



OPERATING RESPONSIBLY  
DEVELOPING LONG-TERM BENEFITS





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# Opening Page



Welcome to the fourth annual Sustainable Development ("SD") Report for the Swire Pacific Offshore Group ("SPO"), 2010. We are pleased to advise that this year's report has again been externally verified in accordance with the Global Reporting Initiative ("GRI") to level C+, as were the last two reports.

We report all of our business policies, processes plus achievements in this open way as we firmly believe that transparency about the sustainability of our activities is of interest to our diverse range of stakeholders, including shareholders, investors, employees, regulators, clients, suppliers, NGOs and others.

SPO, in common with its parent company, takes a long term view of its business, and believes in operating safely, professionally, responsibly and sustainably, to meet the needs of our present stakeholders without compromising the needs of our stakeholders to come in the future.

In response to comments from our stakeholders last year, this SPO SD Report for 2010 is published herein solely as a web based and designed document. This now enables you, the reader, to compile a report tailored to you personally by selecting only the subject area/s that concern you from the drop-down menus. An index showing all the subject area/s contained within the report, and the GRI Indicator that guides the depth and level detail required can be found [here](#)

We are continually seeking to improve the readability and relevance of our report, and welcome all feedback and comments on any aspect of this report via e-mail to [simon.bennett@swire.com.sg](mailto:simon.bennett@swire.com.sg) or to the following address:

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# Introduction



Welcome to the fourth annual Sustainable Development ("SD") Report for the Swire Pacific Offshore Group ("SPO"). We are pleased to advise that our 2010 SD Report is externally verified in accordance with the Global Reporting Initiative ("GRI") to level C+ again, as we achieved for last two reports.

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SPO, in common with its parent company, takes a long-term view of its business and believes in operating safely, professionally, responsibly and sustainably, to meet the needs of our present stakeholders without compromising the needs of our stakeholders to come in the future.



SPO is a wholly owned subsidiary of Swire Pacific Limited which is based in Hong Kong. SPO has worked out of Singapore for 35 years, and has had formal Operational Headquarters status in Singapore since 2002 and whilst we operate occasionally for local reasons under 4 flag registries, >90% of our fleet is flying the Singapore flag.

On the 24th of Mar 2011, its Executive Committee, which has operational responsibility for economic, operational, health, safety, social and environmental performance within SPO, reviewed and re-adopted the Sustainable Development Policy (see [Detail Section](#)). The application of the environmental, health and safety aspects of this policy is outlined by SPO's Environmental Protection, Safety, Operating and Sustainable Development Policies: See [here](#) and [here](#).

These policies are top level documents sitting above our QHSE Management

System, which is extensive and has been used across the company and its fleet for many years. Together our Policies and Management System have ensured that we operate fully in accordance with ISO 9001, ISO 14001 and the IMO International Safety Management Code ("ISM"). We will be confirming our degree of compliance with the ISO 26000:2010 Standard "Guidance on Social Responsibility" by conducting a gap analysis during 2011.

This report describes our full performance in relation to the economic, operational, health, safety, social and environmental performance of SPO during calendar year 2010 since our last report (for 2009) and presents our commitments for 2011. This report is made to the level of GRI G3 B+ though for the moment it is only verified to the GRI C+ standard, and to report also most of the Supplementary Logistics and Transportation performance indicators although these have yet to be formally adopted by GRI.

We have also included other relevant additional indicators which support that our activities and commitments to Sustainable Development are both consistent with the policies and practices adopted by the Swire group of companies and are considered material to the way we run our business, and as such are part of our strategic and operational decision making processes.

This is achieved by the General Manager CSR having direct reporting responsibility to the Managing Director, building on his wide experience within the company offshore and onshore, plus being able to provide input in the early stages of all strategic decision-making where SD issues may be relevant. We gathered much of the data for this report through our exclusive electronic vessel management information system, known as ORBIS, and our HR software package.



ORBIS is available at all SPO locations (each vessel, each outpost / Business Unit and in Head Office) and in all departments. The ORBIS scope covers specified processes in all functional areas: Operations, technical, HSE, purchasing, Manning, Marketing, Accounts, HR, Insurance, IT and System Administration as well as some external organisations that are closely linked with SPO's business.

Building on the foundation of our previous SD reports, we carried out a stakeholder mapping exercise during 2010. We started this by undertaking an Enterprise Risk Management review. This process identified the significant parties that the company could impact in its operations, together with those that we believe impacted us. These were predominantly our employees, including managers and directors of the company, our investors, clients, regulator/s and our key suppliers. We are conscious of the need to take account of the "communities" upon whom we may impinge, however given the nature





of our industry, in which we employ around 30 nationalities to work on our vessels offshore plus in our offices in 28 separate countries worldwide as at 31 Dec 2010 SPO has no individually definable geographical community location per se. The closest we come to this concept of an impacting/impacted community may be regarded as the Philippines, as the provider of 40.2% of our global manpower, (some 4 times the size of the next biggest nationality), but even in this case the 806 employees live in widely dispersed locations within the country. Recognising this, SPO does make a significant effort to engage with our Filipino community as a whole.

Having identified our key stakeholders, we then met a significant number of them in face-to-face interviews to further ascertain what are the issues of material concern to them with respect to our business operations. We seek to meet all of our Key Stakeholders in Singapore, plus Brunei and Philippines, every year, and then to travel to our main outports in 1) Perth,

Australia, 2) Dubai and Qatar and 3) West Africa on a rolling three-year basis to ensure all the concerns worldwide are identified.

We have then sought as far as possible in this report to provide even greater detail in these areas and to demonstrate our commitment to transparency in operating in a sustainable manner.



# Managing Director's Message



Dear Stakeholders,

Swire Pacific Offshore continues to seek to strategically plan, manage and operate its business in the most sustainable way and I am pleased to report our progress in the areas of our Financial, Social and Environmental performance in this, our fourth annual Sustainable Development

Report. Whilst much of 2010 was spent in our industry continuing to recover positively from the loss of business confidence caused by the global financial crisis, SPO used the period to consolidate its position for future growth.

Our core business of providing marine services to the offshore oil and gas

industry has historically been materially driven by the market price for oil and gas. A reasonable and steady increase in market prices that is regarded by our clients as sustainable will generally lead to increased Exploration and Production ("E&P") business, however too big a price increase may cause instability, and run the risk of triggering inflation and dampen



economic activity, reducing the demand for oil and gas. Over-supply of new vessels into the support market without commensurate disposal of older units will also continue to squeeze our potential for the revenue levels required to invest in newer, more environmentally efficient tonnage.

We are continuing to seek opportunities to diversify the exposure of our portfolio of vessels to oil and gas price fluctuations (currently three vessels that we manage or operate work wholly outside the hydrocarbon E&P sector) and our in-house capability has been expanded to provide both professional salvage and oil spill response services on a 24x7 basis. Having acquired Swire Blue Ocean with expertise in the offshore wind farm business at the beginning of the year, Swire Pacific Offshore placed an order for two windfarm installation vessels with Samsung Heavy Industries in Korea. The first vessel is scheduled to be delivered in July 2012 and the second (option) in

December 2012; both vessels will be delivered into contracts working in NW Europe.

SPO continues to enhance its core business, with six new vessels being delivered, (three V-class 8,810 brake horse power ("BHP") anchor handling tug supply ("AHTS") vessels and three P-class 4,800 BHP AHTS vessels). One seismic survey vessel was sold to a dismantling yard (of which more later). Fleet renewal will continue in 2011 with 8 more new vessels due for delivery and 5 old vessels for disposal, giving a reduction of the age profile of some 13% to 9.3 years over the next year. Bringing this modern tonnage into our fleet affords us the opportunity to achieve large step changes in the cost- and energy- efficiency of operations, particular with the Greenhouse Gas ("GHG") footprint that each vessel develops.

CSR is integral to our strategic decision making, as we continue to focus on the key

areas of our business, we will continue to: a) raise behavioural safety awareness, b) enhance our environment, c) attract and retain employees who believe in the Swire Group values, d) ensure our supply chain and business partners are working with us responsibly and e) recognise that SPO has a responsibility for the effect on society and the natural environment, beyond that of legal compliance. We strongly believe this will strengthen SPO and our stakeholders' positions for the future.

We have completed trials on our "Green Zone" Fuel Efficiency Management System ("FEMS"), which builds on the premise that "if you can't measure it, you can't manage it". Even in the trial stage, a client in 2010 saw the value of this for managing what is an area of significant expenditure for them and requested that this system be fitted on the vessels on hire to them. The system will be progressively fitted on our newly built vessels enabling us, once we have built up a representatively sized body of data, to construct meaningful Ship Energy



Efficiency Management Plans ("SEEMP") for each class of vessel in advance of any mandatory requirement from IMO. SEEMPs will indicate the "sweet spot" for each vessel's optimum energy / fuel consumption with due consideration to draft, trim, hull condition and speed, such that each vessel can then be operated efficiently. This system will be critical for clients as GHG Emission Trading Schemes ("ETS") for shipping may be introduced worldwide and clients will have to purchase allowances (carbon credits) for each tonne of GHG emitted by the vessels they have on hire.

SPO delivered on its commitment to achieve the Singapore Environmental Council's "Eco-Office" standard in 2010, becoming one of only 73 businesses in Singapore over the past 6 years to be successfully independently audited for this award.

The Swire Marine Training Centre ("SMTTC") is now running at full utilisation (831 attendees per year in total) for one





shift and during 2010 we have seen a further 25% of our total officer corps attending proactive discretionary training on Behavioural Safety at SMTC (amounting now to more than half the total officer compliment over the past 2 years). We are looking at moving SMTC to running two shifts during 2011; we are also introducing a new Advanced Engineering and Electrical course using the MAN Alphasonic Control System simulator that was added in December. As further proof of our commitment to the value of training and competence of our seafarers, at the end of 2010 SPO purchased the outstanding lease on the SMTC site, while the simulators are undergoing a USD 3.6 million upgrade to provide better graphics and extend the training in deepwater anchor-handling techniques that will be used on our new "C" Class, 200t bollard pull ("bp") vessels and "D" Class, 225t bp vessels.

SMTC is now externally accredited by the Nautical Institute for both DP and Oil Spill Response courses and Total E&P as one

of its globally approved marine training providers.

We have begun to audit our key suppliers with the highest risk profile to SPO's HSE performance and reputation, for compliance with our Supplier Code of Conduct, however this has been proceeding slower than anticipated and may require more resources in 2011 (notwithstanding this will be an ongoing process).

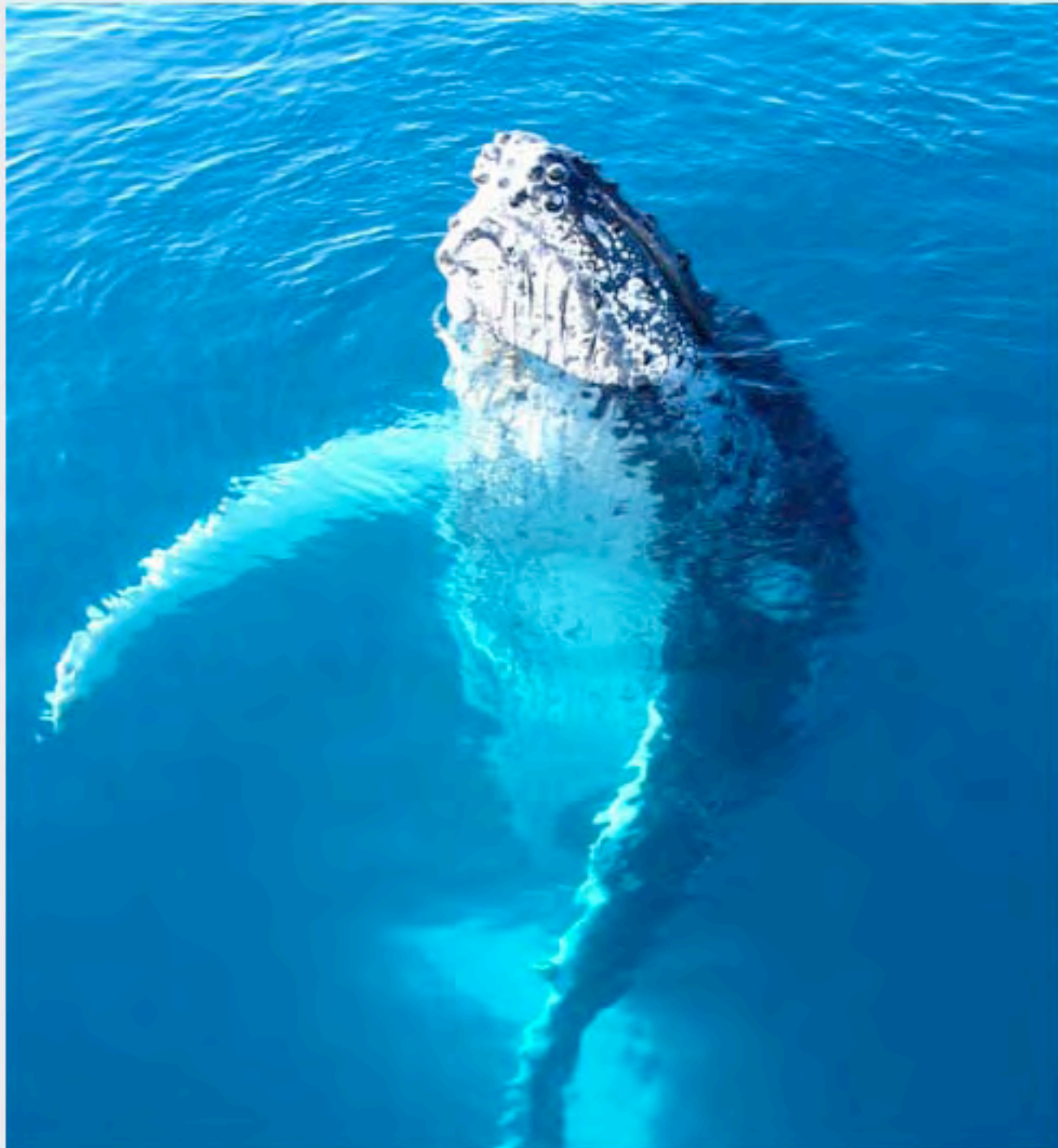
An initiative of which we are particularly proud is SPO's strategic support of youth and education projects, and specifically our commitment to investing in batches of 25 youths from disadvantaged backgrounds in the Philippines to gain vocational skills and work experience continues. The first batch has now graduated from the 18 month course and six were employed immediately. As many as possible of the remainder of this batch will be employed as soon as our fleet expansion and renewal programme can absorb them. As of 31 Dec 2010, our second batch is half way through

the course and the 3rd batch of 25 has been selected by the Salvation Army to start the course on 01 Jan 2011.

Our 2nd University Scholarship was awarded in mid 2010 and we will be committing to supporting a 3rd child of an employee from a lower GDP country to attend a good university for a first degree in 2011. Our 1st Scholarship awardee continues on track towards gaining a 2:1 honours degree.

The key impact that SPO has on the environment will be its GHG footprint caused by the operation of our current fleet of offshore support vessels. Nearly 83% of SPO's total Scope 1 and 2 (as defined in ISO 14064) carbon footprint is derived from the combustion of distillate fuel in the engines of our vessels when they are off-hire (and the emissions are classed as Scope 1 and thus SPO's responsibility). We have discussed with several clients/port authorities the possibility of "cold-ironing" or using shore power supply from cleaner





electricity generation however this is not a viable option given the vessel's operations at present. SPO is also working hard to ensure that each new class of vessel that we order is more energy efficient than the last and have opened preliminary discussions with two potential term clients to build new vessels for them powered by Gas Oil and / or LNG. We hope to be able to report progress in this area in our next report.

Notwithstanding the initiatives detailed above, in common with many other industries, it is proving more difficult to significantly reduce our GHG footprint as technologies become exhausted. Therefore, the next option is to mitigate its effects by carbon-offsetting.

Our biggest Sustainability project going forward will be to offset, auditably and demonstrably, our own climate footprint. SPO has committed to be a climate neutral business with effect from 01 Jan 2011 and to achieve this we are the Project Proponent to develop a project to generate



Carbon Credits from a Reduced Emissions from avoided Deforestation and forest Degradation ("REDD+") scheme in Central South America. The Project Definition Documents that define our scheme was independently validated by the Rainforest Alliance at the end of 2010. We are now proceeding to secure the relevant land parcels in Paraguay and commence generating carbon credits. More details of this 20 year project will be found at Summary Section: Environment, Biodiversity. This will leave SPO and other like-minded, forward-thinking and environmentally-conscious businesses pre-positioned for the introduction of any global (or regional) ETS for the shipping industry.

We believe that the REDD+ project we are developing will help to slow anthropogenic climate change in one of the most effective ways, whilst simultaneously delivering co-benefits to the indigenous people who will be given formal title to their historic land to use for traditional purposes plus some

additional employment opportunities, and to the threatened biodiversity of a fragile and unique ecosystem.

The REDD+ project is initially approved and established to meet our own internal GHG offset needs only. However, the project is designed to be easily scalable and a decision may be taken in the future, as this potential business area matures and the appropriate legal regimes are established globally under the auspices of the UNFCCC, to operate this as a business unit in its own right. The value of credits produced is already recognised to be closely linked to the quality and long-term vision of the Project Proponent (SPO) and its Project Manager/s, and we expect ours to be valued at the top end of the open market range, due to the above factors, plus the double independent validation by both the VCSA and the CCBA.

We are pleased to report both our Socially Responsible performance in 2010 and our intentions in these areas going forward

against measurable key performance indicators. We are happy to have met almost all of our 2010 KPI where year-on-year data is directly comparable. More detail on this can be found at Detail Section: [Environment](#), [Biodiversity](#). We continue to gain experience of the collection of better, relevant data to permit direct measurement of our management of our business to ensure it is as sustainable as possible. SPO works closely with its Parent Company's Sustainable Development department and the Group Risk Management Committee to ensure a comprehensive and rigorous approach is maintained to all aspects of managing our SD risks and opportunities. Additionally, the SPO GM for CSR is *ex officio* on the SPO Tender Review Committee and can advise on any issues connected with governance mechanisms and potential SD risks and opportunities. SPO is committed to operating its business in a sustainable way endorsing Dr. Gro Harlem Brundtland's definition of sustainable development "Our Common Future" in April



1987: *"meeting the needs of the present without compromising the ability of the future generations to meet their own needs."*

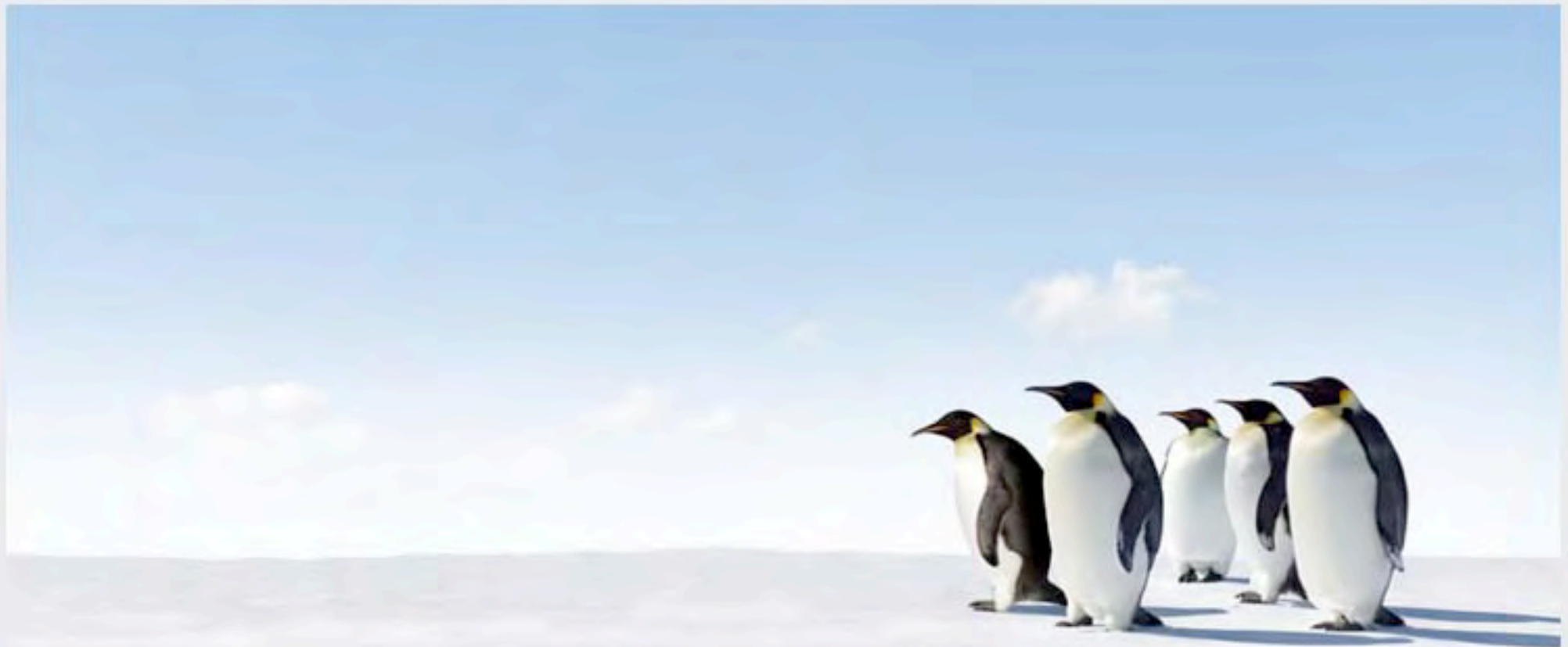


Brian Townsley  
Managing Director





# Summary of Performance



**A summary of the main achievements and performance of SPO during 2010.**

(Greater detail and the supporting data will be found in the relevant sections of this report).

Whilst much of 2010 was spent in our industry continuing to recover positively

from the loss of business confidence caused by the global financial crisis, SPO used the period to consolidate its position for future growth.

Our core business of providing marine services to the offshore oil and gas industry has historically been materially

driven by the market price for oil and gas. A reasonable and steady increase in market prices that is regarded by our clients as sustainable will generally lead to increased Exploration and Production ("E&P") business, however too big a price increase may cause instability and run the risk of triggering inflation and dampen



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We are continuing to seek opportunities to diversify the exposure of our portfolio of vessels to oil and gas price fluctuations (currently three vessels that we manage or operate work wholly outside the hydrocarbon E&P sector) and our in-house capability has been expanded to provide both professional salvage and oil spill response services on a 24x7 call out basis. Having acquired Swire Blue Ocean with expertise in the offshore wind farm business at the beginning of the year, Swire Pacific Offshore placed an order for one plus one optional (since confirmed) windfarm installation vessels with Samsung Heavy Industries in Korea. The

first vessel is scheduled to be delivered in July 2012 and the second in December 2012; both vessels will be delivered directly into contracts working in NW Europe.

SPO continues to enhance its core business capabilities, with six new vessels being delivered (three V-class 8,810 brake horse power ("BHP") anchor handling tug supply ("AHTS") vessels and three P-class 4,800 BHP AHTS vessels). One seismic survey vessel was sold to a dismantling yard (see Detail Section: Environment, Emissions and Waste). Fleet renewal will continue in 2011 with 8 more new vessels due for delivery and 5 old vessels for disposal, giving a reduction of the age profile of some 13%, to 9.3 years, over the next year. Bringing this modern tonnage into our fleet affords us the opportunity to achieve large step changes in the cost- and energy-efficiency of operations, particular with the GHG footprint that each vessel generates.

Halting the rate of anthropogenic global warming and then reversing it before we reach the tipping point, remains a real and live issue and action is required now. Whilst the UNFCCC Climate Change meeting in Cancun at the end of 2010 made much more progress than the meeting in Copenhagen a year previously, we are still lacking a binding global agreement to cover the period post 2012, after Kyoto Protocol Phase 1. This is regrettable as the longer the world nations take to agree, the more action at greater cost that will be required.

Aviation and Shipping were excluded from the Kyoto Protocol due to the trans-border nature of their operations. However the EU has now taken aviation into its established Emission Trading Scheme with effect from 2012 and IMO is on notice that the marine world must deliver real reductions in emissions through its own initiatives or follow aviation into the EU ETS through compulsion. IMO has a meeting (MEPC



62) scheduled for mid-2011, and SPO strongly hopes that a binding mechanism for real, verifiable, immediately effective action, fully observing the IMO requirement for NMFT, to reduce GHG emissions will be agreed. If that does not happen, it will inevitably lead to a global patchwork of regional sectoral schemes that will be resource intensive to administer and distort patterns of free trade.

SPO and its parent company recognize and accept the urgent need for action leading to results, as witnessed by Swire Pacific Ltd signing up to the Cancun Communiqué (see Data Section: [Society](#)). SPO is seeking to mitigate its GHG footprint through better managed operations with ongoing initiatives such as the Green Zone Fuel Efficiency Management System, however achieving material reduction in emissions is usually a matter of asset replacement and this has a long timescale. SPO has been in discussion with a number of clients for the long-term charter of vessels powered by





clean LNG but realizing this commercially remains some way off as yet.

Given that loss of forested areas is responsible for around 20% of anthropogenic global warming, avoiding further deforestation is one of the best ways to achieve the largest effect in the shortest time. SPO has therefore voluntarily decided to offset its Scope 1 and 2 GHG footprint for the 20 year period from 01 Jan 2011 through a project to develop carbon offset credits by way of a REDD+ (Reduced Emissions from avoided Deforestation and forest Degradation) scheme in Central South America. The Project Definition Document was developed in the latter half of 2009, and was independently validated by Rainforest Alliance at the end of 2010. SPO expects to develop the initial verified carbon credits and lodge them with a Registry by the middle of 2011, such that credits equating to the GHG footprint for our management business travel with effect from 01 Jul

2009, and our Scope 1 and 2 operational footprint from 01 Jan 2011 can be retired at that time.

At a granular level SPO, in its Singapore Head Office, Singapore Outport Office and SMTC, has adopted best practices, and after an independent audit have been awarded Eco-Office certification against a set of standards established by the Singapore Environment Council. This certification has only been awarded to 72 other businesses over the past 6 years.

SPO continues to monitor the level of its workforce closely, particularly in view of the number of new-buildings being delivered in the near future. The company continues to employ officers in advance of their being required to fill their operational positions on ships to give them time to assimilate SPO's values and modes of operation thus simultaneously providing the same standard of service to our clients whilst safeguarding our staff, assets and

reputation into the future. Turnover of both shore and sea staff, excluding exceptional reasons, continues at lower than industry norms, and this enhanced continuity is an ongoing benefit in many areas.

Training continued to be an area of significant focus over the past 12 months. As an indication of our commitment to maintaining SMTC as a Centre of Excellence for the long term, SPO purchased the building and the remaining 54 year site lease in mid Dec 2010. Further, Swire Marine Training Centre (SMTC) embarked on Phase 2 of its hardware and software upgrading during 2010. This will significantly upgrade the processing power to give a) greatly enhanced visual representation of environmental conditions, and b) permit the level of calculations required to simulate the behaviour of tow wires and moorings in deep water anchor handling operations. All the officers on our remaining new "C" and "D" class vessels





will attend a new training course in the techniques involved prior to joining the vessels and so will have a chance to have fully tested the boats capabilities even straight from the yard and prior to working for their first clients.

2010 saw an increase of manday's attendance at SMTC of 6.15% and numerical attendance by over a third of our entire seagoing establishment during the year, again with a high rating from feedback from 614 out of 615 attendees. The DP Induction and Simulator courses were already Nautical Institute (NI) accredited, and our MCA 1 and 3 Oil Spill Response courses are now also similarly accredited.

Whilst the facility is now at 99% resource capacity with internal courses, SMTC continues to run some external revenue earning courses at the weekends. In addition we ran two dedicated courses on "Introduction to Offshore Marine Operations" for 60 staff of a regional oil



major, in the process becoming an accredited training provider for that client.

Swire Pacific Offshore is committed to providing the highest levels of quality safety and environmental management. Our objective is to create a positive culture where safety and environmental concerns are addressed proactively. SPO is committed to improving the quality of life both on board our vessels and within the communities we operate. We believe that a proactive approach to managing our HSE is better than being reactive and we have a strong safety culture, characterised by management commitment to HSE. This ensures that our dedicated Safety Management System (SMS) continues to improve and remains a relevant and practical tool whose results are reported through ORBIS.

During 2010, six Lost Time Injuries ("LTI") were recorded (see Data Section: [Labour Tables, Occupational Health and Safety](#)). Although the actual number is the same as

in 2009, the LTIFR has decreased y-o-y by 5.55% to 0.68 due to increased work hours in an expanded fleet. The LTIs are all incurred during routine operations, showing a need to focus on and raise basic safety awareness.

Although the total number of Total Recordable Cases ("TRC") has remained quite high (30), the TRCFR has been reduced to 3.40 (per million man-hours) due to the increased number of man-hours (see Data Section: [Labour Tables, Occupational Health and Safety](#)).

It has also been informative to review the spread of TRCs among the different ranks on board. Although we already were aware of the increased frequency of incidents amongst ratings, it was surprising, and simultaneously regrettable to see Masters and Chief Engineers at such relatively high frequency rates.

When comparing SPO's statistics to that of industry statistics (see Data Section:

[Labour Tables, Occupational Health and Safety](#)), SPO's LTIFR seems to be lower than the industry average, (however latest industry statistics are not yet available at the time of writing), hence the comparison is made for different years.

Further the TRCFR is a bit higher than average for the industry, which may be due to a certain degree of subjectivity in interpretation of the definitions made amongst us and our peer group companies.

Most importantly however is to note that there is a definite downwards trend in SPO's statistics, in a larger environment (more and bigger boats, more sea staff) which shows that we are constantly improving our safety culture throughout the organisation. We aim to continue this trend in the coming years.

SPO's operations hardly impinge on areas liable to human rights violation. The company cannot employ juveniles, with the





exception of a few late adolescents as cadets or trainees, by international regulation. With a business at sea, SPO has no material contact with indigenous peoples, although we plan to have a very positive impact working in conjunction with indigenous people, and assisting with planning to devote more attention to the restoring some rights they had lost some

time ago, in South America as our voluntary carbon credit offset project is developed to fruition in 2011. As can be seen from our KPIs adopted for 2011 (see Summary Section: [Agenda](#)), we are planning to devote more attention to the area of Human Rights in 2011, and in particular to:

a ) conduct a gap analysis between our current business practices and the Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework" if this is adopted by the UN Council for Human Rights in mid 2011, and



b ) ensure that where the SPO Paraguay Forest Conservation Project ("PFCP") impinges on Indigenous Peoples, that their Traditional Rights are recognised and protected and that the Project continues to obtain their Free, Prior and Informed Consent ("FPIC") before any action is taken that may affect them. In 2010 this was confirmed by the independent PDD validator, Rainforest Alliance.

Again in 2010 we are happy to report that there were no incidents reported internally of discrimination against any minority, or of any corrupt practices being discovered or reported. It is a formal part of the induction of all new shore staff and all seafarers attending the Safety Management courses run at SMTC that the Company Code of Conduct, and the non-negotiability of the absolute requirements therein to avoid discrimination and harassment, plus seeking or accepting inducements from suppliers or clients, are explicitly brought to their attention.

The company's internal audit department continues to prioritise business units for audit using a risk-based approach. The allotted number of units was audited in 2010 and no incidents of corruption were uncovered or reported.

SPO continued surveying its clients for feedback of the level of service provided. It was disappointing that the number of responses in 2010 was significantly lower in 2010 than in 2009, however whilst we can request feedback, we obviously cannot demand it. The overall score was also marginally lower in 2010 at 4.24, compared to 4.4, but we still maintain our record of having no boat or category rated poor or very poor during the entire year.

The health and safety impacts of all aspects of providing our services were reviewed by the staff who were to carry them out and their supervisors or line managers on a continuous basis. As in 2009 there were no monetary fines levied on SPO for non-compliance with laws and

regulations concerning the provision of services.

During 2010 there was only one incident in which a vessel was in technical breach of a regulation concerning health and safety. The AHTS Pacific Ariki was on passage to Manila when the HF SSB Radio failed. The vessel had many other back-up systems and reported this using these to its operational control office, who arranged for a technician to attend the vessel on arrival and rectify the fault. The vessel was randomly visited by a Port State Control official on arrival and the faulty radio was openly declared by the Master, together with the fact that a technician had been engaged to rectify it. Regrettably however the fact that the radio had failed is a technical breach of international SOLAS requirements and Flag State should have been informed. In discussions with Flag State for the vessel, had the office informed them of the failure and the rectification measures in hand, an exemption would have been given.



There were no fines, penalties, monetary or non-monetary sanctions levied due to these incidents of non-compliance. There was also no case of any legal action being brought for any anti-competitive behaviour, anti-trust or monopoly practices.

In continuation with long-standing policy and practice, no donations or in-kind contributions were made to political parties or individual politicians. SPO did however continue to invest philanthropically in the communities it impinges upon. As in the previous two years, the company agreed in 2010 to help sponsor a third batch of 25 disadvantaged Filipino youths to undertake 18 months vocational training in Manila to be a fitter / mechanic, commencing on 01 Jan 2011. This will benefit the scholars and their communities by giving them access to a trade and facilitating raising their and their communities' economic value, and also provide access to the skilled people SPO needs to operate its boats as the fleet expands.

The first SPO University Scholarship was awarded to the son of an employee in Azerbaijan so he could embark on a degree course to read for a BA(Hons) in History at Bristol University in the UK, and he is on track for at least a 2(I). In 2010 we awarded the second University Scholarship to the daughter of an employee in the Philippines. She will read for a Bachelor of Business in Information Technology at NTU in Singapore commencing in Academic Year 2011 (as the deadline for foreign applicants to Singapore universities for commencing academic year 2010 had long passed). She will work as an intern in SPO Head Office during her vacation breaks.

These types of investment in the education of young people is prima facie evidence of the belief of SPO in promoting as best it can in a small way, sustainability for future generations.



## Agenda and KPIs Achieved for 2010 and set for 2011



### **SPO Sustainable Development KPIs for 2010 and results achieved**

#### **General and Reporting Issues**

SPO will seek to:

- continue to produce our annual Sustainable Development Report, aiming to meet GRI's application level C+ in our report on our 2009 performance  
**Achieved**
- implement closer dialogue with our key identified stakeholders to enable us to focus our CSR output to better meet the expectations of both our internal and external stakeholders  
**Achieved:** Successful dialogue with over 70 parties, compared to 40 in



2009. The 2010 SPO SD report has been modified to meet most expressed concerns

### Environmental Issues

- continue to reduce its electricity usage per employee in its offices by at least 5% on 2009 figures

**Achieved:** usage was reduced by 16.99% per employee. Total company usage was down by 6.95%.

- reduce our CFC/HCFC consumption on our vessels by 5% on 2009 figures

**Not achieved:** HFC usage was down by 4.78% but HCFC usage increased by nearly a half. The y-o-y increase between 2008/09 was due to more accurate reporting but the reason for the continuing increase in HCFC consumption is still under internal investigation

- reduce our Scope 1 (off-hire) FO consumption per boat-day by at least 5% on 2009 figures

**Achieved:** FO consumption per boat day was reduced by 8.94%

- establish its Carbon Offset REDD scheme in Paraguay such that by the end of 2010 it has generated and registered sufficient verified VER credits to permit offset / retirement of SPO's Scope 1 and 2 GHG footprint for 2010 and the full business travel footprint since 01 Jul 2009.

**Work in progress:** The project (and all other similar REDD projects worldwide) was delayed by 12 months due to greatly delayed release of the relevant methodology from the independent validating/verifying body. The methodology was finally issued in Dec 2010 and our project is now on target to bank its first credits by mid 2011, backdated to Dec 2010.

Due to the above, we have postponed the commencement date for running a climate neutral business by a commensurate 12 months to 01 Jan 2011, although still continuing for 20 years from this revised date.

- gain SEC Eco-office accreditation for SPO Head Office, Singapore Regional Office, and SMTC

**Achieved:** Eco-office accreditation issued in H2 2010 for SPO Head Office, Singapore Regional Office and SMTC; valid for 2 years.

- once trials are complete, to begin to roll out our "Green Zone" Fuel Efficiency Management System on sufficient vessels in the fleet to develop SEEMPs

**Achieved:** 6 systems now installed and transmitting data on a daily and monthly basis. Once there is a statistically significant body of data (mid 2011) it will be processed to begin producing specimen SEEMPs.





## Social Issues

SPO will seek to:

- reduce our LTIFR figure by 5% on 2009 figures

**Achieved:** LTIFR is below HSE Department target, and has reduced y-o-y 2009 / 2010 by 5.55%

- encourage more diversity in our workforce and actively seek the employment of more registered disabled persons to suitable positions by explicitly detailing this policy in any job advertisements

**Achieved:** Head office job adverts now actively seek increased diversity

- continue to monitor and promote the success of our two new youth education programmes; with the Propeller Club in Manila for disadvantaged Filipino youths, and our University Scholarship Scheme

**Achieved:** third year of both schemes



launched, first year for both continues successfully

### Human Rights Issues

SPO will seek to:

- work closer with its approved vendors to ensure that SPO's key suppliers meet its Supplier Code of Conduct to further mitigate its reputational risk exposure  
Services and products were purchased in 2010 by SPO with due cognisance of our SCOC, but insufficient resources were applied to ensuring existing vendors were systematically audited on a risk-based selection.

**Not achieved:** re-prioritized for 2011

### Product Responsibility

SPO will seek to:

- increase the response rate for service quality feedback from our clients by at least 10% over 2009 figures and increase the average quality rating by at least 5% over 2009 figure

**Not achieved:** we received feedback from 16 clients, a y-o-y decrease of 38.5%, reporting on 30 vessels, a y-o-y decrease of 21.1%, and representing 40% of the fleet. The responses to the questions on the quality of our services the average score was 4.24 out of 5. This represents a decrease in quality perception rating of 0.36%. All operating offices have been exhorted to work in this area, but ultimately we cannot force clients to respond.



# Sustainable Development Policy



We adopt this policy because:

- Sustainable development encompasses our dedication toward the environment, health & safety, employment, business partnerships and community matters.

- Long-term value creation for our shareholders depends on the sustainable development of our businesses and the communities in which we operate.
- We wish to excel as corporate citizens.

## Our Policy

- Industry leadership: We will work with others to promote sustainable development in the industries in which we operate.



- In our operations: We will meet or exceed all legal requirements and:
  - Be a good steward of the natural resources and biodiversity under our influence and ensure that all potential adverse impacts of our operations on the environment are identified and appropriately managed.
  - Operate as far as is reasonably practicable in a manner which safeguards the health and safety of all our stakeholders.
  - Strive to be an employer of choice by providing an environment in which all employees are treated fairly and with respect and can realize their full potential.
  - Favour suppliers and contractors who promote sustainable development and encourage the responsible use of our products and services by our customers and consumers.
  - Promote good relationships with the communities of which we are a part and enhance their capabilities while respecting people's culture and heritage.
- We will review this policy periodically, having regard in particular to stakeholder dialogues.

The Executive Committee  
24 March 2011

#### **Making it Happen**

- All of Swire Pacific Offshore's offices shall apply this policy. We will encourage other companies in which we have an interest as a shareholder or through our supply chain to implement similar policies.
- We will encourage and empower our staff to be proactive on sustainable development matters both at work and in the community.
- We will monitor our performance and report it regularly.



## 2010 Overview



The Swire flag has been a recognised symbol of operational excellence and quality in the international marine industry for almost 140 years. Swire Pacific Offshore is a trusted name in the offshore marine industry. Established in 1975, we have established a reputation as a leading offshore marine service provider to the

offshore oil and gas industry, with a network that spans the globe.

As at 31 December 2010, SPO employed 2,003 employees worldwide (on shore and offshore) and owned and/or operated 75 offshore support vessels operated out of, or managed from the offices [shown on the](#)

### SWIRE PACIFIC OFFSHORE'S MISSION STATEMENT

To provide the highest-quality offshore marine support services to the oil and gas industry, advancing our mutual goal of safer, cleaner and more efficient offshore energy exploration and production, while operating the company on a sound commercial and sustainable basis that ensures profitability, growth and delivers satisfactory returns to our shareholders.

[map](#) with a further 13 vessels on order. 48 of the delivered vessels (64%) are equipped with Dynamic Positioning ("DP") systems (32: DP1 and 16: DP2). SPO's fleet is modern with an average age of 10.7 years and includes the whole range of offshore support vessel types, comprising Anchor Handling Tug Supply Vessels,



Platform Supply Vessels ("PSV"), Anchor Handling Tugs ("AHT"), Emergency Towage and Environmental Response Vessels ("ETV"), Ice-Breaking Supply Vessels, Seismic Survey Vessels and ROV/Dive Support Vessels, with Accommodation Barges and Windfarm Installation Vessels ("WIV") on order. The most recent ventures include vessels equipped for Inspection, Maintenance and Repair (IMR) and Tier 1, Oil Spill Response (viz. minor incidents that can be dealt with using resources at the location or from the vessel).

The majority of SPO's customers are in the energy industry, ranging from the world's leading exploration and production corporations to offshore construction companies, subsea service companies and independent oil companies. We are fully equipped to support a wide range of offshore activities, including drilling, production, exploration, salvage, Floating Production Support and Offtake ("FPSO") vessel support, pipe-laying and subsea construction.

We work in almost every major offshore production and exploration region outside North America (due to Jones Act restrictions) and (currently) South America, and are amongst the small number of companies in our sector of the market able to relocate vessels seamlessly whilst meeting all the local and national regulations and social / employment requirements of a new client in a new area.

Our service offering places a strong emphasis on operational excellence and a proactive attitude towards Health, Safety and the Environment ("HSE"). We place great importance on providing reliable and professional service in difficult operational conditions.

The operations conducted by our staff on our vessels for many (~50 at any one time on average) clients has been favourably reported on during feedback dialogues.

We also received specific commendations for the crews on many of our vessels (see

the full listing at Data Section: [Product Responsibility, Safety Awards](#))

Our proactive approach towards Sustainable Development enables our clients to benefit from these value-added services. When designing and specifying the hull forms and vessel propulsion systems for our new vessels currently under construction, we spent significant time with potential clients to ensure that they would be more fuel efficient and cleaner burning for their generally intended operational profile. All of our vessels use Marine Gas Oil (MGO), a low sulphur fuel in accordance with ISO 8217, and will use ultra low sulphur diesel (<10ppm) where available. We have also begun to install a "Green Zone" Fuel Efficiency Monitoring System on our vessels to permit real time monitoring of fuel consumption and thus reduction of GHG emissions by optimization of support operations for clients.



This will both save our clients money and reduce emissions through the ability to demonstrate the achievement of a reduced fuel-burn. Our long-term goals include working with other members of the industry to promote socially aware and environmentally conscious action for a more sustainable future.

SPO has also striven to maintain its position as an Employer of Choice in seeking to enhance the welfare and recognition of our existing staff and has continued with its two schemes to fund the education of youths who may otherwise not have had the opportunity to realize their full potential.

An index showing all the subject area's contained within the report, and the GRI Indicator that guides the depth and level detail required can be found [here](#).





# Global Overview



Global view of SPO's main offices and outports, and joint venture worldwide.

Depending on contracts in force, the vessels in our fleet may be operating out of or managed from any or all of these office locations at any one time.



# Governance



The Swire Pacific Offshore Group of companies is governed at the highest level by a Board of Directors. The MD Finance Director and Commercial Director of SPO are on the Board, along with the non Executive Chairman and 3 other Directors of our parent company, Swire Pacific Limited and 2 independent

directors. The Board of Directors is chaired by the Chairman of Swire Pacific Limited. There is an Executive Committee composed of all SPO Directors and Senior General Managers, which has operational responsibility for economic, operational, health, safety, social and environmental performance within SPO.

SPO has no shareholders itself, however as a wholly-owned subsidiary of Swire Pacific Limited, which is listed in Hong Kong, we comply with the Stock Exchange of Hong Kong in accordance with the Code on Corporate Governance Practices, with Swire Pacific Limited's internal Code of Conduct covering ethical standards and



with Swire Pacific's procedures which are available [here](#)

This compliance is in line with our belief that it is imperative to act with probity, transparency and accountability in order to achieve our long-term objectives. Our Board is committed to maintaining and developing robust corporate governance practices and conducting regular internal reviews that ensure:

- satisfactory and sustainable returns to shareholders;
- the interests of stakeholders are safeguarded;
- that overall business risk is under-stood and managed appropriately;

- delivery of high-quality products and services to the satisfaction of customers; and
- that the highest standards of ethics are maintained.

The requirement for probity, transparency and accountable conduct in all business affairs is highlighted to all of our new onshore staff within 6 months of joining and our officers who attend our Marine Training Centre in Singapore at intervals of less than four years. At this time they meet Senior Management, our Designated Person Ashore (DPA), and are updated with our ongoing CSR initiatives, which includes a formal reminder of our Corporate Ethics Policy. The DPA has been an internationally legally required position since 1993, peculiar to the shipping industry under the ISM code, wherein every Company must designate a person or persons ashore having direct

access to the highest level of management. The responsibility and authority of the designated person or persons includes monitoring the safety and pollution prevention aspects of the operation of each ship and ensuring that adequate resources and shore-based support are applied, as required.



# Economic Performance Summary

## MARINE SERVICES DIVISION

The Marine Services Division, through the Swire Pacific Offshore group ("SPO"), operates a fleet of specialist vessels supporting the offshore energy industry in every major offshore production and exploration region outside North America.

Table EC1

Marine Services Division		
	2010 HK\$M	2009 HK\$M
<b>Swire Pacific Offshore group</b>		
Turnover	3,046	3,892
Operating profit	732	1,594
Attributable profit*	709	1,559
* Including post-tax profits from the jointly controlled companies shown below.		
<b>Share of post-tax profits from jointly controlled companies</b>		
Swire Pacific Offshore group	-	3
HUD group	82	78
	82	81
<b>Attributable profit</b>	<b>791</b>	<b>1,637</b>
	<b>2010</b>	<b>2009</b>
<b>Fleet size (number of vessels)</b>		
Swire Pacific Offshore group	75	70
HUD Group - Hongkong Salvage & Towage	17	17
<b>Total</b>	<b>92</b>	<b>87</b>





**SPO Fleet Size Growth**

			Vessels in Operation			[To be revisited depending on purchase of new vessels]		
Vessel class	Brake horse power	2009	Additions	Disposals	Year-end	Vessels on order expected to be received in:		
				2010		2011	2012	2013
<b>Anchor Handling Tug Supply Vessels</b>								
J-class	2,600-4,200	11	-	-	11	-	-	-
T-class	3,600	4	-	-	4	-	-	-
P-class	4,800	8	3	-	11	5	-	-
S-class	5,440	4	-	-	4	-	-	-
6,000 series	6,000-6,500	2	-	-	2	-	-	-
UT704	7,040-9,000	2	-	-	2	-	-	-
R-class	7,200	8	-	-	8	-	-	-
V-class	8,810	7	3	-	10	-	-	-
W-class	10,800	8	-	-	8	-	-	-
B-class	12,240	6	-	-	6	-	-	-
C-class*	16,310	-	-	-	-	1	3	-
D-class	18,250	-	-	-	-	-	3	1
<b>Platform Supply Vessels</b>								
A-class	6,310	5	-	-	5	-	-	-
<b>Ice Breaking Supply Vessels</b>								
E-class	23,170	2	-	-	2	-	-	-
<b>Seismic and Hydrographic Survey Vessels</b>								
Survey	2,600-6,400	3	-	1	2	1	-	-
<b>Accommodation Barges</b>								
I-class		-	-	-	-	1	1	-
<b>Wind Farm</b>								
Installation Vessel		-	-	-	-	-	1	-
		70	6	1	75	8	8	1

\* Orders placed in February 2011, including one vessel delivered in February 2011.



2010 RESULTS SUMMARY

The attributable profit of the Marine Division was HK\$709 million, a decrease of 55% from 2009.

Swire Pacific Offshore group

2010 Results

SPO reported an attributable profit of HK\$709 million, a decrease of 55% compared to 2009.

During the year, six new vessels were delivered, consisting of three V-class 8,810 brake horse power ("BHP") anchor handling tug supply ("AHTS") vessels and three P-class 4,800 BHP AHTS vessels. One seismic survey vessel was sold to a dismantling yard. As a result, the fleet size at 31st December 2010 increased to 75 vessels.

The offshore market in all regions where SPO operates was very challenging in 2010. Despite recovery in demand in 2010 as oil prices and offshore activity increased, charter hire rates and utilisation remained under pressure throughout the year. This primarily reflected the large number of new vessels (ordered when demand was at its previous peak) which entered the market.

The average fleet utilisation during the year was 80%, nine percentage points lower than in 2009. Average daily charter hire rates were 19% less than in 2009, with total charter hire revenue in 2010 falling by 23%.

Non-charter hire income fell by HK\$28 million due to a reduction in mobilisation and demobilisation fees earned on moving vessels to their location of hire.

Total operating costs fell by HK\$35 million. However, an impairment charge of HK\$57 million was recognised on the write-down in the value of a number of older vessels at 31st December 2010.

Total capital expenditure on new vessels and other fixed assets in 2010 amounted to HK\$1,328 million, compared to HK\$811 million in 2009.

The new V-class vessels and P-class vessels delivered in 2010 made an additional contribution of HK\$35 million.

In February 2010, SPO acquired Blue Ocean Ships A/S, a Danish company which specialises in providing services to the offshore wind farm industry. Later in the year, this company, which has been renamed Swire Blue Ocean A/S, placed its first order for a wind farm installation vessel to be delivered in 2012. The vessel has entered into a short-term contract to support the construction of an offshore wind farm for a European utility company.

2011 Outlook

2011 will be another challenging year for SPO, with the offshore supply vessel industry continuing to suffer from an over-supply of tonnage. Utilisation is likely to improve but charter hire rates are expected to remain depressed. Conditions should improve in the medium-term due to an increase in exploration and production activity.

41% of SPO's 2011 fleet capacity was pre-booked at 31st December 2010 at rates which are consistent with those achieved during 2010. This represents 50% of the expected revenue for 2011.

At 31st December 2010, SPO had 14 vessels on order and a total capital expenditure commitment of HK\$3,601 million (31st December 2009: HK\$2,711 million). Of the 14 vessels on order at 31st December 2010, seven will be delivered in 2011, five in 2012 and the remaining one in 2013. Since the year-end SPO has agreed to acquire four AHTS vessels of which one has been delivered and the remaining three will be delivered in 2012. [SPO has also exercised an option to acquire a second wind farm turbine installation vessel for delivery in 2012. These vessels represent commitments aggregating approximately US\$500 million to tonnage designed to operate in deeper water (where future growth in demand is expected to be strongest) and to the development of alternative energy sources.]

With a view to further international expansion, SPO has established new joint ventures in Indonesia and Saudi Arabia.

SPO - Profile of Capital Commitments (HK\$M)					
	Expenditure		Forecast year of expenditure		Commitments
	2010	2011	2012	2013	at 31st Dec 2010
Vessels	1,287	1,714	1,736	124	3,574
Other fixed assets	41	27	-	-	27
Total	1,328	1,741	1,736	124	3,601

1. Movement in Attributable Profit	
	HK\$M
Attributable profit in 2009	1,559
Increase in revenue from additional capacity	56
Reduction in charter hire and utilisation rates	(873)
Reduction in non-charter hire income	(28)
Impairment of older vessels	(57)
Reduction in operating costs	35
Other items	17
Attributable profit in 2010	709





2. SPO - Fleet Size by Age of Vessel (Please note the 2011-2013 figures reflect disposals)														
CATEGORY	YEAR													
	Dec 2000	Dec 2001	Dec 2002	Dec 2003	Dec 2004	Dec 2005	Dec 2006	Dec 2007	Dec 2008	Dec 2009	Dec 2010	Dec 2011	Dec 2012	Dec 2013
1-5	10	10	15	18	17	19	28	33	33	27	31	36	34	32
6-10	1	-	3	6	9	10	10	10	15	18	17	19	29	24
11-15	2	1	-	-	-	-	-	-	3	8	9	10	10	15
16-20	27	20	6	4	2	2	1	1	-	-	2	2	2	5
21-25	4	12	26	26	24	23	14	11	3	2	1	1	-	-
26-30	-	-	-	1	2	2	9	8	14	14	14	9	4	1
31-35	-	-	-	-	-	-	-	-	1	1	1	1	3	2
Total	44	43	50	55	54	56	62	63	69	70	75	78	82	79
Average age	15.1	15.3	14.7	13.9	13.9	14.0	12.4	11.0	10.4	10.8	10.7	9.3	8.3	8.1

3. 2010 Turnover by Region		
Region	2010 HKD\$M	2010 %
Europe	69	2%
Africa	871	29%
Australia & New Zealand	607	20%
Far eastern Russia	294	10%
South East Asia	692	22%
Middle East	513	17%
	3,046	100%

4. SPO – Lost Time Injury Frequency Rates											
YEAR	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
SPO LTIFR *	1.72	1.05	1.25	1.62	0.97	0.47	0.30	0.57	1.35	0.72	0.68
SPO LTIFR (excl. Australia and New Zealand)	1.84	0.99	0.71	1.56	0.98	0.23	0.34	0.29	0.53	0.28	0.60
ISOA LTIFR * (2010 data not available)	2.10	1.80	1.40	1.20	1.00	0.70	0.70	1.47	1.16	0.51	NA

The injury rate data for prior years has been revised to conform to that used for the Swire Pacific Group's Sustainable Development reporting.





5. Average SPO Fleet Utilisation Rates (2000 – 2010)											
YEAR	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average utilisation rate %	88%	90%	90%	86%	88%	91%	94%	92%	91%	89%	80%

7. Estimated Rig Deliveries for the Offshore Oil and Gas Industry				
	Total	2011	2012	2013+
Jackups	49	26	18	5
Drillships	32	19	7	6
Semisubmersibles	30	18	9	3





# Risk and Opportunities: Climate Change



The senior management body of SPO considers the various aspects of climate change and our mitigation of the anthropogenic drivers of which we have a control on a continuing basis and for future new projects and business areas where relevant. Both the SPO board and our parent company board requires that a ) we

have an action plan for both identifying high priority Sustainable Development issues, mitigating them where possible and managing those parts that cannot be viably mitigated and b ) as a pre-condition of approving any capital investment that we will review the GHG footprint of the

investment and how this can be mitigated to as low a level as reasonably practical.

We do not foresee many, if any, risks to our core business due to physical changes associated with anthropogenic climate change.



- Changes in sea level do not have a net effect on vessels floating on the surface. Our clients may find themselves exploring or producing in marginally deeper waters, but this would only potentially affect only a quarter of our contracts where drilling is done from bottom supported rigs rather than floating rigs, and the additional water depth would not be material to the leg length. When the boats are alongside in ports and supply bases they may experience lower freeboards but these have always varied over the diurnal tidal cycle, and will continue to be managed operationally by the logistics organisations.
- Any increase in severe weather events may increase downtime on a like-for-like basis, but this can generally be countered by clients utilizing a higher horse power vessel. This will merely cause an imperceptible increase in the existing trend to higher horse power vessels that the industry has seen

historically, and that SPO has planned and provided for over the past decade or more.

- Any shift in climatic zones will affect global food chains, but will not directly or disproportionately impact our business operation, except possibly to cause an increase in food prices, however this will be true of all populations and businesses.

From a regulatory point of view, our vessels emit NO<sub>x</sub> and SO<sub>x</sub> as a by-product of combustion in the vessels' engines. The level of emissions a) is a function of engine design, and fuel specification they use and b) is directly related to the activity of the vessel. The activity of the fleet is in turn solely driven by our clients for the 80.5% of all available boat days in 2010 when the boats were on hire; our clients were in operational control of the vessels, determining and directing in what mode of operation they should be (in transit, in port, on running standby or standby at anchor, etc.) and then the speed of the vessel and

the orientation of the vessel in relation to the offshore working location and the weather. All of these factors have a direct connection with the level of fuel consumption and thus emissions of the vessels. ALL of our vessels consume only low or ultra low sulphur Marine Gas Oil / Marine Diesel Oil (MGO/MDO), but never the higher sulphur content grades of Intermediate Fuel Oil (IFO) and Heavy Fuel Oil (HFO). Levels of NO<sub>x</sub> and SO<sub>x</sub> emissions are certified for each vessel by independent Classification Societies in accordance with limits laid down by UN International Maritime Organisation (IMO) under the MARPOL Convention Annex VI. All our vessels are fully compliant with this. The revised Annex VI came into force on 1 July 2010 under the tacit acceptance amendment procedure and includes the phased-in reductions for NO<sub>x</sub> and SO<sub>x</sub> emissions and the extended application of NO<sub>x</sub> emission limits to existing engines. At the same time, Sulphur Emission Control Areas (SECA) became Emission Control Areas (ECA) to incorporate NO<sub>x</sub> emissions



as well as  $SO_x$ . (The Baltic Sea area and the North Sea became ECAs upon entry into force of the revised Annex VI).

The US Environmental Protection Agency (EPA), working closely with its federal and contiguous international partners, submitted an application to the IMO to designate U.S. coastal areas as an ECA. As a result of this, on March 26, 2010, IMO amended MARPOL, designating specific portions of U.S., Canadian and French waters as an Emission Control Area (ECA). The area of the North American ECA includes waters adjacent to the Pacific coast, the Atlantic/Gulf coast and the eight main Hawaiian Islands. It extends up to 200 nautical miles from the coasts of the U.S., Canadian and the French waters, except that it does not extend into marine areas subject to the sovereignty or jurisdiction of other states.

Our "Green Zone" Fuel Efficiency Management System (FEMS), which provides a real time read out of





consumption, shown as m<sup>3</sup> FO or tCO<sub>2</sub>e emitted or USD cost, all either per nautical mile or minute, to the Navigating Watchkeeper. This will assist the vessel and the client to work together to reduce the vessels' footprints.

We also record LO consumed on and off-hire. "LO" covers the complete range of grades of lubricating oil and a survey has shown that 82% by volume of the total LO usage recorded is actually consumed in internal combustion engines and converted into GHG which is emitted to the atmosphere. We thus use this percentage figure to calculate GHG emissions in tCO<sub>2</sub>e from total LO recorded consumed in litres.

Greenhouse Gas emissions from shipping are expected in the near future to be regulated by national, regional or international "cap and trade" Emissions Trading Schemes ("ETS"). Regrettably neither the UNFCCC meeting CoP-15 in Copenhagen in Dec 2009 nor CoP-16 in

Cancun in Dec 2010 achieved sufficient consensus to produce a legally-binding global convention for Annex 1 (developed) and non-Annex 1 (lesser developed) countries to limit GHG emissions in the period post Kyoto Phase 1, after the end of 2012.

CoP-15 did leave the IMO as the single UN body with responsibility for regulation of global emissions from shipping, but the EU has felt that its progress towards a conclusion has not been timely enough. Consequently, the EC has stated that without agreement at IMO by the end of 2011 (effectively requiring a consensual decision at IMO MEPC in July 2011), shipping, which was excluded from the existing EU-ETS at last review at the end of 2008, will be written back in. It will be a very significant administrative burden to shipping in all sectors worldwide if a patchwork of regional sectoral ETS schemes is introduced, due to impatience or frustration with an inability to agree a transparent, legally enforceable, IMO

administered, global sectoral scheme that drives real and verifiable reductions in GHG emissions on an urgent basis.

SPO's operation in Australia is registered with the National Greenhouse and Energy Reporting Office (NGER) at the Australian Federal Government's Department of Climate Change (DCC). SPO Australia continues to report its ISO 14064 Scope 1 and 2 emissions and consumptions as required, inclusive with a statement that the responsibility for reporting the vessels' consumptions when on-hire is regarded as solely lying with the various clients, as they are the parties under the NGER Act defined as being in operational control of the vessels. SPO Australia is a member of the Australian Shipowners Association (ASA) and the ASA has sought and held a meeting with our clients' trade organisation, the Australian Petroleum Production & Exploration Association (APPEA) in 2009 on behalf of SPO and other like-minded members of our peer group in an attempt to resolve the





issue of reporting responsibility under the NGER Act. Regrettably this was unsuccessful and post meeting advice was that this will ultimately probably have to be resolved on a case-by-case basis by the DCC Greenhouse and Energy Data Officer (GEDO). However all of this is in administrative abeyance and no further action will be taken on this until the Australian Government passes its Emissions Trading Scheme Legislation.

The introduction of the NZ ETS has been on hold since November 16 2008 when the newly formed National-led government announced that it would delay implementation of the ETS pending a full review of climate change policy. The inclusion of Shipping was due to take place with effect from 01 Jan 2011.

President Barack Obama has recently reiterated that he wishes the USA to enter a cap and trade system to limit global warming and this will greatly assist achieving a satisfactory conclusion to UNFCCC CoP-16. A number of initiatives



are underway in the USA to pass the required legislation. SPO does not trade in USA waters but this action, when it happens, will have extra-territorial effects. Looking at this pragmatically however further action is unlikely in 2011 as the USA moves towards the next presidential election with split political control of its two legislative houses.

The United Kingdom's shipping industry has proposed creating a global cap-and-trade program for a sector responsible for transporting 80 percent of the world's trade goods. The U.K. Chamber of Shipping ("CoS") supported the emissions scheme because the sector is one of the last big industries to elude the regulatory constraints of greenhouse gas emissions reduction requirements. This is strongly supported by some other national CoS and strongly opposed by others; an indication of the difficulties that IMO suffers in seeking a) consensual agreement amongst 169 disparate member states, whilst b) safeguarding and simultaneously reconciling the core IMO principle of "No

More Favoured Treatment" for any Flag State member with the UNFCCC Principle of Common But Differentiated Responsibilities".

In summary it would appear that the inclusion of shipping in cap and trade systems is a matter of "when" rather than "if".

SPO is working on mitigating some of the Scope 1 and 2 GHG footprint for its vessels operationally, such as by utilizing FEMS as mentioned above, but practically achieving step-change reductions will require significant capex in new vessels of advanced designs.

We are certainly addressing this in the normal course of our business and have entered into discussions with a number of clients on using LNG as sole or in a dual fuel engine as the most promising way to achieve the step change in reduced emissions. Practically design issues in the volume required for LNG storage on board would involve a long-term client being

willing to accept a lower vessel deadweight for the same size and horsepower ("hp") of vessel, and be able to guarantee a regular LNG fuel supply for the long-term of the contract.

A second initiative that SPO is pursuing is the building of a Windfarm Installation Vessel (WIV) on behalf of its dedicated WIV support company, Swire Blue Ocean, based in Copenhagen. The contract for this was signed in Aug 2010 with Samsung Heavy Industries in Korea and the delivery of the first WIV, Pacific Orca, is scheduled for June 2012. The option for a sister vessel, Pacific Osprey, was signed in Q1 2011 for delivery of the vessel into service in Europe in early 2013 and she will be used for the installation of Wind Turbine Generators for Dan Tysk Offshore Wind in the German North Sea. Pacific Orca, which was originally contracted by the Dan Tysk project, will be committed to another European project. The re-allocation of Pacific Orca and Pacific Osprey between projects provides the parties with a better alignment between the





delivery dates of the vessels and the commencement of their initial contracts.

The Swire Blue Ocean windfarm installation vessel design focuses on safety, efficiency and reliability and will provide customers with a significantly improved operating weather window. The advanced specification features a usable

deck area in excess of 4,000 m<sup>2</sup>, DP 2 station keeping, a 1,200 MT crane, a total jackable weight of 8,400 MT and a transit speed of 13 knots. The vessel is well suited for the installation of both wind turbines and foundations.

These initiatives will widen SPO's client support base in the area of offshore

marine support and assist the medium and long term generation of a greater amount of cleaner and greener energy, indirectly reducing the amount of GHG emitted to the atmosphere.

However to achieve real and significant reductions in the short and medium term, and certainly before we reach the global



tipping point, another simultaneous solution is required. SPO has been working on offsetting its GHG footprint for the past 18 months using a REDD+ scheme, as quality, transparent, well designed and managed forestry (avoided deforestation, or reforestation or afforestation) schemes are widely acknowledged by such as the UNFCCC Bali Road Map ( see [here](#)) to produce the greatest positive effect, most cost efficiently, in the shortest time.

Thus by the middle of 2011, SPO is on track to have established its own project to generate, bank and then be able to retire sufficient dual (VCSA and CCBA) verified REDD+ VER carbon credits to offset its entire Scope 1 and 2 emissions' footprint with effect from 01 Jan 2011, and the footprint for all air travel on business wef 01 Jul 2009. The commencement of the REDD+ Offset Scheme has been delayed 1 year as SPO, in common with all other Project proponents, had to wait for the validating body, VCSA, to issue the relevant dual-approved REDD+ methodology, against which the

independent validators and verifier, Rainforest Alliance, could consider our Project Design Document. For full details on this project see the Environmental Section: [Biodiversity](#).



## Risk and Opportunities: Market Presence



With respect to SPO's practices of favouring local suppliers, our geographical definition of "local" with respect to purchasing of local goods and services by operating offices is detailed in the Data Section under [Economic Data and Tables](#).

The company has a Central Purchasing department in Head Office in Singapore, reporting to the Fleet Technical Director. The intent of this is to ensure that SPO obtains the best price through volume of business, for goods and services of known

good quality, achieved in a cost-efficient manner for both the company and our principal approved suppliers.

SPO purchases five categories of goods and services:



1. Spare parts,
2. Consumables, such as offhire fuel, rope, soap and paint
3. Services, such as electronic equipment maintenance,
4. Port and Agency assistance,
5. Provisions, food, etc,

Of these, the first two categories are responsible for 40.73% (2009: 43.50%) of the value our total invoiced procurement spend in 2010 and this is all managed by Central Purchasing. The balance of the remaining three categories, 59.27% (2009: 56.50%) of our total invoiced procurement spend in 2010, is sourced and provided through the local vessel managing outpost office.

Many items, particularly spares, are required to be Original Equipment Manufacturers products to avoid voiding

equipment manufacturers' warranties. The balance of the goods and services purchased is determined on the basis of best value for money.

The "value" aspect is a combination of

- a. quality,
- b. speed of response of the supplier,
- c. flexibility in delivery, in an industry in which schedules change frequently and at short notice, (this is the prime benefit of using suppliers who are local to the ships' areas of operations)
- d. past history of reliable service from a supplier,
- e. the supplier being on our Approved Vendors List (an ISO 9001 requirement),
- f. the suppliers' full acceptance of our "Supplier Corporate, Social and

Environmental Responsibility Code of Conduct" at the time of our placing the order,

g. the suppliers' ability to provide goods in accordance with our various environmental specifications (e.g. "Zero Asbestos" certification, wood products to be FSC certified, replaced IT products disposed of by supplier of new products in accordance with best environmental practice and where possible in line with the European Community directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) which, together with the Restriction of Hazardous Substances (RoHS) Directive 2002/95/EC, disinfectant provided to vessels compatible with sewage treatment plants on board, etc.)

With respect to SPO's practices of locally hiring senior management, we have reviewed the proportion of personnel in all of the regional and sub-offices listed in Section 3.4, who are employed at a managerial job group level. Given the



geographical breakdown of our fleet, these are in fact the local senior operational managers of the vessels.

We seek to employ suitable senior management sourced from the local community where possible, but the constraints of our business require that in many cases managers should have senior professional qualifications (as Master or Chief Engineer) and in some areas this is difficult to achieve.

SPO employs 243 people in all onshore positions in all 19 offices and 2 warehouses worldwide. 54.7% of these are male and 45.3% are female (a move towards a larger percentage of females by 0.8% since 2009).

Of these, 91 (37.4% of the total shore staff) are designated as "managers" (or higher such as "Director", but excluding any "assistant managers").

Half of the increase in numbers of shore staff from 2009 is accounted for by our





inclusion of floating Newbuilding and Dry-docking Superintendants: sea staff that are seconded ashore and the remainder from the opening of new offices in Copenhagen, Jakarta and Kuala Lumpur.

Of these, 43 (47.3% of managers) are regarded as "local" inasmuch as they 1) have the legal right to reside indefinitely in the country in question and 2) have their principal private residence within 30 miles of the office in which they work.



# Energy



It is firm SPO Policy that we wish to excel as corporate citizens by striving ourselves and working with others to promote Sustainable Development, to be a good steward of the natural resources and biodiversity under our influence and to ensure that all potential adverse impacts of

our operations on the environment are identified and appropriately managed (see our [Sustainable Development Policy](#) in the Detail Section).

GRI indicators EN 1 and EN 2 are not reported in this document as SPO is a

service provider, with principal activity of transporting cargoes, rather than a generator of products from inputs of raw or recycled resources. Such resources that are consumed are not material in respect of our turnover or service provided, with the significant exception of fuel and lubricants



("LO") whilst vessels in our fleet are on or off hire. Thus virtually all of SPO's significant environmental impacts are due to transportation used for logistical purposes and these are reported separately in this section (corresponding to GRI indicators EN3, EN4 and EN29) and in the Emissions and Waste Section (GRI indicator EN 16).

Marine fuel consumption was reported as a consolidated "on" + "off" hire figure in 2007. From 2008, reporting has been split to enable capture and management of distinct Scope 1 and Scope 3 (per ISO 14064) and GHG emissions. The same is true for emissions from consumption of LO. See the table in the Data Section: [Environmental](#) (GRI Indicators EN3 & EN4).

We have historically been unable to reasonably and viably record the intensity of vessels' operations on a per hourly basis (or less) and thus fuel consumption, and so GHG emissions, comparisons of

overall y-o-y figures will only give a general indication of the intensity of operational activity, but little more statistically valid information beyond that. We are however progressing installation of our "Green Zone" Fuel Economy Management System to permit individual vessels to indicate to individual clients the cost of fuel/emissions being generated on a real-time basis, broken down by type of activity (viz. on stand-by, steaming to the field, on DP, working cargo, alongside etc.) in order to assist our clients make optimum, efficient use of each vessel on hire for each type of activity.

SPO does not purchase any of coal, LNG, CNG, LPG, bio-fuels, ethanol hydrogen or biomass from which to produce energy for its own consumption. The total company-wide direct energy consumption in GJ is shown in the Data Section: [Environmental](#) (GRI Indicator EN16). The y-o-y change from 2009 to 2010 total Scope 1 and 2 energy consumption is not statistically significant as 98% of the total

consumption each year is Scope 1 MGO burned in the fleet's engines, and the intensity of this each year is a function of fleet chartering utilisation. We do not record distances travelled, and no cargo is carried, as the vessels are off-hire, however we do report the direct Scope 1 energy consumption per off-hire boat day and this shows the same y-o-y reduction as the fuel consumption figure, viz. 8.94%.

Indirect energy consumption within SPO concerns solely electricity that is purchased for supply to our 16 onshore operational office sites around the world. All of the electricity is supplied by the local national grid and none is purchased directly from nuclear, steam, solar, wind, geothermal, biomass or hydro suppliers. We conducted a stage 1 and 2 energy audit and conservation study in 2010 and have instituted all the recommendations. The stage 3 audit (for potentially higher Capex items) will be undertaken in 2011 as SPO purchased the leasehold of the site in mid Dec 2010. This is expected to



suggest consolidating the air-conditioning units to match the cooling required and may also review again the feasibility of fitting solar photo-voltaic ("p/v") panels on the flat roof area of the SMTC building. However at a seminar in 2010 the Head of the Singapore Building and Construction Authority said solar cells are (still) not a cost-effective solution as p/v panels are designed for temperate not tropical climates, and as the current efficiency of solar p/v panels in tropical Singapore is low, this leads to an unviably long payback period.

#### **SPO "Green Zone" Fuel Efficiency Management System ("FEMS")**

The achievement of a high Operational Energy Efficiency Index for each existing vessel will be both through our appropriate maintenance of the entire propulsion system of each vessel, but also by optimizing a vessel's scheduling in conjunction with the other parameters that affect its fuel consumption, such as trim, draft, speed, etc..





Discussions are underway at IMO over the introduction of Ship Energy Efficiency Management Plans ("SEEMP"). Whilst there has been no decision yet that these will be mandatory within the next few years, if ever, they will form a useful common baseline and reference to operate our vessels and SPO has proactively started the process of producing these.

To produce an SEEMP and manage the vessel's operation to achieve a high Operational Efficiency Index, we need to measure the vessel's fuel consumption in near real time, rather than just report consumption over a watch, day or month, as is done and reported at present.

SPO has always sought to operate its vessels for its clients as efficiently as possible, particularly in the area of fuel consumption, which can account for around 50% of the total cost of a vessel to a client. Fuel consumption on a vessel is also the consumer of 98% of the company's energy footprint and generator

of 84% of the fleet's Greenhouse Gas emissions. Thus to make a material difference to our energy consumption profile, this is the area that must see priority action.

SPO has installed a FEMS consisting of high reliability, high accuracy meters on the main engine/s and auxiliary engine/s (ME/AE) supply and return fuel lines. This will feed actual FO consumption data through a processor in the vessel's engine room to a screen on the navigating bridge, which will show near instantaneous consumption. This will in turn permit real time modification of the parameters that affect its fuel consumption and keep the vessel in its "Green Zone", in conjunction with ongoing discussions with the clients' operating / logistics / scheduling managers.

The parameters to be displayed on the bridge will include:

- Individual or total selected engine/s consumption in litres / hour or litres / nm
- Total engine fuel consumption in USD / hour or in USD / nm
- Total GHG emission in tCO<sub>2</sub>eq (or tCO<sub>2</sub>) / hour or in tCO<sub>2</sub>eq (or tCO<sub>2</sub>) / nautical mile ("nm")

And additionally:

- Course made good over land
- Speed made good over land

All of the output data can be further analysed ashore, particularly the mode of operation against the consumption parameters detailed above to ascertain the "sweet spot" or Green Zone for optimum operation of the vessel and generate SEEMPs for each class of vessel.





SPO has had three units on trial during 2010 and now that the software and hardware bugs are ironed out, is moving to start analyzing the data coming in to permit us to move to the next stage in 2011.



## Biodiversity



As part of its commitment to making its business ethically responsible and socially and environmentally sustainable, SPO seeks to reduce the carbon footprint of its operations as far as possible and to offset the remaining emissions, estimated at a minimum of 840,000 tCO<sub>2</sub> over the 20

year period from 2011 to 2030. It has engaged World Land Trust (WLT) and its local partner, Guyra Paraguay, to design a project, which marries SPO's Corporate Social Responsibility (CSR) policy, WLT's expertise in developing voluntary offset projects with benefits for biodiversity and

communities and WLT's local partner Guyra Paraguay's experience of managing conservation projects on the ground in Paraguay.

The project uses dual approved REDD+ methodologies to define, measure, verify



and report its emissions reduction target, concentrating on protection of forest of high biodiversity value that would, in the absence of action, be cleared. These areas are also important for local communities, including indigenous peoples, who must participate fully in and benefit from project implementation. Finally, the project is designed to be expandable and replicable within Paraguay and to contribute to the national strategy for addressing climate change. To ensure these aims are met, the project is designed to meet both the Climate, Community and Biodiversity Alliance ("CCBA") Gold Standard and Verified Carbon Standard ("VCS") guidelines.

The project concentrates on two areas: San Rafael in the Eastern (Atlantic Forest) region and the Quebracho forests of the Chaco-Pantanal transition area in eastern Alto Paraguay.

### **1. San Rafael**

San Rafael is one of the largest fragments (c. 80,000 ha) of Upper Paraná Atlantic Forest remaining in Paraguay. In 1997 a strip of land covering 1,182 ha was excised from the forest and handed over to the La Amistad small-holder community under the Agrarian Reform Programme.

San Rafael (the project zone or reference area) is dominated by moist semi-evergreen forest. Despite a long history of logging, the area has high conservation value. The biodiversity of San Rafael is characterized by high endemism and is a very important refuge for high forest specialist species. The area was also the first Important Bird Area ("IBA") to be identified in Paraguay and hence a Key Biodiversity Area.

The objective of the project is the establishment of a voluntary Payment for Ecosystem Services (PES) scheme for La Amistad (the project site) to retain and

improve the quality of their remaining forest, instead of clearing as planned. Payment rates are designed to compete with cotton as the current alternative land-use. As currently envisaged, 75% of the payment will be made to individual land occupiers who retain forest on their parcels and 25% to actions benefitting the community as a whole.

The land to remain forested will be managed as a community reserve for production of a sustainable supply of natural forest products (e.g. timber, fuelwood). The scheme also allows for reforestation but with a lower payment. This component is a leakage mitigation activity and does not contribute to emissions reductions.

The following benefits are predicted under the project scenario:

Climate: avoided emissions of 219,000 tCO<sub>2</sub>e over 20 years through protection of threatened forest.



Community: a direct revenue stream to the community and its members at a level comparable to the most advantageous alternative crop, to be utilised according to community priorities; opportunity for supplementary income through employment and technical support.

Biodiversity: creation of a physical buffer and positive relationships with a key stakeholder community, safeguarding the high conservation values of the forested hinterland.

## 2. The Chaco-Pantanal.

The Dry Chaco and the wetlands of the Pantanal in north-eastern Paraguay represent extensive wilderness areas with elevated levels of endemism and extremely high conservation values. The eastern portion of the area within the core and buffer zones of the Chaco Biosphere Reserve is taken as the project reference area.





The project aims to secure up to 10,200 ha of threatened Quebracho forest currently under private ownership, thereby sequestering carbon that would otherwise be emitted by planned clearance. It is believed (allowing for non-forested areas) that this requires the purchase of up to 12,000 ha total land parcel/s. Once secured, the land will be dedicated to conservation management as a private protected area under joint ownership by Guyra Paraguay and the Ishir, who have already expressed their support for this initiative.

The Project Design Documents have been produced and validated in principle by the CCBA, but for VCSA validation and then dual verification, the specific land parcels purchased have to be considered. The specific land parcels that go into the Paraguay Forest Conservation Project ("FCFP") will be a matter of optimising the vegetation cover, which defines the deliverable carbon against the price.

It is planned to make the purchases at the beginning of 2011, dual validate and verify them and then the credits will begin to be accredited to the Carbon Registry TZ1 by mid 2011, but with an issue date back-dated to Dec 2010 which is when the agreements were made with the relevant local parties.

A co-management agreement between the two parties safeguards maintenance of forest cover and quality. The area will be jointly managed (with appropriate capacity building for Ishir community members) and, upon demonstration of successful forest quality maintenance during the 20-year project lifetime, will then be transferred to full Ishir ownership. Meanwhile an annual payment will be made to the community in recognition of the Ishir interest in the area.

The following benefits accrue from the initiative:

Climate: avoided emissions of over 1 million tCO<sub>2</sub>e over 20 years through protection of threatened forest.

Community: regained control of traditional territory, a reliable income stream to the community and supplementary income from participation in project and conservation management activity;

A reliable revenue stream, regained control of ancestral territory and economic opportunities.

Biodiversity: safeguarded high conservation values ("HCV") through maintenance of ecological connectivity at landscape scale plus protection of representative areas of Quebracho forest, poorly represented in the current protected area system. Safeguarding of HCVs and securing of an important conservation target (Quebracho forests).





The Paraguayan authorities have endorsed the project, while ownership of any carbon credits initially lies with the land-owner. In this instance, ownership of the carbon credits is then transferred to Swire Pacific Offshore, which retires annually the number needed to meet the internal corporate social responsibility target for climate neutrality. In return, the biodiversity and social benefits (including land ownership) are retained in-country. Following CCBA procedure, their delivery is monitored alongside that of emissions reduction as part of the project monitoring programme. Mechanisms will be established after FPIC with the IPs to maintain consultations and participation by stakeholders, and for resolution of any issues arising.

The initiative is above all a demonstration of how REDD+ can be used to combine a wide range of different interests: corporate responsibility, climate change mitigation, biodiversity conservation, improved economic conditions and promotion of



indigenous interests are being combined under the project's flexible framework.

The selection of land parcels for this project will as far as possible develop local "biodiversity corridors" to increase the available habitat area of local species. Those species deemed "at risk" by the IUCN (International Union for the Conservation of Nature and Natural resources) but that we are positively impacting in the Project areas in Paraguay, and the areas of SPO's usual marine support operations worldwide, are listed in table EN15 in the Data Section.

SPO operated the Fisheries Protection Vessel (FPV) in the Chagos Archipelago in the Indian Ocean throughout 2010. There were no negative effects on the local biodiversity recorded, but several positive initiatives during the year included:

- Continuous monitoring of the Islands of the Chagos Archipelago to deter illegal poaching of Sea Cucumber,

Crustaceans (including Coconut Crabs) and Sharks.

- Continuous monitoring of the general condition of Corals in the Chagos Archipelago.

Probably the most significant single species on the IUCN Red List in whose habitat SPO has operations is the Western Gray Whale.

SPO is a partner in a joint venture that operates three Ice Breaking Supply Vessels ("IBSV") off the coast of Sakhalin Island in the Russian Far East. The waters off Sakhalin Island are the only known summer feeding grounds for the western sub-population of Gray Whales (*Eschritius robustus*). This sub-population is probably genetically isolated from the only other extant sub-population, known as the eastern gray whale. Their ranges do not overlap, and the estimated mature population in 2008 was <250, of which approximately 35 are reproductive females.

This western sub-population is listed on the IUCN Red List of Threatened Species as "Critically Endangered" (see [here](#))

All staff on the three IBSVs are briefed by experts before the beginning of each Western Gray Whale feeding season (summer and autumn), and our client has set its operational requirements to reduce the risks to the whales, by re-routing away from the feeding grounds both any infrastructure such as pipelines and vessel transit routes, which are rigorously enforced. The IBSVs also carry dedicated whale / marine mammal observers during the season to ensure that the IBSVs do not endanger any of the Western Gray Whales and to collect data and help expand the scientific body of knowledge of this critically endangered sub-population. Additional environmental mitigation precautions with respect to noise emission, vessel speeds, sudden changes of course and keeping minimum safe distances from observed endangered species (and all marine wildlife) are strictly observed.



The IUCN has issued a brochure "Saving Western Gray Whales" (see [here](#)) that details the issues surrounding the Western Gray Whale and which states: "Business has joined forces with the IUCN... to do everything possible to ensure the survival of this population".



## Emissions and Waste



SPO had an ISO 14064 Scope 1 and 2 GHG footprint in 2010 of 57,116tCO<sub>2</sub>e (see tables EN 16, EN 17, EN 19, EN 20 in the Data Section: [Environmental](#)). Of this footprint 84.2% is related to emissions due to consumption of MGO and LO whilst vessels were off-hire. This is because even when off-hire, the ship's crew still

living on board require power to be generated to supply heat, light, air conditioning, food refrigeration and other domestic "hotel" services, in addition to ongoing self-maintenance and internal operations necessary for the functioning of a vessel.

The emissions at the ship could practically only be reduced further by a) cold-ironing (connecting to shore power supply whilst alongside) or b) putting the vessels into cold lay-up (de-manning completely).

Cold-ironing is only a net benefit if the supplying grid / power station/s are known



to be using energy sources with reduced emissions such as renewable or nuclear. Drawing from an oil or coal powered grid to save burning MGO on board may actually exacerbate the footprint.

We made initial enquiries on the feasibility of cold-ironing to mitigate the environmental impact of MGO consumption of one of our vessels on long-term charter when alongside in a suitable port during 2010, but given the operations of the vessel – primarily limited time alongside, the initiative was not deemed likely to be cost-effective. Partial or completely de-manning our vessels when they are not working has significant negative safety, operational and economic implications when re-activating the vessel and is not feasible as a short-term solution. SPO has not de-manned and/or laid-up a boat for more than 20 years.

Given the lack of possibilities of making significant reductions in the Scope 1 and 2 emissions, the next best option is to

mitigate the effects indirectly, by off-setting our GHG footprint.

SPO has thus committed to mitigating its Scope 1 and 2 GHG footprint with effect from 01 Jan 2011 plus that generated by management air travel with effect from 01 July 2009 by unilaterally generating sufficient offsets. The full details of our REDD+ voluntary carbon offset credit project is given in Detail Section: [Environment, Biodiversity](#).

The Amendments to the MARPOL Annex VI regulations to reduce harmful emissions from ships even further came into force on 01 Jul 2010. The main changes saw a progressive reduction in sulphur oxide (SOx) emissions from ships, with the global sulphur cap reduced initially to 3.50% (from the previous 4.50%), effective from 01 January 2012; then progressively to 0.50 %, effective from 01 January 2020, subject to a feasibility review to be completed no later than 2018. However as all of our vessels use and have always

used Marine Gas Oil (MGO), which by ISO 8217:2005 has a sulphur content below 1.5% this is not an issue. For vessels bunkering in Singapore we usually seek a sulphur content of 0.5% to max 1.0%, which is as low as is possible before it is classed as Ultra Low Sulphur (ULS).

The SPO fleet of 75 vessels reported 12 incidents of escapes of hydrocarbons to the environment during 2010. None of these were classed as significant (significant herein is defined as >200 bbl / 32m<sup>3</sup> oil), and all were zero or very close to zero.

Of the 12 escapes to the environment:

- 6 were contained on the ship and cleared up, with zero discharge to the sea;
- 1 related to an oil sheen sighted from a vessel, but not determined to have emanated from that vessel;



- 2 related to spills of oil based mud of 15-30 litres;
- 3 related to spills of FO of 2 – 45 litres.

All were fully reported, investigated and the lessons learned fed back to both the specific boat, and promulgated during SPO's Standard and Advanced Safety Management courses at SMTC to ensure that the learning points were widely disseminated.

In relation to the transport of deemed "hazardous waste", in accordance with GRI indicator EN24:

At the end of 2008 Swire Pacific Offshore (SPO) signed a shipbuilding contract to design, construct and build a new, more efficient (13% reduction in GHG emissions per year per bhp) and capable seismic survey vessel, "Pacific Finder" to replace the existing Pacific Sword. Construction began in Singapore in May 2009 and delivery was planned for the beginning of 2011.





In mid 2010 as her replacement's delivery approached, SPO made the decision to recycle the Pacific Sword which was built 30 years ago as a straight supply vessel, but converted and used for the past 20 years as a shallow water seismic survey vessel.

The initial suggestion of the broker engaged to facilitate the sale of Pacific Sword to the recycling yard was to use one of the many well known yards in South Asia. However when SPO consulted the 2010 EU survey on "Clean and Green Recycling Facilities" around the world it detailed the generally unacceptable Health, Safety and Environmental conditions of the recycling yards in this area: one death per week, one accident per day, hazardous waste not properly disposed of, poor standards of training and low paid workers. Even though at first glance it seemed that SPO would realize slightly less for sale, it took the decision that the vessel must be disposed of in a

socially and environmentally responsible way and that to support the yards in South Asia (as they were then) was neither responsible to the workers there nor likely to promote change for the better. SPO thus opened negotiations with a clean, well-maintained and run, environmentally certified yard in Guangdong that was well reported on in the EU Survey. These were successful and the vessel left Singapore for the PRC at the end of July.

Post the hand-over of the vessel in China, an evaluation of the two sale options was conducted and this showed that on an "apples for apples" basis, the decision to "do the right thing" resulted in SPO receiving approximately +11% more than that which SPO would otherwise have achieved.

As a footnote, many of the long-established recycling yards in South Asia have been losing significant business to the certified cleaner and greener yards

elsewhere. As a direct result of this, 75 Indian recycling yards have now sought and gained accreditation to ISO 30000:2009 "Ship recycling management systems". The Bangladesh High Court directed the government at the end of 2010 to stop all kinds of scrapping of ships in the country until the health and safety standards were improved. *(postscript: this injunction was only lifted in March 2011, and involved yards there being required by the High Court to comply with a list of best practices, in order to resume safe, environmentally responsible and sustainable business operations).*



# Environmental Impacts of Services



SPO had an ISO 14064 Scope 1 and 2 GHG footprint in 2010 of 57,116tCO<sub>2</sub>e (see tables EN 16, EN 17, EN 19, EN 20 in the Data Section: [Environmental](#)). Of this footprint, 84.2% is related to emissions due to consumption of MGO and LO whilst vessels were off-hire. This is because even when off-hire the ship's crew still

living on board require power to be generated to supply heat, light, air conditioning, food refrigeration and other domestic "hotel" services, in addition to ongoing self-maintenance and internal operations necessary for the functioning of a vessel.

The emissions at the ship could practically only be reduced further to existing practices by a ) cold-ironing (connecting to shore power supply whilst alongside) or b ) putting the vessels into cold lay-up (de-manning completely).



Cold-ironing is only a net benefit if the supplying grid / power station/s are known to be using energy sources with reduced emissions such as renewable or nuclear. Drawing from an oil or coal powered grid to save burning MGO on board may actually exacerbate the footprint.

We made initial enquiries on the feasibility of cold-ironing to mitigate the environmental impact of MGO consumption of one of our vessels on long term charter when alongside in a suitable port during 2010, but given the operations of the vessel – primarily limited time alongside, the initiative was not deemed likely to be cost-effective. Partial or completely de-manning our vessels when they are not working has significant negative safety, operational and economic implications when re-activating the vessel and is not feasible as a short term solution. SPO has not de-manned and/or laid-up a boat for more than 20 years.

Given the lack of significant environmental impact direct reduction possibilities on our Scope 1 and 2 emissions, the next best option is to mitigate the effects indirectly, by off-setting our GHG footprint.

SPO has thus committed to mitigating its Scope 1 and 2 GHG footprint with effect from 01 Jan 2011 plus that generated by management air travel with effect from 01 July 2009 by unilaterally generating sufficient offsets such that SPO's operations worldwide will be climate (viz. for all GHGs) neutral for the next 20 years. The full details of our REDD+ voluntary carbon offset credit project is given in Detail Section: [Environment, Biodiversity](#).

In addition to this major project, we have a number of other environmental impact initiatives ongoing:

- all of our vessels currently on order are to IMO noise mitigation standards that equate to the DNV Comfort Class 3.

- our Green Zone Fuel Efficiency Management System is moving into the roll out phase at the end of 2010 (fitted on 6 vessels as at 31 Dec 2010), and should be delivering specimen Ship Energy Efficiency Management Plans by Q3 2011.
- all of our vessels segregate waste for disposal ashore fully in accordance with MARPOL Annex V.
- washing of working clothes on board ships is generally pooled, which saves water (and wear and tear on equipment).
- to preserve indigenous marine biodiversity and avoid contamination by invasive species, all vessels moving internationally into Australian, New Zealand and Russian Federation waters practice good Ballast Water Management, even prior to the full entry into force of the International



Convention for the Control and Management of Ships' Ballast Water and Sediments (22 of the required 30 states have ratified this so far. Further, there are still issues with type approval of some of the technical equipment required under this convention).

- The Amendments to the MARPOL Annex VI regulations to reduce harmful emissions from ships even further came into force on 01 Jul 2010. The main changes saw a progressive reduction in sulphur oxide ( $\text{SO}_x$ ) emissions from ships, with the global sulphur cap reduced initially to 3.50% (from the previous 4.50%), effective from 01 January 2012; then progressively to 0.50%, effective from 1 January 2020, subject to a feasibility review to be completed no later than 2018.

However as all of our vessels use and have always used Marine Gas Oil (MGO), which by ISO 8217:2005 has a sulphur content below 1.5% this is not an issue.

For vessels bunkering in Singapore we usually seek a sulphur content of 0.5% to max 1.0%, which is as low as is possible before it is classed as Ultra Low Sulphur (ULS).



# Compliance



During 2010 there was one incident in which a vessel was in technical breach of a regulation concerning health and safety (see Detail Section: Product Responsibility, [Customer](#) [Health](#) and

[Safety](#)), but there were no fines or non-monetary sanctions levied against any of SPO's vessels in relation to non-compliance with any environmental laws and regulations during 2010.



## Overall



The IFAC "International Guidance Document on Environmental Management Accounting" is a detailed and comprehensive document. Establishing the degree to which SPO can report expenditure in line with this utilizing its existing accounting systems will take a

significant amount of time. Much effort is expended in collecting and reporting data internally in an ever more transparent way to better assist management decision taking, and it is believed that much of the relevant data is already easily identified. Collating this to present as suggested by

GRI is a further leg of this journey and whilst SPO had aimed to complete this by the time of issuing the 2009 SPO SD Report, lack of resources and time precluded this. It is now hoped to review this reporting format within 2011.



In summary for expenditure on environmental impact mitigation, protection and initiative investment during 2010:

- The most significant expenditure would be in relation to clean up and remediation costs for significant oil and chemical spills. However as there were no significant or Tier 2 spills (over 200 bbl) in 2010 the expenditure was zero.
- Insurance for environmental liability is covered by marine P&I insurance, and the levels of cover and the premiums for this (expenditure) are commercially confidential, but are not material to the cost of operating the business.
- Accreditation to ISO14001:2004 is done in conjunction with accreditation to ISO9001:2008. The rates for this (expenditure) are commercially confidential, but are not material to the cost of operating the business.
- The process of installing the two trial Green Zone FEMS units began at the end of 2009, but the expenditure (around EUR 30,000 per unit) was only be recognized in 2010. A third unit was also installed at the request of a client in 2010. Three more units were installed on new vessels delivered during the second half of 2010. Data collection has commenced for the preparation of specimen SEEMPs and the first of these are expected in Q3 2011.
- The cost of waste disposal from the fleet when on hire, viz. for 80.55% of 2010 contractually lies with the vessels' clients by usual industry practice.
- The expenditure to achieve the delivery phase of the REDD+ voluntary carbon offset credit project will not be material compared to turnover or attributable profit. Due to the one year delay in issuance of the required verification methodology, the project capital cost of some USD 1.6 million will only be expensed and accounted for in 2011.



# Employment



Details of the breakdown of SPO's workforce are shown in the tables in the Data Section. This shows the numbers of employees working onshore and offshore (and for seastaff the relative numbers of officers and crew), working on full time and "fixed term" contracts, through which

geographical region they are employed. None of our employees worldwide would be regarded as self-employed.

In interpreting these figures it should be borne in mind that it would be meaningless to state which country or

region the sea staff (the majority) are working, as due to the trans-border nature of working at sea the geographical distribution is very dynamic and fluid and thus would only be a snapshot at a moment in time. This is particularly obvious where the number of seafarers



employed by SPO in Australia in accordance with usual industry practice is concerned. During 2010 the number of vessels being managed or operated by the Australian office varied between 3 and 9. SPO in Australia employs a core number of "permanent" staff and augments this with "casual" staff for the periods when there is a higher than usual number of vessels in Australian waters. Comparisons of averages and year-on-year statistics for employment from this office are thus rarely statistically significant.

With respect to the ratio of seastaff on permanent / fixed term contracts, we strongly seek to have all sea staff on permanent contracts of employment. This gives the seafarer security of employment, enables our operations and service to benefit from familiarity with company equipment and reduces the resources required by the company inculcating the company vision, mission and ethos to new employees.

However employment of seafarers and all other Overseas Filipino Workers ("OFW") in the Philippines is strictly controlled by the POEA, a government body regulating employment and minimum terms and conditions and generally safeguarding their working conditions abroad, however the administration of this demands single tour-of-duty contracts strictly following the POEA format, and we believe this single trip contract regime (though not the other employment provisions) is against the best interests of both our seafarers and the company and its business. Unfortunately, at the current time, it is illegal to employ Filipino seafarers under direct contract with overseas companies but we continue to actively engage the relevant authorities in discussions to change this, whilst in no way reducing their legal employment protection.

Trade in the Australian and Russian domestic waters and cabotage trades are strictly governed by union and government

protective regulations which restrict employment to citizens of those respective countries. In both cases manning companies have been established to employ the national seafarers in compliance with local requirements. Our Australian and NZ seafarers are covered by Collective Bargaining Agreements.

Swire Pacific Offshore employs seafarers from a total of around 30 different nationalities covering more than 5 different religious faiths within its global marine operations involving 75 boats working in 36 different countries at time of writing. The largest single nationality of seafarer employed (45.7%) is Filipino and all these seafarers are employed on a contract – per trip basis through a Swire JV manning agency. Whilst as mentioned above there are some territories in which we work that restrict the nationality of seafarers working in their territorial waters, for the most part our vessels have mixed nationality crews, where we seek to best match the skill sets



available with the type of work, type of vessel and significantly, client contractual requirements.

Our staff turnover ashore, outside Singapore/Head Office, and excluding internal movements or growth in business was 2 departures (under 1%). One of these was voluntary and one involuntary.

SPO's staff turnover in Singapore (Head Office, Singapore Regional Office, Seismic Services Division, Salvage Division and the Swire Marine Training Centre) in what is a very volatile and dynamic labour market was somewhat higher at 23 departures (18.4%). All of these were voluntary moves, with an average age of 36.8, and with no significant gender bias: 34.8% were male, compared to an overall male staff population of 40.8%.

The great majority of these voluntarily departing employees left "seeking better terms and conditions elsewhere". The Singapore Ministry of Manpower's overall, seasonally adjusted annualised monthly





resignation rate figure for 2010 was 24.3%, up from 21.6% in 2009. Whilst this is a very difficult, even unacceptable, figure for business in general to manage, the saving grace is that SPO is only slightly above its sector average of 16.2%.

With respect to offshore staff on permanent contracts, there were 9 involuntary departures (25.7% total departures), all of junior officers and crew, with an average length of service of 3.48 yrs, 4 retirements with an average length of service of 18.6 years and 22 voluntary departures (62.9% total departures) with an average length of service of 4.03 years. The breakdown of the figures and reasons are given in Table LA2:1 in the Data Section.

SPO obviously closely manages the age profile and numbers of sea staff officers in each rank. These are shown in graphs LA2:3 and LA2:4 in the Data Section. Given SPO's fleet ongoing rejuvenation and expansion programme, the total number of sea staff is planned to expand by around

8.1% net over 2 years. Officers are being recruited on a rolling basis on fleet standard terms and conditions to fill this need, but initially they are generally being deployed in "shadow billets" to assimilate the way SPO works and its value set, and become familiar with our fleet operations for a period prior to taking a "compliment / operational billet".

9 of our seafarers on "fixed term contracts" (primarily Filipinos) with an average length of service of 4.5 years resigned during 2010 (see Table LA2:2 in the Data Section). This is a pleasingly low 1.0% of our Anscor Swire establishment. Only 2 seafarers left employment involuntarily, one for inadequate performance after less than a year's service and one who was unfortunately determined to be medically unfit after 17.5 years' service.

The total turnover for seastaff on all contacts and for all causes except retirement in the normal course of events was 2.4%, which is well under the norm for

our sector, and is a testament to the effort the company puts into both attracting and retaining the staff that are aligned with our core values.



# Labour / Management Relations



Only the permanently contracted seastaff employed by our manning companies in UK, Australia and New Zealand are currently covered by collective bargaining agreements (CBA). These are between the relevant manning companies for our seafarers working in these territorial

waters, and the national seafarers unions in these countries. Note: Collective Bargaining Agreements are referred to as Enterprise Bargaining Agreements (EBAs) in Australia and New Zealand. For numbers involved see Data Table LA4 in Section 3.6: [Labour Data](#).

The ILO has agreed a new Maritime Labour Convention (2006). It's coming into force has been delayed a little whilst flag states, such as the EU block, put in place the supporting legislation that will be required nationally. It is now expected to garner sufficient ratifications internationally



in H2 2011 and will come into force 12 months thereafter. It is seen as being the most significant convention on labour rights and responsibilities affecting seafarers in many decades, and tidies up and consolidates 40 existing labour conventions and 29 existing regulations that concern marine labour areas. It will also be significant in being an ILO convention covering almost the entire marine industry worldwide, hitherto the exclusive preserve of international UN based regulation by IMO.

Its other main aims are to:

- facilitate the recruitment, development, motivation and retention of competent qualified labour
- prevent poor working and living conditions for seafarers from being used to gain a commercial advantage
- create a level playing field and to marginalise substandard operations and operators

- be the 4th pillar in international maritime regulation (after SOLAS / MARPOL / STCW)

SPO wholeheartedly supports these aims. The main change that the convention will introduce as far as SPO is concerned is that it will require that all seafarers on convention country registered vessels to be covered by a formal CBA. SPO has had many discussions with Flag States, international Unions/employees' bodies and our Manning Agencies as to how to best implement this. However as the main delay in ratification by some Flag States relates to the establishment of clear guidance on how to implement this in practical terms, SPO is awaiting the rulings / advice from their deliberations (particularly those of our main Flag State) on this before committing to an internally agreed regime that may not be completely aligned. In the interim (and also post ratification and adoption) all SPO seafarers will continue to be able to pursue any grievances using the DPA mechanism laid down in the ISM code.

We are not aware of any operations in which our employees' rights to exercise freedom of association or collective bargaining may be at risk. If it were to occur it would not be driven by any of our existing operations *per se* but more likely by national legislation covering the employment contracts. We do not currently employ any seafarers in jurisdictions where this is an issue. SPO has never used the membership of any collective organisation as a barrier to gaining or continuing in employment or as a reason for termination of employment.

As detailed above, SPO has only 3 formal agreements at present with local trade unions bodies. It can clearly be seen from a review of the news items posted on the respective unions' web sites that the health and safety of their members, and indeed other non-member seafarers worldwide in our industry niche, is of prime concern to these bodies (as it also is to both SPO and SPO's employees).



There are numerous references to campaigns and negotiations on the subject of human rights, noise at work, helicopter travel safety, provision of PPE, safety training, safe use of toxic fumigation gases, bio-security risks from exotic pests, participatory representation on health and safety discussion groups and other health and safety campaigns.

Outside this trade union input, our externally audited ISM Health and Safety Management system provides clearly identified, quick and easy pathways for any and all of our seafarers whether or not they are union members, to bring H&S concerns to both local operational and head office management.

All of our seafarers passing through our dedicated in-house training centre (SMTTC) in Singapore (the intent is that each seafarer will attend at least once every 3 years) and meet our ISM "Designated Person Ashore" (DPA).





The purpose of the DPA position is explained during the lectures and as he has an office there he is able to meet the seafarers both formally and during informal social events and can assist where they have an issue or need clarification as to why something may or may not be happening. A critical point, that is written within the ISM Health and Safety Management system, but that is explicitly brought to the attention of all attendees at SMTC is "The Master's Right to Say 'No'", and the right, and indeed obligation, of ALL employees to stop work should they feel that health and safety is in any way being compromised.



# Occupational Health and Safety



Swire Pacific Offshore (SPO) is committed to providing the highest levels of quality safety and environmental management. Our objective is to create a positive culture where health, safety and environmental ("HSE") concerns are addressed proactively. SPO is committed to improving

the quality of life both on board our vessels and within the communities we operate.

We believe that a proactive approach to managing HSE, as opposed to a reactive approach, will ensure a higher level of awareness and contribute to maintaining a

strong safety culture throughout our organisation. The strength of our safety culture lies in the total commitment from top management all the way down to our ratings.



We aim to continuously improve our Safety Management System ("SMS") and ensure that the SMS remains pertinent and up to date. In this respect our ORBIS reporting system remains an integral part of our SMS system.

The Marine Industry is highly regulated by international legislation from IMO and other agencies as well as local (Flag State) legislation. In order to meet these requirements, SPO has developed a robust Safety Management System. This, and the fact that SPO is a service provider in the increasingly safety conscious oil and gas exploration and production industry, has led to sustained improvement in HSE performance over the period that the company has operated and especially so over the last few years.

2010 has been a busy year for SPO, and although the actual number of incidents has not decreased significantly, the Lost Time Incident Frequency and Total Recordable Case Frequency Rates (LTIFR

and TRCFR) have decreased due to an increased number of work hours. We can note that we have mostly been able to avoid incidents during specialised operations, through the use of Tool Box Meetings ("TBM"), Job Safety Analyses ("JSA") and Permits To Work ("PTW"), and that the bulk of the LTIs and TRCs still occurring falls under the category of routine work (see Data Section: [Labour](#)).

A challenge for the coming years will be the expansion of SPO's fleet, and the diversification of activities to include Windfarm Installation Vessels ("WIV") and Construction/Accommodation Barges.

As the industry in general is expanding, and the availability of seafarers (in particular Officers) is not keeping pace, an increasing number of less experienced crew are being employed, thus creating the need for further training, both theoretical and practical. SPO has, with its "state of the art" Marine Training Centre, set the standard within the industry, and is

currently second to none within the industry. This allows us to provide the diversified training needed to develop and maintain the quality and experience of our Officers. Further to that, SPO is looking at providing basic Deck Safety Training facilities for our ratings and new junior Officers.

The integration of new activities within SPO, such as WIV and Construction/Accommodation barges will also demand specific actions in respect to the integration of these operations into our SMS system, and will also entail further training requirements.

### **Management Review 2010**

All the senior Swire Pacific Offshore managers attended our annual conference in Nov 2010 in which the agenda included an open discussion on the effectiveness and progress achieved with the Company's ISM, ISPS codes and ISO Standards. This was to ensure that the



entire operations worldwide of Swire Pacific Offshore complied with the codes and standards (see Data Section: [Labour](#)).

#### **ISM- INTERNATIONAL SAFETY MANAGEMENT**

SPO currently holds Documents of Compliance ("DoC") for 4 Flag States:

- Singapore
- Malaysia
- U.A.E
- Barbados

One vessel under Australian flag operates under the Malaysian DoC.

Our Company Document of Compliance was renewed on 16th November 2010 and, subject to future verification audits, the DoC is valid until 3rd November 2014.

#### **ISO Certification**

The ISM compliant Safety Management System was previously upgraded to an





ABS Classification Society "SQE" Management System, which also complies with ISO Standards for Quality and Environment.

After initial verification audits ISO 9001:2008 and ISO 14001:2004 accreditation certificates were issued by ABS on, and with an effective date of, 16 December 2009, with a validity of 5 years. The annual re-verification audit was performed by ABS during the ISM audit and endorsed on the 16th November 2010.

### **SMS Review**

Masters' and Managers' reviews in 2010 indicate that the SMS meets the requirements of ISM.

During 2010 the Safety Management System (SMS) has been thoroughly reviewed, and a new edition (2011) has been produced. We will continue to monitor the effectiveness and pertinence of the SMS, and will amend it from time to time as found necessary.

### **Safety Performance**

Throughout 2010 there were 6 LTIs, and 30 TRCs.

SPO has launched a safety campaign aiming at reducing "Slips, Trips and Falls", particularly on staircases. Although early, it is having a positive effect, and we will continue to monitor the effectiveness of this kind of campaigns, in order to be able to better target the most pertinent issues, and ensure optimal results.

Further, SPO has installed Rescue Trolley BA sets to be used for rescue from enclosed spaces. These have been placed on the majority of the vessels, and are to be used only in case of rescue. Although it is our hope that these will never have to be used, they will ensure a greater safety and mobility for the rescuers and, most importantly, reduce the time needed for rescuing persons, thus greatly improving the probability of a successful rescue.

### **Lost Time Incidents 2010**

During 2010, six LTIs were recorded (see Data Section: [Labour](#)). Although the actual number is the same as in 2009, the LTIF has decreased to 0.68 due to increased work hours in an expanded fleet.

#### **• Slips, Trips and Falls (3 LTIs) categorized as:**

- Strained knee occurring during Towing operations.
- Strained ankle during routine deck operations.
- Fractured arm during routine deck operations.

#### **• Manual handling (3 LTIs) categorized as:**

- Strained back during routine deck operations.





- Crushed hand during routine deck operations.
- Crushed finger/thumb during routine deck operations

Again it is noted that the LTIs were all incurred during routine operations. All injured persons have returned to work but this shows an ongoing, need to focus on and raise basic safety awareness.

#### **Total Recordable Cases 2010**

Although the total number of TRC has remained quite high (30), the TRCF has been reduced to 3.40 (per million man-hours) due to the increased number of man-hours (see tables 3 and 5-9). It has also been informative to review the spread of TRCs among the different ranks on board (see Data Section: [Labour](#)). Although we already were aware of the increased frequency of incidents amongst ratings, it was surprising, and simultaneously regrettable to see Masters



and Chief Engineers at such relatively high frequency rates.

When comparing SPO's statistics to that of industry statistics (see Data Section: [Labour](#)), SPO's LTIFR seems to be lower than the industry average, however latest industry statistics are not yet available at the time of writing, hence the comparison is made for different years. Further the TRCF is slightly higher than average for the industry. There are two supposed reasons for this:

- the statistical information is not verified, and is based on different criteria.
- there is a certain degree of subjectivity in interpretation of the definitions made amongst ourselves and our peer group companies.

Nevertheless SPO's TRCFR remains higher than reported average for the industry and we will investigate further to

identify the reasons for this, and to identify actions to best reduce this.

Most importantly however is to note that there is a definite downwards trend in SPO's statistics, in a larger environment (more and bigger boats, more sea staff) which shows that we are constantly improving our safety culture throughout the organisation. We aim to continue this trend in the coming years.

#### **Near Miss and Hazard Identification**

The Near Miss and Hazard Report Form ("NHR") function in ORBIS continues to be used to identify and report Near Miss incidents and Hazard Identification. A total number of 412 NHRs (104 Near Misses and 308 Hazard IDs) were reported in 2010. The number remains almost the same as in 2009, suggesting that the process has reached maturity, and we do not expect the number to increase much in the future.

#### **Conclusion**

The results achieved are due to a combination of the following:

- Increased safety awareness
- Safety Campaigns
- Increased focus on Safety aspects during Toolbox meetings on board.
- Increased use and continuous improvement of JSAs.
- Behavioural Based Safety Training during the courses at SMTC.

It is stressed that continuous training, both on board and on shore, and leading by example, is the way forward. Safety is everybody's responsibility and SPO would not have achieved the continuous improvement of our safety performance without the awareness and commitment of





all of our crews and management throughout the SPO organisation. As mentioned earlier, our biggest challenge is to tackle behavioral safety (especially in the simple routine tasks) as this seems to be the root cause of the majority of our incidents. We continue to focus on this

area, both during training at SMTTC, but also at Toolbox and Safety meetings on board, and during Management visits to the vessels. It is our belief that we could substantially reduce the number of incident by focusing even more on this aspect of our ordinary daily work and duties.

### **Security & Piracy**

Piracy, kidnapping and opportunistic theft continues to be an unacceptable threat to lawful and peaceful marine operations worldwide. The SPO senior management team continues to make detailed



and ongoing assessments of the hazards posed and continuously reviews all new data on areas of enhanced hostility exposure as it becomes available. This is used to determine in which areas we will operate such that we can be satisfied that the security and safety of our crew and vessels can be adequately guaranteed.

As we continue to mobilize vessels to and from the Persian Gulf across the western Indian Ocean, we have put procedures in place to minimize risk of piracy attacks on our vessels. These measures include

- reporting to UK Maritime Trade Operation office (based in Dubai) throughout passage of the designated piracy risk zone, implementation of the "Suggested Planning and Operational Practices for Ship Operators, and Masters of Ships Transiting the Gulf of Aden and the Arabian Sea" ("BMP3") issued by a cross-industry group of, industry organisations insurers, owners, underwriters, unions and naval forces,
- verification of passage plan prior to commencement of voyage, and
- advising the Master and Crew of any recent piracy incident happening within 200 nm of the intended route.



## Training and Education



Due to local regulations for Overseas Filipino Workers, all of our seafarers employed through Anscor Swire Ship Management (ASSM) are engaged on a contract-by-contract basis. This means that these 805 seamen, from our total of 1,760 (46%), all receive a briefing at the ASSM

office in Manila before each departure, and each briefing includes education on communicable disease issues.

Health and Hygiene issues for the entire fleet are covered in a dedicated section in the fleet HSE MS Operational Circulars,

and in the personal "Safety Awareness on Board" booklet that is given to all seafarers. The latter also includes information of contagious diseases, smoking, drug, alcohol and substance abuse and obtaining medical attention. Policies concerning Smoking and Drug,



Alcohol and Substance Abuse are included in the HSE MS, and are posted in conspicuous places on all company vessels. SPO has adopted the guidance of both the STCW Code and the Oil Companies International Marine Forum (OCIMF) with respect to consumption, working under the influence, and random testing for Drug, Alcohol and Substance abuse.

Advice is also given on Malarial prophylaxis and the increase in Chloroquine resistance being encountered, but specific advice especially for West Africa where the most effective drugs may have side effects if taken for too long continuously must be obtained from a qualified medical practitioner who will be aware of the latest research.

All staff are screened for contagious and communicable diseases during pre-employment and pre-contract medicals, and at the industry medicals required at prescribed intervals during a

seafarer's professional service. We do not currently provide education and training or counseling on a general basis to employees, families or their community members, as working offshore precludes there being any geographically local workplace communities.

The total throughput of trainees and training courses at SMTC is shown in the Data Section in table LA10. Seafarers were given training internally at SMTC during 2010 in discretionary, non-professional subjects for a total of 2,640 man days, and on external courses for 2,283 man-days or an average of 22.4 hours per employee. We do not maintain a database of mandatory, STCW required professional training which, given that many courses are 3 or 6 months long, but for which not all attendees are fully sponsored by SPO, means that the average figure quoted is not representative of the total training commitment of all the company's employees.

Shore staff received 2,592 man-days of general discretionary training, or an average of 10.7 manhours per employee. SPO spent a total of USD 4.3 million on all training during the year.

All seafarers (outside Australia and New Zealand) receive a Personal Evaluation Report (PER) by their Line Manager and / or the Master/Chief Engineer at the end of every tour of duty. They may thus receive up to a maximum of 3 reviews per year. The PERs have a defined workflow with our ORBIS Management Information System: Every crew member has the opportunity to review, discuss and if required, comment on his line manager's comments before it is transmitted to the Outport Operations / Technical Manager, who reviews it prior to transmittal to the Outport General Manager, who it turn reviews it prior to transmission to either the Fleet Operations or Fleet Technical Manager as relevant. After his review it is sent to the HR Manager for final review and soft-filing. The above work flow ensures that all relevant managers see all



relevant performance reviews, and that a record is kept that will highlight trends in comments on reportees, (and importantly also by reportees).

All managers and local onshore support staff receive a personal performance review by their line manager annually, usually around the date of their birthday for convenience.

SPO is still planning to roll out a HR software package across the company that will facilitate a gap analysis and identify the general training needs for each person, such that they can clearer define their career path within the overall needs of the company. However this project has been deferred until the company has the resources to permit a fully supported implementation.



# Diversity and Equal Opportunities



SPO records the sex, nationality and age of its employees.

The gender split of our total onshore staff of 243 worldwide is 54.7% male : 45.3% female. Whilst SPO has historically employed a few female seafarers, only 2

were employed as at 31 Dec 2010. Gender is immaterial for SPO in employing a seafarer; the current imbalance is purely a matter of few females from most countries wishing to follow a career at sea. Our joint venture SCF Swire Offshore in the Russian Far East employs a total of 91 seafarers

(included in the total stated of 1,760), of whom 7.7% are female.

SPO does not keep any records of its employees' ancestry/ethnic origin, creed or any other diversity indicators as these are regarded as immaterial to the performance



of an employee for the company. The company does indeed recognise the value of the diversity and inclusivity of its workforce to the company, and the variety of nationalities (20 onshore and 30 offshore) is proof of this. Additionally the variations in personal data protection legislation and norms across the 10 countries in which we have operational offices are such that keeping data on certain measures of diversity in some jurisdictions is not allowed.

SPO does not keep records of its employees' disabilities. The company does employ a few personnel with registered disabilities, but provided they have passed a standard medical (for onshore staff) or a prescribed marine industry medical (an "ENG1" – a legal requirement) for offshore staff stating that they are fit to perform their role on one of our vessels, there is no bar to their employment.

The question of employing seafarers who are HIV+ve, and SPO's policy on this, has been raised by several employees during the year and discussed with the HR Department. SPO has no policy of exclusion for HIV+ve employees, however this medical status would preclude the seafarer from entry into certain countries where we work worldwide, and our principal Flag State authority has advised that this status would preclude the seafarer from serving on its vessels. For these operational reasons therefore it is unlikely that we would be able practically to employ many, if any, seafarers with this status.

SPO Head Office continues to word its employment adverts to state that we are committed to the benefits that derive from a diverse work force and to more actively seek applications from all sections of the community.



# Investment and Procurement Practice



There was only one significant investment agreement or contract for capital expenditure finalized or entered into during 2010. This was for Pacific Orca, a 6-legged jack-up DP self-propelled Windfarm Installation Vessel ("WIV") of specialized design that was ordered from Samsung

Heavy Industries ("SHI") Shipyard, to be built at Goeje Island in South Korea. A second, sister vessel is expected to be ordered early in 2011.

Human Rights in South Korea have evolved significantly, however there are

reported by some sources to be problems in some areas. None of these issues however are material to the operation of the WIV shipbuilding contract, nor is SPO able to influence this alleged situation in a sovereign state.



SPO has therefore reviewed SHI's Ethical Management and was pleased to find publically available both a general Ethical Management Statement, and in particular (in this area) it's Ethical Standards for Employees and its Commitment to Employees. These Standards will be audited once work starts at the shipyard in 2011 and annually thereafter to ensure that this significant contractor meets its stated principles.

No other new investment agreements needed to be reviewed or screened for human rights issues.

260 seafarers and 25 new onshore staff in Singapore received a formal 90 min introduction to Sustainable Development within SPO during 2010. This included explicit reference to the Group and [Company Code of Conduct](#) which details our requirement for respecting for all individuals, and their right to expect to be valued for who they are, by all others in

their workplace. This was also provided in hard copy in the attendees' course files.

The Group / Company Code of Conduct (available [here](#)) makes specific reference to the fact that Swire is committed to providing an inclusive work culture and appreciates and recognises that all people are unique and valuable and should be respected for their individual abilities. Swire will not tolerate harassment or discrimination on the basis of gender, religion, race, nationality or ethnic origin, cultural background, social group, disability, sexual orientation, marital status, family status, age or political opinion. The Code of Conduct requires all relevant persons to behave with courtesy and respect towards everyone encountered in the course of business.

In addition to the 430 hours of instruction given to sea and new-hire shore staff during 2010, all the staff at the 3 outports and business units visited in 2010 were

reminded of their obligations and responsibilities under the Group / Company Code of Conduct during the Key Stakeholder Dialogue sessions.

In addition to requiring this of our own employees, we are explicit in our "Supplier Corporate, Social and Environmental Responsibility Code of Conduct" (available [here](#)) that we also expect all of our vendors and suppliers to "integrate social and environmental policies into their business processes. Such policies should include environmental, occupational health and safety, and human rights and labour policies". We also require that our suppliers' "conditions of employment must be based on an individual's ability to do the job, not on the basis of personal characteristics or beliefs. Suppliers shall not discriminate on the basis of race, colour, national origin, gender, sexual orientation, religion, disability and other similar factors".



Additional effort will be made in 2011 to engage with the key suppliers that have been internally assessed as having the highest potential for non-compliance with SPO's "Supplier CSR Code of Conduct" based on a risk-based audit approach.





# Security Practices



SPO does not employ any dedicated or full time security personnel as defined by GRI (i.e. those who are employed for the purposes of guarding the property of SPO, crowd control, loss prevention and escort duties).

However SPO has a mandatory legal requirement to preserve and enhance the security of its personnel and ships under the IMO ISPS Code (the International Ship and Port Facility Security Code). This is a comprehensive set of measures developed in response to the perceived

threats to ships and port facilities, in the wake of the 9/11 attacks in the United States.

The ISPS Code is implemented through chapter XI-2 "Special Measures to Enhance Maritime Security" in the



International Convention for the Safety of Life at Sea (SOLAS). In essence, the Code takes the approach that ensuring the security of personnel, ships and port facilities is a risk management activity and that, to determine what security measures are appropriate, an assessment of the risks must be made in each particular case.

Over and above its use in managing any terrorist threat to any nation, it is also used by SPO today to provide effective counter measures for our seafarers and vessels in areas of the world where piracy may be expected. Every vessel has its own vessel specific ISPS Manual, and the contents of this are confidential to all except the relevant personnel defined in the code.

There is a qualified Ship Security Officer (SSO) on every vessel (thus a total of 150 on the payroll at 31 Dec 2010) and a Regional Company Security Officer (RCSO) in our 5 offices in Australia, Cameroon, Dubai, Singapore and the

Seismic Division. All of these personnel have completed the externally conducted and flag state verified courses relevant to their roles.

With respect to specific training on human rights issues, all existing personnel onshore and all new employees onshore in the last 3 years have been formally made aware of the Company Corporate Code of Conduct. This includes a section on respect in the work place and the strict non-tolerance by the company in matters of harassment and discrimination. This subject is also covered during the Standard and Advanced Safety Management courses attended by seafarers at our marine training centre in Singapore. Up to 31 Dec 2010, 678 seafarers have received formal instruction in this area, and a further 304 are scheduled in 2010. This equates to a total of nearly 56% of our seafaring staff. The Corporate Code of Conduct is posted on the SPO web site for those who have yet to receive formal instruction in this area.

The report of the Special Representative of the Secretary-General on the issue of Human Rights and Transnational Corporations and other Business Enterprises "Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, respect and Remedy" Framework" is expected to be presented to the UN Human Rights Council in mid 2011 for consideration and approval. Once we have a copy of the UNCHR approved or adopted document then SPO will review it for applicability to our operations and seek to align our business and operational practices as best possible.



# Indigenous Rights



SPO currently has no formal dealings to date with Indigenous Peoples ("IP") and thus there have been no violations of their rights, but as detailed in the Environment: Biodiversity section, there are two groups of IPs who will be impacted by our REDD+ Paraguay Forest Conservation Project

("PFCP") in Paraguay. The PFCP has been delayed a year due to the very long delayed release of the relevant REDD+ Project Design Document methodology. This was finally released in late 2010 and as at the end of 2010 the PFCP is now back on track again, hence the positive actions that were planned for the IPs

near our Project sites within 2010 will now commence in mid 2011. We expect to have significantly more to report in next year's SD Report.

In the San Rafael area in the SW of Paraguay we will be establishing of a



voluntary Payment for Ecosystem Services ("PES") scheme for the Campesinos in La Amistad (the project site there) to retain and improve the quality of their remaining forest, instead of clearing as planned. Payment rates are designed to compete with cotton as the current alternative land-use. As currently envisaged, 75% of the payment will be made to individual land occupiers who retain virgin Paraná Atlantic Rain Forest on their parcels and 25% to actions benefitting the community as a whole. Near the project site, the indigenous Mbya Guarani are also resident in the forest, with several land parcels granted to them. Here they maintain a traditional lifestyle based on subsistence agriculture supplemented by hunting and forest loss is of great cultural concern to them. We have maintained an active dialogue from the outset with NGOs that assist with preserving and enhancing their rights (in both areas described herein). Our initially targeted project site is outside any of their ancestral lands, but the project has been designed such that we could and

would seek to work closely with them (as they have recently requested) if / as we decide to scale up the project in the future, or should a suitable land parcel meeting the aims of the PFCP Project Definition Document ("PDD") becomes available.

The Campesinos (and later the Mbya Guarani) will thus benefit from a direct revenue stream to the community and its members at a level comparable to the most advantageous alternative crop, to be utilised according to community determined priorities.

The land parcel/s in the Dry Chaco in the NE of Paraguay will be dedicated to conservation management as a private protected area "preserved in perpetuity for conservation" under joint ownership by Guyra Paraguay and the Ishir IPs, who have already expressed their strong support for this initiative. A co-management agreement between the two parties will safeguard the maintenance of forest

cover and quality. The area will be jointly managed (with appropriate capacity building for Ishir community members) and, upon demonstration of successful forest quality maintenance during the 20-year project lifetime, full land title will be formally transferred to 100% Ishir ownership. Meanwhile an annual payment will be made to the community in recognition of the Ishir community interest in the area.

The Ishir IPs will thus benefit from regained control of traditional ancestral territory, a reliable income stream to the community and supplementary income from participation in project and conservation management activity.



# Customer Health and Safety



SPO has devoted significant dedicated resources to providing a safe work place on all our vessels (and in our offices) and to our business delivering a safe and professional service for well over 25 years. This starts at the design phase; currently 94% of our fleet was contracted from the

outset to be built for us and delivered to SPO from the shipyard. Whilst many of the vessels are certainly based on standard classes of design, we have an in-house team of superintendents who are involved in beginning to define the specification of each class some months before the

contract is signed. The modifications required up to the issue of "approved for construction" drawings draw on the experience of the superintendents, all of whom have served on our vessels in the past, to produce the most operationally functional and safe configuration for our



seafarers as the conflicting working demands of the vessels reasonably permit.

Having taken delivery of every vessel, all the subsequent operations of the vessel and the services provided for our clients for their entire lives in SPO are conducted under our externally audited Safety Management System, using assets that are also externally audited for integrity in accordance with international, flag state, port state and occasionally client regulations. Individual operations on board, whether routine or one-off are subject to a Job Safety Analysis conducted by all the parties that will be performing the task, or have prior experience of it. The purpose of this is first to engineer out any need to perform any hazardous task in the first place, secondly to put in place mitigation strategies to reduce risks to as low a level as reasonably practical and finally to ensure that last line safety barriers such as suitable personal protective equipment are available and used correctly.

Lastly, The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009, was adopted in May 2009, and is expected to be fully ratified and come into force before 2015. This takes a holistic "life of the asset" view of a vessel, tracking all the hazardous substances introduced and removed from the vessel, so that when it finally goes to a ship-recycling facility, the ship's "Green Passport" can be handed to the ship-breakers management to permit a risk assessment to be done on the breakers' workers' exposure and permit the vessel to be dismantled only in a safe and environmentally sound manner worldwide,

All vessels SPO for which the shipbuilding contract was signed after 01 Jan 2009 will be delivered with Green Passports, irrespective of whether the Convention has been fully ratified by that time.

Since last year, SPO disposed of its first vessel directly to a ship-recycling yard. This

is described in more detail in section 2.6.4 under indicator EN 24.

During 2010 there was one incident in which a vessel was in technical breach of a regulation concerning health and safety. The AHTS Pacific Ariki was on passage to Manila when the HF SSB Radio failed. The vessel had many other back-up systems and reported this using these to its operational control office, who arranged for a technician to attend the vessel on arrival and rectify the fault. The vessel was randomly visited by a Port State Control official on arrival and the faulty radio was openly declared by the Master, together with the fact that a technician had been engaged to rectify it. Regrettably however the fact that the radio had failed is a technical breach of international SOLAS requirements and Flag State should have been informed. In discussions with Flag State for the vessel, had the office informed them of the failure and the rectification measures in hand, an exemption would have been given. No fine, penalty or warning *per se* was issued.



## Product and Service Labelling



For the calendar year 2008 we received feedback from 23 clients reporting on 33 vessels from a fleet of 69 (48% fleet) and after averaging all the responses to the questions on the quality of our services the average score is 4.36 out of 5.

For the calendar year 2009 we received feedback from 26 clients, a y-o-y increase of 11.2%, reporting on 38 vessels, a y-o-y increase of 15.2%, and representing 54% of the fleet – a total of 40 separate client-boat contracts, and after averaging all the

responses to the questions on the quality of our services the average score is 4.38 out of 5. This represents an increase in quality perception rating of 0.4%.

For the calendar year 2010 we received feedback from 16 clients, a y-o-y decrease



of 38.5%, reporting on 30 vessels, a y-o-y decrease of 21.1%, and representing 40% of the fleet – a total of 30 separate client-boat contracts, and after averaging all the responses to the questions on the quality of our services the average score is 4.24 out of 5. This represents a y-o-y decrease in quality perception rating of 3.6%.

The decrease in reporting levels for both client and vessel numbers is obviously disappointing and below our target increases, but realistically we cannot force clients to respond. The ongoing high level of customer quality satisfaction – whilst still above the "very good" mark and still with not a single client rating SPO or the relevant vessel operation as "poor", "very poor", "dissatisfied" or "extremely dissatisfied" – is disappointing in that it has dipped slightly. This issue has already been raised with the operational offices and SPO will seek to reverse this trend in the next report.



# Community



The nature of SPO's core business in supporting offshore oil and gas exploration and production means that in the normal course of events we impinge and impact on communities to a negligible degree.

Our vessels work out of base ports around the world, wholly as directed and selected

by our clients, so the main (positive) impact we would have on communities in and around port areas would be in providing a driver for some additional local employment to support our operations. On a national (flag state or area of operations as relevant) basis we also seek to employ suitable, competent and qualified local

seafarers, and office staff where we have a local office.

Internal combustion engine SO<sub>2</sub> emissions to the local atmospheric environment from vessels in port, from operation of their "harbour" or auxiliary generators is a reported issue in some larger ports



worldwide but where it is, these primarily relate to deep-sea cargo ships that are burning Intermediate or Heavy Fuel Oil (IFO/HFO) that currently have a sulphur content of up to 4.5%. All of our vessels burn a significantly cleaner fuel: Ultra-Low Sulphur Marine Gas Oil (ULS MGO) that has a sulphur content of 0.5% - 1.5%, so this is not a material issue.

Our Voluntary Carbon Offset initiative: the Paraguay Forest Conservation Project has been internally approved and is proceeding. The Project Design Documentation ("PDD") for the first area was validated in Dec 2010 by the Rainforest Alliance in accordance with the CCBA Gold Standard (which emphasises a focus on the positive effects that the Project will deliver to the local and indigenous communities).

The local communities and their representatives have been involved in project planning from the outset, and they have formally approved the project and their direct and intimate involvement with it as a part of the validation process. Other communities of Indigenous Peoples have seen this and wholly overcome their initial reticence to become involved in what we are trying to do. It is formally established with the Project's Operating Policy that the Project will *"ensure that applicable codes, guidelines and standards recommended and/or conventions adopted by the UN: in particular the UN "Declaration on the Rights of Indigenous Peoples" adopted on 13 Sep 2007, plus the deliberations of the various UNFCCC CoP, and in particular the REDD+/++ Framework, are taken into account"*.

This is detailed further in the Detail Section: *Environment: [Biodiversity](#)* section.



# Corruption



Both our SPO and the Swire Group's Internal Audit departments formally audit all business units on a rolling basis. The internal audits are conducted under SPO's Internal Audit Charter, reporting to the Audit Supervisory Committee, and the auditing process is governed by The Institute of

of Internal Auditors "Code of Ethics" and "International Standards for the Professional Practice of Internal Auditing".

"The scope of the Internal Audit encompasses the examination and evaluation of the adequacy and

effectiveness of the organisation's governance, risk management process, system of internal control structure and quality of performance in carrying out assigned responsibilities to achieve the organisations stated goals and objectives".



In 2008, 21 of 23 identified business units at SPO were audited. Based on these audits the units were then prioritised using a risk-based audit approach and it was agreed that in 2009, 14 of our total of 21 business units would be subject to Internal Audit and this was undertaken. In 2010, 19 of 22 business units, (having purchased Swire Blue Ocean) were audited in accordance with the same criteria.

No incidents of corruption, or significant risk to SPO that management systems to prevent corruption were lacking, were found during 2010.

The relevant sections of the Swire Code of Conduct concerning issues of corruption can be found in the Data Section: [Society Data](#)

With respect to specific training on corruption issues, all existing personnel onshore and all new employees onshore in the last 3 years have been formally made aware of the company Corporate

Code of Conduct. This includes sections on corruption, bribery, etc., as can be viewed in [Data Section](#). Purchasing Managers in the relevant outports have also been made aware of the SPO Supplier Code of Conduct. This is posted on the SPO web site, and the Terms and Conditions of every Request for a Quotation (RFQ) include a clause stating that any purchase order raised in a response to an RFQ is deemed to include observation of the SPO Supplier Code of Conduct as a strict condition of supplying the goods or service.

This subject is also covered during the onshore Staff Induction Courses for the 25 new employees run in Singapore in 2010, and the Standard and Advanced Safety Management courses attended by seafarers at our marine training centre in Singapore. Up to 31 Dec 2010, 687 seafarers have received formal instruction in this area and a further 304 are scheduled in 2011. This will equate to a total of nearly 56.3% of our seafaring staff.

The Corporate Code of Conduct is posted on the SPO web site for those who have yet to receive formal instruction in this area.

It is planned in 2011 to introduce a web-based guide to the SPO Corporate Code of Conduct posted on the SPO web site for all onshore staff and to annually evaluate and refresh their understanding of the contents of this Code.



# Public Policy



As would be expected SPO follows the public policy positions taken by its parent company, Swire Pacific Limited. During the calendar year 2010 SPO took no public policy decisions over and above those issued by its parent, but fully supported and was aligned with the Cancun

Communiqué on Climate Change (see [here](#)), the successor to previous communiqués such as the Bali, Poznan and Copenhagen Communiqués which Swire Pacific Limited along with 391 other companies in 36 countries, signed. It was presented to CoP-16 negotiators and

government representatives on 5th December 2010 at the business-led 'World Climate Summit'.

Click [here](#) to view the Cancun Communiqué.



# Reporting Philosophy, Methodology and Scope



## Report Boundaries

The boundaries used for this entire report are a mirror of the Organizational and Operational boundaries for the SPO group of companies as they are defined under ISO 14064. We note that ISO 14064 relates

only to GHG emissions from entities within the defined boundaries. However we have used these boundaries for conformity to define the reporting area herein for all of the GHG emissions plus the operational, environmental, social and financial performances from SPO and its Approved

Network Companies ("ANC"), as detailed in the [diagram](#).

The reports from our j/v and associate companies are based on the Control (operational or financial) Approach for each j/v or associate company.



## GHG Scope Divisions

The GHG Scope divisions are primarily as follows:

### Scope 1

Onshore office vehicular petrol / diesel / LPG usage Vessel OFF-hire fuel oil and lube oil consumption Vessel HFC and HCFC consumption / emissions

### Scope 2

Onshore office electricity usage

### Scope 3

Management and Crew air travel Vessel ON-hire fuel oil and lube oil consumption

The distinction between "On"-hire and "Off" hire fuel consumption is made as in all offshore contracts into which SPO enters, the client / charterer is responsible for provision of all fuel oil and lube oil when the vessels are on hire, and likewise SPO is responsible when the vessel is off-hire.

The Operational Intensity of the vessel, and thus the level of emissions from fuel consumption whilst on hire, is entirely within the direction of the client. This is a very significant distinction as the daily fuel oil consumption of a vessel can vary between 1.9 m<sup>3</sup> MGO (5.0 tCO<sub>2</sub>e) / day if directed to wait at anchor to 41.3 m<sup>3</sup> MGO (110.4 tCO<sub>2</sub>e) / day if directed by the client to steam at full speed. Each party therefore takes responsibility for that which is within its management control.

[Click to view table](#)

## Reporting and comparing metrics of Operational Intensity

SPO's business is primarily the leasing of its vessels to perform offshore support services. The company's "Operational Intensity" is thus measured by the availability of its assets for hire, or "Available Boat Days" (ABD). This is the total number of days that its total number of

boats was available during any period for revenue generating activity. The count of available days currently includes periods of boat dry-dockings as although the boats are not available to earn revenue during these (usually statutorily required) periods, the dockings are a requirement to be able to continue to operate the boats. This intensity figure does not include third party vessels only under ship or technical management contracts.

[Click to view table](#)

## Stakeholder Engagement

As we did after the publication of the SPO 2008 SD Report, we sought to actively bring the attention of our 2009 SD Report to as wide an audience as possible, internally and externally.

During feedback sessions with our own staff we heard that the CSR message was



not being cascaded down effectively to our support staff, who make up 62.6% of our onshore staff and are essential to our operation. As the fleet does not yet have broadband internet access fitted throughout, the vessels were unable to download the web-based version on the SD Report – and it was not intended to print multiple copies to minimise paper usage. To resolve this, we printed (on FSC certified paper, using soy ink) sufficient copies of a double-sided summary of the report to send to each member of the shore staff and several copies to every vessel. The summary detailed key achievements, containing an excerpt of the Managing Director's message, and giving the web address for the full report and the GM CSR in case follow up was required. Every member of seastaff attending a Standard or Advanced Safety Management course at SMTC during the year (251 in 2010) was also given a personal copy to maximise penetration of the report. This initiative was well received and will be repeated for the 2010 report.





During the latter part of 2010 an Enterprise Risk Management review was conducted. This identified the risks to our business and, in the process, those parties who would influence the various risks or in turn be influenced by them. This was felt to be an excellent way of identifying a majority of our key stakeholders. It will be no surprise that the key stakeholders were revealed to be our own staff, major clients, flag state regulators, classification societies, key / single suppliers, port states and employee representative bodies. This is much as the qualitative review determined in 2009, but now has a more quantitative basis.

Given the global reach of our operations, it is not viable to meet all key stakeholders every year, so it is planned to meet the maximum number in the SEA Region (Singapore, Manila, Brunei) every year, and an outreach to our other outpost offices: Australia (for 2009 report), Dubai and Qatar (for 2010 report) and West Africa (for 2011 report), then back to Australia again for 2012 and so on.

In Jan 2011, immediately before the writing of this report commenced the GM CSR and local managers conducted a Stakeholder Dialogue exercise in which this report was discussed, face-to-face, with a cross section of our key clients and suppliers in the Middle East. In total, we achieved nearly double the number of feedback responses (73 vs. 40) over that received the previous year.

Both the style and the content (what is included, what is included and needn't be, and what material issues aren't included and should be, all from the point of view of their particular interest group) of the report were reviewed. The comments were then aggregated, and every attempt to prioritise and then satisfy as many as feasible has been made in this 2010 SD report.

One significant comment, repeated many times, was a request for the report to be web-based with hyperlinks (this report is thus designed for viewing on an iPad, or landscape PC Monitor), and as expected

there were comments about optimising the level of detail (as required for GRI G3+ verification) against length of the whole report. This has been addressed herein using the drop-down menus on the opening page. Readers in different disciplines or from types of stakeholders can thus focus on the areas of concern to them, without having to read through the whole report to find them.

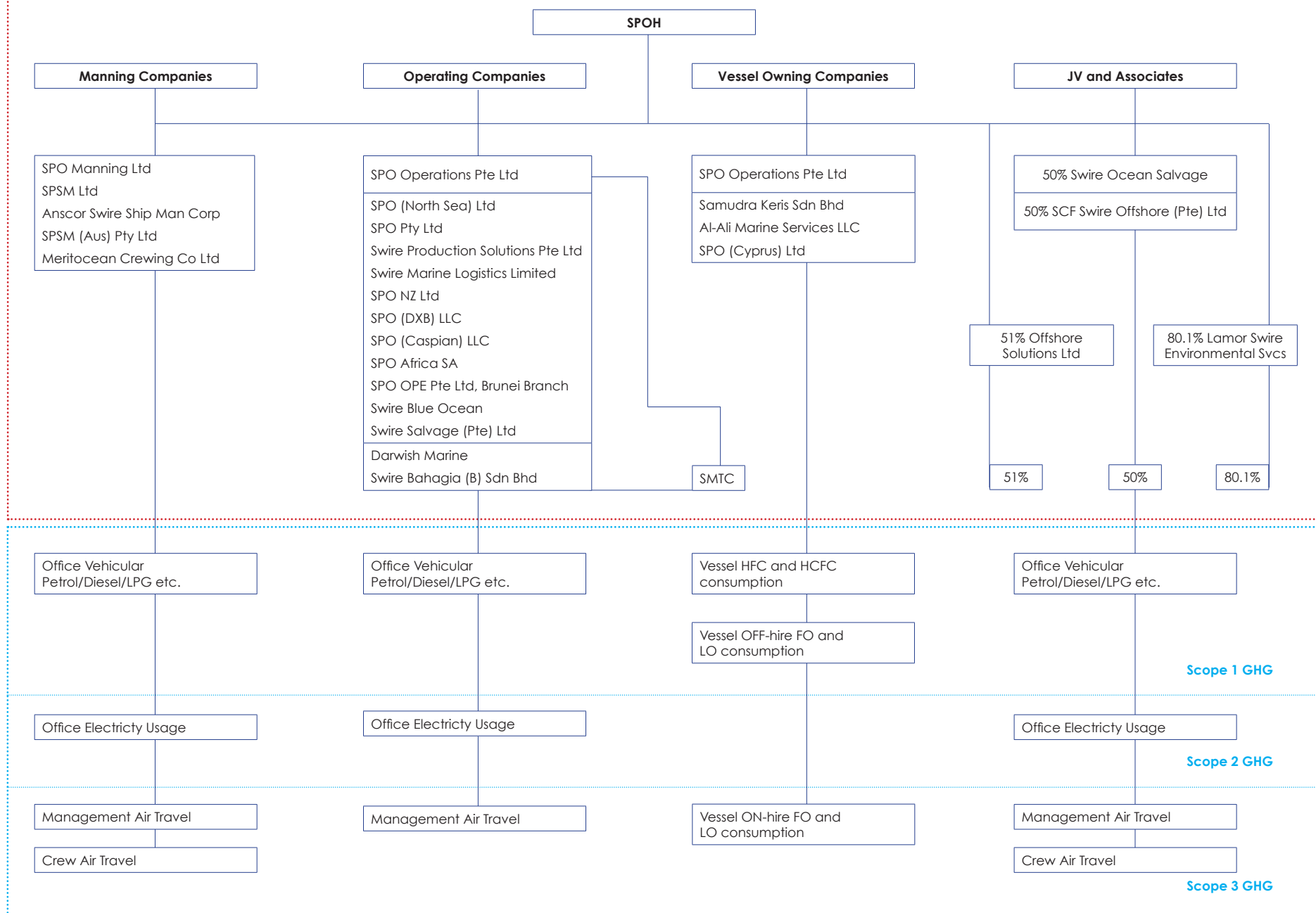
This process will be fine-tuned and repeated with this report with a wider group of our key stakeholders again at the end of 2011 to ensure that in our next report we again continue to focus closer on reporting the issues that are material to them.



# Organizational and Operational Boundaries of Swire Pacific Offshore Operations Pte Ltd (OPE) and Approved Network Companies (AwNC) under Singapore AIS of OPE

Organizational Boundaries

Operational Boundaries





Year	Available Boat Days	Y-o-Y change in Operational Intensity
2005	20,329.0	
2006	21,231.0	+ 4.44%
2007	22,553.6	+ 6.23%
2008	23,878.5	+ 5.87%
2009	25,230.0	+ 5.66%
2010	26,108.0	+ 3.48%



# Economic



SPO's financial performance report is as set required statutorily and is published as a part of its Parent Company's audited Annual Financial Report. The risks and opportunities to SPO due to climate change are as determined by internal discussions and are detailed in the

[Managing Director's Report](#) – see Summary Section and in the Detail Section: Economic.

SPO employees are covered by at least eight different retirement plan schemes, depending on their jurisdiction of

employment in a global company. Given the volume of detail that reporting on this indicator for all eight + schemes would generate, and the lack of perceived benefit in so doing, core indicator EC3 is not reported.



SPO receives no significant directed financial assistance from its host government (Singapore) aside from the structure of the general taxation regime which is applicable at any time to any and all organisations that wish to establish and operate a like business in Singapore, so core indicator EC4 is "NIL".

SPO has four significant centres of operations: Singapore, Perth (Western Australia), Dubai U.A.E, and Doula (for West Africa). The practices of local sourcing of suppliers and management in these four locations are detailed in the Detail Section: Economic.

As an offshore marine services provider, SPO does not operate directly in any communities on land, and thus has no relevant opportunity or need to invest in onshore community infrastructure projects whether for profit or for the public good, so core indicator EC8 is "NIL".



## Environmental and Transport



SPO is a service provider rather than a process provider or goods producer, and thus does not have a material consumption of material with the exception of vessel fuel, which a) cannot be recycled and b) is separately reported under EN3 in the Detail Section: Environment, so core indicators EN1, EN2 and EN27 are "NIL".

By far SPO's most significant impact on the environment, some 91.85% of our Scope 1, 2 and 3 GHG emissions, is through its consumption of fossil fuel (Marine Gas Oil and Lub Oil), and its conversion to CO<sub>2</sub> by burning in internal combustion engines. This is reported in the relevant tables in the Data Section under EN3 (MGO consumed),

EN16 (GHGs emitted) and these both cover EN29 as transporting goods is the very raison d'être for the vessels. However in SPO's Offshore Support Vessel market, when its vessels are on-hire (leased) to clients the vessels' operational activity level, and thus the MGO consumption and GHG emissions, is totally directed by the



client. SPO only has authority and responsibility to direct the operations of its vessels when they are off-hire. Consequently on-hire consumption (and emissions) is reported under the relevant indicators as Scope 3 in accordance with ISO 14064, and off-hire consumption as Scope 1. This is a very material distinction as over a period of a year, the fleet's Scope 3 consumption was 9.36 times larger than the Scope 1 emissions. SPO's Scope 1 emissions from running vessels' internal combustion engines whilst not on hire amount to 84.23% of the total Scope 1 and 2 GHG footprint. Details of SPO's initiatives to reduce total fuel consumption and offset that which cannot be reduced are detailed for core indicators EN11, EN12, EN13, EN14, EN15, EN26, HR9, and SO1 in the Data Section.

The only indirect energy that any of the 17 SPO onshore operational offices worldwide consumed is electricity. For 2010, we have used the Grid Factors most closely relevant to the countries of location of the offices, as

now published by DEFRA/DECC in UK. These vary from 0.295 to 0.952 kgCO<sub>2</sub>/kWhr and as the 5 yearly rolling average grid factor obviously changes slightly over time each year, the y-o-y change GHG emissions between 2009 and 2010 are closely, though not 100% directly, comparable.

Whilst SPO continues to seek to save energy in all areas of operations, we have not in the past year made step changes to process, equipment or behaviour on a directly quantifiable like-for-like basis, so additional indicators EN5, EN7, EN18 and EN30 are not reported. However we have progressed our Green Zone Fuel Efficiency Management System and this is reported in the Detail Section: [Environment](#), [Energy](#) at EN6.

No reports of water indicators EN8, EN9 or EN10 are made, as SPO as a service company neither abstracts groundwater, nor uses surface, waste or rain water. Gross potable water consumption data for

our 75 vessels is of limited use as many of our vessels use waste engine heat to make potable water from seawater. The quantity made a) depends on the location (the seawater taken in must be clear of estuarine silt and human effluent discharges) b) the quantity of waste heat available which continuously varies with vessel operations and c) is not metered. Potable water is also used for occasional washing down the ships' accommodation blocks (as seawater wash-down leaves a salt residue).

All SPO vessels abide by the IMO Ballast Water convention when moving from one operational area to another. This involves flushing out all ballast water from the area departed and taking on ballast water for the area arrived at, and thus avoiding transfer of alien invasive waterborne species.

The amount of water discharged is not relevant to operations, provided it is "all" from the departed area, and so core indicator EN21 is not reported.



The most significant impact SPO has on areas of high biodiversity and where IUCN Red List species may be affected will be in our term contract in Sakhalin, and in Paraguay in relation to our REDD+ carbon offset project. This is fully detailed against relevant indicators EN11, EN12, EN13, EN14 and EN15 in the Detail Section: Environment, [Biodiversity](#). SPO does not produce water run-off, aside from rain-water, so indicator EN25 is not reported.

The only significant non-CO<sub>2</sub> GHG emissions from SPO's business are CFCs and HCFCs from the domestic refrigeration plant on board each of its vessels. It has been assumed that the quantity of freons emitted to the atmosphere through losses from fridge systems is equal to the freons used to refill the systems.

These are reported under indicators EN17 and EN19 in the Detail Section: Environment, [Emissions and Waste](#). SO<sub>x</sub> and NO<sub>x</sub> (plus Volatile Organic Compounds and Particulate Matter)





emissions are reported under EN30 in the Detail Section: Environment, [Overall](#), based on average emissions of each per m<sup>3</sup> fuel consumed.

The details of the hydrocarbon escape events reported from vessels during 2010 are reported under core indicators EN23 and EN28 together with the single incident of Port State Detention under LT13, all in the Detail Section: Environment, [Compliance](#).

Our fleet of 75 vessels disposed of all of its industrial and food waste during 2010 in accordance with international regulations for ships (Garbage Management Plans under IMO Marpol Annex V). However as SPO provides a service, rather than running an industrial process, and so this waste produced is not material to our business, core indicator EN22 is not reported in any more detail than this.

Some potentially hazardous waste transported during the year would be NORM (Naturally Occurring Radioactive Materials). The concentrations of NORM found on oil and gas production equipment and wastes has been determined to pose no threat to the public health and the environment. An insignificant number of cargoes of used welding QA isotopes were carried to or from oil fields during the year, and these were all transported under strict observance of the IMDG Code and other relevant regulations. One vessel was sent for recycling during 2010 and this is reported under indicator EN24 in the Detail Section: Environment, [Emissions and Waste](#).



## Labour



The breakdown of SPO's worldwide workforce, onshore and offshore, and turnover are all reported in accordance with core indicators LA1 and LA2 in the Data Section. The permanently contracted seastaff employed by our manning companies in Australia, New Zealand and

UK who are covered by CBAs (in Australia and NZ: "Enterprise Bargaining Agreements" or EBAs) is reported under LA4. With respect to additional indicator LA3 and core indicator LA5, any benefit disparities between full and part-time employees, plus minimum notice periods

is strictly as per the CBA/EBA in force at any time. All of these indicators are fully reported in the Detail Section: Labour, Employment and Labour / Management relations.



SPO's full Annual Health and Safety Performance is reported under core indicator LA7 in Detail Section: Labour, Occupational Health and Safety, and the corresponding tables in the Data Section. There are no formal joint management-worker health and safety committees at present and so additional indicator LA6 is a NIL report. Disease education and counselling, and substance abuse policies and programmes are required for all offshore staff and this is reported under core indicator LA8 in the Detail Section: Labour, Training and Education.

Training issues are seen as critical to SPO's business in attracting and retaining competent staff fully aligned with the company's core values, and this is reported under indicators LA10 and LA12, plus HR3 also in the Detail Section: Labour, Training and Education.

We are seeking to positively increase our diversity base and be seen as an active equal opportunities employer, and this is

detailed under core indicator LA13 in the Detail Section: [Labour](#), [Diversity](#) and Equal Opportunity. With respect to core indicator LA14, we are happy to report here that there is not a single instance of a man and woman in the company doing work of equal value but receiving different basic remuneration.



# Human Rights



Currently only a small number of term contracts (and no spot contracts) make reference to human rights, but this is observed to be increasing. Details are reported against core indicator HR1 in the Detail Section: Human Rights, Investment and Procurement Practices. SPO is actively

working to increase its oversight of contractors and supply chain management in general, but has not yet begun auditing suppliers and contractors for HR screening, thus for 2010 HR2 is not reported.

Dr John Ruggie submitted a framework to UN Council on Human Rights ("CHR") in 2008 on what needed doing to ensure all parties observed best practice in protecting human rights. The UNCHR accepted this and but asked for guidance on how exactly this would be best achieved, and gave him



a further three year mandate to produce a framework to give to business to guide them as to what to do. This is expected to be delivered to the UNCHR in Q1 2011, for consideration and sign off by UNCHR in Jun/Jul 2011.

*Part 1 is expected to detail what States must do to protect Human Rights.*

*Part 2 is expected to detail "the corporate responsibility to respect human rights, which means that business enterprises should act with due diligence to avoid infringing on the rights of others and to address adverse impacts with which they are involved".*

Once this is signed off during 2011, SPO will conduct a gap analysis review on the framework to ascertain if the company is not compliant in any material areas.

We are pleased to report that again, there have been zero incidents of discrimination, or where there is a risk of child or of forced

labour. Core indicators HR4, HR5 and HR6 are thus all NIL reports.

As mentioned in last year's report, once the ILO Marine Labour Convention 2006 is ratified by our primary flag state, now expected at the end of 2011, all of our seafarers will be required to be covered by a CBA, and this is discussed under Core indicator HR5 in the Detail Section: Labour, Labour and Management Relations.

The issue of Security Training is a regulatory requirement for our fleet under the SOLAS ISPS Code, and detail of this is reported at additional indicator HR8 in the Detail Section: Human Rights, Security Practices.



## Product Responsibility



The Health and Safety aspects of the services we provide are critically important to the success of our business and help to differentiate us from some others in our industry. We report on the assessment of hazards and risks, and the incidence of non-compliance with internal and external

health and safety codes under indicators PR1 and PR2 in the Detail Section: Product Responsibility, Customer Health and Safety.

As a service provider rather than a product producer, SPO does not label anything,

and thus indicators PR3 and PR4 are NIL reports. We do however continue to conduct Customer Satisfaction Surveys and these are reported under additional indicator PR5 in the Detail Section: Product Responsibility, [Product and Service Labelling](#).



There are no codes or voluntary standards relating to the provisions of our services, and we do not market our services to clients publically or in an undirected manner. Consequently indicators PR6 and PR7 are NIL reports.

Privacy and data protection are taken very seriously by SPO as business becomes more and more reliant on electronic transfer and storage of data. Consequently, and per indicator PR8, SPO's IT infrastructure is such that it has never experienced a breach of customer privacy and / or loss of data.

With respect to core indicator PR9, SPO has not received any significant fines or administrative or judicial sanctions for failure to comply with laws and regulations other than any that may have already been reported under core indicator EN28 in the Detail Section: Environment, [Compliance](#).



## Society



SPO takes partnership with its stakeholder communities very seriously, and has reported this under core indicator SO1 in the Detail Section: Society, [Community](#) and the relevant tables in the Data Section.

We also pride ourselves in striving to have the highest and transparent standards of

ethical behaviour. Our initiatives to prevent corruption are reported under core indicators SO2 and SO3 in the Detail Section: Society, Corruption. As per core indicators SO4 and SO8 and additional indicator SO7, there have been no incidents of corruption, legal action for anti-competitive behaviour involving SPO

personnel or significant fines and non-monetary sanctions under laws not covered by EN28 and PR9 during 2010.

SPO's public policy positions are in line with those of its parent company Swire Pacific Limited (SPL). SPL is a signatory to the Cancun Declaration, as detailed under



core indicator SO5 in the Detail Section: Society, [Public Policy](#). As per additional indicator SO6, it is the closely monitored policy of both SPO and SPL not to make donations to political parties, politicians or causes.



# Logistics and Transportation Sector Supplement ("LT")



The GRI G3 Logistics and Transportation Sector Supplement was published in May 2006 as Pilot Version 1.0 and is not yet compulsory to report as the final version has not yet been promulgated. However in the interests of completeness and in anticipation of its future adoption, SPO is reporting the relevant indicators herein as

an integral part of the full SPO SD Report for 2010 that is externally verified to meet GRI C+.

***LT1 Number of ships controlled by the reporting organisation, broken down by the flag state.***

[See Table LT1](#)

***LT2 Breakdown of fleet composition***  
[See Table LT2](#)

***LT3 Description of policies and programmes on the management of environmental impacts, including:***



## 1) Initiatives on sustainable transportation

### 2) Modal shift and

### 3) Route planning

SPO considered various policies to alleviate the GHG footprint of our operations, which amounted to 57,117 t CO<sub>2</sub>e emitted in 2010. They are as described below:

(a) Cold-ironing (connecting to shore power supply whilst alongside) or putting the vessels into cold lay-up (de-manning completely)

The use of shore power when alongside is only a net benefit if the supplying grid/power station/s are known to be using energy sources with reduced emissions. Drawing power from an old oil or coal powered grid to save burning the cleaner, low or ultra-low sulphur Marine Gas Oil that our vessels use will actually exacerbate the emission footprint. Initial investigations into the feasibility of using cold-ironing to mitigate the impact of fuel consumption led to the conclusion that it was not

cost-effective, as the time alongside for vessels is minimal and the modifications required on board and ashore lead to an abatement cost of some USD 200 / t CO<sub>2</sub>e.

Cold-layup for vessels off-hire involves significant negative safety and economic implications when re-activating and thus is not feasible as a short term solution. SPO has not needed to lay-up a vessel for a medium or long period for nearly 20 years.

(b) Mitigation of GHG effects by off-setting the GHG footprint

SPO has voluntarily committed to generating sufficient carbon offsets such that SPO's operations worldwide will be "climate neutral" for the next 20 years, with effect from 01 Jan 2011.

Note: In this context we use the reference to the subject of carbon/climate neutrality given in Wikipedia: [Carbon Neutral](#). "Carbon neutral" is taken to mean "having a net zero carbon footprint, and refers to achieving net zero carbon emissions by balancing a measured amount of

a measured amount of carbon released with an equivalent amount sequestered or offset, or buying enough carbon credits to make up the difference". "Climate neutral" is a similar definition but seeks to achieve a net zero carbon and carbon equivalence (viz. in relation to all 6 GHGs) footprint. SPO will offset all of both its direct emissions (in line with Scope 1 as defined in ISO 14064) plus its indirect, Scope 2, emissions from purchased electricity. In addition to this, SPO has committed to offset the emissions from all management business air travel, as calculated using the calculator [here](#), with effect from 01 Jul 2009.

The full details of our REDD+ voluntary carbon offset credit project is given in Detail Section: Environment, [Biodiversity](#).

In addition to this major project, SPO has a number of other environmental impact initiatives which include:



(i) All of SPO's vessels currently on order are to IMO noise mitigation standards that equate to the DNV Comfort Class 3.

(ii) Green Zone Fuel Efficiency Management System is now being rolled out at in all new buildings and we hope to be producing some class specific specimen Ship Energy Efficiency Management Plans (SEEMP) by the end of 2011.

(iii) All of SPO's vessels segregate waste for disposal ashore fully in accordance with MARPOL Annex V.

(iv) Washing of working clothes on board ships is generally pooled, which saves water (and wear and tear on equipment).

(v) To help the preservation of indigenous marine biodiversity and avoid contamination by invasive species, all vessels moving internationally into Australian, the Arabian Gulf region, New Zealand and Russian Federation waters practice good Ballast Water Management.





(vi) All of SPO's vessels use Marine Gas Oil (MGO), which by ISO 8217:2005 has sulphur content below 1.5%. For vessels bunkering in Singapore we usually seek a sulphur content of between 0.5% to max 1.0%, which is as low as is possible before it is classed as Ultra Low Sulphur (ULS).

***LT4 Description of initiatives to use renewable energy resources and to increase energy efficiency.***

SPO's main initiative to promote the use of renewable energy resources is the building of two Windfarm Installation Vessels (WIV) on behalf of its dedicated WIV support company, Swire Blue Ocean. The WIVs will be committed to the installation of Wind Turbine Generators in Europe. This initiative will widen SPO's client base in the area of offshore marine support and assist in the medium and long term generation of a greater amount of cleaner and greener energy, indirectly assisting with the reduction of the amount of GHG emitted to the atmosphere.

SPO's main direct initiative to increase the operational and thus energy efficiency of its vessels is via the implementation of "Green Zone" Fuel Efficiency Management System (FEMS), which provides a real-time readout of consumption, shown either as m<sup>3</sup> FO, tCO<sub>2</sub>e emitted or USD cost, all either per nautical mile or minute, to the Navigating Watch keeper. This will assist the vessel and the client to work together to reduce the vessels' footprints. By monitoring the consumption of fuel in real-time, it allows the effective management of the efficiency of energy consumed in vessel operations.

***LT5 Description of initiatives to control urban air emissions in relation to road transport (e.g. use of alternative fuels, frequency of vehicle maintenance, driving styles etc)***

SPO owns a very small fleet of company road vehicles which is used to support onshore management offices in the local transportation of personnel or materials.

Initiatives taken to control urban air emissions in relation to road transport are based on compliance with regulations on emissions quality for road vehicles. All new company vehicles are energy efficient, such as hybrids and/or are to Euro V emission standard where available.

***LT6 Description of policies and programmes implemented to manage the impacts of traffic congestion (e.g. promoting off-peak distribution, new inner-city transport modes, percentage of delivery by modes of alternative transportation)***

Road traffic congestion is not an applicable KPI for the shipping sector. LT6 is thus not reported.

***LT7 Description of policies and programmes for noise management/abatement.***

SPO's policy with regards to noise management is addressed at the vessel





design stage. All of SPO's vessels on order are designed to IMO noise mitigation standards that equate to the DNV Comfort Class 3, which represents an acceptable level of comfort.

Compliance with the rules is to be verified through measurements of defined ship-type specific noise and vibration parameters and criteria. For offshore service vessels to be operated in DP (Dynamic Positioning) mode, noise and vibration measurements are to be carried out with the side thrusters in operation. The main parameters used to describe the comfort level are noise, sound insulation, impact sound insulation and vibrations.

Further, to avoid noise pollution from vessels disturbing the small (IUCN "critically endangered") remaining population of Western Gray Whales off the eastern coast of Sakhalin Island in the Russian Far East during their summer breeding season, the IBSVs we operate in this area keep to strictly enforced navigation corridors. The IBSVs are built to



DNV comfort class with respect to noise and vibration pollution, however their operational use to break ice in the winter (non-breeding season) which creates much noise and vibration means that maintaining this as a formal class notation would be pointless.

***LT8 Description of environmental impacts of the reporting organisation's major transportation infrastructure assets and real estate. Report the results of environmental impact assessments.***

SPO does not own transportation infrastructure assets aside from floating transportation assets which are the vessels. LT8 is thus not reported.

At the end of 2010 SPO purchased the long-term (54 year) lease of SMTC. During 2010 SPO engaged a specialised independent consultant to conduct a level 1 and 2 energy audit of the site, which contains the integrated simulators centre,

classrooms, auditorium and conference room, plus two data server centres and SPO's Asia-Pacific warehouse. The findings of this audit have been instituted. After the purchase of the site lease, it is SPO's intent to conduct a more intensive energy audit in 2011 to look at issue involving higher degree of capital investment and thus a longer payback period, such as installing solar panels on the warehouse roof. The results of this will be detailed in the 2011 SD Report. No EIAs were conducted by SPO or on SPO vessels during 2010.

***LT9 Description of policies and programmes to determine working hours and rest hours, rest facilities and leave for those driving and operating fleets.***

The majority of SPO's vessels are under the Singapore flag. With the expected ratification of the International Labour Organisation's (ILO) Maritime Labour Convention, 2006 (MLC, 2006) by Singapore in June 2011 the working hours,

rest hours and leave for ship's officers and crew will be strictly regulated, and the convention implementation guidance from the flag authority will be observed by SPO once it is promulgated.

***LT10 Describe approaches to provision of facilities to enable mobile workers to maintain personal communications while working.***

SPO's has taken the initiative to enable seafarers onboard its vessels to maintain personal communication with their families and friends by providing the infrastructure required for quality communications on vessels. The plan to provide 24x7 broadband internet connections is being aggressively rolled out across SPO's fleet. All seafarers will be given a free quota of data transmission over the broad-band geo-stationary satellite network to facilitate high-speed, high-quality personal communications while working onboard our vessels.





***LT11 Description of policies and programmes regarding substance abuse (e.g. training and campaigns)***

SPO's policy regarding substance abuse for the entire fleet is explained in the company Safety Management Manual (SMM). SPO's Drugs, Alcohol and Substances Policy is clearly stated in SMM,

Section 2.6 and [here](#) and briefed to all new employees. The policy is also posted in conspicuous places on all company vessels and offices, as well as updated regularly as required through ORBIS, for compliance by all staff.

SPO has adopted the guidance of both the STCW Code and the Oil Companies

International Marine Forum (OCIMF) with respect to consumption, working under the influence of, and random testing for Drugs, Alcohol and Substances abuse. The 'Safety Awareness On Board' booklet also includes information on contagious diseases, smoking, drug, alcohol and substance abuse and methods of medical treatment available. This personal



informational booklet is given to all seafarers.

***LT12 Number of road fatalities of drivers or third parties per million kilometres driven.***

SPO does not have any direct business interest in road transportation. Whilst road fatality indicators are thus not relevant for our sector of shipping industry, aside from seafarers joining and leaving vessels, we can report that there were no fatalities of SPO employees or third parties on SPO business in 2010. Thus LT12 is a nil report.

***LT13 List the incidents when ships have been detained by port inspectors, including the following details:***

- (i) Name of the vessel and International Maritime Organisation number
- (ii) Port of detention
- (iii) Reason for detention
- (iv) Duration of detention

There was a single technical detention of a SPO vessel during 2010. [See Table LT13](#)

***LT14 Description of policies and programmes for public access to mail services (e.g. distance to postal office and mail boxes)***

SPO does not have any business interest in mail service. Thus LT14 is not reported.

***LT15 Provision of logistics and transportation core competencies to deliver humanitarian needs locally and globally measured in terms of: e.g. tonnes carrying capacity, persons months, expenditure, value (fair market terms) and in kind contributions in disaster preparedness and response.***

As SPO's core business is to provide support services to the narrow offshore oil and gas exploration and production industry and not in the provision of general logistical services to third parties, SPO was not called upon in the normal course

of its business in 2010. Further SPO was not close to any *ad hoc* need for rendering of transportation of disaster or humanitarian assistance aid in 2010. Thus LT15 is not reported.

***LT16 Criteria for selecting recruitment and placement services. State how these criteria relate to existing international standards such as the conventions of the International Labour Organisation.***

SPO is deeply committed to providing safe, reliable and quality service through the employment of qualified and experienced officers and crew. Very nearly all its offshore personnel are provided by its wholly owned manning agency, Swire Pacific Ship Management Limited (SPSM) in Singapore and a joint-venture entity, Ancor Swire Ship Management Corporation in Manila. Swire Pacific Ship Management (Australia) Pty Limited in Fremantle provides marine personnel for our vessels operating in Australian waters. The number of seafarers employed



through a 3rd party manning agency is 4 out of a total of 1,760 or 0.23%, which is insignificant.

SPSM in Singapore is wholly owned by SPO and operated by SPO employees working to SPO's standards and externally audited management system. This ensures that the recruitment of high quality officers and crew by the manning agency is completely aligned with SPO's requirements for the various skill sets needed for the seafarers to accomplish their tasks in the demanding offshore industry. Anscor Swire Ship Management Corporation in Manila acts as the manning agency for hiring of our Filipino seafarers, who amount to 45.7% of all our seafarers and which is the largest single nationality of seafarers employed by SPO.

In having an equity stake in the manning agencies, SPO can ensure that they abide by all relevant ILO and STCW regulations in the recruitment and placement of seafarers. Manning agencies are required to maintain a register of all seafarers and





ensure that the seafarers recruited or placed by them are qualified and hold the documents necessary for the job concerned. SPO's criteria for selecting recruitment and placement services is in line with ILO's regulations and would continue to be so with the entry into force of Maritime Labour Convention 2006.

***LT17 Describe measures in place to provide income security and employment continuity for workers employed/ contracted repeatedly but not continuously.***

SPO strongly seeks to have as many sea staff as possible on permanent contracts of employment. This gives the seafarer the benefit of security of employment and enables both parties to benefit from their familiarity with company equipment during our operations whilst reducing the resources required by the company in inculcating the company vision, mission and ethos to new employees.

45.7% of all our seafarers employed are of

Filipino nationality. However the administration of the regulations for the well-intentioned control of employment of all Overseas Filipino Workers ("OFW") by the POEA, a government body regulating proper employment, minimum terms and conditions and generally safeguarding their working conditions abroad creates a requirement for single tour-of-duty contracts strictly following the POEA format and so it is very difficult for OFWs to enter into direct, long-term contracts with overseas companies. Notwithstanding this, SPO continues to actively engage the relevant authorities in discussion to change this while fully protecting the Filipino seafarers' legal employment protection. Despite the current inability to formalise a long term contract structure, SPO is proud to employ many long-term Filipino employees and have a very low employee turnover.

Seafarers employed by the manning companies in UK, Australia and New Zealand are currently covered by collective bargaining agreements (CBA). These are

between the relevant manning companies for our seafarers working in these territorial waters and the national seafarers unions in these countries, and strictly regulate working conditions for all seafarers in national waters.

In Australia SPO has access to the databases of seafarers seeking work maintained by both The Australian Ship Owners Association and The Maritime Union of Australia (MUA). Some years SPO in Australia may employ 75% permanent staff and as many as 25% "casual" employees from these databases, but in a quiet year such as 2010, the year of this report, no casuals were employed.

Additional reporting standards for L&T sector

***3.16 Policies and/or systems for managing upstream and downstream impacts***

***Provide descriptions of environmental and social requirements imposed in the***





### ***management of any sub-contracting relationships***

Swire Pacific Offshore (SPO) actively seeks to select and work with suppliers who share its commitment to honesty and integrity in all areas of their business. SPO also actively seeks to select and work with suppliers who integrate CSR policies into all their business processes. The [SPO Supplier Corporate, Social and Environmental Responsibility Code of Conduct](#) describes the various environmental and social standards on any sub-contracting relationships.

### ***Environment***

*All stages in the Supplier's supply chain shall comply with, and preferably exceed, applicable national and legal environmental requirements. Swire Pacific Offshore will have a strong preference for Suppliers who publicly report upon and measure their environmental impact and seek to improve the impact of their*



operations upon the environment, such as by conserving natural resources and energy consumption and reducing waste.

### **Social – Labour and Compensation**

*Suppliers must not use forced labour in any form – prison, indentured, bonded or otherwise.*

*Suppliers must not employ any person below the local legal minimum age, or below the age of 16, unless the person is employed as part of a recognised professional apprenticeship programme.*

*Suppliers must provide each employee at least the local legal minimum wage and benefits. Suppliers must pay their employees promptly, providing each with clear, written accounting for every pay period. Wages should be paid regularly, on time and be fair in respect of work performance.*

### **Commentary for the L&T sector on fleet disposal**

Ship disposal policy by SPO is in accordance with SPO's Sustainable Development Policy which requires us to conduct all of our operations, including vessel disposal, in a socially and environmentally responsible way.

An example of how ship disposal is conducted in SPO may be seen with respect to our vessel **Pacific Sword** which was to be sold to yard for recycling in 2010.

An **EU audit** on recycling yards in South Asia reported that they had unacceptable health and safety conditions workers and Environmental conditions in recycling hazardous waste. This deterred SPO from selecting them for contracting the vessel's sale for recycling. This was despite the fact that SPO initially expected to realise less revenue from sale of Pacific Sword to the clean, well-maintained and environmentally certified yard in Guangdong that it finally selected.

The example illustrates that SPO understands the environmental and social

impacts of ethical ship disposal practices. By conscious selection of yards which conducts their business in a cleaner and greener manner, substandard yards would be forced to improve their practices, as shown by the 75 Indian recycling yards that have been driven by market forces to seek and gain accreditation to ISO 30000:2009 "Ship recycling management systems". This will lead to safer working conditions for employees, and more environmentally responsible disposal of potentially harmful waste, and consequently more business volume and revenue for the recycling yards.

### **Economic Performance Indicators**

#### **Monetary flow indicator**

#### **EC1 Net sales commentary for the L&T Sector**

<b>Swire Pacific Offshore group</b>	<b>2010 (HKD million)</b>	<b>2009 (HKD million)</b>
Gross Revenue	3,046	3,892
Operating Costs	(2,337)	(2,333)
Attributable Profit	709	1,559





As no wholly owned SPO group company bareboats in any vessels, the gross and net revenue figures are the same. Tax is paid in all operational jurisdictions in full compliance with the laws and regulations of those jurisdictions

**EN3 Direct energy use segmented by primary source**

*Commentary for the L&T Sector Supplement*

[See Table LT3](#)

**EN8 Greenhouse gas emissions**

*Commentary for the L&T Sector*

[See Table LT4](#)



***EN16 Incidents of and fines for non-compliance with all applicable international declarations/ conventions/ treaties and national, sub-national, regional and local regulations associated with environmental issues.***

*Commentary for the L&T Sector on Labelling, Storage, Handling and Transportation of Hazardous Goods*

There were no fines or non-monetary sanctions levied against any of SPO's vessels in relation to non-compliance with any environmental laws and regulations during 2010. Thus, EN16 is a nil report with regards to L&T supplement.

***LA1 Breakdown of workforce, where possible, by region/country, status, employment type and by employment contract.***

*Commentary for the L&T Sector on Self-employment (Road transport specific)*

SPO does not have any direct business interest in road transportation. Thus LA1 of the L&T supplement is a nil report.

***LA9 Average hours of training per year per employee by category of employee.***

*Commentary for the L&T Sector on Transport Operational Safety (report on the number of hours of transport safety training)*

**[See Table LT5](#)**



Table LT1

Flag State Registry of Vessels		
	Number	Percentage
Singapore	68	90.7%
Russian Federation	2	2.7%
Australia	1	1.3%
Malaysia	3	4.1%
UAE	1	1.3%
Total	75	

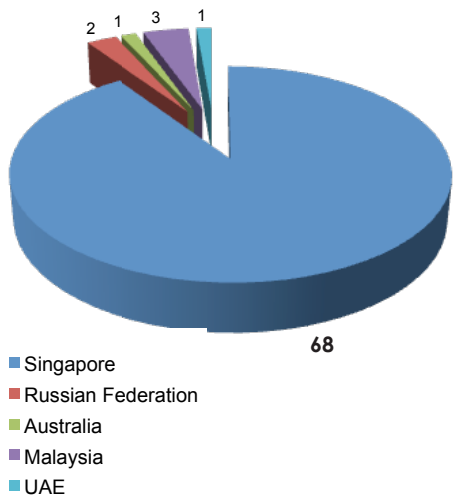






Table LT2

Explanation of Sea Transport Table						
Vessel Type	Design	Total Number	Conditions (Detention during the past year)	Pollution Prevention	Fuel (Average sulphur content)	Average fuel consumption (tonnes per day)
Anchor Handling Tug Supply Vessels (J-class)	Varies	11	0	Some double-hulled	Marine gas oil (0.5-1.5% sulphur)	Varies, average 7.0 @ 12 knots
Anchor Handling Tug Vessels (T-class)	Varies	4	0	Some double-hulled	Marine gas oil (0.5-1.5% sulphur)	Varies, average 8.5 @ 12 knots
Anchor Handling Tug Supply Vessels (P-class)	UT780	11	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	12.7 @ 12 knots
Anchor Handling Tug Supply Vessels (S-class)	UT719	4	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	15.5 @ 12 knots
Anchor Handling Tug Supply Vessels (6000 series)	N/A	2	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	19.5 @ 12 knots on 4 engines
Anchor Handling Tug Supply Vessels (UT704)	UT704	2	1 (Radio communications)	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	15.0 @ 12 knots
Anchor Handling Tug Supply Vessels (R-class)	UT738	8	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	12.0 @ 12 knots
Anchor Handling Tug Supply Vessels (V-class)	IMT966	10	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	12.0 @ 12 knots
Anchor Handling Tug Supply Vessels (W-class)	UT710	8	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	14.0 @ 12 knots
Anchor Handling Tug Supply Vessels (B-class)	UT720	6	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	15.7 @ 12 knots
Platform Supply Vessels (A-class)	UT755L3	5	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	15.0 @ 12 knots
Ice Breaking Supply Vessels (E-class)	UT758-ICE	2	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	19.9 @ 12 knots in ice-free conditions
Seismic and Hydrographic Survey Vessels (Survey Class)	Varies	2	0	Double-hulled	Marine gas oil (0.5-1.5% sulphur)	22.0 @ 12 knots



Table LT3

Mobile (Sea, Road) / Non-mobile	Energy Source	Amount (Litres)	Relevant boat-days	Litres of consumption per relevant boat day	Change year-on-year	Total energy consumption (GJ)	Total energy consumption per relevant boat day (GJ)
Mobile (Sea)	ISO 14064 Off-hire MGO Scope 1	15,763,438	5,076.95	3,104.90	-8.94%	706,202.01	139.10
Mobile (Sea)	ISO 14064 Off-hire LO Scope 1	206,896	5,076.95	40.75	-1.52%	10,701.10	2.11
Mobile (Road)	Office Vehicular Diesel	28,703	-	-	60.37%	1,243.70	-
Mobile (Road)	Office Vehicular Petrol	45,682	-	-	-4.85%	1,835.96	-
Mobile (Sea)	ISO 14064 On-hire MGO Scope 3	148,143,758	21,031.05	7,044.05	5.20%	6,636,840.37	315.57
Mobile (Sea)	ISO 14064 On-hire LO Scope 3	1,105,768	21,031.05	52.58	-6.58%	57,192.56	2.72
<b>Total (Mobile)</b>	-	<b>165,294,245</b>	-	-	-	<b>7,414,016</b>	-
Non-mobile	Electricity purchased by onshore offices worldwide	1,058,564	-	-	-6.95%	3,810.83	-
Non-mobile	Onshore Staff	243	-	-	11.98%	-	-
Non-mobile	Electricity purchased / onshore staff member	4,356.23	-	-	-16.99%	-	-
<b>Total (Non-mobile)</b>	-	<b>1,063,163</b>	-	-	-	<b>3,810.83</b>	-







**Table LT4**

Mobile (Sea, Road, Air) / Non-mobile	Energy Source	Conversion factors	2009 Quantity	2009 GHG emissions (tCO <sub>2</sub> e)	2010 Quantity	2010 GHG emissions (tCO <sub>2</sub> e)
Mobile (Sea)	ISO 14064 Off-hire MGO Scope 1 (litres)	0.00302120	9,755,476.00	29,473.24	15,763,437.63	47,624.50
Mobile (Sea)	ISO 14064 Off-hire LO Scope 1 (litres)	0.00286355	118,399.00	278.01	206,896.44	485.82
Mobile (Sea)	ISO 14064 On-hire MGO Scope 3 (litres)	0.00302120	149,784,794	452,529.820	148,143,758	447,571.923
Mobile (Sea)	ISO 14064 On-hire LO Scope 3 (litres)	0.00286355	1,258,958	2,955.967	1,105,768	2,596.286
Mobile (Sea)	HCFC (kg)	1700	2,888.00	4,909.60	4317.36	7,339.51
Mobile (Sea)	HFC (kg)	1950	444.75	867.26	423.50	825.83
Mobile (Road)	Office Vehicular Diesel (litres)	0.00267200	17,898	47.82	28,703	76.69
Mobile (Road)	Office Vehicular Petrol (litres)	0.00232200	48,009	111.48	45,682	106.07
Mobile (Air)	Management Air Travel	-	-	1,381.756	-	1,061.35
Mobile (Air)	Crew Air Travel	-	-	33,204.138	-	34,135.10
<b>Total (Mobile)</b>	-	-	<b>160,986,866.75</b>	<b>525,759.09</b>	<b>165,298,985.93</b>	<b>541,823.08</b>
Non-mobile	Electricity (KWhr)	-	1,137,587	721.757	1,058,564	658.145
<b>Total (Non-mobile)</b>	-	-	<b>1,137,587</b>	<b>721,757</b>	<b>1,058,564</b>	<b>658,145</b>
Year-on-year increase	-	-	-	-	-	-1.17%



Table LT5

Course	Course Length (days)	2009 participants	Man days	2010 participants	Man days	2011 participants (scheduled)	Man days
Standard Safety Management	4	156	780	134	536	144	576
Advanced Safety Management (+ MCA 1 OSR)	4	99	495	117	468	160	640





Table LT13

Name of vessel	M/V Pacific Ariki
IMO number	8518182
Port of Detention	Batangas, the Philippines
Reason of detention	<p>1 detainable deficiency</p> <p>The HF SSB (Single-side band) radio failed when vessel on passage to Manila. This was reported to the company operating office and a repair technician arranged for the next port call. During the port call, and prior to completion of the repair, there was a random visit by a Port State Control Inspector. The vessel was thus declared detained as radio failure is a technical breach of international SOLAS requirement. The vessel was released to depart the port later (as scheduled) once the SSB radio fault was rectified.</p> <p>Regrettably we determined later that had the full circumstances been reported to Flag State (as is required by the regulations) an exemption to cover the repair prior to departure would have been issued, which would have obviated the technical detention.</p>
Duration of detention	07 June 2010 – 10 June 2010 0900H





# Pacific Sword

At the end of 2008 Swire Pacific Offshore (SPO) signed a shipbuilding contract to design, construct and build a new, more efficient (13% reduction in GHG emissions per year per bhp) and capable seismic survey vessel, "Pacific Finder" to replace the existing Pacific Sword. Construction began in Singapore in May 2009 and delivery was planned for the beginning of 2011.

In mid 2010 as her replacement's delivery approached, SPO made the decision to recycle the Pacific Sword which was built 30 years ago as a straight supply vessel, but converted and used for the past 20 years as a shallow water seismic survey vessel.

The initial suggestion of the broker engaged to facilitate the sale of Pacific Sword to the recycling yard was to use one of the many well known yards in South Asia.

However when SPO consulted the 2010 EU survey on "[Clean and Green Recycling Facilities](#)" around the world it detailed the generally unacceptable Health, Safety and Environmental conditions of the recycling yards in this area: one death per week, one accident per day, hazardous waste not properly disposed of, poor standards of training and low paid workers. Even though at first glance it seemed that SPO would realize slightly less for sale,

it took the decision that the vessel must be disposed of in a socially and environmentally responsible way and that to support the yards in South Asia (as they were then) was neither responsible to the workers there nor likely to promote change for the better. SPO thus opened negotiations with a clean, well-maintained and run, environmentally certified yard in Guangdong that was well reported on in the EU Survey. These were successful and the vessel left





Singapore for the PRC at the end of July.

Post the hand-over of the vessel in China, an evaluation of the two sale options was conducted and this showed that on an “apples for apples” basis, the decision to “do the right thing” resulted in SPO receiving approximately +11% more than that which SPO would otherwise have achieved.

As a footnote, many of the long-established recycling yards in South Asia have been losing significant business to the certified cleaner and greener yards elsewhere. As a direct result of

this, 75 Indian recycling yards have now sought and gained accreditation to ISO 30000:2009 “Ship recycling management systems”. The Bangladesh High Court directed the government at the end of 2010 to stop all kinds of scrapping of ships in the country until the health and safety standards were improved. (postscript: this injunction was only lifted in March 2011, and involved yards there being required by the High Court to comply with a list of best practices, in order to resume safe, environmentally responsible and sustainable business operations).





# Fleet Breakdown

Table LT1

Flag State Registry of Vessels		
	Number	Percentage
Singapore	68	90.7%
Russian Federation	2	2.7%
Australia	1	1.3%
Malaysia	3	4.1%
UAE	1	1.3%
Total	75	

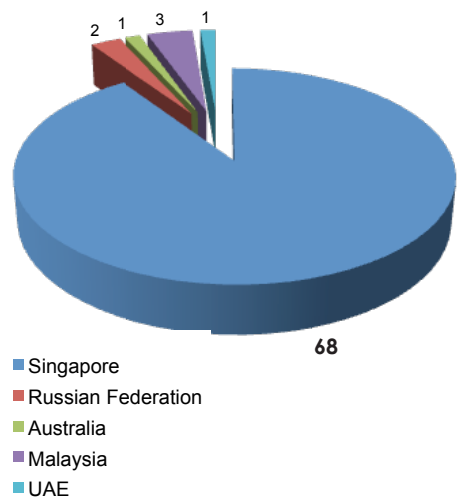






Table LT2

Explanation of Sea Transport Table

Vessel Type		Design	BHP	Number	Port State Detentions in 2010	Pollution Prevention	Fuel, Sulphur Content	Fuel Consumption (tonnes per day)	@ speed (knots)	Remarks
E Class	IBSV	UT 758-ICE	23,170	2	nil	Double hulled	MGO, 0.5-1.5%	19.9	12	in ice free conditions
B Class	AHTS	UT 720	12,240	6	nil	Double hulled	MGO, 0.5-1.5%	15.7	12	
W Class	AHTS	UT 710	10,800	8	nil	Double hulled	MGO, 0.5-1.5%	14.0	12	
V Class	AHTS	IMT 966	8,810	10	nil	Double hulled	MGO, 0.5-1.5%	12.0	12	
C Class	AHTS	UT 704	8,480	3	nil	Double hulled	MGO, 0.5-1.5%	15.0	12	
R Class	AHTS	UT 738	7,210	8	nil	Double hulled	MGO, 0.5-1.5%	12.0	12	
6,000 Class	AHTS	n/a	6-6,500	1	nil	Double hulled	MGO, 0.5-1.5%	19.5	12	on 4 engines
S Class	AHTS	UT 719	5,440	4	nil	Double hulled	MGO, 0.5-1.5%	15.5	12	
P Class	AHTS	UT 780	4,825	11	nil	Double hulled	MGO, 0.5-1.5%	12.7	12	
A Class	PSV	UT 755L3	4,700	5	nil	Double hulled	MGO, 0.5-1.5%	15.0	12	
J Class	AHTS, AHT, FPV	varies	2,800 - 4,200	11	nil	Some double hulled	MGO, 0.5-1.5%	varies, avg 7.0	12	
T Class	AHT	varies	3,600 - 4,000	4	nil	Some double hulled	MGO, 0.5-1.5%	varies, avg 8.5	12	
Survey Class	Survey	varies	varies	2	nil	Double hulled	MGO, 0.5-1.5%	22.0	12	
				<b>Total</b>	<b>75</b>					



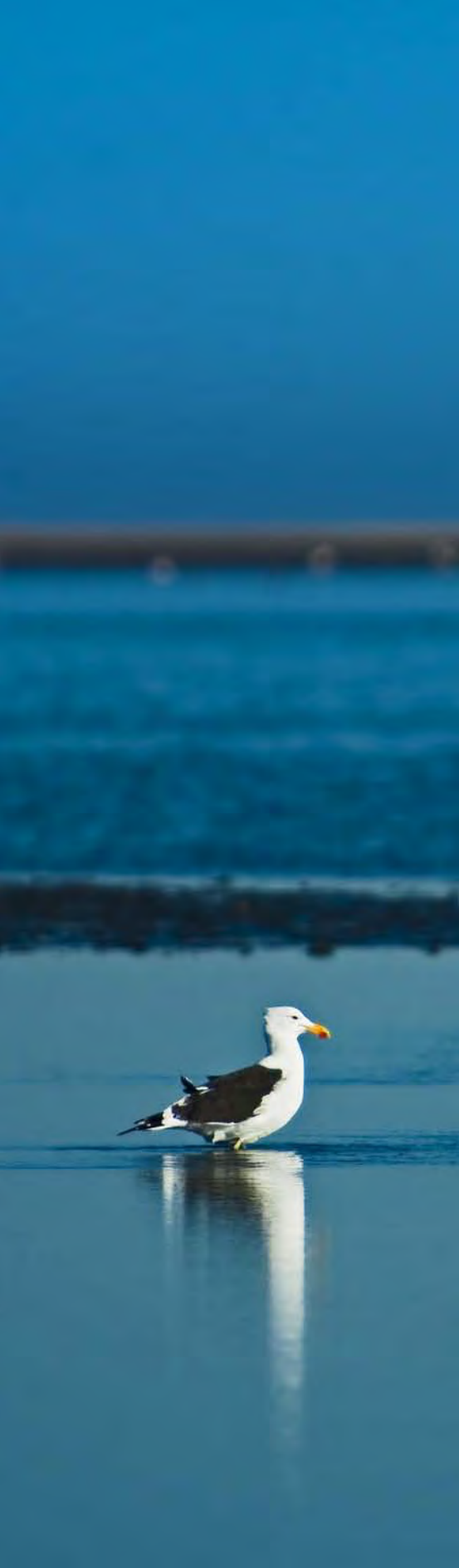
# Economic Data and Tables

Table EC1

Marine Services Division		
	2010 HK\$M	2009 HK\$M
<b>Swire Pacific Offshore group</b>		
Turnover	3,046	3,892
Operating profit	732	1,594
Attributable profit*	709	1,559
* Including post-tax profits from the jointly controlled companies shown below.		
<b>Share of post-tax profits from jointly controlled companies</b>		
Swire Pacific Offshore group	-	3
HUD group	82	78
	82	81
<b>Attributable profit</b>	<b>791</b>	<b>1,637</b>
	<b>2010</b>	<b>2009</b>
<b>Fleet size (number of vessels)</b>		
Swire Pacific Offshore group	75	70
HUD Group - Hongkong Salvage & Towage	17	17
<b>Total</b>	<b>92</b>	<b>87</b>







## SPO Fleet Size Growth

Vessels in Operation						[To be revisited depending on purchase of new vessels]		
			Additions	Disposals	Year-end	Vessels on order expected to be received in:		
Vessel class	Brake horse power	2009	2010			2011	2012	2013
Anchor Handling Tug Supply Vessels								
J-class	2,600-4,200	11	-	-	11	-	-	-
T-class	3,600	4	-	-	4	-	-	-
P-class	4,800	8	3	-	11	5	-	-
S-class	5,440	4	-	-	4	-	-	-
6,000 series	6,000-6,500	2	-	-	2	-	-	-
UT704	7,040-9,000	2	-	-	2	-	-	-
R-class	7,200	8	-	-	8	-	-	-
V-class	8,810	7	3	-	10	-	-	-
W-class	10,800	8	-	-	8	-	-	-
B-class	12,240	6	-	-	6	-	-	-
C-class*	16,310	-	-	-	-	1	3	-
D-class	18,250	-	-	-	-	-	3	1
Platform Supply Vessels								
A-class	6,310	5	-	-	5	-	-	-
Ice Breaking Supply Vessels								
E-class	23,170	2	-	-	2	-	-	-
Seismic and Hydrographic Survey Vessels								
Survey	2,600-6,400	3	-	1	2	1	-	-
Accommodation Barges								
I-class		-	-	-	-	1	1	-
Wind Farm								
Installation Vessel**		-	-	-	-	-	2	-
		70	6	1	75	8	9	1

\* Orders placed in February 2011, including one vessel delivered in February 2011.

\*\* Includes one firm + one option as at 31st December 2010





1. Movement in Attributable Profit	(HK\$M)
Attributable profit in 2009	1,559
Increase in revenue from additional capacity	56
Reduction in charter hire and utilisation rates	(873)
Reduction in non-charter hire income	(28)
Impairment of older vessels	(57)
Reduction in operating costs	35
Other items	17
Attributable profit in 2010	709

SPO - Profile of Capital Commitments (HK\$M)					
	Expenditure	Forecast year of expenditure			Commitments
	2010	2011	2012	2013	at 31st Dec 2010
Vessels	1,287	1,714	1,736	124	3,574
Other fixed assets	41	27	-	-	27
Total	1,328	1,741	1,736	124	3,601

2. SPO - Fleet Size by Age of Vessel (Please note the 2011-2013 figures reflect disposals)														
CATEGORY	YEAR													
	Dec 2000	Dec 2001	Dec 2002	Dec 2003	Dec 2004	Dec 2005	Dec 2006	Dec 2007	Dec 2008	Dec 2009	Dec 2010	Dec 2011	Dec 2012	Dec 2013
1-5	10	10	15	18	17	19	28	33	33	27	31	36	34	32
6-10	1	-	3	6	9	10	10	10	15	18	17	19	29	24
11-15	2	1	-	-	-	-	-	-	3	8	9	10	10	15
16-20	27	20	6	4	2	2	1	1	-	-	2	2	2	5
21-25	4	12	26	26	24	23	14	11	3	2	1	1	-	-
26-30	-	-	-	1	2	2	9	8	14	14	14	9	4	1
31-35	-	-	-	-	-	-	-	-	1	1	1	1	3	2
Total	44	43	50	55	54	56	62	63	69	70	75	78	82	79
Average age	15.1	15.3	14.7	13.9	13.9	14.0	12.4	11.0	10.4	10.8	10.7	9.3	8.3	8.1



3. 2010 Turnover by Region

Region	2010 HK\$M	2010 %
Europe	69	2%
Africa	871	29%
Australia & New Zealand	607	20%
Far eastern Russia	294	10%
South East Asia	692	22%
Middle East	513	17%
	3,046	100%

7. Estimated Rig Deliveries for the Offshore Oil and Gas Industry

	Total	2011	2012	2013+
Jackups	49	26	18	5
Drillships	32	19	7	6
Semisubmersibles	30	18	9	3

4. SPO – Lost Time Injury Frequency Rates (LTIFR)

YEAR	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
SPO LTIFR	1.72	1.05	1.25	1.62	0.97	0.47	0.30	0.57	1.35	0.72	0.68
SPO LTIFR(excl. Australia and New Zealand)	1.84	0.99	0.71	1.56	0.98	0.23	0.34	0.29	0.53	0.28	0.60
ISOA LTIFR (2010 data not available)	2.10	1.80	1.40	1.20	1.00	0.70	0.70	1.47	1.16	0.51	NA

The injury rate data for prior years has been revised to conform to that used for the Swire Pacific Group's Sustainable Development reporting.

5. Average SPO Fleet Utilisation Rates (2000 – 2010)

YEAR	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Average utilisation rate %	88%	90%	90%	86%	88%	91%	94%	92%	91%	89%	81%

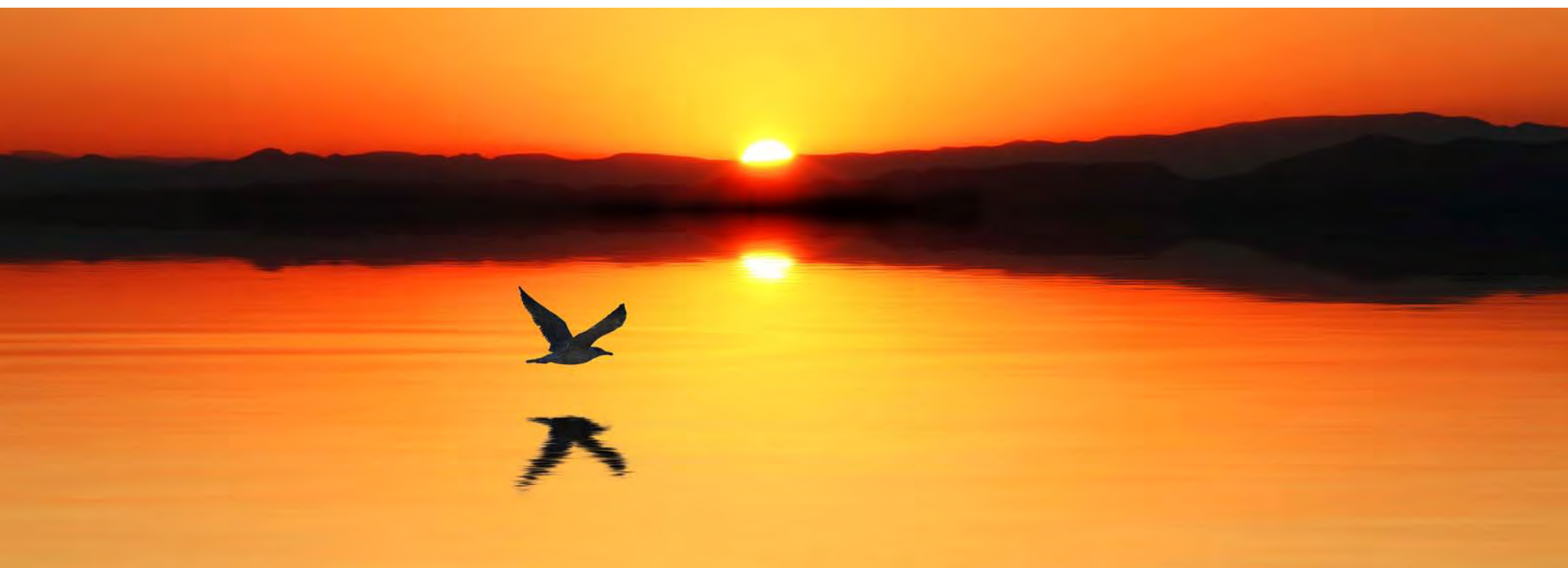




**Table EC 6**

**SPO Regional Outports' Geographical Operational Areas**

<p><b>1 Australia</b> (office in Perth, W.A.) Includes all operations conducted off Australia, Papua New Guinea, New Zealand</p> <p><b>1.1 New Plymouth</b> office; Manages operations conducted off New Zealand</p> <p>Sub-office of Australia regional office</p>	<p><b>2.1 Baku</b> office; manages operations conducted in the Caspian Sea Sub-office of Dubai regional office</p> <p><b>2.2 Doha</b> office; manages operations conducted off Qatar Sub-office of Dubai regional office</p> <p><b>2.3 Mumbai</b> office; manages operations conducted off India Sub office of Dubai regional office</p>	<p><b>3.3 Luanda</b> office; manages operations conducted off Angola Sub-office of West Africa regional office</p> <p><b>3.4 Malabo</b> office; manages operations conducted off Equatorial Guinea Sub-office of West Africa regional office</p>	<p><b>5</b> 50% of <b>SCF Swire Offshore</b>; manages Ice Breaking Support Vessel operations in the Russian Far East</p>
<p><b>2 Dubai</b> (office in Dubai, U.A.E.) Includes all operations within the area bounded by the Straits of Gibraltar to the west, the entire littoral of the Mediterranean Sea, the Black Sea, the Red Sea, the Gulf of Aden littoral, the Caspian Sea to the north, the Persian Gulf, the Indian Ocean islands and northern littoral as far as the Bangladesh/Myanmar border to the east and western littoral as far south as the Somalia/Kenya border.</p>	<p><b>3 West Africa</b> (office in Douala, Cameroon) Includes all operations off the coast of Africa from the Somalia Kenya border round to the Straits of Gibraltar including off Madagascar, all operations on the eastern littoral of the North and South Atlantic, and in the North Sea.</p> <p><b>3.1 Aberdeen</b> office; manages operations conducted in North Sea Sub-office of West Africa regional office</p> <p><b>3.2 Lagos</b> office; manages operations conducted off Nigeria Sub-office of West Africa regional office</p>	<p><b>4 Singapore</b> Outport and Head Office (offices in Singapore) Includes all operations conducted in the rest of the world, not included above</p> <p><b>4.1 Kuala Belait</b> office; manages operations conducted off Brunei Darussalam Sub-office of Singapore regional office</p> <p><b>4.2 Kuala Lumpur</b> office; manages operations conducted off Malaysia Sub-office of Singapore regional office</p> <p><b>4.3 Jakarta</b> office; manages operations conducted off Indonesia SPO also has interests in the following business units;</p>	<p><b>6 SPO Seismic Services Division</b>; manages SPO's seismic fleet from within the main office in Singapore</p> <p><b>7</b> 100% of <b>Swire Ocean Salvage</b>; provides professional salvage services worldwide from within the main office in Singapore</p> <p><b>8</b> 80% of <b>Lamor Swire Environmental Services</b>; provides professional oil spill response services worldwide from within the SPO office in Dubai</p> <p><b>9</b> 100% of <b>Swire Blue Ocean</b>; manages SPO's 1 ordered and under construction Windfarm Installation Vessel ("WIV") plus 1 further expected WIV in 2011, and their contracts offshore NW Europe from its office in Copenhagen</p>





# Environment Data and Tables

Table EN3 & EN4

Energy Source and Indirect Energy Usage							
Fleet Size at 31 Dec	75	75	75	75	75	75	
Energy Source	2010	2010	2010	2010	2010	2010	
	litres	relevant boat days	litres of consumption per relevant boat day	change y-o-y	total GJ energy consumption	total GJ energy consumption per relevant boat day	
ISO 14064 Off hire MGO Scope 1	15,763,438	5,076.95	3,104.90	-8.94%	706,202.01	139.10	
ISO 14064 Off hire LO Scope 1	206,896	5,076.95	40.75	-1.52%	10,701.10	2.11	
Office Vehicular Diesel	28,703			60.37%	1,243.70		
Office Vehicular Petrol	45,682			-4.85%	1,835.96		
Total Scope 1					719,982.76 GJ		
Electricity purchased by onshore offices worldwide	1,058,564			-6.95%	3,810.83		
Onshore Staff	243			11.98%			
Electricity purchased / onshore staff member	4,356.23			-16.99%			
Total Scope 2					3,810.83 GJ		
ISO 14064 Scope 3	On hire MGO	148,143,758	21,031.05	7,044.05	5.20%	6,636,840.37	315.57
ISO 14064 Scope 3	On hire LO	1,105,768	21,031.05	52.58	-6.58%	57,192.56	2.72
Total Scope 3					6,694,032.93 GJ		





Table EN15

Amazonian Species on the IUCN Red List		
Birds in the Amistad Location		
	Latin Name	Common Name      Threat State
1	<i>Dryocopus galeatus</i>	Helmeted Woodpecker      Vulnerable
2	<i>Culicivora caudacuta</i>	Sharp-tailed Grass-tyrant      Vulnerable
3	<i>Platyrinchus leucoryphus</i>	Russet-winged Spadebill      Vulnerable
4	<i>Alectrurus tricolor</i>	Cock-tailed Tyrant      Vulnerable
5	<i>Alectrurus risora</i>	Strange-tailed Tyrant      Vulnerable
6	<i>Procnias nudicollis</i>	Bare-throated Bellbird      Vulnerable
7	<i>Anthus nattereri</i>	Ochre-breasted Pipit      Vulnerable
8	<i>Sporophila palustris</i>	Marsh Seedeater      Endangered
9	<i>Sporophila cinnamomea</i>	Chestnut Seedeater      Vulnerable
10	<i>Xanthopsar flavus</i>	Saffron-cowled Blackbird      Vulnerable
Birds in the Bahia Negra Location		
1	<i>Anodorhynchus hyacinthinus</i>	Hyacinth Macaw      Endangered
Mammals in the Amistad Location		
1	<i>Leopardus tigrinus</i>	Oncilla      Vulnerable
2	<i>Tapirus terrestris</i>	Tapir      Vulnerable
Mammals in the Bahia Negra Location		
1	<i>Priodontes maximus</i>	Giant Armadillo      Vulnerable
2	<i>Pteronura brasiliensis</i>	Giant Otter      Endangered
3	<i>Leopardus tigrinus</i>	Oncilla      Vulnerable
4	<i>Tapirus terrestris</i>	Tapir      Vulnerable
5	<i>Blastocerus dichotomus</i>	Marsh Deer      Vulnerable

Reptiles and Amphibians in the Amistad Location			
There are no reptiles and Amphibians "at risk" in the Amistad Location			
Fish in the Amistad and Bahia Negra Locations			
There are no fish "at risk" in the Amistad and Bahia Negra Locations			
Mammals in the Sakhalin Area			
1	<i>Esrichtius robustus</i>	Western Grey Whale	Critically Endangered
Reptiles and Chondrichthyes in the Indian Ocean			
1	<i>Eretmochelys imbricata</i>	Hawksbill Turtle	Critically Endangered
2	<i>Sphyrna zygaena</i>	Smooth Hammerhead Shark	Vulnerable





Table EN16

Greenhouse Gas Emissions							
		2008	2008	2009	2009	2010	2010
conversion factors		Quantity	GHG emissions as tCO <sub>2</sub> e	Quantity	GHG emissions as tCO <sub>2</sub> e	Quantity	GHG emissions as tCO <sub>2</sub> e
Scope 1							
Off hire MGO	0.00302120	8,450,821.00	25,531.62	9,755,476.00	29,473.24	15,763,437.63	47,624.50
Off hire LO	0.00286355	132,900.00	312.06	118,399.00	278.01	206,896.44	485.82
Office Vehicular Petrol	0.00232200	43,083	100.04	48,009	111.48	45,682	106.07
Office Vehicular Diesel	0.00267200	26,235	70.10	17,898	47.82	28,703	76.69
HCFC	1700	754.45	1,282.57	2888.00	4,909.60	4317.36	7,339.51
HFC	1950	269.00	524.55	444.75	867.26	423.50	825.83
Total Scope 1 footprint			27,820.94	35,687.42		56,458.42	
Scope 2							
Electricity		1,090,487	691.395	1,137,587	721.757	1,058,564	658.145
Total Scope 2 footprint			691.395	721.757		658.145	

1. The conversion factors for MGO, LO, petrol and diesel have been obtained from the latest revision on the UK DEFRA web site <http://www.defragov.uk/environment/business/reporting/conversionfactors.htm> updated Aug 21st 2010

2. The figures for GHG emissions from LO consumption have been rebased to reflect that fact that after a survey it was determined that only 82.0% LO consumed on ships is "burned" and produces GHGs. The remainder is merely used as a lubricant at room temp and pressure, and consumption thus equates to system losses only

3. The figures for 2010 have been calculated using the most accurate rolling national grid factors that are available from the UK DEFRA web site for the countries of generation and consumption. The historic figures for 2008 and 2009 have not been recalculated."

4. The total GHG emissions figures from consumption of MGO and LO are a function of intensity of activity and amount of activity. As in the previous year the y-o-y increase in the total GHG figure for Scope 1 activity of 61.6% reported

in table EN16, masks the fact that there was a 77.5% increase in Scope 1 relevant boat days, thus when expressed as emissions per Scope 1 relevant boat day there was actually an 8.94% reduction in emissions.

5. The significant y-o-y increase in GHG emissions from consumptions for Freons is believed to be a function of better reporting, but this is under investigation.

6. HFC/HCFC GWP figures are from IPCC AR (1994)

7. The boundaries for Scope 1, 2 and 3 emissions are as per definitions in ISO GHG 14064, and the operational boundaries shown in Section 3.1 on page 58

8. GHG conversion factors use NET calorific values (HHV converted from LHV). This is consistent with the IPCC approach for CO2 (though not with the US EPA, API and Australian Greenhouse Office approach Net calorific values are also used for fugitive CH4 emission figures





Table EN17

Greenhouse Gas Emissions							
	conversion factors	2008		2009		2010	
		Quantity	GHG emissions as tCO <sub>2</sub> e	Quantity	GHG emissions as tCO <sub>2</sub> e	Quantity	GHG emissions as tCO <sub>2</sub> e
Scope 3							
Off hire MGO	0.00302120	140,093,426	423,250.259	149,784,794	452,529.820	148,143,758	447,571.923
Off hire LO	0.00286335	1,125,096	2,641.666	1,258,958	2,955.967	1,105,768	2,596.286
Management Air Travel			2,700.000		1,381.756		1,061.35
Crew Air Travel			32,544.710		33,204.138		34,135.10
Total Scope 3 footprint			461,136.63		490,071.68		485,364.65
y-o-y increase/decrease					6.95%		-1.17%

1. The total GHG emissions figures from consumption of MGO and LO are a function of intensity of activity and amount of activity. The y-o-y increase in the total GHG figure for Scope 3 activity from FO and LO combustion of +6.95% from 2008 to 2009 and -1.17% from 2009 to 2010 will be a function of the level of activity of the fleet when on-hire, as directed by the client. As
- the operational intensity level required to support each client, contract, location and operation will be different, any comparison year-on-year will be statistically invalid.

2. The 2008 figures for GHG emissions generated from management travel was an estimate. The 2009 figure was the actual 2009 H2 figure
- extrapolated for the whole year. The 2010 figures are actual for the whole year. The 2008 figures for GHG emissions generated from crew travel was the actual 2009 H1 figure extrapolated for the whole year.. The 2009 and 2010 figures are extrapolated by the number of additional crew employed. All actual figures are derived from the calculator at [www.atmosfair.de](http://www.atmosfair.de).
3. SPO has decided to voluntarily offset the Scope 3 GHG emissions generated by all management air travel with effect from 01 Jul 2009.

Table EN19

Emissions of Ozone Depleting Substances by weight							
ODP	Source	Unit	2007	2008	2009	2010	Remark
0.049	HFC - R134a	tonne	1.718000	nil	nil	nil	No longer carried on our vessels
	HCFC - R22	tonne	nil	0.754450	2.888000	4.317360	
	HFC - R417a	tonne	nil	0.269000	0.444750	0.423500	
10.000	Halon 1301	tonne	nil	0.527000	nil	nil	nil recycled in 2009 or 2010

1. Refrigerant emission figures are based on the assumption that the total volume of HFCs supplied as refrigerant to our vessels will over the long term be equal to the volume consumed or emitted.
2. This table does not include any emissions of ODS relating to air-conditioning/refrigeration processes for onshore offices as this is always provided by landlords as a central service.





Table EN20

NO <sub>x</sub> , SO <sub>x</sub> , PM and VOC Emissions by Type and Weight						
Source (2010)	Unit	Quantity	NO <sub>x</sub>	SO <sub>x</sub>	PM	VOC
Scope 1						
Vessels' Consumption (2010)	litre	15,763,438	801,003	366,592	21,996	177,796
Vessels' Consumption (2010)	litre	206,896.44	8,621	3,945	237	1,913
Scope 3						
Vessels' Consumption (2010)	litre	148,143,758.37	7,527,777	3,445,209	206,715	1,670,917
Vessels' Consumption (2010)	litre	1,105,768.44	46,078	21,084	1,265	10,226

1. Conversion figures derived from the paper: Lloyds Register Engineering Services (1995) 'Marine Exhaust Emissions Research Programme', DNV paper: Representative emission factors for use in "Quantification of emissions from ships associated with ship movements between port in the European Community" (ENV.C.1/ETU/2001/0090) and US EPA (1995): 'Compilation of Air Pollutant Emission factors: Volume 1: Stationary Point and Area sources' AP-42 Fifth Edition, January 1995.
2. These papers give SOx emissions as 20 x Sulphur content of fuel (% by weight in kg/tonne). We are assuming MGO is 1% sulphur by weight.

3. These papers give NOx emissions for medium speed diesels as:
  - 57 kg/tonne input fuel in cruise mode
  - 51 kg/tonne input fuel in manoeuvring mode
  - 23 kg/tonne input fuel in "hotelling" modeUntil the results of the Green Zone trials are available, we assume 33% for each operating mode, giving an average NOx emission factor of 43.7 kg/tonne, or ~50g/litre.
4. For LO emissions, we assume 82% of fleet total consumption is combusted in internal combustion engines and emitted, and then has the same emission factors as MGO until better data is received from the vendors.

5. The PM emission factor of 1.2kg/tonne fuel input in all operating modes is as per Lloyds Register Engineering Services (1995) 'Marine Exhaust Emissions Research Programme'.
6. These papers give VOC emission factors for medium speed diesels as:
  - 2.4 kg/tonne input fuel in cruise mode
  - 3.6 kg/tonne input fuel in manoeuvring mode
  - 23.1 kg/tonne input fuel in "hotelling" modeUntil the results of the Green Zone trials are available, we assume 33%/33%/33% for each operating mode, giving an average VOC emission factor of 9.7 kg/tonne, or ~11.3g/litre.





# Labour Data and Tables

## LA10

### SMTC Training throughput (non-statutory or discretionary courses)

COURSE	Course length (days)	2008 Participants	2009 Participants	man days	2010 Participants	man days	2011 Participants (scheduled)	man days
<b>Seafarers</b>								
Standard Safety Management	4	74	156	780	134	536	144	576
Advanced Safety Management (+ MCA 1 OSR)	4	11	99	495	117	468	160	640
NI Accredited DP Induction	5	30	60	300	68	340	54	270
NI Accredited DP Simulator	4	48	47	235	94	376	66	264
DP Maintenance	4	course not avail	25	125	36	144	57	228
Anchor Handling and Towing (AHT1)	5	course not avail	48	240	53	265	64	320
Advanced Anchor Handling and Towing (AHT2)	5	course not avail	course not avail		31	155	72	360
Deepwater Anchor Handling and Towing (AHT1)	4	course not avail	course not avail		course not avail		16	64
Advancement and Evaluation	5	course not avail	16	80	24	120	32	160
Engineering and Offshore Familiarisation	4	course not avail	14	70	25	100	30	120
Advanced Engineering/ Electrical Course	4	course not avail	course not avail		course not avail		40	160
MCA1 Oil Spill Response (within ASM Course)	1	course not avail	25	25	24	24	160	160
MCA3 Oil Spill Response	3	course not avail	19	57	9	27	not planned	
<b>Total</b>		<b>163</b>	<b>509</b>	<b>2,407</b>	<b>615</b>	<b>2,555</b>	<b>895</b>	<b>3,322</b>
%age of Officer Corps		10.0%	30.1%		34.9%	6.15% increase y-o-y	50.3%	45.53% increase y-o-y

### Management

Diversity and Inclusion	1	course not avail	16	16	not planned		not planned	
Marketing Managers Conference	1	course not avail	16	16	16	16	16	16
INSEAD	1	course not avail	36	36	72	72	72	72
Presentation Skills	1	course not avail	8	8	8	16	10	20
CYSCAN	3	course not avail	10	30	10	30	5	15
<b>Total</b>			<b>86</b>	<b>106</b>	<b>106</b>	<b>134</b>	<b>103</b>	<b>123</b>

### External / Third Party Training

DP Awareness	2	course not avail	16		30		36	
Marine Operations in the Oil & Gas Industry Pt 1	2	course not avail	course not avail		60		not required by client	
Marine Operations in the Oil & Gas Industry Pt 2	5	course not avail	course not avail		20		not required by client	
<b>Total</b>			<b>148</b>		<b>110</b>			



## Society Data and Tables



### **Business Ethics Policy**

Swire is committed to conducting all its business with integrity and fairness. Relevant Persons are expected to maintain the highest standards of professionalism in all their dealings with others. They seek

mutually beneficial relationships with contractors, suppliers and joint venture partners. They are required to promote the application of this Code in all dealings and to give preference to business partners who adhere to similar business ethics.

### **Procurement Principles**

In procurement Swire requires Relevant Persons to support the following principles:



- Each company in the group should develop policies as to the size of the purchase above which tendering should be carried out. For purchases exceeding this limit, suppliers should be selected on the basis of competitive tendering including the impartial selection of appropriately qualified suppliers.
- Whenever competitive tendering above the size thresholds is not carried out a file note explaining why such tendering was not done should be produced and kept on the supplier file.
- Re-tendering should in general take place at least every three years.
- Monitoring systems should be put in place to ensure the proper fulfilment of contractual obligations and to provide reasonable assurance that fraudulent or corrupt activities are prevented.

- Suppliers should be encouraged to make an annual statement that no personal benefit accrues to Swire personnel or supplier personnel from this business arrangement and that they have complied with all legal requirements.
- precautions should be exercised when using personal computers, and all computer software should be used in strict compliance with the laws of copyright.

### **Conflicts of Interest**

A conflict of interest arises where a person's private interests interfere with the proper discharge of his official duties. Swire is committed to conducting its business without conflicts of interest and this Code requires all Relevant Persons to avoid any situation which may lead to an actual or perceived conflict of interest.

Set out below is a non-exhaustive list of circumstances that would potentially give rise to a conflict of interest:

- Working for a non-Swire company or non-affiliated organization at the same time as having employment in a Swire Group company.
- Becoming a member of a Board of any non-affiliated commercial, financial or industrial organisation
- Negotiation or transactions by a Relevant or Connected Person for business with any Swire company (other than with respect to his employment contract or retail purchase of Swire products at market or employee group rates).



## Bribery

Swire is committed to abiding by, or even exceeding, all relevant laws in order to prevent bribery whenever Swire undertakes business. This applies to:

- Relevant Persons not accepting bribes:  
That is they should not solicit any advantage from any person having business dealings with the Company. Nor should they accept any such advantage if such act could affect their objectivity in conducting the Company's business or induce them to act against the interest of the Company, or lead to allegations of impropriety. Further they should ensure that the appropriate managers in the Company are informed of any advantage they have accepted.
- Relevant Persons not giving bribes:  
They must not offer a bribe to any person or company for the purpose of influencing their actions.





Any advantage given in the conduct of the Company's business should be with the prior written approval of the head of the respective business unit.

Items considered bribes are advantages which include money, loans, fees, rewards, gifts, employment, offices, contracts, services or other favour for the Relevant Persons or connected persons given to persons without their principals' knowledge when they are acting as agents. There is, of course, no restriction on normal loans from banks or other financial institutions made at prevailing rates and terms, nor does bribery include traditional gifts of nominal value given during festive seasons.

Although entertainment is an acceptable form of business and social behaviour, Relevant Persons should not accept lavish or frequent entertainment from persons with whom the Company has business dealings if, by doing so, it might be perceived that they are placing themselves in a position of obligation to the offeror.

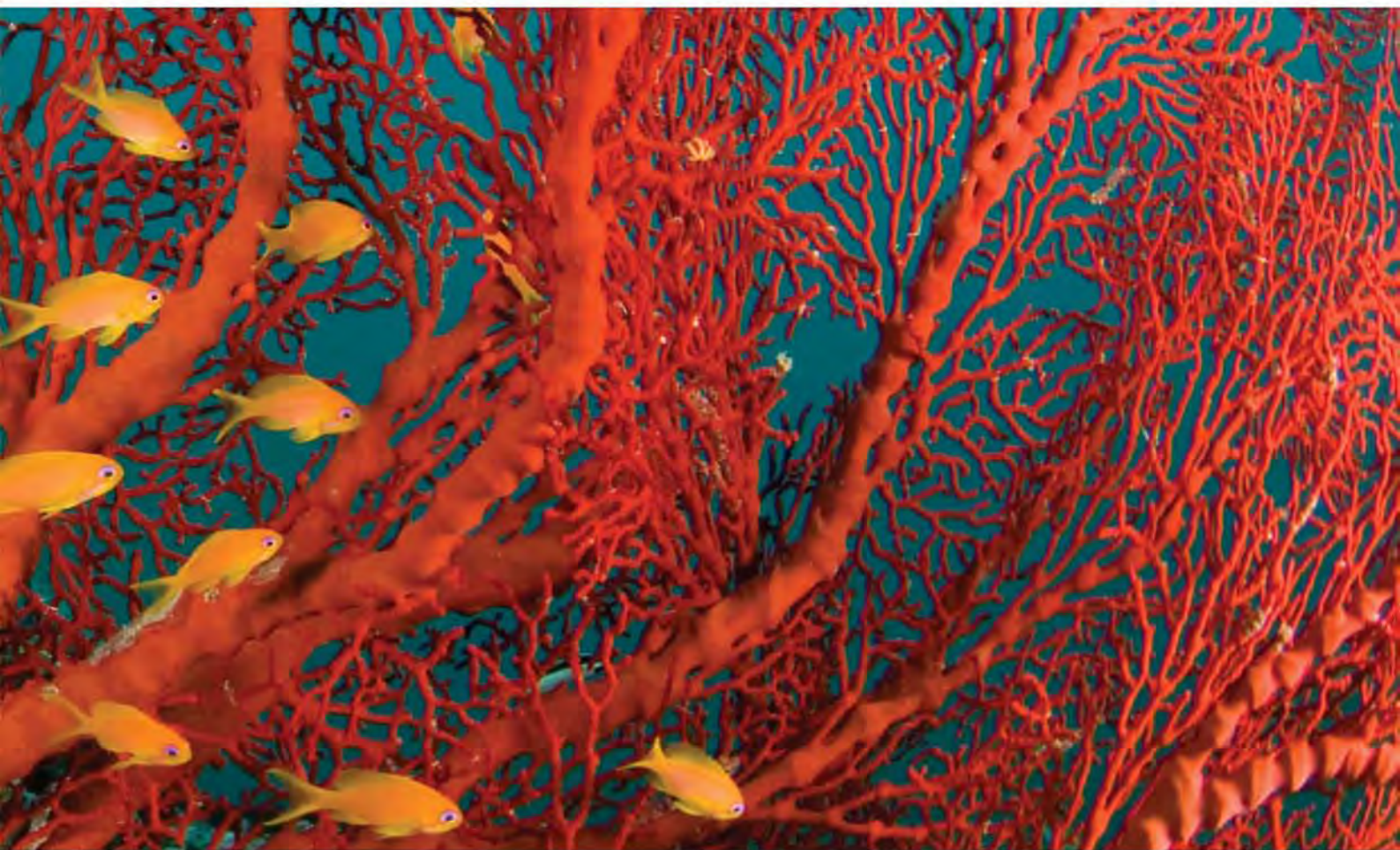
When giving entertainment, company functions are preferable to entertaining individuals. Relevant Persons should therefore exercise good judgement and practise moderation in giving and receiving business gifts and entertainment. These should not be given in cash, cash equivalent, or loans; they should not be excessive in frequency or value. The details of any individual gifts or entertainment valued at more than HK\$5,000 must be disclosed to the company secretary and appropriate director or officer of Swire; failure to report such a transaction is a breach of this code. Gifts bearing a Swire or subsidiary company logo are preferred.

[Click to view the Cancun Communique](#)



# CANCUN COMMUNIQUÉ

A CALL FROM BUSINESS FOR  
AMBITIOUS, ROBUST AND EQUITABLE  
GLOBAL ACTION ON CLIMATE CHANGE



UNIVERSITY OF  
CAMBRIDGE  
PROGRAMME FOR  
SUSTAINABILITY LEADERSHIP



THE PRINCE OF WALES'S

CORPORATE LEADERS GROUP ON CLIMATE CHANGE  
UNIVERSITY OF CAMBRIDGE PROGRAMME FOR SUSTAINABILITY LEADERSHIP



## The Cancun Communiqué on Climate Change is the definitive progressive statement

from the international business community ahead of the United Nations (UN) climate change conference in Cancun this December. It restates the business case for urgent action on climate change and demands that governments redouble efforts to secure an ambitious and equitable international framework, but also pursue an 'ambitious parallel mitigation strategy'.

It has already secured the support of hundreds of companies, from around the world. It is the successor to previous communiqués such as The Copenhagen Communiqué, which secured over 950 signatures by the time of the Copenhagen UN Climate summit last year. The Cancun Communiqué has already well exceeded the levels of support seen by the Poznan and Bali Communiqués, and is expected to gather much more support before UN negotiators meet in Cancun, on 29th November.

The Cancun Communiqué is an initiative of The Prince of Wales's Corporate Leaders' Group on Climate Change which is run by The University of Cambridge Programme for Sustainability Leadership.





THE PRINCE OF WALES'S  
CORPORATE LEADERS GROUP ON CLIMATE CHANGE  
UNIVERSITY OF CAMBRIDGE PROGRAMME FOR SUSTAINABILITY LEADERSHIP

## THE CANCUN COMMUNIQUÉ

This Communiqué is being issued by over 250 business leaders of global companies, including many of the companies that endorsed *The Copenhagen Communiqué* just over a year ago.

*The Copenhagen Communiqué* demonstrated unequivocally that a significant proportion of the international business community would like to see the adoption of an ambitious, robust and equitable global deal on climate change that responds credibly to the scale and urgency of the crisis facing the world today and stimulates economic recovery.

Although the United Nations Copenhagen Climate Conference represented an important step forward, it did not deliver the robust deal we were hoping for. In 2009, the international business community mobilised like never before in support of action to tackle climate change and invest in a low-carbon future but the Copenhagen Climate Conference left many of us feeling frustrated and unsure of our low carbon investment decisions. Business continues to believe that market based approaches are fundamental to long term success. However, the lack of a comprehensive international policy framework is a barrier to the development of a global carbon market and, credible national policies, and to the necessary scaling up of investments in low-carbon technologies.

The scientific evidence remains overwhelming and the case for bold and urgent action to tackle climate change is stronger than ever. As business leaders, we are used to making decisions on the basis of projected risk and established scientific fact, at this point in time we cannot afford to ignore the undeniable impact of climate change on global populations, natural resources, the economy, and on our businesses.

Delivery of an International Framework requires rapid progress on a number of key issues at the United Nations Climate Change Conference in Cancun (COP 16):

**Targets:** The Intergovernmental Panel on Climate Change (IPCC) recommends emission be reduced by half by 2050. To achieve this goal and meet the 2°C limit set out in the Copenhagen Accord, developed countries should show leadership and deliver the necessary aggregate emission cuts for 2020 and 2050. Actions by developing countries (in line with common but differentiated responsibilities) will need to contribute to a plateau in emissions growth in the near future and reductions over the coming decades.

**Financing:** Any decision on financing will necessitate a transparent governance structure and workable architecture for “fast-start” and long-term climate finance acceptable to all countries.



Governments will need to draw on recommendations from the UN Secretary General's Advisory Group on Finance to deliver the \$100billion per annum financing pledged to developing countries.

Massive investments are needed over the coming decades to develop a low-carbon economy. In a post-recession economy only a fraction of this is likely to come from public sources and therefore meaningful investment will require significant involvement of the private sector, but the scale of investment required will not be reached without the smart use of public finance. Governments must recognise that private financing and supporting finance structures, such as carbon markets and "climate bonds", have the potential to transform global markets and provide the low-carbon infrastructure needed in the coming decades. In this respect, building on the existing international carbon market architecture which underpins the markets in operation today is essential.

A combination of public and private investment is required to help reduce emissions in developing countries. Until now, the Clean Development Mechanism (CDM) has been a key channel for clean investment in developing countries. However, going forward, reform is necessary to enable more 'transformational' projects in developing countries to take place at the pace and scale required to avoid dangerous climate change.

**Technology Transfer:** A clear mechanism with authority, funding and established objectives should be created to promote technology transfer without undermining Intellectual Property Rights protection. This mechanism should facilitate the transfer of nationally relevant technology through existing streams of climate financing.

**REDD:** Rapid delivery of commitments on REDD+ (reducing emissions from deforestation, forest degradation, and forest management) that includes forest conservation, sustainable forest management and enhancement of forest carbon stocks is essential. Further progress is needed on recognition of forest-based carbon credits in regional and domestic carbon compliance schemes in order to create strong demand for investment in forest carbon, underpinned by commonly agreed and credible protocols, and to develop and then scale up pilot projects that benefit local communities and protect biodiversity.

The REDD+ Partnership reflects goodwill to accelerate the negotiations and actions on REDD+ projects and funding. In the medium to long term, private sector investment will need to contribute a large share of the total required finance. Therefore early involvement of the private sector along with civil society is critical in shaping this mechanism.

**Monitoring, Reporting and Verification:** A strong, publicly transparent and accountable framework for monitoring reporting and verification is essential. Such transparency and accountability will help to build business confidence in the stability and credibility of national policy frameworks, which is critical for the private sector to make its contribution towards the massive investment needed to transition to a low-carbon global economy.



### **THE CALL FOR ACTION**

We recognise that securing a comprehensive international legally binding climate framework will be more complex, but the urgency of reaching a global solution is growing daily. Failure to deliver progress on these crucial issues at Cancun will significantly undermine investment and concrete action on mitigation and adaptation.

It is critical, that governments re-double their efforts towards securing a comprehensive international framework at the United Nations Climate Change Conferences in Cancun (COP 16) and South Africa (COP17) alongside a parallel mitigation strategy focusing on GHG reduction opportunities in *certain sectors* and/or bilateral and multilateral agreements in five *key areas of action*:

- 1. Energy efficiency across all sectors:** Robust financial and policy support for energy efficiency measures (including standards and targets) in buildings (both non-residential and residential),, transport and industry.
- 2. Low carbon energy systems:** Strong policy support and fast-track funding for low carbon energy sources, infrastructural development, and research, development and deployment in buildings (both non-residential and residential), industry, and transport (including a comprehensive global approach on emissions from aviation and shipping).
- 3. Emissions capture and storage:** Greater financial and policy support for the scale up of Carbon Capture and Storage (CCS) technologies.
- 4. Emissions from other greenhouse gases:** Increased effort on tackling other GHG emissions such as methane, nitrous oxide, and F-gases and the impact of black carbon.
- 5. Urban planning, land-use management and land use change:** Addressing the carbon emissions impact of land-use both in terms of urban and rural environments.

Action in the above areas or by sector at the local, state, national, and regional levels will help build the necessary foundation for an international agreement but should by no means undermine progress towards an international framework. By putting in place the necessary mechanisms that will enable governments to reach or set new GHG emission reduction targets we can make progress along the way.

The sooner individual jurisdictions begin to develop robust policy that will drive early action on GHG emission reductions, and develop the implementation plans and investment strategies required to deliver them, the sooner international agreement will be reached. Partnership between all stakeholders; governments, businesses, investors, civil society and consumers is vital to help deliver real and rapid progress on the ground, and to demonstrate what is possible.

We are committed to working in partnership with governments to achieve our joint climate objectives. For us the risk of inaction on climate change is far greater than the cost of investing today. To seize the opportunities for us all, courageous leadership is required from governments across the globe starting in Cancun and continuing to South Africa.



**The University of Cambridge Programme for Sustainability Leadership (CPSL)**

works with business, government and civil society to build leaders' capacity to meet the needs of society and address critical global challenges. Our seminars and leadership groups and our partnerships with those who make or influence decisions are designed to transform public and private sector policies and practices and build greater understanding of our interdependence with one another and the natural world. Our network of alumni brings together the most influential leaders from across the world who share an interest in and a commitment to creating a sustainable future.

CPSL is an institution within Cambridge University's School of Technology. We work in close collaboration with individual academics and many other departments of the University. HRH The Prince of Wales is our patron and we are also a member of The Prince's Charities, a group of not-for-profit organisations of which His Royal Highness is President.



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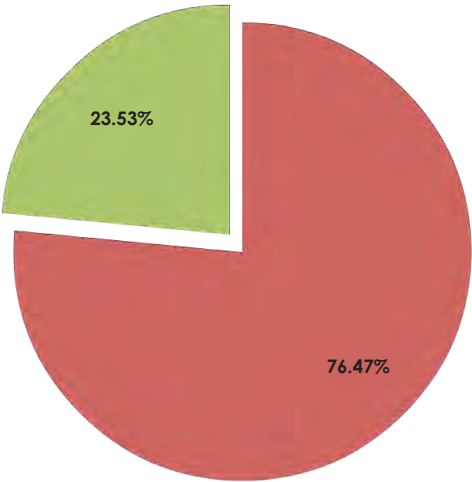
[www.cpsl.cam.ac.uk](http://www.cpsl.cam.ac.uk)



# Product Responsibility Data and Tables

PR 5.1

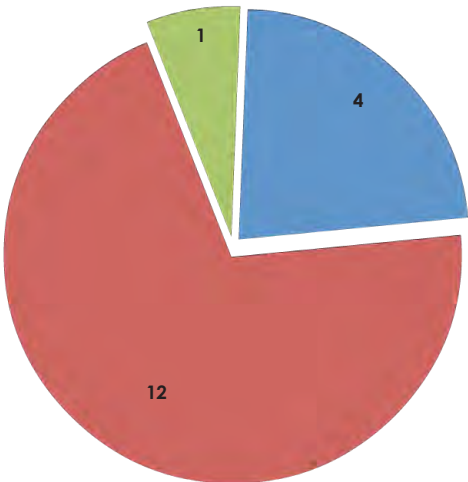
Customer Feedback on the Company	
How satisfied are you with the Company Overall?	
Delighted	0
Fully Satisfied	13
Satisfied	4
Dissatisfied	0
Extremely Satisfied	0



- Delighted
- Fully Satisfied
- Satisfied
- Dissatisfied

PR 5.2

Customer Feedback on the Company	
How satisfied are you with the Services Overall?	
Delighted	4
Fully Satisfied	12
Satisfied	1
Dissatisfied	0
Extremely Satisfied	0



- Excellent
- Very Good
- Average
- Poor





Table PR5.3

Commendation from Client		
Month	Vessel	Details
Feb 2010	Pacific Blade	Captain and crew were praised by client on their performance.
	Geo Natuna	Everyone on board was thanked for the team effort, commitment and excellent support that have been provided during the shoot offshore, Thailand.
	Pacific Protector	MPA expressed appreciation to Master and crew members for rescuing 2 crew members from "Ocean Lark" on 6 Jan 2010 and continued to be involved in the search and rescue operation.
	Pacific Valhalla and Pacific Wyvern	Everyone on board was thanked for the efforts and excellent results that have been delivered to Client's operations.
March 2010	Pacific Marlin	An email of commendation received from Professor Charles Sheppard of Warwick University and scientific advisor to the British Foreign and Commonwealth Office on BIOT. He was thoroughly appreciative of all the help and support, he and his team of scientists received from the Pacific Marlin officers and crew.
	Pacific Parakeet	Note of thanks to everyone on board for the help and professionalism rendered during the recent diving campaign. Work was conducted safely without incident.
	Pacific Valkyrie, Pacific Wrangler and Pacific Wrestler	Everyone on board was praised for their excellent team effort, achieving 12 months LTI free.
	M/V Swift Rescue	Everyone on board was praised and thanked for their dedication to the job and an excellent partnership with James Fisher Defence for successfully recovering an underwater submarine mating target after nearly 300 days.
	Pacific Titan	Safety awards to nominated crew members (both marine and seismic) for safety related performance i.e. proactivity and PRISM cards.
	Pacific Warrior	Safety Award was for achieving 4.0 mil man hours without an LTI.





Commendation from Client		
Month	Vessel	Details
April 2010	Pacific Marlin	Client express thanks to Master and crew of MAR for the superb way in which they facilitated the week long operation, making it a successful operation, worthwhile and memorable Everyone on board was praised for the excellent support and professionalism rendered to BIOT in Indian Oceans.
	Pacific Marlin	4th Officer, Keith Nepucpan has showed good support to the team from Warwick University, whilst their team conducted research from the vessel.
	Pacific Prospector	5 years of constant operations in the Al Shaheen Field in without any LTI.
	Pacific Ranger and Pacific Rover	Significant contribution towards Total achieving 11 years without an LTI.
	Pacific Valkyrie, Pacific Wrangler and Pacific Wrestler	BHP Billiton management acknowledged the continued good safety performance of all three ships. - A period of 13 months has passed without any Lost Time Injury.
	Pacific Worker	Client expressed their appreciation for the team effort and support that has been provided by the vessel over the past few weeks.
May 2010	Pacific Banner	Verbal commendation from the GSF 140 IOM and Rig Shift Master on the third rig shift done by this vessel for the GSF 140 with no incidents or accidents.
	Pacific Bear	Officers & Crew each received a recognition and small monetary award from the Offshore Installation Manager of Dubai Petroleum Establishment for the safe transfer of personnel between Falah C to Falah B platforms in marginal sea conditions.
	Pacific Wyvern	Verbal message passed from the charterer to the Malabo port captain that the crew had been performing well on deck while handling large items of deck cargo.





Commendation from Client		
Month	Vessel	Details
June 2010	Pacific Bear	Captain Eden and Crew of Pacific Bear were commended for their outstanding contribution to DPE Marine activities.
	Pacific Blade	Client commended vessel for her safe and efficient Operations, maintaining consistently good standard of performance, led by well-experienced Masters
	Pacific Pickle	Client expressed thanks to vessel (Master, officers and crew) for good collaboration and good crew performance on cargo loading.
	Pacific Sword	Commendation to all on board for the excellent team effort and professionalism provided during the seismic campaign in India.
	Pacific Valhalla	Vessel did a good job, supporting Atwood Beacon.
	Pacific Patriot	Letter of commendation for the vessel (Master, officers and crew) for June 2010 1. Saibos 230 - Anchor handling & Towing ops - June 12 to 14 2. Saipem 355 - Anchor handling ops in PNR bay - June 15 3. CPLB Crawler - Anchor handling ops and positioning - June 26 / 27 4. Tamboril Platform - Fire fighting - June 30





Commendation from Client		
Month	Vessel	Details
July 2010	Pacific Assegai	The Safety award was presented to the Captain who won the monthly 'Best stop card' which was a mobile telephone from the Client
	Pacific Bear	Pacific Bear continued to provide sterling support to Client's offshore operations. In particular, the NRR Rig Move highlighted the great team effort, commitment to safety awareness as well as a high standard of professionalism being displayed.
	Pacific Patriot	Officers and Crew were commended for the excellent support that was provided on 30 June 2010, whilst rescuing survivors from the installation fire that had enveloped Tamboril Platform, offshore Angola.
	Pacific Titan	Everyone on board was praised and thanked for the professional support that has been provided during the seismic operations, offshore Irian Jaya, Indonesia.
	M/V Swift Rescue	Commendation from the Republic of Singapore Navy for vessel's efforts during the Navy's Open House.
	Pacific Valhalla	GP Richard Dobgima to receive a Zizi Medal. He is awarded for exceptional performance during the recent near miss incident.





Commendation from Client

Month	Vessel	Details
August 2010	Pacific Blade	Positive feedback from the Client: Pacific Blade is a reliable vessel with competent, confident and experienced Officers and Crew.
	Pacific Buccaneer and Pacific Warlock	Client expressed appreciation to vessels' crew and management team for their dedicated efforts in executing their offshore Installation program. As a token of appreciation, each crew member was awarded a backpack with project logos
	Pacific Ranger	Everyone on board was praised for the excellent support provided to Total's intervention campaign. The project was conducted in a safe and responsible manner and living standards were maintained to a high standard.
	Pacific Valour	Client convey their compliments to Captain and crew onboard the vessel for a well performed job on Deepsea Stavanger.
	Pacific Vigilance	Hess's training team impressed with the efficient and professional operation executed by vessel for the field emergency training exercise
	Pacific Vixen	Crew on board is complimented for the competence, efficiency and professionalism, as displayed during the Rig Move.
	Pacific Wizard	Vessel was awarded for 3 years of safe operations during the charter.
	M/V Swift Rescue	The Pac Reach 2010 exercise was a success. Everyone on board was praised for their professionalism and hard work.





Commendation from Client		
Month	Vessel	Details
September 2010	Pacific Bear	Client appreciated the terrific job done by vessel in a safe and professional manner with 4 rig moves, and 3 tanker moves. As a token of appreciation, each crew member has been awarded a Duty Free Voucher.
	Pacific Blade	Favourable feedback received from Client on the high standard of performance rendered by vessel on the rig move operation.
	Pacific Endurance	Everyone on board was complemented by Molikpaq team for resolving the problem of MPQ back load cargo handling on the deck, given the limited deck space.
	Pacific Prospector	Client was pleased with the performance of the vessel at the end of a more than 5 years charter. Vessel has an impressive safety record, well maintained, and manned with professional skilled crew
	Pacific Rigger	12 month term charter with client without any downtime and LTI free
	Pacific Valkyrie	Completion of Salvage & Towage Services to MV Gagasan Perak in a safe and professional manner
October 2010	Pacific Marlin	Client expressed appreciation to vessel for her support and effective operations in the remote islands
November 2010	Pacific Bear	Vessel received commendation for safe acts during anchor handling and rig move
	Pacific Rover	Crew are awarded by charterer for reporting safety anomalies (positive or negative) in the work place
	Pacific Wrestler	Everyone on board was commended for the safe work carried out during the rig move - A First Class Effort
December 2010	Pacific Bear	Vessel received commendation for safe acts during rig move and cargo handling operations
	Pacific Dart	Master of P. Dart was given a note of thanks for prompt notification about the CALM buoy failure to rotate and the efforts undertaken by him and the Master of F Spirit to avoid damage and a loss of production.





# Abbreviations

ABD	Available Boat Day/s – a measure of the time a vessel is available for hire
AHT	Anchor Handling Tug vessel/s
AHTS	Anchor Handling Tug and Supply vessel/s
AMSA	Australian Maritime Safety Authority
ASA	Australian Shipping Association
ASSM	Anscor Swire Ship Management manning agency
BHP	Brake Horse Power
CAR	Audit-driven Corrective Action Report
CBA	Collective Bargaining Agreement
CCBA	Climate, Community and Biodiversity Alliance
CFC	Chlorofluorocarbon/s
CoC	Certificate of Competency
CSR	Corporate Social Responsibility
DCC	Australian government: Department of Climate Change
DECC	UK government: Department of Energy and Climate Change
DEFRA	UK government: Department for Environment, Food and Rural Affairs
DP	Dynamic Positioning
DPA	ISM Code Designated Person Ashore
EBA	Enterprise Bargaining Agreement (CBA term in Australia)
ECA	Emission Control Area
EPA	US government Environmental Protection Agency
ETS	Emission Trading Scheme
FEMS	"Green Zone" Fuel Efficiency Management System
FPSO	Floating Production, Storage and Offtake vessel/s
FPV	Fishery Protection Vessel

GEDO	Australian government DCC Greenhouse and Energy Data Officer
GHG	Greenhouse Gas/es
GJ	(unit) Giga-Joule, 1 billion joules of energy
GRI	Global Reporting Initiative
HCFC	Hydrochlorofluorocarbon/s
HCV	High Conservation Value
HFO	Heavy Fuel Oil – a residual fuel
HHV	Higher Heating Value, also known as gross calorific value, of a fuel is defined as the amount of heat released by combusting a specified quantity and returning the temperature of the combustion products to 150°C. LHV assumes all the water component is in liquid state at the end of combustion
HOF	SPO Head Office in Singapore
HSE	Health, Safety and the Environment
IBA	Important Bird Area
IBSV	Ice Breaking Supply Vessel/s
IFO	Intermediate Fuel Oil - residual fuel
ILO	(UN) International Labour Organisation
IMO	(UN) International Maritime Organisation
IMR	Intervention Maintenance and Repair vessel/s
IP	Indigenous People/Person/s
ISOA	International Support Vessel Owners' Association
ISM	IMO International Management Code for the Safe Operation of Ships and for Pollution Prevention, as chapter XI of SOLAS
IUCN	International Union for Conservation of Nature and Natural Resources
KBA	Key Biodiversity Area
KPI	Key Performance Indicator







kW hr	(unit) Kilo Watt hour, is a unit of energy equal to 1,000 Watt hours or 3.6 mega Joules
LHV	Lower Heating Value, also known as net calorific value, of a fuel is defined as the amount of heat released by combusting a specified quantity and returning the temperature of the combustion products to 150°C. LHV assumes all the water component is in vapour state at the end of combustion
LO	Lubricating Oil
LTI	Lost Time Injury
LTIFR	Lost Time Injury Frequency Rate
MARPOL	IMO International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 and later
MCA	(UK) Maritime and Coastguard Agency
MDO	Marine Diesel Oil – a distillate fuel
MGO	Marine Gas Oil – a distillate fuel
MLC	ILO Maritime Labour Convention, 2006
NGER	Australian National Greenhouse Gas and Energy Reporting Act
NI	Nautical Institute
NO <sub>x</sub>	Oxides of Nitrogen
OCIMF	Oil Companies International Marine Forum
ODS	Ozone Depleting Substance/s
OFW	Overseas Filipino Workers
ORBIS	SPO's electronic Business Information System
PES	Payment/s for Environmental Services
PFCP	Paraguay Forest Conservation Project
PM	Particulate Matter
PO	Purchase Order/s
POEA	Philippines Overseas Employment Agency
PSV	Platform Supply Vessel/s
QHSE	Quality, Health, Safety and Environment

REDD/+	Reduced Emissions from avoided Deforestation and Forest Degradation in developing countries
RFQ	Request For a Quote
SBO	Swire Blue Ocean
SD	Sustainable Development
SECA	Sulphur Emission Control Area/s
SEEMP	Ship Energy Efficiency Management Plan
SIN	Singapore
SMS	Safety Management System
SMTC	Swire Marine Training Centre, located in Loyang, Singapore
SOLAS	IMO International Convention for the Safety of Life at Sea, 1974, as amended in 1980 and later
SO <sub>x</sub>	Oxides of Sulphur
SPL	Swire Pacific Limited. Parent company of SPO
SPO	Swire Pacific Offshore group of companies
STCW	IMO International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended in 1995 and later
ULS	Ultra Low Sulphur content
UNFCCC	United Nations Framework Convention on Climate Change
VCSA	Verified Carbon Standards Association
VCU	Verified Carbon offset Unit
VER	Voluntary GHG Emission Reduction credit
VOC	Volatile Organic Compound/s
WIV	Windfarm Installation Vessel
WLT	World Land Trust, UK
y-o-y	Year on Year change



# GRI Content Index

## G3 Content Index - GRI Application Level C

### Standard Disclosures Part 1: Profile Disclosures

Application Level C Assured by Copeland & Partners, Limited

Report fully on the below selection of profile disclosures or provide a reason for omission

#### 1. Strategy and Analysis

Profile Disclosure	Description	Reported	Cross-reference/Direct answer	Reason for Omission	Explanation
1.1	Statement from the most senior decision-maker of the organization.	Fully	Summary - Managing Director's Message		

#### 2. Organizational Profile

Profile Disclosure	Description	Reported	Cross-reference/Direct answer	Reason for Omission	Explanation
2.1	Name of the organization.	Fully	Summary - Introduction		
2.2	Primary brands, products, and/or services.	Fully	Summary - Introduction		
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	Fully	Data Section - Economic Data and Tables		
2.4	Location of organization's headquarters.	Fully	Summary - Introduction		
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	Fully	Detail Section - 2010 Overview; Global Overview		
2.6	Nature of ownership and legal form.	Fully	Data Section - Economic Data and Tables		
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	Fully	Detail Section - 2010 Overview; Global Overview		
2.8	Scale of the reporting organization.	Fully	Detail Section - 2010 Overview		
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Fully	Data Section - Reporting Philosophy, Methodology and Scope		
2.10	Awards received in the reporting period.	Fully	Detail - 2010 Overview		

#### 3. Report Parameters

Profile Disclosure	Description	Reported	Cross-reference/Direct answer	Reason for Omission	Explanation
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	Fully	Summary - Introduction		
3.2	Date of most recent previous report (if any).	Fully	Summary - Introduction		
3.3	Reporting cycle (annual, biennial, etc.)	Fully	Summary - Introduction		
3.4	Contact point for questions regarding the report or its contents.	Fully	Summary - Opening Page		
3.5	Process for defining report content.	Fully	Data Section - Reporting Philosophy, Methodology and Scope		
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Fully	Data Section - Reporting Philosophy, Methodology and Scope		
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	Fully	Data Section - Reporting Philosophy, Methodology and Scope		
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Fully	Data Section - Reporting Philosophy, Methodology and Scope		
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).	Fully	Data Section - Reporting Philosophy, Methodology and Scope		
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Fully	Data Section - Reporting Philosophy, Methodology and Scope		
3.12	Table identifying the location of the Standard Disclosures in the report.	Fully	This table		
3.13	Policy and current practice with regard to seeking external assurance for the report.	Fully	Summary - Opening Page		



3.16	Policies and/or systems for managing upstream and downstream impacts. Commentary for the L&T Sector Supplement on Environmental Requirements of Sub-contractors. Provide descriptions of environmental and social requirements imposed in the management of any sub-contracting relationships.	Fully	(new)
3.16	Policies and/or systems for managing upstream and downstream impacts. Commentary for the L&T Sector Supplement on fleet disposal.	Fully	Detail Section – Environment – Emissions and Waste

4. Governance, Commitments, and Engagement

Profile Disclosure	Description	Reported	Cross-reference/Direct answer	Reason for Omission	Explanation
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	Fully	Detail Section - Governance		
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Fully	Detail Section - Governance		
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	Fully	Detail Section - Governance		
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Fully	Detail Section - Governance		
4.14	List of stakeholder groups engaged by the organization.	Fully	Data Section - Reporting Philosophy, Methodology and Scope		
4.15	Basis for identification and selection of stakeholders with whom to engage.	Fully	Data Section - Reporting Philosophy, Methodology and Scope		

Standard Disclosures Part 3: Performance Indicators

Report fully on 10 core or additional performance indicators - At least 1 from each dimension (Economic, Environmental Social)

Economic

Performance Indicator	Description	Reported	Cross-reference/Direct answer
Economic Performance			
EC1	Net sales. Commentary for the L&T Sector Supplement.	Fully Partially	EC1 is fully reported in the main body of the GRI report EC1 in the L&T Sector Supplement is only partially reported
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Fully	Detail Section - Economic - Risks and Opportunities: Climate Change; quantitative estimate not feasible to calculate.
EC3	Coverage of the organization's defined benefit plan obligations.	Not	Nil report
EC4	Significant financial assistance received from government.	Not	Nil report

Market presence

EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	Not	Nil report
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	Fully	Detail Section - Economic - Risks and Opportunities: Market Presence; Data - Economic Data and Tables.
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	Fully	Detail Section - Economic - Risks and Opportunities: Market Presence

Indirect Economic Impacts

EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Not	Nil report
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Not	Nil report



Environmental			
Performance Indicator	Description	Reported	Cross-reference/Direct answer
Materials			
EN1	Materials used by weight or volume.	Not	Nil report
EN2	Percentage of materials used that are recycled input materials.	Not	Nil report
Energy			
EN3	Direct energy use segmented by primary source. Commentary for the L&T Sector Supplement.	Fully	Data Section – Fleet Breakdown – Environmental Data and Tables (Table LT3)
EN4	Indirect energy consumption by primary source.	Fully	Detail Section - Environmental - Energy; Data Section - Environmental Data and Tables
EN5	Energy saved due to conservation and efficiency improvements.	Not	Nil report
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Fully	Detail Section - Environment - Energy
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	Not	Nil report
Water			
EN8	Greenhouse gas emissions. Commentary for the L&T Sector Supplement.	Fully	Data Section – Fleet Breakdown – Environmental Data and Tables (Table LT4)
EN9	Water sources significantly affected by withdrawal of water.	Not	Nil report
EN10	Percentage and total volume of water recycled and reused.	Not	Nil report
Biodiversity			
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Fully	Detail Section - Environmental - Biodiversity
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Fully	Detail Section - Environmental - Biodiversity
EN13	Habitats protected or restored.	Fully	Detail Section - Environmental - Biodiversity
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	Fully	Detail Section - Environmental - Biodiversity
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	Fully	Detail Section - Environmental - Biodiversity; Data Section - Environmental Data and Tables
Emissions, Effluents and Waste			
EN16	Incidents of and fines for non-compliance with all applicable international declarations/ conventions/treaties and national, sub-national, regional and local regulations associated with environmental issues. Commentary for the L&T Sector Supplement on Labelling, Storage, Handling and Transportation of Hazardous Goods.	Fully	Nil report
EN17	Other relevant indirect greenhouse gas emissions by weight.	Fully	Detail Section - Environmental - Energy; Data Section - Environmental Data and Tables
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Not	Nil report
EN19	Emissions of ozone-depleting substances by weight.	Fully	Data Section - Environmental Data and Tables
EN20	NOx, SOx, and other significant air emissions by type and weight.	Fully	Data Section - Environmental Data and Tables
EN21	Total water discharge by quality and destination.	Not	Nil report
EN22	Total weight of waste by type and disposal method.	Not	Nil report
EN23	Total number and volume of significant spills.	Fully	Detail Section - Environmental - Emissions and Waste
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	Partially	Detail Section - Environmental - Emissions and Waste
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	Not	Nil report



**Products and Services**

EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.		Detail Section - Environmental Impacts of Services; Data - Management Approach - Environmental and Transport
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	Not	Nil report

**Compliance**

EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Fully	Data Section - Management Approach - Society
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**Transport**

EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	Not	Nil report
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**Overall**

EN30	Total environmental protection expenditures and investments by type.	Not	Nil report
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**Social: Labor Practices and Decent Work**

Performance Indicator	Description	Reported	Cross-reference/Direct answer
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**Employment**

LA1	Breakdown of workforce, where possible, by region/country, status, employment type and by employment contract. Commentary for the L&T Sector Supplement on Self-employment (Road transport specific).	Fully	LA1 is fully reported in the main body of the GRI report
LA2	Total number and rate of employee turnover by age group, gender, and region.	Not Applicable	LA1 in the L&T Sector Supplement is not applicable
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Partially	2010 Results Summary - 3. 2010 Turnover by Region
		Fully	Data Section - Management Approach - Labour

**Labor/Management Relations**

LA4	Percentage of employees covered by collective bargaining agreements.	Fully	Data Section - Management Approach - Labour
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements.	Fully	Data Section - Labour

**Occupational Health and Safety**

LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	Not	Nil report
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	Partially	2010 Results Summary - 3. 2010 Turnover by Region; Detail - Labour, Health and Safety; Data - Labour
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Partially	Detail Section - Labour, Training and Education
LA9	Average hours of training per year per employee by category of employee. Commentary for the L&T Sector Supplement on Transport Operational Safety.	Partially	Data Section – Fleet Breakdown – Labour Data and Tables (Table LT5)

**Training and Education**

LA10	Average hours of training per year per employee by employee category.	Fully	Detail Section - Training and Education; Data Section - Labour Data and Tables
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Not	Nil report
LA12	Percentage of employees receiving regular performance and career development reviews.	Fully	Detail Section - Training and Education



<b>Diversity and Equal Opportunity</b>			
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	Partially	Detail Section - Training and Education
LA14	Ratio of basic salary of men to women by employee category.	Fully	Data Section - Management Approach - Labour
<b>Social: Human Rights</b>			
<b>Performance Indicator</b>	<b>Description</b>	<b>Reported</b>	<b>Cross-reference/Direct answer</b>
<b>Diversity and Equal Opportunity</b>			
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	Fully	Detail Section - Human Rights - Investment and Procurement; Data - Management Approach - Human Rights
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	Partially	Detail Section - Human Rights - Investment and Procurement; Data - Management Approach - Human Rights
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Partially	Detail Section - Labour, Training and Education; Human Rights - Investment and Procurement
<b>Non-Discrimination</b>			
HR4	Total number of incidents of discrimination and actions taken.	Fully	Data Section - Management Approach - Human Rights
<b>Freedom of Association and Collective Bargaining</b>			
HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	Fully	Data Section - Management Approach - Labour
<b>Child Labor</b>			
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	Fully	Data Section - Management Approach - Human Rights
<b>Forced and Compulsory Labor</b>			
HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	Not	Nil report
<b>Security practices</b>			
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	Fully	Detail Section - Human Rights - Security Practices
<b>Indigenous Rights</b>			
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	Fully	Detail Section - Human Rights - Indigenous Peoples
<b>Social: Society</b>			
<b>Performance Indicator</b>	<b>Description</b>	<b>Reported</b>	<b>Cross-reference/Direct answer</b>
<b>Community</b>			
SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	Fully	Detail Section - Society - Community
<b>Corruption</b>			
SO2	Percentage and total number of business units analyzed for risks related to corruption.	Fully	Detail Section - Society - Corruption
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	Fully	Detail Section - Society - Corruption
SO4	Actions taken in response to incidents of corruption.	Fully	Data Section - Management Approach - Society



<b>Public policy</b>			
SO5	Public policy positions and participation in public policy development and lobbying.	Fully	Detail Section - Society - Public Policy
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Fully	Data Section - Management Approach - Society
<b>Anti-competitive behavior</b>			
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	Fully	Data Section - Management Approach - Society
<b>Compliance</b>			
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Fully	Data Section - Management Approach - Society
<b>Social: Product Responsibility</b>			
<b>Performance Indicator</b>	<b>Description</b>	<b>Reported</b>	<b>Cross-reference/Direct answer</b>
<b>Customer health and safety</b>			
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Fully	Detail Section: Product Responsibility, Customer Health and Safety.
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	Fully	Detail Section: Product Responsibility, Customer Health and Safety.
<b>Product and service labelling</b>			
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	Not	Nil report
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	Not	Nil report
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	Fully	Detail Section - Product Responsibility - Product and Service Labeling; Data Section - Product Responsibility Data and Tables
<b>Marketing communications</b>			
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	Not	Nil report
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	Not	Nil report
<b>Customer privacy</b>			
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	Fully	Data Section - Management Approach - Product Responsibility
<b>Compliance</b>			
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	Fully	Data Section - Management Approach - Product Responsibility



Logistics and Transportation Sector Supplement, Pilot Version 1.0			
Performance Indicator	Description	Reported	Cross-reference/Direct answer
<b>Economic</b>			
LT1	Number of ships controlled by the reporting organisation, broken down by the flag state.	Fully	Data Section – Fleet Breakdown (Table LT1)
LT2	Breakdown of fleet composition.	Fully	Data Section – Fleet Breakdown (Table LT2)
LT3	Description of policies and programmes on the management of environmental impacts, including: 1) Initiatives on sustainable transportation 2) Modal shift and 3) Route planning	Fully	Detail Section – Environment – Environmental Impacts of Services
LT4	Description of initiatives to use renewable energy resources and to increase energy efficiency.	Fully	Detail Section – Economic – Climate Change Detail Section – Environment – Energy
LT5	Description of initiatives to control urban air emissions in relation to road transport.	Partially	(new)
LT6	Description of policies and programmes implemented to manage the impacts of traffic congestion.	Not Applicable	Nil report
LT7	Description of policies and programmes for noise management/abatement.	Fully	(new)
LT8	Description of environmental impacts of the reporting organisation's major transportation infrastructure assets and real estate. Report the results of environmental impact assessments.	Partially	(new)
<b>Social</b>			
LT9	Description of policies and programmes to determine working hours and rest hours, rest facilities and leave for those driving and operating fleets.	Partially	(new)
LT10	Describe approaches to provision of facilities to enable mobile workers to maintain personal communications while working.	Fully	(new)
LT11	Description of policies and programmes regarding substance abuse.	Fully	Detail Section – Labour – Training and Education
LT12	Number of road fatalities of drivers or third parties per million kilometres driven.	Fully	Nil report
LT13	List the incidents when ships have been detained by port inspectors, including the following details: 1) Name of the vessel and International Maritime Organisation number 2) Port of detention 3) Reason for detention 4) Duration of detention	Fully	Detail Section – Product Responsibility – Customer Health and Safety
LT14	Description of policies and programmes for public access to mail services.	Not Applicable	Nil report
LT15	Provision of logistics and transportation core competencies to deliver humanitarian needs locally and globally measured in terms of: e.g. tonnes carrying capacity, persons months, expenditure, value (fair market terms) and in kind contributions in disaster preparedness and response.	Not Applicable	Nil report
LT16	Criteria for selecting recruitment and placement services. State how these criteria relate to existing international standards such as the conventions of the International Labour Organisation.	Fully	(new)
LT17	Describe measures in place to provide income security and employment continuity for workers employed/contracted repeatedly but not continuously.	Fully	Detail Section – Labour – Employment



# Verification and Assurance Statement

Swire Pacific Offshore Operations Pty Ltd (SPO) commissioned Copeland & Partners Ltd to conduct an independent assurance of its 2010 Sustainable Development (SD) Report, in accordance with the scope below.

## Objective and Scope

The objective of the assurance process was to verify a representative sampling of the information included in SPO's 2010 SD Report and to determine conformance of the report contents with the Global Reporting Initiative (GRI)'s *Sustainability Reporting Guidelines* requirements for Application Level C. An assessment of the company's SD initiatives, as reported in its fourth SD Report and against Swire Pacific Limited's policies, was conducted and recommendations were provided to management on the company's overall performance.

## Methodology

The assurance process, which was conducted in April and May of 2011, involved a desktop review of SPO's SD Report to identify a representative sampling of data and information, as well as claims regarding management systems, performance and corporate strategies, for on-site verification. Meetings were held with relevant SPO managers to confirm a representative sampling of data included in the report, to discuss the report contents and strategies for managing SPO's sustainability issues and to identify gaps or areas for improvement. Based on this process, observations were made which resulted in SPO making minor amendments to the draft report.

## Findings

Based on the claims and data sampled, SPO's 2010 SD Report includes accurate and robust information to support the company's commitment to, and performance in, implementing its SD Policy and its self-declaration of the report to meet the requirements of GRI's Application Level C in terms of its coverage of the required profile disclosures and indicators. This year's report, which has evolved since SPO prepared its first SD Report in 2007, also discloses information on additional profile disclosures and indicators and the company's approach to managing its sustainability issues in more detail, in line with the *GRI Guidelines*. The report format and content is now web-based in response to stakeholder feedback. SPO's material sustainability issues are substantively covered, with enhanced stakeholder consultation and reporting on issues such as the green zone carbon reduction initiative, carbon offsetting and responsible vessel disposal. The report also addresses challenges SPO faces in further reducing its environmental footprint and remaining diligent in implementing its comprehensive safety management system and training. SPO has also enhanced its process for ensuring its community engagement activities are aligned with business interests and local community needs.

## Recommendations for Future SD Strategy and Reporting

The commitment and resources that SPO has dedicated to integrating sustainability into its business processes and to managing potential risks is commendable. Going forward, SPO is encouraged to maintain its comprehensive approach to addressing and reporting its sustainability performance and to focus on the following key areas:

- Engaging its management team to systematically map SD issues and risks across all business areas and establish an overall strategy to focus and track ongoing sustainability performance throughout the company;
- Raising awareness and regularly engaging all staff on SPO's SD KPIs and performance and opportunities to enhance SPO's sustainability initiatives;
- Expanding engagement with key suppliers to manage sustainability risks and build capacity for conformance with SPO's *Supplier Corporate Social and Environmental Responsibility Code of Conduct*; and
- Expanding its engagement with clients and the industry to address challenges to further sustainability initiatives within the marine sector.



Anne Copeland



Director & Sustainability Advisor, Copeland & Partners Ltd

May 21<sup>st</sup>, 2011



## Contact Details

Thank You for Reading this Report

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Request for feedback

In order that we may improve our reporting,  
we would be grateful for your views and  
comments on any aspects of this report via  
e-mail to the above address or to  
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