – and strong domestic off-take contracts. The timing is good given low oil and gas prices and we have invested at a very attractive valuation with substantial upside potential. Now we have a foothold in the Marcellus field we are at the heart of where the action is in the US gas sector. We are well positioned to take advantage of new deal opportunities - both acquisition and divestment - in what is a very liquid asset market. And to support this new strategy we are truly delighted to welcome Khun Anon as a director and advisor. His expertise will prove invaluable," **concluded Ms Chaimongkol**.

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