



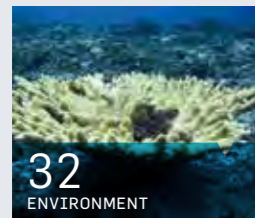
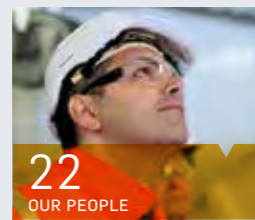
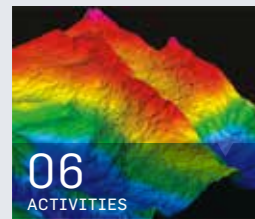
**2013**  
SUSTAINABLE  
DEVELOPMENT REPORT

**Leaving a Fond Memory**

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**Cover photo:** Irrawaddy Delta in southern Myanmar covered in dense mangrove (red) and encroaching agriculture (light green). Time series of false color satellite imagery can aid monitoring and planning activity amongst the complex delta channels and flooded wetlands (purple). Satellite imagery worldwide is available from NPA Satellite Mapping, part of CGG's GeoConsulting business line.

## Our Mission

To create value by optimizing the discovery and the development of natural resources

## Our Vision

To be the geoscience partner of choice

## Our Values

Powered by people around the world, we

... have a passion for innovation

... operate safely and with integrity

in order to deliver sustainable performance

# LETTER OF COMMITMENT FROM THE CHIEF EXECUTIVE OFFICER

**A**s a forerunner and leader in geoscience, CGG seeks to create value by optimizing the discovery and the development of natural resources. We carry out activities around the world which bring enormous opportunities for positive action and progress. Our sustainable development strategy guides us in seizing these opportunities to care for our employees, the environment and the communities around us.

I would like to highlight two accomplishments which you will find described in more detail in this report. Each illustrates, I believe, our focus on key issues for CGG.

In 2013, CGG acquired Fugro's Geoscience Division. This acquisition brought with it the challenge of integration, as the number of our employees rose by more than 30%, and making these new employees feel part of "our People". I am pleased with the overall success and speed of their integration. You will find in this report several case studies from these new Geoscience businesses, illustrating the successful implementation of our sustainability strategy.

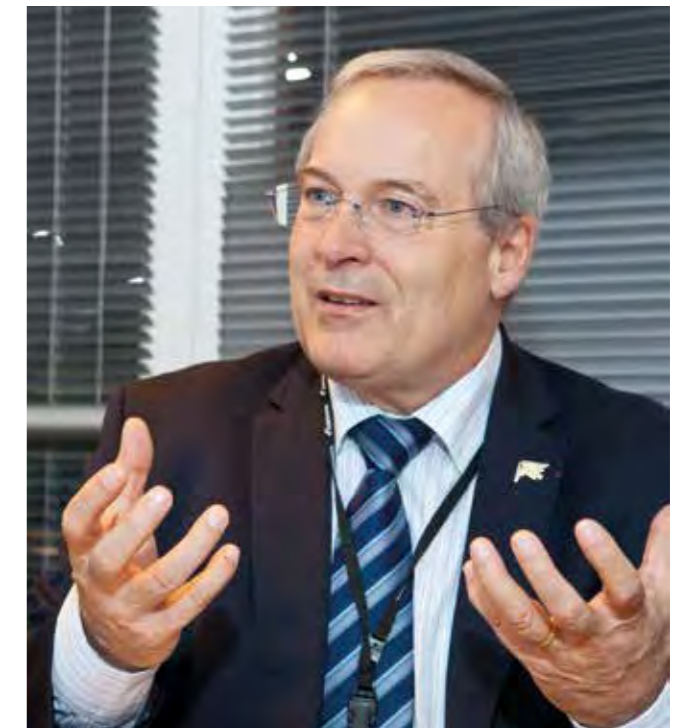
In the area of Governance and Conduct, we continued our focused drive to strengthen the CGG Anti-Corruption Program. We made our processes even more robust and we launched a new worldwide training and communication effort to raise even further awareness about corruption and our standards and procedures in this area. Finally, we had our program externally reviewed and certified.

The health and safety of our employees and our contractors and the safeguarding of the environment are central issues to CGG and to our industry. For the mid-term, we have set ambitious objectives to be the industry benchmark in these areas. In 2013, I launched our Care+Protect program designed to propel our operations to a new level of excellence in Health, Safety and Environment. This three-year program is supported by the full engagement of all management and staff to achieve this collective goal.

For the past seven years, we have supported, implemented and promoted the Principles of the United Nations Global Compact. I am proud to renew our commitment in 2013. We know that what we and our partners do today will have an impact far into the future. We act to meet the needs of society today, while respecting the needs of future generations, leaving only a fond memory wherever we work.

**"WE CARRY OUT ACTIVITIES AROUND THE WORLD WHICH BRING ENORMOUS OPPORTUNITIES FOR POSITIVE ACTION AND PROGRESS"**

Jean-Georges Malcor  
Chief Executive Officer



# PROFILE

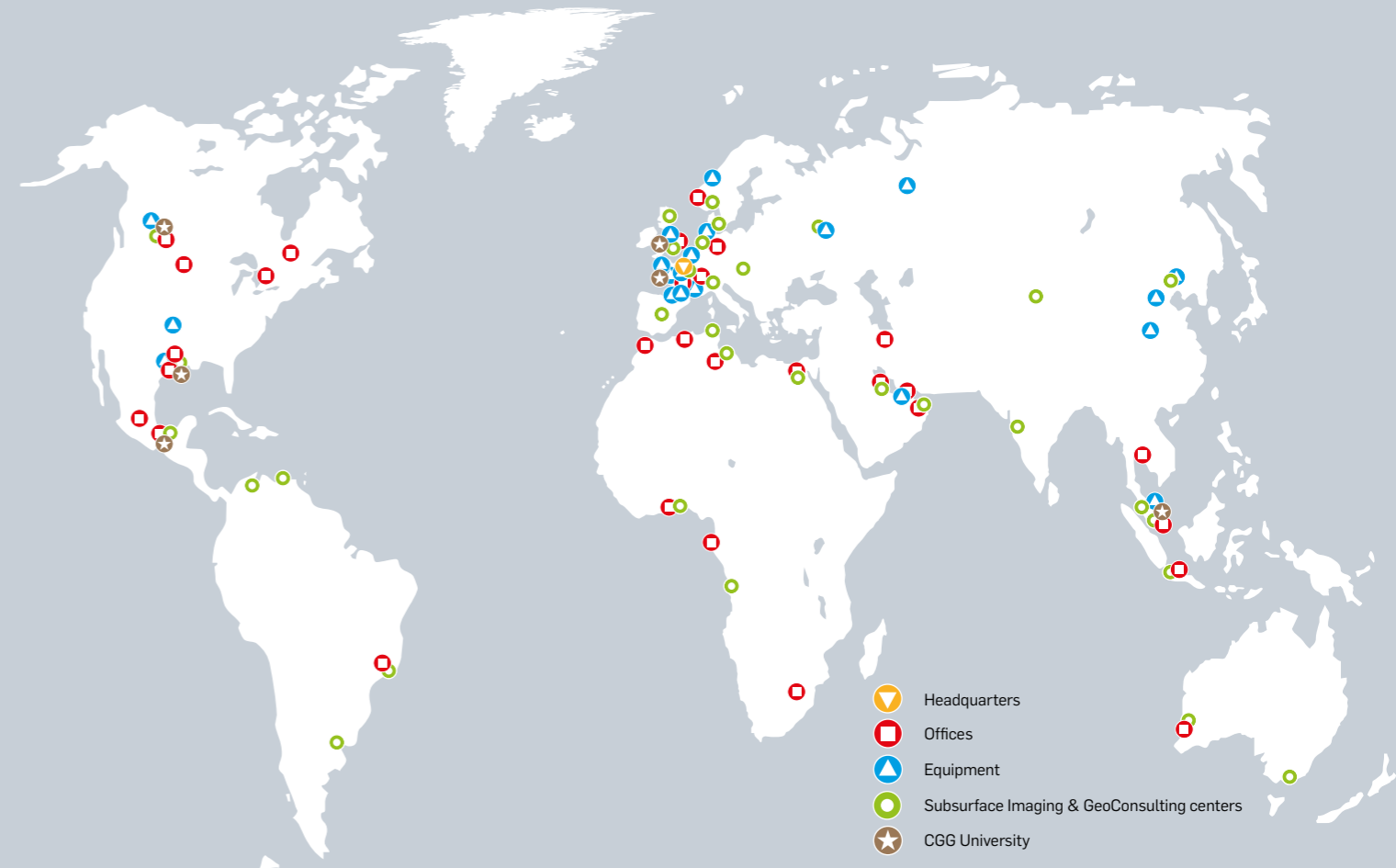
CGG is a leader in cutting-edge geoscience. We have achieved leadership through a strong focus on innovation and a sustained commitment to developing our markets both locally and globally.

We bring our clients a unique range of technologies, services and equipment designed to acquire extremely precise data and images of the Earth's subsurface. We also provide state-of-the-art software and services for analyzing that data and developing a deeper understanding of the subsurface for exploration, production and optimization of natural resources including potential and existing oil and gas reservoirs.

Our people share a passion for geoscience and work together safely and with integrity to deliver the best sustainable solutions to our clients' energy challenges.

## CGG WORLDWIDE

CGG is a truly global group with strong local roots. With over 70 locations worldwide, CGG works closely with its clients to bring them the industry's most innovative technologies and the highest level of expertise to meet their business needs.



**Over 80-year**  
tradition of pioneering

**9,700 staff**  
working in over 70 locations

**650 employees**  
dedicated to R&D

**40**  
Subsurface Imaging  
centers

**20**  
GeoConsulting  
centers

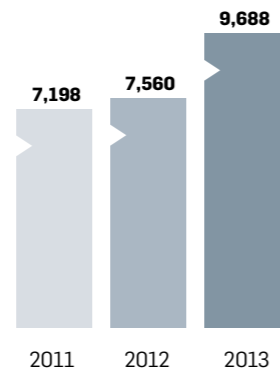
# KEY FIGURES

In 2013, the Group's total revenue was \$3.766 billion, up 10% on 2012. Group revenue breaks down to 22.2% from the Equipment Division, 43.4% from the Acquisition Division and 34.4% from the GGR Division.

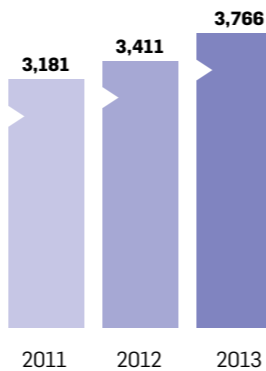
In a contrasting year with deteriorating market conditions in the second semester, CGG businesses proved resilient. CGG's successful integration of Fugro's Geoscience activities reinforces the Group in a profitable and high-growth market segment.

Cash flow from operations: \$908m

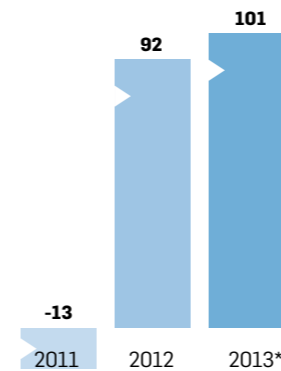
NUMBER OF EMPLOYEES



CONSOLIDATED OPERATING REVENUE (million dollars)

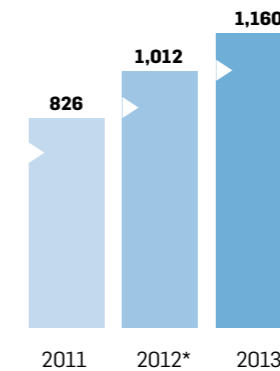


NET INCOME (million dollars)



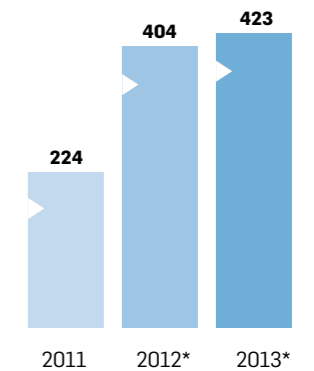
\* Before impairment & write-off.

EBITDAS (million dollars)



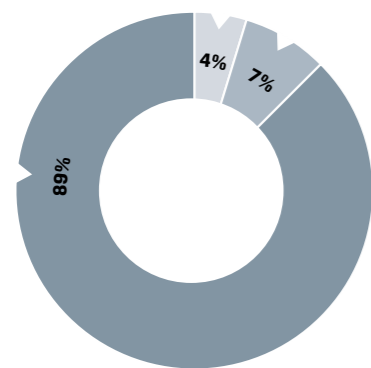
\* Before NRFI (Non Recurring Items linked to Fugro).

EBIT (million dollars)



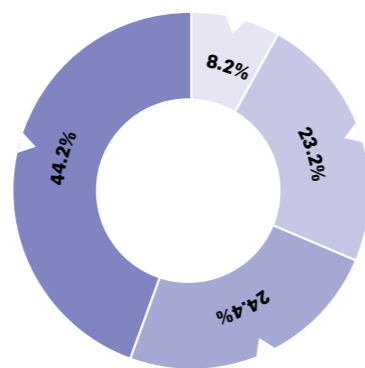
\* Before NRFI & impairment & write-off.

SHAREHOLDER STRUCTURE



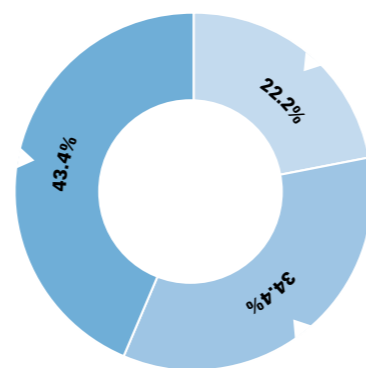
- 4% IFP Energies Nouvelles
- 7% Banque Publique d'Investissement
- 89% Floating USA/Europe

OPERATING REVENUE BY REGION



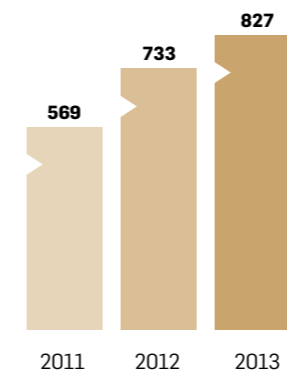
- 8.2% Latin America
- 23.2% North America
- 24.4% Asia Pacific
- 44.2% Europe, Africa & Middle East

REVENUE BY DIVISION



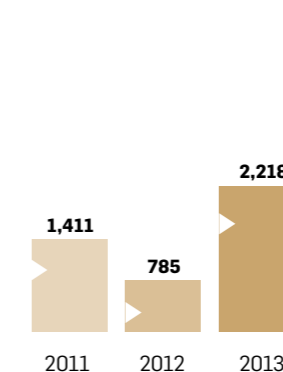
- 22.2% Equipment
- 34.4% GGR
- 43.4% Acquisition

CAPITAL EXPENDITURE (million dollars)

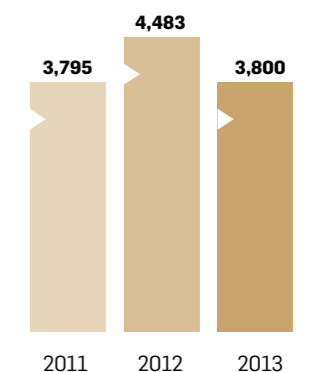


NET DEBT TO EQUITY RATIO: 58% IN 2013

Net debt (million dollars)



Equity (million dollars)



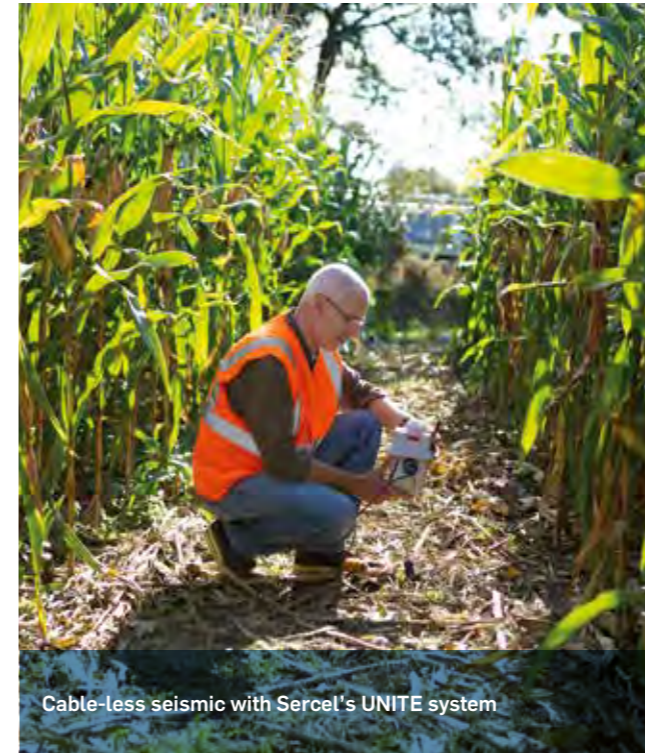
# ACTIVITIES

On land or at sea, in remote regions and extreme climates or in urban areas, CGG serves its clients even in their most complex and ambitious projects. By providing them with the industry's most innovative technologies and the highest level of expertise available, we help our clients meet the energy and environmental challenges of today and tomorrow.

CGG's geoscience solutions enable our clients to push back the limits of exploration to new frontiers and increase the production of existing fields while meeting the most demanding safety and environmental standards.

With the successful integration of Fugro's Geoscience activities in 2013, we are now a geoscience group with a leading position in geophysics, geology and applied geoscience.

We have launched the next phase of our strategic roadmap to transform CGG by 2016 into a fully integrated, rebalanced and more resilient geoscience group in order to improve profitability and cash generation.



Cable-less seismic with Sercel's UNITE system



Safety discussion with client on the gun deck

## Forerunner and Leader in Geoscience

In all environments, we acquire, process and interpret surveys that provide our clients with a comprehensive understanding of subsurface targets and their geological settings. We deliver our unique expertise in geoscience technology and project management through our three complementary business Divisions: Equipment, Acquisition and GGR (Geology, Geophysics & Reservoir).

### EQUIPMENT Sercel delivers innovative equipment for every seismic application

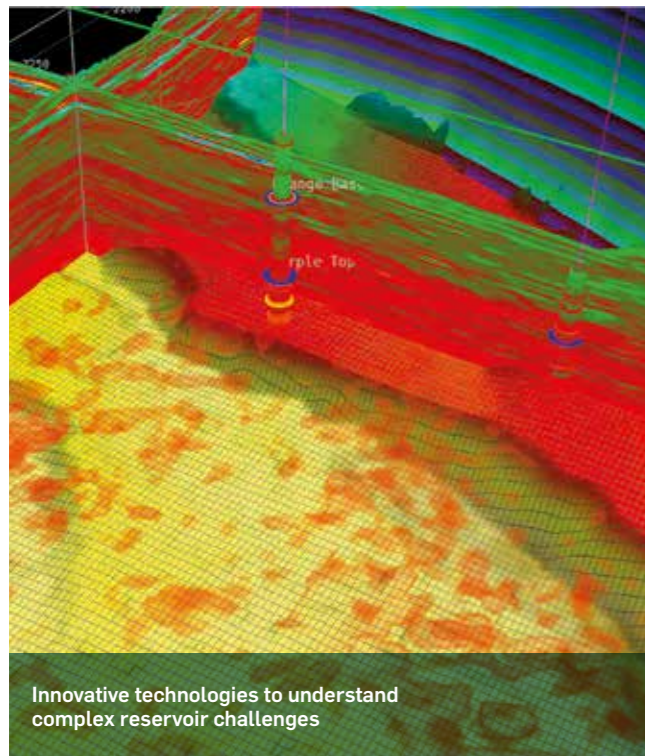
Our Equipment Division, Sercel, designs, manufactures and markets a comprehensive range of innovative and reliable seismic systems and reservoir monitoring instruments. Oilfield service companies and geophysical contractors from across the globe use our equipment for seismic exploration and reservoir monitoring in onshore, offshore (streamers and ocean bottom equipment), transition zone and downhole environments.

### ACQUISITION In every environment

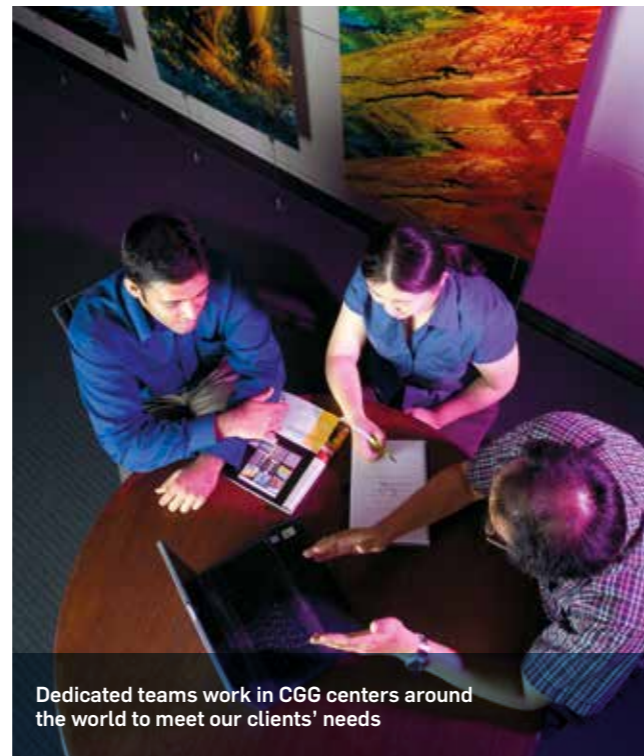
#### Marine

From shallow to deep water we help our clients image the most complex targets, delineate shallow hazards and identify subtle 4D effects in mature fields. Ours is one of the largest high-end fleets, acquiring broadband, wide-azimuth, ultra-long offset, full-azimuth and 4D data. Single or multiple vessels deploy state-of-the-art BroadSeis™ or StagSeis™ acquisition technology. Our gravity and magnetic services provide a complementary perspective on seismic data.

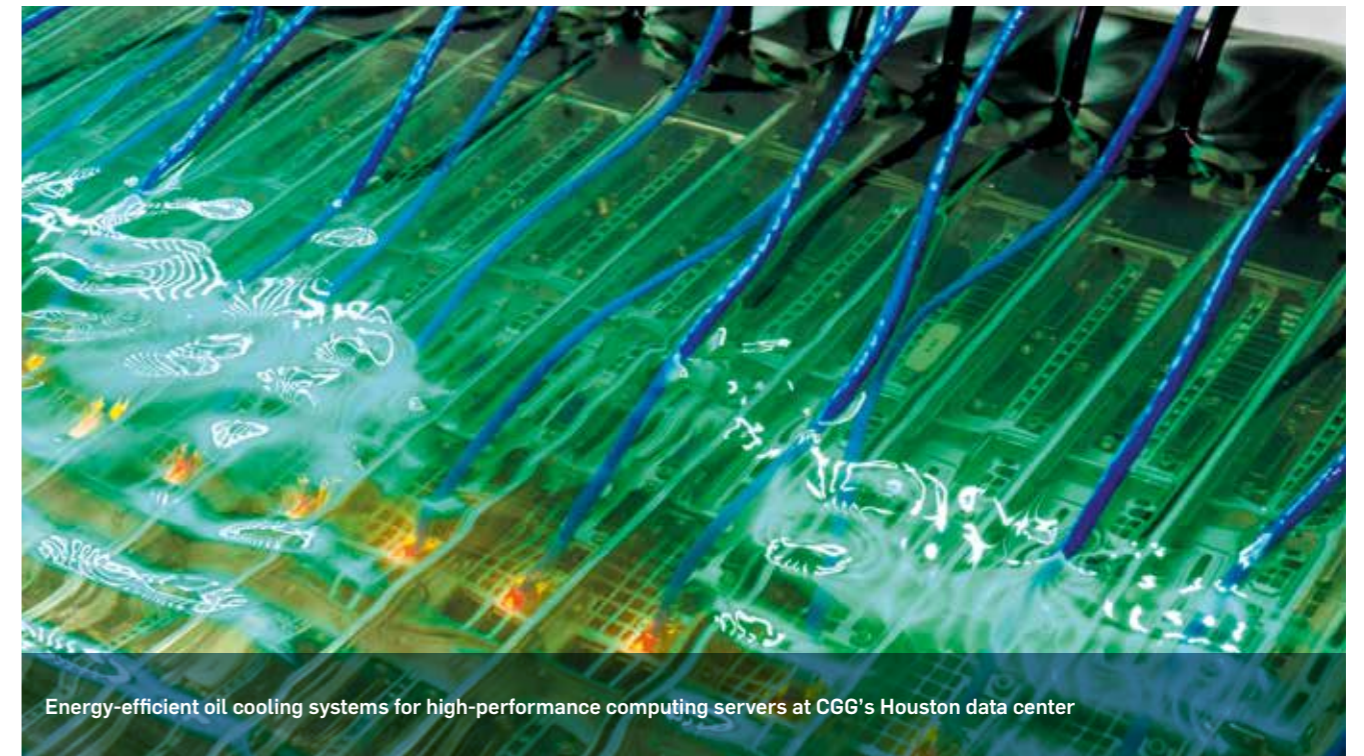
On the seabed we are the industry leader in ocean bottom node and cable surveys through our joint venture with Fugro, Seabed GeoSolutions, offering our clients a clearer picture of hydrocarbon



Innovative technologies to understand complex reservoir challenges



Dedicated teams work in CGG centers around the world to meet our clients' needs



Energy-efficient oil cooling systems for high-performance computing servers at CGG's Houston data center

prospects, reservoir characteristics and potential geohazards, from tidal shallows to the abyssal plain.

**Land**

Our surveys acquire seismic, gravity and magnetic data as well as properties such as target-based near-surface resistivity. Projects span from massive Middle East operations in mature fields to new Arctic frontiers and small-scale environmental and hydrogeological site investigations. Reservoir monitoring services provide real-time input for enhanced production and risk mitigation.

**Airborne**

Our fleet of specialized aircraft supplies critical information for energy exploration, engineering and mining. We map deep structures that constrain sedimentary basins and investigate near-surface, groundwater and shallow drilling hazards. We measure the Earth's density, electromagnetic and radiometric properties.

**GGR  
Cross-disciplinary expertise  
from exploration to asset optimization**

GGR brings together the skills and expertise of some of the most trusted brands in the industry. Our innovative thinking, region-specific expertise and game-changing technology allow us to deliver high-impact solutions across the E&P value chain.

**Subsurface Imaging**

Our industry-leading solutions provide a much clearer understanding of the reservoir and minimize risks. We turn geophysical data into actionable information. "Technology, reliability, safe pair of hands" are the guiding principles of our Subsurface Imaging staff to produce extremely precise images of the Earth's subsurface even in areas of complex overburdens, using our industry-leading *geovation* software. In over 40 centers worldwide we advise clients on how to address their latest imaging challenges.

**GeoSoftware**

Our geoscientists develop sophisticated algorithms and intuitive interfaces to reveal key information from geophysical data. Hampson-Russell, Jason and TerraSpark are globally respected brands providing a comprehensive set of software tools and support for multidisciplinary teamwork including well log analysis, seismic reservoir characterization, petrophysics, structural and seismic interpretation, and reservoir modeling.

**GeoConsulting**

Our consulting services provide comprehensive reservoir knowledge that helps our clients better understand their reservoirs and maximize ultimate recovery. Our sound know-how in seismic reservoir characterization, and the consulting expertise of Robertson, from global tectonics to samples analysis, geochemistry, petroleum engineering and economics, are combined to offer a truly integrated interpretation of the reservoir that maximizes production and reduces risks.

In addition, NPA Satellite Mapping interprets and distributes satellite imagery to provide mapping solutions, including a unique global hydrocarbon seeps database, a valuable complement to our multi-client data library.

**Multi-Client & New Ventures**

We offer our clients the industry's most recent and technologically advanced seismic, gravity, magnetic and well data in the world's key locations to evaluate the acreage potential worldwide. Regional and global geologic studies include reservoir analogues, predictive models, dynamic plate tectonics and a database of fairway and petroleum systems in more than 500 basins.

**Data Management**

We transform data into knowledge by providing validated, interpretation-ready data, consultancy and training. Our services include physical asset management and the design, implementation and operation of National Data Repositories.

**Technology & innovation powered by people**

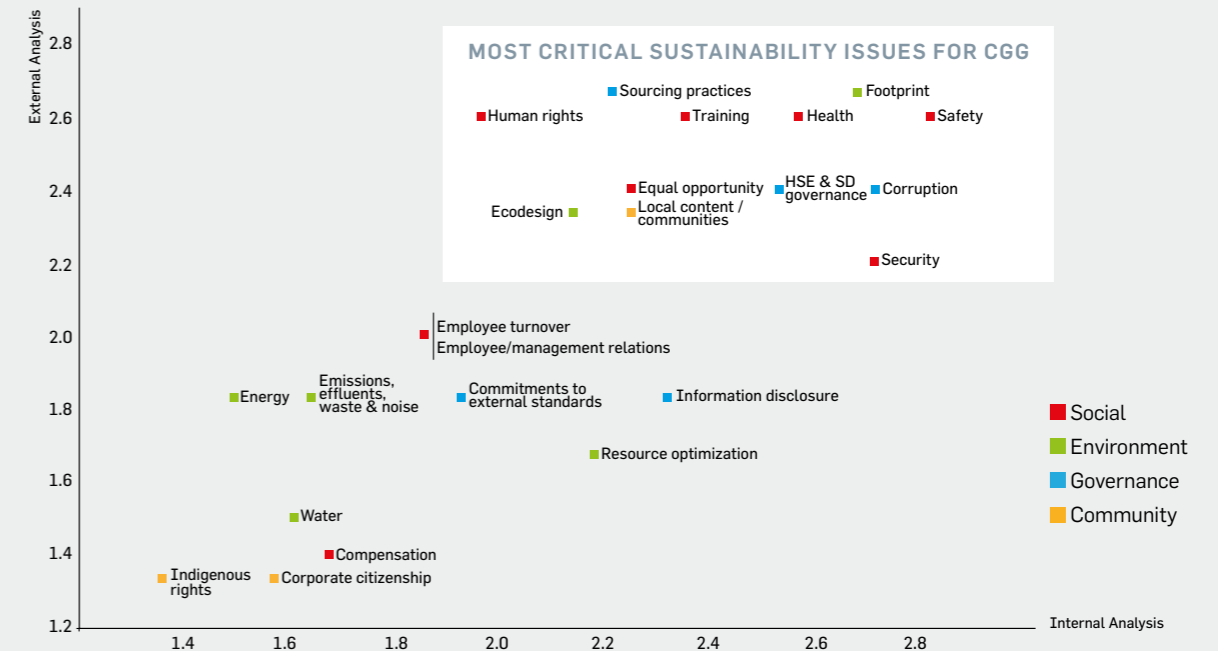
At CGG, we fuel the potential of our teams with an impressive commitment to R&D. We provide world-class geophysical training and encourage performance and innovation via our CGG University centers in Calgary, Paris, London, Houston, Singapore and Villahermosa.

# SUSTAINABLE DEVELOPMENT STRATEGY

For CGG, sustainability means the ability to successfully deliver geoscience services and products to the market in the long term while preserving the environment and caring for our employees and the communities in which we have the privilege to operate.

We help our clients gain access to today's energy resources while preserving the ability of future generations to meet their energy needs.

## CGG SUSTAINABILITY MATERIALITY ANALYSIS



## Engaging Stakeholders to Set our Strategy

CGG ranked its sustainable development issues in a materiality analysis based on an extensive consultation involving management, a panel of employees from different divisions and external stakeholders (clients, investors, NGOs, and the International Association of Geophysical Contractors). This analysis highlighted the themes most pertinent to CGG. In 2013, we reassessed the materiality study and the resulting ranking following the acquisition of Fugro Geoscience. The new entrants confirmed the study's primary themes and no new issues were added. The above Materiality Analysis Chart illustrates the sustainability themes considered most important to our business.

As we examined the results of our materiality study, several themes stood out. In 2013, we focused our efforts on those themes with targeted programs. The need to protect employees and to minimize any negative impact on communities and the environment stands out in our materiality analysis. In Health, Safety and Environment (HSE) and in Sustainable Development (SD), we launched the three-year Care+Protect program designed to propel our operations to a new level of performance.

Although our HSE program is mature, the study encouraged us to set ambitious goals and take new initiatives to continue improving our HSE performance. To succeed, we knew that we would need to reach deep into the organization, give our initiatives high visibility and ensure that all of our operations managers in every country in which we operate were on board and engaged. The Care+Protect program does just that.

We also set out to strengthen and better communicate our anti-corruption efforts throughout the company. We expand on the Care+Protect program below and on our anti-corruption initiatives later in the report, under Governance.



Safety toolbox meeting on a land crew in Thailand

### The Care+Protect program

The Care+Protect program is a three-year initiative running from 2013 to 2015. It focuses on our HSE and SD culture, proactive engagement and intervention, and seeks to strengthen specific cornerstones of our HSE system:

- Leadership and visibility
- Risk management
- Subcontractor management
- Competence and training

### Communication and engagement

The first to engage was our CEO; he championed the program, set program objectives and launched a series of innovative Care+Protect discussion sessions in early 2013. Sessions began with his direct staff and their direct reports and then cascaded down the hierarchy worldwide, two levels at a time. At the end of each session, participants were asked to sign a letter of commitment, pledging to support the Care+Protect program and its objectives. The chain of command dissemination through direct sessions ensured that our message was communicated clearly and consistently across hierarchical levels and that we reached all of our operations managers.

### Integration

The Fugro Geoscience Division acquisition in early 2013 presented CGG with specific HSE challenges, as we integrated 2,500 people into the organization, increasing the size of our employee base by over 30%. The Care+Protect program launch coincided with the acquisition, providing us with an excellent opportunity to bring together our existing CGG teams with new employees from Fugro Geoscience and engage them around a common objective: improving HSE and SD performance.

CGG's Care+Protect program is now solidly in place and has started bringing home the desired results.

## Care+Protect and Integration of the Activities of Fugro Geoscience



Greg Paleolog, with Mark Reeves, Chief Pilot of our South African Airborne business



**Greg Paleolog,  
Senior Vice President, Airborne**

“The Care+Protect program came at a perfect time for Airborne, reinforcing two of our key priorities for 2013: the need to integrate successfully into CGG and the desire to elevate our HSE culture and performance. Care+Protect was very valuable in moving Airborne forward on both of these priorities.”



**Mark Weber,  
Senior Vice President, GeoConsulting**

“When I joined CGG as part of the Fugro Geoscience acquisition, I was eager to learn how serious, or not, CGG was about Health and Safety. Would it just be a generic written policy or would it be a well engrained, ‘walk the talk’, strong Health and Safety culture? When the CEO personally delivered the Care+Protect initiative during a one-hour interactive session to my colleagues and me, it became totally clear that the well-being of our staff and the many people we work with around the world is CGG’s top priority and that this is not just a generic policy but rather a real part of the CGG DNA.”



# GOVERNANCE AND CONDUCT

"The CGG Group was built on a foundation of values and ethics. The Group has made a commitment to its clients, its shareholders, its employees and its partners to comply with the laws and regulations of the territories where it operates and to respect the principles of its Business Code of Conduct."

**Robert Brunck,**  
Chairman of the Board



## Applying the Principles of Good Governance

Good governance is one of the pillars of sustainable development at CGG. A solid governance structure and clear governance practices ensure that CGG has strong strategic focus, manages its risks effectively, complies with laws and regulations, is transparent in its external reporting and develops constructive relationships with its stakeholders. Here is a brief overview of the company's governance structure. CGG is listed on both the Paris and New York stock exchanges and accordingly follows the recommendations of the AFEP-MEDEF Code and the Sarbanes-Oxley Act. Since 2010, CGG has dissociated the functions of CEO and Chairman.

The Board of Directors' Internal Rules and Regulations define the composition, duties and operating procedures of the Committees with the exception of the Audit Committee and the Appointment & Remuneration Committee that have each had their own operating charter since March 8, 2005 and July 30, 2008 respectively.

The Board of Directors organizes an annual evaluation of its activities and those of its Committees. This is a self-evaluation, supplemented every third year by a more in-depth assessment, including individual interviews, with an outside consultant. The results of the self-evaluations are analyzed once a year and reported on by the external consultant. They result in action plans that are monitored annually, in particular by the Appointment & Remuneration Committee.

## BOARD OF DIRECTORS

The Board of Directors is comprised of twelve members, of which nine are independent; seven are French, three are American, one is Norwegian and one is Canadian. The Board of Directors relies on the work of specialized Committees to oversee the company's good conduct. The Committees oversee Group activities in their area of competency, guarantee that high-level risks are identified and managed, and maintain a close collaboration with General Management.

### ORGANIZATION

#### ▶ APPOINTMENT & REMUNERATION COMMITTEE

- Prepares and recommends senior executive compensation and benefits and company equity-based plans for Board approval
- Oversees appointments to the Board and to key executive management positions

#### ▶ AUDIT COMMITTEE

- Oversees the effectiveness of the company's Internal Control and Risk Management
- Reviews the organization, operation and findings of internal audits
- Oversees external audits and their findings
- Oversees the Group's plans, budgets and financial operations

#### ▶ HSE & SUSTAINABLE DEVELOPMENT COMMITTEE

- Oversees and informs the Board on the Group's sustainable development and HSE programs
- Oversees and informs the Board on sustainable development and HSE high-level risks

#### ▶ STRATEGIC COMMITTEE

- Assists the Board in setting strategic goals and overseeing their implementation

#### ▶ TECHNOLOGY COMMITTEE

- Assists the Board on matters concerning the Group's technology development strategy
- Oversees technology risks including competitor offers and intellectual property



From left to right, top to bottom :

**Olivier APPERT** (b)(c)  
French

**Rémi DORVAL** (a)(c)(d)  
Independent member – French

**Hilde MYRBERG** (c)(d)  
Independent member – Norwegian

**Loren CARROLL** (a)  
Independent member – American

**Agnès LEMARCHAND** (a)(c)(e)  
Independent member – French

**Daniel VALOT** (a)(b)(e)  
French

**Robert SEMMENS** (b)(c)  
American

**Gilberte LOMBARD** (a)  
Independent member – French

**Jean-Georges MALCOR**  
Chief Executive Officer – French/Australian

**Robert BRUNCK** (b)(d)  
Chairman of the Board – French

**Kathleen SENDALL** (d)(e)  
Independent member – Canadian

**Terence YOUNG** (d)(e)  
Independent member – American

- (a) Member of the Audit Committee
- (b) Member of the Strategic Committee
- (c) Member of the Appointment & Remuneration Committee
- (d) Member of the Technology Committee
- (e) Member of the HSE & Sustainable Development Committee

## EXECUTIVE LEADERSHIP

CGG is under the management responsibility of Jean-Georges Malcor, Chief Executive Officer, to whom the Board has given broad management authority. He is seconded by two Corporate Officers, Stéphane-Paul Frydman and Pascal Rouiller. As CEO, Jean-Georges Malcor manages the Group with support from three management Committees, the C COM, the E COM and the M COM, whose functions are described below.

### CORPORATE COMMITTEE (C COM)

C COM is chaired by the CEO. It is a decision-making body bringing together the CEO, the CFO and the three Division heads, that meets monthly to review the general conduct of business. Its members interface regularly with the Board and the market and participate in the Group's financial and business roadshows.

### EXECUTIVE COMMITTEE (E COM)

E COM is formed by the C COM and the Function heads. It meets monthly and acts as a support structure for the C COM. Its principal function is to serve as the Group's platform for discussion and proposals between Divisions and Functions. It also serves as the validating body for all projects and decisions with cross-division or cross-function impact. More specifically it:

- Monitors the implementation of C COM executive decisions
- Ensures consistency for group-wide initiatives across the three Divisions
- Monitors the management of support functions and shared services

### MANAGEMENT COMMITTEE (M COM)

M COM is made up of the E COM and the heads of each Department and Business Line. It meets twice quarterly to review and discuss Group performance, business and budget information and specific topics of interest to the Group as required. One of the two quarterly meetings is scheduled at the same time as the quarterly business review in order to prepare external financial communications.

#### ► DIVISIONS

- CGG is organized around three Divisions - Equipment, Acquisition and GGR – covering the full range of geoscience capabilities
- The Divisions supervise the activities of nine Business Lines

#### ► BUSINESS LINES

- Manage operations in their respective areas of activity
- Develop markets and technologies in their areas

#### ► FUNCTIONS

- Provide functional support to operations
- Develop policy and guidance in functional areas
- Assure the overall coherence of Group activities

#### ► DEPARTMENTS

- Provide support to operations and General Management in Internal Audit, Risk Management, HSE, Sustainable Development, Strategy, Investor Relations and Communication

#### ► COMMERCIAL COMMITTEE

- Reviews the key elements of the backlog and monitors the commercial plans
- Arbitrates the pricing & margin distribution strategy, when necessary, between Business Lines and between Contract or Multi-Client activities

#### ► FINANCE COMMITTEE

- Reviews on a monthly basis the financial positions of the Company with the C COM and Division Controllers

#### ► DISCLOSURE COMMITTEE

- Reviews significant information and determines what is to be disclosed to financial market regulators or to financial markets

#### ► ETHICS COMMITTEE

- Oversees the dissemination of our Business Code of Conduct and related training
- Reviews and makes recommendations concerning ethical issues and situations
- Maintains an 'ethics alert' hotline

#### ► SUSTAINABLE DEVELOPMENT COMMITTEE

- Pilots our sustainable development program
- Reports on progress in sustainable development to General Management and the Board's HSE & SD Committee



**Jean-Georges Malcor**  
Chief Executive Officer

"Despite challenging market conditions, our business performance for 2013 was satisfactory. We are rolling out the next phase of our strategic development that should turn CGG into a fully integrated and totally balanced geoscience group by 2016."



**Stéphane-Paul Frydman**  
Corporate Officer,  
SEVP, Finance, and CFO

"Under tighter market conditions, CGG is working to rebalance its activities and reduce its financial volatility."



**Benoît Ribadeau-Dumas**  
SEVP, Acquisition Division

"Tough market conditions took a toll on us in the second semester 2013. We launched a program to downsize our fleet and restructure our onshore and airborne activities. By rightsizing our organization and developing new business models, we will return our acquisition business to sustained profitability."



**Pascal Rouiller**  
Corporate Officer, SEVP, Equipment Division, and CEO, Sercel

"Once again this year, the Equipment Division managed to deliver high profitability. Innovation and technology play a key role in shaping our future."



**Sophie Zurquiyah**  
SEVP, Geology, Geophysics & Reservoir (GGR) Division

"Our geoscience expertise and technology are unique. They enable our clients to develop a better understanding of subsurface complexities and reduce the economic and environmental risks associated with exploration and production. We must continue to invest in our people and technology to further develop and strengthen the GGR Division."

## Ethics and Compliance

CGG defines its ethical standards, core values and commitments in its Group Values, Code of Ethics, Business Code of Conduct and in the policies that guide their implementation. CGG's Ethics Committee supports and oversees implementation of the Business Code of Conduct. To further encourage compliance, CGG created an independent Ethics Alert system for reporting irregularities to or violations of the Business Code of Conduct. The Ethics Alert hotline, managed by an independent third party, is open to employees 24 hours a day in all countries where we operate. A robust Anti-Corruption Program frames our international compliance efforts.

### Certification of CGG's Anti-Corruption Program

CGG's sustainable development materiality study underlined the significant risk of corruption inherent to our sector of activity. Over the last two years, CGG has carried out a campaign to strengthen anti-corruption efforts. We examined our processes, such as the due diligence procedures for intermediaries and suppliers, and we made anti-corruption processes and procedures more robust. To support our Program, we launched a worldwide anti-corruption communication and training program to reach out to CGG managers and employees across all of our activities.

In 2013, to obtain formal recognition of the significant progress made in strengthening CGG's Anti-Corruption Program, to benchmark our Program and to identify areas for further improvement, CGG had its Anti-Corruption Program reviewed by ADIT and Mazars. The Mazars-ADIT Anti-Corruption Certification framework is approved and recognized by international independent experts and authorities and by the French Central Corruption Prevention Department (SCPC), an inter-ministerial department attached to the French Ministry of Justice.

The external, independent review evaluated the adequacy of the CGG Anti-Corruption Program against the benchmark Mazars-ADIT Anti-Corruption Framework® and examined implementation of the CGG Program in 2013. The review encompassed key issues related to corruption prevention and examined compliance with applicable statutory and regulatory provisions (FCPA, French Law, UK Bribery Act). The review, based on industry best practices, focused on five key areas:

- **Control Environment:** corporate culture, tone at the top, ownership, awareness and commitment related to the anti-corruption effort.
- **Risk Management:** identifying and assessing corruption risks and communicating the results of those assessments.
- **Control Activities:** preventing and detecting potential corruption related to commercial consultants, gifts and hospitality, sponsorships and charity and to supplier relationships.
- **Monitoring:** regular monitoring of incidents and the functioning of corruption controls.
- **Communication and Training:** company-wide communication of policies and guidelines; training and awareness programs to support anti-corruption policies.

The Anti-Corruption Program review provided CGG with a solid benchmark for its Program; specific areas of organization, procedure and documentation were identified to further strengthen the Program. In a subsequent review, the scope will be enlarged to include the Fugro Geoscience entities acquired in 2013, not yet included in the review.

In May 2014, CGG received the sought-after assurance report, "the Anti-Corruption Certificate", in which no major discrepancies have been noted between the CGG Anti-Corruption Program and the Mazars-ADIT Anti-Corruption Framework®. The full External Assurance Report and the description of the CGG Anti-Corruption Program are available on CGG's website.

## Corruption: a Growing Concern for Investors

High-profile cases of corruption in the oil and gas industry during 2013 have raised the concerns of investors regarding corruption issues. We discussed corruption with two Socially Responsible Investment (SRI) organizations in order to hear their perspective on the issue.



**Léo Gaborit, Environment, Social and Governance (ESG) Analyst, Ethifinance**

"Corruption is an underground activity; it functions in the shadows where, by definition, both protagonists have a vested interest in maintaining secrecy. So there are really two challenges here: measuring the effectiveness of anti-corruption prevention policies in such a context and closing the gap between anti-corruption policies at the corporate level and implementation and compliance at the operational level. The highly competitive and globalized oil and gas services industry is particularly exposed to corruption risks."



**Léa Dunand Chatellet, Portfolio Manager Head of ESG Research, Sycomore Asset Management**

"As far as corruption goes, most companies demonstrate a willingness to operate in an exemplary manner. As anti-corruption legislation, like the UK Bribery Act 2010, progresses, investors are increasingly at risk. Stock markets are also more and more prone to penalizing corporate misconduct, particularly if the incriminating practices appear to be long-term and put a company's long-term growth at risk."

We analyze corruption issues primarily by monitoring controversies that we believe are the early warning signs of deeper, structural problems. Country and sectoral exposure alone justify higher corruption risk premiums. The only way we can differentiate between companies on corruption and misconduct issues is by assessing policies and acts that reflect top management's commitment to eliminating such practices.

Sycomore AM's ESG model assesses corruption risk taking into account country and sectoral exposure. We use corruption ratings provided by the NGO Transparency International to further refine our analysis.

We downgrade a company's ESG rating when the level of controversy reaches a critical threshold. We proceed on the assumption that if a company is accumulating scandals then it is clearly not implementing its anti-corruption policies and programs diligently and effectively.

We pay special attention to the quality of a company's policies, and specifically to the way they are being practically implemented. As an example, we positively value the good practices implemented by CGG such as the compensation ceiling for business providers/commercial agents, the declaration of all business providers/commercial agents, in addition to the Ethics Committee and to the high-level dedicated commercial agent committee overseeing policies and processes in this area."

# OUR PEOPLE

Since our company was founded in 1931, our people and their pioneering spirit have been the driving force behind our enduring success and the innovation and excellence we provide to our customers.



Line crew in Alaska



HSE professionals support the implementation of our HSE Management System worldwide

## Health, Safety and Security

CGG is committed to providing a healthy, safe and secure work environment for its employees and subcontractors. This commitment runs deep in our company culture. Our management of health, safety and security is based on fundamentals: a proactive approach in all of our operations and the relentless pursuit of improvement through learning from incidents and near-misses.

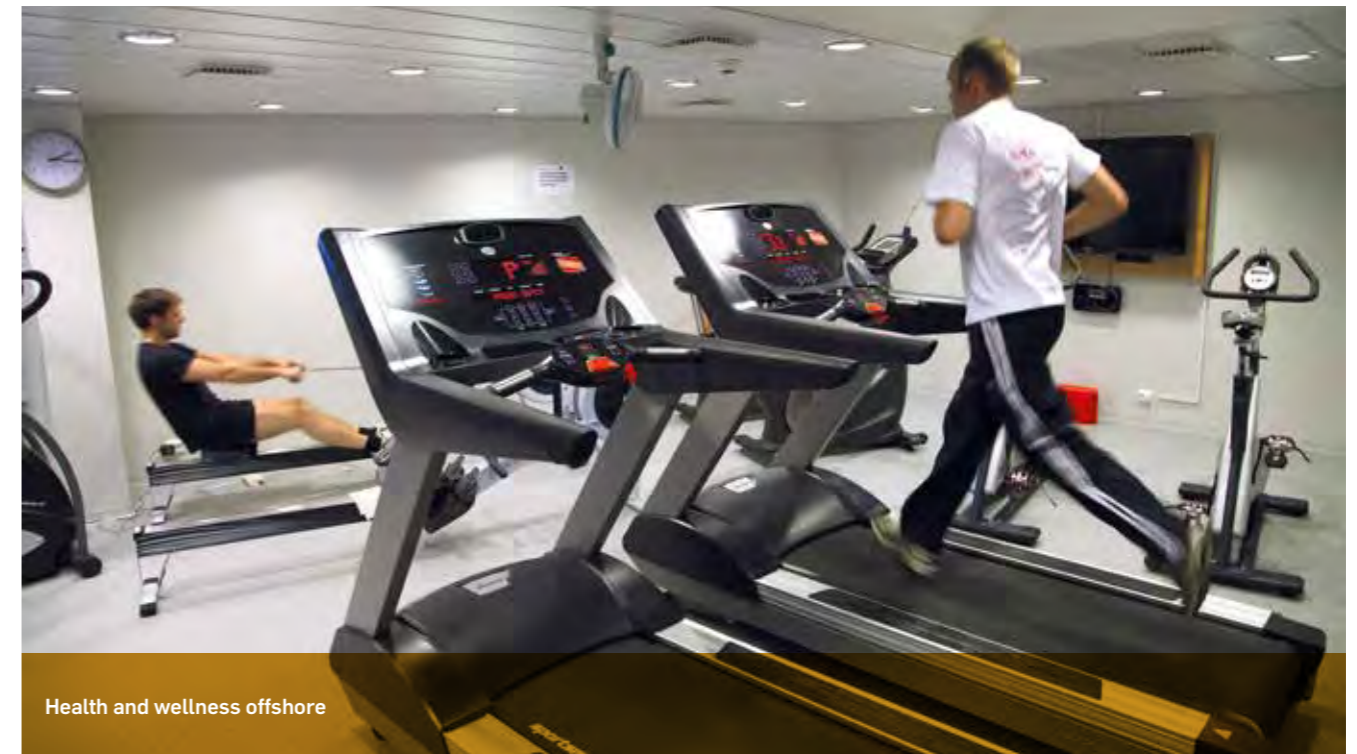
## Our Management System

CGG takes a structured approach to Health, Safety and Security, grounded in our HSE Management System (HSE MS). The HSE MS is implemented across all our activities; its broad scope includes the health, safety and security of our permanent employees, our seasonal employees and subcontractors under our management as well as the environmental impact of all of our projects and facilities. Our HSE MS conforms with the Oil & Gas Producers (OGP) *Guidelines for the Development and Application of Health, Safety and Environment Management Systems*, the *de facto* industry standard.

We also take a structured approach to identifying, assessing and controlling risks based on a common worldwide CGG methodology and risk matrix. Risk assessments are conducted for each project or each permanent facility; they integrate our historical incident databases as well as industry data from the International Association of Geophysical Contractors' (IAGC) shared incident database going back several decades.



Early-morning vehicle inspection



Health and wellness offshore

**Care+Protect**

As described in the sustainable development strategy section, the Care+Protect program rallies our efforts across the company toward HSE excellence and HSE leadership. The program is based on:

- A strong and proactive HSE culture that requires a willingness to stop and intervene from each and every individual
- Management leadership and visibility
- Improved risk management, with a focus on high risks: risk understood by all at project and facility levels; work environment risk awareness at individual level
- Subcontractor management: clear HSE expectations and supervision
- HSE behavior: reward and consequence; HSE performance in annual reviews
- Rigorous HSE training adapted to each level of responsibility

**Focus on high risks**

Focusing on high risks, risks that can result in fatalities or serious injuries, is one of the cornerstones of our HSE Management System and a key component of our Care+Protect program. Our focus is on learning from incidents and specific initiatives targeting high-risk activities.

A very low frequency of fatal or serious injuries offers few opportunities for learning from actual accidents; we have

therefore recognized the importance of analyzing potential impacts of incidents and near-misses. By examining potential impacts rather than focusing on actual impacts, we are able to take action on a much larger number of incidents in order to prevent future accidents. We relentlessly pursue the identification, investigation of and learning from High Potential Incidents (HPIs) including near-misses. HPIs receive high visibility in CGG, with regular review by executive management up to the CEO as well as an annual review by the Board’s HSE and SD Committee.

CGG’s “Rules to Live By” and “Things We All Must Know” behavioral programs, focusing on our major safety risks, are deployed across all activities and in a variety of languages. The rules are backed up by clear procedures, a consequence management program and visible signage for worksites. A monitoring program allows management to monitor violation of these key rules in their operations and to take immediate action.

To improve mitigation measures and strengthen employee risk-awareness, we target specific areas of identified high risk:

- **Road transport:** in 2013, we pursued our road transport program focusing on driver competency and behavior, reinforced by consequence management. Our road accident prevention system includes In Vehicle Monitoring Systems (IVMS), Speed Limiting Devices (SLDs), roll-over protection and permanent on-site defensive driver trainers on our crews.

- **Crane operations:** we continued the training programs for offshore crane and lifting operations. Pallets have been replaced by much safer lifting cages where possible.
- **Helicopter operations:** helicopters provide support for many of our land seismic projects and we also use helicopters for crew changes and medical evacuations for our vessels offshore. As in 2012, helicopter risks were a major area of focus in 2013. We further developed our standards and our contractual requirements, we continued to implement extensive field manager training on helicopter risks and we tightened our selection criteria for helicopter charter providers. We supported the risk mitigation effort with an extensive audit program to ensure that all helicopter operators with whom we work meet our OGP-based standards.

**Health and wellness**

Health and wellness are key components of the CGG HSE Management System. Through our programs we strive to manage health risks in ways that are adapted to the environments in which we work; these environments often include remote operations. In 2013 we continued our efforts to strengthen the two core components of our health management: prevention and appropriate medical care for our operations.

- **Prevention:** we rely on extensive prevention efforts to mitigate our health risks. These include programs to reduce exposure to vector-borne diseases in tropical areas, manage food chains

to prevent food poisoning on our crews and vessels, screen for drugs and alcohol at work and conduct vaccination programs adapted to the regions in which we work.

In 2013 a specific effort was made on the identification and substitution of hazardous and Carcinogenic, Mutagenic or Toxic to Reproduction (CMR) chemicals at our worksites. We conducted inspections at Land, Marine and manufacturing sites to identify hazardous chemicals and launched substitution programs. Another area of emphasis in 2013 was our fitness-for-work program. The program seeks to prevent occupational injuries and illnesses by promoting medical screening for health risk factors; this is particularly important for our remote operations.

- **Medical care:** another important part of the health component of our Management System is the medical care we provide for our field operations. Project health risk assessments allow us to determine the time required to transport someone to a medical facility and the level of medical facilities available in a given area. We can then adapt the on-site medical resources to our needs, from trained first aid providers for projects near well equipped and staffed hospitals to full medical clinics staffed by doctors on our vessels or remote land crews. We maintain and regularly test our medical evacuation and repatriation plans for all our projects. In 2013 we reviewed our medical care processes and updated our medical evacuation procedures. We also strengthened our relationship with key medical support subcontractors to ensure improved services.



Management leadership and visibility is core to Care+Protect

### Security

At any given time, a large number of CGG employees are travelling or are on assignment on a project overseas. In order to protect these employees, CGG has implemented a rigorous security system, based on prevention and deterrence. Our security staff rely on an extensive intelligence network to regularly update security exposure assessments for areas where our employees work or travel. Based on these assessments, appropriate prevention and deterrence measures are put in place.

CGG travelers receive security information as well as information on other travel risks, specific to their country of destination. In 2013 the scope of this system was widened to capture more remote CGG sites. In 2013, the integration of acquired Fugro Geoscience units into our security system was given high priority and was successfully carried out. We also conducted audits of the security measures taken on our North Africa land crews in accordance with CGG's security policy.

### Nurturing our HSE culture

CGG HSE training programs are delivered across the organization at all sites, at CGG University facilities and in the field. In 2013, we launched focused programs to strengthen risk management for working at heights and offshore crane operations. CGG provided over 140,000 hours of HSE training in 2013.

CGG continues to play a leadership role in the industry through the International Association of Geophysical Contractors' (IAGC) HSE Committee where it drives HSE improvements and shared learnings in the industry. CGG also participates in numerous Oil and Gas Producers (OGP) workgroups where it provides geoscience contractors' input to industry standards.

### Audit

A robust internal HSE & SD audit program verifies that our policies and management system are implemented across our activities. Audits are supplemented by operational cross-audits and inspections at project and facility level. In 2013, 74 HSE audits were conducted; they were supplemented by over 100,000 local inspections. In 2013, our HSE Management System was also audited by several key clients. The audits highlighted only a limited number of low-rated findings. All have been remedied.

## Innovative Medical Support in the Kara Sea

### CHALLENGE

Provide medical support for Marine seismic operations in a very remote and challenging Arctic environment.

### BACKGROUND

During the summer of 2013, the CGG vessel Geo Celtic conducted a seismic survey in the Arctic waters of the Kara Sea. The survey area was very remote and required four to five days of crew transport by boat; the location was out of reach for normal emergency helicopter support and at times had only limited satellite communication. The challenge for CGG was to provide medical support without being able to rely on onshore hospitals in the event of serious injury or illness.

### SOLUTION

CGG upgraded its medical capabilities to cope with most medical emergencies onboard. The first step was to upgrade the onboard medical facility with new equipment for trauma diagnosis. We installed an X-ray machine, an ultrasound unit and equipment for various mini-labs. We set up the first-ever civilian offshore walking blood bank onboard to enable fresh whole blood transfusions in life-threatening situations. The "walking blood bank" makes it possible for onboard medical staff to collect fresh whole blood from crew members in an emergency

situation. The blood bank was set up in compliance with stringent guidelines determined at project inception. Following informed consent, crew volunteers underwent blood screening for infectious diseases and ABO Rh matches. Transfusion procedures and protocols were established. Restricted access to PLYO, Lyophilized Plasma was made available to support transfusions. This innovative project received support from the University Hospital of Bergen, Norway and from the CTSA French Military Medical Services at Percy Hospital, Clamart, France.

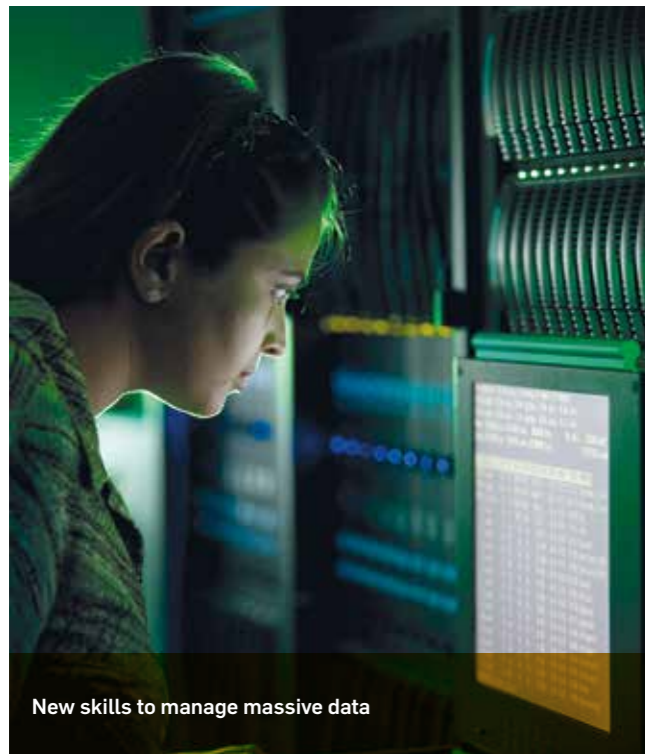
### RESULTS

CGG demonstrated that it is capable of developing new approaches to medical care in remote offshore environments and meeting the medical care challenge with innovative and practical solutions. An offshore, on-site, walking blood bank is an important breakthrough for emergency response and PLYO is an innovative human product, easy to activate and very convenient in remote locations.

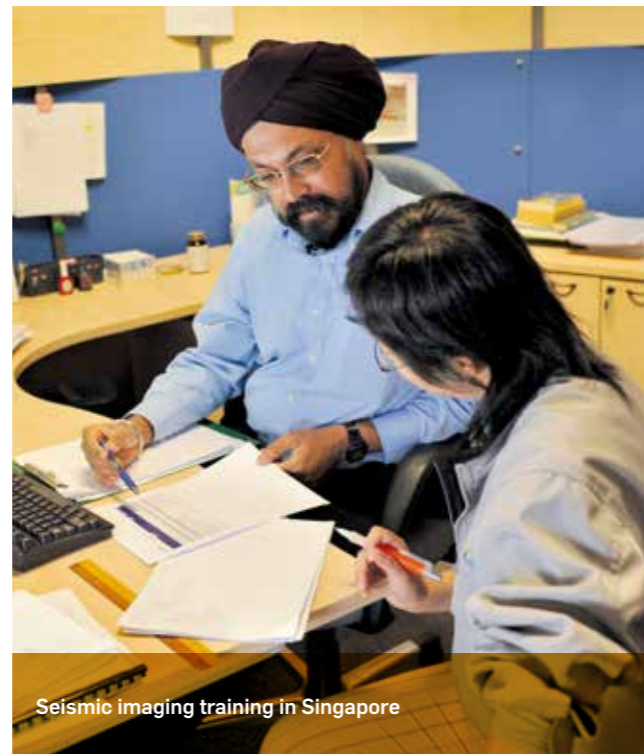
A very positive side benefit of the project was the team spirit created when the crew stepped up to give blood and help protect each other. Fortunately, no life-threatening emergencies required the use of the upgraded facilities or the walking blood bank during the Kara Sea project!



"Mini blood lab" for upgraded medical care in remote environments



New skills to manage massive data



Seismic imaging training in Singapore



Role-playing by a facilitator is part of an innovative CGG University "Onboarding Seminar" for new hires

## CGG: Powered by People

For over 80 years, CGG has grown, adapted and innovated because it has been powered by its people. The recruitment and development of our staff around the world is essential to the success of all of our business units.

### Year-round encouragement and support

CGG believes that guidance and encouragement are key elements for creating motivated and effective employees. We have created a suite of performance and review obligations that give structure and priority to the relationship between each employee and their manager.

Our Performance Management process fits within the calendar year and involves a cycle of assessment, planning and development that aims to develop each employee in a way that reflects their skill sets, their potential and the needs of CGG in answering the challenges of our customers.

### Optimizing new talent

As with all global companies, CGG has a history of acquisitions and integration. The purchase of Fugro Geoscience in 2013 increased the size of our workforce by over 30%. As on each occasion when we have been involved in such a major organizational change, we integrated incoming employees into our Performance Management system.

### Recruiting

#### Attracting and retaining talent

CGG's HR teams are at the forefront of our efforts to both attract new talent and ensure that the excellence we have stays and grows within the company.

Our recruiting capabilities are constantly upgraded to embrace new opportunities and appeal to the evolving expectations of our clients. We complement this with regular visits to key recruitment sites such as universities and industry conferences.

All new job openings are advertised in-house first and this exemplifies our belief in the importance of mobility within CGG. We support and encourage our employees to experience different geographical and business scopes and to develop their skills through exposure to a variety of CGG worlds. This builds understanding, teamwork and a depth of knowledge that brings increasing value as their careers evolve.

CGG recruits between 600 and 1,000 highly qualified professionals and young talents every year.

### Training for the future

#### CGG prioritizes training

This is a necessity in a high-end technology business with a global footprint across 70 different centers and a product and services offer reaching across the full E&P chain.

HR teams encourage and facilitate targeted training to optimize employee development. CGG University backs up these efforts.

CGG University has learning facilities in six centers and employs 27 full-time staff. Its extensive website details the

courses it provides, the lectures it sponsors, the e-learning modules it has developed and the full scope of other resources it offers.

#### Breadth of learning

The scope of learning in CGG is broad and its prioritization high. We recognize that, even in our technology-based world and with such a wealth of scientific minds at our disposal, the needs of a modern employee are greater than just equipping them to undertake the technical part of their job.

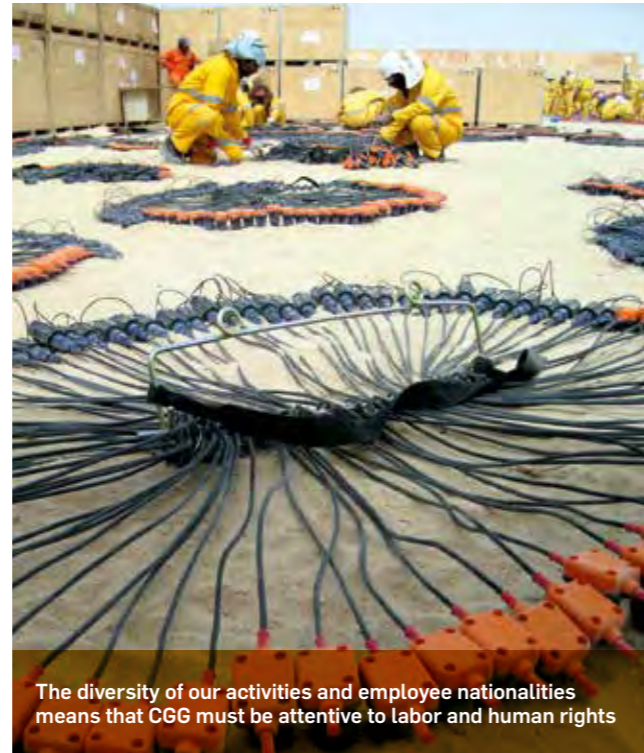
So called "soft skills" and training in areas of non-technical awareness are strongly encouraged. CGG University has created courses that build an understanding of such topics as emotional intelligence, impactful communication and cultural awareness. This not only empowers employees to better connect with clients, but also helps them to best take advantage of CGG's diversity.

More recently, CGG University has developed its e-learning offering and 2013 saw the successful launch of modules on Ethics, Harassment & Discrimination and Intellectual Property.





Learning for development at CGG University



The diversity of our activities and employee nationalities means that CGG must be attentive to labor and human rights

### Equal opportunity, respecting rights

#### Diversity

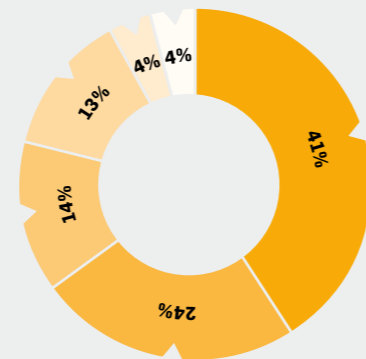
CGG's Human Resources policy is based on non-discrimination and equal opportunity; cultural diversity, openness and a supportive team ethic are essential drivers of our success and are embraced with rigor. We strongly support and look for ways to encourage the goal of a workforce that is defined purely by merit. In 2013, CGG was ranked 21<sup>st</sup> out of 120 SBF\* companies in the French Government index for the number of women with senior executive and non executive positions.

#### Respect for rights

CGG adheres to the principles and rules established by the International Labor Organization (ILO) and the United Nations Universal Declaration of Human Rights. Our Human Resources policy prohibits the employment of children under 16 years of age and we have established clear guidelines for the employment and management of those between 16 and 18.

\* SBF 120 is a French stock market index, including the 120 most actively traded stocks listed in Paris – including the CAC 40.

108 nationalities



#### Employees by region

- 41% Europe, Africa & Middle East
- 24% North America
- 14% Asia-Pacific
- 13% Marine seismic crews
- 4% Land seismic crews
- 4% Latin America

## Effective Recruitment of Graduates for Robertson – North Wales

### CHALLENGE

The ability to attract and effectively select young talents is crucial to our service-oriented and technology-intensive business.

### BACKGROUND

Ten years ago, in 2003, CGG Robertson's Llandudno office needed an innovative way to effectively select, train and onboard fresh graduates. It was critical to their business to attract young talent from good British universities to North Wales and assess their geology and geophysics skills, technical skills, "soft skills" and overall potential.

### SOLUTION

Robertson set up a three-week graduate workshop program where applicants are faced with intensive training, real case studies (from a real 1990 Robertson project that is now a producing oil field), field trips, presentations, teamwork and social gatherings. Twenty applicants are selected from hundreds of candidates from the best UK universities. The workshop is time-constrained and results-focused. Instructors maintain a steady pressure, challenging candidates with clearly defined objectives. Results can

only be achieved if the teams are hardworking and resilient; this is an ideal way to test trainees' willingness and dedication. Normal interview processes are stressful but the workshop framework provides an opportunity to observe how pressure impacts candidates' relationships with colleagues and their ability to produce timely and accurate work. Regular contact between trainees and instructors highlights behavioral issues that would not be revealed during a standard interview process. Particular emphasis is placed on the graduates' ability to settle into the Robertson "family" environment.

### RESULTS

With ten yearly workshops behind them, the Robertson staff have become very proficient at running the program. Chris Burgess, Managing Director, says: "Some of those we would have hired on day 1 at an interview have not been offered a job at the end of the workshop" and concludes, "I cannot think of a single employee recruited from our workshop program that I have regretted hiring – they are all rising stars and have contributed greatly to our company's success". In 2013, a record year, 19 applicants were offered positions, with 16 accepting.



Field trips as part of the recruitment process

# ENVIRONMENT

Caring for the environment is part of how CGG conducts its business. CGG's environmental policy establishes a mandate that requires us to prevent or reduce the Group's environmental footprint and to continually improve our environmental performance.



CGG employee on a short-term volunteer assignment monitoring invasive species



508XT: Sercel's latest ecodesign achievement

## Care+Protect the Environment

CGG's Care+Protect program retained two high-level environmental objectives:

- Implement methods to prevent, reduce or mitigate our footprint.
- Lead industry efforts to further investigate and, where necessary, mitigate the effect of our operations on marine life.

Environmental stewardship is embedded in the HSE Management System, with dedicated environmental specialists to support line management in their decision-making. Year after year, our Business Lines define specific targets, forming a string of meaningful actions that embody CGG's environmental ambitions.

## Minimizing our footprint

### Ecodesign by Sercel

Environmental considerations are most effective when taken into account early on in the product development process. That is why Sercel calculates potential environmental benefits beginning with the Product Development Charter stage. The ecodesign approach defines a product's composition, specifications and impact during the entire life cycle. Sercel's new state-of-the-art 508XT Land acquisition system is their most recent illustration of a successful ecodesign. With its low weight, need for reduced handling, and drastically reduced battery requirements (up to 100 times less than competing systems), the 508XT improves crew productivity and significantly reduces transportation needs as well as overall acquisition costs.



New support vessel purpose-built for seismic needs.  
© Bourbon



Personnel with disabilities taking care of recycling on a crew in Algeria



Extension of CGG's Houston office following the US Green Building Council LEED Silver certification

**Managing the energy footprint of marine acquisition**

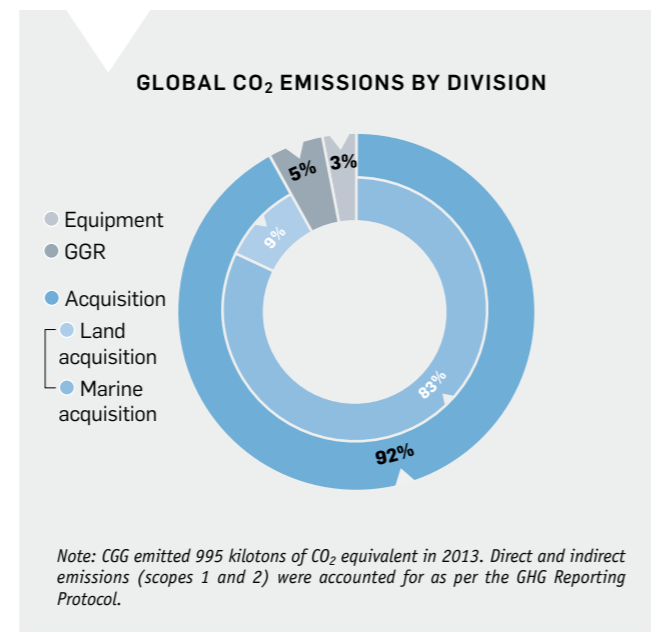
CGG's marine seismic activity increased in 2013; a logical repercussion of integrating four state-of-the-art seismic vessels from Fugro Geoteam. More than 80% of CGG's greenhouse gas emissions today stem from the fossil fuels used in marine seismic surveys. Be that as it may, CGG is making tangible progress in reducing the energy footprint of its marine acquisition activities.

Bringing a final touch to its fleet modernization plan, CGG welcomed three in a series of six new support vessels. The vessels were purpose-built to meet the specific needs of seismic acquisition, an industry first. This new generation of support vessels is equipped with hybrid propulsion for optimized fuel consumption. Diesel-electric propulsion is favored during escort while mechanical propulsion allows for maximum power when required during operations.

CGG's maritime joint ventures have designed Ship Energy Efficiency Management Plans that set qualitative and quantitative objectives. Energy management has also become an essential element of the relationship between CGG and its ship managers, with objectives and critical milestones defined at technical seminars between procurement, quality, HSE and maritime departments.

CGG has been measuring and monitoring the fuel intensity of its marine seismic surveys for several years. Monitoring takes into account the amount of linear seismic data acquired per

cubic meter of fuel consumed during production. As illustrated in the *Facts and Figures* section, CGG significantly improved its KPI in 2013 compared to 2011 and 2012 baselines. CGG's reduced fuel intensity is parallel to the increase in wide-azimuth surveys that yield both higher productivity and higher data quality for the client.



**Low-impact land seismic acquisition**

In Land acquisition, our most tangible footprint comes from clearing seismic lines and building helipads and drop zones. Minimum vegetation clearance is conducted sufficient to guarantee the safety of advance crews.

In the desert, we give special attention to the responsible sourcing and use of water. For example, pressure washers are only used in the case of compulsory mechanical vehicle maintenance. At all other times, drivers clean vehicles with brushes and cloths.

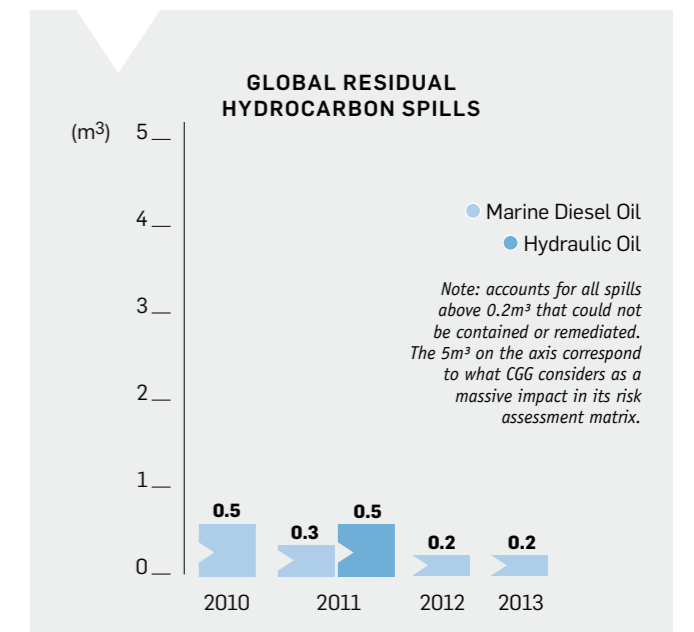
When a survey ends, a decommissioning report informs clients and authorities of the restoration of sites used for seismic activities and describes any potential residual footprint.

**GGR's environmental stewardship**

Most of GGR's activities resemble a typical office environment, with our highest potential for footprint minimization lying in reducing the electricity consumption of our data centers. In 2013, we continued to deploy innovative solutions such as evaporative and oil cooling systems to meet GGR's strong demand for computing power while limiting total energy usage.

Robertson and Data Management Services (DMS), which joined GGR following the Fugro Geoscience integration, have footprints that are slightly different from typical Subsurface Imaging activities because they also manage chemicals and therefore

generate hazardous waste. Both companies have had ISO14001 certified environmental management systems for many years, ensuring an independent assessment of their environmental performance.





Soft-starts are delayed if humpback whales are observed close to the energy source

### Addressing sound and marine life issues

#### CGG's standard practices on marine seismic surveys

Marine seismic acquisition has evolved as a response to a growing concern over the potential impact of man-made sound on marine life. We have implemented preventive and mitigation measures on marine surveys for over a decade. Onboard our vessels, teams of Marine Mammal Observers (MMO) and Passive Acoustic Monitoring (PAM) operators ensure compliance with applicable regulations and Environmental Impact Assessments (EIAs). Soft-starts are used as a standard mitigation measure to warn marine mammals and sea turtles of our presence before surveying begins, giving the animals time to leave the immediate vicinity of our operation prior to our vessels reaching full power. After a risk assessment, including the review of applicable regulations, MMOs monitor a 500-m to 3,000-m exclusion zone around the energy source. In areas not governed by specific regulations, CGG follows the IAGC recommended mitigation measures for cetaceans.

#### Industry partnerships

In 2013, CGG took over leadership of the Sound and Marine Life Committee within the International Association of Geophysical Contractors (IAGC). This peer group analyzes scientific and regulatory developments relating to the impact of sound on marine life and develops industry recommendations. For example, in the absence of guidelines from regulatory authorities, the

Committee published a PAM Guidance to help the geophysical industry ensure a continued and quality-driven development of this monitoring tool.

CGG is also actively involved in the multi-industry *Sound and Marine Life* workgroup established by the French Maritime Cluster (CMF). In 2013, the Group contributed to a comprehensive report entitled "Underwater Sound: Economic and Environmental Stakes" published on the CMF website.

#### Promoting research

As a member of the IAGC, CGG supports the Sound and Marine Life Joint Industry Project (JIP), addressing priority knowledge gaps and research needs to better evaluate and mitigate the potential impact of man-made sound on marine animals. Since 2006, this program has awarded about US\$55 million in research grants focusing on sound source characterization and propagation, physiological effects, behavioral reactions and mitigation and monitoring measures. The results of the research are published in various specialist peer-reviewed journals as well as on the JIP website: [www.soundandmarinelife.org](http://www.soundandmarinelife.org)

## Minimizing the Footprint of Norway's E&P Data Management

### CHALLENGE

Streamline Norwegian seismic, well and production data while minimizing its environmental footprint.

### BACKGROUND

Natural resources are often a country's greatest source of income and long-term sustainability. To protect and maximize the value of these resources, governments around the world are seeking to collect, quantify and broker data, most often by creating a national data repository (NDR).

In Norway, the Diskos database, launched by the Norwegian Petroleum Directorate (NPD), is a shared electronic storage and distribution solution bringing together 600 terabytes of seismic, well and production data. Members include 56 oil companies, service companies and Norwegian universities.

In 2013, Diskos issued a call for tender to identify a new service provider capable of managing the growing volume of E&P data.

### SOLUTION

CGG's Data Management Services (DMS) Business Development team designed a proposal that offered both productivity and environmental benefits. Their search for a data center site culminated in the selection of Green

Mountain. This former NATO underground ammunition store on the island of Rennesøy, operated by EVRY, a Scandinavian leader in the Datacenter market, inherits unique security features and benefits from 100% renewable and low-cost hydroelectric energy, produced in the nearby fjord. The data center's low Power Usage Effectiveness\* directly translates into lower operating costs. CGG's proposal also entailed a partnership with Kadme to develop software that would enable Diskos members to take full advantage of open data in addition to the base's seismic, well and production data. The NPD and oil companies will now be in a position to superimpose production data, weather data, data on marine protected areas and the position and availability of anti-pollution equipment for better-informed decision-making.

### RESULTS

Our service offer combining advanced technology with low-impact solutions attracted the interest of Diskos. In November of 2013, Diskos chose CGG DMS to ensure the long-term storage and maintenance of digital seismic, well and production data and announced that they expected considerable savings.

\* Power Usage Effectiveness (PUE) is determined by dividing the amount of power entering a data center by the power used to run the computer infrastructure within it.



Green Mountain data center. © EVRY



# SOCIAL RESPONSIBILITY

CGG's ambition is to play an active role in the long-term development of the people and communities around the world that host our seismic activities and permanent centers.



Houston employees volunteered to help underprivileged youngsters during a two-day summer workshop



ARGAS (CGG and TAQA joint venture) and King Abdulaziz University (KAU) partnership

## Being Socially Responsible in Practice

CGG's commitment to social responsibility is reflected in our Care+Protect program. We have a good track record of managing community relations responsibly across our acquisition projects and permanent sites, fostering local content whenever possible. We go the extra mile and support carefully selected Sustainable Development initiatives benefiting communities we work within on a worldwide scale. As part of this endeavor, we ensure an ongoing and open dialog with our stakeholders.

### Close to our partners and clients across the globe

In 2013, the Group operated in 42 countries, spanning all of the world's natural resource basins.

Successfully maintaining long-term relationships with national partners, enabling them to leverage our technology to best address their specific energy challenges, is central to CGG's strategy.

This is best exemplified by the partnership we established in Saudi Arabia 47 years ago. We reinforced that commitment in 2013 by signing a technology agreement with King Abdulaziz University (KAU) in Jeddah. The agreement includes, among other provisions, a donation of 24 licenses for Hampson-Russell's comprehensive software suite of reservoir characterization tools to KAU Faculty of Earth Sciences.

In other countries such as India, Mexico and Brazil, CGG has for several decades implemented a policy of developing dedicated technology centers and hiring local professionals. We train young recruits in state-of-the-art geoscience technologies so that they become skillful problem-solvers for their countries' exploration and production challenges.



Medical screening and school stationery donation in Tunisia

### Promoting local content in seismic acquisition

Seismic acquisition, be it Land or Marine, is nomadic by nature. A survey rarely exceeds a few months. But even in such a short time-span, there are significant opportunities to make a positive difference in the host regions.

Our ability to recruit staff and source goods and equipment locally is an essential success factor for seismic acquisition. In Land, locally hired staff are given preference whenever possible; we provide training and continue to employ them over several successive surveys, capitalizing on their learning and experience. In 2013, CGG carried out land acquisition operations in seven non-OECD countries, offering 1.61 million workdays to local hires. During the two consecutive surveys that CGG conducted in 2013 to image parts of Algeria's Adrar wilaya, CGG became by far the region's largest employer, hiring one in every four job seekers.

While recruiting and training clearly represent the principal and most direct way in which CGG's seismic acquisition activities contribute to local economic and social development, we also contribute by sourcing local goods and equipment whenever possible. In 2013, over US\$82 million worth of supplies were purchased from local suppliers in non-OECD countries. Apart from personnel, the main operating costs are transportation services and the daily operations of seismic camps: camp building and decommissioning, catering, telecommunications, etc.

### Developing and maintaining harmonious community relations

Our clients usually manage community relations given that they will be engaging with local communities over a much longer period of time than CGG. However, CGG conducts itself as a responsible partner when implementing the client's approach in the field.

In all our Multi-Client acquisition projects, we are solely responsible for maintaining harmonious relations with local communities. High-risk projects, where interaction with local communities is critical, are closely managed. This applies to Marine Acquisition when a survey covers a busy fishing zone or to Land Acquisition when the crews need to cross over the property of multiple landowners.

Identifying our stakeholders and engaging with them early on is a critical success factor for smooth and safe surveys. CGG first addresses this opportunity from a risk management perspective. A specific section of our Project Risk Assessments (PRA) relates to managing community relations. The Group Sustainable Development Department also developed dedicated guidance tools to support operations: a "Community Relations Management Plan" (CRMP) and four associated guidelines. These methodological toolboxes encourage proactive practices and suggest a variety of measures to prevent or mitigate potential social impact, which could be detrimental to our host communities, as well as to maximize the opportunities to make a positive difference.

## Community Relations on Land Seismic Crews in Thailand

### CHALLENGE

Develop and maintain harmonious relations with local communities where CGG works. Ensure that these communities understand CGG's presence, its contribution to their development, and receive fair compensation if applicable.

### BACKGROUND

Since 2004 CGG has operated several land acquisition crews each year, mainly in rural agricultural areas, where no proper land registers are available. Our relations with the populations living in these areas as we cross their land are key to effectively managing a seismic project. In order to minimize our impact on farms and to access difficult areas, we use small dynamite charges buried in drilled shot holes as a seismic source. As we lay out these source lines and our geophone receiver lines, several thousand land owners are identified and compensated individually in case their lands or crops (rice, sugar cane, cassava, etc.) are damaged.

### SOLUTION

A team of 30 community liaison officers works on a full-time basis to ensure a harmonious two-way communication with local community representatives throughout the duration of the seismic projects. Before crew mobilization, the team plays a strong social role to integrate CGG's seismic activities into the local community landscape. They identify the main stakeholders (government

representatives, local authorities, village chiefs, etc.) located in the survey area. They interact with them in a totally transparent way, answer their questions and inform them about the compensation process in place. They collaborate with village chiefs to interact with landowners, providing them with information at each survey stage, from drilling to compensation payments and a final Thank You meeting. They also address questions and complaints that are reported.

Additionally, CGG is particularly committed to contributing to the local development of the communities where it works. We prefer to hire workforce and source goods and services locally and often implement specific community projects.

### RESULTS

CGG conducted six land seismic projects in Thailand in 2013. More than 1,000 public meetings with local communities were organized. On behalf of our clients, around 19,000 landowners were compensated individually for a total of more than US\$1.54 million. Ninety-five per cent of the workforce on CGG operations are Thai and an equivalent of US\$11 million of goods and services were purchased locally. The associated sustainable development projects that were launched will continue to benefit local communities in the long term. The Thai personnel responsible for permitting and liaising with local community representatives are exemplary ambassadors of CGG's corporate values.



Ceremony marking the donation of a new water filter system to a school by crew THA3591



72 Singapore employees participating in a charity run

### 2013 Solidarity Challenge

Nearly 90% of the world's population do not have access to credit and 80% do not have access to banking services. A loan, even for a minimal amount, can very often be the key to autonomy for these populations by allowing them to develop a profitable activity. In an effort to support micro-credits, CGG organizes an annual two-week challenge in partnership with babyloan.org, an online crowd-funding platform. In 2013, more than 300 CGG employees from 22 countries across the globe chose to lend money to micro-entrepreneurs from Indonesia, Peru and the Philippines, with CGG fully matching the total amount of their loans. Since the first Solidarity Challenge in 2012, 546 micro-

businesses have been fully funded by CGG employees and the Group's matching funds. The repaid loan money from CGG's matched funds is re-lent every month, with a particular focus on supporting artisanal fisheries. The total amount lent by CGG at the end of 2013 amounted to US\$133,000.



### Corporate citizenship

CGG aims to be a good neighbor, fully integrated within the communities in which we have the privilege to operate. CGG focuses its support for corporate citizenship projects on advancing education/training (with a special focus on Earth Sciences), community service, environmental protection and Health and Safety. In 2013, we supported initiatives in 30 different countries for a total contribution of about US\$760,000. Among them, 45 initiatives were ongoing from one year to the next.

A network of committed Sustainable Development Correspondents facilitates employee engagement in all of our facilities and operations worldwide. Committed employee involvement in the projects is critical to delivering good results. In 2013, CGG employees were personally involved in 76% of the projects, a significant improvement over a 50% direct involvement rate in 2012 and 29% in 2011.

### Investor Relations and Socially Responsible Investment

#### Investor dialogue

The Group is followed by 30 international investment analysts worldwide. The Investor Relations team keeps the financial and extra-financial community regularly informed about CGG's business.

CGG participated in over 40 international roadshows and conferences in 2013, following intense IR activity in 2012 boosted by the Fugro Geoscience acquisition.

In 2013, CGG hosted its Capital Market Day in Paris during which Management presented its 2014-2016 cash and profitability plan to 96 attendees including 60 investors, 21 financial analysts and 15 SR investors.

The attendees also had a choice of four workshop presentations, among which was a SRI workshop providing insight into a multi-client survey offshore Brazil. This helped investors better understand the different environmental and social issues that CGG teams tackle during a survey from the preparation phase through to post-operations follow-up. Special emphasis was given to the expertise and pre-survey lead-time necessary to obtain an environmental permit and meet the regulatory framework applicable to seismic acquisition offshore. The workshop also shed light on the best practices applied to our relations with fishing communities.

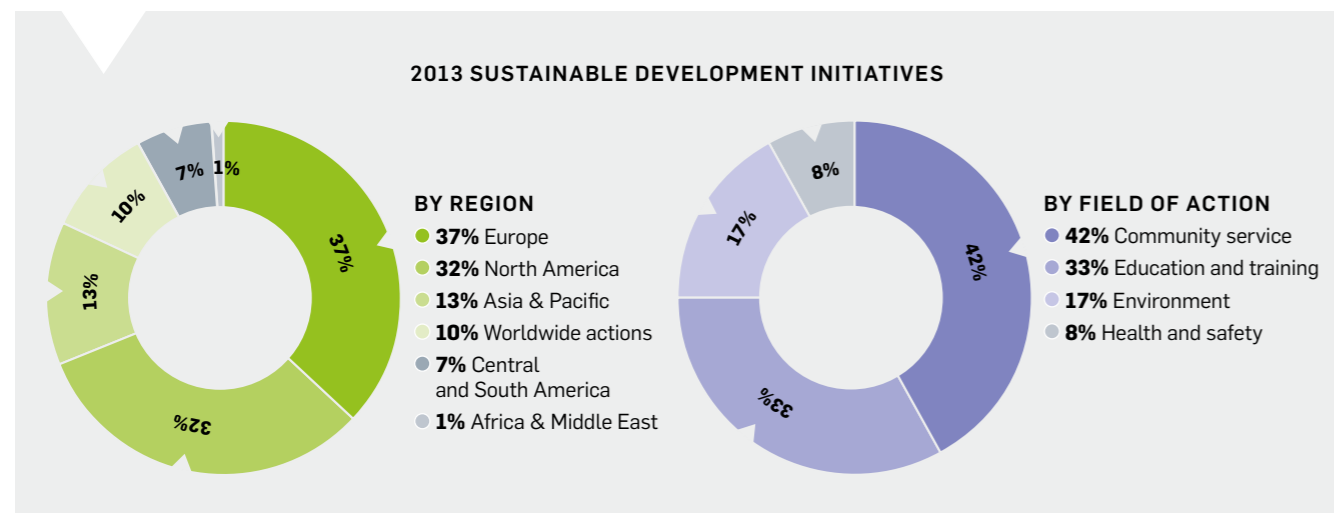
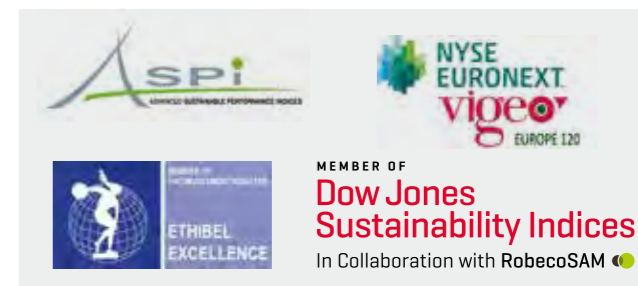
#### Listing in SRI indexes

Socially Responsible Investment (SRI) indexes assess a company's extra-financial performance based on specific methodologies.

They analyze the social policies, performance and data, as well as the economic and environmental information disclosed by a company in order to give it a non-financial rating.

This determines whether or not the company will be listed in the given index. Each year, these indexes assess company progress in terms of sustainable development indicators and ensure that companies engage in an ongoing improvement process. SRI indexes select companies which meet strict criteria in terms of sustainable practices.

In 2013, CGG was listed in the ASPI Eurozone, Ethibel Excellence, Dow Jones Sustainability Europe, Dow Jones Sustainability World and Vigeo Europe 120 indexes.



# A SELECTION OF SUSTAINABLE DEVELOPMENT INITIATIVES



**CANADA**  
Following massive floods in Alberta in June, Calgary employees collected funds for the Canadian Red Cross' flood relief. Local management matched their effort.

**UNITED KINGDOM**  
15 women from our Crawley offices took part in Cancer Research UK's Race for Life and 10 other employees from Swanley ran the "Shine Walk for Cancer Research" half-marathon in London. All sponsored by CGG.

**UNITED STATES OF AMERICA**  
CGG has been a partner of SIRE for many years, promoting therapy to those in need through horseback riding. Financial and volunteer support was given to the Houston rodeo TOP HANDS event.

**FRANCE**  
CGG is a partner of the Fondation de la 2<sup>e</sup> Chance, that provides professional training to people in need to help them seize new development opportunities. A dozen CGG employees act as volunteer mentors during the training and job search periods.

**TUNISIA**  
Together with local authorities, land seismic crew management provided support to a village medical dispensary and primary school. They also organized a medical check-up for pupils and encouraged the local labor force by purchasing handicraft.

**THAILAND**  
As a school of 475 pupils located on a land seismic acquisition prospect was not able to produce potable water, CGG equipped the building with a new water filtration system.

**MEXICO**  
CGG promotes sound waste management awareness to the Villahermosa public and private sector by organizing recycling challenges.

**MALAYSIA**  
CGG provided educational materials coupled with a small amount of financial aid to families living below the national poverty line in a small and isolated village of North East Malaysia.

**COLOMBIA**  
CGG participated in the joint SD initiatives of two NGOs, *Fundacion Pedalazos Que Construyen* and *Un Techo Para Columbia*. CGG sponsored the construction of two houses in a rural area close to Bogota, giving two families a new home.

**NIGERIA**  
Employees collected funds to donate to an orphanage caring for 109 children close to CGG's Subsurface Imaging center in Lagos. CGG matched employees' contributions.

**INDONESIA**  
At the end of a land survey, crew management donated material and equipment (bamboo jetty, tent structure, base camp material, electrical household appliances, electrical and sanitary equipment) to an orphanage, representatives of the local communities and a social organization.

**BRAZIL**  
CGG sponsored the *Ténis Para Todos* initiative, offering low-income youngsters from favelas the opportunity to learn to play tennis and possibly find a new job as a trainer.

**ANGOLA**  
As a partner of A. Neto University, CGG helps build geoscience capacity by mentoring students on the Hampson-Russell reservoir characterization suite.

**SOUTH AFRICA**  
CGG sponsored Education students in their final degree year to teach children from Kwena Basin's rural area.



# FACTS AND FIGURES

Employees	2010	2011	2012	2013	THIRD-PARTY VERIFICATION
<b>NUMBER OF NATIONALITIES AT CGG</b>	<b>99</b>	<b>101</b>	<b>104</b>	<b>108</b>	
<b>PERMANENT EMPLOYEES</b>	<b>7,264</b>	<b>7,198</b>	<b>7,560</b>	<b>9,688</b>	•
Permanent employees (Female %)	25%	25%	26%	26%	•
<b>Europe</b>	<b>2,861</b>	<b>2,787</b>	<b>2,581</b>	<b>3,601</b>	•
Female	25%	25%	20%	28%	•
<b>Africa &amp; Middle East</b>	<b>735</b>	<b>411</b>	<b>331</b>	<b>408</b>	•
Female	9%	18%	20%	19.9%	•
<b>Asia-Pacific</b>	<b>1,329</b>	<b>1,070</b>	<b>1,108</b>	<b>1,370</b>	•
Female	31%	38%	38%	36.1%	•
<b>North America</b>	<b>2,012</b>	<b>1,710</b>	<b>1,782</b>	<b>2,294</b>	•
Female	27%	29%	33%	31.3%	•
<b>Latin America</b>	<b>327</b>	<b>281</b>	<b>258</b>	<b>398</b>	•
Female	32%	28%	31%	29.6%	•
<b>Marine seismic crews</b>	-	<b>939</b>	<b>970</b>	<b>1,242</b>	•
Female	-	7%	7%	6%	•
<b>Land seismic crews</b>	-	-	<b>530</b>	<b>375</b>	•
Female	-	-	2%	0.8%	•
<b>EMPLOYEE HIRES &amp; TRANSFERS</b>	<b>629</b>	<b>773</b>	<b>1,238</b>	<b>3,411</b>	•
Female	N/A	28%	28%	26.9%	•
Non-French employees as a % of new hires	N/A	N/A	80%	95%	•
<b>TOTAL EMPLOYEE TURNOVER RATE</b>	<b>11%</b>	<b>11.2%</b>	<b>10%</b>	<b>12.4%</b>	•
<b>COMPANIES WITH EMPLOYEE REPRESENTATION</b>					•
<i>Main countries only</i>		France Norway Switzerland Singapore	France Norway Switzerland Singapore	France Norway Switzerland Singapore	
<b>EMPLOYEES COVERED BY A COLLECTIVE BARGAINING AGREEMENT</b>	-	<b>1,940 (reported)</b>	<b>2,067 (reported)</b>	<b>2,242</b>	•
<b>EMPLOYEES ENTITLED TO HEALTH INSURANCE</b>	-	<b>100%</b>	<b>100%</b>	<b>100%</b>	•
<b>EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEW</b>	-	<b>74%</b>	<b>97%</b>	<b>98%</b>	•
<b>TRAINING HOURS DELIVERED BY CGG UNIVERSITY</b>	-	<b>111,440</b>	<b>139,160</b>	<b>115,255</b>	•
HSE training hours	-	14,742	7,980	7,504	•

Health & Safety	2010	2011	2012	2013	THIRD-PARTY VERIFICATION
Exposure hours (million)	76.6	79.9	72.1	68.4	•
Fatalities	1	0	2	0	•
Partial or permanent disability cases	2	1	0	1	•
Lost time incident frequency	0.42	0.44	0.46	0.60	•
Total recordable cases frequency	3.06	3.18	2.76	2.16	•
Seriousness rate	0.0133	0.0102	0.0112	0.013	•
Motor Vehicle Crash Rate	0.92	0.84	0.45	0.88	•
HSE field training (hours)	74,426	117,684	120,073	140,000	•

Environment	2010	2011	2012	2013	THIRD-PARTY VERIFICATION
Greenhouse Gases (kilotons of CO <sub>2</sub> eq. – Scope 1&2 emissions)	781	945	890	995	•
Greenhouse Gases Intensity (kilotons of CO <sub>2</sub> eq. per employee)	-	1.3	1.2	1	•
Significant spills (number of spills > 0.2 m <sup>3</sup> of hydrocarbons)	1	2	1	1	•
Residual spillage after clean-up (m <sup>3</sup> )	0.5	0.8	0.2	0.2	•
Marine Fuel Efficiency Index (CMP-kms/m <sup>3</sup> of fuel)	41	44	44	51	•
Number of Marine Life Sightings	1,222	904	2,189	2,071	•
Operational downtime linked to Marine Life Mitigation (hours)	181	53	92	133	•

Corporate citizenship	2010	2011	2012	2013	THIRD-PARTY VERIFICATION
<b>SPONSORSHIP OF SUSTAINABLE DEVELOPMENT INITIATIVES (KUSD)</b>	<b>466</b>	<b>477</b>	<b>757</b>	<b>760</b>	•
Europe	18%	17%	31%	37%	•
Africa and Middle East	1%	11%	12%	1%	•
Asia-Pacific	20%	15%	4%	14%	•
North America	44%	35%	29%	32%	•
Latin America	13%	9%	7%	7%	•
<i>Worldwide initiatives</i>	4%	13%	17%	10%	•
Initiatives with direct employee engagement (%)	Not assessed	29%	50%	76%	•
Initiatives supported for at least 2 years % of total amount	Not assessed	Not assessed	Not assessed	45 69%	•

## Reporting Scope and Method

### Methodology

CGG's HSE reporting procedures are based on the Group's Event Reporting, Recording and Classification Guidelines. Social reporting consolidation rules and adjustments are defined by a protocol to ensure comparability and traceability of the information provided.

### Selection and pertinence of indicators

Published data is intended to inform stakeholders of CGG's Sustainable Development results for the current year. It is in line with OGP and Global Reporting Initiative (GRI) recommendations on information transparency regarding social responsibility and the environment. The information retained followed a materiality analysis process involving the consultation of internal and external stakeholders. Indicators were selected to monitor:

- CGG's HSE and Sustainable development commitments and policies integrated in management systems.
- Performance relating to CGG's main risks and impacts.
- Regulatory obligations (the French Commercial Code which was updated in 2012 by decree implementing Article 225 of the Grenelle II Law).

### Scope

Health, safety, environmental and social reporting concerns all employees and contractors working in CGG's prevailing influence, namely all of our sites and acquisition activities that are at least 50% CGG owned and which are consolidated in the Group's financial statements.

As an exception to this rule, HSE reporting also covers the operations of:

- Argas in Saudi Arabia.
- Amadeus, the ship operated by CGG through the PTSC CGGV Geophysical Survey Company Limited Joint Venture in Vietnam.
- Binh Minh, the ship that CGG has operated through the PTSC CGGV

Geophysical Survey Company Limited Joint Venture in Vietnam since October 4, 2013.

Operations performed by Seabed Geosolutions BV, in which CGG has a minority interest, even when contracted through CGG, are not included in the scope of this report. These operations are performed under the Seabed Geosolutions BV HSE management System.

The Airborne Business Line joined the Group in September 2013. We therefore only report their most significant HSE indicators in this report. Unless otherwise specified, all statistics provided in this report include this scope which accounted for 68 million hours worked in 2013.

Data associated with acquisitions is recorded as soon as possible and no later than January 1 of the following year; sales activities are recorded in the month following their actual output.

### Consolidation and internal controls

HSE data is reviewed on a weekly basis by HSE support functions. The data is then consolidated every month at Division and Group level. Data pertaining to certain specific indicators are calculated directly by the businesses. These processes undergo regular internal audits.

Social data is stored in the Human Resources information system by local Human Resources administrative entities, or through a special structure set up for this purpose (Employee Service Center for North America). This data is checked at three levels:

- A level of SOX compliance, via annual audits and setting up of control points for individual data such as; gender, birth dates, seniority, wages, promotions, tax situations, type of contract, etc.
- A level of compliance via the pay slip or monthly time sheet, when the base is coupled to an HRMS payroll engine.
- A level of compliance regarding organizational reporting lines, belonging to a given business family, a Division, a Function, a Business Line etc. is done by checking made by operational and functional HR managers at the time of the monthly or quarterly reporting.

# EXTERNAL ASSURANCE REPORT

*This Assurance Report is only valid with the Management Report (“Rapport de Gestion”) to which it refers. It may only be reproduced in its entirety.*

## CGG

*Year ended December 31, 2013*

### Independent verifier’s report on consolidated social, environmental and societal information presented in the management report established for the year ended December 31, 2013, presented in chapter 2 of the Reference document

To the Shareholders,

In our quality as an independent verifier of which the admissibility of the application for accreditation has been accepted by the COFRAC, under the number n° 3-1050, and as a member of the network of one of the statutory auditors of the company CGG, we present our report on the consolidated social, environmental and societal information established for the year ended December 31, 2013, presented in chapter 2 “Environment, Sustainable Development and Employment”<sup>1</sup> of the Reference document including the management report, hereafter referred to as the “CSR Information”, pursuant to the provisions of Article L. 225-102-1 of the French Commercial Code (Code de commerce).

#### Responsibility of the company

It is the responsibility of the Board of Directors to establish a management report including CSR Information referred to in article R. 225-105-1 of the French Commercial Code (Code de commerce), in accordance with the protocols used by the company (hereafter referred to as the “Criteria”), and of which a summary is included in sections “2.1.5 Reporting method and scope” and “2.2.1.8. Reporting methodology and definitions” of chapter 2 of the Reference document including the management report, and available on request at the company’s headquarters.

#### Independence and quality control

Our independence is defined by regulatory requirements, the Code of Ethics of our profession as well as the provisions of Article L. 822-11 of the French Commercial Code (Code de commerce). In addition, we have implemented a quality control system, including documented policies and procedures to ensure compliance with ethical standards, professional standards and applicable laws and regulations.

#### Responsibility of the independent verifier

It is our role, based on our work:

- to attest whether the required CSR Information is present in the management report or, in the case of its omission, that an appropriate explanation has been provided, in accordance with the third paragraph of article R. 225-105 of the French commercial code (Code de commerce) (Attestation of presence of CSR Information);
- to express a limited assurance conclusion, that the CSR Information, overall, is fairly presented, in all material aspects, in accordance with the Criteria (Limited assurance on CSR Information).

Our verification work was undertaken by a team of seven people between July 2013 and April 2014 for an estimated duration of sixteen weeks.

We conducted the work described below in accordance with professional standards applicable in France and the Order of May 13, 2013 determining

the conditions under which an independent third-party verifier conducts its mission, and in relation to the opinion of fairness and the reasonable assurance report, in accordance with international standard ISAE 3000<sup>2</sup>.

## 1. Attestation of presence of CSR Information

We obtained an understanding of the company’s CSR issues, based on interviews with the management of relevant departments, a presentation of the company’s strategy on sustainable development based on the social and environmental consequences linked to the activities of the company and its societal commitments, as well as, where appropriate, resulting actions or programmes.

We have compared the information presented in the management report with the list as provided for in article R. 225-105-1 of the French Commercial Code (Code de commerce).

In the absence of certain consolidated information, included in the Reference document, we have verified that the explanations were provided in accordance with the provisions of Article R. 225-105-1, paragraph 3, of the French Commercial Code (Code de commerce).

We verified that the information covers the consolidated perimeter, namely the entity and its subsidiaries, in the meaning of article L. 233-1 and the entities which it controls, as aligned with the meaning of article L. 233-3 of the French commercial code (Code de commerce) with the limitations specified in the Methodological Note “2.1.5 Reporting method and scope” and “2.2.1.8. Reporting methodology and definitions” in chapter 2 of the Reference document including the management report, notably regarding the information on the number of training hours that cover only part of the perimeter (primarily trainings conducted in France and those issued by CGG University).

Based on this work, we confirm the presence in the management report, included in the Reference document, of the required CSR Information.

## 2. Limited assurance on CSR Information

### Nature and scope of the work

We undertook about twenty interviews with the people responsible for the preparation of the CSR Information in the different departments of Sustainable Development, Human Resources and HSE, in charge of the data collection process and, if applicable, the people responsible for internal control processes and risk management, in order to:

- assess the suitability of the Criteria for reporting, in relation to their relevance, completeness, reliability, neutrality, and understandability, taking into consideration, if relevant, industry standards;
- verify the implementation of the process for the collection, compilation, processing and control for completeness and consistency of the CSR Information and identify the procedures for internal control and risk management related to the preparation of the CSR Information.

We determined the nature and extent of our tests and inspections based on the nature and importance of the CSR Information, in relation to the characteristics of the company, its social and environmental issues, its strategy in relation to sustainable development and industry best practices.

For the CSR Information which we considered the most important<sup>3</sup>:

- at the level of the consolidated entity, we consulted documentary sources and conducted interviews to corroborate the qualitative information (organization, policies, actions, etc.), we implemented analytical procedures on the quantitative information and verified, on a test basis, the calculations and the compilation of the information, and also verified their coherence and consistency with the other information presented in the management report included in the Reference document;

- at the level of the representative selection of entities that we selected<sup>4</sup>, based on their activity, their contribution to the consolidated indicators, their location and a risk analysis, we undertook interviews to verify the correct application of the procedures and undertook detailed tests on the basis of samples, consisting in verifying the calculations made and linking them with supporting documentation. The sample selected therefore represented 34% of the total workforce and on average 23% of the quantitative environmental information.

For the other consolidated CSR Information, we assessed their consistency in relation to our knowledge of the company.

Finally, we assessed the relevance of the explanations provided, if appropriate, in the partial or total absence of certain information.

We consider that the sample methods and sizes of the samples that we considered by exercising our professional judgment allow us to express a limited assurance conclusion; an assurance of a higher level would have required more extensive verification work. Due to the necessary use of sampling techniques and other limitations inherent in the functioning of any information and internal control system, the risk of non-detection of a significant anomaly in the CSR Information cannot be entirely eliminated.

## Conclusion

Based on our work, nothing has come to our attention that causes us to believe that the CSR Information is not fairly presented, in all material respects, in compliance with the Criteria.

## Observations

Without qualifying our conclusion above, we draw your attention to the following points:

- The consolidated data on Entries and Leavers include internal movements within the company, as mentioned in chapter 2: reclassification of employees between seasonal and permanent status, movements associated with absences, etc. Actual hires and departures of employees are not communicated in the perimeter outside France.
- The reporting Criteria associated with the environmental indicators and the absenteeism, entries and leavers indicators do not precisely and systematically detail the following elements: the data input process, the indicator’s perimeter and the types of controls to be carried out.

Paris - La Défense, April 10, 2014

French original signed by:

The Independent Verifier  
Ernst & Young et Associés

Christophe Schmeitzky  
Partner, Sustainable Development

Bruno Perrin  
Partner

1. With the exception of sections “2.2.2.2. Optional stock investment plan” and “2.2.2.3. Free stocks based on employee performance”.

2. ISAE 3000 – Assurance engagements other than audits or reviews of historical information

3. Environmental, social and societal information: number of permanent employees, number of entries in the company, Lost Time Injury Frequency Rate (LTIF) and Total Recorded Cases Frequency (TRCF), number of training days provided by CGG University, minimization of the footprint of the Group’s products and services, number of accidental spills of moderate or high level at sea or on land, Power Usage Effectiveness (PUE), amount of linear seismic data acquired per cubic metre of fuel consumed, marine fauna monitoring & mitigation measures (number of sightings, number of acoustic detections, number of hours of downtime, number of marine fauna shutdowns, number of delayed soft-starts, corrective measures, etc.), percentage of national staff by country of permanent implantation, corruption prevention actions undertaken, the share of purchases from suppliers in countries with low risk of corruption and the relationships with stakeholders.

4. The sites of Townpark (Houston), Data Management Services (Houston) and the center of CGG University (Massy).

# GRI AND UNITED NATIONS GLOBAL COMPACT CONCORDANCE TABLE

This index provides the concordance between the:

- 2011 Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI), Version 3.1, [www.globalreporting.org](http://www.globalreporting.org)

- 10 principles of the United Nations Global Compact 10 Principles, [www.unglobalcompact.org](http://www.unglobalcompact.org)

Page numbers refer to this Sustainable Development Report unless "DR" is mentioned, which corresponds to CGG's Document de référence in French, available at [www.cgg.com](http://www.cgg.com) > Investors > Financial Information > Financial and Annual Reports > Document de référence 2013

	GRI INDICATOR	UN GLOBAL COMPACT PRINCIPLE	PAGE NUMBERS WHERE REPORTED
<b>PROFILE</b>			
<b>Strategy and Analysis</b>	1.1, 1.2		1; 10-13; 18; DR Magazine 2-3
<b>Organizational Profile</b>	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10		2-9; 43; 46-47; DR 301
<b>Report Parameters</b>	Report Profile, Scope and Boundary 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11 GRI Content Index 3.12 Assurance 3.13		6; 11; 48-49; 51 50 48-49
<b>Governance, Commitments and Engagement</b>	Governance 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10 Commitments to External Initiatives 4.11, 4.12, 4.13 Stakeholder Engagement 4.14, 4.15, 4.16, 4.17		0; 12-20; 30; 46; DR 90-103; DR 137 1; 23; 30; 35-36; DR 51; DR 89 4; 11-12; 36; 39-43; 46
<b>PERFORMANCE INDICATORS</b>			
<b>Environmental</b>	Materials EN1, EN2 Energy EN3, EN4 Water EN8 Biodiversity EN11, EN12 Emissions, Effluents and Waste EN16, EN17, EN19, EN20, EN21, EN22, EN23 Products and Services EN26, EN27 Compliance EN28	8, 9 8 8 8 8 8, 9 8	34; 47 36; 47 35; 47 33-36 DR 48
<b>Human Rights</b>	Investment and Procurement Practices HR1, HR2, HR3 Non-discrimination HR4 Freedom of Association and Collective Bargaining HR5 Child Labor HR6 Forced and Compulsory Labor HR7 Assessment HR10 Remediation HR11	1, 2, 3, 4, 5, 6 1, 2, 6 1, 2, 3 1, 2, 5 1, 2, 4	DR 35-36 30; DR 36; DR 51 30; DR 54; DR 56 26; 30; DR 45; DR 56 30; DR 56 26; DR 56 DR 36
<b>Labor Practices and Decent Work</b>	Employment LA1, LA2 Labor/Management Relations LA4, LA5 Occupational Health and Safety LA7, LA8 Training and Education LA10 Diversity and Equal Opportunity LA13 Equal Remuneration for Women and Men LA14	6 1, 3 1 1, 6 1, 6	2; 30; 46; DR 49-53 46 46; DR 52 46; DR 55 16-19; 46; DR 52-53 DR 54
<b>Society</b>	Local Community S01, S09, S010 Corruption S02, S03, S04 Public Policy S05 Compliance S08	10 1, 2, 3, 4, 5, 6, 7, 8, 9, 10	38-41; DR 45 20; 29; DR 36 DR 55; DR 143-144 DR 289
<b>Product Responsibility</b>	Customer Health and Safety PR1 Product and Service Labeling PR3 Marketing Communications PR6 Compliance PR9	1 8	23-27 DR 289
<b>Economic</b>	Economic Performance EC1, EC2, EC3, EC4 Market Presence EC6, EC7 Indirect Economic Impacts EC8	6	4-5; 42-45; DR 89; DR 195; DR 228 40-41; DR 45-46 40-45; 47; DR 45-46

Key to GRI indicators: ● Fully reported in 2013 ● Partially reported in 2013 ● Not material ● Not covered in 2013



This document serves as our 6<sup>th</sup> Communication on Progress.  
In it we report according to the "Advanced Level" of the United Nations Global Compact.  
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