TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) STATEMENT

THIS SECTION OUTLINES THE CUE ENERGY RESOURCES APPROACH TO CLIMATE CHANGE.

It is structured to provide an overview of the core elements of the Task Force on Climate-related Financial Disclosures (TCFD):

Governance
Strategy
Risk management, and
Metrics and Targets

STATEMENT ON CLIMATE CHANGE FROM RESPONSIBLE SENIOR EXECUTIVE

Cue acknowledges the 2021 assessment of the Intergovernmental Panel on Climate Change. It reported that climate change is widespread, rapid, and intensifying. Climate change is already affecting every region on Earth, in multiple ways, while some of the changes already set in motion, such as continued sea level rise, are irreversible over hundreds to thousands of years. In response, rapid, and sustained reductions in greenhouse gas emissions are necessary.

Cue manages its emissions in support of these goals.

As an explorer and producer of hydrocarbons, relevant emissions are those from our own activities, such as operating our offices and travel, carbon emitted in the process of producing oil and gas, and emissions by users of the oil and gas we produce.

Our strategy is to manage our own emissions responsibly, and to provide energy options that allow the world to transition to a lower carbon future.

The credibility and success of the transition depends on global populations being able to access secure and affordable energy while economies decarbonise. Ensuring that energy is affordable requires carbon emissions to be allocated to uses that have the highest economic value.

Cue's production is subject to emissions pricing in New Zealand. Under the New Zealand Emissions Trading Scheme, Cue purchases credits that offset emissions from our share of the Maari production facilities.

Indonesia is a developing economy, with a rapidly growing population demanding much more energy from year to year. It faces profound challenges to decarbonise. Cue is helping by making available lower-emission fuels and supporting economic development. The Sampang PSC supplies gas to Indonesia Power's Grati power plant. The electricity, which the plant supplies to East Java, emits far fewer greenhouse gas than other non-renewable alternatives in a market which is dominated by coal fired generation.

Cue offices have reduced greenhouse gas emissions by replacing ageing IT infrastructure with lower power consumption equipment and installing low-energy LED lighting. We have begun to offset emissions from our Melbourne and Jakarta offices by planting trees.

Cue is continuing to increase its focus on measuring and disclosing our climate performance.

This year we implemented a TFCD reporting framework. Emissions from our Sampang and Maari assets are reported. In the coming year we will add emissions from Mahato, which entered production during the year, and the Amadeus Basin after completion of the asset acquisition.

We are also disclosing a comprehensive summary of climate-related risks. Our board Operational Risk and Sustainability Committee reviews and manages climate risks within our broader risk management framework.

We considered weather events that may become more severe, the potential for structural change in long term demand and prices, and risks to accessing capital as investors seek alternative sectors.

The TCFD process identifies the explicit risks as climate-related. We are pleased to present this report below.

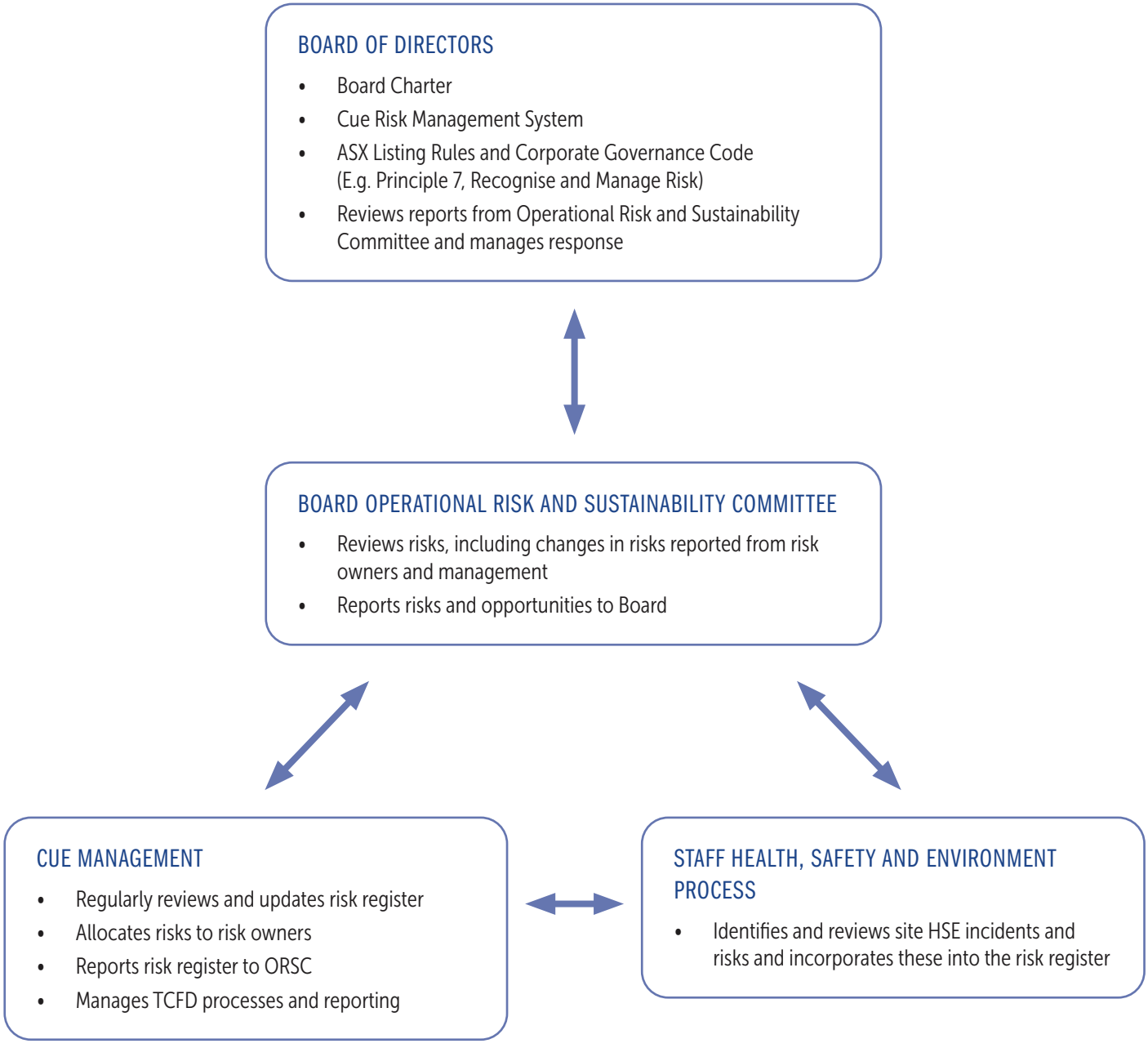
Matthew Boyall
Chief Executive

GOVERNANCE

TCFD CHECKLIST

TCFD CATEGORY	RECOMMENDATION		EXPLANATION FOR NON-COMPLIANCE
GOVERNANCE	Disclose the organisation's governance around climate-related risks and opportunities	✓	
	Describe the board's oversight of climate related risks and opportunities	✓	
	Describe management's role in assessing and managing climate-related risks and opportunities	✓	

CLIMATE-RELATED RISK GOVERNANCE PROCESS



The board has responsibility for reviewing all risks, including climate-related risk and opportunities, and ensuring these are appropriately managed to support delivery of our business strategy.

Recognising and managing risks is an overarching board accountability under its charter (Board Charter 2.2 (h)
Link to Cue Board Charter.

The Board reserves to itself specific responsibility to:

> "Understand the material risks faced by the Company and ensure the Company has appropriate risk management strategies and control measures in place and is actively managing these."
>
> —Board Charter, 3.3 (h).

The process for considering risks is set out in the company's risk management system framework. The framework meets the requirements of the ASX Corporate Governance Principles and Recommendations, Principle 7: Recognise and Manage Risk.

The Board Operational Risk and Sustainability Committee sets, reviews and agrees relevant risk policies, practices, frameworks, targets and performance. Its Charter includes climate change responses. ORSC Charter, Schedule 1, #2:
Link to Cue Board Charter.

Cue's risk register assesses risks related to climate policy, climate-related events, and public perception. Examples of risks are disclosed below.

Management is responsible for identifying, assessing and managing risk and reporting this to the Board through the ORS committee. Management risk owners identify and manage risks. Management regularly reviews the corporate risk framework, including the risk register. The ORS committee receives a report on updates to the register.

Management retains specialist expertise to review risk management, including advice from Cue's major shareholder.

At an operational level, responsibility for day-to-day oversight of climate risk and opportunity (including managing climate objectives and targets) rests with the chief executive.

STRATEGY

TCFD CHECKLIST

TCFD CATEGORY	RECOMMENDATION		EXPLANATION FOR NON-COMPLIANCE
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.	✓	
	Describe the climate related risks and opportunities the organisation has identified over the short, medium and long term.	✓	
	Describe the impact of these risks on businesses, strategy and financial planning.	✓	
	Describe the resilience of the organisation's strategy, taking into consideration different climate related scenarios including a 2 degree Celsius or lower scenario.	✓	

Actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning

Climate change and climate-related financial and regulatory behaviour creates opportunities for production of natural gas. The Company's Sampang and Amadeus Basin assets comprise a significant portion of its production earnings. These are mainly natural gas-producing properties, where the natural gas is used to generate electricity in markets that would otherwise be likely to generate electricity from coal. The Company believes its strategy best positions it for realistic policy and economic scenarios, including a 2 degree warming pathway.

1. Gas demand is expected to increase.

While global gas demand fell by 2.5%, or 100 billion cubic metres in 2020 as a result of the pandemic suppressing demand, the IEA forecasts an increase in demand over the 2020s. Under policies pledged by governments globally, gas demand will increase by 7 per cent to 2025, and by 15% to 2030. (Data from International Energy Agency, World Energy Outlook 2020, Annex A. For discussion, see pages 187-194).

In the IEA's 'sustainable development' scenario, in which sustainable energy objectives including net zero emissions by 2050 are met in full, global gas demand is projected to remain steady through the 2020s. In the net zero to 2050 pathway, the IEA forecasts that demand for gas will be around 10% lower than today (assuming the global economy is recovering from the pandemic).

Demand for gas is affected by factors pulling in different directions. In developing countries, renewables will replace some use of gas, but this will be largely cancelled out by increased demand for natural gas to replace the higher emissions of coal. In developing countries, rapidly growing economies will create more demand for energy. LNG import capacity in Asia in 2020 and 2021 grew strongly, to accommodate forecast increasing demand.

2. Regulation is likely to increase in Australia and New Zealand, carbon prices are likely to rise, and limits are likely to be imposed on emissions from domestic consumption.

In anticipation of higher carbon prices, the Company applies a shadow carbon price to screening of new investments and impairment testing of existing assets.

The Company applies sensitivity testing to its assets and reviews assets for impairment as part of its financial audit and assurance processes. This testing reviews whether asset valuations have been materially affected by climate-created conditions, including effects on prices, costs, insurance, financing and abandonment. Sensitivity and impairment testing manages economic risks to assets. Where those risks change materially, immediate disclosure is made under the Company's continuous disclosure obligations.

Resilience to physical risks, such as weather events, is conducted as a normal part of engineering risk management.

Regulatory risks are mitigated by diversifying jurisdiction risk.

The Company offsets its emissions in New Zealand. A carbon price is applied to emissions from use of the oil and gas in New Zealand through the New Zealand Emissions Trading Scheme. Emissions from use in Australia and Indonesia are not currently measured but would be expected to be lower than emissions that would be generated from alternative non-renewable sources if natural gas were not available or if heavier oils were substituted.

3. Resilience in alternative scenarios

The Company monitors the International Energy Agency's World Energy Outlook, and models produced by industry leaders such as the BP Energy Outlook, the IPCC and international consultancies. In all scenarios, we expect to see increased demand for gas in Asian markets. A more rapid decarbonisation outlook implies a faster switch to gas in Asian markets, and reduced or stable use in Australia and New Zealand. In Indonesia we see a faster switch to natural gas from coal, and steady demand for oil as the economy develops economically.

To further support our modelling assumptions, we seek information from our JV partners on potential commercial opportunities relating to management of climate change risk, including undertaking scenario analysis following the structure of TCFD.

Engineering resilience is assured and regularly updated at scheduled joint venture Technical Committee Meetings.

Resilience to financial or economic changes is tested as part of our financial audit and assurance processes, which includes impairment testing. Financial planning incorporates expected prices and revenues, including carbon costs, insurance costs, maintenance costs, and the availability of corporate finance. Specific material risks or changes to financial outlooks are disclosed in financial reports where these are material.

RISK MANAGEMENT

TCFD CHECKLIST

TCFD CATEGORY	RECOMMENDATION		EXPLANATION FOR NON-COMPLIANCE
RISK MANAGEMENT	Disclose how the organisation identifies, assesses and manages climate-related risks	✓	
	Describe the process for identifying and assessing climate risks.	✓	
	Describe processes for managing climate risks.	✓	
	Describe how processes for identifying, assessing and managing are integrated into overall risk management.	✓	

How we identify, assess and manage climate-related risks

The Company's Risk Management System Framework applies consistent and comprehensive risk management practices. Climate risks are recorded in the central risk register, which considers the risks, reviews the controls, assigns ownership of a risk and tracks treatment plans.

Climate risks are identified on an ongoing basis. Consideration is given to industry and peer information and expertise, shareholder and community feedback, regulatory changes, and analysis by our own staff and contractors.

Risk assurance and oversight of climate risk management is provided through internal review by the board Operation Risk and Sustainability committee.

The chief executive has responsibility for climate risk, including risks to individual assets and financial and investment risks associated with climate change.

Potential risks to Cue Energy from climate change are assessed under the following headings:

- Policy and Legal,
- Physical (acute and chronic),
- Financial and Market,
- Social/Political/Regulatory, and
- Technological.

All these risks have potential financial and operational implications due to lost profitability and increased delays. Financial and market risks, and social/political risks also present opportunities associated with more rapid uptake of natural gas as a lower-carbon replacement for coal.

How we model climate risk

Maari

For our New Zealand Maari asset, Cue uses the New Zealand ETS market pricing for carbon emissions. The Company purchases emissions credits annually and the price of these credits is modelled in Maari performance forecasts and impairment testing. For impairment testing, prices are derived from market prices.

Amadeus Basin

For investment into Amadeus basin assets, Cue's advisers used an internal price to test the economics of investments based on market prices in other comparable international regimes. Expectations of forward prices reflect the market consensus on the likelihood and level of future carbon charges and market demand. Potential increased carbon pricing or reduced prices are part of the Company's sensitivity testing. For example, the Californian-Quebec May auction prices were USD18.80 per tonne of carbon. Korean prices were around USD35 per tonne prior to COVID-19 effects, and the European ETS units were trading historically at around USD30 per tonne prior to COVID-19 effects (although after changes to the European scheme and a colder than normal winter heating season, carbon prices increased to ca. USD65/tonne).

Currently, Cue tests Australian investment economics with a price of USD20 per tonne, with scenarios testing this price increasing to USD60 per tonne by 2040.

Sampang

Emissions from the company's interest in the Sampang PSC are considered in performance forecasts and impairment testing. There is currently no carbon cost mechanism in Indonesia. The Company monitors the economic effects of climate-related policy and climate conditions on the value and operation of its asset.

Mahato

Production from Mahato is not currently reported. To model emissions and conducts sensitivity and impairment testing the Company is evaluating benchmarks for calculating emissions from a comparable onshore oil field based only on production data. This evaluation model is expected to be introduced in the current financial year.

CLIMATE RELATED RISKS

The table of risks below uses the following time horizon categories:
Short (s) – 0-5 years,
Medium (m) – 5-10,
Long (l) – 10+ years.

RISK TYPE		DESCRIPTION	TIME	CONTROL
Non-physical risks	Policy and legal risks	Litigation against companies and/or directors on climate grounds (claiming causation or seeking greater action to mitigate effects) could have reputational, development and operating cost impacts. Changing regulations including bans and restrictive regulations, taxes and emissions limits across all jurisdictions risk viability of projects	s, m, l.	Board and management understand their fiduciary duties around climate change risk. Update internal processes, including due diligence and joint venture processes, identify and manage climate risk. Monitor the jurisdictions where we undertake activities. Strategy of diversifying jurisdictions to mitigate changes on any individual regulatory environment. TCFD compliant reporting.
	Reputational and social license risks	Stakeholder disengagement and oppositional activism. Loss of social license, leading to project delays or stoppages. Recruitment and retention risk.	s, m, l.	Manage environmental performance. Due diligence screening of commercial opportunities and joint ventures.
	Financial risks	ESG investing affects availability and cost of capital. Insurance premiums increase. Potential for classes of assets and locations to become uninsurable. Capital cost increases if new environmental standards require more expensive supplies relative to alternatives. Carbon pricing adopted across jurisdictions, or inconsistently between them. Changes to price and cost forecasts result in stranded assets or reserves.	s, m, l. s, m, l. m, l. s, m, l. s, m, l.	Shadow price on carbon to sensitivity testing in investment decisions. Due diligence screening of commercial opportunities and joint venture processes. Assurance relating to insurance forecasts. Access to a range of funding options. TCFD compliant reporting. Jurisdictional diversification to avoid impact of sudden, unilateral changes, confiscation or value destruction by regulation.
Physical risks	Acute & Chronic	Physical assets may be subject to increased frequency and intensity of extreme weather events such as storms, flooding, coastal inundation, lack of water availability, or slips. Offshore drilling and production delayed or shut in by increased weather events.	m, l.	Engineering anticipates environmental conditions. Carbon policy provides for review of climate issues in strategic and operational decisions.
Opportunities	Commercial	Global reduction in high carbon sources such as coal is increasing demand for natural gas as a lower carbon partner to renewables.	s, m, l.	Strategic preference for natural gas. Support for our joint venture partners pursuing low carbon innovations on sites. Ongoing investigation of investment opportunities in lower emission technologies, including carbon capture and storage.

MEASUREMENTS AND TARGETS

TCFD CHECKLIST

TCFD CATEGORY	RECOMMENDATION		EXPLANATION FOR NON-COMPLIANCE
TARGETS AND METRICS	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	✓	
	Disclose the metrics used by the organisation to assess climate related risks and opportunities in line with its strategy and risk management process.	✓	
	Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks.	✓	The Company does not disclose Scope 3 emissions, as the information is not obtainable.
	Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	✓	

The TCFD recommends disclosure of the measures we use to assess climate-related risks and measure them, disclose emissions (by Scope 1,2 and 3), and describe the targets that we use to manage climate-related risk.

Risk management systems are described above.

Emissions relate to Cue's corporate office activities and emissions from production facilities in New Zealand, Australia and Indonesia.

An annual estimate is prepared of carbon emissions from corporate activity, using inputs such as electricity bills, air travel and rental car use, waste disposal contracts, and government figures for average building carbon intensity. The company purchases trees to offset these emissions.

Emissions from producing oil and gas fields are reported below.

METRICS

TOTAL GREENHOUSE GAS EMISSIONS

YEAR TO 30 JUNE 2021	METRIC TONNES CO2e
Sampang	4447
Maari	4622
Mahato	Not available*
Jakarta Office	12
Melbourne Office	5
Total	9086
Scope 1	9069
Scope 2	17

*Mahato emissions are not compiled by the PSC operator. In future years, Cue intends to report estimated Mahato emissions derived from a comparable onshore oil field. A suitable model is currently being evaluated.

The board Operational Risk and Sustainability Committee annually reviews sustainability targets and performance.

OUR RESULTS: TCFD TARGETS FOR 2020-21

2020-21 TARGETS	STATUS
Establish and implement a TFCD framework to become compliant by FY22.	Ongoing.
Establish company reportable metrics	Complete for assets producing for the full year (Sampang and Maari). Ongoing for Mahato, which started production during the year (in Jan 2021). Ongoing for Amadeus Basin (acquisition expected to complete in fourth quarter of calendar 2021).
Offset emissions from Melbourne and Jakarta offices by planting trees	Completed and ongoing.

OUR INTENTIONS: TCFD TARGETS FOR FY2021-22

FOCUS AREA	TARGET	IMPACT	MEASURED BY
Reporting	Continue to report Scope 1 and 2 emissions	Disclosure of risks, impacts and climate responsiveness	Publication in annual report. Available on website
Reporting	Finalise TCF compliance and reporting	Disclosure of risks, impacts and climate responsiveness	Publication in annual report. Available on website
Reporting	Maintain TCFD statements and reporting online and in the 2022 Annual Report.	Disclosure of risks, impacts and climate responsiveness	Publication in annual report. Available on website
Reporting	Incorporate Amadeus Basin and Mahato assets into reporting	Disclosure of risks, impacts and climate responsiveness	Publication in annual report. Available on website
Policy and Legal	Adopt a discrete climate change policy	Disclosure of climate strategy	Publication on website by Q1 FY22
Commercial	Undertake analysis of an internal price on carbon to inform TCFD risk and commercial decisions by end FY 2022	Management of carbon pricing risk	Report in 2022
Emissions reductions	Review potential for material emissions reductions or offsets from producing sites	Ongoing mitigation of emissions	Report in 2022
Emissions management	Benchmark emissions against comparable production	Provides basis for evaluating performance	Report in 2022
Emissions reductions	Offset emissions from head office and corporate travel.	Net zero from our own operations	Report in 2022
Emissions reductions	Initiate ongoing office sustainability improvement opportunities.	Sustained emissions reductions	Report in 2022
Emissions reductions	Investigate a carbon emission audit and reduction plan.	Potential reductions and increased confidence in reporting.	Publicly reported.