

RESILIENCE BAROMETER® AFRICA OIL WEEK 2022



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EXPERTS WITH IMPACT





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Tackling the Energy and ESG crisis

The year 2022 represents a critical inflection point in the way we think about energy and the global systems needed to find, produce, deliver, and decarbonise it. Significant, era- defining events are happening all around us, all around the world, and all at a breakneck pace – shaping both short- and long-term structural considerations around energy and sustainability.

Given the concerted global urgency to reduce carbon emissions as well as the geo political vulnerabilities energy transition is now more topical than ever. Energy transition however, is not simply a switch from fossil fuels to renewables, but rather a more profound shift in how we source, transport, store, trade and use energy across the entire global economy.

In our annual Resilience Barometer of over 4,000 C-suite executives, the top five boardroom concerns were:

- 1. Surge in energy prices
- 2. Inflation reaching damaging levels
- 3. Rising unemployment
- 4. Global energy shortages
- 5. Economies failing to tackle climate change quickly



FIGURE 1. TOP C-SUITE CONCERNS IN 2022

Total traditional energy (oil and gas)

- Renewable resources and alternative energy
- Traditional energy (utilities)
- Other sectors

Many countries including African nations are now considering how to transition their energy demands in a way that provides the most benefit for their own citizens, balancing short-term needs (e.g., raising living standards and improving electricity access rates) with long term imperatives (minimising climate change impacts and building the skills and capabilities within their workforce/ economy to benefit from new technologies).

Energy transition will be complex. It will require the deployment of various technologies, across different geographies, on differing timeframes."



CHRISTO ROUX Senior Managing Director, FTI Consulting South Africa

Increased pressure to improve on ESG and Sustainability

Data from our most recent global Resilience Barometer® highlight that over the next 12 months, 45% of energy companies surveyed believe they will face increased pressure to improve on environmental, social and governance (ESG) and sustainability metrics as compared to 36% of companies from other sectors.

This pressure ranked highest on CEOs' agendas and even outstripped concerns about improving operating performance and increasing market share. The reasons for this are three-fold:

- 1. As compared to other sectors, energy companies are most likely to report struggling with outdated business models.
- 2. Comparatively, our analysis shows that more energy companies lost revenue last year due to an inability to keep pace with climate change regulations and attitudes.
- **3.** Energy companies are now facing increased scrutiny from investors, regulators, activists, and the media from a financial, environmental, and sustainability standpoint.

The pressure to improve ESG now outstrips concerns about improving operating performance and increasing market share for energy companies."



LOSHNI NAIDOO Senior Director, FTI Consulting South Africa Sustainability is not the only driver curtailing financing, as there are also investor concerns driven by financial resilience. There is the risk of stranded assets, i.e., those assets that become unable to earn an economic return far earlier than was assumed at the point of investment decision.

A confluence of climate-related factors is exacerbating this risk:

- On a cost basis, the downward trajectory of renewable energy costs may render fossil fuels uncompetitive earlier than expected.
- Physically, assets may become inoperable due to changing climatic conditions.
- Regulations may change such that energy projects that are large emitters are forced to stop operating ahead of schedule.



How energy companies are responding

In response to the increasing pressure to improve ESG and sustainability, energy companies are trying to reduce Scope 3 emissions (which cover emissions from the use of products sold) by investing heavily in renewable energy.

It will become increasingly important to monitor and preserve liquidity as energy companies seek to build sufficient reserves to withstand price shocks in a volatile market environment. The global sanctions environment and fallout from the war in Ukraine is increasing the uncertainty of supply and market volatility.

To this end, the need for scenario planning (and range of scenarios considered in such planning) has been amplified, both from an internal risk management perspective and from the growing requirements of external stakeholders, including lenders and regulators, that are seeking greater clarity and assurances on the financial health and ability of energy companies to withstand market shocks.

Demand side pressure is driven by the rise in energy consumption, which has been on a steady upward trend since 2009, thus, from a demand-side perspective, energy companies are facing immense pressure due to the not-always-complementary needs to transition from fossil fuels to more renewable sources whilst simultaneously maintaining and in some cases increasing overall energy supply and addressing concerns around affordability and security of supply.

66 ESG is a strategic imperative which is increasingly being recognised across stakeholders as linked to greater shared value creation and resilience for businesses."



CAROLINE PARKER Managing Director, FTI Consulting South Africa

Transport and mobility

Transport and mobility, which is largely driven by emissions from road vehicles, contributes approximately 20% of global carbon emissions. As a result, decarbonising the transport sector remains a key hurdle in the path to net zero.



It is expected that demand for transportation will continue to grow throughout the world as economies recover, populations grow, and incomes expand. The International Energy Agency (IEA) forecasts that by 2070 global transport will have doubled, along with demand for passenger and freight aviation tripling and car ownership rates growing by 60%.

These forecasts clearly demonstrate the immediate need for evolution in transportation and mobility. This need for change is reflected in company attitudes, with our data indicating that 75% of respondents in the transport sector agreed that their business model needs to fundamentally change to maintain or restore competitiveness.

Heavy industry

Our Resilience Barometer data highlight that the impact of ESG and sustainability are among the top three threats for heavy industry companies over the next 12 months.

Thus, enabling decarbonisation in heavy industry is another major challenge in the energy transition as these sectors have traditionally relied heavily on conventional fuels.



Policy incentives



Governments and regulatory bodies are driving change on ESG and Energy Transition through the implementation of favourable subsidy schemes and punitive legislation.

Egypt introduced tax incentives for those companies considering investing in green hydrogen and ammonia production, storage and export, and the manufacture of plastics- alternatives amongst other project types. Participating companies can reduce their investment costs by 30- 50% from their tax bill.¹ The Madagascar Tax Code provides for VAT exemptions on equipment that is required in renewable energy production.² South Africa introduced the Carbon Tax Act, to hold emitters accountable and to drive carbon emission reductions by companies. The Act allows for a range of different tax- free emission allowances in phase 1 which has been extended to 31 December 2025.³

https://enterprise.press/stories/2022/03/16/tax-incentives-announced-for-green-emerging-investments-67049/

² https://cleanenergy4africa.org/tax-incentives-on-renewable-energy/

https://www.iea.org/policies/3041-south-african-carbon-tax;

https://www.bdo.co.za/en-za/insights/2022/tax/carbon-tax-phase-1-2

Hydrogen as a potential solution

A versatile energy carrier, hydrogen can help decarbonise the parts of the economy that cannot be addressed by direct electrification.

In addition to heavy industry, this may mean applications in transport, power and heating. A molecule that can be stored and moved around in the form of gas or liquid, hydrogen can provide additional flexibility as a backup capacity and storage solution, complementing the electrical grid.



How the industry has responded

While renewable energy companies are keen to participate on the generation side for hydrogen, they are also partially dependent on "green" hydrogen for their own supply chains. At the same time, utilities are thinking about how to repurpose existing infrastructure for hydrogen and transport OEMs are placing bets on hydrogen as a fuel, especially in heavy-duty and long-haul applications.

As seen with wind and solar, scaling up clean energy technologies is a long, complex journey. But it's critical for net zero and it can be done — with decisive policy action, smart investment, and strong stakeholder support."



KERSTIN DUHME Senior Managing Director, FTI Consulting Belgium

The energy transition will not just require the building of new power generation resources, and changing how we transport, store, trade and deploy energy across the economy; it will also require the creation of an entirely new ecosystem of industries and companies that are dedicated to enabling this fundamental shift. This includes seismic changes to the metals and mining sector, to primary industry, to grid infrastructure, and to consumer technology.

Trading and risk management capabilities required

Energy companies buy supply volumes in wholesale markets and manage price risk on behalf of their customers by trading energy derivatives in wholesale markets.

It is therefore vital that energy suppliers and related service providers, such as insurers, banks, and energy traders, improve their risk management capabilities. This would require acquiring the right skill-set as well as additional capital to enhance capabilities and meet liquidity requirements.



Grid flexibility

Growth in intermittent generation will create much greater demand for grid flexibility solutions than what has historically been required. Grid flexibility has historically focused on servicing relatively mild fluctuations in peak and off-peak load. Wind seasonally balances solar, but they are uncorrelated within a day; i.e., wind and solar can spike/fall together.

The growing importance of grid flexibility will also create opportunities. Energy storage companies will benefit from higher values placed on balancing the grid; such benefits could even extend to the average consumer of electricity, with vehicle-to-grid trials allowing drivers to use their electric vehicles as batteries that can automatically send electricity to the grid.

Shocks in energy markets in one part of the world affect us all, making resilience essential to the stability and success of companies."



EMMANUEL GRAND Senior Managing Director, FTI Consulting France



Monitoring supply chain risks

With a larger, more interconnected supply chain, energy companies are going to have to monitor supply chain risks. Supplier risks can be seen in many contexts: There are reputational risks, chiefly linked to the potential for supplier conduct to have negative ramifications for the customer; there are commercial risks due to pricing and security of supply concerns; and there are risks from cybersecurity breaches that can cascade further to the business.

The fast integration of ESG and sustainability factors into investment decision-making and regulations carries with it a new set of considerations around supplier behaviour. Additionally, human rights, labour issues and climate performance of suppliers are coming under scrutiny.



Commercial challenges



From a commercial perspective, supply chain failures across industries have been widely publicised — take for example the shortage of microchips, which has had knock-on effects across industries. For the energy sector, there will be increased strain on the supply of vital commodities, from basic resources like copper and rare earth materials to processed goods like steel and cement.

Ensuring a continuous supply of affordable feedstock will become more and more important, and price rises have already created financial hurdles for renewable energy OEMs and by extension, developers, and utilities.

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Given the importance of energy to economic development, world events have made it increasingly obvious that reliance on other sovereign states for energy places dependent countries in very precarious positions.

Countries should now aim to transition their economies in a way that provides the most benefit for their citizens, balancing short-term needs (e.g., raising living standards and improving electricity access rates) with long-term imperatives (minimising climate change impacts and building the skills and capabilities within their workforce/ economy to benefit from new technologies).

The clock is ticking on climate, and economies failing to tackle climate change quickly is a top 5 boardroom concern for energy business leaders.

- 1. Decarbonising road transport requires huge expansion in electrification and hydrogen, and investment to transform the grid. The 21st-century grid needs to overcome challenges around intermittency, inertia, directional flow, and pricing volatility.
- 2. Deployment of hydrogen offers huge potential to decarbonise at scale. But we must avoid being distracted by arguments over 'colours' and focus on bringing down cost, building infrastructure, and minimising environmental consequences.
- **3.** The energy trilemma demonstrates what energy means for the functioning and stability of the global economy and society. Energy inaccessibility and unaffordability result in disproportionate impacts on some parts of society –driving further inequality and the possibility of societal unrest.
- **4.** To accelerate and scale the kinds of solutions that will address climate, cost, and security, it will take decisive policy action, smart investments, and strong stakeholder support, and we're racing against the clock.
- The energy industry, with its ability to not only finance but execute highly complex, technically challenging projects, will need to be at the very heart of the process.







CHRISTO ROUX Senior Managing Director – Energy Transition FTI Consulting South Africa christo.roux@fticonsulting.com



KERSTIN DUHME Senior Managing Director- Energy Transition & ESG FTI Consulting Belgium kerstin.duhme@fticonsulting.com



EMMANUEL GRAND Senior Managing Director – Energy Transition FTI Consulting France emmanuel.grand@fticonsulting.com



CAROLINE PARKER Managing Director – ESG FTI Consulting South Africa caroline.parker@fticonsulting.com



LOSHNI NAIDOO Senior Director – ESG FTI Consulting South Africa loshni.naidoo@fticonsulting.com







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