



Annex B

BP Singapore

BP Singapore began as an oil refining and marketing company in the 1960s. Its activities grew rapidly over the years, and today, it is a broad-based operation and a knowledge hub for the BP Group in the Asia-Pacific region.

Business Activities

Employing some 600 staff, BP Singapore is a regional base for many of BP's business activities including: Integrated Supply and Trading (IST), Gas, Shipping, Consumer Lubricants, Industrial Lubricants, Marine Fuel and Lubricants, and Aviation Fuel and Lubricants.

IST, for example, serves the Australasian, Far East, Middle East and South African markets, with varied activities ranging from the marketing of BP's equity crude oil, NGLs and natural gas, to offering risk management products to third parties, generating entrepreneurial trading income and managing BP's forex requirements.

BP Shipping

At the heart of the BP Group's marine expertise is BP Shipping whose history dates back to 1915 when it was established as the British Tanker Company, carrying products for the Anglo-Persian Oil Company. BP Shipping manages marine and shipping risks for the BP Group. BP believes in having a core fleet of operated vessels that, along with its chartered vessels, focuses on and manages these risks to the Group's assets.

BP strongly believes that its long history of shipping expertise and experience is able to efficiently deliver the most appropriate level of shipping assurance to the Group. BP Shipping's core values are Clean Seas, Safe Ships and Commercial Success.

Today, BP Shipping employs around 430 shore-based employees and approximately 1,400 serving officers with BP Maritime Services, an organisation set up in Singapore to manage the employment of the seafarers.

BP Shipping operates/manages a sizeable international fleet of tankers (including VLCCs and LNG carriers), regional and specialist vessels and time charter vessels. It also provides marine expertise to the BP Group's major offshore projects and other offshore activities.

Knowledge Hub

BP Singapore also serves as a knowledge hub supporting BP's operations in the region. Group functions such as Information Technology & Services, Legal, Tax, Group Security, Internal Audit, Treasury and Group Compliance & Ethics are based here.

Employee Welfare

Other than growing the business, BP Singapore is also a strong advocate of employee welfare. A variety of programmes are in place to make BP Singapore a great place to work in. These include networks like BP Association (for greater social interaction), the Workplace Health Promotion Programme, HSSE Network (aimed at promoting HSSE objectives), and the GoGreen network in support of the environment.

GoGreen Initiative

The GoGreen team, formed in 2007, consists of staff volunteers who are passionate about the green agenda. It sets specific targets to help reduce BP Singapore's use of electricity, paper, printing, etc, using a variety of methods like campaigns, presentations, exhibitions, educational visits, eco-themed events and outings and an annual office spring-cleaning.

In just three years since its set-up, the GoGreen initiative has won BP a Singapore Eco Office award and achieved total savings of nearly S\$1 million* – in terms of utility, printing/paper costs and archiving of documents. BP Singapore's electricity bill alone was reduced by 40% and its use of print paper by 55%.

The on-going effort has also motivated staff to be more aware of how their daily actions can help to make a difference to the environment as well as reduce costs and wastage.

ANNEX C: JURONG PORT'S GREEN INITIATIVES

Since starting operations in 1965, Jurong Port (JP) has grown to become Singapore's only international multi-purpose port operator and is a key gateway port in the region. Amidst a backdrop of growing climate concerns, impending regulations and increased awareness of environmental sustainability, JP has started to examine the environmental impact of their business. Developed in 2010, JP's 'Go Green' strategy aims to establish JP as a progressive, clean and green port in Singapore and Asia.

ONGOING PROJECTS

Carbon Footprint Assessment

A key initiative in JP's overall Go Green strategy, the Carbon Inventory establishes a clear baseline of the port's carbon emissions. Through this, JP can identify key emission sources and develop strategies to reduce said emissions. This report can be viewed at JP's corporate website or the following link: <http://www.jp.com.sg/JurongPort/carbon-footprint-report/>

ISO 14001

JP is also in the final stages of its exercise to achieve the ISO14001 Environmental Standard. The ISO 14001 enables JP to better identify and control its environmental impact of its activities. An example to introduce green procurement practices, such as vendor selection criteria, in the procurement policy.

Green Office Initiatives

Aimed at creating green practices at a grassroots level, these initiatives revolve around the 3Rs; Reduce, Reuse and Recycle. The list of eco-measures here are extensive, such as: Double-sided printing policy, reduced use of bottles water, elimination of Styrofoam cups, recycled printing cartridges, are but some of the measures taken to make the JP office more eco-friendly. FSC papers, which are derived from well managed forests, have also replaced all paper use in the office.

EXPLORATORY PROJECTS

Cold Ironing

When a vessel berths at the port, it typically keeps its ship generators running for power. Through cold ironing, or the supply of shore-to-ship power, JP will supply the vessel with less pollutive energy generated by Singapore's grid.

Alternative Energy Sources

Instead of relying traditional fuel combustion based energy, JP is exploring cost effective implementation strategies for alternative energy sources such as solar power. Through such projects, JP can supplement its energy usage with zero-emissions energy.

Building Improvements

A major refurbishment of the port's main office building, JP Administration Building, aims to drastically increase the energy efficiency of the building. With planned features such as solar panels, energy efficient air-conditioning and lighting, and even double-glazed glass facades, the new building aims to acquire the BCA Green Mark certification.

ANNEX D: Keppel Offshore & Marine's contributions to sustainable operations

Fact Sheet

Offshore operators worldwide are seeking safer, eco-friendlier and more sustainable means of oil and gas exploration. Through technology innovation, Keppel Offshore & Marine incorporates unique features into its product designs to reduce environmental impact and promote safe and sustainable operations. Our operations are infused with responsible business practices that help to protect the environment and promote energy efficiency.

At our yards, we are committed to energy conservation and environment protection. Instead of grit blasting we use hydro blasting to reduce airborne pollutants. We installed photovoltaic power plants to convert solar power into electricity and this saves an estimated 1.5 million kilowatts of electricity and cuts carbon emissions by about 1,300 tonnes. We retrofitted energy-efficient lights at our yards, plants and offices. In 2010, we recycled 90,000 tonnes of waste comprising ferrous scrap metals and grit.

Green Innovations – Engineering eco-friendly rigs and ships

For its eco-friendly features and contribution towards safe and sustainable operations, our KFELS semisubmersible drilling tender (SSDT) design won the ASEAN outstanding engineering achievement award in 2009. A zero discharge vessel, it adopts the latest technological advancements to minimise the impact to the environment.

The KFELS SSDT has a stringent drilling waste management system, which eliminates the dumping of solid waste into the ocean and reduces the need for frequent supply boat trips to offload the waste, thus minimising the risk of an accidental spillage. Its design has made it possible for two massive floating platforms to work in close proximity to each other without the risk of a major collision.

Another eco-friendly design is our KFELS B-Class jackup rig which is able to achieve maximum uptime with reduced emissions and discharges. It won the prestigious Engineering Achievement Award from the Institution of Engineers Singapore in 2009 for its safety and environmentally friendly features.

The main generators of the KFELS B Class jackup rig meet the stringent Engine International Air Pollution Prevention (EIAPP) requirements. The rig's three legs are also designed to seamlessly drill over oil wells previously occupied by a Le Tourneau rig with little obstruction. This allows marine life to co-exist with exploration and drilling activities, causing minimal disruption to the eco-system.

Our specialised vessels incorporate the eco-friendly diesel electric propulsion into its design instead of diesel mechanical propulsion. A number of our specialised ships are built to DNV's Clean Design standard, which is intended to reduce and limit the vessels' air emissions and sea pollution. It features a defensive design for accident prevention and consequence limitation, which helps provide added environmental protection.

Besides promoting eco-friendly operations through our product designs, we are also applying our technology and expertise in developing solutions that support the harvesting of renewable offshore wind energy.

We gained traction in this market last year with our subsidiary in the Netherlands, Keppel Verolme, winning a contract to build an electrical transformer and maintenance platform for Germany, and the introduction of Keppel FELS' multi-purpose self-elevating platform (MPSEP) concept to the market. The KFELS MPSEP was chosen by the Seafox Group as the basis for a new-generation, wind turbine installation vessel that can withstand harsh offshore environmental conditions year round at a water depth of 65 metres in the North Sea.

Annex E

Taking environmental leadership: Maersk Line initiatives

As the leading container shipping line, Maersk Line is consistently recognised for its leadership in providing reliable and responsible transport solutions.

One of Maersk Line's key strategic focus areas is leadership on environmental performance. We are committed to the continuous improvement of our company performance, to reduce our impact on the environment, and to maximise the positive impacts of our business for the ports, communities and countries in which we operate.

We aim to make Maersk Line the global leader in low-carbon shipping. Through a focus on continuous improvements, investments and innovation, we will work for cleaner water and air, and responsible lifecycle management of our vessels. Our commitment and responsibility also implies driving the industry in the right direction. We will work with regulators to raise the bar for the industry.

Low carbon leadership

Maersk Line has committed itself to reduce its CO₂ emissions by 25% by 2020 per container moved, compared to 2007 levels. So far, the company has reduced its CO₂ emissions by 14%. In 2010, a 4.6% reduction was achieved. The reduction in CO₂ emissions was achieved mainly through the slow steaming programme and other operational efficiencies.

Since Maersk Line began slow steaming in 2008, the technique has spread to nearly 50% of the world's ships, effectively setting both a new industry standard and creating a new competitive parameter.

Cleaner air in ports

To improve the air quality for the port communities, we are driving our own operations as well as the shipping industry towards zero sulphur emissions. We continuously work to reduce sulphur emissions by engaging in voluntary fuel switches. We have committed ourselves to implementing fuel switch programmes in at least 10 global locations by 2015.

Maersk Line pioneered voluntary fuel-switching in California in 2006. We have steadily extended the programme to other regions, including ports in Texas, Hong Kong and the US Pacific Northwest. Most recently, in March 2011, we have switched from bunker to low-sulphur fuel in New Zealand, which reduces sulphur to the air by 80-95% in port.

Unmatched energy efficient ship design

Throughout 2010 Maersk line worked to design and purchase 10 of the largest and most CO₂ efficient containerhips ever, the Triple-E class of container vessels. These will emit 20% less CO₂ per container moved compared to the most efficient container vessel operating today and 50% less than the industry average for vessels operating on the Asia - Europe trade. The Triple-E will be a key component in reaching our goals for low carbon leadership.



APL participates in and supports programs that help reduce our environmental footprint. As a result of our efforts, APL has received recognition from customers and our peers for our leadership in mitigating the environmental impact of world trade.

LINER

Containerization

Container Pioneers: APL introduced 45', 48', and most recently, 53' containers to increase capacity, resulting in fewer drayage moves and emissions per box.

OceanGuaranteed: APL Logistics' OceanGuaranteed is an integrated ocean-truck, less-than-container-load service with day-definite delivery. It combines the date-specific reliability of airfreight with carbon-friendly ocean transportation to reduce the overall carbon footprint per shipment.

Fuels and Treatments

Low Sulfur Fuel (LSF): As the first carrier to use LSF in auxiliary engines while at the berth in Seattle, APL now uses LSF in nearly half a dozen ports worldwide. LSF is also used for propulsion off the California coast.

Water in Fuel: Several ship's auxiliary engines use Constant Water Injection to humidify the scavenge air and lower exhaust gas temperatures to reduce NOx by over 20%. APL is also installing a fuel cavitation system for main and auxiliary engines to produce a fuel emulsification with 20% water. This is expected to generate a fuel savings of 10% for the main engine and 18% for auxiliaries. Less fuel used translates directly into fewer emissions.

Innovative Technologies

Ballast Water Treatment: APL is using an innovative Venturi oxygen stripping system to eradicate invasive species in ballast water without chemicals.

Slide Valves: APL line-haul vessels employ slide valves to reduce fuel leakage when fuel is injected into the engine, resulting in more complete combustion with lower emissions.

Operational Improvements

Green Passport: Used for all APL line-haul vessels, this certificate documents the hazardous materials used in construction. It accompanies the ship throughout its operating life and is updated during equipment changes. The ultimate owner of the ship will deliver it with the vessel to the recycling facility to allow for proper processing of the materials.

Speed Reductions

Slow-steaming: Operating vessels at slower speeds reduces emissions including CO₂, CO, SO_x, NO_x, and PM. For our customers, slow steaming means a lower carbon footprint per TEU.

Voluntary Speed Reduction (VSR): APL is an ongoing participant and active supporter of the vessel VSR Program in Southern California. By reducing speeds to 12 knots, SO_x, NO_x, and PM emissions are also reduced.

TERMINALS & LOGISTICS

Cargo Handling

Biodiesel Fuel: In Seattle, APL uses a biodiesel blend in its yard tractors and mobile container-handling equipment. This blend of low-sulfur and biodiesel reduces particulate-matter emissions by approximately 80%.

Efficient Operations: APL's Oakland terminal received the Caltrans Excellence in Transportation Award for an efficient yard layout redesign. This was followed by the Los Angeles terminal receiving the Most Efficient Marine



Terminal award from the Harbor Truckers for a Sustainable Future in recognition of efforts to minimize trucker delays and therefore exhaust emissions from idling.

Electric Operations

Cold-Ironing: Through a partnership with the Bay Area Air Quality Management District, the California Air Resources Board, and the Port of Oakland, APL became the first terminal in the port to be capable of coldironing ships at the berth. By making the switch, APL cuts 50,000

pounds of NOx and 1,500 pounds of PM annually. In addition, all new build ships being added to the fleet are cold-iron capable.

Cranes and Refrigerated Containers: All of APL's terminals worldwide use electric gantry cranes. On the U.S. West coast, over 2,600 electrical plugs power refrigerated containers in APL terminals. These electrical operations eliminate point source pollution from diesel generators.

Reducing Carbon

Eliminating Drayage: APL led the effort to develop large scale on-dock rail operations which eliminate the need to move containers from ships to rail terminals via public roads. Not only is highway congestion and the resulting pollution lowered but the amount of greenhouse gasses reduced is significant. For example:

Los Angeles: APL's Los Angeles terminal loaded 255,000 containers via on-dock rail lifts in 2009, saving 3.2 million miles of truck transit which would have produced nearly 8,400 MT of CO₂ and 88,000 MT of CO₂e.

Seattle: At APL's Seattle terminal, 54,000 containers were moved via on dock rail in 2009, saving 544,000 miles of truck transit and eliminating nearly 1,400 MT of CO₂ and 15,000 MT of CO₂e.

Warehouse Operations: APL Logistics uses an internally designed tool to calculate the carbon footprint of warehouses. By estimating the amount of greenhouse gases produced by using fossil fuels for electricity, heat, transportation, and other purposes at each warehouse, APL can focus its carbon reduction efforts in an efficient manner.

Environmental Awards

2011

Green Gateway Gold Partner Award - Port of Seattle

2010

Marine Environment Protection Award - NAMEPA

Operator of the Year – Sustainable Shipping

50 Green Supply Chain Partners - Inbound Logistics

Best Green Service Provider & Shipping Line - Asian Freight and Supply Chain

William M. Benkert Marine Environmental Protection Award - U.S. Coast Guard

2009

Most Efficient Marine Terminal - Harbor Truckers for a Sustainable Future

Clean Air Action Plan Award - Port of Los Angeles

Vessel Speed Reduction Program - Port of Los Angeles

ANNEX G: SEMBCORP MARINE'S GREEN INITIATIVES

Caring for the Environment

To build a sustainable and greener future, Sembcorp Marine continued its efforts to protect and conserve the environment. Besides adopting green practices, the Group also reached out to promote environmental care and protection among employees, stakeholders and the community.

Green Commitment

High standards of environmental management continued to be upheld by Sembcorp Marine and its yards. Its shipyards are certified to the internationally recognized ISO 14001:2004 standard. The shipyards maintained stringent systems and processes to minimize the environmental impact of their operations.

Green Mindset

To foster a green mindset among employees, Sembcorp Marine and its yards held regular briefing during the year to encourage recycling and resource conservation. Housekeeping efforts were also carried out by the yards on a regular basis to ensure work areas were clean and tidy.

To engage the young generation in protecting the environment, Sembawang Shipyard continued to organize the Green Wave Environmental Care. Competition for schools in collaboration with its alliance partners Shell International Trading and Shipping Company and BP Shipping. In its 9th year, the competition achieved a breakthrough level of participation, with a record 312 project entries involving more than 1,250 students from primary and secondary schools, junior colleges, the Institute of Technical Education and tertiary institutions. This was more than two-fold increase in participation rate since the competition's first year in 2003.

Eco-friendly Operations

Sembcorp Marine's yards continued to adopt eco-friendly practices in their operations in the areas of water management, energy conservation and waste management via :

- Use of water-saving devices like thimbles and flow regulators
- NEWater to be used in yards for cooling towers, toilet flushing systems & washing of ship hulls and tanks
- Automatic timers installed in yards to regulate power usage for utilities and equipment

- Energy-efficient lighting systems and air-conditioning units for conserving power
- Workshops fitted with transparent cooling sheets to maximize use of natural lighting

Sembcorp Marine took a step further to minimize paper-based waste by launching further its eco-friendly annual report, The 2009 annual report and shareholders' circulars were delivered via CDs to recipients. As initiative was well received, the Group continued to adopt this green approach in the distribution of its 2010 annual report.

Green Future

Sembcorp Marine's Integrated New Yard facility currently under construction at Tuas View Extension was designed with environmentally friendly features. In addition to meeting the Green Mark certification, the workshops in the new yard incorporate energy-monitoring systems to regulate and fine-tune electricity usage, resulting in cost savings and energy efficiencies.

ANNEX H

Inaugural MPA Maritime Singapore Green Pledge Signing

Date: 12 April 2011

PSA Green Initiatives

With long-term sustainability in mind, PSA has adopted a multi-pronged approach towards Going Green.

1) Green Mindsets

PSA believes that change must begin from within. We encourage our staff to do their part for the environment and strive to provide a conducive environment for a thriving green culture. We seek to change the way we operate in a sustainable manner at our terminals and facilities. We proactively identify and adopt environmentally-friendly port equipment and practices.

2) Equipment

PSA's focus for equipment and infrastructure is to reduce wastage of energy usage, and to use cleaner sources of fuel where possible. Our Rubber-tyred Gantry Cranes (RTGs) have been retrofitted with fuel saving devices to reduce diesel consumption. These fuel saving devices regulate the engine speed according to load, and help reduce fuel consumption during idle periods. Past trials have shown an overall reduction of 12 to 15 per cent in fuel usage. We have also implemented a series of e-RTGs that run entirely on electricity, and will continue to explore appropriate green technologies for our equipment fleet.

3) Infrastructure

We conduct regular audits to identify areas for energy conservation and to tap natural lighting for our port infrastructure where possible. For instance, our ground-level engineering workshops and stores are innovatively lit through the use of natural sunlight. Sun-pipes installed on the roofs capture the natural light and funnel sunlight into the workshops, thereby reducing our electricity usage.



Natural day-lighting system in PSA Tanjong Pagar Workshop

Ends