Providing unique perspectives on our planet

Providing a comprehensive range of **data, products, services and solutions** for complex natural resource, environmental and infrastructure challenges

SEE THINGS DIFFERENTLY

- HSE EXCELLENCE
- PEOPLE
- SOCIAL RESPONSIBILITY
- INNOVATION
- QUALITY
Our Sustainability contribution and ESG ratings

- Energy companies CO² footprint reduction
  More accurate drilling locations to avoid hazards and optimally target reservoirs

- Energy transition
  Supporting the transition to a lower carbon future

- Energy companies internal efficiency
  Expertise & HPC resources & digital platform to optimize decisions process

- Earth observation & monitoring
  Environmental science
  Improving awareness of local and global environmental changes

MSCI ESG RATINGS

#1-3 among the Oilfield Services

#2 among the Energy Services
Our core perimeter

**OUR STRENGTHS**

**Remarkable data & technology**
Unique Earth data library, imaging, geoscience & digital technologies

**Outstanding people & performance**
Ingenuity, diversity and expertise driving innovation and exceeding expectations

**Resolute ESG commitments**
Enabling our clients to be more efficient, effective, responsible and sustainable

**THREE CORE BUSINESSES**

**Geoscience**
Established leader in subsurface imaging, geology and geoscience services

**Earth Data**
The industry’s most technically advanced seismic data and geologic studies in the world’s key locations

**Sensing & Monitoring**
Established leader in marine, land, ocean floor and downhole seismic equipment and gauges
Our Beyond The Core business opportunities

<table>
<thead>
<tr>
<th>NEW APPLICATIONS</th>
</tr>
</thead>
</table>
| **Digital Sciences**  
Data transformation, data science, AI, machine learning, CGG Cloud services and HPC expertise |
| **Earth Data Library**  
Growing portfolio of digital products for natural resources and energy transition activities, backed by a unique taxonomy and data ecosystem |
| **Energy Transition**  
Supporting industry transition with technology, data and expertise for CCUS, geothermal and critical minerals |
| **Monitoring & Observation**  
Structural health & earthworks monitoring solutions with advanced sensors and Earth observation and Environmental Sciences expertise |
Geoscience Unmatched expertise, advanced geoscience & digital algorithms and excellent service in every image

- Highly differentiated in complex environments with an excellent market position in FWI and nodes processing
- Majority exposure to stable part of upstream value chain (reservoir development and production segments)
- Substantial awards in major basins including GoM, Brazil and Guyana
- Long-standing relationships with diversified client base (NOCs, IOCs, Independents) provide steady revenues through open and dedicated centres
Earth Data - A complete breadth of geoscience data and expertise covering geology, geophysics and multi-physics

- One of the industry’s most technically advanced seismic data and geologic studies provider
- Global presence in the world’s key prolific hydrocarbon basins
- Focus on mature, established regions and in the most attractive basins (e.g. US Land, Gulf of Mexico, Norway and Brazil)
- CGG advanced imaging technology
- Ongoing digitalization efforts to build an ecosystem for Earth Data

EDA REVENUE ($M)

<table>
<thead>
<tr>
<th>Year</th>
<th>Prefunding</th>
<th>After-sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>YTD 21</td>
<td>163</td>
<td>71</td>
</tr>
<tr>
<td>YTD 22</td>
<td>230</td>
<td>161</td>
</tr>
</tbody>
</table>

+41% growth year-over-year

EDA Market Share

- Competitor 1
- Competitor 2
- CGG
- Competitor 3

2018: Competitor 1 28%, Competitor 2 24%, CGG 30%, Competitor 3 26%
2019: Competitor 1 22%, Competitor 2 21%, CGG 30%, Competitor 3 27%
2020: Competitor 1 25%, Competitor 2 23%, CGG 30%, Competitor 3 24%
2021: Competitor 1 14%, Competitor 2 18%, CGG 33%, Competitor 3 26%

MAP.png

Alaska: 348 km²
U.S. Land: 54k km²
N. Sea: 239k km²
GOM: 406k km²
Brazil: 370k km²
Africa: 72k km²
Australia: 57k km²

2018 2019 2020 2021
**Sensing & Monitoring Technology and market leadership with a unique diversified portfolio**

<table>
<thead>
<tr>
<th><strong>Oil &amp; Gas</strong></th>
<th>Seismic land &amp; marine solutions for imaging subsurface</th>
</tr>
</thead>
<tbody>
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<td><strong>Structural Monitoring</strong></td>
<td>Sensors and monitoring solutions for infrastructure</td>
</tr>
<tr>
<td><strong>Defense</strong></td>
<td>Custom-engineered marine acoustics and cable solutions</td>
</tr>
</tbody>
</table>

- **Large installed base**, creating a competitive advantage and a strong platform for leveraging market growth
- **A broad portfolio of leading-edge technologies**
- **Manufacturing flexibility** and high operating leverage to absorb market volatility
- **Diversification beyond Oil & Gas**, securing long-term growth through environmental monitoring and SHM

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<td><strong>FY21 Sales</strong></td>
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<tr>
<th><strong>BTC</strong></th>
<th><strong>Downhole</strong></th>
<th><strong>Marine</strong></th>
<th><strong>Land</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YTD 2021</strong></td>
<td>262</td>
<td>169</td>
<td>51</td>
</tr>
<tr>
<td><strong>YTD 2022</strong></td>
<td>165</td>
<td>20</td>
<td>13</td>
</tr>
</tbody>
</table>
# Beyond the Core

New differentiated offerings in rapidly growing markets

## DIGITAL SCIENCES

### Digital Services & Innovation
HPC and Cloud services enabling efficient access to compute power and analysis tools leveraging data science.

### Data Transformation
Advanced systems for data digitalization, transformation, classification and integration for analytics and interpretation.

## MONITORING & OBSERVATION

### Environmental Sciences
Monitoring of local and global environmental changes using geoscience data, technology and analytics.

### Infrastructure Monitoring
Detailed and continuous situational awareness to predict failures, respond to hazards and optimize preventative maintenance of structures & earthworks.

## ENERGY TRANSITION

### Geothermal
Evaluation of resource potential, optimization and monitoring of geothermal developments with greater subsurface insight.

### Minerals & Mining
Services for exploration and monitoring of mine tailings, increasing awareness at all stages of the cycle.

### CCUS & Energy Storage
Expertise for screening, evaluating and monitoring sub-surface storage and risks

## EARTH DATA

### Multi-Client Earth Data Library
Portfolio of digital products for natural resource and energy transition applications, with over 55 petabytes of data, backed by a unique taxonomy and data ecosystem.
2022: A year of transition with high quarterly volatility

- **What happened to the topline in Q3 and in 2022?**
  - $90m revenue shift into Q4 and 2023, non including ~$55m full year impact of Russia
    - From Q3 to Q4: ~$25m EDA sales prefunding for Norway and Brazil
    - From 2022 to 2023: ~$65m (~$30m SMO; ~$30m EDA Brazil and $5m GEO)

- **What happened to the cash?**
  - $60m increase inventory of land equipment
    - Ahead of the large 2 mega-crews surveys from Saudi Aramco which shifted into Q1/Q2 2023
    - Managed the shortage of electronic components

- **2022 a year of high investment for CGG to catch the upcycle**
  - EDA cash capex increase by 20%, +$40m
  - SMO inventory increase by + $60m
  - M&A of $37m
  - Creation of HPC & Cloud Solutions business

### 2022 quarterly revenue pattern (m$)

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4 (consensus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTERNAL REVENUE (EXR)</td>
<td>152</td>
<td>217</td>
<td>240</td>
<td>124</td>
</tr>
<tr>
<td>GEO</td>
<td>75</td>
<td>69</td>
<td>44</td>
<td>34</td>
</tr>
<tr>
<td>EDA</td>
<td>44</td>
<td>62</td>
<td>124</td>
<td>69</td>
</tr>
<tr>
<td>SMO</td>
<td>34</td>
<td>45</td>
<td>86</td>
<td>62</td>
</tr>
</tbody>
</table>
Full year cash structure (before NWC)

Cash cost of debt ~ 95m$
Discontinued operations (until 2025) ~25m$
Lease and repayments ~55m$
Capex (EDA / Industrial / R&D) ~225/230m$
Taxes ~10m$

Full year EBITDA breakeven at ~410 / 420m$
I.e. full year Topline at ~ $1.050B
As of September 31, 2022

Group liquidity amounted to $325m, including:
- $225m cash liquidity
- $100m undrawn RCF

Group gross debt before IFRS 16 was $1,114m and net debt was $889m

Group gross debt after IFRS 16 was $1,201m and net debt was $976m
- $1,070m HY Bonds, due 2027
- $87m Lease liabilities
- $41m Accrued interests
- $3m Bank loans

Group leverage (Net Debt to Segment EBITDAs) was 2.5x
Increasing level of commercial activity worldwide

Geoscience (GEO)
- Increased demand for high-end imaging technology driven by near-field exploration and EOR, while frontier exploration remains subdued
- CGG’s clear technology differentiation making significant impact in complex sub-surface areas

Earth Data (EDA)
- Resumption of lease rounds in several countries (UK, Brazil & others)
- Increasing client activity to find short-cycle opportunities and position in economical basins

Sensing & Monitoring (SMO)
- Land activity picking-up in 2023 & 2024 sustained by large projects in the Middle East and North Africa
- Increasing OBN demand
- Beginning of the streamer replacement cycle

Activities Beyond the Core (BTC)
- Digital market showing significant potential driven by need to access more compute power
Conclusion: Strong positive signals, yet limited visibility from the large IOCs

- The industry is entering a multi-year up-cycle, driven by years of underinvestment and the war in Ukraine tilting the balance of the energy trilemma towards energy security and affordability vs. sustainability

- To fill the energy supply gap, exploration must progressively increase, especially offshore and in the Middle East
  - NOCs and Independents expected to be the most actives
  - The level of increase from IOCs remains unclear

- 2022 is a year of transition for CGG. We invested in our future growth, while managing through the market volatilities

- All businesses, Core and BTC will see strengthening activity in 2023 and beyond
  - Our core businesses have strong market positions with leading technology that is critical to our clients
  - We are progressing our Beyond the Core initiatives and starting to see their commercial success