

RESPONSIBLE OPERATIONS

Our goal is to manage our people and assets safely and sustainably, minimising our environmental and social impacts, and achieving the highest standards of health and safety. This involves protecting the natural and cultural environments we operate in, and maintaining the health, safety and security of our employees, contractors and communities, as well as respecting the human rights of people who might be impacted by our activities.

MATERIAL ISSUES

Environment

- Impact on water and biodiversity
- Emergency preparedness: oil spill response
- Waste management
- Climate change, flaring
- Stranded assets

Health & Safety

- Road safety
- Safe people, sites and assets
- Ebola
- Malaria

Security

- Voluntary Principles on Security & Human Rights

Social impact

- Land access
- Grievance management
- Community benefits
- Cultural preservation
- Community consultation

KEY RISKS TO PERFORMANCE

- Safety failure or environmental or security incident
- Failure to manage social impacts
- Supply chain failure

PRIORITISING SUSTAINABILITY

For Tullow, being a Responsible Operator involves placing equal importance on above and below ground risks, and embedding this into our operational planning and delivery.

Strategy and management approach

Tullow places equal importance on managing risks above the ground as it does below the ground. This means delivering our environmental, social, safety, health and security performance objectives is as important as achieving our operational targets.

We work to accomplish this by combining the management of all above ground risks into a single Safety, Sustainability and External Affairs (SSEA) organisation which operates across the business.

The SSEA organisation provides functional leadership, technical excellence, and develops requirements through Group Standards. It also provides guidance to the business units and structured assurance, through audits and reviews, to ensure we deliver on our commitments.

The organisation designs and drives improved performance through an increasingly robust suite of Key Performance Indicators, including targets for improvement.

As part of the new SSEA organisation, a number of experienced staff and functional leaders have moved into the business units. This has allowed us to more effectively integrate SSEA requirements into business plans and activities.

HOW WE MEASURE SUCCESS

41/48

result for EHS scorecard, which represents 10% of Tullow's Incentive Plan (TIP) for Executive Remuneration

28%

Improvement in Lost Time Injury Frequency (LTIF)

"Our priority is safe and sustainable operations while protecting the wellbeing of our staff, contractors and neighbouring communities."

SANDY STASH
VP SAFETY, SUSTAINABILITY
& EXTERNAL AFFAIRS

Risks and opportunities

Effective management of our environmental, social, health, safety and security risks is key to sustainable operations. Failure to manage these non-technical risks effectively may result in delays, potential disruptions, increased costs and a reduction in the value of our projects.

Environmental, health, safety and security issues that we manage include:

- waste and water management;
- environmentally sensitive areas;
- gas flaring and oil spill response preparedness; and
- the safety and security of our people, contractors, communities and assets.

Socio-economic issues that we manage include:

- traditional community livelihoods;
- socio-economic impacts;
- culturally significant areas;
- land acquisition and resettlement;
- protection of human rights;
- grievance management; and
- community engagement.

There are clear risks involved in not managing these impacts well. Eroding relationships with local communities, governments and anyone with a stake in our operating environment can cause delays and disruptions. As a result, managing non-technical risks is critical to all aspects of our operations.

EHS Scorecard

Our EHS scorecard is part of our Group KPIs and accounts for 10% of Tullow's Incentive Plan (TIP) for Executive Remuneration. The scorecard comprises 16 leading and lagging indicators, which are actively monitored at all levels of the business, from operational to the Board. Each indicator has a potential value of three points, depending on whether it is fully, partially or not achieved. In 2014, we fully achieved 13/16 indicators which translates to a score of 41/48. This reflects 8.5% of a potential 10% award in the overall TIP awards for the year. This section summarises some of the year's most noteworthy developments as well as issues material for our business and stakeholders. Our full EHS scorecard can be found on page 19 of this report.

East Africa Occupational Safety performance

In early 2014, we had safety performance issues, which were largely driven by our East Africa start up operations in both Kenya and Ethiopia. We therefore initiated a critical review of how Group Safety Standards were being applied in Kenya and Ethiopia and how we were organised in the field to assure line accountability for the delivery of safe operations. A detailed gap analysis of our safety management identified three areas for improvement: leadership and clarity of accountability; contractor management and behavioural safety.

During the year, we established a strategy to improve our safety performance. This involved increased management focus and additional KPIs to track performance.

We also introduced five changes to our operations to drive consistency in performance:

- Organised field operations under a single Area Field Manager and made them accountable for safe delivery of all field activities;
- Ensured better systems are in place when operations 'start up' to assure ourselves that our equipment, people and processes are ready and fit for purpose;
- Delivered a mandatory training course on Safety Leadership, aligned with IOGP best practice;
- Measured all managers and supervisors on their Safety Leadership competency; and

- Developed a safety observation and hazard awareness training course, implemented through a train the trainer approach. To date, over 3,000 employees and contractors have received training that encourages safe work practices and discourages at-risk work practices.

The interventions allowed us to improve our performance during the year. Our occupational safety performance as measured by Lost Time Injury Frequency (LTIF) of 0.58 improved by 28%, exceeding our 2014 target of 0.64. Whilst we still lag some of our industry peers, 2014 was a year of progress towards our five year target of achieving top quartile industry performance.

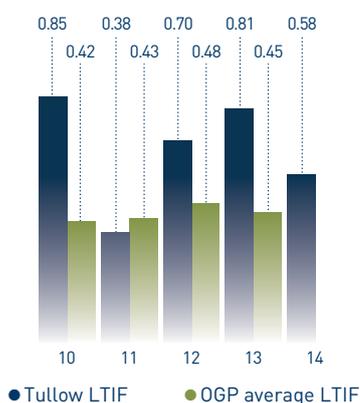
Jubilee Recovery Plan

In November 2013, a contractor working on the FPSO received an electric shock when carrying out test activities on a high voltage switchboard. He sustained significant injuries but has since made a full recovery. Following the incident, an investigation was conducted with Board-level oversight. The investigation revealed that there had been a tendency to under-report incidents, and it revealed a somewhat casual compliance to our permit to work and isolation procedures. Some of these issues were systemic and were a legacy of the poor transition of management of the FPSO between MODEC and Tullow in 2011.

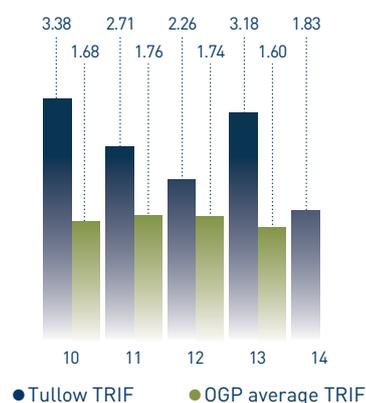
In March 2014, a Jubilee Recovery Plan was initiated and implemented over the course of the year. The learnings and actions from the electric shock incident formed one important area of focus within this plan. The plan also focused on many important key operational practices including improving and assuring competencies; improving the quality of risk assessments; providing hazard awareness training; introducing a new operations management system; and introducing zero tolerance for non-compliance to Tullow procedures.

In parallel with the Recovery plan, we have introduced key operating disciplines and principles, which our operations leadership has accountability for implementing. This ensures that all activities are properly planned, risk assessed and conducted by competent personnel.

LOST TIME INJURY FREQUENCY (LTIF) RATES



TOTAL RECORDABLE INJURY FREQUENCY (TRIF) RATES



The results over the last eight months have been encouraging. There have been no significant incidents or injuries to personnel on the facility. Our renewed commitment to high EHS and operating standards involved proactive action against non-compliances, resulting in a number of people leaving the organisation. The increase in reporting of near misses is an indication of the teams' improved understanding of risk.

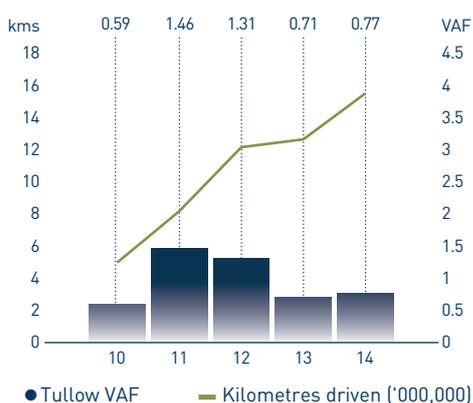
Land transport safety

Land transport safety continues to represent one of the most significant safety risks to our onshore operations, particularly in Kenya. Vehicle Accident Frequency rates increased from 0.71 in 2013 to 0.77 in 2014. Progress in the implementation of the Group Land Transport Standard was monitored by leadership and the Board, but a number of actions remained work in progress at the end of the year. We regret to report the tragic death of a Kenyan Police Reservist as a result of a road traffic accident. An investigation into the causes of the incident was completed and a land transport improvement plan has been initiated by the Kenya team. The plan includes reorganisation of core accountabilities; revision and roll out of the Light Vehicle Standard including assurance of contractor data; greater monitoring of vehicles, with non-compliant vehicles taken off the road; and stronger contractor management with compulsory contractor forums focused on improving driver and passenger behaviour.

Emergency preparedness

In 2014, we focused on continuing to improve our established crisis and emergency management programme, ensuring alignment with industry best practice. We conducted a number of risk-based exercises, culminating in a major subsea containment blowout scenario in November, designed to test our response capability at all levels in the organisation. Our revised Oil Spill Preparedness and Planning Standard will help ensure Tullow Oil is suitably prepared, resourced and equipped to respond effectively to oil spills and mitigate impacts on people, the environment, assets and reputation. Guidance documents and practical toolkits were also developed to aid the business with implementation.

VEHICLE ACCIDENT FREQUENCY (VAF) RATES



GHANA EMERGENCY PREPAREDNESS

To test their oil spill emergency response capability, Tullow Ghana carried out a major emergency simulation exercise in real-time in late 2014. Offshore equipment deployment and aerial response was tested, followed by the subsequent deployment of shoreline response equipment. Ghana's Environmental Protection Agency, Petroleum Commission and National Disaster Management Organisation (NADMO) and JV partners, Ghana National Petroleum Commission (GNPC) and KOSMOS were involved in the exercise.

The exercise used a scenario where a tanker taking oil off the FPSO had an incident whilst product was being transferred. For the scenario, the spill was large enough to incorporate tier 2 and tier 3 oil spill response interactions, both with local contractors and international resources, including those from Oil Spill Response Limited (OSRL) in Southampton, UK. This was a realistic scenario and is consistent with Tullow's current risk profile. All equipment movements during the two days were conducted live by the offshore and onshore response teams.



Environmental and social challenges – Kenya

The complexity of our operating environment in Kenya presents a number of challenges. One of the greatest of these is the high expectations local communities have about the benefits our operations can bring. Our challenge is managing those expectations together with complex social and environmental issues including land rights, water scarcity and security and human rights. An additional challenge is the recent devolution of powers from central government to County level, and the fact that the implementation of this constitutional change is still work-in-progress and local governance structures are embryonic. Security concerns and political tensions remain a significant issue in Kenya. Conflict between the Turkana and the Pokot people over the control of scarce resources has been the main cause of the recent escalation in tension in Northern Kenya. Although this pre-dates Tullow's work in the region, undoubtedly oil exploration is raising the stakes as individuals and groups seek to gain from the benefits created by increased investment and economic activity.

Security and human rights in Kenya

We conduct our own security risk assessments and use these to develop security plans that align with the guidance established by the Voluntary Principles on Security and Human Rights (VPSHR). Alignment with the VPs presents Tullow Kenya with an opportunity to reduce conflict by involving communities in the design and delivery of private security operations. As part of our security and human rights management plans and strategy in Kenya we have:

- Asked for input on our approach from the Government of Kenya, Institute for Human Rights and Business (IHRB) the Kenya Oil and Gas Association Security Committee and the British Deputy High Commissioner;
- Assessed our operational activity against the UN Guiding Principles on Business and Human Rights and International Finance Corporation (IFC) Performance Standards to inform a revised Human Rights Policy which will be released in 2015;
- Enhanced our grievance management processes to better manage allegations of human rights abuse by public/private security forces; and
- Prioritised private security providers which are signatories of the International Code of Conduct, balanced against local content objectives.

In 2014, Tullow received criticism that our operations caused a shortage of critical public security forces to manage conflicts not associated with our operations. In response to these concerns, we have reduced reliance on public security personnel from 332 to 181, a reduction of 45%. Additional reductions are planned.

Water use

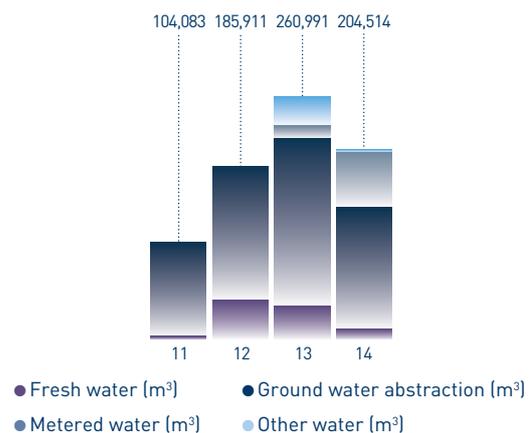
While our operations in Kenya represent the highest risk in terms of water usage, 98% of Group water usage is currently seawater used for reservoir injection in Ghana (2014: 9,872,189 m³). Fresh and brackish water usage represented 2% of our total water usage. Our operations in Kenya are located in remote and arid areas that are often afflicted by drought. Our field operations in Turkana require water for exploration and appraisal drilling; road and well pad construction; field camps; and community water programmes. Total current demand is about 670 m³ per day.

A groundwater development programme is well underway which is achieving high success rates for operational water needs. We have targeted shallow aquifers which follow the river valleys and the edge of the volcanics. All water production boreholes are licensed by the Water Resources Management Authority, the government's regulatory agency for water resources. The licencing process includes a requirement for a hydrogeological impact assessment.

Local groundwater sources will comfortably meet the short-term operational demand for water, but other sources need to be found for reservoir injection water when our operations reach the development phase. It is unlikely that the higher demand can be met from local groundwater sources within the area of our operations. Therefore, a strategic water supply must be found.

On the basis of a hydrological and hydrogeological review of potential sources across the whole of Kenya, a number of options are being considered, including both surface water and groundwater. An initial options analysis has been carried out, and a methodology developed to reduce the options to a short-list for more detailed study.

FRESH AND BRACKISH WATER USAGE



A wide range of factors have been considered in the analysis, including technical feasibility; regulatory approvals; stakeholder acceptability; social and environmental impact; security implications; and cost. Key stakeholders are being consulted and will continue to be included in discussions so that they can contribute to the decision-making process.

Spills and uncontrolled releases

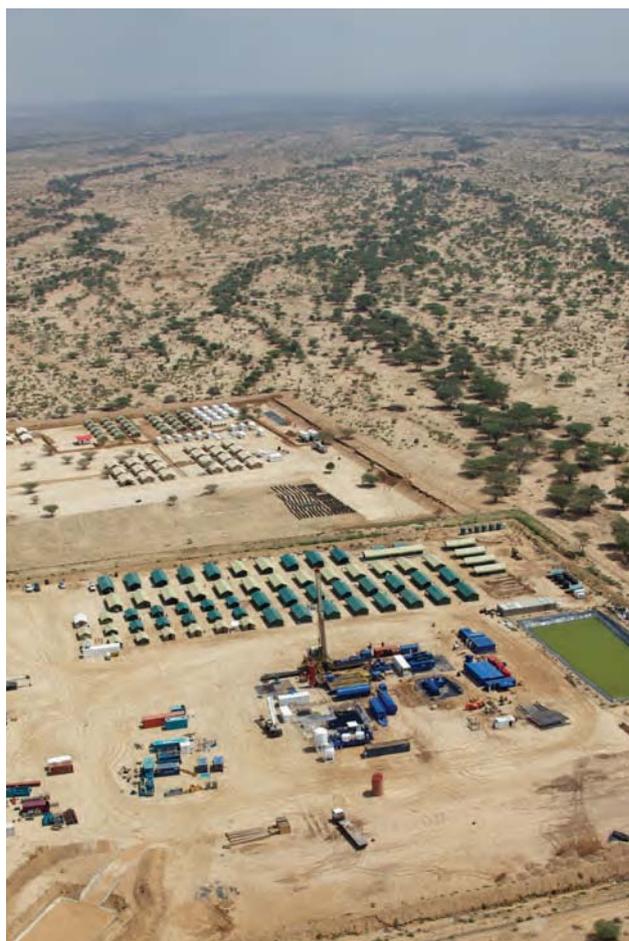
We failed to meet our target of reducing spills by 20%, with no more than 0.47 spills per million man hours worked. We had 15 uncontrolled releases of over 50 litres during the year (0.67). The volume of materials spilled increased significantly on the prior year (2013: 23 tonnes; 2014: 716 tonnes). The majority of spills (10) involved black and grey waste water spilled from camps supporting our Kenyan operations. The increase was because of one large spill of 702,000 litres in Turkana, involving a septic tank leaking into a storm water pit, which then subsequently escaped into the surrounding area. Performance issues led to management intervention to address the waste water management with contractors in Kenya.

Land access

Given the importance of land to Turkana and to pastoralism, Tullow aims to minimise the impact of its activities by keeping our well pads, camps and other infrastructure located away from settlements, sensitive environments, or areas of cultural heritage.

To ensure that we avoid these areas, we conduct Site Specific Assessments. These assessments are conducted with local community members, representatives from the National Museum of Kenya and Turkana Basin Institute and Tullow staff from various functions, with the aim of identifying and where possible avoiding potential social, environment and cultural heritage impacts. During these assessments, if settlements are identified or if large trees have to be felled or if areas of cultural importance are likely to be disturbed, Tullow will try to move the site so as to avoid these impacts.

To access the land, we secure agreement through lease permits from the Turkana County Government. These leases are renewed annually. We also seek community agreement which typically involves some form of community benefit, in recognition of the status of Turkana lands as community land. To manage any grievances arising as a result of our activities, we have implemented a project based Community Grievance Mechanism (GMs) which is managed by our Community Liaison Officers. All grievances, concerns and demands are recorded and responded to within a maximum period of 30 days.



Top: Aerial view of Ekales-1 rig site, Kenya

Above: Community Campaigns Officer at community engagement, Lokichar, Kenya

Ghana flaring

Group greenhouse gas (GHG) emissions increased by 11% largely due to temporary gas flaring at the Jubilee FPSO in Ghana. Tullow had made a commitment to the Government of Ghana and our investors to offtake the gas to the Ghana National Gas Corporation (GNGC) gas processing plant, however, the completion of the plant took three years longer than originally planned by GNGC. Tullow avoided the need to flare for most of this period by re-injecting additional gas, but as delays continued, the reservoir re-injection capacity became depleted and we flared in order to maintain production. Although flaring across the Group is 46% higher than 2013, increased emissions from flaring were offset by reduced drilling activity and the sale of the UK and Bangladesh assets. The Ghana processing plant is now operational and the need to flare gas should cease, assuming GNGC can continue to offtake gas to their plant.

Although the FPSO is 60km off the coast, in order to understand the potential impacts of increased flaring on the ambient air quality at the Ghana shoreline, emissions modelling was carried out. This work demonstrated that dispersion was extremely effective and impacts upon coastal air quality were negligible. Emissions were fully reduced within a 5-10km radius of the FPSO. Ambient air quality sampling was carried out on the FPSO to verify that there were no adverse impacts to operators. This showed that both Ghana and USA Environmental Protection Agency (EPA) limits were not exceeded for nitrogen oxides (NO_x), sulphur dioxide (SO₂) and ozone. The onshore gas processing facility was completed in November 2014, allowing gas to be exported to the plant and plant commissioning to commence. We anticipate this will reduce the need to flare substantially in 2015, but we may be forced to resume flaring if there are process upsets or if the gas plant cannot accept

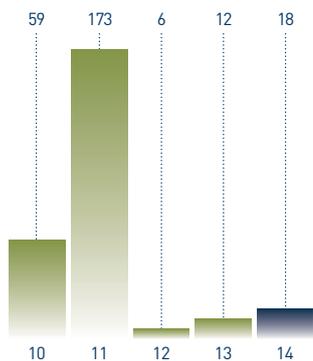
the gas. Learning lessons from the Jubilee project, the TEN development project underwent a Best Available Techniques (BAT) assessment to determine the most appropriate environmental controls. As a result of this approach, it was determined that TEN can operate a closed flare system whereby flaring only occurs during process upset conditions. Additionally, a Vapour Recovery Unit (VRU) will recover gas from the cargo storage and offloading systems so that there will be no direct hydrocarbon venting. Fugitive emissions from gases leaking from pressurised equipment on the FPSO will be reduced by having double mechanical seals on all hydrocarbon systems equipment. The TEN FPSO will come on stream in 2016.

Tullow's Group total scope 1 emissions, which in 2014 included gas and diesel from our offices as well as emissions from our operations, were 764,700 tonnes CO₂e (2013: 686,996 tonnes CO₂e)¹ and 118 tonnes of CO₂e per 1,000 tonnes of hydrocarbon produced (2013: 100 tonnes CO₂e). Total scope 2 emissions² were 4,179 tonnes of CO₂ (2013: 6,174 tonnes of CO₂) and 0.64 tonnes of CO₂ per 1,000 tonnes of hydrocarbon produced (2013: 0.89). Full details of our Basis of Reporting can be found online.

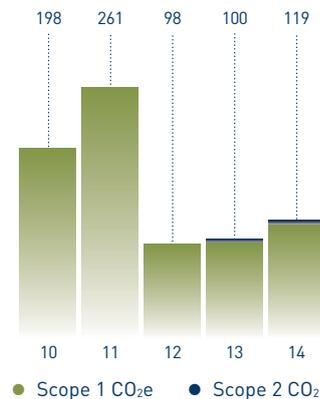
Climate change and stranded assets

Tullow acknowledges the climate change science that demonstrates global warming is occurring and that further controls will be introduced in the coming years to reduce emissions of GHGs. We recognise that as an oil company our activities and product contribute to global warming and our business will be impacted by increasing greenhouse gas controls. We understand that as global citizens we have a role to play by reducing our GHG emissions as far as is reasonably practical. How we position Tullow to remain successful and profitable in a lower carbon economy is

TOTAL HYDROCARBON FLARED BY PRODUCTION (TONNES PER THOUSAND TONNES HYDROCARBON PRODUCED)



CO₂e EMISSIONS PER 1,000 TONNES OF HYDROCARBON PRODUCED



1 Group CO₂e between 2012-2013 have been restated because of a previously overstated proportion of methane in vented gas from the Jubilee FPSO.
2 Group 2014 scope 2 emissions are reported in CO₂ instead of CO₂e, as recommended by DEFRA.

something that is already on the Board and EHS Committee agenda. In 2015, Tullow will develop its greenhouse gas strategy which shall be approved by the Tullow Board and identify what will be done to reduce its current and forecast GHG emissions.

Stranded assets have become a major topic for discussion in the oil and gas industry. It has been suggested that, as governments adopt stricter climate change policies, the majority of coal, oil and gas deposits will remain undeveloped as investment in alternative energy sources grows. Climate change legislation is going to become an increasingly important factor in determining the price of all fossil fuels. Some resources may become uneconomic over time and, in the much longer term, oil and gas may have a diminishing role in the overall energy mix. Tullow recognises the potential risk in light of this issue, but is confident there will be a continuing role for the conventional oil and gas industry for decades to come. Even if governments around the world take decisive action now, it would take years of investment to replace the installed base of assets consuming fossil fuel, at a time when energy demand is forecast to continue to grow significantly.

Operating in sensitive areas

In 2014, the Board took the decision that the Company would not explore or exploit oil in World Heritage Sites. While this is an important decision, it does not significantly impact our planned activity today. Our onshore exploration portfolio totals some 121,000 square kilometres, of which approximately 1.5% is inscribed on the World Heritage List. This proportion drops to 0.5% when offshore acreage is also taken into account. Tullow is not active in any of the exploration blocks that infringe on World Heritage Sites. Our updated Environmental and Social Performance Standard, which reflects the Board's decision, will be operationalised in 2015.

In 2014, the Board, Executive Committee and EHS Board Committee also approved a new Protected Areas Management Process. Four percent of Tullow's total acreage includes international protected or sensitive areas within the block boundary limits. This process enhances our approach to screening for environmentally sensitive areas by ensuring decisions to work in sensitive areas are only made at the highest levels of the Company.

We have identified legally protected and high biodiversity value areas using the Integrated Biodiversity Assessment Tool (IBAT) developed by Birdlife International, Conservation International, the International Union for Conservation of Nature (IUCN) and the United Nations Environment Programme World Conservation Monitoring Centre. We use IBAT to screen prospective areas and identify potential biodiversity and conservation risks and concerns prior to taking decisions to explore. We also carry out independent environmental and social assessment (ESIA) studies to define and understand ecosystems and habitats in and around all our activities, even when not required by law.

We are working to improve our biodiversity performance through ongoing participation in industry initiatives. Tullow is a member of IPIECA's Biodiversity and Ecosystems working group. We are also members of the Cross Sector Biodiversity Initiative (CSBI), which was established in 2013 to address biodiversity loss and ecosystem degradation related to extractive industries. The initiative encourages the development of scientifically valid and practical applications of the mitigation hierarchy – a model designed to assist with approaches to limit the impacts on biodiversity. CSBI also provides a forum to members to share tools, best practice and experiences on all aspects of management of biodiversity and ecosystem services impacts.



Top: Onshore Gas Plant & Processing Facilities, Ghana

Above: Murchison Falls, Uganda