Necessity is the mother of (re)invention

Oil and gas companies must transform to thrive in the energy transition. Reinvention leaders are showing the way.
Big change is not enough

Oil and gas companies need to transform to achieve profitability and relevance during and after the energy transition. We believe transformation will not be enough. Reinvention is needed. And that reinvention must be anchored in the “5Cs.”

A recent Accenture survey of 179 energy companies identified 18 that can be considered Reinvention Leaders. What they are—and are not—doing in each 5C area can inform the decisions of others embarking on their own reinvention journey.

Competitiveness

Connectivity

Carbon

Customer

Culture
Leaders in Competitiveness design for profitable reinvention through enterprise-wide transformations (as opposed to continuous improvement initiatives).

Think like a leader

Competitiveness

Nothing is off the table for leaders. They are rethinking their business models and operating models in tandem. Their actions include:

- Expanding to new geographies and asset classes.
- Developing operating capabilities to deliver on new business ambitions.
- Introducing new products and services (a move to low-carbon businesses holds particular appeal—and potential future value).
Leaders have a clear focus on profitability. They are no longer defining success by the volumes of oil and gas they produce.

**Leaders define success by ROCE and ESG**

**Percent** of respondents expecting competitiveness initiatives to drive **strong** impact on...

**Leaders expect higher margin improvements over the next 3 years**

<table>
<thead>
<tr>
<th>Margin Improvement</th>
<th>Percent of Respondents Expecting</th>
<th>Leaders</th>
<th>Laggards</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>...of at least +20% from low-carbon business</td>
<td>100%</td>
<td>14%</td>
<td>14%</td>
<td>100%</td>
</tr>
<tr>
<td>...of at least +10% from downstream</td>
<td>65%</td>
<td>14%</td>
<td>14%</td>
<td>65%</td>
</tr>
<tr>
<td>...of at least +10% from midstream</td>
<td>55%</td>
<td>0%</td>
<td>0%</td>
<td>55%</td>
</tr>
<tr>
<td>...of at least +10% from OFES</td>
<td>0%</td>
<td>5%</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>...of at least +10% from upstream</td>
<td>90%</td>
<td>76%</td>
<td>76%</td>
<td>90%</td>
</tr>
</tbody>
</table>

Note: low-carbon business warrants distinction of “at least +20%,” as 100% of responses indicate margin improvements >20%, while no more than 20% of responses indicate this for any other segment.

Survey question: How strong an improvement do you expect in margins in the next 3 years from following your current plan? Global (N=214).
Competitiveness

Others in the industry can learn from what leaders are doing—and not doing—to build their competitive edge. We recommend oil and gas companies take the following actions:

Focus on ROCE, not volumes. Make systemic cost takeout, zero-based principles, and a reduction in capital intensity part of your standard operating procedure.

Ensure your operations and functions are in “lock-step.” Collaborate internally to design and execute successful enterprise-wide transformations.

Leverage new and existing ecosystems and partnerships to unlock new frontiers of efficiency in logistics and supply chain, drive innovation, and develop profitable low-carbon solutions and services.

Capture the green multiple. Put sustainability at the center of your strategy and decision-making.
Carbon

Leaders are tackling the carbon challenge head-on in several noteworthy ways.

**ESG target-setting.** Nearly all (96 percent) of the leaders we surveyed have set ambitious ESG targets. The same percentage of leaders is committed to reporting frequently on their emission-reduction progress.

**Practical near-term actions.** Leaders are investing in energy management solutions, focusing on achieving significant process efficiencies, and deploying better carbon-detection and management technologies.

**Elevating low-carbon solutions.** Leaders expect their low-carbon business segments to experience margin growth of at least 20 percent and contribute handsomely to their revenue growth by 2030. For them, hydrogen and renewable power hold the most potential.

Think like a leader

Leaders in Carbon go beyond reacting to external ESG pressures and are proactively creating new sources of growth outside traditional oil and gas.
Leaders believe their carbon-related actions will deliver significant results

Percent of respondents that expect carbon initiatives will drive...

**Leaders**

- **at least +20% boost in ESG performance**: 92%
- **at least +20% reduction in emissions**: 77%

**Laggards**

- **at least +20% boost in ESG performance**: 15%
- **at least +20% reduction in emissions**: 2%

Survey question: What do you expect the impact from your carbon-related initiatives to be over the next 3 years from following your current plan? Global (N=214).

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Leaders have high expectations for low-carbon business revenue

Percent of respondents expecting >7% of annual revenues by 2030 from...

- **Hydrogen**: 62% Leaders, 11% Laggards, 15% Overall
- **Renewable Power**: 54% Leaders, 25% Laggards, 27% Overall
- **Biofuels**: 27% Leaders, 0% Laggards, 12% Overall
- **CCUS**: 0% Leaders, 0% Laggards, 0% Overall

Note: Options for ranges of annual revenues (%) span from “under 1%” to “>10%” and we have chosen to highlight those choosing >7%.

Survey question: How strong an impact do you expect the following low-carbon businesses will have for your company as % of annual revenues in 2030? Global (N=214).
In the area of Carbon, we recommend oil and gas companies take the following actions:

+ **Move fast.** Establish emissions performance metrics and develop a plan, roadmap and incentives.

+ **Go low-carbon.** Identify where you will have the chance to make the biggest impact and build differentiated capabilities.

+ **Act as though carbon already has a price.** Make informed capital allocation decisions by incorporating the projected cost of carbon into field development planning and valuations.

+ **Extend your partnerships.** Collaborate beyond traditional peer and partner groups to drive new innovations and convergence beyond industry borders.
Connectivity

Connectivity is a key element of reinvention. It involves employing technologies—operational, digital and informational—to dismantle siloes, provide a unified data foundation, and optimize decision making to collaboratively drive agreed-upon results.

Think like a leader

Leaders in Connectivity focus on digital transformation, not experimentation, and target financial and carbon-related metrics by implementing cloud, IOT and mobility solutions.

All leaders expect Connectivity to drive at least 10 percent revenue growth in the next three years. Nearly all (96 percent) expect 20+ percent gains in employee engagement and customer satisfaction.
Connectivity

While leaders are doing many things right such as focusing on cloud transformation (not experimentation) and targeting financial and carbon-related metrics, there are significant capability gaps:

- **Cybersecurity**
- **Data management**
- **Connected operations**

**Leaders have bolder ambitions for cloud**

*Percent of respondents* with goals for cloud this year

<table>
<thead>
<tr>
<th>Transformation</th>
<th>Experimentation and foundation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leaders</strong></td>
<td><strong>Laggards</strong></td>
</tr>
<tr>
<td>54%</td>
<td>15%</td>
</tr>
<tr>
<td>51%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Survey question: What actions are you planning in the next year to improve your cloud capabilities? Global (N=214). Showing only two out of five response options.
Connectivity
In the area of Connectivity, there are significant capability gaps
Percent of respondents strongly agreeing with statement

Survey question: To what extent do you agree with the following statements about your capabilities relating to connectedness? Global (N=214).
Connectivity

We recommend oil and gas companies take the following actions in the area of Connectivity:

- Don’t simply follow the “cloud crowd.” Consider cloud a strategic enabler of reinvention.

- Build data management muscle. Data governance, quality, accessibility and portability are essential.

- Focus on cyber defense. With the rise of remote operations and widespread adoption of IoT in the industry, cybersecurity is a must.

- Think enterprise-connectedness first and individual technologies second. The real value from digital comes at scale by connecting the organization.

- Connect the dots. Coordinate with peers, suppliers and customers to expand the boundaries beyond the organizational walls.
As oil and gas companies reinvent, they will need to pivot from being commodity businesses to customer-centric businesses. Leaders show the way. They are:

**Building stronger experiences** across the customer lifecycle—from discovering new customers to making it easy for customers to log-in, order and pay for products.

**Balancing digital investments** to continually improve experiences across the customer journey.

**Customizing products, services or formats** based on customer feedback and personalizing products and services for unique customer segments.
**Customer**

**Leaders use digital to create a differentiated, end-to-end customer experience**

Percent of respondents that identify area as top priority for digital capabilities

- **Leaders**
  - Onboard: 12%
  - Re-engage: 27%
  - Discover and engage: 19%
  - Order and payment: 31%
  - Support and replenish: 12%

- **Laggards**
  - Onboard: 51%
  - Re-engage: 13%
  - Discover and engage: 4%
  - Order and payment: 25%
  - Support and replenish: 7%

**Leaders expect their customization initiatives to create significant value**

Percent of respondents that expect improvements of...

- **Leaders**
  - ...at least 40% in customer satisfaction: 46%
  - ...at least a 10% in revenue: 81%
  - ...at least a 5% in margins: 73%

- **Laggards**
  - ...at least 40% in customer satisfaction: 0%
  - ...at least a 10% in revenue: 38%
  - ...at least a 5% in margins: 44%

Survey question: Which parts of the digital customer experience are you planning on investing in over the next 12 months? Global (N=214).

Survey question: What do you expect the impact from your customer-related initiatives to be in next 3 years from current plan? Global (N=214).
In the area of Customer engagement, we recommend oil and gas companies take the following actions:

**Manage customers, not molecules.** In the new era of oil and gas, value will be derived from the strength of your customer relationships, not the commodities you sell. Prioritize engaging with and expertly serving the customers who will ultimately dictate the path of your reinvention. Create a CX/BX management function with a voice in your organization’s strategic decision-making.

**Solve problems.** Rethink what you know about your current and future customers and the challenges they face. Understanding their needs, values and growth strategies will be critical to building intimacy and delivering value.

**Monetize new products and services.** The oil and gas market is evolving to address changing customer preferences, needs and behaviors. Reshape your portfolio to provide the products and services your customers will want—and will be willing to pay for.

**Create high barriers to defection.** Achieve customer “stickiness” by investing equitably across the customer lifecycle. Create a seamless experience that consistently satisfies B2C and B2B customers and gives them no reason to look elsewhere for products or services.
Culture

Reinvention does not happen without the buy-in of those charged with executing it. Reinvention leaders are working hard to create the environment in which a new Culture and new levels of productivity can flourish. They are:

- Enabling collaboration between teams and functions.
- Creating engaging and rewarding employee experiences at every turn.
- Developing the right skills for their reinventions.

Yet gaps in Culture remain. Survey respondents did not prioritize innovation despite having ambitions to develop new products and services. In fact, only 4 percent of leaders identified innovation and entrepreneurship as a top action item.
Culture

Significant gaps exist in the capabilities and skills needed to sustain reinvention

Even across the two strongest dimensions in culture, there is significant opportunity to drive improvement

Percentage of respondents that strongly agree they have these capabilities related to employee experience

- Deliver on ethics experience: 50% (Leaders), 50% (Laggards)
- Deliver on diversity experience: 46% (Leaders), 54% (Laggards)
- Our staff and motivation are improving: 46% (Leaders), 54% (Laggards)
- We monitor employee experience: 50% (Leaders), 50% (Laggards)

Percentage of respondents that strongly agree they have these capabilities related to collaboration

- Incentivize collaboration between functions: 46% (Leaders), 54% (Laggards)
- Incentivize collaboration between operations and functions: 46% (Leaders), 54% (Laggards)
- Incentivize collaboration between teams: 42% (Leaders), 58% (Laggards)

There is a material opportunity to build the skills for reinvention, even among leaders

Percentage of respondents that strongly agree they have these skills

- Strong low-carbon Industry and Technical skills: 54% (Leaders), 46% (Laggards)
- Strong IT and digital technology skills: 54% (Leaders), 46% (Laggards)
- Strong data and analytics skills: 38% (Leaders), 62% (Laggards)
- Strong customer engagement skills: 31% (Leaders), 69% (Laggards)

Survey question: To what extent do you agree with the following statements about your capabilities relating to [employee experience/collaboration/existing skills]?

Global (N=214). Showing selected skills only.
Culture

Oil and gas players that can effectively bridge their Culture gaps stand to gain a competitive edge. Other things companies can do include:

**Make purpose a magnet for talent.** Diversity, equity and inclusivity programs will be key. So will a commitment to sustainability and interesting work, enabled by new technologies.

**Reimagine work and the workforce.** Inventory the capabilities you have today, identify those you will need tomorrow, and develop a plan to close the gaps.

**Design for teamwork.** Empower people to share ideas and operate seamlessly with enabling technologies and structures.

**Create an environment of experimentation.** Encourage new ideas and ways of working. Invest in building an innovation capability that sets you apart.
The value and pace of reinvention
Reinvention can create up to $500bn in value annually by 2023

Leaders have confidence that their decision to focus on Competitiveness, Carbon and Connectivity will pay off big. While laggards also believe their actions will produce positive returns, they are much more modest in their expectations. The potential value upside for the industry from each player achieving leaders-level ambition can be up to $500 billion annually.

Survey question: How strong an improvement do you expect in margins in the next 3 years from following your current plan?

Survey question: What do you expect the impact from your (carbon/connectivity/culture/customer) related initiatives to be over the next 3 years from following your current plan? – Revenue growth

Survey question: What do you expect the impact from your carbon-related initiatives to be over the next 3 years from following your current plan? – Overall ESG performance improvement

Note: All figures shown are based on self-reported expectations for the next 3 years. Global (N=214).
Know where you’re going

When it comes to planning for their transformation, oil and gas companies need to prioritize their 5C commitments and understand where they are in their reinvention journey.

Starting the Journey
- Increase efficiencies to enhance Competitiveness of supply; set and objectively measure key returns and ESG objectives
- Accelerate the journey to cloud and Connect domains to visualize how the company is functioning and understand what gaps exist
- "Clean the Core" to reduce Carbon footprint and deliver on foundational ESG goals
- Leverage Customer data and relationships to increase sales volumes
- Put improving skills and collaboration at the center of company Culture to boost productivity

Transitioning
- Build portfolio resilience through cost and carbon zero-basing to minimize impact of volatility on Competitiveness
- Integrate Carbon into core operating procedures to minimize footprint of the organization
- Scale digital technologies across the organization and Connect systems to generate insights for growth
- Create capabilities to monitor and adjust to changing Customer preferences to increase stickiness and sales volumes
- Create a Culture that accepts reinvention and seeks to deliver improved employee experiences to attract talent

Achieving Reinvention
- Architect and adapt a dynamic portfolio of assets (carbon and non-carbon) geared to structurally enhance Competitiveness (high returns and low carbon)
- Create a sustainable competitive advantage with Carbon capabilities and a unique portfolio of low-carbon assets
- Build end-to-end internal and external Connectivity and utilize data and analytics to optimize the portfolio and operational performance
- Use digital to understand Customer preferences and create or anticipate demand for new or personalized products and services
- Shape the organization’s Culture to support the reinvention, developing necessary skills and capabilities to drive innovation and collaboration
Be a reinvention leader
In early 2021, Accenture conducted its inaugural Oil and Gas Reinvention Index research to understand the actions companies are taking to meet the challenges of the energy transition, their progress toward reinvention, and the outcomes they expect to achieve. This initiative, comprising surveys and case study research, will be updated annually to track the industry’s reinvention progress over time.

**Survey**

The Accenture Reinvention Index research included a survey of 214 c-suite executives from 179 companies. The survey collected data on:

- Perceived need for reinvention and drivers of change
- Current state of reinvention across the 5Cs: Competitiveness, Carbon, Connectivity, Customers and Culture
- Future reinvention actions planned and anticipated future state
- Expected value to be captured from reinvention

**Approach**

We grouped responses (n=214) into companies (n=179) to determine an aggregated score for each. Next, we defined and grouped companies into Reinvention Leaders and Laggards (i.e., those ahead in terms of their reinvention progress and those who are not changing or are changing slowly).

**Definitions**

We created a Reinvention Index (RI) Score, composed of equally weighted scores from each of the 5Cs of reinvention with a maximum score of 100. The top 10 percent of the companies on this score are Leaders and the bottom 25 percent are Laggards.

**Calculations**

We compared expected financial benefits of pursuing the 5Cs—measured by minimum expected improvement—and calculated the difference in performance between Leaders and Laggards.

**Responsible research methods**

Our research, and that of our partners in our ecosystem, employs ethical and responsible research methods. Respondents were anonymous and we commit to not using the data collected to personally identify the respondents and/or contact them.
Survey Demographics

4 firm types  
- International Oil Company (IOC)  
  - N= 92  
  - % 43%
- Independent  
  - N= 86  
  - % 40%
- National Oil Company (NOC)  
  - N= 18  
  - % 8%
- Oilfield and Equipment Services (OFES)  
  - N= 18  
  - % 8%

9 Regions  
- Australia/New Zealand  
  - N= 4  
  - % 2%
- Canada  
  - N= 25  
  - % 12%
- China  
  - N= 6  
  - % 3%
- Europe  
  - N= 78  
  - % 36%
- India  
  - N= 5  
  - % 2%
- LatAm  
  - N= 10  
  - % 5%
- Middle East  
  - N= 18  
  - % 8%
- Other Asia  
  - N= 4  
  - % 2%
- USA  
  - N= 64  
  - % 30%

CXO Title*  
- Chief Financial Officer
- Chief Innovation Officer
- Chief Marketing Officer
- Chief Strategy Officer
- CIO/CTO/CDO
- Chief Mobility Officer
- Chief Operating Officer

Revenue  
- <$100m
- $100m-$499m
- $500m-$999m
- $1b-$10b
- >$10b

* Includes direct reports

N=214

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Visit us at www.accenture.com  
www.accenture.com/reinventionindex

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