

Operationalizing Climate Risk

Plotting the path
towards a low carbon
oil and gas sector

Contents

2 Overview

4 About this study

5 Part 1

**The Current Landscape and Attitudes
to the Low Carbon Economy**

7 Part 2

The Drivers of Change

9 Part 3

Turning Ambition into Action

11 The Seeds of Success

**12 Tackling the Low Carbon
Challenges Ahead**

16 Case studies

**How are you operationalizing
the transition?**

18 Part 4

**The Five Steps to
Operationalizing Climate Risk**

20 Conclusion

Executive summary

In the first four months of this year, every economy in every country and every company regardless of size has had to face up to the seismic impact of the COVID19 pandemic. The oil and gas sector has successfully navigated periods of economic challenge before – but the COVID19 challenge is different. It's both a health and an economic disruption, and it's global. As many companies mobilize to overcome the initial shock and short term business continuity issues, highlighted by the turmoil of oil prices, longer-term ambitions and strategies may have been put on hold, or slowed. However, one such issue that still features in the conversations we have with clients is how best to address the transition to a low carbon economy.

For the past 18 months we've heard CEO's make ambitious statements in achieving carbon reductions from their company by a set date (usually 2030, or 2050). However in many cases there has been little detail of the 'how'. This paper examines some of the drivers that will still exist post COVID19 and what companies can do to operationalize climate risk.

Based on ERM's primary research on this topic with the likes of Chevron, Total, Petronas, Enbridge, TC Energy and Engie, more detailed interviews with senior executives and our own insights from the many clients we speak to daily, it provides important insights into the drivers and challenges ahead in the transition to a low carbon economy.

This paper starts by looking at current attitudes to the transition, particularly in light of the relentless increase in energy demand throughout the world. It then looks at the drivers of change and, in particular, the increased expectations and scrutiny of investors. The paper then explores some of the challenges ahead to operationalize these ambitions and highlights data and the 'war for talent' as two crucial areas.

It concludes with five observations that we see the winners doing to operationalize climate risk, namely;

1. They will get real – and transparent – with their investors.
2. Exacerbated by the COVID pandemic, they will recognize that this is a period of deep structural transformation – not yet another cyclical price swing.
3. They will equip the people running this new 'carbon data front line' with the tools and confidence to answer the challenge more robustly.
4. They will equip themselves and their operational managers to lead staff through the transition.
5. They will walk the talk every day by doing whatever it takes to eliminate emissions from ongoing operations.

We hope you find this interesting and insightful for the significant challenges ahead.

Overview

"I'm done with fossil fuels. They're done. ... The world's turned on them." Those were the words Jim Cramer, the icon of retail stock picking and the host of Mad Money on CNBC, delivered to his viewers last month.

Cramer is no hardcore environmentalist. Rather, with his characteristic bombast and perhaps a touch of hyperbole, he was merely articulating how, over the last couple of years, consumer and media opinion has turned against the fossil fuel industry. As a result governments are feeling more than ever before the need to act on climate change and, in turn, the investment community is starting to view fossil fuel companies as a bad risk. The current pandemic for different reasons is only fuelling that uncertainty.

The dramatic shift in sentiment has multiple causes. It has been spearheaded by the global mobilization of millions of young people to protest against climate change by Swedish teenager, Greta Thunberg. That mass movement grabbed the attention of global media and social media at the same time that a series of environmental disasters have swept the world – perhaps most notably the devastating wildfires in California in 2018 and Australia in 2019.

And even during the acute urgency of the current COVID 19 emergency, both industry leaders and investors have not lost their focus on the low carbon energy transition. In late March these included BP CEO Bernard Looney saying that the coronavirus 'reaffirms the need to reinvent BP' for net-zero energy.

The growing sense of crisis has prompted many global and regional governments to announce ambitious carbon reduction targets. It will be interesting to see the fortitude towards these as the pandemic recedes. Much of the corporate world also has stepped up its call for stronger climate regulation and set its own goals to reduce climate related risk. Recently Microsoft pledged to become carbon-negative by 2050.

None of this has been lost on the investment community. For the past decade environmental campaigners have urged a "follow the money" approach to climate change. As a result an increasing number of investment and pension funds have taken the decision to divest from their fossil fuel holdings – a movement that gained mainstream status at the start of 2020 when Larry Fink, CEO of the world's largest investment firm, BlackRock, with nearly \$7trillion in assets under management, declared that "Every government, company, and shareholder must confront climate change."

Slowly, a dominant world view is emerging. Namely, that the climate crisis, unless tackled head on, will wreak havoc through global society and the economy that underpins it. One recent projection from Schroders estimates climate risk could lead to global economic losses of up to \$23tn per year and represent a systemic threat to the global financial system. To prevent that happening we must undertake a radical transition to a low carbon economy.

Managing that transition is perhaps the greatest challenge our world has faced since the birth of the Industrial Revolution. Simply put, the world can't afford the oil and gas industry to collapse – too much of our global wealth is tied up in the industry at present and we need to power our society while we undertake the low carbon transition. The conundrum for an industry that now has a worse reputation than Big Tobacco is how to operationalize this low carbon transition and how oil and gas executives can demonstrate the type of leadership that will win back the trust of society and ensure the survival of their business in the future.



\$23tn

**One recent projection from
Schroders estimates climate risk
could lead to global economic
losses of up to \$23 trillion per year**

Perhaps, as a recent International Energy Agency (IEA) analysis put it: “The core question, against a backdrop of rising GHG emissions, is a relatively simple one: should today’s oil and gas companies be viewed only as part of the problem, or could they also be crucial in solving it?”

Accepting they have a role to play is the first step. One recent study by the Oxford Martin School at the University of Oxford found that just over half of global oil and gas companies now acknowledge the goals of the 2015 Paris Agreement to limit the increase in global temperature to well below 2°C above the pre-industrial level and attempt to limit it to 1.5°C. Yet just 39% explicitly state their support for these aims¹.

Slowly, however, the oil and gas industry is rising to the low carbon challenge. In 2019 Royal Dutch Shell announced it would link the pay of its 150 most senior executives with its progress towards its aims of reducing the carbon footprint of its energy products by 50% by 2050. That same year Repsol pledged to become emissions net-zero by 2050². Earlier this year BP’s new CEO Bernard Looney announced that it, too, would undertake an ambitious strategy of low carbon transition.

It is how that can be achieved that is so hotly debated. Many in the environmental movement call for the immediate end to new oil and gas exploration. Those in the oil and gas industry, however, argue that a low carbon transition, driven by a greater emphasis on natural gas production coupled with new technologies to capture and mitigate carbon and methane emissions, can contain emissions while guaranteeing the energy security our world needs to prosper.

The aim of this paper is not to judge those opposing arguments about how best to achieve the low carbon transition. Rather, our focus is on the ways oil and gas executives are looking to operationalize the very clear climate risk they and society face, and the challenges they face in terms of strategy, finance, developing technology and attracting talent as they integrate low carbon strategies in their business.

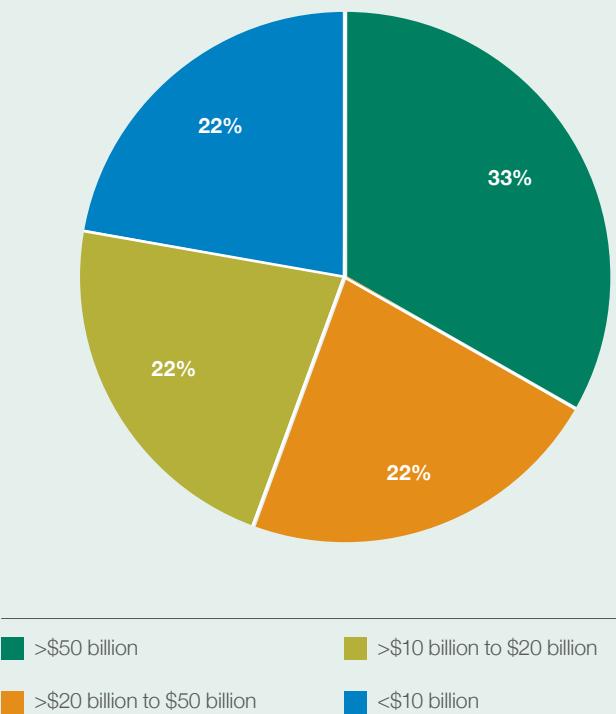
About this study

At present it is the major and super major oil and gas companies that are most vocal in proposing new strategies, business models, products and innovation around low carbon – even if they have to acquire smaller companies to help them achieve their goals at a speed and scale they can't achieve alone.

With this in mind, for this report, rather than conduct a large-scale industry wide survey, we sought the opinions of a select group of the industry's most influential companies to understand how they are looking to operationalize climate risk, what motivates them to make this transition and the steps they are taking to make sure their companies are fit for a low carbon future. This included the likes of Chevron, Total, Petronas, Enbridge, TC Energy and Engie.

The executives we talked with have the capability to drive change within the entire industry as demonstrated by the size of their companies' annual turnover (see chart right). We believe their experience and influence can help paint an insightful picture of where the oil and gas industry currently sits on its low carbon journey.

Chart 1
What is your organisation's annual turnover?



© ERM 2020

Part 1

The Current Landscape and Attitudes to the Low Carbon Economy

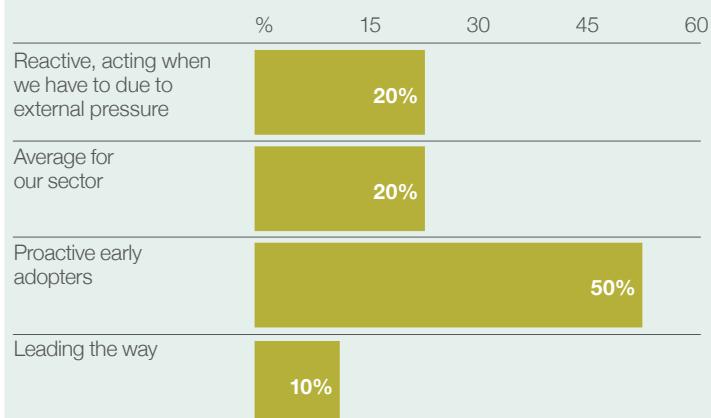
Despite the many challenges currently facing the oil and gas sector the senior executives surveyed for this report presented a very optimistic picture when considering their company's role in delivering a low carbon agenda.

Half of the executives we talked to consider their organizations to be “proactive early adopters” of low carbon strategies (see chart right) and the same number say their companies have made commitments to reduce emissions in line with the Paris Agreements (see chart on next page). Furthermore, half also believe that renewable energy technology will be able to keep up with the demand for fossil fuels and they are confident their business has executives with the skills and experience to address low carbon issues. Only a few think the oil and gas sector fails to attract the right talent because of environmental perceptions.

Could this be a case of misplaced optimism? After all, according to current IEA estimates, investment to date by oil and gas companies outside their core business areas (i.e. in renewables) has been less than 1 percent of total capital expenditure. In fact, none of the executives suggested that the age of oil and gas exploration was at an end. On the contrary, nearly every one of them believes that emerging markets will keep demand for fossil fuels steady in the future even though a majority cite revenue and growth opportunities as a driver of low carbon action. We will also have to wait and see if post this pandemic whether demand does significantly change.

Chart 2

Proactivity in delivering the low carbon agenda – comparison with other organisations in the Oil & Gas sector



© ERM 2020

<1%

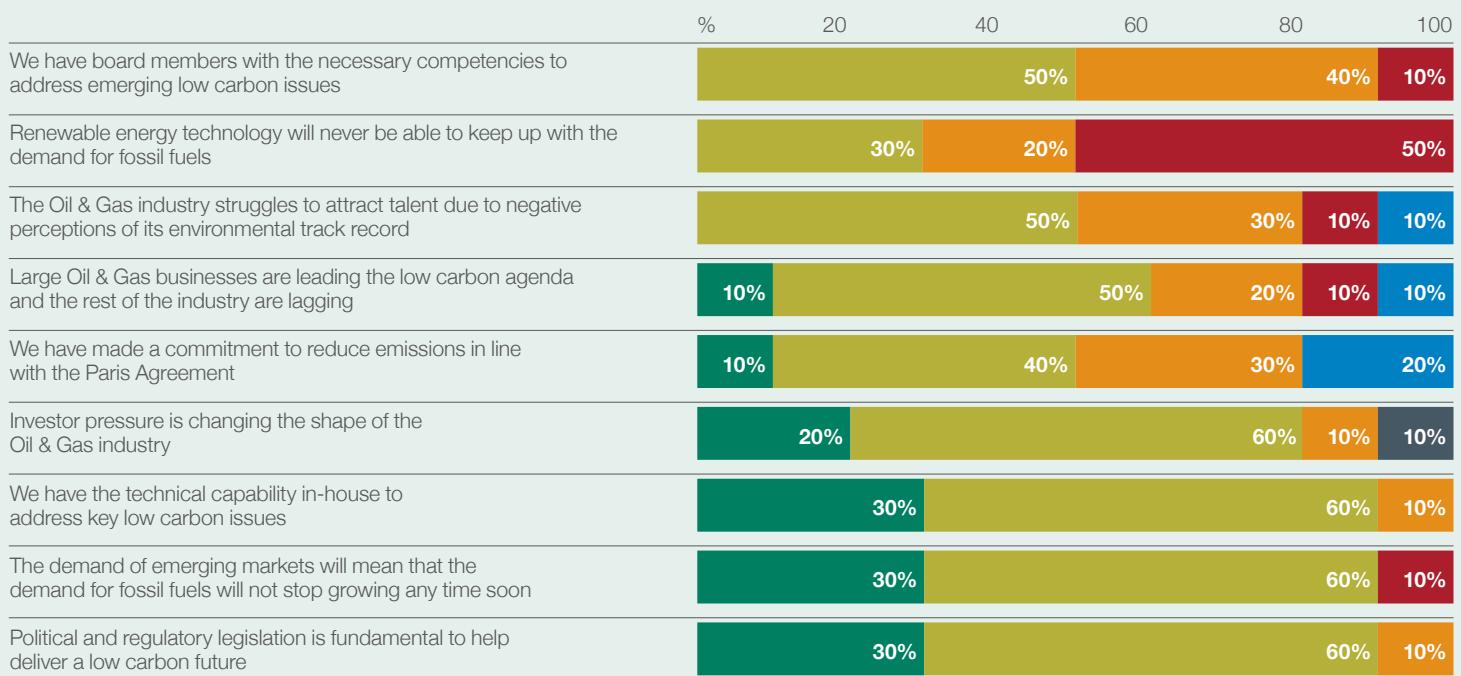
Investment to date by oil and gas companies outside their core business areas (i.e. in renewables) has been less than 1 percent of total capital expenditure.

Part 1 continued

Attitudes to the low carbon economy

Chart 3 – Attitudes to low carbon economy

To what extent do you agree or disagree with the following statements?



■ Strongly agree ■ Agree ■ Neither agree or disagree ■ Disagree ■ Strongly disagree ■ Don't know

© ERM 2020

How then to explain what appear to be the mixed messages around a strong commitment to a low carbon transition while also putting faith in the future of fossil fuels. The answer, in large part, is natural gas.

As many oil companies seek to scale back their exposure to crude oil exploration and production they have chosen to double down on natural gas production – and for downstream producers liquified natural gas (LNG) – as a low carbon solution.

In some ways the sector's growing emphasis on natural gas is important as it is one of the lower carbon options (compared to oil or coal at least) that can help the world as it transitions to a post-carbon future. One recent Goldman Sachs report into the

European oil and gas sector estimated that while 50% of capital expenditure by major oil companies already is being invested in low carbon resources the majority was devoted to natural gas projects.

However, numerous studies have emphasized that emissions cannot be contained to 1.5 degrees (in line with the Paris Agreement) if new oil and gas exploration continues unchecked. In particular, as the IEA reported in 2019, based on current projections that demand for oil and (especially) gas would continue to grow to 2040, there is only a “50% probability of a 2.7°C stabilisation (or a 66% chance of limiting warming to 3.2°C) – not nearly enough to avoid severe effects from climate change.”

Part 2

The Drivers of Change

Investors pile on the pressure

It won't come as much surprise to anyone in the oil and gas sector that investor pressure is playing an outsized role when it comes to operationalizing climate risk through a low carbon agenda. Eighty percent of executives said investor pressure was the main driver of change within the organization – a direct reflection no doubt of a multi-year campaign by environmental activists and activist investors to "follow the money" around climate change.

In February 2020, The Investor Forum, which holds £18.5tn in assets and represents Britain's largest investors, was reported to be putting Barclays Bank, a large UK bank, under pressure to adopt stricter policies on climate change³. Also this year, the Church of England, decided to screen BP out of its £2.8 billion pension fund. This follows the push in 2019 by BP's shareholders for a climate change shareholder resolution that demands a business strategy consistent with the Paris Agreement (a move that BP is now seeking to address)⁴. As a whole, the number of climate-related shareholder proposals has almost doubled since 2012 and the percentage of investors voting in favor has increased from 10% to 30%⁵.

80%

80% of respondents see investor pressure as the main driver of the low carbon agenda

Yet despite this major investor shift away from carbon intensive companies and products the oil and gas sector still hasn't fully woken up to the risks it poses. For example, research from CDP found that, between January and October of 2018, the oil and gas sector's 24 largest publicly listed firms spent just 1.3% of their combined capital expenditure on low-carbon technologies and projects⁶.

In another piece of research, Carbon Tracker, an independent NGO, analyzed large oil and gas investment projects planned worldwide over the next 10 years. It concluded that oil and gas companies intend to spend \$6.5tn on new production by 2030. However, that amount of production is financially unfeasible if global warming truly is to be contained at 1.5C. That would result in oil and gas companies sitting on \$2.2tn in potentially stranded assets.

Regulation rising

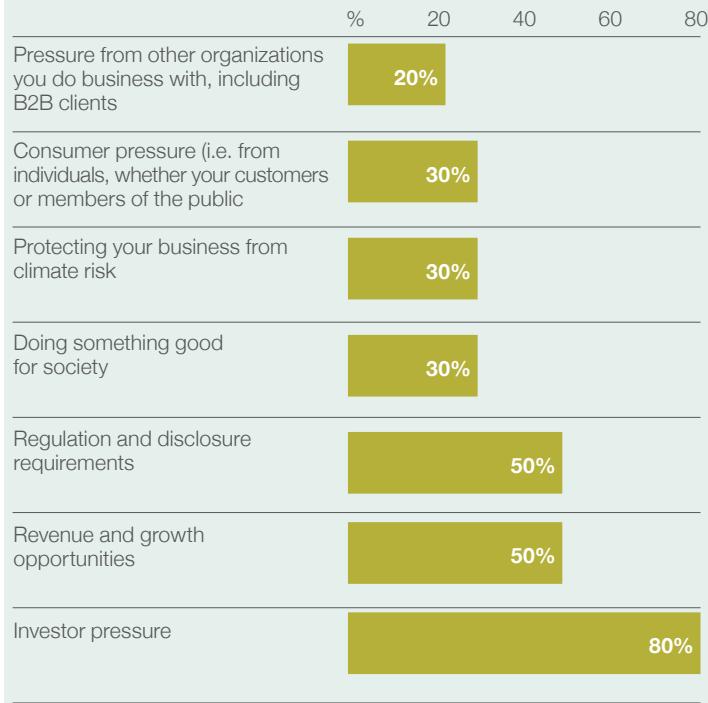
Regulation (or the fear of new climate regulation to be more precise) and disclosure requirements is the joint second biggest driver for oil and gas executives tied with opportunities for new revenue and growth streams.

In 2019 the UK government pledged to bring greenhouse gas emissions to net-zero by 2050, joining 66 other global nations who have articulated similar plans for a clean economy – now estimated to cover 40% of GDP globally. In early 2020 the UK also announced it would ban the sale of all new internal combustion vehicles (including electric hybrids) by 2035, sending shockwaves through the automobile industry and a clear warning to the oil industry. This followed the lead of nine other nations, including France and Norway, who have legislated the demise of petroleum-powered cars and trucks. Many more cities (not to mention the US state of California) have announced similar bans in the near future.

Part 2 continued

Chart 4

Which are the most important drivers of the low carbon agenda?



© ERM 2020

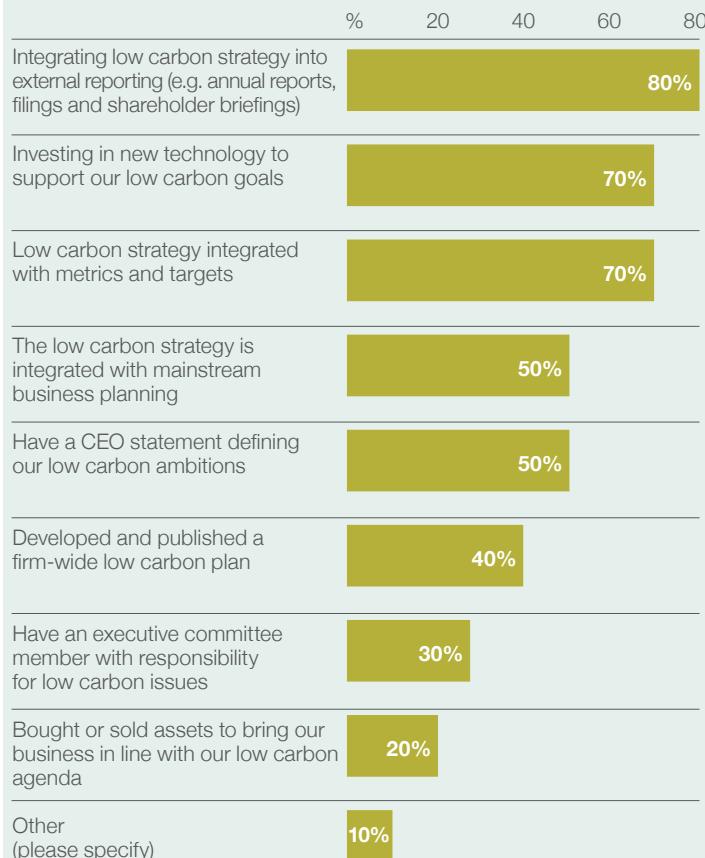


The importance of investor pressure and increased regulation seems a clear indication that external forces are still very much driving the low carbon agenda within oil and gas companies.

Interestingly only a minority of executives said that consumer pressure was a factor – surely a short-term optic that will have to be reassessed very quickly given the millions of young people who have taken to the streets calling for radical (non-fossil fuel) action on climate change. Certain parts of the political establishment and business might feel comfortable dismissing the passion of Swedish climate campaigner Greta Thunberg and her legions of social media-motivated supporters but the next generation of oil and gas leaders likely won't. Not least because in the coming years, as climate change becomes an ever more important media story, as popular culture rallies against fossil fuels and a new generation of “climate-woke” young adults make the wholesale shift from a carbon intensive consumer lifestyle, their business survival will depend on fully grasping the low carbon shift that is underway.

Chart 5

Which of the following actions is your organisation taking as part of its low carbon agenda?



© ERM 2020

Part 3

Turning Ambition into Action

Companies put their faith in better reporting and technology

Given the oil and gas sector's current perspective of the low carbon agenda and the most important drivers of change, what steps are they taking to integrate it into their strategy and operations?

By far the most proactive step so far is to integrate low carbon strategy into external reporting. Most executives said their companies are incorporating low carbon strategy into their annual reports, sustainability reports, regulatory filings and shareholder briefings (see chart left).

Investing in new technology also features prominently in executive thinking – not least because technologies like better controls on flaring, methane capture and LNG transport capabilities will be crucial in helping the oil and gas industry make the low carbon transition. The industry's expertise, infrastructure capabilities and access to resources also make it a natural leader when it comes to innovation in the form of carbon capture and storage, hydrogen and bio-refineries.

Even in energy areas such as solar or wind energy that have prospered independent of the oil and gas sector, individual companies could still play an important role in growing the capacity of these renewable technologies because of their expertise in delivering energy and infrastructure at scale.

Part 3 continued

“With their extensive know-how and deep pockets, oil and gas companies can play a crucial role in accelerating deployment of key renewable options such as offshore wind, while also enabling some key capital-intensive clean energy technologies – such as hydrogen and CCUS – to reach maturity,” Dr Fatih Birol, executive director of the IEA, noted in an 2019 interview.

Integrating metrics and robust measurement in a low carbon strategy is another high priority and, by extension, half of executives interviewed also cite the fact that their low carbon strategy is integrated with mainstream business planning. Half also emphasized the importance of having a CEO statement that defines the company’s low carbon ambitions.

Moving low carbon from the periphery to the mainstream

Those three points – essentially putting low carbon strategies at the heart of business thinking – will not seem revolutionary to many business leaders outside of the oil and gas sector. The mainstreaming of sustainability (because of its obvious financial impact on the business) already has transformed thinking and strategy in sectors such as Fast Moving Consumer Goods, Food and Fashion. Unilever, notably, first outlined its ambitious Sustainable Living Plan back in 2010. Slowly, oil and gas executives seem to be coming to terms with the fact that low carbon strategies (and the pace of adoption) will very much define their companies’ success over the next 20 and even 10 years.

However, turning strategy into real action is a slow process. Less than half of executives said their company had developed a low carbon plan that applied to the entire business and less than a third had an executive committee member with responsibility for low carbon issues – both barriers for effectively operationalizing low carbon action. Just 20% of companies had bought or sold assets to help bring the business in line with its low carbon agenda – though this will no doubt accelerate in the next few years. After all, over the past 30 years, mergers and acquisitions has been the go-to solution for oil companies wanting to stay competitive or move quickly into new markets.



20%

Just 20% of companies had bought or sold assets to help bring the business in line with its low carbon agenda

The Seeds of Success

Every executive surveyed whose company had bought or sold assets to align their low carbon agenda said the strategy has proved very effective (see chart right). This point of view would appear to be bolstered by a number of high-profile industry examples. In 2018 Total bought Direct Energie – helping it expand into the consumer electricity market⁷. That same year BP acquired Chargemaster, the UK's largest electric vehicle (EV) charging network⁸. Shell, meanwhile, snapped up residential energy storage provider Sonnen in 2019.

Investing in new technology was another success story for executives as was the strategy of making sustainability an executive board level responsibility. And most executives cited the importance of the CEO statement outlining low carbon ambitions.

Clearly though, despite high level executive commitment, demonstrable low carbon transformation has yet to filter throughout the industry. Far less successful so far have been the attempts by companies to integrate sustainability into mainstream business thinking, shaping a firm-wide sustainability plan and integrating sustainability into external reporting.

This could be because the business case for low carbon action has yet to win the hearts and minds of key decision makers either from a lack of leadership commitment, or a failure to demonstrate through metrics the importance of low carbon to future success. In some cases it could also be that executives who have excelled through decades of oil and gas prosperity simply don't believe the climate risks their business faces.

Chart 6

How effective have the following actions been in furthering your low carbon agenda?



© ERM 2020

Part 3 continued

Tackling the Low Carbon Challenges Ahead

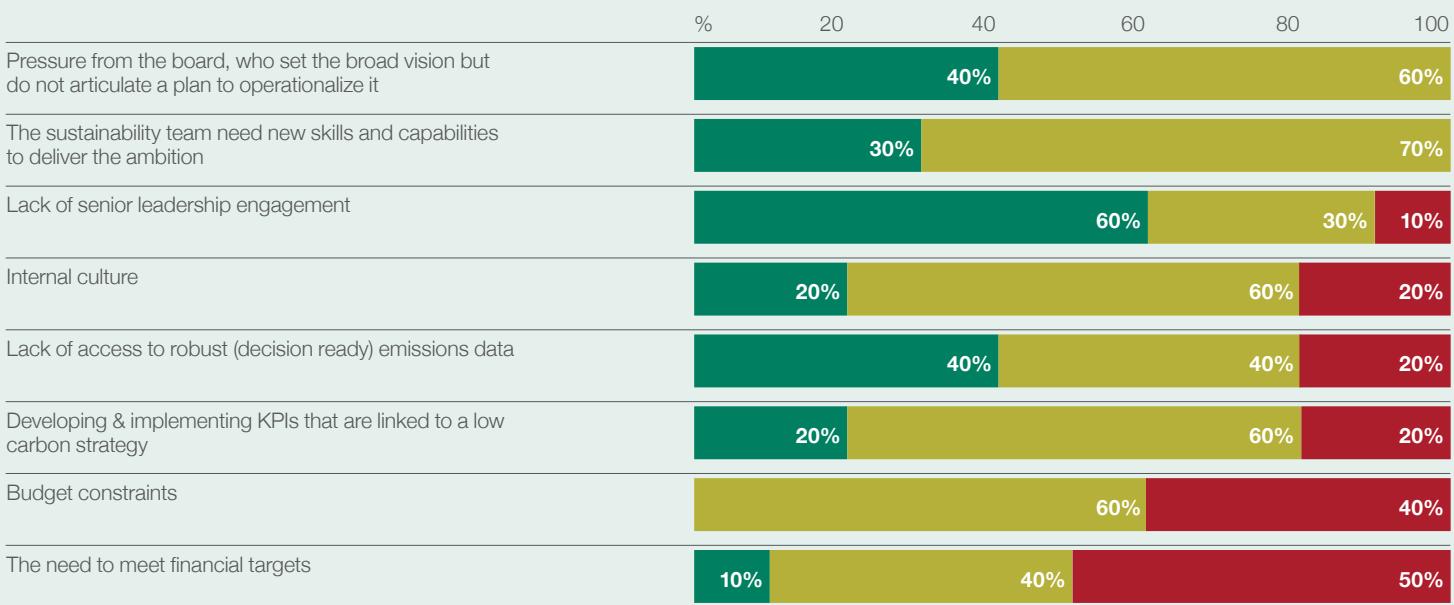
Balancing short-term performance with a low-carbon transition

Oil and gas companies are going to embrace low carbon strategies in different ways depending on their interpretation of how the energy landscape is being redrawn. Whatever their level of commitment they face some common challenges.

The most significant challenge, according to the executives surveyed, is the need to meet financial targets while embracing the low carbon agenda. Second was budget constraints (see chart below). Both are linked. At a time when oil and gas revenues are under increasing scrutiny by investors oil companies find themselves with a dilemma. They must prove their profitability and yet develop and demonstrate an appetite for low carbon projects that often are still perceived as a potential business risk even though renewable energy at scale is consistently proving its ability to be competitive in the marketplace. In 2019 the UK obtained more power from zero-carbon sources than fossil fuels for the first time since the Industrial Revolution⁹.

Chart 7 – Challenges

What are the major challenges to operationalizing climate risk?



■ Significant challenge ■ Somewhat ■ Not a challenge



That lack of confidence in low carbon profitability translates into budget constraints even as the industry ploughs billions into low-margin deep water oil exploration and tar sand extraction. Yet Goldman Sachs estimates that \$30tn in new clean energy infrastructure investments may be required by 2040 to limit global warming.

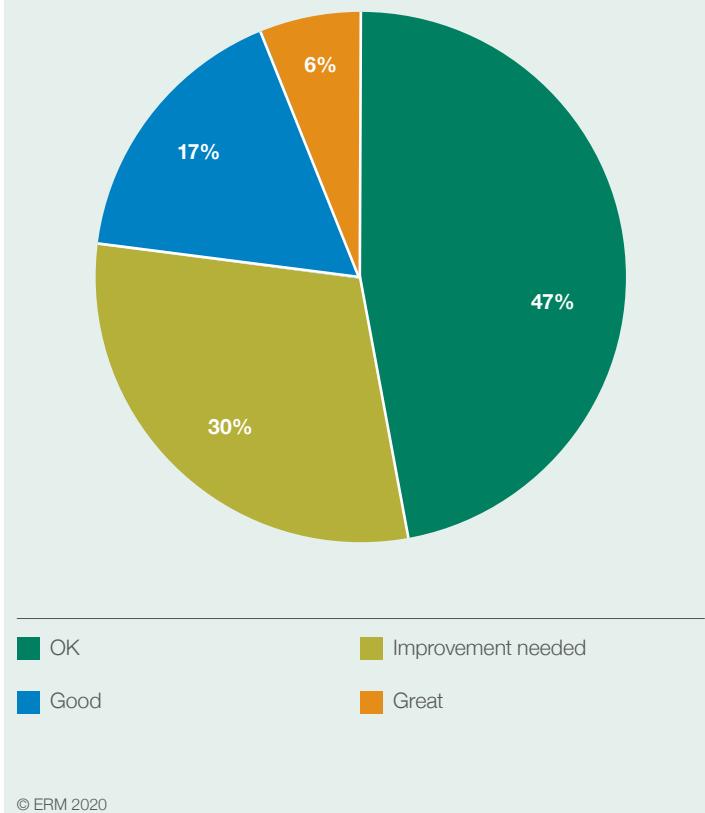
Executives also highlight the challenges of developing KPIs linked to a low carbon strategy and a lack of access to robust emissions data – two themes that again could be seen to hinder the mainstreaming of low carbon within the company given how high data and metrics are valued within the industry.

One of the most important challenges is to balance the current business by demonstrating that natural gas now is important to improve the transition to a low carbon economy and, on the other hand, to invest in other renewable gases that allow us to go further to a zero carbon economy.

Carlos Ruiz Alonso, Sustainability and Risk Director Enagás

Part 3 continued

Chart 8
Are your carbon data sources up to the task ahead?



Carbon Data

Another issue that is key to operationalizing a low carbon agenda is obtaining data that are fit for purpose to help you achieve your objective. A key problem here is that the people and systems you are relying on at the new ‘carbon front line’ are not necessarily set up for success.

This chart (shown left) comes from a workshop ERM hosted in February 2020 in Houston, with 30 people from a front line group of managers in large and medium sized oil and gas firms across up, mid and downstream in North America.

We asked them ‘how comfortable are you that the data you currently collect around carbon are up to the task of driving performance and enabling the CEO to demonstrate to investors that they are walking the talk?’ The answers were equivocal. Perhaps because until very recently environmental data were collected primarily for regulatory compliance and CSR reporting purposes. Neither of which demand a particularly onerous burden of proof. Put simply, okay is not okay when you are talking about the financial impacts of carbon.

Leading companies are now building new – and truly ‘business critical’ – data platforms that join the dots between existing data sets, to create new ones and equip operations, strategy and finance teams to drive the low carbon transition. For those that embrace this, we believe it will clearly give them a competitive advantage in a world where carbon performance now equates to money.



Beware the Talent Gap

Then there are the people issues. The vast majority of executives said that internal corporate culture was a challenge and that the sustainability team needed new skills to deliver the low carbon ambition. That could be because less than half believe the executive leadership are suitably engaged.

Perhaps the biggest challenge oil and gas companies will face is how to recruit the next generation of talent when that same generation has such a negative view of the industry. Most of the executives interviewed don't consider this a problem at present but, if the past experience of challenged industries (think Financial Services post 2008 and Tobacco) is any indication, that may be a result of complacent thinking.

Perhaps the biggest challenge is how to recruit the next generation of talent.

Case studies

How are you operationalizing the transition?

Nicola Lovett
CEO of Engie UK & Ireland

"Essentially, we provide three different services. The traditional energy facilities, management services and also regeneration services. With the latter two, we very much look through the lens of how they can support a zero-carbon economy – we are trying to push forward into the space of how we can be a leader in trying to make those facilities refurbishments as near to zero carbon as possible.

Our zero carbon journey began five years ago when Isabel Kosher took over as CEO of Engie Group. She talked about a root and branch revolution that was required and a complete transitioning into a new zero-carbon world. So, I think our transition was earlier than most and was exceptionally bold. Since then the Group has reduced its emissions by 50%, and within the UK, the energy that we supply and generate is either zero carbon or as close to zero carbon as possible. I would say right through the business from Engie Group into each of the business units, low carbon, zero carbon is absolutely what the Group is about on a minute to minute, day to day basis. I think we are very much seen as a pioneer in this space, as one that's absolutely leading the change.

That has had a very positive effect in attracting talent. Both in the UK and the broader Engie Group the volume of people that want to come and work for us has increased, which I think is very much because we are seen in that space. People want to be part of something that is very progressive – especially graduates who want to join a firm that is very responsible and moving forward.

I think a successful business now has to balance the people, the profit and the climate agenda. And therefore, I think the absolute benefit to our organisation is that we will thrive in the new low carbon environment. We already are seeing this. Up until a few years ago, we had almost a decade of zero growth or no growth across the Engie Group and a sort of diminution in the level of return. Now we are beginning to see that change we are into our second, third year of seeing growth as a business (though admittedly when we first embraced our zero strategy we were perhaps a little ambitious in terms of how quickly we would see that change).

In the future, by embracing people, profit and the planet we will attract the very best talent and we will be able to very much deliver on our customer requirements while coming up with new and innovative solutions that will continue to drive organic growth."

In the future, by embracing people, profit and the planet we will attract the very best talent and we will be able to very much deliver on our customer requirements.

Senior Executive
Total Oil India Pvt Ltd

The LPG operations include transportation and safety. There's a significant carbon dioxide footprint in this part of the business because of transportation.

From our corporate office in France there is a mandate now to measure the CO₂ intensity of our operations and specifically, reduce the CO₂ intensity. We expect that progressively it will be embedded in each and every aspect of our operations.

We are focusing on illumination and switching over to LEDs, which are very cost effective now. They've reduced our energy consumption dramatically. LEDs also are a precursor for the full solarization of our facilities as you cannot implement solarization of sites using conventional illumination systems.

Yet the combination of LED and solar is the low hanging fruit. Today, the technologies to reduce your carbon footprint are becoming more affordable all the time. Technology is driving the cost curve downwards so what could not be implemented three or four years back now becomes feasible.

The challenge for leading in low carbon investment in India is that the markets here are big, dense and quite complex. In these types of markets it's usually the company with the lowest marginal costs that wins. That's why a concerted effort either on the part of industry or the government is needed to nudge people along a low carbon path. The macro environment has to be conducive to make these kinds of investments.

Ultimately, it is inevitable that energy companies, will have to green their energy. There is a very clear recognition within Total that climate change presents a real business risk. And to that extent, Total is putting in place policies and systems to mitigate that risk and try to become a greener energy company.

Carlos Ruiz Alonso
Sustainability & Risk Director, Enagás
Spain

At Enagás, our main business is to develop new infrastructure in the natural gas sector (LNG terminals, compression stations, pipelines, underground storage), and also operation and maintenance of these structures. We have been working very hard on climate change and low carbon strategies since 2011. We have constituted a special working group to try to measure all the carbon footprint in Enagás and also to identify which are the main initiatives to try to reduce our carbon footprint every year in every facility. Also, we have included this target as a KPI in our variable remuneration and we have reported on our activities in accordance with the Taskforce on Climate-related Financial Disclosure (TCFD).

One of the most important challenges we face is to balance the current business to try to demonstrate that natural gas now is important to improve the transition to a low carbon economy while, on the other hand, invest in other renewable gases that allow us to go further to a zero carbon economy.

Looking forward we can collaborate to a low carbon economy through the use of our infrastructure. Our natural gas infrastructure can play a main role in the decarbonation process if we are able to demonstrate that green hydrogen can be produced at low prices and we are able to use the green hydrogen in mobility, in industries, in cities and in our houses. We think that we play an important role in those services.

Part 4

The Five Steps to Operationalizing Climate Risk

As oil and gas companies move quickly to operationalize their climate risk and integrate low carbon strategies they will have to meet and exceed the expectations of many different stakeholders. Here are what we see the winners doing:

1

They will get real – and transparent – with their investors. They may be some of the best friends the industry has got. This means understanding what they want, being consistent in what you tell them and as much as possible how that compares with others.

2

They will recognize that this is a period of deep structural transformation – not yet another cyclical price swing. And profound changes will be needed in business models, portfolios and practices.

What makes the biggest difference are actions that shift portfolio balance and provide genuine leadership commitment – rather than a sustainability program tacked on to the business.

While the most obvious angle might be to get rid of all the high carbon stuff before it has no value at all, the more pragmatic path is to make sure you are considering ‘transition risk’ in every transaction, capital project approval and off balance sheet financing decision.

It is becoming particularly critical with ‘the money’ getting ever focused on how to evaluate whether a corporate plan, capital project or business investment is really delivering a lower carbon outcome.

3

Equipping the people running the new ‘carbon data front line’ with the tools and confidence to answer the challenge more robustly. This has to be a key priority. Leading companies are beginning to build new platforms that join the dots between existing data sets, to create new ones and equip operations, strategy and finance teams to drive the transition – even formally designating them as one of the handful of systems deemed ‘business critical’. They will understand what their carbon data are really saying about the state of the business. And what they are currently incapable of telling them in the march towards fiduciary accountability.

At the same time they need to attract a new generation of talent – young people who will feel proud of working for the business. The reality is that, if executives are not walking the talk on low carbon promises, the talent they need to prosper will choose careers elsewhere.

We have highlighted better data would also help make sense of new technology implementations. But to do so means a new breed of data-smart employees is needed to help create a data-driven business. And the type of company they want to work for is one that is really committed to low carbon and a place where they can make a difference.

4

They will equip themselves and their operational managers to lead staff through the transition. Step by painful step. And they will work ever harder to attract a next generation that yearns to ‘make a dent in the universe’.

While success in the transformation era appears to be driven by keeping one group of people happy – investors – companies skip over another group at their peril: staff, both current and future.

Perhaps the deepest structural problem lies in persuading your people that you are serious about the change in direction – how will you tackle the deep-seated anxiety they feel? The reality is that many people in the industry are finding it incredibly hard to move out of a destructive cycle of denial and anger – and to follow executive leaders to new beginnings in the energy transition. However, without them companies simply won’t make it.

5

They will walk the talk every day by doing whatever it takes to eliminate emissions from ongoing operations. They will dare to imagine low carbon as the only license to operate that really matters.

Conclusion

We are at a moment in time when the impact of a changing climate and human involvement in accelerating that cannot be questioned. Despite the ravages brought by the Coronavirus pandemic, as global economies rebuild the demands of industry and consumers will only increase the need for energy.

We have all seen the leadership of companies in many industries as they make pledges of a zero carbon operation working to varying timescales, usually 2030 or 2050. The reality is many can talk a good game of ambition and targets – ‘hero statements’ for want of a better phrase. But ultimately the challenge to make these real lies in embedding changes into the daily activities of firms.

With heavyweight investors like BlackRock positioning ‘climate risk as investment risk’, the calls for action are becoming deafening. The opportunity for oil and gas firms to define a new purpose as providers of lower carbon energy is clear.

In 1962 U.S. President J.F. Kennedy made a pledge to put a man on the moon by the end of the decade. At the time it appeared a fanciful ambition. With so many scientific and engineering challenges, even the notion to some seemed improbable. Today, collectively the world is facing its own moon mission. We have highlighted five important steps companies can take in operationalizing their own approach to climate risk.

However as we consider the climate ‘moonshot’, we also think there is a sixth priority all firms must embrace. That is to harness new-found corporate leadership, social will and financial drivers to get the job done.





1. <https://www.transitionpathwayinitiative.org/tpi/publications/27?type=NewsArticle>
2. <https://www.repsol.com/en/press-room/press-releases/2019/repsol-will-be-a-net-zero-emissions-company-by-2050.cshtml>
3. <https://www.theguardian.com/business/2020/feb/05/barclays-bank-revolt-investor-forum-fossil-fuels-climate>
4. <https://www.greenbiz.com/article/unprecedented-why-bp-investors-holding-billions-shares-are-backing-climate-resolution>
5. <https://www.goldmansachs.com/insights/pages/gs-research/paths-to-power/report.pdf>
6. <https://www.cdp.net/en/articles/investor/european-oil-majors-spending-up-to-7-on-low-carbon-but-wider-industry-needs-to-step-up>
7. <https://www.ft.com/content/c083e56a-42e9-11e8-803a-295c97e6fd0b>
8. <https://www.bbc.co.uk/news/business-44640647>
9. <https://www.bbc.co.uk/news/science-environment-48711649>

ERM wishes to acknowledge Meridian West in undertaking and compiling the research that supports this paper

Matt Haddon

Global Lead,
Sustainability & Climate Change
matt.haddon@erm.com

Emily Farnworth

Global Director,
Climate Change and Low Carbon
Economy Transition
emily.farnworth@erm.com

James Stacey

Global Director,
Climate Change and Low Carbon
Economy Transition
james.stacey@erm.com

Some of our offices



ERM

Is a leading global provider of environmental, health, safety, risk, and social consulting and sustainability related services. We employ more than 5,500 people in over 40 countries and territories working out of more than 160 offices. ERM is committed to delivering solutions while providing a service that is consistent, professional and of the highest quality to create value for our clients. We have worked with many of the Global Fortune 500 companies delivering innovative solutions for business, providing advice that has underpinned billions of dollars of investment decisions. For all we have helped them understand and manage the sustainability challenges that the world is increasingly facing.

**For more information contact us at
www.ERM.com or your usual ERM contact.**

April 2020 Global Marketing

© Copyright 2020 by ERM Worldwide Group Limited and/or its affiliates ('ERM'). All Rights Reserved. No part of this work may be reproduced or transmitted in any form or by any means, without prior written permission of ERM.

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received, or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation. ERM would be pleased to advise readers how the points made within this document apply to their circumstances. ERM accepts no responsibility, or liability for any loss a person may suffer for acting or refraining to act, on the material in this document.