A Key Sustainable Value in the E&P Chain
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A Strategic Move Strengthening CGGVeritas’ Sustainable Value in the E&P Chain

CGGVeritas ESG issues

Conclusion: From Compliancy to Sustainable Strategy

Annexes
CGGVeritas in the E&P Value Chain

Exploration
Delineation
Development
Production

Seismic model
Static model
Dynamic model

Geosciences

Seismic
Equipment
Data acquisition
Processing

Interpretation
Reservoir Characterization
Modeling
Reservoir Management

CGGVeritas is significantly moving into Geosciences businesses with the Fugro Deal...
What We are Buying

**Equipment**

- De Regt
  - c.120 employees

- Marine: Geoteam
  - 7 vessels, 4 owned, 3 chartered
  - c. 480 employees

- Multi-Client Seismic
  - c.50 employees

- Geophysical & Geological Services
  - c. 660 employees

- Including
  - Airborne
    - 35 aircrafts
    - 10 helicopters
  - Gravity, Magnetic and EM

**Data Acquisition**

- Gravity, Magnetic and EM

**Processing & Imaging**

- Seismic Imaging
  - 13 processing centers
  - c. 350 employees

**Exploration & Appraisal**

- Robertson
  - c.280 employees

**Reservoir Characterization**

- Jason
  - c.245 employees

**Data Management**

- c. 270 employees

**Total:** 2500 employees
...Transforming CGGVeritas into a Fully Integrated Geoscience Company

**Processing & Imaging**
- Multi-Client: MultiClient (1)
- Reservoir: Hampson-Russell
- Reservoir Characterization: Jason
- Exploration & Appraisal: Robertson
- Data Management

**Data Acquisition**
- Marine Acquisition: 16 vessels
  - Four High-End 12+ streamer vessels
  - Three Mid Class 8 streamer vessels
- Marine Gravity & EM
- Land Acquisition: Carve out SW/OBS/OBN/PRM
- Airborne Geophysical
- Joint-Venture: Shallow Water, OBN/OBC and Permanent Reservoir Monitoring

**Equipment**
- Sercel
- De Regt

**Establishment of strategic partnerships between CGGVeritas and Fugro**

(1) Multi-Client Library to remain owned by Fugro

Total circa 10 500 employees
Revenue circa $4.5 billion
CGGVeritas 2011 Key Financial Figures

- Revenue: $3.2 billion
- Opinc: $210 million
- EBITDA: $852 million

- Capex: $626 million
- Employees: 7,264 worldwide
- Group Net debt at $1.411 billion
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Oil & Gas Companies Exploration and Production Challenges

- **Exploration**
  - Increasingly difficult with the end of “easy oil”: challenging environments increase the cost of exploration

- **Production**
  - Rapid depletion of the reservoirs

- **Mounting public pressure to conduct more responsible, well-controlled and risk-free exploration**
  - New “sensitive” exploration areas
  - Post Macondo new regulation framework
  - Public Image & Reputation
  - Investor community

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**Global OPEC spare capacity**

Source: IEA reports

Excluding: Iraq, Nigeria and Venezuela.

**Dollar cost per foot of US O&G wells drilled**

Source: EIA, Morgan Stanley Research

As Complexity Increases, US Wells Are Becoming Significantly More Expensive to Drill
A Strategic Move Strengthening CGGVeritas Sustainable Value in the E&P Chain

In combining Seismic and Geosciences technologies, CGGVeritas will contribute to:

- Lower the cost of exploration
- Reduce drilling costs and mitigate risks
- Limit environmental footprint
- Extend the life of field
- Optimize reservoirs production
- Predict the evolution of reservoirs
- Optimize well placement for less fracturing & drilling with reservoir characterisation
- Leverage on historic experience in new territories

De-risking the exploration & drilling operations
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A Strategic Move Strengthening CGGVeritas’ Sustainable Role to Play in the E&P Value Chain

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Focusing on the most Critical Issues: Launch of our ESG Materiality Matrix

Top Management analysis

Materiality  Opportunity for ESG Innovation
HSE & Security standards: Key for Operational Success

- Integrated Management System supported by a dedicated organization
  - 120 correspondents across the world

- Regular Monitoring of Local Practices through audits
  - HSE audits including Social Responsibility issues since 2010
  - Proprietary Real Time Web based Reporting

- Continuing Training program
  - HSE policy communicated to all stakeholders
  - Organized by CGGVeritas University and on sites

- Performance
  - 2011: LTIF 0.44/TRCF 3.18/ SR 0.01
  - 2012 Objectives: LTIF <0.30 / TRCF <2.70 / SR:<0.005

Marine – Emergency Preparedness Training
Policies & Code of Conduct, Corruption and SD Governance: Identify, Manage and Mitigate risks

- Structured and disciplined approach to assessing and managing the uncertainties that the Group faces

- Each risk is linked to a corporate governance issue and monitored by its dedicated Board Committee

- Specific tools to identify the main risks of the Group: Group Risk Matrix, Human Risk Matrix and Scorecard Systems (Country and Subcontractors Risk Management) including SD issues

- Risks Assessment and Management are part of our activities’ project management

- Systems of Audits including SD issues to monitor our Entreprise Risk Management

<table>
<thead>
<tr>
<th>Risks Identification</th>
<th>Governance and Board of Directors</th>
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<tbody>
<tr>
<td>Operational</td>
<td>HSE/DD Committee</td>
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<tr>
<td>Financial</td>
<td>Audit Committee</td>
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<tr>
<td>Communication</td>
<td>Technology Committee</td>
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<td>Technologic</td>
<td>Appointment and Remuneration Committee</td>
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<td>HR</td>
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</table>

Evaluation et Gestion des Risques « Management System »
Local Content & Local Communities: Contributing to the Economic Development of the « Hosting » Countries

- **Local employment & Local purchase**
  - Favoring local employment especially for long term projects
  - Purchasing Code of Conduct
  - HSE Training
  - Sharing of skills and know-how
  - Long-term partnerships with our local JVs

- **Community Relationship Management Plan (CRMP)**
  - Identification of our activity’s social impact on local communities
  - Use of tools to “map” local stakeholders and to open a dialogue with them
  - Development of indicators to monitor our social performance

Examples of local employment

Example of a Communication to inform the communities of CGGVeritas operations
Footprint & Ecoconception : Going Beyond Regulation

› **Environment Policy**
  - Tailored Environmental Risk Assessment & Environmental Management Plan
  - Promote environmental best practices
  - Train, inform and mobilize employees

› **Environmental criteria included in the product development cycle**
  - Technology innovation to produce eco-friendly equipment
  - “Product end-of-life” recycling offer for clients

› **Mitigation of transient disturbance**
  - Minimizing soil and seabed disturbance
  - Monitoring fauna’ displacements and change of behaviour patterns
  - Joint Industry Program to address knowledge gaps on E&P offshore’s impact on marine life

Marine Mammal Observer

Oil Spill Prevention in Alaska
Vessel Profile:

- Fugro acquired vessels will be adapted to CGGVeritas’ fleet management
- 2 New X-Bow vessels meeting DNV-Clean Notation
- All 3D high capacity vessels equipped with solid streamers
- Use of marine diesel oil
- Compliant with international convention MARPOL (concerning sea pollution)
- Permanent installation on board to treat water and to separate wastes
Training & Equal Opportunity

- RH priorities: Attract and retain talents
  - Recruitment: long-term relationships with schools and universities worldwide
  - Significant intern mobility opportunities
  - Identification of « key potentials »
  - Competitive remuneration based on an average of competitors remuneration and Energy sector
  - Training: CGGVeritas University promotes individual development and professionalism

- Social Dialogue
  - Worldwide commitment to ensure the representation of employees and the respect of non-discrimination
  - Regular Employee satisfaction survey

- Integrity and Commitment
  - Our focus on performance and passion for innovation are powered by people and delivered with integrity
  - Promoting best practices inside the Group
  - E-learning sessions of our Code of Ethics and our Business Code of Conduct
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Seismic: A Key Technology for E&P sector

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We Launch Initiatives to Go Beyond Regulation

- Protect the “hosting countries” wealth
  - Participation of Ethnologists and Biologists to our surveys

- Marine: Reducing Fuel Consumption
  - Evaluating the potential of an organic additive X-Bee

- Land: Taking into account the operation environment
  - Desert Environment: Reducing the water consumption by installing smart grid and raising employees and local people awareness with posters
  - Forest Environment: Respecting the food-chain law by designing non-straight seismic lines and by replanting trees

- Processing: Reducing the Use of Air Conditioning
  - Use of “oil bath” to cool down the computers
  - Eco-cool free-air cooling systems
Conclusion

**2011:** Our SD strategy based on 80 years of experience is recognized by clients, local population, employees and investors....

**2012:** We are committed to respect our sustainable roadmap in reducing our footprint and going along with our clients to develop a more responsible E&P activity and launch our ESG Materiality Matrix

**2013:** A year of developing our SD reporting notably with SD indicators
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Annexes
Annexes

Summary of the Oil and Gas Field Development Lifecycle

1. Seismic Equipment & Services
   - Land & Marine data acquisition
   - Data Processing
   - 4% of E&P budget ($16bn)

2. Contract Drilling
3. Drilling-Related Products & Services
4. Formation Evaluation
5. Completion & Stimulation Services
6. Infrastructure Installation
7. Production & Well Maintenance
8. Oilfield Equipment
9. Logistics
Annexes
Sustainable commitment history

- Foundation of CGG (1931)
- CGG became CGGVeritas
- UN Global Compact member
- Creation of HSE & SD Committee
- Creation of Ethics Committee
- Business Code of Conduction
- 1st Communication On Progress
- 2nd Communication On Progress
- 3rd Communication On Progress
- Listed on DJSI, Ethibel and ASPI
- Launch of the 1st SD report
CGGVeritas ESG Issues: Long Term Management of the Complexity of our Diversified Activities

Addressing specific issues

<table>
<thead>
<tr>
<th></th>
<th>Marine Acquisition</th>
<th>Land Acquisition</th>
<th>Processing &amp; Geoscience</th>
<th>Sercel</th>
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</thead>
<tbody>
<tr>
<td>« Floating » Plant issues</td>
<td>- HSE</td>
<td>- HSE</td>
<td>- Development of dedicated centers</td>
<td>- HSE &amp; quality</td>
</tr>
<tr>
<td>« Construction » issues</td>
<td>- Environmental impact - Dialogue with communities</td>
<td>- Dialogue with communities</td>
<td>- Energy Efficiency</td>
<td>- Environmental footprint of plant sites/Eco-design</td>
</tr>
<tr>
<td>« IT business » issues</td>
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<tr>
<td>« Industrial » issues</td>
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**Operations Risk Management**
- HSE

**Local & Environmental Impact**
- Environmental impact
- Dialogue with communities

**HR/Innovation**
- Talent retention
- BroadSeis
We Apply our own Standards Based on the Industry Standards (OGP and IAGC)

Example: Regional Marine Mammal Mitigation Guidelines Implemented During Seismic Surveys: Some countries have defined Guidelines and others don’t: problems of non consistent regulation

**Our Group Standards**
- **Observer Requirement**: 2-3 MMO
- **Required Observation**: 30 min
- **Source Exclusion zone**: 500m
- **Ramp up Operations**: Yes
- **Night-time Source use**: Permitted
- **Use of Passive Acoustics**: Integration on several vessels

**USA/GOM Mitigation Measures**
- **Observer Requirement**: 2 MMO
- **Required Observation**: 30 min
- **Source Exclusion zone**: 500m
- **Ramp up Operations**: Yes but not at night
- **Night-time Source use**: Yes
- **Use of Passive Acoustics**: Encouraged

**UK Mitigation Measures**
- **Observer Requirement**: 1-2 MMO
- **Required Observation**: 30 min
- **Source Exclusion zone**: 500m
- **Ramp up Operations**: Yes
- **Night-time Source use**: Permitted
- **Use of Passive Acoustics**: During hours of darkness, or low visibility

**Australia Mitigation Measures**
- **Observer Requirement**: independent MMO
- **Required Observation**: 30 min
- **Source Exclusion zone**: 500m-1000m
- **Ramp up Operations**: Yes
- **Night-time Source use**: Infra-Red binoculars
- **Use of Passive Acoustics**: Not required