

MANAGING RISKS & OPPORTUNITIES

GRI 201-2, 413-2

MANAGING RISKS & OPPORTUNITIES

Given the dynamic nature of the Group's risks and opportunities landscape, risk management forms a vital part of the Board's agenda, influencing all matters

set before them. The financial year under review was no exception, presenting its own unique set of risks and opportunities. Proactive monitoring at multiple levels within the Group facilitated the timely

mitigation and management of key risks while simultaneously capitalizing on emerging opportunities. Haycarb's risk environment is graphically presented below.

Climate change

Our product range, which caters to air and water purification, energy storage and resource efficiency positions us well to seize the significant opportunities presented by the global transition to a low carbon economy.

Climate change also presents physical risks to our business as extreme weather events and vagaries in weather patterns could disrupt business operations and adversely impact supply chains.

Global economic outlook

The Global Economic Outlook for 2024 forecasts stable but modest growth, with a projected 3.2% increase in GDP, mirroring the performance observed in 2023.

Advanced economies are anticipated to experience a slight uptick in growth to 1.7% in 2024, supported by improved prospects in the USA. Meanwhile, emerging market and developing economies are expected to maintain their growth trajectory at 4.2% in 2024.

Sri Lanka economic outlook

The Sri Lankan economy is poised for recovery and a path towards sustainable growth. However, its fruition hinges upon the continued implementation of reforms and economic adjustments outlined in the IMF's EFF program and the successful conclusion of ongoing debt restructuring negotiations.

Product and process innovation

Product innovation presents opportunities for the Group to develop new offerings that capitalise on emerging market trends. Process innovation empowers the Group to implement more sustainable practices.



Growth in the activated carbon industry

The global activated carbon industry is projected to grow at a compound annual growth rate of 4% to 9% by 2030 with growth expected to stem from applications underpinned by more stringent environmental regulations, global efforts towards de-carbonization and increased need for pure and safe potable water.

Technology and cyber security

IT enables the streamlining and continuous improvement of processes while fueling our innovation through data driven insights on emerging market trends. It also facilitates connectivity to overseas locations and customers which is vital for our growth. However, increased digitization presents heightened cyber security risks.

Policy and regulations

Increasing environmental regulations across the globe presents significant growth opportunities for the Group in water and air purification applications.

Moreover, ongoing policy reforms under the Sri Lanka's EFF-IMF programme have the potential to significantly impact our business.

Geopolitics

The current geopolitical climate presents risk as well as opportunities. Ongoing conflicts pose downside risks with potential to disrupt supply chains and fluctuations in commodity prices. In contrast, growth in markets like India presents opportunities for the business.

RISK GOVERNANCE

The Board of Directors is collectively responsible for the management of risk and is assisted by the Audit Committee. Risk management is a regular item on the Board agenda while the Audit Committee conducts a more detailed review of risk and reports it to the Board.

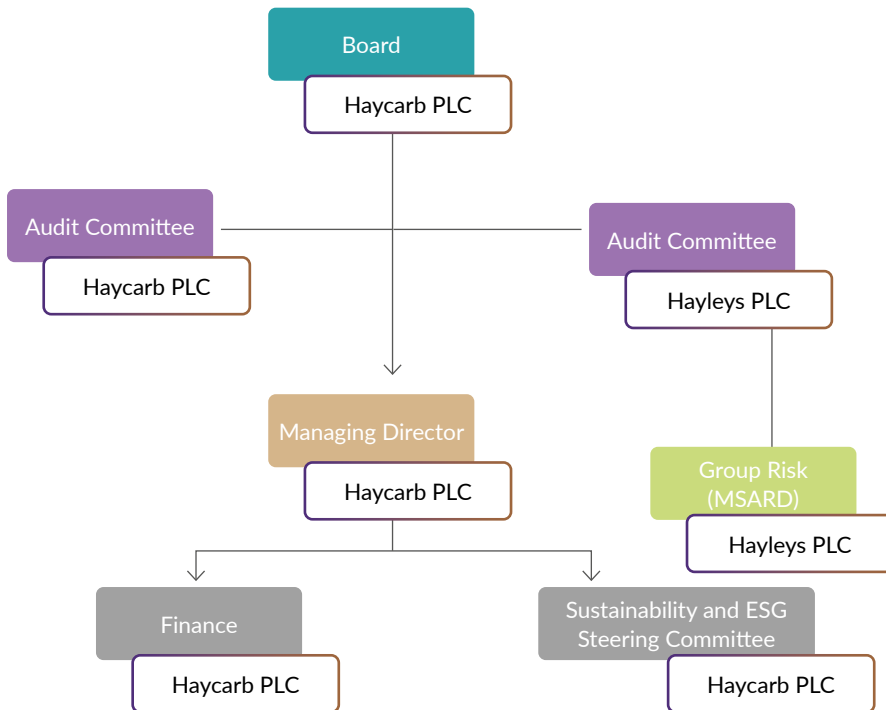
The Group’s risk management is also reviewed by the parent entity, Hayleys PLC’s Management Systems Audit and Review Department (MSARD) and feedback is provided to the Haycarb Audit Committee at quarterly meetings. Sector risk reviews are also subjected to further scrutiny by the Audit Committee of the parent entity.

Risk management is a shared responsibility embedded across the Group. It is integrated into all key decision-making processes including strategy formulation, business planning, business development, investment decisions, capital allocation, internal control, and day-to-day functions.

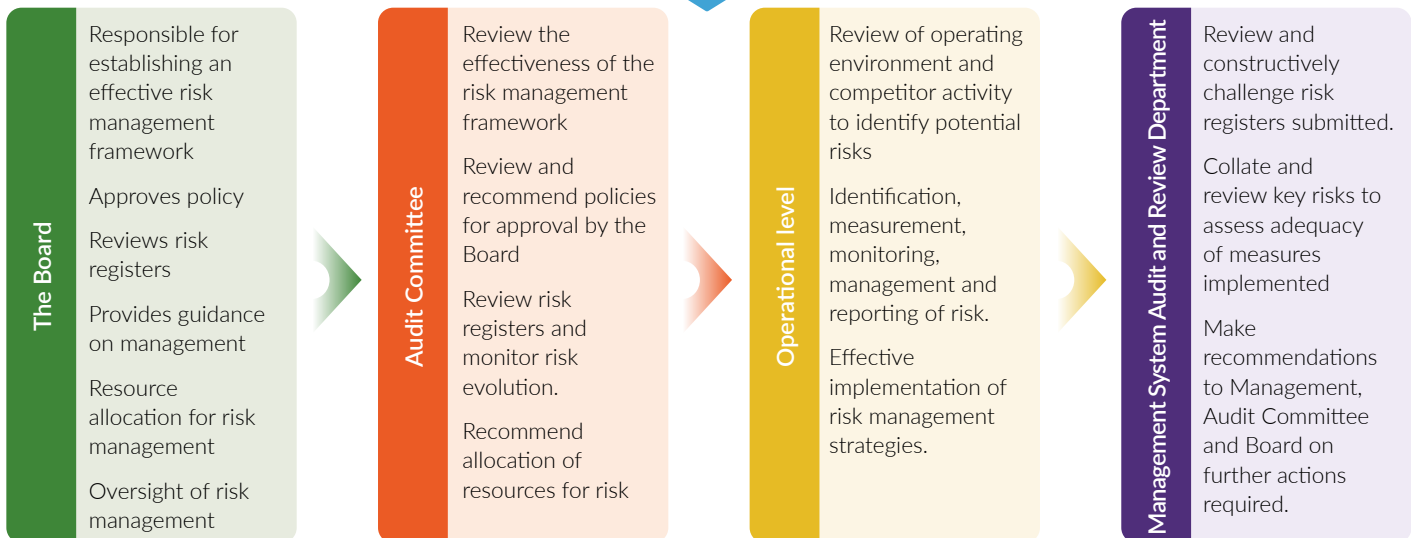
During the year under review, the Group undertook several initiatives to strengthen the governance of its sustainability risks and opportunities by establishing

an ESG steering committee headed by the Managing Director and including sustainability & climate related risks to the presentation of the risks scoring, impact

to the business and responses by the management to the audit committee and board for review on a quarterly basis (more details under Corporate Governance page 66 to 83).



ROLES AND RESPONSIBILITIES



MANAGING RISKS & OPPORTUNITIES

RISK MANAGEMENT PROCESS

The Group has established a formal process to manage risk and is coordinated by the Finance Department. The Senior Management of the Group is responsible for identifying risks related to their areas. These are then captured on the risk register and reviewed at least quarterly. Identified risks are measured, managed, and monitored while the top risks are reported to the Audit Committee and the Board of Directors.

The allocation of resources to manage risk is typically done by management and is approved by the Board through the strategic plan and other processes.

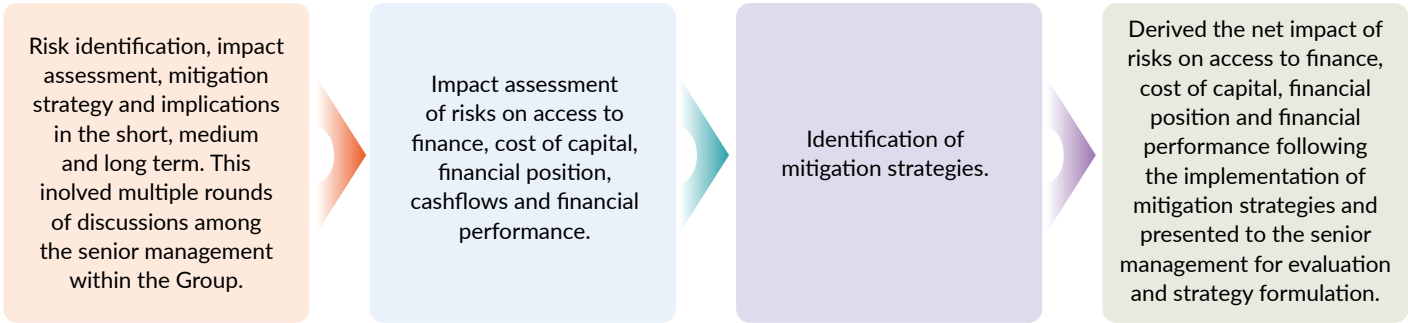
During the year under review, the Group strengthened its risk management process in line with the requirements of SLFRS S1 and S2.



Key improvements to our risk management process in 2023/24

- Aligned our sustainability and climate related risk management process with the requirements of SLFRS S1 and S2.
- This involved identifying and presenting the impact of each sustainability and climate related risk on the Group's financial performance and position after the implementation of mitigation strategies.
- This assessment was carried out across three time periods – short term, medium term and long term, to ascertain the implication of each risk at different time periods and enable proactive mitigation and adaptability.
- 15 out of the 19 data points required under SLFRS S1 and S2 have been assessed during the year.
- We extended the same approach to the assessment of business risks.

The Group adopted the following approach in identifying its sustainability and climate related risks and opportunities across of short, medium and long term periods. This process was also extended to assessing business risks.



This analysis provided the Group with a quantitative impact assessment of its principal business, sustainability and climate related risks. This data driven approach to risk management facilitates long term risk management strategies, enabling the development of sustainable solutions and facilitate operational stability.

During the year under review, we also formally established a sustainability risk

management policy which included the processes and related policies used to identify, assess, prioritise and monitor sustainability related risks and opportunities. We also carried out a double-materiality assessment during the year under review to identify, assess and prioritise sustainability related risks and opportunities. This assessment formed the basis for the development of our 2030 ESG roadmap. A risk assessment is carried out on a

quarterly basis and a materiality assessment is carried out on an annual basis to review ESG related risks and opportunities. This assessment is presented to the Board on a quarterly basis.

■ - Short term ■ - Medium term ■ - Long term

BUSINESS RISKS

Business risks		
Risk	R1 RAW MATERIAL PROCUREMENT	R2 FOREIGN CURRENCY RISK
Description	<ul style="list-style-type: none"> Coconut shell charcoal accounts for a significant component of cost of goods sold. Disruptions to the supply of this key raw material due to increased competition for raw materials, fluctuations in coconut yield or adverse implications to industries from which we derive coconut shells could adversely affect financial performance. 	<ul style="list-style-type: none"> Haycarb Group is exposed to foreign currency risk, as a significant portion of revenue is derived in foreign currency compared to the cost base of the business entity that is generating the revenue. The Group's debtors and borrowings are primarily USD denominated. Therefore, exchange rate fluctuations can have both positive and negative impacts on the Group's financial performance.
Mitigation strategies	<ul style="list-style-type: none"> Maintained a robust supply chain network in the three countries we operate manufacturing facilities in (Sri Lanka, Indonesia and Thailand) while maintaining a supply network in the Philippines and India. Expand our manufacturing footprint to the Philippines where coconut is a major economic crop. Backward integration and partnerships with suppliers. Expansion of the charcoal and shell collection network. Expansion of the activated carbon regeneration facilities. Emphasis on eco-friendly charcoaling at all manufacturing locations with plans for expansion. 	<ul style="list-style-type: none"> Entering foreign currency forward contracts with financial institutions considering macro-economic conditions. Forecasting foreign exchange rate movements and adjusting pricing models.
Net impact after mitigation strategies in the short, medium and long term		
Link to capital		

MANAGING RISKS & OPPORTUNITIES

BUSINESS RISKS

Business risks																																						
Risk	R3 LIQUIDITY RISK	R4 INTEREST RATE RISK																																				
Description	<ul style="list-style-type: none"> Financial stress and increased pressure to meet future debt obligations. 	<ul style="list-style-type: none"> An upward revision to interest rates will increase finance costs and adversely impact financial performance. 																																				
Mitigation strategies	<ul style="list-style-type: none"> We aim to strike a balance between continuity of funding, flexibility and tenure through a mix of short- and long-term borrowings in multiple currencies Diversification of funding sources. The liquidity position of the Group is monitored by the Group Treasury function while all liquidity policies and procedures are subjected to review and approval by the Board of Directors. Balancing risk return dynamics in the investment of short term excess cashflows. 	<ul style="list-style-type: none"> Diversification of funding across multiple financial institutions Forecasting of interest rate movements and balance the fixed and variable interest rate components accordingly. Effective negotiations with banks on interest rate proposals provided to the company to obtain most competitive rate. Actively pursue concessionary funding especially for sustainable / green initiatives. 																																				
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact for R3 Liquidity Risk</caption> <thead> <tr> <th>Category</th> <th>Green (Positive)</th> <th>Orange (Negative)</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>3</td> <td>1</td> </tr> <tr> <td>Cost of capital</td> <td>2</td> <td>1</td> </tr> <tr> <td>Financial position</td> <td>4</td> <td>2</td> </tr> <tr> <td>Cashflows</td> <td>4</td> <td>2</td> </tr> <tr> <td>Financial performance</td> <td>5</td> <td>2</td> </tr> </tbody> </table>	Category	Green (Positive)	Orange (Negative)	Access to finance	3	1	Cost of capital	2	1	Financial position	4	2	Cashflows	4	2	Financial performance	5	2	<table border="1"> <caption>Net Impact for R4 Interest Rate Risk</caption> <thead> <tr> <th>Category</th> <th>Green (Positive)</th> <th>Orange (Negative)</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>4</td> <td>3</td> </tr> <tr> <td>Cost of capital</td> <td>4</td> <td>3</td> </tr> <tr> <td>Financial position</td> <td>3</td> <td>2</td> </tr> <tr> <td>Cashflows</td> <td>3</td> <td>2</td> </tr> <tr> <td>Financial performance</td> <td>3</td> <td>2</td> </tr> </tbody> </table>	Category	Green (Positive)	Orange (Negative)	Access to finance	4	3	Cost of capital	4	3	Financial position	3	2	Cashflows	3	2	Financial performance	3	2
Category	Green (Positive)	Orange (Negative)																																				
Access to finance	3	1																																				
Cost of capital	2	1																																				
Financial position	4	2																																				
Cashflows	4	2																																				
Financial performance	5	2																																				
Category	Green (Positive)	Orange (Negative)																																				
Access to finance	4	3																																				
Cost of capital	4	3																																				
Financial position	3	2																																				
Cashflows	3	2																																				
Financial performance	3	2																																				
Link to capital																																						

Business risks																									
Risk	Business risks																								
Description	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>R5 CREDIT RISK</p> <ul style="list-style-type: none"> • Impairment of receivables and its implications on financial performance and cashflows. • Inability of banks and Financial institutions to repay our deposits </div> <div style="width: 48%;"> <p>R6 COMPLIANCE RISK</p> <ul style="list-style-type: none"> • Increased regulations and potential risk of non-compliance resulting in legal fees, fines, penalties and reputational damage. </div> </div>																								
Mitigation strategies	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <ul style="list-style-type: none"> • Obtained adequate credit insurance or advance payments from customers who cannot be covered through credit insurance. • Evaluation of the credit worthiness of new customers against the Group's credit policy prior to offering standard payment and delivery terms and conditions. • Regular monitoring of outstanding customer receivables by the Senior Management of Haycarb and Hayleys Group Management Committee. • Monitoring the developments in the credit ratings and assessing the credit risk of the financial institutions where short-term funds have been invested. </div> <div style="width: 48%;"> <ul style="list-style-type: none"> • Ongoing monitoring of the regulatory landscape for new developments and revisions to existing regulations. • Performing regular risk assessments by the Board and Audit committee on a quarterly basis. • Implementing new policies and procedures in line with new regulations to ensure the adequacy of monitoring. • Conducting internal audits and review meetings to assess compliance procedures with current compliance status of the company. </div> </div>																								
Net impact after mitigation strategies in the short, medium and long term	<div style="display: flex; justify-content: space-around;"> <div style="width: 45%;"> <p>R5 Credit Risk Net Impact</p> <table border="1"> <thead> <tr> <th>Metric</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>0.5</td> </tr> <tr> <td>Cost of capital</td> <td>0.5</td> </tr> <tr> <td>Financial position</td> <td>3.0</td> </tr> <tr> <td>Cashflows</td> <td>3.0</td> </tr> <tr> <td>Financial performance</td> <td>3.0</td> </tr> </tbody> </table> </div> <div style="width: 45%;"> <p>R6 Compliance Risk Net Impact</p> <table border="1"> <thead> <tr> <th>Metric</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>0.5</td> </tr> <tr> <td>Cost of capital</td> <td>0.5</td> </tr> <tr> <td>Financial position</td> <td>2.0</td> </tr> <tr> <td>Cashflows</td> <td>2.0</td> </tr> <tr> <td>Financial performance</td> <td>2.0</td> </tr> </tbody> </table> </div> </div>	Metric	Impact	Access to finance	0.5	Cost of capital	0.5	Financial position	3.0	Cashflows	3.0	Financial performance	3.0	Metric	Impact	Access to finance	0.5	Cost of capital	0.5	Financial position	2.0	Cashflows	2.0	Financial performance	2.0
Metric	Impact																								
Access to finance	0.5																								
Cost of capital	0.5																								
Financial position	3.0																								
Cashflows	3.0																								
Financial performance	3.0																								
Metric	Impact																								
Access to finance	0.5																								
Cost of capital	0.5																								
Financial position	2.0																								
Cashflows	2.0																								
Financial performance	2.0																								
Link to capital	<div style="display: flex; justify-content: space-around; align-items: center;"> </div>																								

MANAGING RISKS & OPPORTUNITIES

BUSINESS RISKS

Business risks		
Risk	R7 CUSTOMER SATISFACTION	R8 PRODUCT QUALITY
Description	<ul style="list-style-type: none"> Dissatisfied customers can lead to customer loss and reputational damage. 	<ul style="list-style-type: none"> Adverse issues regarding product quality can result in customer dissatisfaction, production delays and increased costs associated with re-work and reputational damage.
Mitigation strategies	<ul style="list-style-type: none"> Maintain customer complaint logs to support learning and prevent the re-occurrence of similar incidents. Continued focus on efficient production planning and logistics to minimise delays and errors in shipping and delivery. Conducted regular quality, contamination, environmental and safety audits to identify improvement areas and to minimise possible lapses in systems. Introduction of new production processes and machinery through in-house R&D efforts for increased efficiency and Precision Pore Size Distribution (PSD) for different applications. Expansion of production capabilities to meet emerging requirements of customers. 	<ul style="list-style-type: none"> Established robust quality management systems including ISO 9001:2015 Quality Management Systems to ensure consistent product quality throughout the production process. Established clear quality requirements and expectations with suppliers and monitored performance regularly. Comprehensive training to employees involved in the production process to ensure quality standards and procedures are met. Root cause analysis of quality issues to identify underlying factors contributing to defects or to avoid the recurrence of similar issues in the future. Held regular quality, contamination, environmental and safety audits to identify further improvement areas and minimise possible lapses in the system.
Net impact after mitigation strategies in the short, medium and long term		
Link to capital		

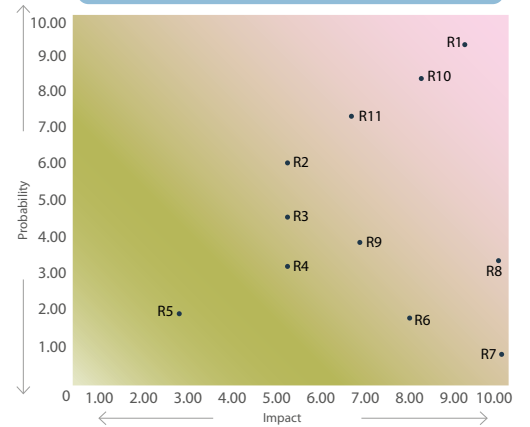
Business risks																										
Risk	R9 GEO-POLITICAL DYNAMICS	R10 CYBER SECURITY RISK																								
Description	<ul style="list-style-type: none"> Potential implications include loss of revenue from possible trade sanctions, supply chain disruptions, movement of funds and exchange rate volatility. 	<ul style="list-style-type: none"> Potential negative implications arising from cyber threats. 																								
Mitigation strategies	<ul style="list-style-type: none"> Regular engagement with suppliers and customers to stay up-to-date and pro-actively address new developments. Diversification of suppliers. Increased insurance coverage where required. Effective crisis management and proactive resilience planning. Market diversification 	<ul style="list-style-type: none"> Regular risks assessments to identify potential vulnerabilities, threats and risks to digital assets. Formulating IT Security Policies which are consistently communicated and adhered to by all teams across the Group. Pro-actively ensure operating systems, software and firmware are up to date with the latest security patches and updates. Regular cyber security training to employees Implemented regular data backups and ensured backups were safely and securely stored off site. Implemented continuous monitoring tools and processes to detect and respond to cyber security threats in real time. Maintained annual vulnerability testing for all Haycarb web sites hosted on dedicated virtual private servers. Annual IT audits by a reputed external audit firm. Periodic reviews and revisions of the IT policy, information security policy and NDAs. 																								
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact for R9 (GEO-POLITICAL DYNAMICS)</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>0.5</td> </tr> <tr> <td>Cost of capital</td> <td>0.5</td> </tr> <tr> <td>Financial position</td> <td>0.5</td> </tr> <tr> <td>Cashflows</td> <td>0.5</td> </tr> <tr> <td>Financial performance</td> <td>0.5</td> </tr> </tbody> </table>	Category	Impact	Access to finance	0.5	Cost of capital	0.5	Financial position	0.5	Cashflows	0.5	Financial performance	0.5	<table border="1"> <caption>Net Impact for R10 (CYBER SECURITY RISK)</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>1.5</td> </tr> <tr> <td>Cost of capital</td> <td>1.5</td> </tr> <tr> <td>Financial position</td> <td>2.5</td> </tr> <tr> <td>Cashflows</td> <td>2.5</td> </tr> <tr> <td>Financial performance</td> <td>2.5</td> </tr> </tbody> </table>	Category	Impact	Access to finance	1.5	Cost of capital	1.5	Financial position	2.5	Cashflows	2.5	Financial performance	2.5
Category	Impact																									
Access to finance	0.5																									
Cost of capital	0.5																									
Financial position	0.5																									
Cashflows	0.5																									
Financial performance	0.5																									
Category	Impact																									
Access to finance	1.5																									
Cost of capital	1.5																									
Financial position	2.5																									
Cashflows	2.5																									
Financial performance	2.5																									
Link to capital																										

MANAGING RISKS & OPPORTUNITIES

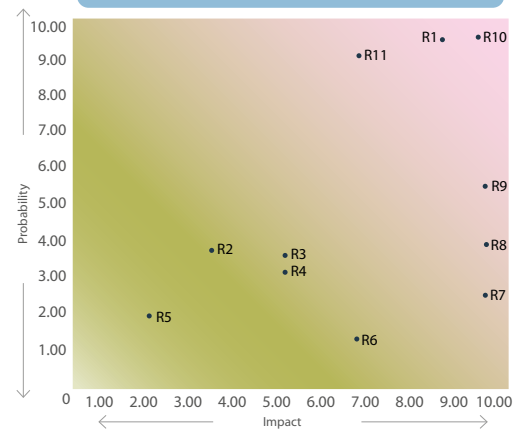
BUSINESS RISKS

Business risks																									
Risk	R11 INCREASED COMPETITION																								
Description	<ul style="list-style-type: none"> Normalisation of supply chains and improving global macro-economic environment led to, intensifying competition in the activated carbon market and impacting top line. The growing demand for activated carbon products has intensified competition for raw materials. 																								
Mitigation strategies	<ul style="list-style-type: none"> R&D investments to innovate new products, improve the existing product range and develop innovative solutions that address emerging customer needs. Deeper penetration of existing markets through competitive pricing. Strengthen presence in new markets. Enhanced value added capabilities with emphasis on improving the energy storage carbons product range. Collaborative partnerships with customers to drive innovation and new product development. Strengthen global supply chains to ensure an uninterrupted supply of raw materials. 																								
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact After Mitigation Strategies</caption> <thead> <tr> <th>Category</th> <th>Light Green Bar</th> <th>Dark Green Bar</th> <th>Orange Bar</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>2.0</td> <td>1.5</td> <td>1.0</td> </tr> <tr> <td>Cost of capital</td> <td>2.0</td> <td>1.5</td> <td>1.0</td> </tr> <tr> <td>Financial position</td> <td>4.0</td> <td>3.0</td> <td>2.0</td> </tr> <tr> <td>Cashflows</td> <td>4.0</td> <td>3.0</td> <td>2.0</td> </tr> <tr> <td>Financial performance</td> <td>4.0</td> <td>3.0</td> <td>2.0</td> </tr> </tbody> </table>	Category	Light Green Bar	Dark Green Bar	Orange Bar	Access to finance	2.0	1.5	1.0	Cost of capital	2.0	1.5	1.0	Financial position	4.0	3.0	2.0	Cashflows	4.0	3.0	2.0	Financial performance	4.0	3.0	2.0
Category	Light Green Bar	Dark Green Bar	Orange Bar																						
Access to finance	2.0	1.5	1.0																						
Cost of capital	2.0	1.5	1.0																						
Financial position	4.0	3.0	2.0																						
Cashflows	4.0	3.0	2.0																						
Financial performance	4.0	3.0	2.0																						
Link to capital																									

Risk Assessment – Short Term Lens



Risk Assessment – Medium Term Lens



SUSTAINABILITY RELATED RISKS & OPPORTUNITIES

As stated in SLFRS S1 General Requirements for Disclosure of Sustainability Related Financial Information standard, the Group applied the disclosure topics in the SASB Chemical Standard in the identification of its sustainability related risks and opportunities. Based on this assessment, the Group's sustainability related risks and opportunities, its implications on financial performance and position over the short, medium and long term and the mitigation strategies we have implemented are presented below.

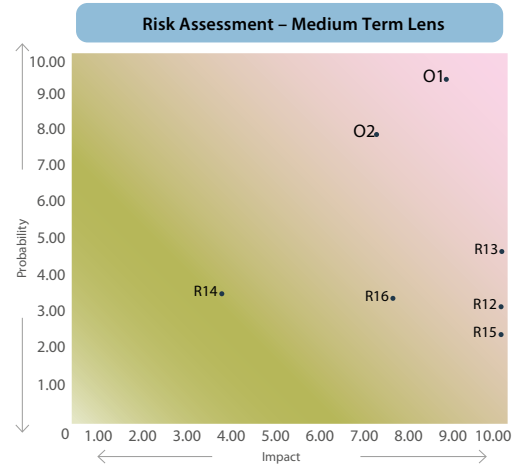
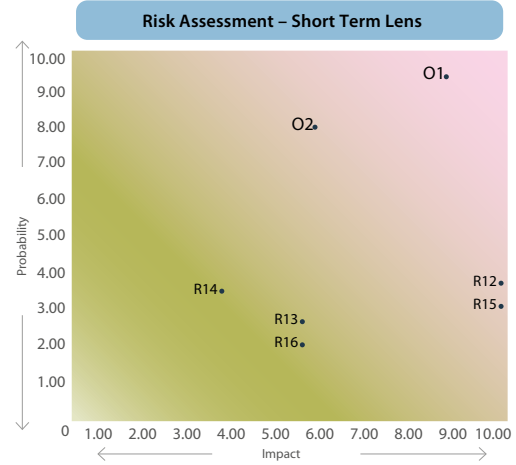
	Sustainability related risks																																																	
Risk	R12 WORKFORCE HEALTH AND SAFETY	R13 WASTE MANAGEMENT																																																
Description	<ul style="list-style-type: none"> • Risk of accidents and injuries within our premises • Work disruption • Impact on employee well-being 	<ul style="list-style-type: none"> • Risk of non-compliance with waste management regulations in the countries we operate in and associated penalties. 																																																
Mitigation strategies	<ul style="list-style-type: none"> • A comprehensive occupational health and safety policy that encompasses all individuals present on all our premises. • Ongoing health and safety training to all employees and periodic evacuation and fire drills. • Designated safety officers and emergency response teams at each location. • Equipped first aid centers operated by qualified personnel at all manufacturing locations. • Promotion of overall worker health through medical reimbursement schemes, medical insurance, annual medical check-ups and weekly visits by a consultant doctor. 	<ul style="list-style-type: none"> • Minimise and re-use solid waste generated from production processes including recycling non-reusable polythene packaging and re-using charcoal packaging received. • Installed a bio-gas generating system from organic waste. • Installed a composting facility within the factory premises. • Maintained and expanded effluent treatment plants. 																																																
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact for R12</caption> <thead> <tr> <th>Category</th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>0.5</td> <td>1.0</td> <td>1.5</td> </tr> <tr> <td>Cost of capital</td> <td>0.5</td> <td>1.0</td> <td>1.5</td> </tr> <tr> <td>Financial position</td> <td>1.0</td> <td>2.0</td> <td>3.0</td> </tr> <tr> <td>Cashflows</td> <td>1.0</td> <td>2.0</td> <td>3.0</td> </tr> <tr> <td>Financial performance</td> <td>1.0</td> <td>2.0</td> <td>3.0</td> </tr> </tbody> </table>	Category	Short-term	Medium-term	Long-term	Access to finance	0.5	1.0	1.5	Cost of capital	0.5	1.0	1.5	Financial position	1.0	2.0	3.0	Cashflows	1.0	2.0	3.0	Financial performance	1.0	2.0	3.0	<table border="1"> <caption>Net Impact for R13</caption> <thead> <tr> <th>Category</th> <th>Short-term</th> <th>Medium-term</th> <th>Long-term</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>0.5</td> <td>1.0</td> <td>1.5</td> </tr> <tr> <td>Cost of capital</td> <td>0.5</td> <td>1.0</td> <td>1.5</td> </tr> <tr> <td>Financial position</td> <td>1.0</td> <td>2.0</td> <td>3.0</td> </tr> <tr> <td>Cashflows</td> <td>0.5</td> <td>1.0</td> <td>1.5</td> </tr> <tr> <td>Financial performance</td> <td>0.5</td> <td>1.0</td> <td>1.5</td> </tr> </tbody> </table>	Category	Short-term	Medium-term	Long-term	Access to finance	0.5	1.0	1.5	Cost of capital	0.5	1.0	1.5	Financial position	1.0	2.0	3.0	Cashflows	0.5	1.0	1.5	Financial performance	0.5	1.0	1.5
Category	Short-term	Medium-term	Long-term																																															
Access to finance	0.5	1.0	1.5																																															
Cost of capital	0.5	1.0	1.5																																															
Financial position	1.0	2.0	3.0																																															
Cashflows	1.0	2.0	3.0																																															
Financial performance	1.0	2.0	3.0																																															
Category	Short-term	Medium-term	Long-term																																															
Access to finance	0.5	1.0	1.5																																															
Cost of capital	0.5	1.0	1.5																																															
Financial position	1.0	2.0	3.0																																															
Cashflows	0.5	1.0	1.5																																															
Financial performance	0.5	1.0	1.5																																															
Link to capital																																																		

MANAGING RISKS & OPPORTUNITIES

SUSTAINABILITY RELATED RISKS & OPPORTUNITIES

Sustainability related risks		
Risk	R14 SAFETY AND ENVIRONMENTAL STEWARDSHIP OF CHEMICALS	R15 MANAGEMENT OF LEGAL AND REGULATORY ENVIRONMENT
Description	<ul style="list-style-type: none"> Risk of accidents and chemical spills at production facilities. 	<ul style="list-style-type: none"> Risk of non-compliance with environmental and social legal and regulatory requirements and associated penalties and reputational damage.
Mitigation strategies	<ul style="list-style-type: none"> Rigorous safety protocols and procedures for handling, storage and disposal of chemicals. Comprehensive training to personnel involved in chemical handling to ensure competency and awareness of safety protocols. Compliance with all relevant regulations and standards pertaining to chemical safety and environmental protection. Established emergency response plans and contingency measures to mitigate the impact of accidents and chemical spills. 	<ul style="list-style-type: none"> A senior manager reporting to the Managing Director is tasked with conducting regular audits with certified external auditors to assess the risk of non-compliance vis-a-vis Company's environmental certifications. Frequent air quality monitoring and emission testing Installation and maintenance of dust extractions. Installation and maintenance of volatile gas burning chamber (VBC) Introduced the wet scrubber mechanism to avoid emitting acid based fumes in to the environment from the washing plant operation. Investment in R&D for innovative pollution control technologies.
Net impact after mitigation strategies in the short, medium and long term		
Link to capital		

Sustainability related risks													
Risk	R16 AIR QUALITY												
Description	<ul style="list-style-type: none"> Risk of non-compliance with regulatory air quality indicators and associated penalties. 												
Mitigation strategies	<ul style="list-style-type: none"> Installation and maintenance of dust extractions. Installation and maintenance of volatile gas burning chamber (VBC) Introduced the wet scrubber mechanism to avoid emitting acid based fumes in to the environment from the washing plant operation. Frequent air quality monitoring and emission testing Investment in R&D for innovative pollution control technologies. 												
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact After Mitigation Strategies</caption> <thead> <tr> <th>Metric</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>3.0</td> </tr> <tr> <td>Cost of capital</td> <td>2.0</td> </tr> <tr> <td>Financial position</td> <td>2.0</td> </tr> <tr> <td>Cashflows</td> <td>-1.0</td> </tr> <tr> <td>Financial performance</td> <td>-1.0</td> </tr> </tbody> </table>	Metric	Impact	Access to finance	3.0	Cost of capital	2.0	Financial position	2.0	Cashflows	-1.0	Financial performance	-1.0
Metric	Impact												
Access to finance	3.0												
Cost of capital	2.0												
Financial position	2.0												
Cashflows	-1.0												
Financial performance	-1.0												
Link to capital													



MANAGING RISKS & OPPORTUNITIES

SUSTAINABILITY RELATED RISKS & OPPORTUNITIES

Sustainability related opportunities																										
Risk	O1 PRODUCT DESIGN FOR USE PHASE EFFICIENCY	O2 COMMUNITY RELATIONS																								
Description	<ul style="list-style-type: none"> Opportunities for products that enhance material efficiency and lower energy consumption. 	<ul style="list-style-type: none"> Opportunity to positively impact the communities we operate in. 																								
Mitigation strategies	<ul style="list-style-type: none"> R&D investments to innovate new products; improve the existing product range and develop innovative solutions that enhance material efficiency and lower energy Regular monitoring on market changes to identify and capitalize on market opportunities 	<ul style="list-style-type: none"> Supporting livelihoods and creating employment opportunities through local procurement and staffing. Strict adherence to social and environmental regulations to minimise adverse impacts on local communities. Long term focused CSR initiatives that support important community needs. <ul style="list-style-type: none"> Supporting wellness and educational needs of children. Supporting the healthcare system within our communities. Donation of dry rations to communities in need. Continuous engagement with communities. 																								
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact for O1</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>3</td> </tr> <tr> <td>Cost of capital</td> <td>3</td> </tr> <tr> <td>Financial position</td> <td>4</td> </tr> <tr> <td>Cashflows</td> <td>4</td> </tr> <tr> <td>Financial performance</td> <td>4</td> </tr> </tbody> </table>	Category	Impact	Access to finance	3	Cost of capital	3	Financial position	4	Cashflows	4	Financial performance	4	<table border="1"> <caption>Net Impact for O2</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>1</td> </tr> <tr> <td>Cost of capital</td> <td>1</td> </tr> <tr> <td>Financial position</td> <td>2</td> </tr> <tr> <td>Cashflows</td> <td>2</td> </tr> <tr> <td>Financial performance</td> <td>2</td> </tr> </tbody> </table>	Category	Impact	Access to finance	1	Cost of capital	1	Financial position	2	Cashflows	2	Financial performance	2
Category	Impact																									
Access to finance	3																									
Cost of capital	3																									
Financial position	4																									
Cashflows	4																									
Financial performance	4																									
Category	Impact																									
Access to finance	1																									
Cost of capital	1																									
Financial position	2																									
Cashflows	2																									
Financial performance	2																									
Link to capital																										

CLIMATE RELATED RISKS & OPPORTUNITIES

For the identification of its climate related risks and opportunities, the Group applied the disclosure topics in the SASB Chemical standard, the SLFRS S2 Climate related disclosures industry-based guidance and TCFD guidance. Based on this assessment, the Group's sustainability related risks and opportunities, its implications on financial performance and position over the short, medium and long term and the mitigation strategies we have implemented are presented below.

Climate Related Risks																										
Risk	R17 GREENHOUSE GAS EMISSIONS	R18 ENERGY MANAGEMENT																								
Description	<ul style="list-style-type: none"> A growing focus on managing GHG emissions is likely to lead to stricter emission regulations. 	<ul style="list-style-type: none"> Implications of stricter emission regulations on our energy mix. Energy security and resilience. 																								
Transition / Physical	Transition	Transition																								
Mitigation strategies	<ul style="list-style-type: none"> Proactive measures to minimise reliance on fossil fuel based energy sources while investing in renewable energy sources (refer Energy Management for more details). Introduced an additional measure in machinery and equipment procurement where the source of energy and emission level is considered prior to procurement. 	<ul style="list-style-type: none"> Reduce reliance on fossil fuel based energy sources while investing in renewable energy sources to enhance energy security and resilience. Specific strategies in this regard include, <ul style="list-style-type: none"> Installation of solar panels at factory premises in Sri Lanka. Innovation of processes to increase energy efficiency and reduce energy and oil consumption. Harnessed waste heat generated from manufacturing processes to power the production process. Increased reliance on biomass as an energy source to dry activated carbon. Commenced installation of floating solar panels in Carbokarn factory, Thailand. Conducted energy management audits to identify opportunities to reduce energy consumption and minimise waste. Installation of solar powered garden / street lights. Installation of transparent sheets for roofing to enhance natural lighting. 																								
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact for R17 (Greenhouse Gas Emissions)</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>Positive</td> </tr> <tr> <td>Cost of capital</td> <td>Positive</td> </tr> <tr> <td>Financial position</td> <td>Positive</td> </tr> <tr> <td>Cashflows</td> <td>Positive</td> </tr> <tr> <td>Financial performance</td> <td>Positive</td> </tr> </tbody> </table>	Category	Impact	Access to finance	Positive	Cost of capital	Positive	Financial position	Positive	Cashflows	Positive	Financial performance	Positive	<table border="1"> <caption>Net Impact for R18 (Energy Management)</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>Positive</td> </tr> <tr> <td>Cost of capital</td> <td>Positive</td> </tr> <tr> <td>Financial position</td> <td>Positive</td> </tr> <tr> <td>Cashflows</td> <td>Positive</td> </tr> <tr> <td>Financial performance</td> <td>Positive</td> </tr> </tbody> </table>	Category	Impact	Access to finance	Positive	Cost of capital	Positive	Financial position	Positive	Cashflows	Positive	Financial performance	Positive
Category	Impact																									
Access to finance	Positive																									
Cost of capital	Positive																									
Financial position	Positive																									
Cashflows	Positive																									
Financial performance	Positive																									
Category	Impact																									
Access to finance	Positive																									
Cost of capital	Positive																									
Financial position	Positive																									
Cashflows	Positive																									
Financial performance	Positive																									
Link to capital																										

MANAGING RISKS & OPPORTUNITIES

CLIMATE RELATED RISKS & OPPORTUNITIES

Climate Related Risks		
Risk	R19 WATER MANAGEMENT	R20 VAGARIES IN WEATHER PATTERNS
Description	<ul style="list-style-type: none"> Disruptions to operations due to water scarcity Non-compliance with water quality regulations 	<ul style="list-style-type: none"> Implications on supply chain and operational continuity.
Transition / Physical	Physical, Transition	Physical
Mitigation strategies	<ul style="list-style-type: none"> Rainwater harvesting mechanisms in Sri Lanka and Thailand. Collection and re-use of condensed steam in the boiler process. Expanded storm water drainage systems for usage in non-production activities. Investment in water re-cycling plants. Emphasis on enhancing water intensity. Frequent testing of water samples to maintain quality parameters in legislative and regulatory standards. Installation of sensor/low flow taps for employee water consumption Promotion of effective water and waste water management in Sri Lanka and South East Asia through the Environmental Engineering Solutions segment. 	<ul style="list-style-type: none"> Emergency preparedness at manufacturing locations for adverse weather events. Emergency responsive transport management Location wise flood management plans. Obtaining insurance coverage across the Group. Emergency preparedness for health-related issues. Weather forecasting to ascertain implications on raw material availability. Supported initiatives focused on increasing coconut cultivation.
Net impact after mitigation strategies in the short, medium and long term		
Link to capital		

Climate Related Risks																										
Risk	R21 REGULATION	R22 REPUTATION																								
Description	<ul style="list-style-type: none"> Increased regulations related to energy management and emissions. 	<ul style="list-style-type: none"> Growing stakeholder concerns regarding climate implications of the business 																								
Transition / Physical	Transition	Transition																								
Mitigation strategies	<ul style="list-style-type: none"> Ongoing engagement with regulators and policymakers to stay abreast of policy changes. Maintained robust policies and controls and conducted regular risk assessments to ensure compliance with all regulatory requirements. Transparent reporting of environmental metrics and mitigation strategies. Invest in legal and regulatory expertise to ensure compliance with evolving environmental regulations Continuous improvement and innovation to stay ahead of regulatory requirements and market expectations related to carbon emissions and environmental sustainability. 	<ul style="list-style-type: none"> Communicated the Group's commitment to sustainability and efforts to mitigate environmental impacts to stakeholders through the launch of "Activate" ESG roadmap 2030 Deeper integration of ESG factors into corporate decision-making processes and business strategies Voluntarily aligned corporate reporting with numerous sustainability related frameworks Strengthened corporate governance practices and ensure board oversight on ESG related activities. Adhered with corporate strategies and goals set in Activate which is in-line with global climate targets and provide regular updates to shareholders/customers through different platforms such as social media. 																								
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact for R21 Regulation</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>3</td> </tr> <tr> <td>Cost of capital</td> <td>2</td> </tr> <tr> <td>Financial position</td> <td>2</td> </tr> <tr> <td>Cashflows</td> <td>2</td> </tr> <tr> <td>Financial performance</td> <td>2</td> </tr> </tbody> </table>	Category	Impact	Access to finance	3	Cost of capital	2	Financial position	2	Cashflows	2	Financial performance	2	<table border="1"> <caption>Net Impact for R22 Reputaion</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>3</td> </tr> <tr> <td>Cost of capital</td> <td>2</td> </tr> <tr> <td>Financial position</td> <td>3</td> </tr> <tr> <td>Cashflows</td> <td>3</td> </tr> <tr> <td>Financial performance</td> <td>4</td> </tr> </tbody> </table>	Category	Impact	Access to finance	3	Cost of capital	2	Financial position	3	Cashflows	3	Financial performance	4
Category	Impact																									
Access to finance	3																									
Cost of capital	2																									
Financial position	2																									
Cashflows	2																									
Financial performance	2																									
Category	Impact																									
Access to finance	3																									
Cost of capital	2																									
Financial position	3																									
Cashflows	3																									
Financial performance	4																									
Link to capital																										

MANAGING RISKS & OPPORTUNITIES

CLIMATE RELATED RISKS & OPPORTUNITIES

Climate Related Opportunities																										
Opportunity	O3 AIR PURIFICATION	O4 ENERGY STORAGE CARBONS																								
Description	<ul style="list-style-type: none"> Opportunities stemming from increasingly stringent regulations on the air quality emitted from industrial activity. 	<ul style="list-style-type: none"> Opportunities stemming from the increased need for energy storage solutions to support the adoption of renewable energy sources. 																								
Strategies to capitalise on opportunities	<ul style="list-style-type: none"> Regular monitoring of customer requirements, market & regulatory changes and invest in R&D and product development to leverage Haycarb's expertise to develop products for emerging requirements Participating in related marketing exhibitions to showcase Haycarb's new and existing product developments to cater to air quality improvements 	<ul style="list-style-type: none"> Regular monitoring of customer requirements, market & regulatory changes Participating in related marketing exhibitions to showcase Haycarb's new and existing product developments that is applicable as energy storage solutions Improving customer reach through digital media and focus on strategic customers through focused marketing initiatives Continual investment in technology, manufacturing capacity and resources (know-how) to stay abreast of the market and product technology developments 																								
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact for O3 Air Purification</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>3</td> </tr> <tr> <td>Cost of capital</td> <td>3</td> </tr> <tr> <td>Financial position</td> <td>2</td> </tr> <tr> <td>Cashflows</td> <td>1</td> </tr> <tr> <td>Financial performance</td> <td>2</td> </tr> </tbody> </table>	Category	Impact	Access to finance	3	Cost of capital	3	Financial position	2	Cashflows	1	Financial performance	2	<table border="1"> <caption>Net Impact for O4 Energy Storage Carbons</caption> <thead> <tr> <th>Category</th> <th>Impact</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>4</td> </tr> <tr> <td>Cost of capital</td> <td>3</td> </tr> <tr> <td>Financial position</td> <td>3</td> </tr> <tr> <td>Cashflows</td> <td>1</td> </tr> <tr> <td>Financial performance</td> <td>2</td> </tr> </tbody> </table>	Category	Impact	Access to finance	4	Cost of capital	3	Financial position	3	Cashflows	1	Financial performance	2
Category	Impact																									
Access to finance	3																									
Cost of capital	3																									
Financial position	2																									
Cashflows	1																									
Financial performance	2																									
Category	Impact																									
Access to finance	4																									
Cost of capital	3																									
Financial position	3																									
Cashflows	1																									
Financial performance	2																									
Link to capital																										

Climate Related Opportunities																			
Opportunity	O5 WATER PURIFICATION																		
Description	<ul style="list-style-type: none"> Opportunities stemming from increasingly stringent regulations on the water quality released from industrial activity. 																		
Strategies to capitalise on opportunities	<ul style="list-style-type: none"> Regular monitoring of customer requirements, market & regulatory changes Participating in related marketing exhibitions to showcase Haycarb's new and existing product developments to cater to water purification improvements Continuous investment in R&D for improved activated carbon products for water purification applications., Expand geographical presence to increase customer reach through our environmental engineering arm 																		
Net impact after mitigation strategies in the short, medium and long term	<table border="1"> <caption>Net Impact After Mitigation Strategies</caption> <thead> <tr> <th>Metric</th> <th>Green Bar (Positive)</th> <th>Orange Bar (Negative)</th> </tr> </thead> <tbody> <tr> <td>Access to finance</td> <td>~3.5</td> <td>~2.5</td> </tr> <tr> <td>Cost of capital</td> <td>~3.5</td> <td>~2.5</td> </tr> <tr> <td>Financial position</td> <td>~2.5</td> <td>~1.5</td> </tr> <tr> <td>Cashflows</td> <td>~2.5</td> <td>~-1.5</td> </tr> <tr> <td>Financial performance</td> <td>~2.5</td> <td>~1.5</td> </tr> </tbody> </table>	Metric	Green Bar (Positive)	Orange Bar (Negative)	Access to finance	~3.5	~2.5	Cost of capital	~3.5	~2.5	Financial position	~2.5	~1.5	Cashflows	~2.5	~-1.5	Financial performance	~2.5	~1.5
Metric	Green Bar (Positive)	Orange Bar (Negative)																	
Access to finance	~3.5	~2.5																	
Cost of capital	~3.5	~2.5																	
Financial position	~2.5	~1.5																	
Cashflows	~2.5	~-1.5																	
Financial performance	~2.5	~1.5																	
Link to capital																			

