ESG: A Barrier or a Solution to the Oil and Gas Investment Emergency?
About APICORP

The Arab Petroleum Investments Corporation (APICORP) is a multilateral development financial institution established in 1975 by an international treaty among the ten Arab oil exporting countries. It aims to support and foster the development of the Arab world’s energy sector through providing equity investments, project finance, trade finance and advice. Its headquarters are in Dammam, Kingdom of Saudi Arabia. APICORP is rated “Aa2” with a stable outlook by Moody’s, “AA” with a stable outlook by Fitch and “AA” by S&P Global.

About KAPSARC

KAPSARC is an advisory think tank within global energy economics and sustainability providing advisory services to entities and authorities in the Saudi energy sector to advance Saudi Arabia’s energy sector and inform global policies through evidence-based advice and applied research.

This publication is also available in Arabic.

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Key Points

Oil and gas investment in 2022 is still far below prepandemic levels. The low investment levels in the oil and gas sector are a point of concern among experts, who estimate that if investment does not reach 2018 levels by 2025, the market will risk an undersupply of oil and gas.

Several issues are affecting investment attractiveness in the oil and gas industry: price volatility, diverging oil and gas projections, increasing climate change concerns, and a lack of proper regulations for energy transition and environmental, social, and corporate governance (ESG) implementation.

For national oil companies (NOCs), the governance aspect of the abbreviation is the leading one because their relationships with domestic stakeholders (including governmental stakeholders) often determine their success. That is why, in their case, the order is more “GSE” than “ESG.”

The current crisis is shifting the discourse from climate and ESG implementation concerns to energy and food security. It is essential to consider energy transition in the medium to long term, but securing the energy supply in the short term is more critical.

ESG narratives thus far have been focused on the E (environmental) pillar, while few steps have been taken to address governance and social issues. Proper governance implementation will help ESG to achieve better results. Governance (G) should happen before the environmental (E) aspect, which suggests rearranging the letters from ESG to GES.

NOCs will ensure that their ESG strategies conform to the relevant government policies and regulations. National net-zero strategies will lead companies to align themselves with the host country. Governance must follow a top-down model, from the government to companies.

The theory of ESG and its measurement are simple and easy to understand, but implementation is complicated due to the following challenges:

— Lack of clarity in regulations
— Lack of standardized measurement systems
— The S(ocial) and G(overnance) dimensions have not attracted as much attention as the E(nvironmental) dimension of ESG; thus, ESG has been associated with “greenwashing”
— ESG has been treated as a public relations campaign by some participants, resulting in some focusing on actions that increase their public acceptance rather than the intangible essence of ESG. Many institutions have developed their own tools to measure ESG, which adds to the lack of standardization across the board.

Investors’ and financial institutions’ interest in ESG is increasing with the drive for the implementation of new clean technologies. However, governmental support and incentives must help to catalyze investments and complement ESG metrics, especially in large-scale processes.

ESG financing benefits have been concentrated in a few countries, reflecting the geographical disparity of ESG investment incentives.
Summary

On September 6, 2022, the workshop “ESG: A Barrier or a Solution to the Oil and Gas Investment Emergency?” was held in conjunction with the Arab Petroleum Investment Corporations (APICORP). This workshop had the following objectives:

- To continue the campaign to inform stakeholders about the alarming low investment situation in the oil and gas sector, which could result in a supply deficit in two to three years unless urgent measures are taken.
- To analyze the main factors affecting investment attractiveness in the sector, with particular attention to the climate issues that have shifted investors’ priorities to other industries.
- To analyze the role of environmental, social, and corporate governance (ESG) scores and strategies and possible solutions that could help the oil and gas industry attract more investment and, at the same time, cope with its sustainability responsibilities.

The event was split into four sessions. In the first session, “Oil and Gas Investment, Energy Transition, and ESG,” the participants learned about the current global situation of oil and gas investments. They also identified current investors’ sentiment toward energy transition and ESG and how to move toward a holistic approach that reconciles the needs to meet energy security and ESG criteria and to transition to a low-carbon future. In this session, the participants also discussed the issues affecting investment attractiveness in the oil and gas industry: price volatility, diverging oil and gas projections, stronger climate change concerns, and lack of proper regulations for energy transition and ESG implementation.

In the second session, “The Challenges that the Oil and Gas Industry and Investors Face within ESG,” the participants considered the problems that are not part of the current ESG agenda. First, there is a lack of national oil company (NOC) perspective in shaping the ESG agenda, marking a difference between NOCs and private and hybrid oil companies. NOCs carry part of the national development agenda and are responsible for revenues, employment, and stable energy supply. At the same time, their contribution is not taken into account in the “S” pillar of ESG. The second group of problems is linked to the limited transparency of all ESG frameworks, taxonomies, and rating guidelines, which creates uncertainties and additional challenges for energy companies willing to meet these requirements. The creation of sector-specific guidelines, taking into account multiple options for sustainable development, is crucial for the success of ESG in the oil and gas sector. The APICORP example showcased how sustainable solutions could be implemented in the industry in the Middle East and North Africa (MENA) region and globally.

In the third session, “ESG, Financial Institutions, and Low-carbon Investments,” the participants learned about the financial ESG ranking process and the challenges associated with this process, not only in the oil and gas sector but also in general. One of the most critical remarks of this session was the fact that the ranking depends not only on the product of the company/player but also on a number of intangible conditions that, in some cases, put oil companies in better positions than companies that are well known to produce green products, such as Tesla. Additionally, this session provided some possible solutions for the oil and gas industry to improve its ESG ranking and become more attractive to investors.
Finally, session four, “Solutions for Attracting More Investment and Tackling ESG at the Same Time,” drew attention to the challenges and misconceptions of the ESG agenda due to the overemphasis on the “E” pillar. The participants discussed how the social pillar could contribute to the development of the oil and gas sector, especially due to concerns about a possible skills shortage in the industry and difficulties in attracting young talent. Gains in the “S” pillar of ESG, it was argued, will therefore give oil and gas actors an advantage with some of their largest stakeholders: employees. Furthermore, localization successes—an area in which oil and gas companies have traditionally been ahead—can serve as a template for improved ESG. Therefore, the strategic use of ESG in the sector can become a factor in its long-term success.

This Workshop Brief reports on the insights derived from the roundtable deliberations that focused on the current investment problems faced by the oil and gas industry. It also highlights the impact of the climate change discourse on fossil-fuel investors and how the industry can use ESG strategies to attract investment.
Background of the Workshop

Currently, among other challenges, the investment attractiveness of the oil and gas sector has been negatively affected by climate concerns and social misconceptions about fossil fuels. In the oil and gas sector, few enterprises, including integrated and independent producers, have adopted ESG mandates to address climate change.

First introduced in 2005 by the United Nations Environment Programme Finance Initiative (UNEP FI), ESG criteria rapidly gained importance after the Paris Agreement. Now, ESG mandates are important criteria for many oil and gas investors.

In 2014, the fall in global oil prices triggered concerns among investors, who decided to take a conservative approach by reducing global upstream investment by approximately 50% between 2014 and 2016. Despite OPEC+ interventions to stabilize the market, capital spending in the sector in 2019 was still substantially down from 2014 levels. In 2020, the COVID-19 crisis exacerbated the investment deficit in the oil and gas industry, inciting a yearly drop in upstream capital expenditures of approximately 30%. Despite a slight recovery in 2021, experts warn of a possible midterm oil and gas supply crisis unless a substantial amount of investment is rapidly injected into the sector. Unfortunately, the investment projections for the next two years are not promising.

Following these concerns, the King Abdullah Petroleum Studies and Research Center (KAPSARC), in partnership with APICORP, decided to collaborate to develop an understanding and bridge the gap by organizing the workshop “ESG: A Barrier or a Solution to the Oil and Gas Investment Emergency?” on September 6, 2022, in Riyadh, Saudi Arabia, with three primary objectives:

- To continue the campaign to inform stakeholders about the alarming low investment situation in the oil and gas sector, which could result in a deficit of supply in two to three years unless urgent measures are taken.
- To analyze the main factors affecting investment attractiveness in the sector, with particular attention to the climate issues that have shifted investors’ priorities to other industries.
- To analyze the role of ESG scores and strategies and possible solutions that could help the oil and gas industry attract more investment and, at the same time, cope with its sustainability responsibilities.
Lessons Learned

Session 1. Oil and Gas Investment, Energy Transition, and ESG

During the first workshop session, the participants had the opportunity to learn about the current global situation of oil and gas investments as well as to identify current investors’ sentiment toward energy transition and ESG and how to move toward a holistic approach that reconciles meeting energy security and ESG criteria and transitioning to a low-carbon future.

The moderator started the session by explaining that ESG is a new term in the oil and gas business. However, the concept of sustainability is not new. The first oil company report using “sustainability” was from Royal Shell in the 1990s. Since then, most companies in the industry have included corporate social responsibility (CSR) strategies in their business plans. For decades, CSR was the most common term for sustainability in the oil and gas industry.

Health, safety, and environment (HSE) was another concept that emerged within the oil and gas industry as a strategic idea for renovating the industry’s public reputation. While the oil industry worked to improve its reputation through innovative strategies that included CSR and HSE, a new and more sophisticated concept was being created. In January 2004, major financial institutions were invited to participate in a joint initiative under the auspices of the UN Global Compact, the International Finance Corporation (IFC), and the Swiss government to find ways to integrate ESG concepts into capital markets (Kell 2018).

The Global Situation

During recent years, the environmental negativity around hydrocarbons combined with the climate change discourse have been driving investment from private and hybrid oil companies and financial institutions away, placing a high burden on NOCs and generating a lack of investment in the industry. Therefore, NOCs have been forced to work harder to guarantee energy security and simultaneously satisfy the energy transition and ESG strategies in their agendas.

Investments in the oil and gas industry have been facing difficulties since 2014, when the oversupply generated by the shale oil and gas revolution, combined with geopolitical risks, caused an energy crisis. After 2016, when OPEC and its allies intervened, investment in the sector slowly recovered. However, in 2020, the COVID-19 pandemic pushed the oil and gas CAPEX down by 30%. It recovered again in 2021 but was still $100 billion below the prepandemic level.

Low investment in the industry is attributed partly to the adjustments that oil and gas companies are making due to global climate concerns. NOCs and private and hybrid oil companies are implementing net-zero targets to address climate change. Most Middle Eastern, Russian, and Asian companies have incorporated scope 1 and 2 targets to cope with upstream and downstream emissions. European companies have gone a little further, implementing scope 3 targets that reduce emissions from the final user. This transition has created opportunities for new clean technologies and generated divestment in many oil and gas companies. Shell has been the most active, reaching a divestment of above 50% in its 2015 upstream oil and gas.

Despite the divestment activities of large European oil companies over the last seven years, the share of oil and gas investment is still far higher than
the percentage designated for clean technologies. However, if the divestment trend continues at the same pace as in recent years, the oil and gas sector could face a crisis and could be saved only by NOCs.

Other reasons affecting the investment in oil and gas are detailed below (Arboleda and Al Sadoon 2022):

• Volatility and backwardation. Typically, a commodity with high price volatility is not the first option among investors seeking steady gains. Additionally, backwardation shows the perspective of lower prices in the short term, reducing attractiveness to investors. Additionally, extreme oil and gas price volatility has created distortions in valuations, leading to low M&A activities and delaying financial loans or making access to them difficult.

• Increasingly diverging long-term demand projections. Uncertainties in the long term have a significant impact on investors, especially if the demand difference is considerable. Some stakeholders have even talked about peak oil demand, but the estimated date of peak oil demand varies significantly among forecasters.

• Evolving government climate regulations. Many governments are issuing net-zero targets, which affect investment decisions. Important producers and consumers, such as Saudi Arabia, India, and Russia, have set long-term climate targets. On the supply side, only 20% of gas-producing countries and 17% of oil-producing countries do not have net-zero targets.

• The lack of regulations and standardization makes it difficult to determine how to approach ESG implementation.

Figure 1. Historical oil investment, 2000–2020, billion $ (nominal value).

Source: KAPSARC, based on (Rystad 2022).
In 2022, oil prices above $100/b drove up oil and gas investments, although they are still far below prepandemic levels. Additionally, oil and gas prices are distorted due to the undersupply of fuels, eliminating the motivation for investment despite high prices. In the case of natural gas, the artificial price is expected to last at least until 2026, when new LNG capacity will come online with projects such as Qatar’s NFE.

The question of how much oil and gas will be required in the coming decades currently has no concrete answers. If the world follows the net-zero scenarios of the IEA, oil and gas demand will decrease and the required investment will also fall. However, more realistic scenarios suggest that demand will continue to increase, at least until 2040, resulting in a corresponding increasing need for investment in the sector.

The current energy and geopolitical crises, combined with global stagflation, are pushing energy and food security and affordability to the top of ESG agendas, setting off alarms about investment deficits that may result in a supply shortfall in the medium term.

Some experts consider that this new shift in priorities is occurring as the world realizes that some net-zero targets are highly aspirational and, in some cases, unrealistic, diverging from crucial issues that need to be addressed in the short term. Clear mechanisms for reaching net zero have been determined, but they are expensive. Private investors have no motivation or capacity to capitalize on these mechanisms, generating a gap in the applicability of the suggested solutions. The truth is that the energy transition will happen, and the climate targets will be achieved, but not today. It will take at least 30 years to go through this transition.

The Middle East and North Africa

MENA is the only region that increased upstream oil and gas investments in 2020 and 2021. Total MENA investment now represents 18% of global CAPEX in upstream oil and gas, a significant increase compared to the 15% share in 2019. At the same time, the Gulf Cooperation Council (GCC) region leads the decarbonization of conventional energy sources through technologies such as carbon capture, utilization, and storage (CCUS) and gray and blue hydrogen (Saudi Jafurah hydrogen project). Hydrogen is considered the transitional fuel. However, hydrogen investment is limited, as large-scale production and delivery techniques are still undergoing pilot testing. The region also invests heavily in clean energy sources (solar and wind).
Refinery margins have reached 25-year record levels, incentivizing new capacity investments in the region. New petrochemical capacity additions in MENA compensate for permanent closures in the EU and other regions. The acceleration of the energy transition is also leading to a push for new capacity in fuels to chemicals, which is expected to sharply increase the crude oil to chemicals (COTC) share in the next decade. MENA has a competitive advantage in petrochemical production, as feedstock availability with a low-carbon footprint is guaranteed for the long term, even under radical energy transition scenarios (Al-Ashmawy and Shatila 2022).

The final message of the session can be summarized as follows: A substantial increment in investment in oil and gas is needed today to guarantee global energy security in 2025 and beyond.

**Session 2. ESG Challenges that the Oil and Gas Industry and Investors Face**

There are several groups of ESG challenges that the oil and gas industry is increasingly facing. Among them are the lack of involvement of NOCs in the discussion around shaping ESG frameworks. There are crucial differences between NOCs and private and hybrid oil companies that are currently not taken into account. Additionally, limited transparency of all frameworks, taxonomies, and rating guidelines creates additional challenges for energy companies that are willing to align with ESG requirements. Moreover, many sustainable...
technologies suggested by policymakers are not yet mature or economically feasible, which drives away responsible investors.

Standardizing existing rules and developing sector-specific guidelines would help develop ESG agendas in the oil and gas sector. However, on this road, contextualization for countries is necessary.

**NOC Perspective on ESG**

A topic that is barely mentioned is the lack of involvement of different types of companies in the process of shaping the ESG agenda. Indeed, NOCs take almost no part in developing ESG frameworks, which are now being addressed from the point of view of developed markets and publicly listed companies. For example, out of all NOCs, only Aramco and Equinor participated in developing ESG metrics for the International Business Council of the World Economic Forum.

While ESG regulation could potentially lead to rising costs of capital for oil and gas producers, which would impact global markets and prices (Al Moneef 2022), it is important to distinguish the impact of ESG on different types of oil and gas companies. The impact of ESG on publicly traded companies is more severe because pressure from credit ratings and agencies influences their access to capital. At the same time, NOCs are especially impacted by the energy transition and the ESG frameworks for multiple reasons:

- Traditionally, NOCs carry part of the national development agenda. Therefore, they often have social responsibilities: stable energy supply, contributing to the budget of the country, employment, and talent development.
- NOCs are, by their nature, focused on returning value to the shareholder, and this function cannot be compromised by new agenda items.
- Some CSR programs that NOCs offer (e.g. helping to develop local suppliers in the industry and increase the strength of the local supply chain) are not taken into account in the “S” part of ESG despite their significant contribution to the nation’s social development.
- The “E” pillar of ESG is the most challenging for the oil and gas industry. At the same time, the metrics of the “E” pillar do not properly reflect aspects of particular importance for NOCs: carbon intensity of hydrocarbon production, the circular carbon economy (CCE), and investment in CCUS.
- At the same time, it can be more challenging for NOCs to diversify their business due to the institutional structure adopted in their nation. For instance, while private and hybrid oil companies can proactively develop renewable energy sources (RESS), in the case of NOCs, this is likely a prerogative of a different state institution. As a result, NOCs can lag in terms of this parameter. Moreover, NOCs are usually bound to follow their national environmental agendas.

For NOCs, the governance aspect of ESG is the leading one because their relationships with domestic stakeholders (including governmental stakeholders) often determine their success. That is why, in their case, the order of importance is more “GSE” than “ESG.” However, ESG metrics for good governance (such as those related to board structure and relationships with the government) do not reflect the perspective of NOCs and do not take into account their shareholding structure.

Lessons Learned
As a result of all these particularities, the commitments that private and hybrid oil companies and NOCs adopt are different (Figure 3). In Europe, most private and hybrid oil companies have committed to limiting emissions within scopes 1 and 2, and a higher number of companies also committed to limiting emissions within scope 3. The market and regulation in the U.S. are less developed and ESG-focused, resulting in less ambitious commitments. In comparison to private and hybrid oil companies, NOCs are more dependent on government policy; at the same time, NOCs from the GCC have strongly pushed the development of the environmental agenda. These commitments will influence the types of investments that these companies will make in the future.

Figure 3. Commitments to limiting emissions by different types of companies.

* Multiple leading international oil companies and national oil companies have started committing to scope 1, 2 and 3 emission targets.

Source: (Shehab 2022).
Alignment of Frameworks, Taxonomies, and Ratings

Another challenge that makes the ESG journey more difficult for oil and gas companies is the lack of consistency between multiple ESG frameworks and a lack of transparency within ESG ratings. Currently, the companies face the risk that in complying with one standard, they will not be able to adhere to another. This lack of clarity and standardization hinders the ability of companies, especially NOCs, to demonstrate their progress.

Multiple frameworks exist that are not coordinated (Figure 4). Most standards, such as the Global Reporting Initiative (GRI) standards, Task Force on Climate-Related Financial Disclosures (TCFD) standards, and United Nations Sustainable Development Goals (UN SDGs), are voluntary.

Figure 4. Variety of ESG/sustainability frameworks, ratings, and standardization agencies.
Another problem is that the scoring process that the companies must undergo is not transparent. The scores from one agency can be completely different from those from another agency for the same company.

To a great extent, the outcomes of different weights assigned to various parameters define the results. In most ratings, the weights assigned to emissions are very high. The weights assigned to other categories, such as water quality, efficiency, or biodiversity, are now barely significant.

To solve these issues, coordination among the standards and frameworks is needed. A feasible approach would be to start from the top of the pyramid—the alignment of international reporting frameworks is crucial to ensure transparent, consistent, and universal high-level reporting principles. The second step would be for rating agencies to develop more aligned tools, similar to those existing for credit ratings. The third step would be to develop consistency within the measurement component. Stakeholders need to agree on exactly how different parameters are measured, as such agreement is also currently lacking.

Clarity from regulators would help reduce the amount of additional work that companies are currently doing to compare and choose between different approaches. Together, investors, the financial community, and policymakers could develop sector-specific guidelines that would lead to clarification and uniformity in the positions of different stakeholders and rules for governance and disclosures. This step would be crucial for moving the ESG agenda forward.

At the same time, all metrics and ratings need to take into account natural differences between types of countries and companies—especially in environments where geography and the economy determine the set of available sustainable solutions. There are an increasing number of policies and regulations, including national commitments, dictating what investors should invest in. However, investors need mature technologies with feasible costs. There cannot be one common way forward because a favorable solution for one country or company is not necessarily achievable for another.

### The Experience of APICORP

During session 2, the informative case study of APICORP, a multilateral development bank headquartered in Saudi Arabia, was presented to the participants.

By late 2019, APICORP had approved its 5-year strategy with a core concentration on sustainability. In early 2020, the bank started working on its ESG Policy Framework, which was published in September 2021. The framework was developed in line with the UN SDGs and in consultation with the World Bank and other leading global financial institutions. The framework outlined APICORP’s strategy in all aspects, including the “G” pillar.

Several weeks later, APICORP’s ESG Policy Framework was tested by issuing green bonds worth 750 million U.S. dollars with a five-year maturity. Ninety percent of the investors who purchased the bonds were from outside the MENA region, which shows that there is global interest in such projects.

Following the success of the green bonds, at the beginning of 2022, APICORP acquired its first sustainability rating from Moody’s ESG solutions.

Below are the lessons that APICORP derived from its experience:

- Unfortunately, many investors struggle with the concept of greenwashing when all attempts
to implement sustainable solutions are met with skepticism. To win over public opinion, it is necessary to establish credibility and transparency.

• To ensure a nondisruptive transition for the company’s or the country’s economy, it is necessary to focus on all aspects of ESG, not just the “E” pillar.

• Data are “a big piece of the puzzle.” If a company wants to achieve net-zero emissions, it must first understand how much it emits at every stage.

• There should be differentiation of solutions for various types of companies and geographies. For instance, it would be challenging to apply APICORP’s ESG Policy Framework to an oil and gas company, but it is feasible for finance companies.

To enhance the investment decision-making process in relation to ESG, APICORP developed its ESG Scoring Toolkits. To the credit scoring that the bank had before, it added ESG scoring for its investee companies. APICORP studies investee companies’ documents and websites to estimate their ESG score on the basis of the 25 factors (Figure 2.3). In the next step, the scores are sent to the investee companies for vetting.

Such a data-driven approach allows APICORP to make informative investment decisions that prioritize the ESG agenda.

Figure 5. APICORP’s ESG Scoring Toolkits.

Risk management is an integral component of APICORP’s sustainable growth pain.

APICORP’s Risk Management developed an ESG Due Diligence toolkit to evaluate prospective and current portfolio companies to make lending and investment decision.

In particular, the toolkit supports APICORP in classifying ESG risks into three distinct levels:

- High risk
- Medium risk
- Low risk

The ESG Due Diligence toolkit is mapped to the IFC Performance Standards

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Source: (APICORP 2022).
Session 3. ESG, Financial Institutions, and Low-Carbon Investments

During this session, the participants learned about the current global situation of oil and gas investments as well as how to identify current investors’ sentiment toward energy transition and ESG and how to move toward a holistic approach that reconciles the needs to meet global energy security and ESG criteria and transition to a low-carbon future.

The moderator highlighted the interest of developing countries in becoming cleaner with sustainable programs. However, most of these programs, which are part of the countries’ nationally determined contributions (NDCs), are based on financial funds detailed in mean of implementation (MOI) agreements. Unfortunately, the supporting funds have not worked as they were designed. For example, the Green Climate Fund (GCF) was designed to inject $100 billion per year, divided into 50% for adaptation and 50% for mitigation. However, since 2010, this fund has raised only $10.3 billion. The Special Climate Change Fund (SCCF), the Least Developed Countries Fund (LDCF), and the Adaptation Fund (AF) had similar experiences. The lack of funds is delaying or even stopping governments from working on their energy transition, even with projects that already count as part of the preliminary design.

However, raising funds is not the only challenge that policymakers face in climate change agreements. The public unfamiliarity with the Paris Agreement has driven several stakeholders to condemn the use of fossil fuels, especially in the transportation sector. The Paris Agreement does not mention transportation or fossil fuels in any of the agreement lines. However, the public pressure for the decarbonization of oil and gas companies has increased, ignoring these companies’ responsibility to secure an energy supply.

All that pressure has contributed to driving up investment in climate change mitigation and adaptation technologies, which are not necessarily dedicated only to producing energy. Mitigation technologies are related to intervention actions to reduce emission sources or enhance sinks of greenhouse gases (GHGs). In addition, adaptation corresponds to an adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects (Klein et al. 2007).

Mitigation investment totals between $0.75 and $1.20 trillion per year, depending on the source. However, this value is not only dedicated to renewable energy. It is far above the $400 billion dedicated to oil and gas, which goes up by $60 billion if we add the refining sector. Unfortunately, this needed change in priorities among investors is generating a deficit in the energy sector, which needs $1.2 trillion to maintain the current energy production and another $1.2 trillion to increase supply at the expected demand level. To maintain the current level of oil and gas production, the industry needs between $500 and $600 billion.
At the same time, oil and gas companies that are shifting their image by increasing their investment in ESG have dedicated only 1% of their total investment to this new concept.

An additional $300 billion per year is needed for adaptation. However, since 2015, the adaptation of new clean technologies has been between $23 and $35 billion per year, with private investment contributing less than 1.6% of the total.

Similarly, the World Energy Council estimates that $5.7 trillion is needed per year to combat climate change. This is close to the average calculated by other institutions, which estimate that the cost to reach net-zero targets is between $3 and $8 trillion per year. However, it is important to understand that not every country has the same investment capacity, and the lack of standardization processes increases these differences.

**Figure 6.** Average annual global investments in selected net-zero scenarios, 2021–2050.

![Bar chart showing average annual global investments in selected net-zero scenarios, 2021–2050.](chart)

Source: (Yilmaz 2022).
**ESG Risk Ranking Analysis**

ESG terminology was officially first used by the UNEP FI in October 2005 (Freshfields Brukckhaus Deringer 2005). In that year, the UNEP FI’s Asset Management Working Group (AMWG) confirmed that despite the growing evidence that ESG issues can have a material impact on the financial performance of securities and an increased recognition of the importance of assessing ESG-related risks, those seeking greater regard for ESG issues in investment decision-making often encounter resistance on the basis of a belief that institutional principals and their agents are legally prevented from taking account of such issues. Based on those findings, the financial system, especially banks, has transformed its approach from ignoring ESG risks to a complete ESG awareness.

However, ESG terminology still suffers from a lack of clarity. Without proper standardization, ESG suffers from a linguistic problem of interpretation, where each stakeholder adjusts the understanding of ESG to his or her benefit. Not only ESG but also climate change, net zero, and other related new concepts mean different things to different people, and different means are used to measure and rank their risk.

The case of the S&P Global 500 ESG Index presented in the first half of 2022 is an example of how the ESG concept can generate uncertainties. In this index, Exxon was rated among the top ten ESG companies by the S&P 500, while Tesla did not even make the list. Elon Musk, the CEO of Tesla, expressed his discontent in a tweet, saying, “ESG is a scam” (Kerber and Jin 2022). The truth is that ESG rankings focus not on the product but on the intangible issues of the company, including the work environment. It is very well known that Tesla does not provide the best working environment.

ESG ranking methodologies are not standardized, and there are many raters in the market, making it difficult to define which is the most appropriate for any participant. Companies such as S&P Global, PwC, Bloomberg, and Reuters have presented ESG scores/rankings. At the same time, some organizations, such as APICORP, have started an internal process to develop ESG risk measurement tools. Many of those scoring methodologies are based on similar approaches to determine ESG performance based on data input about internal processes and products and defined net-zero and decarbonization strategies. Most globally practiced ESG guidelines do not exclude CCUS technologies but do not explicitly mention them. Only a few provide explicit guidance on reporting CCUS.

In other words, the ESG ranking process is determined by input data about current processes and products, providing a risk score and valuable information for net-zero strategies. The performance data are obtained from public and private sources as well as media reports. A vital weight for intangible assets has been prioritized in ESG performance rankings, while the final product has a short, limited impact on the total performance score. It is estimated that intangible assets could account for as much as 84% of the total scoring performance, a significant difference from how companies’ performance was evaluated in the 1970s, when the performance scoring was based on tangible results—the final product.

Oil and gas companies average medium scores in most ESG ranking reports. However, there is regional disparity, with European companies presenting high ESG performance and Middle Eastern companies presenting very low scores. These results show that the oil and gas industry could lead the ESG process, and not much is needed to shift companies’ strategies toward better...
ESG scores. In recent years, many companies have developed their own net-zero strategies and initiatives, and this trend will continue.

Oil and gas companies are in a position to contribute to the implementation of article 6 of the COP26, which allows a country (or countries) to transfer carbon credits earned from the reduction in GHG emissions to help one or more other countries meet climate targets (The World Bank 2022). This opens room for the implementation and counting of scope 3 emissions, allowing the oil and gas industry to focus on producing companies and trading institutes that have not previously been part of the process. It also provides the opportunity for oil and gas companies to turn a new page as partners, eliminating the “bad guy” reputation of the industry. Because the ESG ranking of oil and gas companies is vital, scoring tools that capture article 6 of COP26 are also needed.

ESG Ranking and Challenges in the Energy Sector

As mentioned at the beginning of session 3, energy investments are still far from what is needed. Most reasons for low investment in the oil and gas sector were presented in session 1. However, prioritizing ESG rankings or providing heavier weight to the environmental section of ESG rankings have also affected the performance perception of oil and gas companies, reducing attractiveness to investors.

At the same time, the ranking process is experiencing the following challenges:

- The lack of “inclusive and precise” global ESG standards—e.g., several (voluntary and mandatory) reporting, regulatory, and rating guidelines exist. The fundamental reasons for the lack of standardized processes are as follows:
  - The way “energy transitions” are defined inevitably determines the guiding principles for ESG frameworks and definitions
  - To date, global ESG funds have focused mostly on renewable energy
  - Differences in economic structures and policy priorities—e.g., reliance on carbon-intensive sectors, including oil and gas, mainly for the following reasons:
    - Reliance on carbon-intensive sectors, including oil and gas
    - More investment is needed in carbon management technologies (e.g., carbon capture, utilization, and storage) or clean fuels, such as hydrogen
    - These technologies are capital intensive
  - Poor financial development, especially the ESG infrastructure, or capacity constraints—e.g., poor reporting guidelines, data quality, and greenwashing
  - Investment risks—e.g., macroeconomic and political risks
  - Weak investment incentives—e.g., less attractive subsidies

At the same time, the inappropriate understanding of the energy transition is also jeopardizing the UN SDGs, especially goal 7, which aims to ensure universal access to affordable, reliable, and modern energy by 2030. A low investment environment also affects goal 9, which aims to build resilient infrastructure, promote sustainable industrialization,
and foster innovations, and goal 11, which aims to renew and plan cities and other human settlements in a way that offers opportunities for all, with access to basic services, energy, housing, transportation, and green public spaces, while reducing resource use and environmental impact (UN DESA 2015).

The consequences of inappropriate ESG implementation are already having an impact. Some countries are trying to free their gas consumption by shifting to oil and gas, pushing back their decarbonization strategies, and reflecting on the painful path that could result from planning based on public pressure. Some ESG strategies have been political and not technical.

Additionally, ESG strategy implementation depends on loans from several multilateral organizations, which have had to reduce their financing capacity due to COVID-19. This affects the performance of decarbonization strategies in developing regions, which are also not eager to invest in ESG, as they are not large carbon emitters. Some of these regions need to carbonize before decarbonizing. Equities have also been affected, as many of these countries do not count on funds.

The crisis has also stopped investment in high-risk capital, such as research on new technologies, and low-risk investments are limited as commodity prices’ volatility increases.

**Solutions to the ESG Dilemma**

One of the solutions that have emerged due to the high profit that oil and gas companies are experiencing is the implementation of windfall taxes, which is helping to increase investment in green technologies. Governments are injecting money into renewable technology from capital captured from fossil-fuel companies, which have experienced record high free cash flow (FCF) this year (Figure 7). At the

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**Figure 7.** Total FCF for oil and gas companies (billion $) and ICE Brent crude price—1st forward month ($/b).

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![Figure 7](source: KAPSARC based on Rystad UCube (Rystad 2022) and OPEC data (OPEC 2022).)
same time, investment in green energy is profitable, with inflated asset valuations.

ESG financing could become less costly if a large scale is achieved. The more participants the ESG market has, the less costly it becomes. At the same time, it is crucial to highlight these investments’ importance and generate incentives through a green premium and governmental stimulus (government support). However, this also creates the expectation of ESG finance’s potential, not only in public domains but also in private markets.

ESG funds have recently been growing substantially and performing better. These funds have become less risky in the last year, showing positive and stable growth and partially supported by governmental support, which has obliged participants to use COVID recovery funds in sustainable projects.

Unfortunately, the geographical disparity in ESG actions has resulted in a limited number of nations benefiting from ESG financing flows. Fifteen nations received more than 99% of the total ESG funding, resulting in a minimal geographical impact of the financial benefit of ESG (Figure 8). At the same time, the total ESG funds are still far from what is needed.

Figure 8. ESG finance flows, $/Mt CO2.

Source: (Yilmaz 2022).
Session 4. Solutions for Attracting More Investment and Addressing ESG at the Same Time

The last session focused on other aspects of ESG that often fade into the background. As the speakers highlighted, ESG currently has an image problem. There is an overemphasis on the “E” pillar and too little attention to the other two. As a result, the aggressive push on “E” factors diverts stakeholders from important “S” and “G” aspects. It is essential to highlight that the companies that failed to incorporate corporate targets over the past 50 years did not fail because of “E.” Rather, they did so because of underperformance in either the “G” or “S” aspect. The sustainability or ESG risk measurement was still not part of corporate culture, but governance has long been part of corporate culture, and it has always been the key to success or failure in every company.

That is why viewing the cumulative score of ESG often distorts the picture. It is important to be able to rank companies on all factors separately. The “S” and “G” pillars have the potential to add much to achieve the SDGs.

To attract more attention to the “S” pillar, two of its aspects—talent attraction and localization—and their potential impact on the performance of oil and gas companies were highlighted during the fourth session.

The social (“S”) pillar of ESG can be defined through the question “What impact does this company or industry have on the community?” This pillar can help firms engage employees and comply with increasingly strict localization mandates.

Currently, the oil and gas industry is facing challenges in attracting young talent in Saudi Arabia (Figure 9). This problem is bound to be exacerbated by 2029, when 72% of the workforce

Figure 9. Prospective employees’ views of sectors in which to work in Saudi Arabia.

Source: (Arboleda and Al Sadoon 2022).
will belong to the millennial or Gen-Z generations. For them, the importance of factors such as the job’s meaning is increasing, resulting in a rise in resignation rates (the “Great Resignation”) and, more recently, the emergence of “silent quitting” (PwC 2022).

Employment-related problems in oil and gas became evident even before the pandemic, when companies were already experiencing difficulties filling entry-level and midlevel positions (Figure 10). Fossil fuel workers have the option of switching to the renewable energy sector, and 56% were considering doing so in 2022 (Brunel and Oilandgasjobsearch.com 2022).

ESG can become the solution for companies to create meaning and help retain their employees. As the data show, firms with highly satisfied employees tend to perform better in ESG scoring—on average,

Figure 10. Trends in the employment of petrotechnical professionals (PTPs).

![Graph showing employment trends of petrotechnical professionals](image)

Source: Andrews et al. (2017).
Lessons Learned

Figure 11. Average ESG and pillar scores of top employers by employee satisfaction and average employers.

Source: MSCI, Marsh & McLennan Advantage Insights Analysis in Marsh & McLennan Companies (2020).

14% higher (Figure 11). Employers with an attractive image among young talent have better ESG scores. Moreover, satisfied workers work harder, stay longer, and are more committed to driving results.

Therefore, investing in improving ESG can become a competitive advantage in the “war for talent.” This implies that ESG is not an obstacle to success but a path toward it.

Another aspect of ESG is localization. Local content policies can be defined as policies targeting the “value of an extraction project to the local, regional or national economy beyond the resource revenues” and naturally have a great deal of crossover with the social pillar of ESG. Since the global financial crisis, protectionism has been on the rise; it increased during the pandemic and will remain in place. Local content policies will become stricter, so developing a progressive localization strategy makes business sense. Progressive means going beyond existing regulations and having a plan to localize areas that are not currently mandated, aiming to use this as a basis for ESG ranking.

To increase localization, government regulations can be used as a starting point. Ideally, localization should be included in a project plan before investments start. A market study should follow, identifying capabilities and areas to target, including all stages of the value chain.

There are multiple benefits of localization:

- Progressive localization will contribute to ESG scoring if appropriately documented.
- It will also future-proof the company against potential stricter local content policies to come.
- It will result in good meaningful stories to improve the attitude of employees.

Oil and gas companies have traditionally been ahead in localization policies, helping the local economy develop apart from merely the benefits of resource extraction. This can and should help them as a basis for improved ESG performance, which, in turn, will help them attract brighter talent and perform better.
References


T his workshop was a joint effort between KAPSARC and APICORP, and it took place in the APEX installations of KAPSARC in Riyadh, Saudi Arabia, on September 6, 2022. It brought over 35 regional and international experts together to openly discuss the key issues related to the global investment situation in the oil and gas sector; the challenges affecting investment, including ESG challenges; and possible solutions to those challenges. It also analyzed the current challenges presented by ESG ranking methodologies. The workshop was run under Chatham house rules.

List of Participants

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ESG: A Barrier or a Solution to the Oil and Gas Investment Emergency?

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Frank is the Program Director for Energy Transitions and Electric Power Program at KAPSARC. Prior to joining KAPSARC, Frank was a Research Professor at the School of Planning and Public Policy at Rutgers University, Director of the Rutgers Energy Institute, and Director of the Center for Energy, Economics and Environmental Policy.

Julio Arboleda

Julio is a Fellow at KAPSARC, with more than 20 years of experience in the energy field. Before joining KAPSARC, Julio worked as a senior energy consultant within different organizations, including OPEC. His experience in both the governmental and private sectors, both in the field and in the office, allows him to understand the dynamics of the energy sector.

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Majed is the Acting Director of the Oil & Gas Program and a Fellow at KAPSARC. He has more than 15 years of experience in the oil and gas industry in the fields of simulation and modeling, asset management, reserve estimation, oil field development, disruptive technologies, and business planning, gained at Chevron and Saudi Aramco.

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Zlata is a Senior Research Analyst at KAPSARC. Previously, Zlata worked in the Energy Center of the Skolkovo Business School. Later, she joined the Business Strategy Department in NOVATEK, Russia's leading independent gas producer. Since 2020, Zlata has also been a member of the Future Energy Leaders Programme of the World Energy Council.

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Albaraa is a Senior Public Relations Analyst at KAPSARC. He has presided over 100 high-profile events attended by ministers of state, members of royalty, and CEOs. Before KAPSARC, he was the Country Facilities & Internal Events Management Supervisor at CBRE, Assistant Production Manager G20 project at Richard Attias & Associates, Facilities Representative at Thomson Reuters, and Front Desk Agent at Al-Faisaliah Hotel.
Basema Al-Mahroos

Ms. Basema Al-Mahroos heads Portfolio Management at APICORP. Basema has played an instrumental role in enhancing APICORP’s bottom-line financials. Basema worked for the Bahrain Petroleum Co. (Bapco) and has assumed several leadership roles, including managing the refining and downstream planning and economics unit. Basema holds a BSc in Engineering and a master’s degree in finance.

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Fouad is a Senior Manager—Enterprise and ESG Risk Management at APICORP. In 2021, Fouad spearheaded the development of APICORP’s ESG framework and was instrumental in APICORP’s maiden green bond issuance. In 2022, he helped APICORP acquire the first sustainability rating from Moody’s ESG solutions. Prior to joining APICORP, Fouad held several positions with big four firms and other commercial banks.

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Ramy joined APICORP in 2019 as a Senior Energy Specialist for oil and gas (including petrochemicals). An engineer by background, he started his energy career as a petroleum economist with Dana Gas PJSC before moving to IHS CERA in London to work as Senior Consultant, Energy & Natural Resources. He also worked as Middle East Strategic & Commercial Planning Coordinator for Tenaris in Dubai.

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