ASRS CLIMATE-RELATED FINANCIAL DISCLOSURES GUIDE:
Assessing Risks & Opportunities

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AVARNI

This resource is not a substitute for legal advice and should be used alongside professional judgment and consultation of the full AASB S2 standard.

OVERVIEW OF CLIMATE-RELATED FINANCIAL DISCLOSURE PROCESS

Abridged from the Task Force on Climate-related Financial Disclosures

IDENTIFY CLIMATE-RELATED RISKS & OPPORTUNITIES

- Understand the landscape
- Consider internal & external factors
- Categorize by time-horizon: Short-term (< 1 year), Medium-term (1-5 years) & Long-Term (> 5 years)

ASSESS CLIMATE-RELATED RISKS

- Evaluate Potential Size and Scope of Risk
- Define Risk Terminology and Frameworks (TCFD's Risk Management Hub is a useful resource!)
- Consider Regulatory Requirements
- Prioritize Risks / Assess Materiality: Based on the assessment of likelihood and impact

MANAGE CLIMATE-RELATED RISKS

- Develop a management process to Mitigate, Transfer Accept or Control
- Integrate into the overall risk management processes of the company
- Assign clear roles & responsibilities

INTEGRATE WITH STRATEGY & FINANCIAL PLANNING

- Outline how climate-risks and opportunities impact business model, strategic direction, and financial performance
- Design a scenario analysis to assess how the business might perform under various future climate conditions (consider leveraging TCFD's scenario analysis tools!)

RESOURCES:

- TCFD Recommendations of the Task Force on Climate-related Financial Disclosures: https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf
- TCFD Risk Management Hub: https://www.tcfdhub.org/risk-management/
- Scenario Analysis Tools: https://www.tcfdhub.org/scenario-analysis/
- IPCC Assessment Report - Six Assessment Report (AR6): https://www.ipcc.ch/report/ar6/syr/

CLIMATE-RELATED RISKS AND POTENTIAL FINANCIAL IMPACTS

Abridged from the Task Force on Climate-related Financial Disclosures

TYPE OF RISK	CATEGORY	KEY RISKS	FINANCIAL IMPACTS
TRANSITION RISKS	POLICY & LEGAL	• Increased pricing of GHG emissions • Enhanced emissions-reporting obligations • Mandates on and regulation of existing products and services • Exposure to litigation	• Higher compliance and insurance costs • Earlier asset retirement and write-offs • Direct litigation expenses impacting profitability
	TECHNOLOGY	• Substitution of existing products and services with lower emissions options • Unsuccessful investment in new technologies • Costs to transition to lower emissions technology	• Early retirement of carbon-intensive assets • Declining market share as preferences shift • Increased R&D expenditures in alternative tech • Capital investments for technology development • Implementation costs for new processes
	MARKET	• Changing customer behaviour • Uncertainty in market signals • Increased cost of raw materials	• Reduced demand for goods and services due to shift in consumer preferences • Increased production costs due to changing input prices (e.g., energy, water) and output requirements (e.g., waste treatment) • Unexpected shifts in energy costs • Change in revenue mix and sources, resulting in decreased revenues
	REPUTATION	• Shifts in consumer preferences • Stigmatization of sector • Increased stakeholder concern or negative stakeholder feedback	• Reduced revenue from shifts in preferences, decreased production capacity (e.g supply chain disruptions), negative impacts on workforce • Reduction in capital availability
PHYSICAL RISKS	ACUTE	• Increased severity of extreme weather events such as cyclones and floods	• Reduced revenue from decreased production capacity and higher costs from negative impacts on workforce • Write-offs and early retirement of existing assets • Increased operating costs • Increased capital costs due to facility damage • Increased insurance premiums and potential for reduced availability of insurance on assets in “high-risk” locations
	CHRONIC	• Changes in precipitation patterns and extreme variability in weather patterns • Rising mean temperatures • Rising sea levels	

CLIMATE-RELATED OPPORTUNITIES AND POTENTIAL FINANCIAL IMPACTS

Abridged from the Task Force on Climate-related Financial Disclosures

TYPE OF OPPORTUNITY	KEY OPPORTUNITIES	FINANCIAL IMPACTS
RESOURCE EFFICIENCY	• Use of more efficient modes of transport, production & recycling • Move to more efficient buildings • Reduced water usage and consumption	• Lower operating costs through efficiency gains • Increased production capacity and revenues • Higher value of fixed assets (e.g., efficient buildings) • Workforce benefits leading to reduced costs (health, satisfaction)
ENERGY SOURCES	• Leverage lower-emission energy sources, new energy technologies & decentralized energy generation • Policy incentive utilization • Carbon market participation	• Reduced operational costs through lowest cost abatement • Less exposure to fossil fuel price volatility • Reduced carbon pricing risk • Returns on low-emission technology investments Increased capital availability Reputational benefits driving demand
PRODUCTS & SERVICES	• Development of low emission goods and services • Development of climate adaptation and insurance risk solutions • Development of new products or services through R&D and innovation • Respond to shift in consumer preferences	• Increased revenue from low-emission offerings • New revenue from adaptation solutions • Competitive advantage from meeting shifting consumer preferences
MARKETS	• Access to new markets • Use of public-sector incentives • Access to new assets and locations needing insurance coverage	• Increased revenues from new markets • Partnership opportunities with governments and development banks • Diversification of financial assets (green bonds, infrastructure)
RESILIENCE	• Participation in renewable energy programs • Resource substitutes/diversification	• Higher market valuation through resilience planning • Increased supply chain reliability • New revenue from resilience-related offerings

APPENDIX

Sector examples of risks & opportunities summarized from ASX100 sustainability reports

MANUFACTURING

RISKS

PHYSICAL RISKS:
•Damage to manufacturing facilities from extreme weather events
•Supply chain disruptions affecting raw material availability
•Water scarcity impacting production processes
•Employee health and safety risks during extreme heat
•Logistics and transportation disruptions

TRANSITION RISKS:
•Carbon pricing impacts on operational costs
•Increasing energy costs, particularly for energy-intensive processes
•Compliance costs with expanding emissions regulations
•Potential for stranded assets in carbon-intensive equipment
•Capital investment requirements for low-carbon technology conversion
•Competitive disadvantage if international competitors face less stringent regulations

MARKET AND TECHNOLOGY RISKS:
•Shifting consumer preferences toward low-carbon products
•Reduced demand for carbon-intensive products
•Technology obsolescence as industries decarbonize
•Rising costs of raw materials due to embedded carbon pricing

OPPORTUNITIES

OPERATIONAL EFFICIENCIES:
•Energy efficiency improvements reducing production costs
•Waste reduction and circular economy initiatives
•On-site renewable energy generation
•Process optimization and electrification of manufacturing

PRODUCT INNOVATION:
•Development of low-carbon products and services
•Green product certification and eco-labelling
•Recyclable or biodegradable product design
•Climate-resilient product offerings

STRATEGIC ADVANTAGES:
•Access to green finance and sustainability-linked loans
•Government incentives for clean manufacturing
•Participation in the renewable energy supply chain
•Development of local manufacturing capabilities to reduce supply chain risks
•Early mover advantage in emerging green markets

MINING & MATERIALS

RISKS

TRANSITION RISKS
•Increasing regulatory pressure to reduce carbon emissions
•Potential carbon pricing mechanisms and emissions trading schemes
•Rising costs of compliance with emerging climate regulations
•Risk of stranded assets as global energy transition accelerates
•Potential devaluation of fossil fuel-related infrastructure

PHYSICAL CLIMATE RISKS
•Extreme weather events impacting mining operations
•Water scarcity in mining regions (particularly critical in Western Australia)
•Increased frequency of heat waves affecting worker safety and operational efficiency
•Potential damage to infrastructure from climate-related natural disasters
•Disrupted supply chains due to climate-induced environmental changes

MARKET AND REPUTATION RISKS
•Changing investor sentiment towards carbon-intensive industries
•Potential loss of social license to operate
•Increased pressure from shareholders and stakeholders for climate action
•Risk of reduced access to capital markets due to poor climate performance
•Potential challenges in attracting talent and maintaining workforce engagement

OPPORTUNITIES

TECHNOLOGY AND INNOVATION
•Developing low-emission mining technologies
•Investing in renewable energy for mining operations
•Exploring critical minerals essential for clean energy transition (lithium, copper, nickel)
•Developing carbon capture and storage technologies
•Innovative approaches to reduce operational carbon footprint

MARKET POSITIONING
•Capitalizing on increased demand for minerals crucial to renewable energy
•Positioning as a leader in sustainable mining practices
•Developing new business models aligned with low-carbon economy
•Creating value through strategic investments in green technologies
•Potential for premium pricing of sustainably produced minerals

OPERATIONAL EFFICIENCY AND COST REDUCTION
•Implementing energy efficiency measures
•Reducing operational costs through renewable energy adoption
•Developing circular economy approaches in mining
•Optimizing water and resource management
•Potential for long-term cost savings through sustainable practices

PROFESSIONAL SERVICES

RISKS

PHYSICAL RISKS
•Disruption to operations from extreme weather events (bushfires, floods, storms)
•Property damage to office locations in climate-vulnerable areas
•Health and safety risks to employees during extreme weather
•Supply chain disruptions due to climate events

TRANSITION RISKS
•Regulatory changes and compliance costs as Australia strengthens climate policies
•Carbon pricing mechanisms affecting operational costs
•Reputational damage from perceived inadequate climate action
•Stranded assets from investments in carbon-intensive industries
•Client portfolio exposure to climate-vulnerable sectors

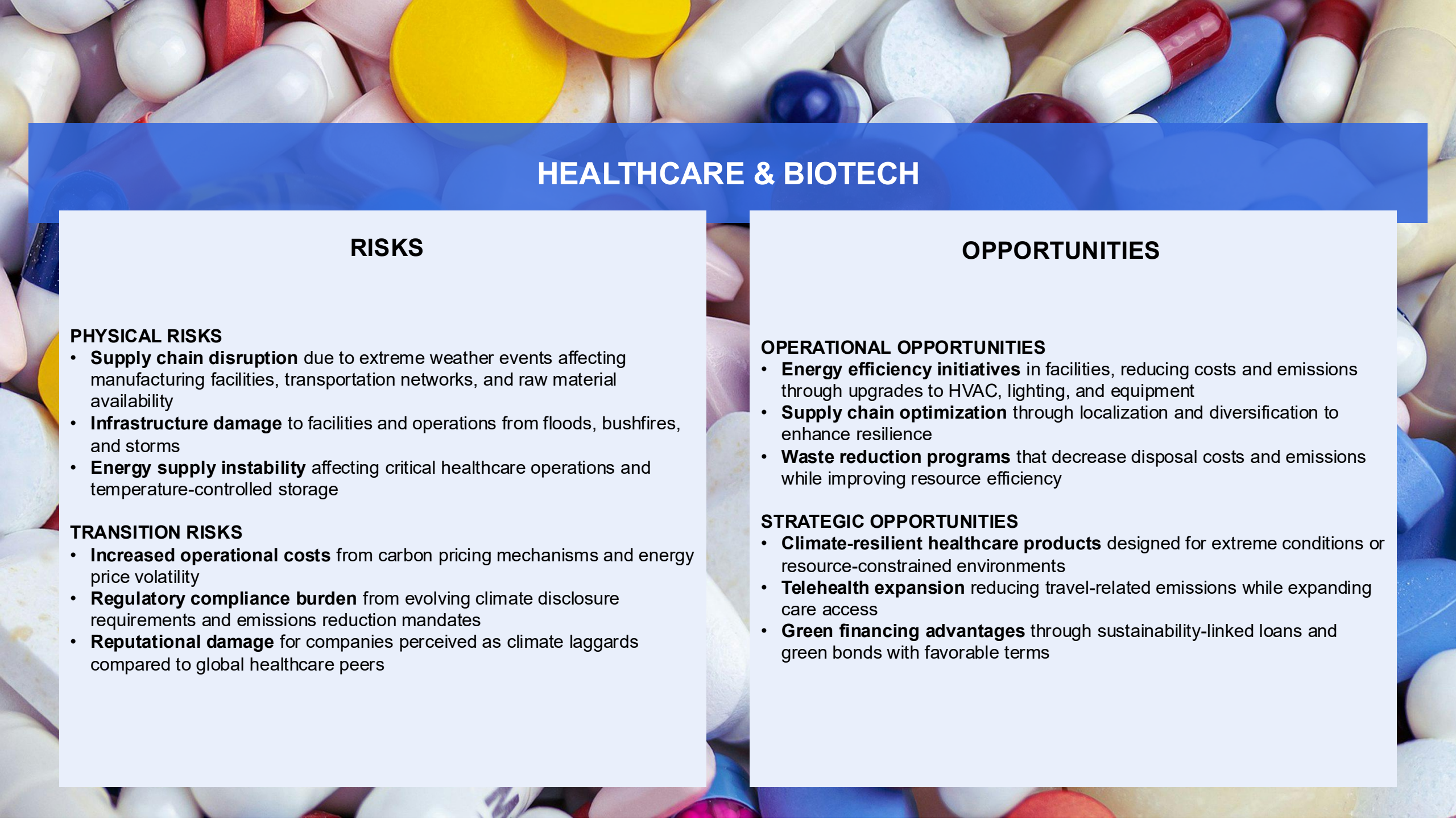
LIABILITY RISKS
•Increased professional liability related to climate advice
•Litigation risks from stakeholders for inadequate climate risk disclosure
•Director liability for failure to address foreseeable climate risks

OPPORTUNITIES

ADVISORY SERVICES
•Climate risk assessment and management consulting
•ESG reporting and assurance services
•Carbon accounting and emissions reduction strategy
•Climate scenario analysis and TCFD implementation
•Sustainable finance advisory

OPERATIONAL ADVANTAGES
•Cost savings from energy efficiency initiatives
•Enhanced recruitment and retention through climate leadership
•Reduced operational costs through digitalization and remote work
•Access to green finance and sustainability-linked loans

MARKET POSITIONING
•Competitive differentiation through climate credentials
•Enhanced reputation with climate-conscious clients and employees
•Development of climate-specific service lines
•Partnerships with climate technology providers



HEALTHCARE & BIOTECH

RISKS

PHYSICAL RISKS

- **Supply chain disruption** due to extreme weather events affecting manufacturing facilities, transportation networks, and raw material availability
- **Infrastructure damage** to facilities and operations from floods, bushfires, and storms
- **Energy supply instability** affecting critical healthcare operations and temperature-controlled storage

TRANSITION RISKS

- **Increased operational costs** from carbon pricing mechanisms and energy price volatility
- **Regulatory compliance burden** from evolving climate disclosure requirements and emissions reduction mandates
- **Reputational damage** for companies perceived as climate laggards compared to global healthcare peers

OPPORTUNITIES

OPERATIONAL OPPORTUNITIES

- **Energy efficiency initiatives** in facilities, reducing costs and emissions through upgrades to HVAC, lighting, and equipment
- **Supply chain optimization** through localization and diversification to enhance resilience
- **Waste reduction programs** that decrease disposal costs and emissions while improving resource efficiency

STRATEGIC OPPORTUNITIES

- **Climate-resilient healthcare products** designed for extreme conditions or resource-constrained environments
- **Telehealth expansion** reducing travel-related emissions while expanding care access
- **Green financing advantages** through sustainability-linked loans and green bonds with favorable terms

RETAIL

RISKS

PHYSICAL RISKS

- **Supply chain disruption** from extreme weather events affecting agricultural production, manufacturing facilities, and logistics/transportation networks
- **Damage to retail infrastructure** including stores, distribution centers, and warehouses from floods, bushfires, and storms
- **Inventory loss** due to weather events and compromised cold chain systems in grocery retail

TRANSITION RISKS

- **Increased operational costs** from carbon pricing, rising energy prices, and compliance with emissions regulations
- **Product sourcing challenges** as climate impacts and sustainability requirements affect availability and cost of raw materials (particularly for fashion and food)
- **Changing consumer preferences** favoring sustainable products and penalizing brands perceived as environmentally harmful

OPPORTUNITIES

OPERATIONAL OPPORTUNITIES

- **Energy efficiency initiatives** in stores and distribution centers, reducing costs through LED lighting, refrigeration upgrades, and renewable energy installations
- **Supply chain optimization** through local sourcing, emissions tracking, and supplier engagement programs
- **Packaging innovations** reducing waste, costs, and emissions while meeting consumer sustainability expectations

STRATEGIC OPPORTUNITIES

- **Sustainable product lines** with lower environmental footprints, including organic food, recycled materials in fashion, and reusable/refillable packaging options
- **Circular business models** incorporating product take-back, repair services, and resale platforms
- **Enhanced reputation and market share** through transparent climate action and sustainability leadership