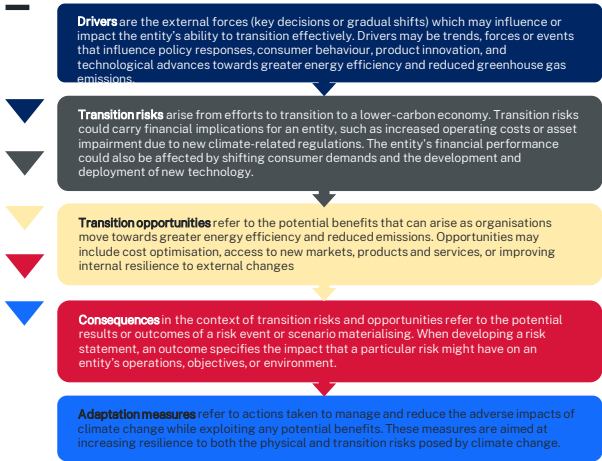


Instructions

- This document represents 1x full card deck suitable which is suitable for 5-10 players.
- This document is formatted for printing at a standard playing card size of 64mm x 89mm.
 - If working in PowerPoint, please note objects extend beyond slide size to help ensure crop and bleed is accounted for.
 - If editing any content, ensure any text is a least 3mm from any border. In the PowerPoint ribbon above select 'view' > 'show' > 'guides' which will show guidelines assisting with this.
- It is recommended to print on paperstock of approx. 220gsm thickness or above (uncoated stock will better allow participants to write additional material on the provided blank cards).
- Working with a commercial printer is recommended, with approx. costs of \$15-\$20 per deck printed.
- Delete this page before printing



Drivers are the external forces (key decisions or gradual shifts) which may influence or impact the entity's ability to transition effectively. Drivers may be trends, forces or events that influence policy responses, consumer behaviour, product innovation, and technological advances towards greater energy efficiency and reduced greenhouse gas emissions.

Transition risks arise from efforts to transition to a lower-carbon economy. Transition risks could carry financial implications for an entity, such as increased operating costs or asset impairment due to new climate-related regulations. The entity's financial performance could also be affected by shifting consumer demands and the development and deployment of new technology.

Transition opportunities refer to the potential benefits that can arise as organisations move towards greater energy efficiency and reduced emissions. Opportunities may include cost optimisation, access to new markets, products and services, or improving internal resilience to external changes

Consequences in the context of transition risks and opportunities refer to the potential results or outcomes of a risk event or scenario materialising. When developing a risk statement, an outcome specifies the impact that a particular risk might have on an entity's operations, objectives, or environment.

Adaptation measures refer to actions taken to manage and reduce the adverse impacts of climate change while exploiting any potential benefits. These measures are aimed at increasing resilience to both the physical and transition risks posed by climate change.

TRANSITION DRIVER CARD

TD1

New government legislation, policies and targets, including potential for carbon pricing

Governments are setting stricter emissions reduction policies, and organisations are required to align with these frameworks. This could also include the introduction of carbon pricing mechanisms.

Introduction of mandatory climate reporting

Mandatory climate reporting is set to impact large companies from 2025, focusing on transparency in identifying and managing climate-related risks and opportunities.

Growing recognition of climate risk in financing and investment

Investors are increasingly assessing climate risks, affecting credit, market value, and insurance costs. This is driving demand for sustainable finance, including green bonds, influencing investment decisions.

Changing community expectations

Communities now expect greater accountability and transparency on climate impacts, increasing potential liabilities and reputational risks for organisations.

*Need for capacity building to
respond to
climate transition*

Employees will need training and support to effectively participate in and lead the transition to a low-carbon economy, ensuring the necessary skills and knowledge are developed and applied.

Changing certifications and standards

Stricter sustainability certifications will require operational upgrades and retrofits, potentially causing disruptions, but are essential for future-proofing and meeting stakeholder expectations.

Creation of new industries and employment

New job opportunities are created in emerging industries like advanced energy, transport, and environmental services, requiring organisations to integrate these shifts into their decision-making while mitigating job losses.

Changing consumer behaviour

Consumers are increasingly adopting sustainable behaviours and choosing more sustainable products and services like electric vehicles, employing energy-efficient technologies or using low-emissions forms of transport.

Changes to energy generation mix, transmission and storage

The electricity sector is increasingly focused on transitioning from fossil fuels to renewable sources like wind and solar. This shift demands modernising grids and storage systems to support electrification and ensure energy security.

Increasing electricity demand and expectations on reliability

As electricity demand rises, driven by population growth and electrification, ensuring network reliability and security will become more critical and may be subject to cost fluctuation, disruption, and decentralisation.

Growing availability of alternative fuels

The production and competition for alternative fuels like hydrogen and biofuels are increasing, particularly in sectors such as manufacturing and aviation.

Increasing energy efficiency and electrification of built environment and property

Efforts like installing rooftop solar and replacing fossil fuel-powered systems with low-emissions alternatives are vital in improving the energy efficiency and decentralisation of power in buildings.

Greater regulation and retrofitting of built environment and property

Retrofitting buildings to support renewable energy and electric vehicle infrastructure is increasing, with new regulations ensuring future constructions are compatible with decarbonisation needs.

Electrification in transport

The rise in demand for electric vehicles is prompting manufacturers to electrify fleets and governments to invest in charging infrastructure, supporting a greener transport network.

Electrification in industry and manufacturing

Electrification and hydrogen technology adoption will play a key role in reducing industrial emissions, with solutions tailored to the specific energy requirements of different industries.

Changing metals and minerals demand and associated supply chain disruptions

The demand for critical minerals such as copper, nickel, and cobalt will rise to support electric vehicle production and renewable energy generation. This increased demand may lead to supply chain disruptions.

Technologies and farming methods to reduce agricultural emissions

Innovations such as methane-reducing livestock feed, improved fertilisers, and regenerative farming are helping lower agricultural emissions while improving yields.

Increasing scale of carbon dioxide removals

Carbon dioxide removals through nature-based carbon sequestration and technological responses will support decarbonisation particularly in industries such as steel and cement production.

Growing recognition and valuation of nature

Australia's dependence on natural capital, including ecosystems that provide essential services like water and carbon storage, is growing, making nature conservation crucial to economic and community wellbeing.

Changes to environmental approvals

Changing policies will entrench environmental compliance and sustainable project delivery requirements for both the public and private sector, with increased penalties for environmental breaches.

Growing recognition of Traditional Knowledge to inform climate transition

Indigenous land management practices offer valuable insights for enhancing ecosystem resilience, providing opportunities to incorporate Traditional Knowledge into climate adaptation strategies.

TRANSITION DRIVER CARD

TD22

TRANSITION DRIVER CARD

TD23

TRANSITION DRIVER CARD

TD24

TRANSITION DRIVER CARD

TD25

TRANSITION DRIVER CARD

TD26

TRANSITION RISK CARD

TR1

Failure to meet policy targets

Risk that organisation does not meet stated government policies and targets, leading to a disorderly transition.

Introduction of carbon pricing mechanism

Risk that carbon pricing mechanism is introduced, requiring the need to purchase carbon offset credits.

Disconnect between planning and operations

Risk that there is a disconnect between strategic planning and operational actions within an organisation that result in uninformed or misguided decisions to be made in connection to climate transition.

Insufficient funding for climate transition

Risk that organisation has not secured or allocated sufficient funding to undertake effective and measurable action on climate transition.

Failure to meet electrification expectations

Risk that organisation does not meet community expectations regarding the pace and scale of electrification (e.g. availability of charging stations, battery storage, availability of electrified public transport fleet).

Litigation risk due to inaction

Risk that insufficient effort is made to support climate response and reduce emissions, leading to potential for litigation claims including class action.

TRANSITION RISK CARD

TR7

Inadequate resources for reporting needs

Risk that increasing reporting requirements will need additional resources and skills not currently available within the organisation.

Costly new sustainability regulations

Risk that regulations introduce new requirements or benchmarks for sustainability performance and sustainable design, which are either costly to meet, or result in potential for stranded assets.

Lack of skills for climate transition

Risk that organisation does not adequately plan for changing skillsets required to deliver new products and services, leading to productivity loss and potential staff retention challenges.

Shift towards sustainable local products

Risk that consumer preferences shift to local, sustainable and zero emissions products and services, reducing demand for certain imported goods, or reducing demand and volumes of Australian exported goods.

Unprepared transmission for energy transition

Risk that transmission and distribution is not built to respond to changing energy sources and rising demand, leading to disruptions in power supply.

Price fluctuations due to electricity demand

Risk that increasing electricity demand will raise prices or lead to price fluctuations for grid-based electricity.

Revenue loss from declining fossil fuels

Risk that decreased demand for fossil fuel products will reduce revenues for interdependent organisations, e.g. freight, water suppliers.

Assets failing energy performance standards

Risk that existing assets for sale or lease do not meet expectations on energy and emissions performance.

Costly retrofitting of existing assets

Risk that retrofitting built assets becomes too costly to undertake.

Electric vehicles inadequate for remote needs

Risk that electric vehicles will not account for long range needed to reach remote communities or customers, leading to less frequent interaction.

High costs delay industrial electrification

Risk that high electricity prices, coupled with relatively lower-efficiency industrial equipment, delays the electrification of industrial and manufacturing processes and products, rendering continued high emissions.

Insufficient metals for renewable demand

Risk that mineral extraction and circular economy for metals and minerals does not meet demand from renewable energy technologies, resulting in supply chain disruptions and reduced availability of renewable products and services.

Investment in unproven technologies

Risk of adopting technologies or investing in research and development that does not provide the expected or intended value or benefit.

Limited availability of sequestration sites

Risk that availability of carbon sequestration sites becomes constrained against other development, leading to challenges and higher costs to meet emissions targets.

Impact of environmental law reforms

Risk that environmental law reforms impact use of natural resources and land, leading to increased reporting requirements and changes to project approval processes.

Projects failing environmental approval

Risk that projects are not approved due to failure to demonstrate alignment with environmental, emissions or sustainability requirements and targets.

Lack of Indigenous recognition

Risk that organisational efforts to reduce emissions or increase carbon dioxide removals do not recognise Indigenous connections to lands, waters or other resources.

TRANSITION RISK CARD

TR24

TRANSITION RISK CARD

TR25

TRANSITION RISK CARD

TR26

TRANSITION RISK CARD

TR27

TRANSITION RISK CARD

TR28

Develop sector-based guidance tools

Opportunity to develop sector-based guidance and tools and share and exchange with relevant stakeholders (community, customers, associations or other partner organisations) to support broader sectoral emissions reduction.

Publicly communicate net zero efforts

Opportunity to publicly communicate organisation's efforts to transition to net zero, providing examples for other organisations to follow and creating a positive ripple effect for climate transition.

Invest in low-carbon technology development

Opportunity to invest in research and development to develop and pilot low carbon and energy efficient technologies and products, rendering reputation and market benefits.

Explore green finance mechanisms

Opportunity to explore new finance mechanisms and investment that is driven to address climate risk (e.g. green finance) to diversify the investment pool and respond effectively to customer and community needs.

Deploy stakeholder outreach programs

Opportunity to invest in and deploy stakeholder outreach programs to observe changing preferences and expectations regarding climate response and energy transition, supporting adaptive response and improved awareness on the effectiveness of the organisation's current practices.

Review internal climate capability programs

Opportunity to review internal capability programs and create avenues for internal and external knowledge exchange on climate transition challenges and programs.

TRANSITION OPPORTUNITY CARD

T07

Collaborate with sustainability peak bodies

Opportunity to proactively work with sustainability peak bodies to understand planned industry shifts and changes in order to update organisational design standards and specifications.

Promote sustainable locally-produced products

Opportunity for the entity to advocate for use of sustainable, locally- produced products as part of its procurement policy, boosting local manufacturing and production and promoting improved product standards.

Partner with research and tertiary institutions

Opportunity to form collaborative partnerships with research and tertiary institutions to investigate how new industries, products and services may emerge over time.

TRANSITION OPPORTUNITY CARD

TO10

*Create new products for
shifting demand*

Opportunity to develop new product or service in response to consumer shifts, to develop a better competitive position in the market.

Generate onsite renewable energy

Opportunity to generate renewable energy onsite through improved access to renewable technologies and declining capital cost.

Utilise micro-grid and battery technologies

Opportunity to utilise micro-grid and battery technologies as decentralised mechanisms for renewable energy and storage.

Advance emissions reduction in manufacturing

Opportunity to advance the emissions reduction potential of hard-to-electrify assets and processes, including manufacturing and industrial activities.

Integrate energy and water efficiency

Opportunity to integrate energy and water efficiency measures across assets and operations, mitigating operational cost increases from increased energy cost and/or carbon pricing.

Adopt energy efficiency platforms and upgrades

Opportunity to adopt energy efficiency and energy management platforms and technologies as part of new design and/or upgrades, to raise awareness and accountability of energy use and improve performance.

Support community use of EVs

Opportunity to support growing use of EVs by community and employees by electrifying fleet and providing charging infrastructure.

Switch to electricity for industrial processes

Opportunity to switch to electricity for heating and to power industrial equipment including compressors, pumps and industrial motors.

Improve sustainability of domestic supply chains

Opportunity to improve domestic supply chains and contribute to circular economy, reducing energy consumption and emissions associated with creation of new products.

Integrate regenerative farming practices

Opportunity to integrate regenerative farming practices to reduce emissions released from land.

TRANSITION OPPORTUNITY CARD

TO20

Invest in carbon offset programs

Opportunity to invest in carbon offset programs that support protection of carbon sinks as well as promoting biodiversity.

Conduct nature-related risk gap analysis

Opportunity to undertake nature-related risk and opportunity gap analysis to understand level of impact on nature from organisational activities.

Integrate climate metrics into project reports

Opportunity to integrate metrics and targets into project reports (from business cases to evaluation plans) to demonstrate progress and performance in line with approval requirements and/or other benchmarks.

TRANSITION OPPORTUNITY CARD

T023

Collaborate with First Nations people regularly

Opportunity for the entity to formally and regularly collaborate with First Nations people to create mutual benefits for effective climate transition.

TRANSITION OPPORTUNITY CARD

T024

TRANSITION OPPORTUNITY CARD

T025

TRANSITION OPPORTUNITY CARD

T026

TRANSITION OPPORTUNITY CARD

T027

TRANSITION OPPORTUNITY CARD

T028



Decreased expenditures



CONSEQUENCE CARD

C2

Increased expenditures



CONSEQUENCE CARD

C3

Increased revenue



CONSEQUENCE CARD

C4

Decreased revenue



CONSEQUENCE CARD

C5

Increased asset performance and valuation



CONSEQUENCE CARD

C6

Decreased asset performance and valuation



CONSEQUENCE CARD

C7

Increased availability of capital and financing



CONSEQUENCE CARD

C8

Decreased availability of capital and financing



Reputational benefit



CONSEQUENCE CARD

C10

Reputational loss



CONSEQUENCE CARD

C11

Increased productivity



CONSEQUENCE CARD

C12

Decreased productivity



Increased organisational resilience



Decreased organisational resilience

CONSEQUENCE CARD

C15

CONSEQUENCE CARD

C16

CONSEQUENCE CARD

C17

CONSEQUENCE CARD

C18

CONSEQUENCE CARD

C19

Develop climate transition action plan

Develop a climate transition plan to highlight objectives and key actions required for a coordinated effort to reduce emissions to zero and effectively transition across areas of energy supply, demand and efficiency.

Create carbon emissions reduction policy

Develop a carbon emissions policy to set direction and requirements for reduction and offsetting of emissions.

Develop sustainable procurement policy

Develop a sustainable procurement policy that describes any energy, emissions, environmental or social requirements that suppliers must meet to be engaged.

Conduct mandatory resilience assessments

Undertake mandatory climate resilience assessments for all new capital projects and/or major upgrades over a specified threshold.

Undertake scenario analysis for technology deployment

Undertake scenario analysis to support the planning and timing of zero emission technology deployment.

Integrate climate risk in policies

Strengthen the integration of climate risk and response within organisational policies and frameworks, including strategic planning, enterprise risk, design and construction, investment and approvals.

Develop work-from-home travel strategy

Develop a work-from-home (WFH) and travel strategy applicable across the organisation to initiate material reduction in employee transport-related emissions.

Implement climate transition capability programs

Implement capability building programs to upskill staff on climate transition as part of strategic, financial and operational decision making to support improved capability and organisational resilience.

Create electrification roadmap and incentives

Develop an electrification roadmap and incentivise stakeholders or projects to install renewable energy generation capacity (e.g. solar PV) and progress electrification of fleet and plant.

Install energy monitoring and storage systems

Install building management systems that monitor energy usage and work with renewable supply and battery storage to optimise generation and use of renewable energy while managing grid-based demand.

Increase emissions data visibility

Increase visibility of existing data and identify data gaps to enable emissions reporting and monitoring the effectiveness of transition responses.

Redirect savings to innovation programs

Redirect operational savings from installation of energy efficiency measures into innovation programs that look to optimise assets or reduce emissions even further.

Investigate internal carbon pricing viability

Investigate viability of setting an internal carbon price to gauge the financial impact of products and services used and generated.

Explore alternative fuel for hard-to-electrify

Explore alternative fuel options for hard-to-electrify assets, including potential pilot programs or small scale trials of new technologies.

Seek government funding for renewables

Seek out government funding pathways to install onsite renewable energy generation (e.g. large scale solar, demand management and grid-response technology) to support reduction in emissions generated.

Explore green finance funding options

Investigate options and structuring of green finance mechanisms to fund relevant programs or new asset builds.

Review investment for climate priorities

Review and modify internal investment and capital approval processes and frameworks to increase priority given to initiatives that reduce climate-related risk and capitalise on opportunities

Report co-benefits of emissions reduction

Research and report on co-benefits of emissions reduction, such as air quality improvements, community health and fuel security, as ways to improve engagement with climate related policies.

Leverage working groups for decarbonisation

Leverage membership within existing intergovernmental and industry working groups to raise sustainability and decarbonisation agenda and develop consistent regulatory responses.

Engage suppliers on emissions reporting

Engage with vendors and suppliers to upskill them on emissions reporting requirements as part of the organisation's value chain.

ADAPTATION MEASURE CARD

AM21

ADAPTATION MEASURE CARD

AM22

ADAPTATION MEASURE CARD

AM23

ADAPTATION MEASURE CARD

AM24

ADAPTATION MEASURE CARD

AM25