# Task Force on Climate-related Financial Disclosures (TCFD) Report

Capricorn Energy's climate-related financial disclosures made in the 2022 Annual Report are aligned with the TCFD's recommendations and recommended disclosures, consistent with the Financial Conduct Authority's LR9.8.6 requirement. We have analysed the impact of transition risks of climate change on our portfolio using scenario analysis. We have also assessed the potential impact of the physical risks of climate change on our assets.

### Governance

# Disclose the organisation's governance around climate-related risks and opportunities

Capricorn attaches high importance to climate change considerations at Board level and throughout the organisation, together with our broader environmental, societal and governance responsibilities. These matters are standing agenda items at each Board meeting, and also comprise an important KPI in the determination of Management Remuneration (see pages 79 to 102). Climate-related risks and opportunities are presented at the Executive Committee, the Group Risk Management Team meeting for discussion and challenge.

During the year, the Board and Executive Committee's discussions included:

- progress on approved decarbonisation initiatives, including the reduction of diesel power generation, gas flaring and fugitive methane emissions in Egypt;
- progress on approved investment for electrification of Egypt operations and subsurface screening for carbon capture and sequestration;
- assessing the carbon abatement potential of all business development opportunities reviewed for investment and ensuring compatibility with the Group's net zero target;
- assessing the 'advantaged resources' criteria for all exploration new venture opportunities, to ensure that investments target resources that will be competitive in a future with lower oil demand and higher carbon prices;
- receiving regular updates from the Energy Transition Director on stakeholder objectives and regulatory developments in the area of climate change and energy transition policies;

- approving the acceleration of the Group's near-term net zero carbon emissions target of 15% by 2025 and increasing the 2030 target from 25% to 30%
- setting a near-term target addressed our stakeholders' concerns and enabled the Company to more effectively measure progress on reducing GHG emissions.
- review and approval of the climate change category in the Group Risk Appetite Statement. Completing a risk workshop which assessed the current and future risks to Capricorn in relation to climate change and the transition.

### a) Describe the Board's oversight of climate-related risks and opportunities

Climate-related risks are recognised as a major concern for the planet, as well as the future of the oil and gas industry. Addressing these risks is one of the highest priorities for our business. The Board takes full responsibility for the governance of climate-related risks and opportunities.

In March 2022, the Board established the Sustainability Committee, highlighting the importance of ESG matters within the Board and wider organisation. The energy transition and Capricorn's role in it is of particular importance to the Board and the formation of this new committee has allowed it further dedicated time.

Overall responsibility for the system of risk management and internal control and reviewing the effectiveness of such systems rests with the Board. Principal climate-related risks and opportunities are reviewed at each Board meeting, so at least five times per year.

Capricorn uses risk registers, described in the Risk Management section below, to report climate-related risks and opportunities and associated mitigation measures. Reporting of these risks within the organisation is structured so that risks are escalated through various internal management groups, to relevant Board committees and to the Board itself. Climate-related risks and opportunities are discussed, as noted, during risk discussions but also when considering annual work programmes and budgets, acquisitions, and divestments and when considering annual performance objectives.

#### b) Describe management's role in assessing and managing climate-related risks and opportunities

Capricorn's Interim CEO, who is also part of the Executive Committee, takes ultimate responsibility and accountability for the Company's ESG policy, including climaterelated strategy and targets. The Chair of Capricorn's Board is the Director responsible at Board-level.

Capricorn's Executive Committee reviews climate and energy transition issues, concerning both Capricorn's own position and risk management, and international policy and stakeholder drivers. The Management Team also performs a quarterly review of the Group risk register and associated controls and actions. This offers management an opportunity to agree on and challenge the principal climate-related risks and opportunities.

Capricorn's Energy Transition Director is responsible for the development of the Company's climate change and energy transition strategy and reporting. The Energy Transition Director reports to the CFO and provides regular updates to the Executive Committee, as well as the Board.

The Energy Transition Director is responsible for monitoring the fast-changing external environment, including the regulatory and technological spheres. Climate-related risks and opportunities are discussed on a regular basis with the Company's senior leadership.

This includes overseeing Capricorn's carbon emissions from existing assets and ensuring that screening of new opportunities is in line with the Company's net zero commitments. The Energy Transition Director is also responsible for TCFD reporting, including scenario modelling to assess the impact of transition risks of climate change on Capricorn's portfolio.

The Energy Transition Director works closely with other functions in the Company – such as Business Development, Exploration, Legal and HSE – to identify and assess any climate-related risks and opportunities. Capricorn's Strategy and Energy Transition Advisor, working as part of the Strategy and Business Development team is responsible for the development of commercially viable decarbonisation projects at the asset level.

Energy transition is being embedded into Capricorn's culture, as climate impact becomes a key strategic consideration across different business functions. For example, screening of new opportunities is underpinned by resilience testing against transition risks of climate change, including the application of internal carbon pricing across all potential investments.

We also include energy efficiency and carbon emissions as a differentiating factor in selecting contractors for drilling, marine and aviation services. The most polluting products and services are eliminated from the tender process.

Internally, we established our Eco-Team in 2019 with a dual focus: to identify opportunities to reduce our carbon footprint within our office environment, for example paper consumption and recycling; and also to educate and encourage colleagues to reduce their personal impact on the climate.

## **Risk Management**

# Disclose how the organisation identifies, assesses, and manages climate-related risks

#### a) Describe the organisation's processes for identifying and assessing climaterelated risks

The Group's framework for risk management promotes a bottom-up approach to risk management with top-down support and challenge. Climaterelated risks and opportunities and the associated mitigation measures and action plans are maintained in a series of risk registers at Group, asset, function and project level. The Group uses a number of tools to identify climate-related risks

#### Management

Executive Committee plus Senior Leadership (including the Energy Transition Director): meets triweekly and regularly updates on any new climate-related developments.

Executive Committee: meets every two months, with strategic updates from the Energy Transition Director.

Risk Management Committee meets quarterly to discuss and challenge the Group's principal climate related risks and opportunities.

Management team meet quarterly to perform a deep-dive review of the Group's principal climate related risks and opportunities. The conclusion from the discussion are captured in the updated risk reports presented at the Risk Management Committee.

#### Board

Meets every two months. A risk management Board paper is presented at each Board meeting which details the Group's principal climate related risks and opportunities.

Regular updates provided by the Management Team, including the Energy Transition Director's briefing.

Sustainability Committee: meets every four months.

including, but not limited to, hazard identification (HAZIDs), social impact assessments and environmental hazard identification (ENVIDs). Risks identification sessions are typically completed with project teams and risks are uploaded to the Group's risk software tools which assign ownership for the risks. All risk information is captured using the Group's risk management software tool.

Climate-related risks are classified in alignment with TCFD's description of physical and transition risks:

Transition risks – are those risks related to the transition to a lower carbon economy including policy and legal, technology, markets, and reputational risks. Physical risks – are risks related to the physical impacts of climate change including event-driven risks such as changes in the severity and/or frequency of extreme weather events.

The Group has established impact criteria which assigns a score of one to five for impact and probability of occurrence. This drives the overall assessment of the risk and will determine if the risk is within the appetite limits. Further information is included in the risk disclosure page and the Materiality Matrix (pages 31 and 15 respectively).

b) Describe the organisation's processes for managing climate-related risks The Group applies one of the 4Ts to each identified climate-related risk: Tolerate, Treat, Transfer or Terminate.

All risks categorised as 'Treat' are required to have actions assigned to them to reduce the impact or likelihood of the risk occurring. Reporting of these risks within the organisation is structured so that risks are escalated through various levels of internal management, Board committees and to the Board itself for challenge and oversight. Future challenges and costs to achieving pathway to Net Zero 2040 risk has been identified as a principal risk. Further information on the risk, appetite level, impacts and mitigations can be found on page 37.

#### c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management

Climate-related risks are captured at various levels within the Group and in line with the Group process for risk management. All projects, be it a drilling project, an acquisition opportunity, or a new country entry, are required to maintain a risk register. Project teams are multi-disciplined which ensures that all categories of risk, including climate-related risks, are identified, assessed and managed.

There is also a dedicated Energy Transition risk register which identifies the strategic climate-related risks as well as the aggregated climate-related project risks. This risk register is maintained by the Energy Transition Director and the Energy Transition Advisor and is reviewed quarterly. This ensures all climate-related risks are integrated into the Group's overall risk management processes and will be presented and challenged at various forums within the Group.

## Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material.

a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term In developing our strategy, Capricorn's Board and leadership team consider a wide range of opportunities and risks across three discrete time horizons:

**Short term (to 2025)**: the next two to three years are defined by detailed business and financial plans, which are performance-managed in delivery of our 2025 targets.

Medium term (to 2030): looking out to the end of the decade and the duration of the Paris Agreement enables us to consider our progress towards the long-term targets and adjust the course of action if required. Long term (post-2030): we use a scenario planning approach – IEA's Stated Policies Scenario (STEPS), Announced Pledges Scenario (APS) and Net Zero Emissions (NZE) Scenario – to account for a wide range of uncertainties in the post-2030 period.

Capricorn considers the following risks to be key climate-related risks in the short, medium and long term.

The current strategy review is expected to address and provide further detail on the climate and energy transition strategy across different time horizons.

Туре	e Climate-related Risk	Capricorn's Response			
	Policy and legal (medium to long ter	rm)			
	<ul> <li>Implementation of carbon pricing mechanisms in both compliance and non-compliance markets.</li> <li>Changes in legislation and country policy.</li> </ul>	<ul> <li>In line with IEA and other energy companies, in the EU and UK compliance markets we use carbon prices of US\$100/tCO<sub>2</sub>e and US\$110/tCO<sub>2</sub>e in 2030, respectively. For other regions, where carbon price is not currently applicable, we use our internal carbon pricing assumptions starting at US\$31/tCO<sub>2</sub>e in 2023, rising to US\$50/tCO<sub>2</sub>e in 2030 with a 5% escalation thereafter to 2050.</li> <li>Use of long-term oil price assumptions that consider the demand effects of global carbon taxation.</li> <li>Ongoing efforts to decarbonise operations.</li> <li>Ongoing monitoring of policy and legislation development in countries of interest.</li> <li>The above measures are currently in place.</li> </ul>			
	Technology (medium to long term)				
Iransition Risks	<ul> <li>Increasing costs of transition to lower-emission technology.</li> <li>Substitution of existing products and services with lower emissions options.</li> </ul>	<ul> <li>Implementation of decarbonisation technologies at the field level in Egypt.</li> <li>Increase in gas production within the portfolio, with decarbonisation options including carbon-capture, utilisation and storage (CCUS) and solar for in-field use.</li> <li>Funding of Heriot-Watt University research scholarships.</li> <li>Application of inherently lower emission equipment and contractor services.</li> <li>The above measures are currently in place.</li> </ul>			
Ira	Market (medium to long term)				
	<ul> <li>Decline in oil demand and oil price.</li> <li>Faster than expected shift away from gas, leading to lower gas prices</li> <li>Changing market sentiment as consumers switch away from fossil fuels.</li> <li>Access to capital.</li> </ul>	<ul> <li>Low-cost portfolio to generate value in a 1.5 degree scenario.</li> <li>Embed low oil and gas prices, as well as carbon prices when screening for new investments.</li> <li>Consider diversification into clean technologies, such as solar and geothermal in the medium term.</li> <li>Ensure strong balance sheet, low leverage, strong free cash-flow generation.</li> </ul>			
	Reputation (short term)				
	<ul> <li>Public perception of the oil and gas industry is changing.</li> <li>Lack of trust in the oil and gas industry's net zero ambitions.</li> </ul>	<ul> <li>Maintain transparency relating to all ESG issues.</li> <li>Comply with the highest reporting standards.</li> <li>Ensure continued engagement with external stakeholders. Currently in place.</li> </ul>			
	Chronic (long term)				
Physical Risks	<ul> <li>Rising mean temperatures and risk of drought.</li> <li>Rising sea levels.</li> <li>Increased extreme weather events.</li> <li>Rising water stress including conflicting uses and availability.</li> </ul>	<ul> <li>We assessed the materiality and plausible impact and likelihood ranges with focus on Drought, Heat Stress and Windstorm on our business using an independent provider (WTW).</li> <li>Drought Stress (prolonged periods of rain and water shortage), in particular for the RCP8.5 hothouse world had been identified as the most material risk for Capricorn Energy by 2040-2050 timeframe.</li> <li>The impact of this chronic hazard for this scenario was estimated as likely being in the medium Value at Risk (VAR) impact range (US\$1-10m on Cashflow and US\$25-100m Market Cap Loss) with a 'probable' likelihood forecasted by the climate models utilised.</li> <li>For RCP4.5 and 2040-2050 timeframe, this hazard was estimated to have low Value at Risk (VAR) impact (US\$0.1-1m on Cashflow and US\$5-25m Market Cap Loss), whereas for the low carbon emission world RCP2.6, the Value at Risk (VAR) impact for the same timeframe was estimated to be likely to be very low (similar to estimates for current climate conditions)</li> <li>Water resource and resilience studies in Egypt, including a planned in-house water challenge.</li> <li>We help our communities adapt to physical risks, for example, through our investment ir a mangrove rehabilitation project in Suriname to prevent coastal erosion and improve biodiversity (see our Sustainability Report).</li> </ul>			

Capricorn has recognised and is currently working on scoping and implementing a number of climate-related opportunities as we try to address our stakeholders' key concerns illustrated in the Materiality Matrix (page 15, with further information in our Sustainability Report).

Туре	Climate-related Opportunities	Capricorn's Response
Energy Source/ Resilience (short to medium term)	<ul> <li>Use of lower-emission sources of energy.</li> <li>Shift toward decentralised energy generation.</li> <li>Use of supportive policy incentives.</li> <li>Use of new technologies.</li> <li>Participation in carbon market.</li> </ul>	<ul> <li>In Egypt, we are replacing diesel generators with cleaner- burning gas generators, and electrifying well sites and downhole pumps using centralised power generation. We also plan to integrate solar power to further reduce our reliance on diesel and gas.</li> <li>We are actively pursuing opportunities in carbon capture, utilisation and storage (CCUS) in Egypt and other jurisdictions, and we have invested in the NECCUS project, which is examining industrial carbon capture projects in Scotland.</li> <li>We are actively engaged in voluntary carbon markets. We have acquired a portfolio of high quality carbon offsets, including nature-based, landfill gas and refrigerant gases sequestration.</li> </ul>
Resilience (long term)	<ul> <li>Resource substitutes/diversification.</li> </ul>	<ul> <li>We are evaluating clean energy diversification opportunities, including solar, geothermal and CCUS.</li> </ul>
Products and Services (short to medium term)	<ul> <li>Development and/or expansion of low emission goods and services (short term).</li> </ul>	<ul> <li>To minimise energy use in drilling operations and associated activities without compromising safety or cost, we assess the fuel consumption of rigs, vessels and helicopters as part of the tender process. Lower energy consumption – and therefore emissions – could provide a point of differentiation if other technical and commercial considerations are comparable. We have already trialled this approach when tendering vessels for geophysical and geotechnical survey work in the UK and Mauritania. We will strive to align our supply chain products and services with our own emission reduction target of net zero by 2040</li> </ul>
Resource Efficiency (short to medium term)	<ul> <li>Use of more efficient production and distribution processes (short to medium term).</li> <li>Use of recycling (short term).</li> <li>Move to more efficient buildings (short term).</li> </ul>	<ul> <li>We seek to continuously improve the performance of our operating assets, reducing their carbon intensity, including elimination of flaring from our operations in Egypt. We are also promoting efficient operations with our contractors and planning improved management of vessels and other assets during our drilling operations to further improve the energy efficiency or our products.</li> <li>Working internally to identify opportunities to reduce our carbon footprint within our office environment, for example paper consumption and recycling.</li> </ul>

#### b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning

Capricorn is fully incorporating climate change-related risks into its investment decision-making. Our capital allocation decisions are made using rigorous planning assumptions, informed by climate change and energy transition scenario analysis. We carefully consider the environmental performance of assets and opportunities as part of our screening process, underpinned by our net zero commitment. This commitment also drives our decarbonisation strategy in Egypt, as described in the table above.

All new oil and gas opportunities are screened at US\$60/bbl flat Brent oil price and US\$6/mcf global gas price (adjusted for certain regional markets). We also consider a range of other scenarios as part of our opportunity screening process. We apply carbon prices across all our scenarios. For countries that already have an established carbon pricing mechanism – such as the EU and the UK – we use carbon prices of US\$100/tCO<sub>2</sub>e and US\$110/tCO<sub>2</sub>e by 2030, respectively. For other regions, where regulatory carbon pricing mechanisms are not currently applicable, we use our internal carbon pricing assumptions starting at US\$31/tCO<sub>2</sub>e in 2023, rising to US\$50/tCO<sub>2</sub>e in 2030, with a 5% escalation thereafter until 2050.

#### c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario

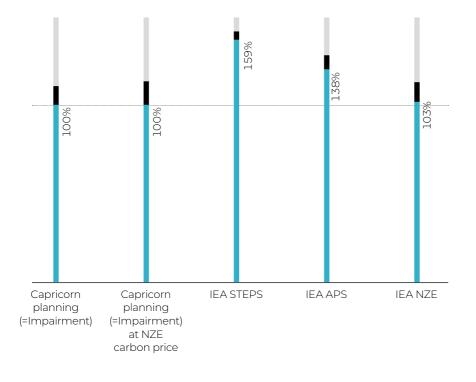
The TCFD recommends the use of scenario analysis in disclosure of climate-related risks and opportunities. Scenario analyses aligned with the TCFD framework help companies explore different futures and the implications of climate-related circumstances on business strategy.

The findings of the recently conducted scenario analysis exercise, which tested the resilience of Capricorn's Egypt portfolio against IEA's STEPS, APS and NZE scenarios, showed that our assets will generate value in the most ambitious climate scenario, aligned with a 1.5 degree warming. This gives us confidence that our valuation and planning assumptions are robust and that we will continue to create value for all key stakeholders – even in the most aggressive carbon reduction scenario.

Capricorn's assumptions, used for our financial planning and balance sheet impairment testing includes a variable oil price of US\$88 for 2023 decreasing down to US\$70 for 2025 and US\$60 flat for 2030 to 2050 US\$6/mcf gas price (long term, inflated at 2% from 2025) and carbon prices of US\$31/tCO<sub>2</sub>e in 2023, increasing to US\$50/tCO<sub>2</sub>e in 2030. Carbon prices were applied to Scope 1 and 2 emissions from Capricorn's Egypt operations.

The scenario analysis shows that our Egypt portfolio, when modelled using IEA's NZE assumptions delivers 103% of the value we derive for our financial planning purposes. Our portfolio outperforms our planning scenario by 38% in the APS scenario.

### Egypt: Asset Value relative to Capricorn Planning Case NAV including carbon costs



IEA scenarios are modelled using IEA's assumptions associated with each of the scenarios.

Net asset value

Carbon costs

IEA scenarios: STEPS assumes policies and targets announced by governments are enacted and estimates an average temperature rise of 2.7°C (up to 3.3°C).

APS sees an accelerated transition to a low-carbon world and projects a 66% chance to limit temperature rise to 1.8°C and a 50% chance to limit it to 1.65°C.

NZE scenario is aligned with the Science Based Targets Initiative (SBTI), limiting the global warming to 1.5°C by 2100 compared to pre-industrial levels.

## **Metrics and Targets**

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material

TCFD recommended disclosures	<b>Risks and opportunities identified</b>	Metrics and targets
a) Disclose the metrics used by the organisation to assess climate- related risks and opportunities in line with its strategy and risk management process.	Transition and physical risks, including policy, market and long-term chronic effect of global warming. Opportunity to invest in clean projects, with carbon pricing risk- adjusted returns fully recognised. Participation in carbon market. Improved resilience of the existing portfolio.	<ul> <li>Net zero, with 2025, 2030 and 2040 targets set for Scope 1 and 2 emissions on an equity basis, pages 11, 12 and 16 and 22 to 24. We will measure progress against our 2022 baseline.</li> <li>Remuneration policy with embedded climate related targets, pages 92 and 93.</li> <li>Pro-active engagement with our employees to increase awareness and help deliver net zero, pages 180 and 181.</li> <li>Key assumptions: commodity prices for opportunity screening and financial planning, page 183.</li> <li>Carbon price, page 182.</li> </ul>
	Rising water stress including conflicting uses and availability.	- Capricorn's environmental impact, pages 22 to 24.
b) Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Measurement and disclosure of GHG emissions from Scope 1, 2 and 3 help emissions management and creation of a clear pathway to net zero. Risks include exposure to carbon price due to changes in policy, as well as significant reputation risks if emissions are not managed.	<ul> <li>Scope 1 and 2 on an operational and equity basis, pages 22 to 24.</li> <li>Scope 3. We have undertaken further definition and reporting of our Scope 3 emissions to include emissions from categories 1, 3, 4, 5, 6, 7 (operated) and 9, 10 and 11 (equity), pages 22 to 24.</li> <li>TCFD climate-related risk and management, page 181.</li> </ul>
c) Describe the targets used by the organisation to manage climate- related risks and opportunities and performance against targets.	Summary of targets aimed at helping achieve our net zero strategic goal. Given the dynamic nature of Capricorn's portfolio, we will use 2022 as a baseline year on the journey to carbon neutrality.	<ul> <li>2025, 2030 and 2040 targets and planned progress, pages 11, 12 and 22 to 24.</li> <li>Scope 1 and 2 and planned progress, pages 11, 12, 16 and 22 to 24.</li> <li>Scope 3 and planned progress, pages 22 to 24.</li> <li>Flaring and planned progress, pages 11, 12 and 23.</li> </ul>