# CORPORATE SOCIAL RESPONSIBILITY

"TGS is responsible to our customers, our employees, the communities in which we live and work, to the world community and to our shareholders. Living the TGS Values every day, in everything that we do, helps us to meet or exceed the expectations of our stakeholders both today and in the future, and is critical to delivering sustainable growth over the long term."

Hank Hamilton, Chairman

## Sustainability Report

### 1. Report on Corporate Social Responsibility

The term "Corporate Social Responsibility" (CSR) is often used interchangeably with "Corporate Sustainability." The Dow Jones World Sustainability Index defines Corporate Sustainability as "a business approach that creates long-term shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments."

TGS has prepared a CSR report to communicate to stakeholders how it integrates sustainability priorities within its business operations and strategy. Specifically the report covers TGS' CSR policies, actions, results and future ambitions and plans, focusing on our People and our Conduct, namely our anti-corruption, health and safety, and environmental efforts within the Company and with our Stakeholders. Our commitments, activities and performance on the priorities identified by TGS are set forth in the case studies, facts and figures set forth below. It is the opinion of the Board of Directors that this report complies with the CSR requirements of the Norwegian Accounting Act section 3-3c.

## **2.** Responsibilities Towards Our Stakeholders

TGS believes that Corporate Social Responsibility is a fully compatible and integrated part of conducting business successfully. The foundation of our Company's superior business performance is built on our long-standing values of honesty, integrity, accountability, and respect for others. In order for TGS to prosper, we need the trust and respect of our customers, shareholders, employees, and the communities in which we work and live. These values have long been a fundamental part of how TGS has chosen to do business and the Company has developed and refined these values over time. The purpose of the TGS Statement of Values is to provide a moral and ethical compass to assist and guide the Company in business situations that arise every day. These standards apply to all its activities in every market that TGS serves.

Honesty, integrity and fairness form the cornerstones of TGS' relationships inside and outside the Company.

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**TGS is responsible to its customers.** Through quality and service, the Company consistently strives to meet or exceed the expectations of customers, both promptly and profitably.

**TGS is responsible to its employees.** TGS' single greatest asset is its employee base. The Company considers each employee as an individual, and recognizes and respects the dignity, culture and merit of each employee. TGS aims to provide equal opportunity for employment, development and advancement. The Company's human resources policies are designed to ensure fair and equitable treatment and to encourage personal growth. The TGS health, safety and environmental management system (HSE-MS) is designed to ensure that all Company operations are conducted in the absence of significant risk, by continuously identifying and controlling hazards which may arise through any aspect of the Company's operations.

TGS is responsible to the communities and environment in which it operates and works and to the world community as well. TGS monitors its environmental performance versus plans and is dedicated to the continuous improvement of its environmental programs and standards for all of its operations. TGS works with its suppliers to ensure that their health, safety, and environmental standards are consistent with that of TGS. The Company actively supports reputable charitable programs and organizations, as well as local social welfare programs within the countries in which seismic data acquisitions are performed, that serve people and communities in need by providing ongoing financial donations. In addition, TGS implemented a program that encourages employees to donate their time and energy to help those in society who are less fortunate. The largest contributions were donated to organizations that work with underprivileged youth, homeless families and organizations that provide medical and humanitarian assistance in disease plaqued regions. TGS supports the United Nations Universal Declaration of Human Rights and strives to apply the declaration's principles regarding the freedom, rights, dignity and worth of the human person and promotion of equality irrespective of gender, race or religion throughout business operations.

**TGS is responsible to its shareholders** and expects that they should realize a fair return. The Company understands that its main contribution to society comes from operating and growing a profitable and thriving business that creates value over the long term.

TGS joined the UN Global Compact in 2016 and publicly committed to implementing the Global Compact's principals on human rights, labor, environment, and anti-corruption into our strategy, culture and day-today operations.

## **3.** Priority Identification

In identifying CSR priorities for TGS, it is important that the Company considers how its business impacts stakeholders across the value chain, from planning projects and consulting with local communities and regulatory authorities (including permitting requirements), to selecting and working with partners, agents and contractors, to managing HSE risks in geophysical operations, and to ensuring compliance with the TGS Code of Conduct and anti-corruption program in dealings with third parties.

On an annual basis, TGS conducts a risk assessment process whereby risks from across the business (including CSR risks) are assessed by different groups within TGS: Strategic, Operations, Legal and Compliance, and Finance. These groups identify the top risks, along with the current mitigation measures in place for each of those risks, and rank the risks based upon their impact to TGS, likelihood, and whether the risk is increasing, stable or decreasing. From these analyses, TGS' Executive Team identifies the top risks to TGS, some of which may relate to CSR risks, and implements a mitigation plan to address these risks for the coming year. In addition, all TGS departments, including Human Resources, Compliance, and Health, Safety and Environment, set annual goals for each year, and TGS executive team and Board of Directors participate in reviews of compliance, health, safety and environmental performance on at least a quarterly basis.

TGS also seeks feedback from regular meetings with shareholders, customers, other stakeholders and the International Association of Geophysical Contractors (IAGC). In addition, TGS joined the UN Global Compact in 2016 and publicly committed to implementing the Global Compact's principals on human rights, labor, environment, and anti-corruption into our strategy, culture and day-to-day operations.

From these inter-related processes TGS identified its CSR priority areas, set the CSR goals, plans and actions for 2016. The continuation of the challenging market conditions in the oil and gas industry resulted in TGS remaining steadfast in our commitment to:

- People: Engaging and developing employees in difficult market conditions
- Anti-Corruption: Employing the best practices to ensure anti-corruption compliance in all our operations
- Health, Safety & Environment: Promoting safe, healthy, and environmentally sound practices within the company and by our vendors and suppliers
- Human Rights: Advocating for responsible labor practices by our vendors and suppliers

## 4. People

#### 4.1. Who We Are

TGS strives to promote and maintain a work environment in which our people are treated with dignity, decency and respect. TGS expects all relationships among persons in the workplace will be business-like and free of unlawful bias, prejudice and harassment. It is TGS' policy to ensure equal employment opportunity without discrimination or harassment on the basis of race, color, national origin, religion, sex, age, disability, or any other status protected by law.

TGS Code of Conduct prohibits discrimination and harassment in the workplace. All TGS employees must annually attend Code of Conduct training, which includes training on TGS' anti-discrimination and anti-harassment policies. New TGS employees must complete an online training focused on maintaining a workplace free from discrimination or harassment.

#### 4.2. What We Did in 2016

Employee engagement is critical to the long-term sustainability of TGS. TGS seeks to maintain high levels of employee engagement while complying with labor rights and providing favorable work conditions. Due to the difficult market conditions in the oil industry, 2016 continued to be a challenging year. TGS announced a reduction in workforce and implemented reduced work hours in select locations. TGS focused on keeping employees engaged and motivated and maintaining

Employee S	Statistics				2016	2015
Total # of Employees at year end New Hires Internal Job Fill Employee Turnover					614 19 58% 8%	747 31 56% 10%
Tenure				Gender – Management		
0 - 5	2015 / 46%	2016 / <b>36%</b>		<b>• • • • • • • • • •</b>		
5 - 10 years	2015 / 26%	2016 / <b>29%</b>	2017		<b>* 29</b>	
10 - 20 years	2015 / 23%	2016 / <b>30%</b>	2016			
+20 years	2015 / 5%	2016 / 6%		2016 / Male 71% 2015 / Male 74%	2016 / Female 29% 2015 / Female 26%	
Gender – To	tal Employe	e Population		Age / 2016		
			/ 00/	- 30 y/o Total Pop. / 8% Mgmt. / 2%		
			43%	<b>30 – 50 y/o</b> Total Pop. / <b>55%</b> Mgmt. / <b>51%</b>	Pop.	Mgmt.
2016 / Male 57 2015 / Male 59		2016 / Fer 2015 / Fer		50+ y/o Total Pop. / <b>37%</b> Mgmt. / <b>47%</b>		

internal communications by launching our new intranet site which serves as a platform to enhance communication with our employees. We utilize the site to keep employees informed on industry updates, company programs & initiatives and employee events. In addition, through town hall sessions, we continued to update employees on the state of the industry and how TGS planned to approach the challenges ahead. We now broadcast our town hall sessions live globally on a quarterly basis. In addition, TGS continued to provide learning and professional development opportunities for employees, both internally and externally, aimed at encouraging employee advancement.

#### It is TGS' policy to ensure equal employment opportunity without discrimination or harassment on the basis of race, color, national origin, religion, sex, age, disability, or any other status protected by law

#### 4.2.1. Employee Engagement

One of TGS' main priorities in 2016 focused on keeping employees engaged and motivated to retain top talent and enhance performance in these challenging market conditions. TGS actively sought feedback and input from the workforce and continued to communicate with employees to address their concerns. Engaged employees are essential to the success of TGS. Increasingly, we understand that employee engagement is a requisite for high performance. Hence, TGS performed its biennial Global Employee Engagement Survey in November 2016, to help identify opportunities for increasing employee engagement. The anonymous survey measures employees' perceptions of past events, present experiences, and future expectations for a more complete view of employees' engagement levels. The survey compares TGS employee responses to a global, multi-industry benchmark across eight metrics to identify areas of improvement. TGS had an 87% response rate and scored highly in the areas of Culture/Values and Work Environment. Professional Development and Communication were identified as areas of focus to continue to improve engagement.

Communication across the organization is vital to maintaining an informed and engaged workforce in which employees are motivated to contribute and improve performance. Therefore, it is necessary for TGS's leaders to be visible and accessible to the entire workforce and employees be encouraged to share their opinion on important issues facing the organization. TGS holds quarterly employee meetings across all of its key offices, which include a Q&A session with the CEO and presentations from various projects or business units on their operations. Additionally, all business groups and departments hold a multi-day planning session at the start of the year in which members of that department participate in planning and discussing business objectives and goals for the coming year.

#### 4.2.2. Professional Development

TGS is committed to strengthening our culture of excellence. Providing professional development opportunities for our workforce is a cornerstone to that end. Building upon long-term corporate objectives, TGS continued to provide general management skills, business acumen courses and technical training at each of its core offices in 2016.

TGS employees participate in an annual performance and professional development review, whereby the employee and his/her manager discuss the progress of last year's goals, establish goals for the upcoming year, discuss the employee's performance over the past year, review career aspirations and identify opportunities for further development. TGS recognizes that this process is critical to ensuring that its employees continue to develop the necessary skills to grow with the company.

TGS offers both onsite and out-of-office professional development training opportunities to employees, encourages employee participation in industry events, supports internal career progression, and provides tuition assistance for higher education courses for employees. TGS also continued its Executive Mentorship program for talented individuals to be mentored by members of the Executive management team.

## @1,815 hrs

2016 was the third full year of TGS' revamped technical training program, and employees participated in over 1,815 hours of in-house geological and imaging courses and lunch-and-learn sessions.

Additionally, TGS provides technical training to its employees through onsite training programs and lunch- and-learns as well as encouraging employees to participate in industry events. Employees participated in over 1,815 hours of inhouse geological and imaging courses and lunch-and-learn sessions (down from 2,006 hours in 2015 due to the fewer number of employees in the company). TGS employees also participated in five University Consortia around the world in 2016.

#### 4.3. Our Ambitions and Plans

TGS recognizes the value of having an engaged workforce and will continue to actively identify opportunities to improve engagement, provide professional

development, encourage career discussions, and maintain open communication in 2017. TGS's commitment will be further reinforced through the implementation of leadership sessions and focus on transparent communication from the top down. TGS will hold focus groups with employees to better understand the feedback and to gain understanding of the areas of improvement. Corporate goals that align with these initiatives will be posted in our new intranet (ODIN) and reinforced during quarterly employee meetings. Finally, TGS conducted its Global Employee Engagement Survey in 2016 and will use the results of that survey to measure our effort in increasing our employees' engagement, and we are committed to conducting another survey in 2017.

### **5.** Anti-Corruption and Compliance

#### 5.1. Our Code of Conduct

TGS expects the highest levels of personal conduct from its Board of Directors, its entire staff, regardless of position, and its agents and contractors. The TGS Code of Conduct sets the standard of responsible conduct for every TGS employee and serves as the Company's ethical roadmap – ensuring all employees perform their duties with honesty and integrity and in accordance with the law.

As a function within the TGS executive team, the Compliance Program endeavors to foster an open, transparent and ethical environment in accordance with the TGS Code of Conduct. The TGS Compliance Officer reports to the Board of Directors and the CEO and provides updates on at least a quarterly basis. The Compliance Officer aims to educate TGS employees on potential compliance concerns as well as implement policies, procedures, and guidelines to detect and prevent potential compliance concerns. In January of each year, an annual letter from the CEO is issued to all TGS employees that outline TGS's expectations regarding ethical and compliant conduct.

All TGS employees are to complete an annual certification that represents each employee's personal pledge that he or she has read, understood, and will uphold the Code in his or her business activities, as well as to participate in annual live Code of Conduct trainings, either held in-person or via video-conference, and other online compliance training initiatives.

TGS provides multiple avenues for TGS' internal and external stakeholders to discuss or report potential non-compliance. Employees are encouraged to report any violation of TGS' values or policies to their supervisor, the Compliance Officer, or through the TGS hotline, which allows employees to report suspected instances of non-compliance anonymously. TGS wants to know about potential problems before they become serious, and policies are in place that prohibit

retaliation against reporting employees. TGS investigates all potential violations of its Statement of Values and Code of Conduct, such as illegal acts, conflicts of interest, financial fraud, corruption issues or breachejs of TGS' corporate policies. TGS will also engage internal or external legal counsel as needed in dealing with possible violations of its corporate policies.

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#### 5.2. What We Did in 2016:

As a Company that operates throughout the world, TGS recognizes that bribery and corruption is a serious risk in today's business environment. TGS works to ensure that its employees understand that when conducting business in other countries, employees must be sensitive to the legal requirements that apply to foreign operations, including the U.S. Foreign Corrupt Practices Act, the OECD Convention on Combating Bribery of Foreign Public Officials in International Business, and the U.K. Bribery Act.

TGS' Anti-Corruption policy applies to both TGS employees and third parties acting on behalf of TGS and expressly prohibits bribery, kickbacks and other illegal payments, as well as facilitation payments and political contributions on behalf of the company. Review and prior approval is required for gifts, entertainment, or travel expenses provided to government officials, as well as charitable or social welfare contributions to be made by or on behalf of TGS. TGS conducts due diligence on third party relationships based upon various risk factors, including but not limited to the location of where services are to be performed, the types of services to be performed, and the entity performing the services. TGS includes anti-corruption provisions in agreements with third parties providing services on behalf of the company, and third parties deemed to be high-risk must complete annual anti-corruption training and certification requirements. TGS continually conducts assessments of its anti-corruption policies, procedures, and guidelines to identify weaknesses and areas for improvements. International agents are periodically audited to ensure their compliance with their agreement to TGS and applicable anti-corruption laws. To support the concept that compliance starts at the executive level and to ensure that all aspects of the business are up-to-date on anti-corruption best

practices, the Compliance Director provided quarterly and ad hoc presentations to the management team and business groups on global developments in anticorruption laws and enforcement actions in 2016.

In 2016, TGS focused on monitoring third party relationships and implemented additional internal controls to monitor payments made to high risk third parties to ensure their compliance with contractual terms and the law.

Each year, all TGS employees are required to certify their compliance to TGS' Code of Conduct and participate in live Code-of-Conduct training, both of which include a focus on TGS' anti-corruption efforts. One-hundred percent of TGS employees completed both the Code of Conduct certification and Code of Conduct training for 2016. In addition to the Code of Conduct training, which includes discussion of TGS' Anti-Corruption policy, TGS administered an online anticorruption training and certification program to key employees and managers who interact with government officials or oversee employees who interact with government officials that included training on and certifying compliance with TGS policies. One-hundred percent (100%) of active TGS employees completed the online anti-corruption training and certification (same as in 2015).

## **100% CERTIFIED**

- 100% of TGS employees completed Code of Conduct certification and Code of Conduct training
- 100% of key TGS employees completed TGS' Anti-Corruption training and certification program
- 100% of TGS international agents certified their compliance with TGS' Anti-Corruption policy and completed Anti-Corruption training

TGS continued to work with its third party agents to stress the importance of and ensure compliance with international anti-corruption laws in 2016. All of TGS's international agents are required to annually certify compliance with TGS's Anti-Corruption policy and complete online anti-corruption training. One-hundred percent (100%) of TGS's international agents completed their annual certification of compliance with TGS's Anti-Corruption policy and anti-corruption training in the past year (same as in 2015).

#### 5.3. Our Ambitions and Plans:

TGS will continue to be active in monitoring the international developments and "best practices" in anti-corruption compliance. Going forward TGS intends to further the actions undertaken during 2016 with a continued emphasis on monitoring both the payments made to and relationships with TGS's international agents, and will maintain its hands-on approach to ensure our international agents understand and abide by TGS' anti-corruption policy. TGS will continue to aim for 100% compliance by both key TGS employees and international consultants with TGS' anti-corruption training and certification requirements. In the coming years as part of its monitoring of international agents, TGS will continue to review and update international agent due diligence information on a periodic basis so as to maintain current and accurate information for all international agents. Finally, TGS will continue to stay committed to internationally accepted "best practices" for anti-corruption compliance, and will work to update policies and procedures accordingly.

## **6.** Health and Safety

#### 6.1. What We Believe

TGS is dedicated to the continuous improvement of health, safety and security standards for its people and insists on the same policy from its contractors. TGS has defined safe operating procedures and guidelines in the HSE Management System that are designed to meet or exceed all appropriate legal requirements and, in the absence of any defined standards, to meet or exceed generally accepted industry-wide "best operating practices." TGS actively participates with all relevant client/contractor associations and relevant authorities in developing HSE standards.

TGS maintains a high level of safety awareness by means of safety meetings, internal auditing, review meetings and general communications. All employees and contractors are actively encouraged to participate in the conduct, management and continuous improvement of safety. TGS requires all employees and contractors to be accountable for and committed to their own health and safety as well as for those with whom they work. Employees and contractors are empowered to intervene and STOP any operation or activity that they feel is unsafe or hazardous, with the knowledge that such action will be supported by management.

Both the TGS HSE Director and senior management have responsibility for the communication and implementation of TGS health and safety policies, including provision of information, training and resources to employees.

#### 6.2. What We Did in 2016: HSE Reviews and Training

TGS conducts quarterly HSE reviews with the executive team. TGS continues to promote a top-down message of health and safety by making its senior management responsible for ensuring that all employees completed at least two HSE training modules during 2016. Management also participated in audits of all

Employee Health & Safety Statistics	2016	2015	
Man-hours	1,103,829	1,562,934	
Fatalities	0	0	
Lost Time Injuries (LTI)	1	0	
Medical Treatment Cases	0	0	
Restricted Work Cases	0	1	
Recordable Case Frequency*	0.18	0.64	
LTI Frequency*	0.18	0.00	
Working Days Lost	1,536	1,040	
Sickness Absence Frequency	1.11%	0.53%	

office locations, and all TGS staff are assessed on active HSE commitment during annual performance reviews.

In 2016, all TGS Executive Team members conducted at least 1 HSE facility inspection. All office locations performed at least one HSE related lunch and learn activity, which included topics such as First Aid / CPR Training, Bicycle Safety, Home Safety, and Fire Extinguisher Training.

There was one lost time incident for contractor field crews in 2016. An investigation was performed and remedial measures were put in place to prevent similar incidents from occurring in the future. With respect to TGS employees, there was one lost time incident in 2016. The Total Recordable Incident rate for 2016 was 0.18 (per 1,000,000 man hours).

There were 13 field visits from senior management and operations managers during 2016, and full compliance with vessel and land crew audit requirements was achieved. Additionally, 39 inspections were performed at TGS office locations globally.

The Motor Vehicle Accident Rate in 2016 (per 1,000,000 miles) was 0.00, as only a small number of land activity was completed.

One hundred percent (100%) of employees completed both HSE training courses offered in 2016.

#### 6.3. Our Ambitions and Plans

TGS management will continue to champion TGS' HSE training initiatives by increasing management's presence at both land and marine operations and by having management conduct facility inspections at TGS' offices. TGS will continue to require all land and marine contractors to participate in TGS' Contractor Management System for both land and marine surveys. Additionally,

Rontractor Health & Safety Statistics	2016	2015
Man-hours	2,975,592	6,466,840
Fatalities	0	0
Lost Time Injuries (LTI)	1	1
Medical Treatment Cases	1	11
Restricted Work Cases	2	13
Recordable Case Frequency*	1.34	3.87
LTI Frequency*	0.34	0.15

\*Per million man-hours

all TGS employees will be required to complete two HSE training courses during 2017. Each office location has a goal to host two HSE Lunch and Learn events in 2017. Finally, TGS has set as targets for 2017 of zero lost time injuries across all operations, and a total recordable incident rate of less than 2.0 and a motor vehicle accident rate goal of less than 2.0 for land seismic operations.

## 7. Environment

#### 7.1. What We Believe

TGS is committed to leading the industry in minimizing the impact of its activity on the environment. To achieve this, TGS continually assesses its impact on the environment and endeavors to plan operations that minimize environmental impact. TGS typically conducts environmental impact assessments as part of the permitting process prior to initiating seismic data acquisition. TGS monitors its environmental performance versus plans and is dedicated to the continuous improvement of its environmental programs and standards for all of its operations.

TGS strives for zero spills and unplanned releases to the marine environment during seismic vessel operations and zero reportable spills in the onshore environment. Through TGS's charters of the seismic vessels, TGS influences and aims to ensure our contractors comply with all applicable environmental laws and regulations. Seismic vessels chartered by TGS undergo audits from the International Marine Contractors Association/Offshore Vessel Inspection Database (IMCA/OVID audits), either conducted by TGS, the vessel, or another third party, that evaluate compliance with all applicable health, safety, and environmental regulations and industry requirements, and ensure that all required health, safety, and environmental permits and certificates are valid.

TGS understands the importance of working with local governments, regulatory authorities, and non-government organizations, and therefore, TGS maintains positive communication with regulatory authorities and other governmental and non-governmental organizations to help identify, understand and mitigate environmental risks associated with geophysical activities. Finally, we work to implement improved environmental awareness in office locations and minimize waste and manage waste output, minimize carbon emissions by survey design, guard against accidental and operational pollution, and mitigate against any active or operational pollution.

TGS understands the importance of working with local governments, regulatory authorities, and non-government organizations, and therefore, TGS maintains positive communication with regulatory authorities and other governmental and non-governmental organizations to help identify, understand and mitigate environmental risks associated with geophysical activities.

#### 7.2. What We Do

TGS continues to include environmental aspects within IMCA/OVID accredited audits on all chartered seismic vessel and monitor spills and unplanned releases during seismic operations. TGS assesses and reports upon biologicallyimportant areas, which include marine mammal migration paths, spawning grounds, sanctuary areas, or other ecologically sensitive locations where TGS has activities. There were no recordable spills or unplanned releases to the marine environment and no reportable spills or releases to the onshore environment.

TGS actively supports the IAGC both financially and through employee participation in committees and projects. In 2016, TGS employees, including the SVP Onshore, General Counsel, Director Marine Acquisition and HSE Director actively served and participated in IAGC boards and committees. Through its work with the IAGC, TGS seeks to positively influence sensible and sustainable legislation and address environmental misconceptions associated with the geophysical industry. TGS supports the IAGC's efforts to create standards and protocols for seismic in frontier areas, and to plan seismic surveys to minimize environmental implications and liaise with stakeholders (including local fishing industry). TGS is also involved with the International Association of Oil & Gas Producers (IOGP) and supports its efforts to improve safety, environment and

social performance and promote responsible and sustainable operations within the oil and gas industry. Each year, TGS participates in IOGP's global forum, which includes both clients and competitors, to share best practices and to troubleshoot challenges that may have arisen in the industry.

One example of TGS' efforts in 2016 to work with stakeholders, including regulatory authorities and other governmental and non-governmental organizations, on identifying, understanding and mitigating environmental risks associated with geophysical activities is in the Asia Pacific region. TGS completed a comprehensive round of stakeholder engagement communications with a diverse range of government and non-government groups, most notably commercial fishermen, during the planning phase for the recently acquired North West Shelf Renaissance 2016 (NWSR16) regional 2D survey. Survey commitments included the deployment of independent Marine Fauna Observers on-board the survey vessel, who provided the means of compliance with the Australian Department of the Environment's EPBC Act Policy Statement 2.1, ensuring all mitigation and adaptive management procedures were adhered to when marine mammals were encountered.

TGS spent a period of 9-months throughout 2016 liaising with the Australian government regulator, NOPSEMA, on a basin-wide 5 year Environment Plan, which provides the building block upon for the company to develop and acquire new 2D or 3D surveys in a geographically expansive zone.

Additionally in 2016, TGS completed a seismic survey program in the arctic waters off of North East Greenland. The sensitive nature of the environment demanded careful planning of survey activities. TGS commissioned specialist environmental consultants CMACS (now NIRAS) to undertake a detailed environmental impact assessment (EIA) in line with requirements under Greenlandic regulations. The EIA report considered the potential effects of seismic survey in arctic waters, home to diverse and potentially sensitive marine wildlife such as whales, walrus and seabirds and the supporting ecosystem, as well as the potential for interactions with local communities and activities such as fishing and hunting.

Key considerations were the underwater noise associated with seismic surveys and potential for potential pollution from any hydrocarbon spills. Detailed noise modelling was completed to understand the potential effects on sensitive species such as the bowhead whale, narwhal and walrus. Taking into account the presence of protection areas for key marine groups, a comprehensive set of risk reduction and mitigation measures were developed. These included enhancements to standard 'best practice' approaches (e.g. marine mammal observer teams) because of concerns about highly sensitive species such as bowhead whales. Practical measures were developed to address stakeholder concerns whilst allowing efficient survey operations.

There was active stakeholder engagement, most notably through a public hearing prior to the survey permit approval during which individuals, community groups, government authorities and NGOs had an opportunity to comment on the survey proposals.

#### 7.3. Our Ambitions and Plans

Going forward TGS intends to continue its work with the IAGC and IOGP to develop and ensure compliance with environmentally sound practices in the seismic industry. As with prior years, TGS will continue to aim for zero spills and unplanned releases to the marine environment during seismic vessel operations and zero reportable spills in the onshore environment. Further, TGS has set a goal in 2017 for each chartered vessel will undergo an IMCA/OVID audit within six months of hire and every twelve months thereafter, and an audit within four weeks of start for land seismic crews. Finally, TGS will continue to ensure its marine and land contractors participate in and abide by the environmental standards set forth in TGS Contractor Management System.

## 8. Human Rights

TGS supports the UN Universal Declaration of Human Rights and aims to apply its principles throughout our business operations. These principles include recognition of the freedom, the rights, the dignity and the worth of the human person and promotion of equality irrespective of gender, race or religion. TGS will not use or support child labor or slavery in any of its offices. TGS also works with contractors and vendors to ensure that our field and seismic vessel operators abide by the UN Universal Declaration of Human Rights and do not use or support child labor or slavery in their operations for TGS. To that end, TGS' Contractor Management System requires vendors, contractors and suppliers to provide TGS their policies regarding their human rights and labor practices so that TGS may review and ensure that any contractors or third parties with whom TGS contracts maintain the same commitment to human rights as TGS.

## **9.** Community and Charitable Relations

Through the TGS Charitable Contributions Committee and in accordance with its charitable contributions guidelines, TGS actively supports reputable charitable programs and organizations that serve people in need by providing ongoing financial donations as well as encouraging employees to donate their time and energy to help those in society who are less fortunate.

TGS is committed to supporting local, nonprofit community organizations and charities that focus their services on people and are dedicated to (i) providing access to healthcare, medical services, and helping to fight disease; (ii) assisting underprivileged, underrepresented, or at-risk communities or groups; (iii) providing humanitarian aid or disaster relief; (iv) addressing environmental issues; or (v) promoting geophysics and geoscience educational experiences to children.

TGS consults with local communities to seek input and address concerns relating to seismic data acquisition projects, especially in relation to onshore seismic activities, areas sensitive to the fishing industry and the Arctic.

Significant contributions were made to over 21 charitable organizations during 2016. The largest charitable contributions were made to organizations that help underprivileged youth, fund medical research and access to healthcare, and provide humanitarian aid. Donations were also made to organizations that help homeless families and organizations promoting geophysics and geoscience educational experiences to children. TGS employees reported that they had spent more than 856 hours (up from 405 hours in 2015) on TGS-supported charitable activities during 2016. TGS will continue to support local charities and non-profits in the communities in which we operate and to encourage TGS employees to do the same.

