

Energy segment business activities presentation – Q&A session

1. Date and time: December 15, 2015, 16:00~17:30
2. Location: Otemachi Sankei Plaza
3. Speakers: Hiroyuki Tsurugi, Managing Officer, Chief Operating Officer of Energy Business Unit I
Hirotatsu Fujiwara, Managing Officer, Chief Operating Officer of Energy Business Unit II
Masaharu Okubo, General Manager, Planning & Administrative Division (Energy)
Michihiro Nose, General Manager, Investor Relations Division
4. Questions and Answers:
 - Q Can you provide a sense of volume of upcoming investments including those projects in the pipeline?
 - A In regards to Mozambique we are aiming for FID next year, and based on this we should start to see cash outflow from 2016, but we are currently negotiating project costs with our selected EPC contractor as well as closely scrutinizing upstream development costs, which should eventually lead to clearer view of the investment volume. In regards to the Cameron project, cash will be spent in accordance with the EPC contract. The Browse project is still being studied.
 - Q In an environment of extremely difficult LNG market, can you explain the sort of challenges you are facing in your marketing activities, such as the issue of destination clauses?
 - A LNG from the Cameron project are basically sold. For Mozambique, we have reached conceptual agreements on the crucial points of the sales contract for over 80% of the planned production. For the remaining portion we are focusing on heightening our cost competitiveness to establish a flexible supply structure that will enable us to meet the needs of our customers, and therefore we are not too fixated on a stringent destination provision. The same applies to Browse as well. We are aiming to develop a supply structure that meets the demand of our customers across globe who are seeking more diversified supply sources.

Q In regards to the LNG demand forecast illustrated on page 10 of the presentation, what is your thought on when demand and supply will match, and how do you see the risk of the demand forecast fluctuating?

A We hold the same view for near-term forecast. We will see new production starting-up in years 2015 and 2016. Demand is not growing as much due to slowing Chinese demand and warm winter, and therefore we see supply exceeding demand for the next few years. On the other hand, although there are various factors affecting this, we should start to see reserves drying-up in mature projects and countries that originally supplied LNG to Japan becoming LNG importers from 2020 or 2022 onwards, leading to strong demand growth in China and Southeast Asia. For example Bangladesh is considering importing LNG. Beyond 2020 we believe the balance, or more so demand, heading toward the 2030 image. As you pointed out forecasts can fluctuate, but we believe the senses of direction beyond 2020 should not drastically change.

Q In an environment of over-supply of LNG, did you lower your price in order to market up to 80% of the Mozambique volumes? In other words, were you able to lower your price due to lower costs, or was it enabled by the strong competitiveness compared to others? Please provide a sense of how to understand this.

A In Mozambique there are nearly 80tcf discovered in Area 1 alone. This should provide strong competitiveness to the project. Also, in the current environment where over-supplied LNG and low crude oil price are forcing cancellation of major projects around the world, we can enjoy the benefits of competitive costs not only in EPC. We believe Mozambique and Browse are in the right position to enjoy this benefit. Furthermore, Mozambique is in a unique geological location where Asia, Europe and the Middle East markets are accessible along with the different price indices of those areas. Japan and Asia will basically be JCC or oil-linked pricing, but NBP should be applied to Europe. The ability to use both price indices can provide us with flexibility in pricing.

Q Are properties of LNG easy to adjust?

A Different customers have different specifications, but if the properties are

within range cargos can be interchangeable. Japanese utility companies purchase from various projects, and therefore this should not be an issue.

Q How do you see the weight of up, middle and downstream parts of the LNG business changing in the future, including how you would measure those weights?

A Our aim is to develop a business model that embodies the whole value from up to downstream by expanding value creation to middle to downstream where traditionally profits are generated mostly in the upstream. Precise weights are difficult to mention, but currently the upstream is weighted the most followed by midstream and downstream being the lowest. We would like to evolve our portfolio with well-balanced value creation from upstream to downstream, by focusing mainly on strengthening our downstream business.

Q Can you be more specific on demand creation at the LNG downstream area?

A Gas to power or gas to chemical is meant by demand creation. As Tsurugi showed in the presentation, there tend to be more collaboration with Machinery & Infrastructure and Chemical segments in the energy business. For example, the Machinery & Infrastructure segment is expanding its IPP or gas-fired power plant business globally, as well as seeking infrastructure investment opportunities for LNG import terminals worldwide. We will aim to create demand by linking cost competitive LNG projects with IPP and infrastructure businesses, and expand our business from up to downstream.

Q It was explained that Browse is considered as a succession to the Northwest Shelf project (NWS), and that its economics are being studied as a standalone development based on FLNG. But with production from NWS expected to decline beyond 2020, can development based on tie-back to NWS be considered as an option or has FLNG been firmly decided? Would there be any hindrance if FLNG ceases to be the choice?

A As we announced recently we are developing new gas fields at NWS as a countermeasure to declining production beyond 2020. We are keen to pursue such mid to long term utilization of NWS, and therefore we do not envisage tying-back Browse to NWS. FLNG is the basis for developing Browse. We have conducted extensive study of FLNG and we have confirmed with our

partners that FLNG is the most realistic and economically favorable way to develop, and therefore this will be the path we will take.

Q In regards to exploration, is the success rate shown in page 13 calculated only with wells that were commercial successes? Also, please explain how you can maintain such high success rate, factors such as your exploration concepts or geological aspects that enable you to maintain or anticipate such high success rate?

A The wells that were counted in the calculation are basically those that were commercially successful. We take a portfolio approach to our exploration business where the correct way is to mix various kinds of exploration opportunities, from so-called wildcats to those near production areas, and while the high success rate is mostly thanks to the latter wells, Mozambique turned out to be a good example of the former. The probability of success of wildcats are usually low, but our success in Mozambique contributed greatly to our success rate. Going forward we will focus on opportunities that can potentially provide good economics from exploration to development stages, by holistically considering technical aspects and tax regimes, country risks. Good technical potential will certainly be the major premise. Exploration is a relatively less expensive way to add reserves, but is also means it is the most difficult. Our past experience and network within the industry that we have built along the years have increased our chances of encountering relatively good opportunities, and we will continue our efforts by utilizing on these opportunities.

Q EBITDA tells us that cash inflow is strong, but can you give us the breakdown of core operating cash flow by oil and LNG? Cash flow is likely supported by depreciation in the oil projects, and I understand that the increase in production toward end-March 2020 illustrated on page 18 is based on Tempa Rossa and Eagle Ford, but is the probability of this projection high? Also, can we expect cash flow generation to continue based on depreciation and profit from these projects?

A EBITDA does not differ so much between commodities. I don't have exact numbers and it also depends on the investment structure, but my impression is that oil projects have slightly high EBITDA. The projected increase in oil production up to end-March 2020 does take in consideration

start-up of Tempa Rossa that we introduced as one of the projects in the pipeline as you correctly pointed out, but it also includes new projects as well. Existing projects and projects in the pipeline will likely lead us to the envisaged goal with high probability, but we believe we need to endeavor to add more.

Q With the current low oil price looking more likely to stay, what are your main concerns, or conversely, what sort of opportunities do you see?

A It is difficult to forecast the oil price, but being mindful of the possibility that the current condition will continue, it is crucial to firmly implement cost reduction in existing projects. For developing and new projects, we will be as stringent as ever in selecting opportunities. In regards to whether such approach may lead to business opportunities, I believe there will be opportunities to acquire assets that are usually out of reach under more favorable terms than usual.

Q In terms of overall cash flow, can you explain whether projects that are currently being considered are doable even if oil price continues to stay low, whether there are flexibility in the projects in the pipeline? Also, please explain how today's presentation differs from 2 to 3 years ago. For example, are the cost-cuttings and stringent project selection results of downsizing due to the current situation? Please explain along with projects in the pipeline and production forecast projected on page 18.

A In terms of flexibility in the planned investments, there are those that have passed through FID and those that are waiting FID. For those that have passed FID we will maintain our course. For those that are going through FEED or feasibility studies, we will have to wait for those process to complete and reach a stage where we have to make a final decision to invest. Low crude oil prices haven't affected our strategy at a high level. We will continue to build a good portfolio of E&P and other businesses. Improving our portfolio and strengthening our competitiveness will basically continue, but scrutinizing new opportunities has already become ever more stringent.

Q Regarding your projected LNG liquefaction capacity also on page 18, comparing end-March 2010 and 2025 for instance, how do you see your marketing portfolio changing over this period? And how would it change

looking further to 2030? Especially if Japan's portion is expected to fall, can you provide guidance on how to anticipate your marketing capabilities and networks in marketing to areas other than Japan?

A The 5 million tons as of end-March 2010 was basically sold mainly to Japanese power and gas companies along with Korea, Taiwan and partially to China based on long term contracts. At the time LNG was yet a limited source of energy, and Far East and Asia accounted for the bulk of global demand with Japan being the largest of them. Since then LNG has gained much recognition over the past few years, and not only in emerging economies of Southeast Asia and China but also in the Middle East and Latin America the use of LNG for power generation and distribution has been expanding. If we look at end-march 2020 or 2025, we are already working with the newly emerged customers of these areas. The emergence of these new customers is remarkable, and it is driving us to think in new ways, such as looking at Singapore as a logistical hub for delivering LNG cargos, in order to pursue optimal portfolio in a drastically changing environment.

Q With regards to the supply-demand forecast of crude oil, how long do you expect the current over-supply condition to last? And in relation to this, can you give us any updates on your shale oil and other conventional production in terms of any disruptions or cutbacks.

A At present the over-supply of crude oil seems to be persisting, but while the pace of growth has slowed demand is still growing. And supply on the other hand, shale oil production has peaked sometime around April of this year and has been slowly declining since. Russia and OPEC seems to be adamant to produce as much as they can in order to maximize revenue, but there has already been large projects being postponed or cancelled due to costs. Looking at announcements by the majors give us a sense of magnitude of the decline in investment, which I believe will soon result in production peaking. The difficult question would be when the slowly rising demand and peaking production would converge, and my personal opinion is that we may see this happen sometime next year. A word of caution that these kind of forecasts are never correct and mine is no exception. As for our upstream production, we are controlling our investment and production by reducing our drilling operation in our North American shale oil and gas production,

reflecting the nature of shale operations. Other projects are basically still cash flow positive under current prices and therefore we have basically not cut production for price reasons.

Q With crude oil prices falling as much, please explain how you conduct your testing for impairment. I understand that general investment to LNG projects are tested every quarter but E&P and other assets have not recorded impairments for the last three quarters. Can you explain the difference in your testing under IFRS?

A We conduct impairment tests every quarter by reflecting every situation at that time.