

SCG Chemicals PCL

Commodity Chemicals Thailand

ESG Risk Rating

13.8

Updated Jul 7, 2022

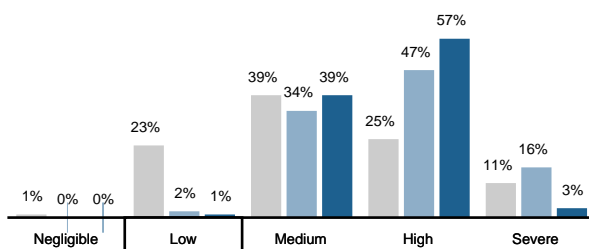
Not available

Momentum

Low Risk



ESG Risk Rating Distribution



ESG Risk Rating Ranking

UNIVERSE	RANK	PERCENTILE
	(1 st = lowest risk) (1 st = lowest risk)	
Global Universe	989/14392	8th
Chemicals INDUSTRY	5/460	2nd
Commodity Chemicals SUBINDUSTRY	1/223	1st

Peers Table

Peers (Market cap \$0.0 - \$0.0bn)

	Exposure	Management	ESG Risk Rating
1. SCG Chemicals PCL	44.9 Medium	77.7 Strong	13.8 Low
2. INEOS Group Holdings SA	42.2 Medium	58.8 Strong	20.4 Medium
3. INEOS Styrolution Group GmbH	41.0 Medium	49.9 Average	22.8 Medium
4. Borealis AG	41.8 Medium	45.9 Average	24.7 Medium
5. CABB GmbH	41.0 Medium	39.0 Average	26.8 Medium

SCG Chemicals PCL

Commodity Chemicals Thailand

ESG Risk Analysis

Exposure refers to the extent to which a company is exposed to different material ESG Issues. The exposure score takes into consideration subindustry and company-specific factors such as its business model.

ESG Risk Exposure

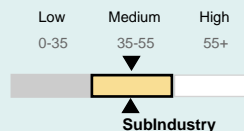
44.9

Not available

Medium

Momentum

Beta = 1.00



SCG Chemicals (SCG) produces a variety of petrochemical products, including polyethylene plastic, which is used in many single-use applications, such as plastic bags. Therefore, the company is subject to scrutiny from both consumers and regulators due to the growing environmental concerns surrounding plastics pollution. Furthermore, SCG's manufacturing processes consume large amounts of energy, as it uses natural gas as its main energy source. This results in significant greenhouse gas (GHG) emissions and exposes the company to the risk of evolving carbon regulations, particularly in Thailand, where the government aims to reduce the country's GHG emission by 20-25% by 2030. Finally, the company is exposed to business ethics issues, including political lobbying to delay regulations, anti-competitive practices, and bribery and corruption.

The company's overall exposure is medium and is similar to subindustry average. Carbon -Own Operations, Business Ethics and E&S Impact of Products and Services are notable material ESG issues.

Management refers to how well a company is managing its relevant ESG issues. The management score assesses the robustness of a company's ESG programs, practices, and policies.

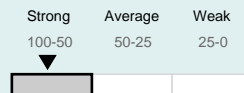
ESG Risk Management

77.7

Not available

Strong

Momentum



SCG maintains a board-level ESG committee, which oversees corporate responsibility issues at the company level. Despite this structure, the company's remuneration policy is not disclosed and it is therefore unclear if executive remuneration is linked to ESG performance targets. Regarding its notable ESG issues, 49% of SCG's 2021 revenue was derived from sustainable products, such as energy-saving coating materials for industrial furnaces, and pontoons for total solution solar floating farms. The company also has a strong policy against bribery and corruption, which addresses conflicts of interest as well as provides clear guidelines on what is or is not considered acceptable behaviour. In terms of managing carbon, despite disclosing a strong GHG reduction programme, the company's carbon intensity is still well above the chemical industry average.

The company's overall management of material ESG issues is strong.

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Material ESG Issues

These are the Material ESG Issues driving the ESG Risk Rating.

Issue Name	ESG Risk Exposure	ESG Risk Management	ESG Risk Rating	Contribution to ESG Risk Rating
	Score Category	Score Category	Score Category	
Corporate Governance	9.0 High	50.8 Average	4.4 Medium	32.1%
Carbon -Own Operations	8.8 High	63.5 Strong	4.3 Medium	31.4%
E&S Impact of Products and Services	6.0 Medium	85.0 Strong	1.9 Negligible	13.9%
Business Ethics	6.0 Medium	86.3 Strong	1.1 Negligible	7.9%
Resource Use	4.0 Medium	92.5 Strong	1.0 Negligible	7.5%
Emissions, Effluents and Waste	5.1 Medium	100.0 Strong	0.5 Negligible	3.7%
Occupational Health and Safety	6.0 Medium	96.9 Strong	0.5 Negligible	3.5%
Overall	44.9 Medium	77.7 Strong	13.8 Low	100.0%

Events Overview

Identify events that may negatively impact stakeholders, the environment, or the company's operations.

Category (Events)

5 Severe (0)

4 High (0)

3 Significant (0)

2 Moderate (0)

1 Low (0)

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Events Overview

Identify events that may negatively impact stakeholders, the environment, or the company's operations.

Category (Events)

None (15)

Accounting and Taxation

Animal Welfare

Anti-Competitive Practices

Bribery and Corruption

Business Ethics

Emissions, Effluents and Waste

Energy Use and GHG Emissions

Environmental Impact of Products

Intellectual Property

Lobbying and Public Policy

Occupational Health and Safety

Sanctions

Social Impact of Products

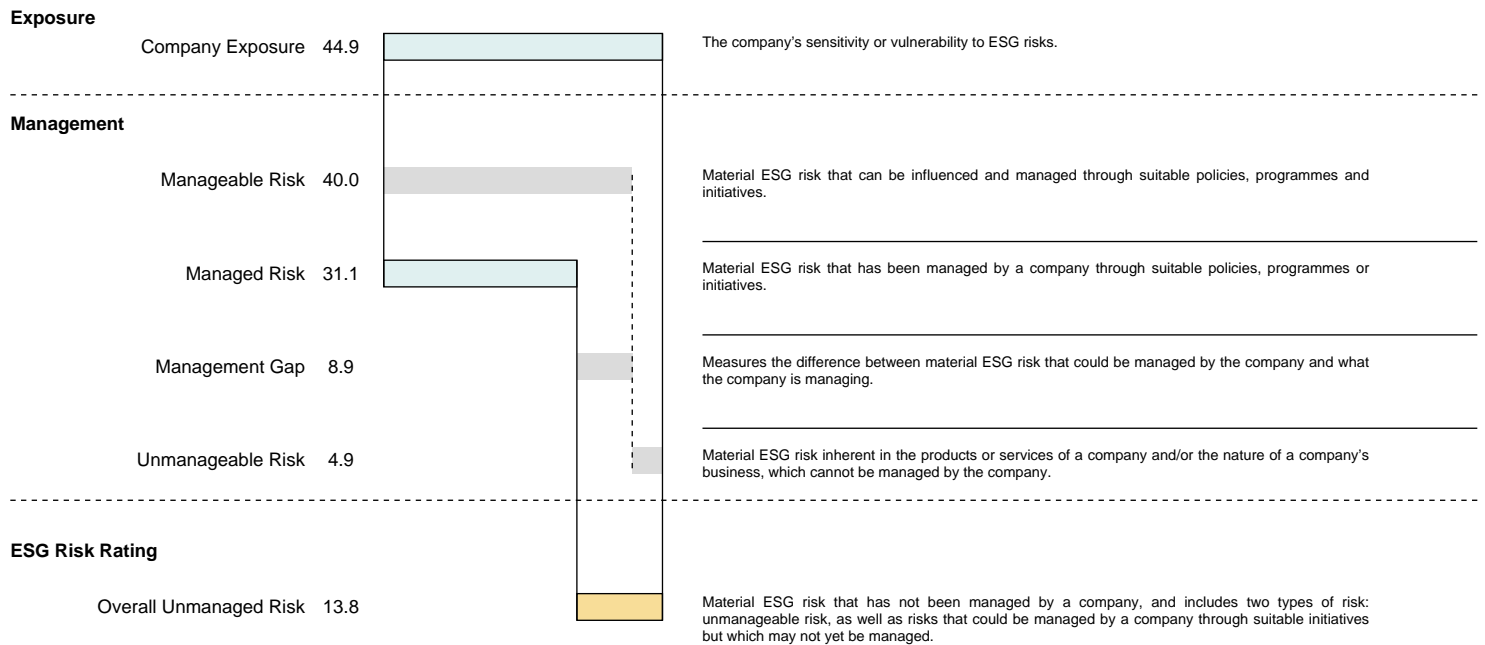
Society - Human Rights

Water Use

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Risk Decomposition



Momentum Details

Not available due to a lack of comparable historical information.

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Issue

Contribution 32.1 %



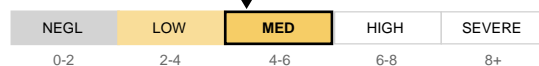
Corporate Governance

Corporate Governance represents foundational structures for the management of ESG risks.

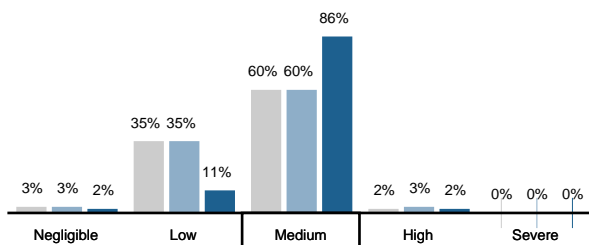
ESG Risk Rating

4.4

Medium Risk



ESG Risk Rating Distribution



ESG Risk Rating Ranking

UNIVERSE	RANK (1 st = lowest risk)	PERCENTILE (1 st = lowest risk)
Global Universe	2607/4919	53rd
Chemicals INDUSTRY	78/171	46th
Commodity Chemicals SUBINDUSTRY	10/65	15th

Peers Table

Peers (Market cap \$1.3 - \$1.7bn)

	Exposure	Management	ESG Risk Rating
1. INEOS Group Holdings SA	5.0 Medium	61.0 Strong	2.0 Negligible
2. White Energy Holding Co. LLC	5.0 Medium	38.0 Weak	3.1 Low
3. SCG Chemicals PCL	9.0 High	50.8 Average	4.4 Medium
4. Tokai Carbon Co., Ltd.	9.0 High	41.8 Average	5.2 Medium
5. Petkim Petrokimya Holding AS	9.0 High	40.4 Average	5.4 Medium

SCG Chemicals PCL

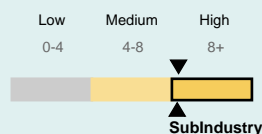
Commodity Chemicals Thailand

ESG Risk Analysis

Exposure refers to the extent to which a company is exposed to different material ESG Issues. The exposure score takes into consideration subindustry and company-specific factors such as its business model.

ESG Risk Exposure

9.0
High

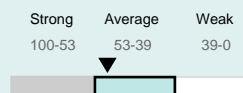


The quality and integrity of the company's board and management, its ownership structure and shareholder rights are identified as the highest weighted governance areas of focus. The company is publicly traded, which leads to heightened scrutiny of its governance practices and increases the importance of governance structures, practices and behaviour. This translates into high exposure to baseline Corporate Governance risk.

Management refers to how well a company is managing its relevant ESG issues. The management score assesses the robustness of a company's ESG programs, practices, and policies.

ESG Risk Management

50.8
Average



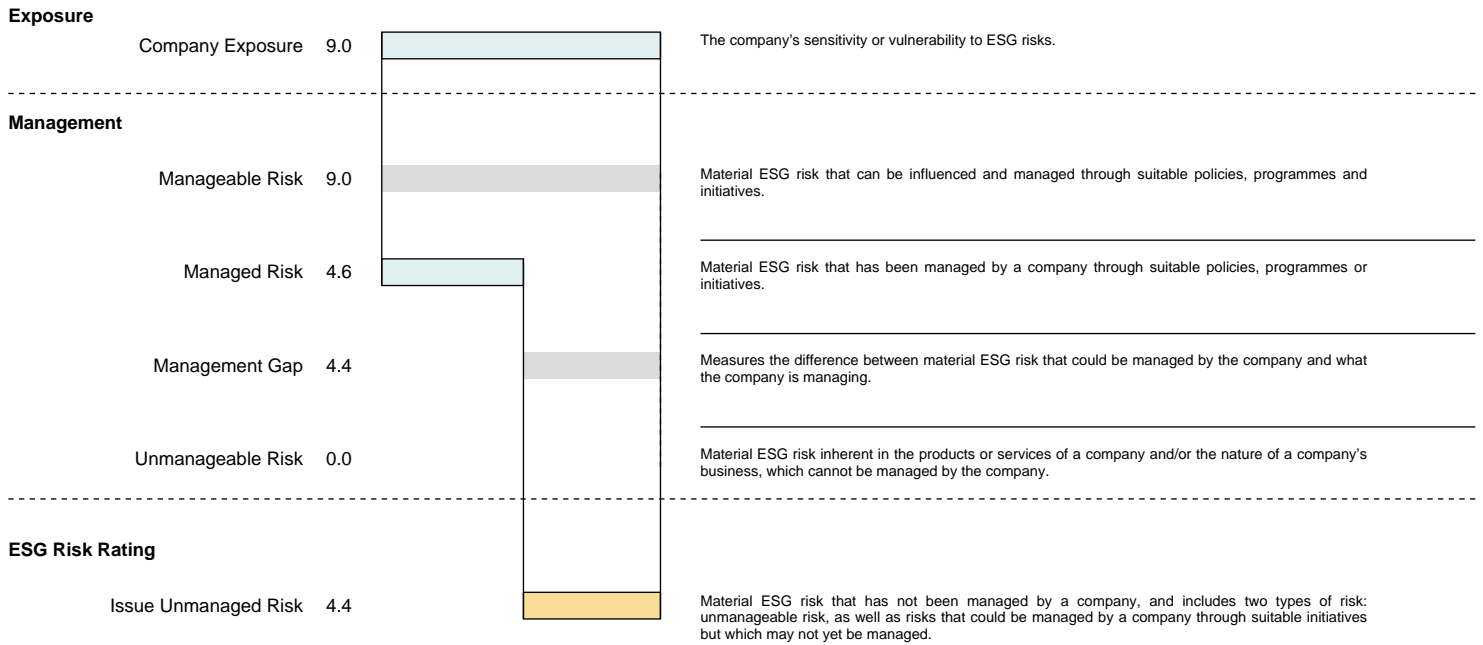
The company is noted for showing particular strength in its audit and financial performance systems and its stakeholder governance. On the other hand, it is noted for weakness in the quality and integrity of its board/management and its remuneration systems. It has average management of its 2 other governance pillars. Overall, we rate the company's corporate governance management as average.

Corporate Governance Pillars	Raw Score	Weight	Weighted Score
Board/Management Quality & Integrity	40	25.0%	10.0
Board Structure	62	17.0%	10.5
Ownership & Shareholder Rights	55	25.0%	13.8
Remuneration	31	17.0%	5.3
Audit & Financial Reporting	66	8.0%	5.3
Stakeholder Governance	75	8.0%	6.0
Totals		100.0%	50.8

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Risk Decomposition



SCG Chemicals PCL

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Issue  **Carbon - Own Operations**

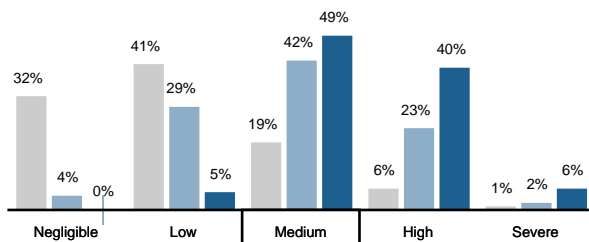
Contribution 31.4 %

Carbon - Own Operations refers to a company's management of risks related to its own operational energy use and GHG emissions (scope 1 and 2). It also includes parts of Scope 3 emissions.

ESG Risk Rating 4.3 Medium Risk



ESG Risk Rating Distribution



ESG Risk Rating Ranking

UNIVERSE	RANK (1 st = lowest risk)	PERCENTILE (1 st = lowest risk)
Global Universe	2218/2883	77th
Chemicals INDUSTRY	69/171	40th
Commodity Chemicals SUBINDUSTRY	6/65	9th

Peers Table

Peers (Market cap \$1.3 - \$1.7bn)	Exposure	Management	ESG Risk Rating
1. Tokai Carbon Co., Ltd.	6.4 Medium	66.4 Strong	3.0 Low
2. SCG Chemicals PCL	8.8 High	63.5 Strong	4.3 Medium
3. Petkim Petrokimya Holding AS	8.8 High	49.9 Average	5.3 Medium
4. INEOS Group Holdings SA	9.2 High	44.1 Average	6.0 Medium
5. White Energy Holding Co. LLC	9.2 High	12.4 Weak	8.3 Severe

SCG Chemicals PCL

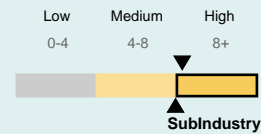
Commodity Chemicals Thailand

ESG Risk Analysis

Exposure refers to the extent to which a company is exposed to different material ESG Issues. The exposure score takes into consideration subindustry and company-specific factors such as its business model.

ESG Risk Exposure

8.8
High



SCG operates energy-intensive processes mainly due to its high ethylene capacity, which is used downstream to make various intermediates and polymers such as polyethylene. Ethylene is produced by steam crackers that primarily rely on fossil fuels for combustion, making them a significant contributor to GHG emissions. During the COP26 climate conference, Thailand, where the majority of SCG's manufacturing sites are located, committed to reaching carbon neutrality by 2050. SCG therefore faces regulatory risks related to evolving and strengthening carbon regulations.

The company's exposure to Carbon -Own Operations issues is high and moderately above the subindustry exposure.

Exposure Analysis

Subindustry Issue Exposure	8.0
Issue Beta	x 1.10
Company Issue Exposure	8.8

Beta Indicators

Beta Signal

Energy Use and GHG Emissions	0.00
Operating Performance	0.00
Solvency	0.00
Financial Flexibility	0.00
Asset Performance	0.00
Carbon Emissions	0.15
Qualitative Overlay	0.00
Subindustry Correction Factor	-0.06
Exceptional Event Adjustment	0.00
Total Beta Signal	0.10
Baseline	+1.00
Overall Beta	1.10

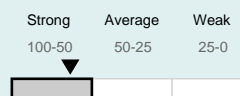
SCG Chemicals PCL

Commodity Chemicals Thailand


Management refers to how well a company is managing its relevant ESG issues. The management score assesses the robustness of a company's ESG programs, practices, and policies.

ESG Risk Management

63.5
Strong



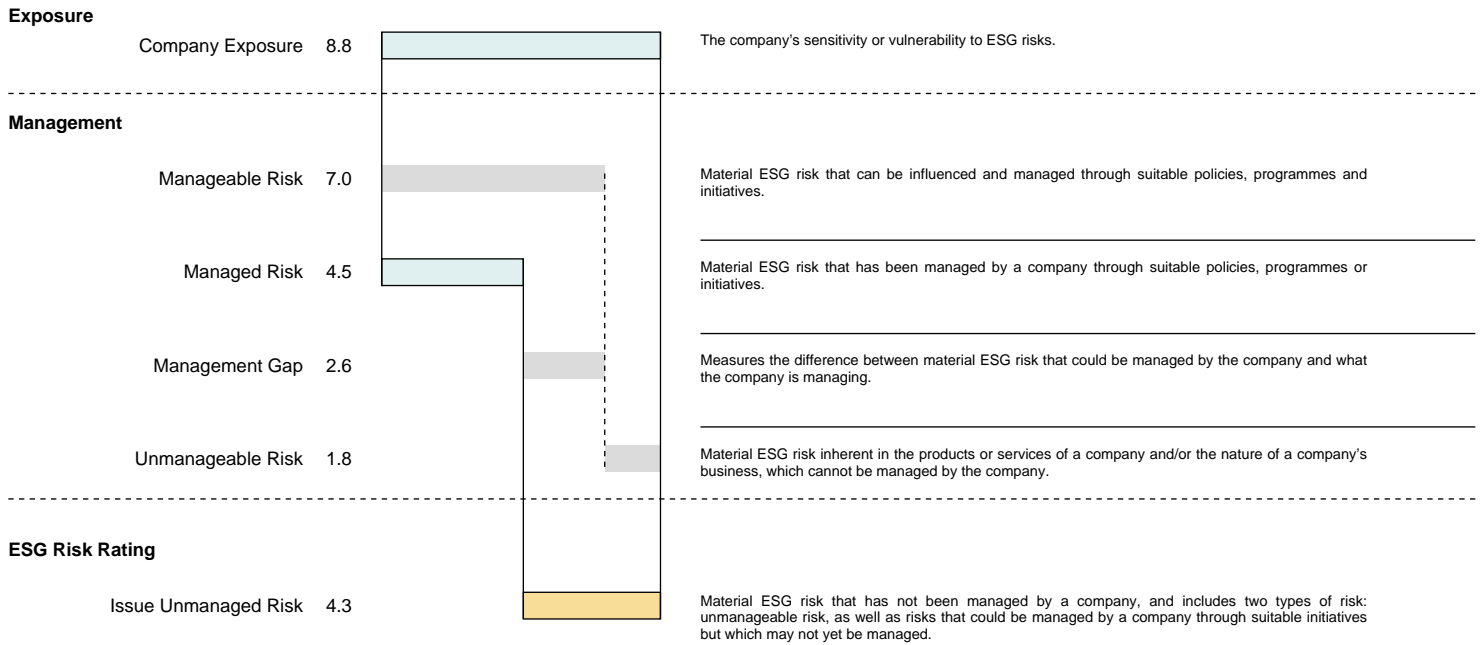
SCG Chemicals discloses that, for 2021, 100% of its subsidiaries were certified in accordance with the ISO 14001 standard, assures that a very strong company-wide environmental management system has been implemented. To reduce its GHG emissions, the company has set an ambitious target to decrease its GHG emissions (scope 1 and 2) by 20% by 2030, compared to 2021, with the ultimate goal of achieving carbon neutrality by 2050. To achieve these targets, SCG has improved part of its manufacturing processes by installing cutting-edge technologies that can help lower GHG emissions during the manufacturing process. Compared to 2007, the company has been able to reduce its GHG emissions by 14% (as of 2021). Despite these improvements, SCG's carbon intensity remains well above the chemical industry median. In our view, the company's management of the issue is above average.

Management Indicators	Raw Score	Weight	Weighted Score
EMS Certification	100	5.0%	5.0
Environmental Management System	100	5.0%	5.0
Environmental Policy	100	5.0%	5.0
Green Logistics Programmes	100	10.0%	10.0
Renewable Energy Programmes	100	10.0%	10.0
Scope of GHG Reporting	100	5.0%	5.0
GHG Reduction Programme	75	17.5%	13.1
GHG Risk Management	50	12.5%	6.3
Carbon Intensity Trend	25	12.5%	3.1
Renewable Energy Use	20	5.0%	1.0
Carbon Intensity	0	12.5%	0.0
 Energy Use and GHG Emissions	Category 0	0%	0.0
Weighted Sum			63.5

SCG Chemicals PCL

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Risk Decomposition



SCG Chemicals PCL

Commodity Chemicals Thailand

Issue

Contribution 13.9 %



E&S Impact of Products and Services

E&S Impact of Products and Services refers to the management of the inherent characteristics of input materials, and the impacts during use, disposal and recycling (excluding Carbon).

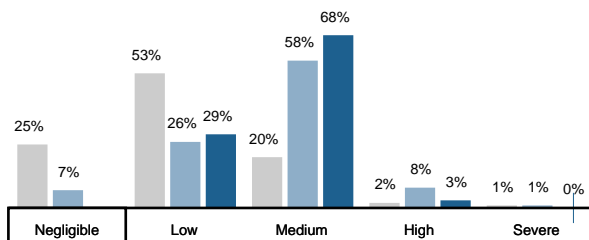
ESG Risk Rating

1.9

Negligible Risk



ESG Risk Rating Distribution



ESG Risk Rating Ranking

UNIVERSE	RANK	PERCENTILE
	(1 st = lowest risk)	(1 st = lowest risk)
Global Universe	317/1405	23rd
Chemicals INDUSTRY	10/171	6th
Commodity Chemicals SUBINDUSTRY	1/65	1st

Peers Table

Peers (Market cap \$1.3 - \$1.7bn)

Peers (Market cap \$1.3 - \$1.7bn)	Exposure	Management	ESG Risk Rating
1. SCG Chemicals PCL	6.0 Medium	85.0 Strong	1.9 Negligible
2. Tokai Carbon Co., Ltd.	5.4 Medium	29.5 Average	4.1 Medium
3. INEOS Group Holdings SA	6.0 Medium	36.5 Average	4.2 Medium
4. White Energy Holding Co. LLC	6.0 Medium	25.0 Weak	4.8 Medium
5. Petkim Petrokimya Holding AS	5.7 Medium	12.0 Weak	5.2 Medium

SCG Chemicals PCL

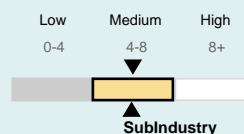
Commodity Chemicals Thailand

ESG Risk Analysis

Exposure refers to the extent to which a company is exposed to different material ESG Issues. The exposure score takes into consideration subindustry and company-specific factors such as its business model.

ESG Risk Exposure

6.0
Medium



SCG manufacturers plastics, such as Polyvinyl Chloride (PVC), and produced 1.3 million tons of PVC in 2021. Although PVC is used in a variety of construction applications, a considerable amount is used in single-use packaging applications. Single-use plastics face growing scrutiny from consumers and regulators. Demand for PVC is likely to shrink over time, driven by regulations such as Thailand's plastic bag ban introduced in January 2020 and a single-use plastic ban in the country's national parks introduced in April 2022.

The company's exposure to E&S Impact of Products and Services issues is medium and similar to the subindustry exposure.

Exposure Analysis

Subindustry Issue Exposure	6.0
Issue Beta	x 1.00
Company Issue Exposure	6.0

Beta Indicators

Beta Signal

Environmental Impact of	0.00
Social Impact of Products	0.00
Operating Performance	0.00
Solvency	0.00
Financial Flexibility	0.00
Asset Performance	0.00
Headquarters Location	0.00
Sales Location	0.00
Qualitative Overlay	0.00
Subindustry Correction Factor	0.00
Exceptional Event Adjustment	0.00
Total Beta Signal	0.00
Baseline	+1.00
Overall Beta	1.00

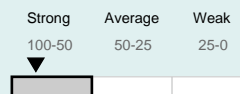
SCG Chemicals PCL

Commodity Chemicals Thailand



Management refers to how well a company is managing its relevant ESG issues. The management score assesses the robustness of a company's ESG programs, practices, and policies.

ESG Risk Management

85.0
Strong



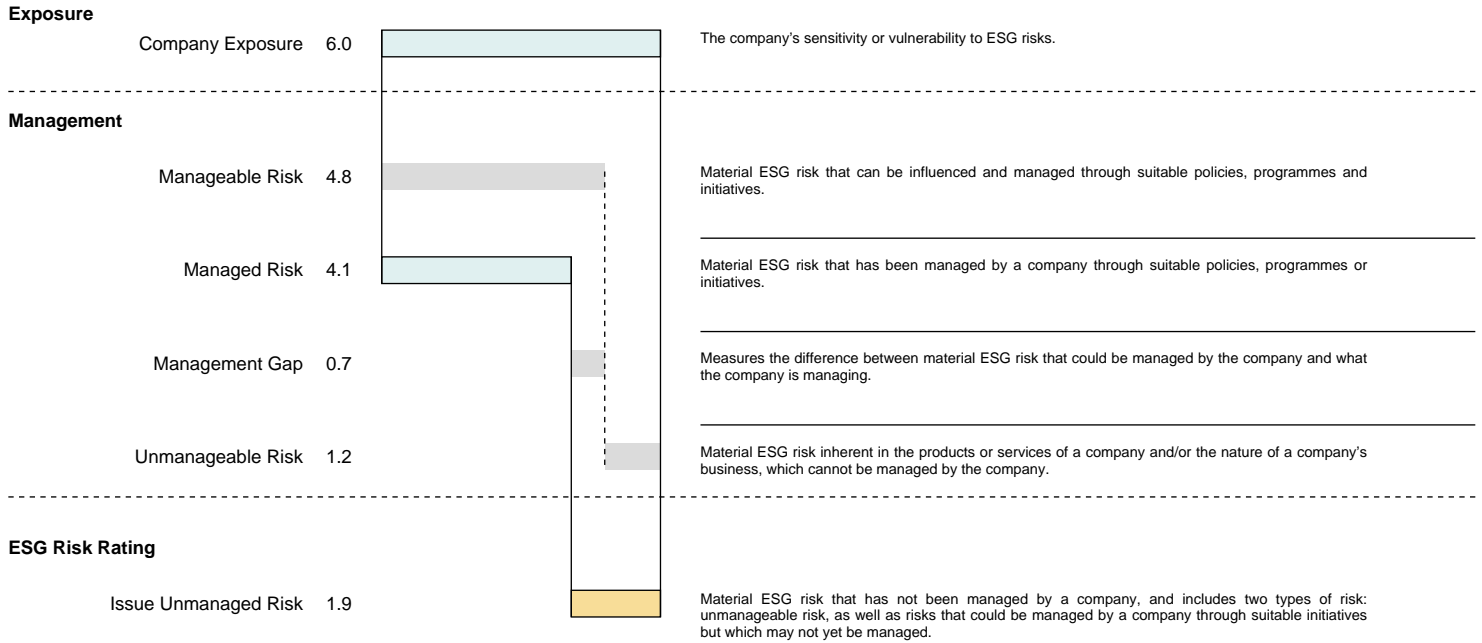
SCG Chemicals offers its SCG Green Choice range, which includes a variety of products considered to be sustainable. The company classifies its SCG Green Choice products according to three qualities: 1) energy conservation and reduction of global warming, 2) natural resource conservation and lifespan extension and 3) promotion of well-being. Examples of sustainable products it sells include energy-saving coating materials for industrial furnaces and pontoons for total solution solar floating farms. Such products contributed 49% of the company's 2021 revenue. While SCG does not use substances considered to be of very high concern according to the EU Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulation, the company also implemented an adequate processes to identify, review and manage substances considered hazardous to the environment or humans. In our view, the company's management of the issue is above average.

Management Indicators	Raw Score	Weight	Weighted Score
Green Procurement Policy	100	15.0%	15.0
Hazardous Products	100	25.0%	25.0
Sustainable Products & Services	100	30.0%	30.0
Hazardous Substances Management	50	30.0%	15.0
 Environmental Impact of Products	Category 0	0%	0.0
 Social Impact of Products	Category 0	0%	0.0
Weighted Sum			85.0

SCG Chemicals PCL

Commodity Chemicals Thailand

Risk Decomposition



SCG Chemicals PCL

Commodity Chemicals Thailand

Issue

Contribution 7.9 %

Business Ethics

Business Ethics focuses on the management of ethical considerations applicable to most or all sectors, such as taxation and accounting, anti-competitive practices and intellectual property issues.

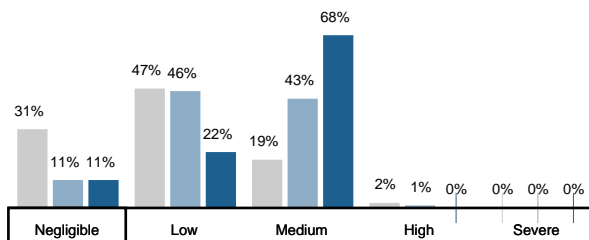
ESG Risk Rating

1.1

Negligible Risk



ESG Risk Rating Distribution



ESG Risk Rating Ranking

UNIVERSE	RANK (1 st = lowest risk)	PERCENTILE (1 st = lowest risk)
Global Universe	385/4509	9th
Chemicals INDUSTRY	4/166	3rd
Commodity Chemicals SUBINDUSTRY	1/65	1st

Peers Table

Peers (Market cap \$1.3 - \$1.7bn)

Peers (Market cap \$1.3 - \$1.7bn)	Exposure	Management	ESG Risk Rating
1. SCG Chemicals PCL	6.0 Medium	86.3 Strong	1.1 Negligible
2. Petkim Petrokimya Holding AS	5.7 Medium	84.4 Strong	1.1 Negligible
3. White Energy Holding Co. LLC	6.0 Medium	80.0 Strong	1.4 Negligible
4. INEOS Group Holdings SA	6.0 Medium	66.9 Strong	2.2 Low
5. Tokai Carbon Co., Ltd.	5.7 Medium	24.4 Weak	4.4 Medium

SCG Chemicals PCL

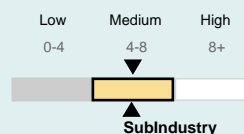
Commodity Chemicals Thailand

ESG Risk Analysis

Exposure refers to the extent to which a company is exposed to different material ESG Issues. The exposure score takes into consideration subindustry and company-specific factors such as its business model.

ESG Risk Exposure

6.0
Medium



SCG operates in an industry that is heavily regulated, owing to the potential negative environmental impact of its products. The company is therefore exposed to various ethical issues, including political lobbying to delay regulation of specific substances and anti-competitive practices, such as price fixing or dumping. Moreover, SCG operates and sells the majority of its products in Thailand (64% of 2021 sales), which ranks 104 out of 180 in Transparency International's global Corruption Perception Index, raising potential corruption-related risks for the company.

The company's exposure to Business Ethics issues is medium and similar to the subindustry exposure.

Exposure Analysis

Subindustry Issue Exposure	6.0
Issue Beta	x 1.00
Company Issue Exposure	6.0

Beta Indicators

Beta Signal

Accounting and Taxation	0.00
Animal Welfare	0.00
Anti-Competitive Practices	0.00
Bribery and Corruption	0.00
Business Ethics	0.00
Intellectual Property	0.00
Lobbying and Public Policy	0.00
Sanctions	0.00
Society - Human Rights	0.00
Operating Performance	0.00
Solvency	0.00
Financial Flexibility	0.00
Asset Performance	0.00
Qualitative Overlay	0.00
Subindustry Correction Factor	0.00
Exceptional Event Adjustment	0.00
Total Beta Signal	0.00
Baseline	+1.00
Overall Beta	1.00

SCG Chemicals PCL

Commodity Chemicals Thailand

Management refers to how well a company is managing its relevant ESG issues. The management score assesses the robustness of a company's ESG programs, practices, and policies.

ESG Risk Management

86.3
Strong



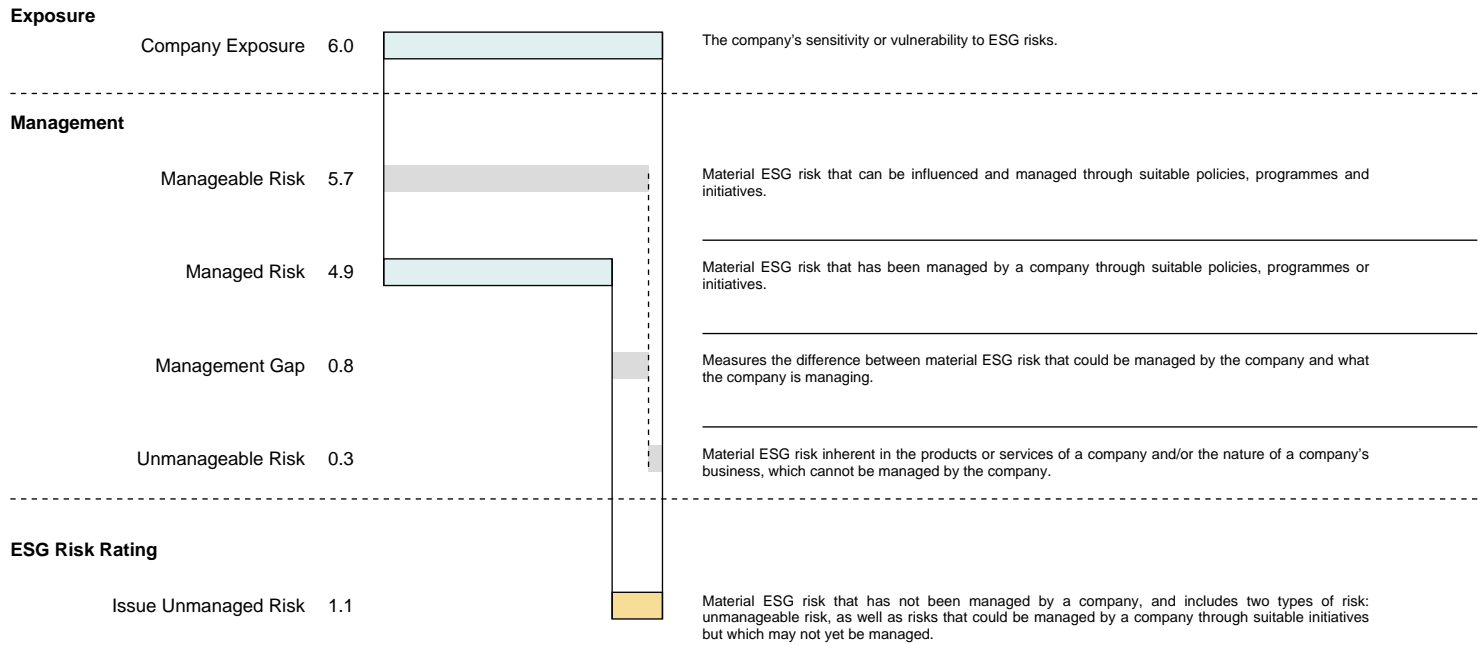
SCG has a strong policy against bribery and corruption, which also addresses conflicts of interest as well as provides clear guidelines on what is or is not considered acceptable behaviour. Employees at the executive and operational level conduct annual self-assessments on bribery and corruption risks. During 2021, the company reported that there were no corruption or non-compliance cases. Regarding political lobbying, SCG states that it does not support any political parties and it maintains neutrality. Effectively, SCG reports that no monetary contributions have been made over the past five years (2017-2021). However, its policy does not specifically prohibit political contributions or spending under any circumstances. In our view, the company's management of the issue is above average.

Management Indicators	Raw Score	Weight	Weighted Score
Animal Testing Policy	100	10.0%	10.0
Animal Testing Programme	100	20.0%	20.0
Lobbying and Political Expenses	100	15.0%	15.0
Bribery & Corruption Policy	75	12.5%	9.4
Political Involvement Policy	75	17.5%	13.1
Whistleblower Programmes	75	25.0%	18.8
Accounting and Taxation	Category 0	0%	0.0
Animal Welfare	Category 0	0%	0.0
Anti-Competitive Practices	Category 0	0%	0.0
Bribery and Corruption	Category 0	0%	0.0
Business Ethics	Category 0	0%	0.0
Intellectual Property	Category 0	0%	0.0
Lobbying and Public Policy	Category 0	0%	0.0
Sanctions	Category 0	0%	0.0
Society - Human Rights	Category 0	0%	0.0
Weighted Sum			86.3

SCG Chemicals PCL

Commodity Chemicals Thailand

Risk Decomposition



SCG Chemicals PCL

Commodity Chemicals Thailand

Issue

Contribution 7.5 %



Resource Use

Resource Use focuses on how efficiently and effectively a company uses its raw material inputs (excluding energy and petroleum-based products) in production and how it manages related risks.

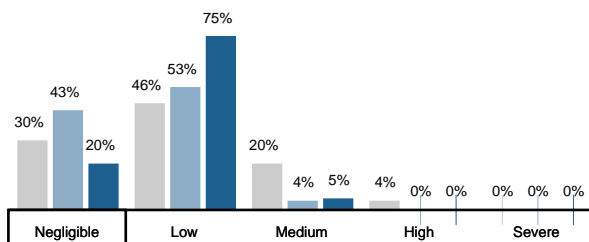
ESG Risk Rating

1.0

Negligible Risk



ESG Risk Rating Distribution



ESG Risk Rating Ranking

UNIVERSE	RANK	PERCENTILE
	(1 st = lowest risk)	(1 st = lowest risk)
Global Universe	55/1466	5th
Chemicals INDUSTRY	8/171	5th
Commodity Chemicals SUBINDUSTRY	1/65	1st

Peers Table

Peers (Market cap \$1.3 - \$1.7bn)

Peers (Market cap \$1.3 - \$1.7bn)	Exposure	Management	ESG Risk Rating
1. SCG Chemicals PCL	4.0 Medium	92.5 Strong	1.0 Negligible
2. Petkim Petrokimya Holding AS	3.8 Low	65.0 Strong	1.8 Negligible
3. Tokai Carbon Co., Ltd.	3.8 Low	59.4 Strong	2.0 Negligible
4. INEOS Group Holdings SA	4.0 Medium	45.7 Average	2.5 Low
5. White Energy Holding Co. LLC	4.0 Medium	27.3 Average	3.1 Low

SCG Chemicals PCL

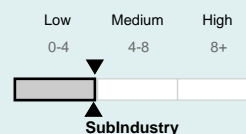
Commodity Chemicals Thailand

ESG Risk Analysis

Exposure refers to the extent to which a company is exposed to different material ESG Issues. The exposure score takes into consideration subindustry and company-specific factors such as its business model.

ESG Risk Exposure

4.0
Medium



The Commodity Chemicals industry depends on water in the manufacturing process, primarily for cooling, steam generation and chemical processing. Since water is becoming a scarce resource around the world, commodity companies can face higher supply costs and supply disruptions as a result. Risk exposure for water use does not significantly vary by business model but by region. Parts of Latin America, Africa, Asia, the Middle East, Australia and the US are already impacted by major droughts, and it is estimated that by 2025, important river basins in the US, Mexico, Western Europe, China, India, and Africa will face severe water problems due to water scarcity and/or water contamination, exposing companies with manufacturing operations in these countries to operational risks. Commodity Chemicals companies that depend on petroleum, and/or minerals and metals (including cobalt and nickel) are exposed to future risks from resource scarcity and higher feedstock prices. Companies that use renewable feedstock in lieu of fossil hydrocarbon feedstock may be better positioned to ensure a steady supply of raw materials. Industry companies that invest in comprehensive water and resource management programmes that entail risk assessments and progressive reduction targets may be best positioned to mitigate risks related to water or raw material resource scarcity.

The company's exposure to Resource Use issues is medium and similar to the subindustry exposure.

Exposure Analysis

Subindustry Issue Exposure	4.0
Issue Beta	x 1.00
Company Issue Exposure	4.0

Beta Indicators

Beta Signal

Water Use	0.00
Operating Performance	0.00
Solvency	0.00
Financial Flexibility	0.00
Asset Performance	0.00
Regional Water Stress	0.00
Qualitative Overlay	0.00
Subindustry Correction Factor	0.00
Exceptional Event Adjustment	0.00
Total Beta Signal	0.00
Baseline	+1.00
Overall Beta	1.00

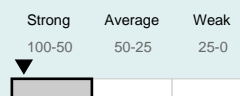
SCG Chemicals PCL

Commodity Chemicals Thailand


Management refers to how well a company is managing its relevant ESG issues. The management score assesses the robustness of a company's ESG programs, practices, and policies.

ESG Risk Management

92.5
Strong



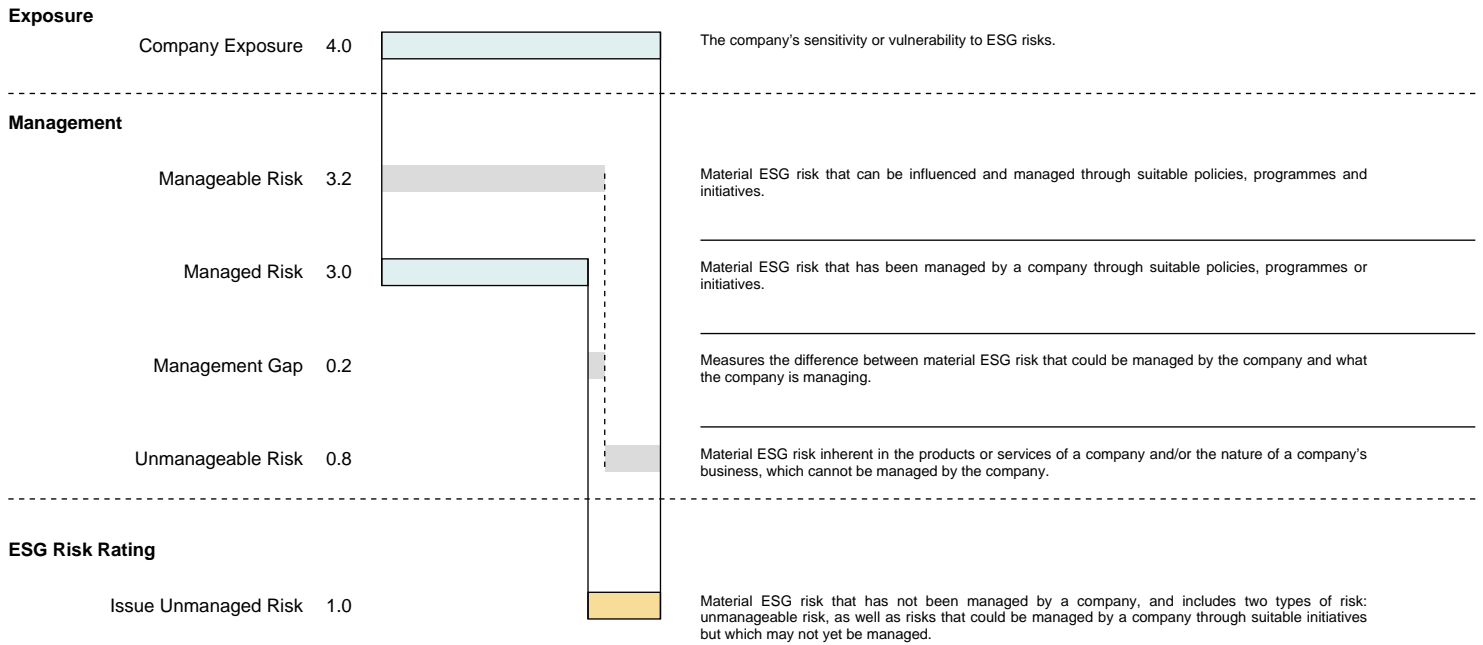
In our view, the company's management of the issue is above average.

Management Indicators	Raw Score	Weight	Weighted Score
EMS Certification	100	2.5%	2.5
Environmental Management System	100	10.0%	10.0
Environmental Policy	100	2.5%	2.5
Physical Climate Risk Management	100	10.0%	10.0
Water Intensity	100	15.0%	15.0
Water Management Programmes	100	30.0%	30.0
Water Risk Management	100	20.0%	20.0
Water Intensity Trend	25	10.0%	2.5
 Water Use	Category 0	0%	0.0
Weighted Sum			92.5

SCG Chemicals PCL

Commodity Chemicals Thailand

Risk Decomposition



SCG Chemicals PCL

Commodity Chemicals Thailand

Issue

Contribution 3.7 %



Emissions, Effluents and Waste

Emissions, Effluents and Waste focuses on the management of emissions and releases from a company's own operations to air, water and land, excluding GHG emissions.

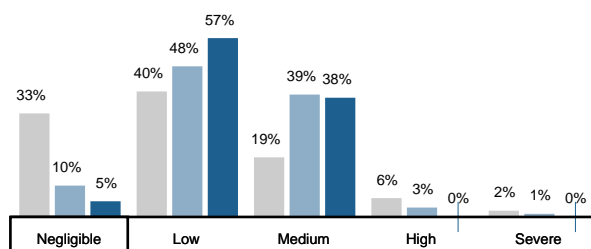
ESG Risk Rating

0.5

Negligible Risk



ESG Risk Rating Distribution



ESG Risk Rating Ranking

UNIVERSE	RANK (1 st = lowest risk)	PERCENTILE (1 st = lowest risk)
Global Universe	27/1771	2nd
Chemicals INDUSTRY	1/166	1st
Commodity Chemicals SUBINDUSTRY	1/65	1st

Peers Table

Peers (Market cap \$1.3 - \$1.7bn)

Peers (Market cap \$1.3 - \$1.7bn)	Exposure	Management	ESG Risk Rating
1. SCG Chemicals PCL	5.1 Medium	100.0 Strong	0.5 Negligible
2. INEOS Group Holdings SA	6.0 Medium	62.1 Strong	2.6 Low
3. Tokai Carbon Co., Ltd.	5.4 Medium	51.2 Strong	2.9 Low
4. Petkim Petrokimya Holding AS	8.1 High	63.2 Strong	3.5 Low
5. White Energy Holding Co. LLC	6.0 Medium	37.7 Average	4.0 Low

SCG Chemicals PCL

Commodity Chemicals Thailand

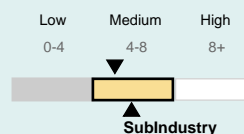
ESG Risk Analysis

Exposure refers to the extent to which a company is exposed to different material ESG Issues. The exposure score takes into consideration subindustry and company-specific factors such as its business model.

ESG Risk Exposure

5.1

Medium



Chemicals manufacturing faces a variety of stringent environmental regulations, ranging from addressing air emissions, to water discharges, to hazardous waste. The majority of pollutants from companies in the commodity chemicals subindustry include hazardous air pollutants (HAPs) from the combustion of fuels and processing of raw materials, especially from petrochemicals production, NO_x, SO_x, and volatile organic compounds (VOCs), and wastewater treatment sludge and hazardous by-products from processing and pollution-control equipment. Companies with inadequate management may face restrictions or delays in obtaining permits from national and local agencies if their facilities do not meet specific emissions criteria, or may be subject to monetary penalties and costly requirements to upgrade facilities in the tens of million USDs, as well as meet current or anticipated emissions standards, especially with regard to tightening air emission regulations globally. Commodity chemicals are produced in large quantities posing the risk of sizeable spills. Companies with higher levels of toxic substances used in their manufacturing process are more exposed to regulatory scrutiny. Companies operating in the US face risks from specific regulations regarding so-called "superfund" sites, for which companies may face remediation costs. Furthermore, companies with manufacturing sites in developed markets are more likely to experience public scrutiny and regulatory risks due to stricter environmental regulations, which may have negative impacts on revenues. On the other hand, companies operating in developed markets are more likely to be equipped to tackle risks from rising global regulations on emissions, effluents and waste. Strong programmes with detailed targets to reduce emissions, effluents and waste safety are essential to mitigating risks.

The company's exposure to Emissions, Effluents and Waste issues is medium and moderately below the subindustry exposure.

Exposure Analysis

Subindustry Issue Exposure	6.0
Issue Beta	x 0.85
Company Issue Exposure	5.1

Beta Indicators

Beta Signal

Emissions, Effluents and Waste	0.00
Operating Performance	0.00
Solvency	0.00
Financial Flexibility	0.00
Asset Performance	0.00
Headquarters Location	0.00
Assets Location	0.00
NO _x Emissions	-0.10
SO _x Emissions	-0.10
Qualitative Overlay	0.00
Subindustry Correction Factor	0.05
Exceptional Event Adjustment	0.00

SCG Chemicals PCL

Commodity Chemicals Thailand

ESG Risk Analysis

Exposure refers to the extent to which a company is exposed to different material ESG Issues. Our exposure score takes into consideration subindustry and company-specific factors such as its business model.

Beta Indicators	Beta Signal
Total Beta Signal	-0.15
Baseline	+1.00
Overall Beta	0.85

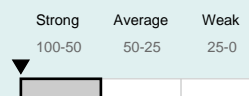
SCG Chemicals PCL

Commodity Chemicals Thailand


Management refers to how well a company is managing its relevant ESG issues. The management score assesses the robustness of a company's ESG programs, practices, and policies.

ESG Risk Management

100.0
Strong



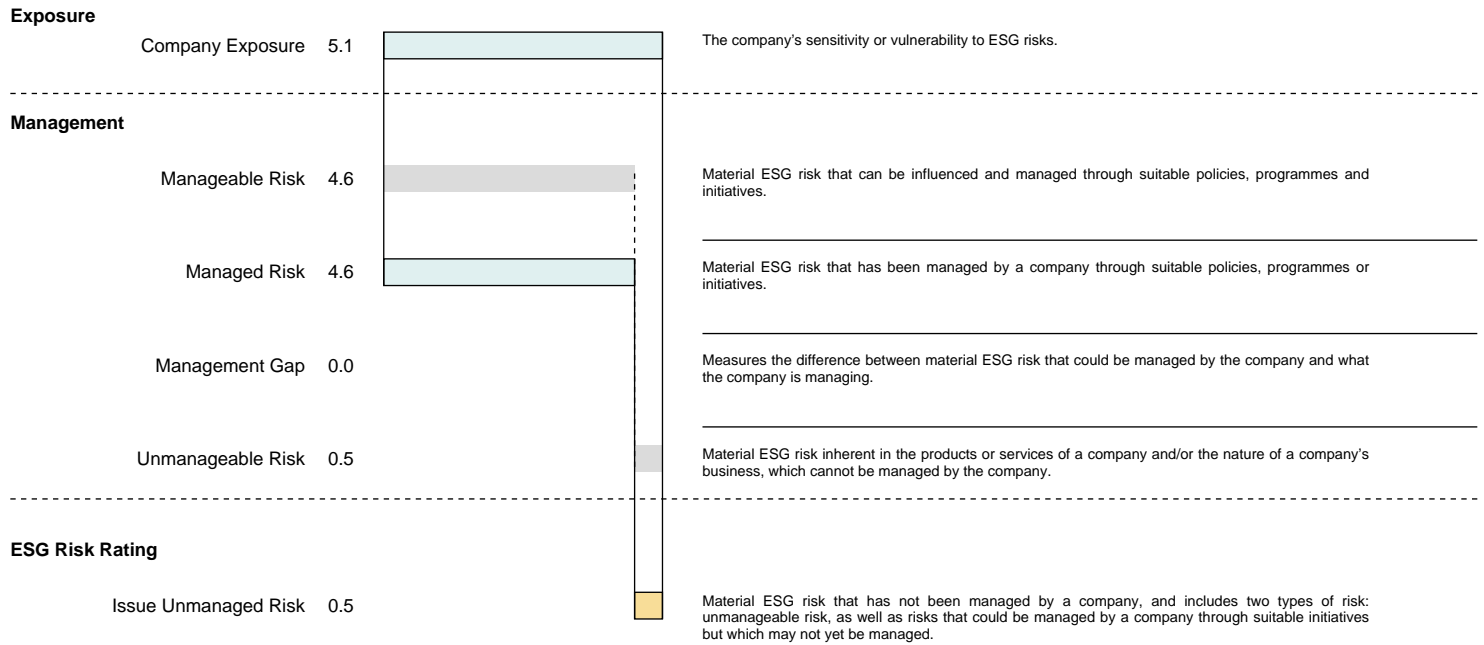
In our view, the company's management of the issue is above average.

Management Indicators	Raw Score	Weight	Weighted Score
Effluent Management	100	20.0%	20.0
Emergency Response Programme	100	12.5%	12.5
EMS Certification	100	7.5%	7.5
Environmental Management System	100	7.5%	7.5
Environmental Policy	100	7.5%	7.5
Hazardous Waste Management	100	20.0%	20.0
Non-GHG Air Emissions Programmes	100	20.0%	20.0
Physical Climate Risk Management	100	5.0%	5.0
 Emissions, Effluents and Waste	Category 0	0%	0.0
Weighted Sum			100.0

SCG Chemicals PCL

Commodity Chemicals Thailand

Risk Decomposition



SCG Chemicals PCL

Commodity Chemicals Thailand

Issue

Contribution 3.5 %



Occupational Health and Safety

Occupational Health and Safety focuses on the management of workplace hazards affecting a company's own employees and on-site contractors. Where relevant, it may also include HIV/AIDS programmes.

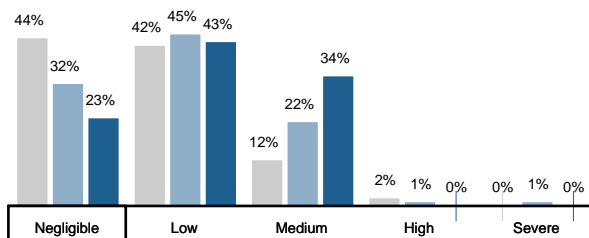
ESG Risk Rating

0.5

Negligible Risk



ESG Risk Rating Distribution



ESG Risk Rating Ranking

UNIVERSE	RANK	PERCENTILE
	(1 st = lowest risk)	(1 st = lowest risk)
Global Universe	58/2085	4th
Chemicals Industry	3/171	2nd
Commodity Chemicals Subindustry	3/65	4th

Peers Table

Peers (Market cap \$1.3 - \$1.7bn)

Peers (Market cap \$1.3 - \$1.7bn)	Exposure	Management	ESG Risk Rating
1. Petkim Petrokimya Holding AS	5.7 Medium	96.9 Strong	0.5 Negligible
2. SCG Chemicals PCL	6.0 Medium	96.9 Strong	0.5 Negligible
3. INEOS Group Holdings SA	6.0 Medium	90.6 Strong	0.8 Negligible
4. Tokai Carbon Co., Ltd.	5.1 Medium	48.1 Average	2.8 Low
5. White Energy Holding Co. LLC	6.0 Medium	25.6 Average	4.5 Medium

SCG Chemicals PCL

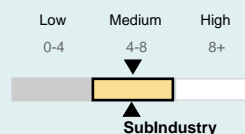
Commodity Chemicals Thailand

ESG Risk Analysis

Exposure refers to the extent to which a company is exposed to different material ESG Issues. The exposure score takes into consideration subindustry and company-specific factors such as its business model.

ESG Risk Exposure

6.0
Medium



The production of commodity chemicals involves substances with hazardous and explosive characteristics. Large quantities of goods are produced in a continuous stream, and inattention or fatigue from employees can lead to safety lapses. Since companies in this industry also rely on individual contractors, who may be insufficiently trained or relatively unfamiliar with production facilities, occupational health and safety is important for both permanent employees and contractors. Safety incidents occur regularly in the Commodity Chemicals industry. These have led to production disruptions from explosions, loss of revenue-generating opportunities, litigation from affected employees or their families, fines and penalties for safety violations, and reputational damage. Moreover, long-term respiratory illnesses from the exposure to chemical substances can lead to ongoing legal liabilities. The industry is required to adhere to specific employee health and safety standards in manufacturing, including regulations that address process safety and chemical storage, with a particular focus on preventing acute health and safety hazards. Companies with a large workforce and manufacturing operations in emerging markets – where the enforcement of occupational health and safety standards tends to be lower – are more exposed to risks, as companies must rely more fully on internal controls to detect safety hazards that could result in severe incidents. A strong safety culture and a thorough, systematic approach to safety, risk management (including emergency preparedness and response), and operational integrity are essential to avoiding accidents and maintaining workforce productivity.

The company's exposure to Occupational Health and Safety issues is medium and similar to the subindustry exposure.

Exposure Analysis

Subindustry Issue Exposure	6.0
Issue Beta	x 1.00
Company Issue Exposure	6.0

Beta Indicators

Beta Signal

Occupational Health and Safety	0.00
Operating Performance	0.00
Solvency	0.00
Financial Flexibility	0.00
Asset Performance	0.00
Headquarters Location	0.00
Assets Location	0.00
Qualitative Overlay	0.00
Subindustry Correction Factor	0.00
Exceptional Event Adjustment	0.00
Total Beta Signal	0.00
Baseline	+1.00
Overall Beta	1.00

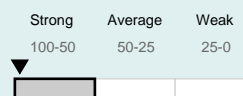
SCG Chemicals PCL

Commodity Chemicals Thailand


Management refers to how well a company is managing its relevant ESG issues. The management score assesses the robustness of a company's ESG programs, practices, and policies.

ESG Risk Management

96.9
Strong



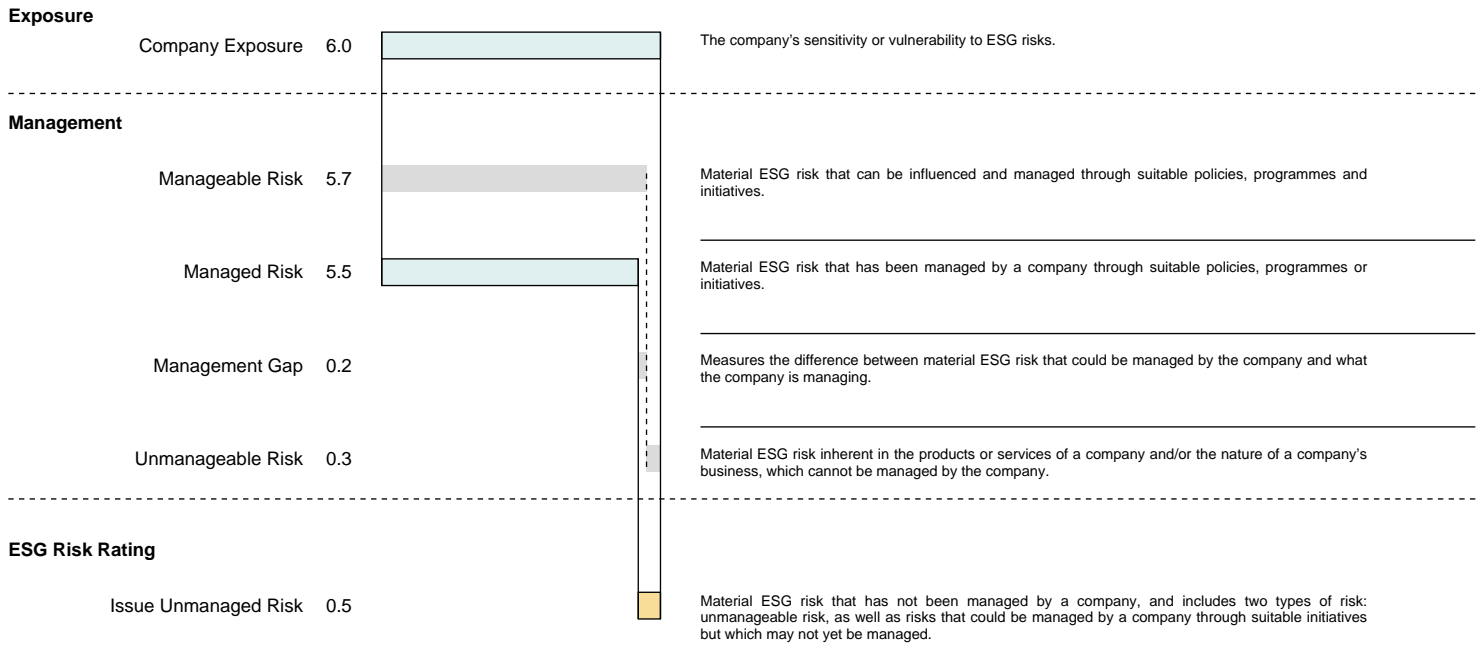
In our view, the company's management of the issue is above average.

Management Indicators	Raw Score	Weight	Weighted Score
Contractor Safety Programme	100	12.5%	12.5
Employee Fatality Rate	100	12.5%	12.5
Health & Safety Certifications	100	12.5%	12.5
Health and Safety Management	100	37.5%	37.5
LTIR Trend	100	12.5%	12.5
Contractor Fatalities	75	12.5%	9.4
 Occupational Health and Safety	Category 0	0%	0.0
Weighted Sum			96.9

SCG Chemicals PCL

Commodity Chemicals Thailand

Risk Decomposition



Appendix



Management Details



Corporate Governance

Board/Management Quality & Integrity

40 Underperformer

Raw Score



Our analysis of the quality and integrity of the company's board and management indicates the following key areas of focus for SCG Chemicals Co., Ltd.:

- Zero non-executive directors have relevant industry experience as a public or private company executive however one or more non-executive directors have relevant industry experience as a public company outside director.
 - No non-executive directors with more than one year of tenure own stock and market practice is for directors not to own stock.
 - RPTs are approved by disinterested/independent directors or committee members only and the oversight and review of RPTs raises concerns.
- Overall, SCG Chemicals Co., Ltd. positions itself as an Underperformer with regard to its Board/Management Quality & Integrity compared to peers.

Indicators

Score

Board Experience	0
Governance Controversies	50
Shareholder Engagement and Responsiveness	100
Director Track Record	60
Board Capture	70
Related Party Transactions	20
Director Stock Ownership	0
Executive/Board Misconduct	50
Business Practices Controversies	50

Board Structure

62 Average Performer

Raw Score



In reviewing the company's structural board features, we note the following for SCG Chemicals Co., Ltd.:

- Some directors are nominated by significant/strategic shareholders and all directors are elected by all shareholders.
 - The Chair and CEO roles are separate and the Chair is not independent.
 - There is only one woman on the board and the company has disclosed a formulaic or non-material diversity policy for its board membership.
- Overall, SCG Chemicals Co., Ltd. positions itself as an Average Performer with regard to its Board Structure compared to peers.

Indicators

Score

Board Leadership	40
Board Tenure	70
Board Independence	50
Nominating Committee Effectiveness	60
Director Disclosure	100
Voting Structures	50
Directors not Elected by Shareholders	30
Risk Oversight	100
Board Diversity	40

Ownership & Shareholder Rights

55 Average Performer

Raw Score



SCG Chemicals Co., Ltd.'s Ownership & Shareholder rights regime includes the following key areas of focus:

- Not all the directors on the board are elected annually.
 - The company has a controlling shareholder and a supermajority is required for charter/bylaw amendments, according to market regulations.
 - There is a controlling shareholder with 50% or more of voting rights and the dominant shareholder is an investor with board representation.
- Overall, SCG Chemicals Co., Ltd. positions itself as an Average Performer with regard to its Ownership & Shareholder Rights compared to peers.

Indicators

Score

Director Appointment & Removal	30
Proportionality - One Share/One Vote	60
Ownership Structure	50
Capital Issuance Risks	60
Shareholder Action	60
Poison Pill & Takeover Defences	80
Supermajority Provisions	50

Appendix



Management Details

Remuneration

31 Underperformer

Raw Score



Our analysis of executive compensation practices at SCG Chemicals Co., Ltd. points to the following:

- CEO remuneration amounts are not disclosed and remuneration amounts are disclosed as an aggregate for executives of the company.
- There are other features of the remuneration programme that misalign pay with performance and there is insufficient disclosure to determine the proportion of variable pay in the CEO's remuneration.
- Shareholders have no vote on (prospective) remuneration policy and shareholders have no vote on the remuneration report or retrospective pay decisions.

Overall, SCG Chemicals Co., Ltd. positions itself as an Underperformer with regard to its Remuneration compared to peers.

Indicators	Score
Remuneration Disclosure	0
CEO Termination Scenarios	80
Internal Pay Equity	50
Clawback Policy	70
Remuneration Committee Effectiveness	20
Say on Pay	0
Pay Controversies	50
STI Performance Metrics	50
LTI Performance Metrics	50
Pay Magnitude	50
Pay for Performance	0
Pay for Failure	60

Audit & Financial Reporting

66 Outperformer

Raw Score



In reviewing the company's Audit & Financial reporting features, we note the following for SCG Chemicals Co., Ltd.:

- There is no disclosure regarding audit committee meetings and there is at least one independent member of the audit committee with financial expertise.
- The audit committee is entirely independent and audit committee independence meets market standards.
- The company has a policy to rotate or re-tender the audit mandate and there is a market requirement to periodically re-tender or rotate the audit mandate.

Overall, SCG Chemicals Co., Ltd. positions itself as an Outperformer with regard to its Audit & Financial Reporting compared to peers.

Indicators	Score
Audit Committee Structure	70
Audit Committee Effectiveness	80
Auditor Fees	50
Audit Rotation Policy	70
Auditor Change	50
Reporting Irregularities	50

Stakeholder Governance

75 Leader

Raw Score



In reviewing the company's practices regarding ESG stakeholder governance, points of attention for SCG Chemicals Co., Ltd. are: ESG Governance, Discrimination Policy and Environmental Policy.

- ESG Governance: A board member or a board committee is responsible for overseeing ESG issues
- Discrimination Policy: The company has a strong policy
- Environmental Policy: The company has a very strong policy

Indicators	Score
ESG Governance	100
Environmental Policy	100
Whistleblower Programmes	75
Tax Disclosure	100
Discrimination Policy	100
Scope of Social Supplier Standards	50
GHG Reduction Programme	75
Green Procurement Policy	100
ESG Reporting Standards	75
Verification of ESG Reporting	50
Global Compact Signatory	0
ESG Performance Targets	25
Political Involvement Policy	75
Lobbying and Political Expenses	100
Bribery & Corruption Policy	75

Appendix

Exposure Details



Carbon - Own Operations

EA.E.15 - Energy Use and GHG Emissions

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.F.1 - Operating Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.F.2 - Solvency

0.00
Beta Signal

Data for this company is not yet available.

EA.F.3 - Financial Flexibility

0.00
Beta Signal

Data for this company is not yet available.

EA.F.4 - Asset Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.P.1 - Carbon Emissions

0.15
Beta Signal

The company's carbon emissions intensity indicates higher exposure to this issue
SCG Chemicals Co., Ltd. Sustainability Report 2021

EA.S.1 - Qualitative Overlay

0.00
Beta Signal

The analyst did not apply a qualitative overlay.

EA.S.2 - Subindustry Correction Factor

- 0.06
Beta Signal

Appendix



Exposure Details

EA.S.3 - Exceptional Event Adjustment

0.00

Beta Signal

Appendix



Management Details

E.1.1 - Environmental Policy

100	5.00%	5.0
Raw Score	Weight	Weighted Score

The company has a very strong policy

Criteria

- Approved by senior management or the board of directors
- Commitment to consult with stakeholders on environmental issues
- Commitment to create environmental awareness
- Commitment to environmental protection
- Commitment to implement an environmental management system
- Commitment to monitor the company's environmental performance
- Commitment to reduce emissions, releases and waste
- Commitment to report regularly on environmental issues
- Commitment to use natural resources or energy more efficiently

Sources

SCG Chemicals Code of Conduct, released April 2022
 SCG Chemicals Environment and Climate Policy, released April 2022

E.1.2 - Environmental Management System

100	5.00%	5.0
Raw Score	Weight	Weighted Score

The company has a very strong EMS

SCG Chemicals discloses that, for FY2021, 100% of its subsidiaries were certified in accordance with ISO 14001 standard. This assures that a very strong company-wide environmental management system is implemented.

Criteria

- Assigned roles and responsibilities
- Compliance with environmental regulation
- Corrective actions to stimulate continual improvement
- Environmental performance records
- Environmental programmes
- External environmental audits
- Identification of products, activities and services that have significant impacts on the environment
- Internal and external communications on environmental management issues
- Internal environmental audits
- Managerial or board level responsibility for environmental issues
- Monitoring and measurement
- Objectives, targets and deadlines
- Training and awareness programmes for employees

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)

E.1.3 - EMS Certification

100	5.00%	5.0
Raw Score	Weight	Weighted Score

90% or more of the company's activities have received external certification

SCG Chemicals discloses that, for FY2021, 100% of its subsidiaries were certified in accordance with ISO 14001 standard.

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)

E.1.6 - Scope of GHG Reporting

100	5.00%	5.0
Raw Score	Weight	Weighted Score

The company discloses emissions data in full

Criteria

- Based on available evidence, the company does not disclose any GHG emissions
- The company discloses scope 1 emissions
- The company discloses scope 2 emissions
- The company discloses scope 3 emissions as a total
- The company discloses scope 3 emissions with category split
- The company only discloses total emissions, without disclosing by emission scope

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)
 The company provided feedback on 16 June 2022

Appendix



Management Details

E.1.6.1 - GHG Risk Management

50	12.50%	6.3
Raw Score	Weight	Weighted Score

The company has an adequate risk management programme

Criteria

- Board level responsibility for climate-related transition risk
- Climate-related responsibilities to management level positions or committees
- Description of the impact of climate change related transition risks including downside risks and opportunities on business strategy and financial planning
- Description of the resilience of the strategy, taking into account different climate scenarios -qualitatively relating to previously disclosed transition risks and opportunities
- Description of the resilience of the strategy, taking into account different climate scenarios -utilising quantitative scenario analysis -relating to previously disclosed transition risks and opportunities
- Management embeds and integrates transition risk into wider business processes and procedures
- Organisational responsibility for climate-related transition risk
- Prioritisation of adaptation and mitigation plans and measures associated with transition risks, with integration into business and financial planning including Capex spent and/or R
- Recognition and description of climate change related transition risks including downside risks and opportunities identified by the organisation over the short, medium and long term
- There is no reporting available yet, but the company does have a commitment to report on any of the above over the next three years

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)
 The company provided feedback on 16 June 2022
 The company provided feedback on 25 June 2022

E.1.7.0 - GHG Reduction Programme

75	17.50%	13.1
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- Adoption of key mitigation technologies
- Demonstration of how initiatives put in place close the emissions gap between current performance and the targeted emissions reduction
- Emissions reduction coverage
- GHG emissions monitoring and measurement
- GHG reduction target
- Initiatives are linked to wider TCFD reporting
- Initiatives in place to reduce emissions
- Interim targets
- Net Zero and Science Alignment
- Regular GHG audits or verification

Sources

SCG Chemicals Code of Conduct, released April 2022
 SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)

E.1.7.1 - Green Logistics Programmes

100	10.00%	10.0
Raw Score	Weight	Weighted Score

The company has a strong and detailed programme to improve the environmental performance of its logistics and its fleet management

Sources

SCG Chemicals Sustainability Report 2021 (FY2021)
 The company provided feedback on 16 June 2022

E.1.8 - Renewable Energy Programmes

100	10.00%	10.0
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- The company has a formal programme which covers less than 50% of operations
- The company has a formal programme which covers more than 50% of operations
- The company has a target with a deadline to increase renewable energy use
- There are a clear set of initiatives in place to aid in the use of renewable energy
- The use of renewable energy is solely via the use of corporate or other direct wire PPAs, green tariff energy, and renewable integrated grid
- The use of renewable energy is solely via the use of decentralized or embedded site renewables, or offsite company-funded renewable energy projects

Appendix



Management Details

- The use of renewable energy is solely via the use of Virtual Power Purchase Agreements (VPPAs) and other market instruments of this type (for example RECs/ROCs), or other mechanisms which facilitate wider use of renewable energy, but are not direct wire nor offsetting mechanisms
- The use of renewable energy is via a combination of the above

Sources

SCG Chemicals Sustainability Report 2021 (FY2021)
 The company provided feedback on 25 June 2022

E.1.9 - Carbon Intensity

0	12.50%	0.0
Raw Score	Weight	Weighted Score

The company's carbon emissions intensity is well above the industry median

SCG Chemicals Co., Ltd. Sustainability Report 2021

	2020
Industry Median	304.9
Carbon Intensity (t/million USD)	820

E.1.10 - Carbon Intensity Trend

25	12.50%	3.1
Raw Score	Weight	Weighted Score

The company's carbon intensity trend shows an increase of between 10% and 25% over the last 3 years

SCG Chemicals Co., Ltd. Sustainability Report 2021

	2020
Carbon Intensity Trend (%)	12.3

E.1.11 - Renewable Energy Use

20	5.00%	1.0
Raw Score	Weight	Weighted Score

Some portion of the company's primary energy use comes from renewable energy sources or less than 5%

In FY2021, less than 1% of total energy used by SCG Chemicals came from renewable sources.

Sources

SCG Chemicals Sustainability Report 2021 (FY2021)

Appendix

Exposure Details



E&S Impact of Products and Services

EA.E.17 - Environmental Impact of Products

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.E.32 - Social Impact of Products

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.F.1 - Operating Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.F.2 - Solvency

0.00
Beta Signal

Data for this company is not yet available.

EA.F.3 - Financial Flexibility

0.00
Beta Signal

Data for this company is not yet available.

EA.F.4 - Asset Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.G.1 - Headquarters Location

0.00
Beta Signal

Data for this company is not yet available.

EA.G.3 - Sales Location

0.00
Beta Signal

Data for this company is not yet available.

EA.S.1 - Qualitative Overlay

0.00
Beta Signal

The analyst did not apply a qualitative overlay.

EA.S.2 - Subindustry Correction Factor

0.00
Beta Signal

Appendix



Exposure Details

EA.S.3 - Exceptional Event Adjustment

0.00

Beta Signal

Appendix



Management Details

E.2.1 - Green Procurement Policy

100	15.00%	15.0
Raw Score	Weight	Weighted Score

The company's green procurement initiatives are strong

Criteria

- Engagement with suppliers to improve environmental performance
- Policy addressing process related requirements
- Policy addressing product related requirements
- Policy or initiatives addressing office products

Sources

SCG Chemicals Environment and Climate Policy, released April 2022
 SCG Chemicals Green Procurement Guidelines, released May 2004
 SCG Chemicals Sustainability Report 2021 (FY2021)
 The company provided feedback on 16 June 2022

E.3.1.1 - Sustainable Products & Services

100	30.00%	30.0
Raw Score	Weight	Weighted Score

Between 25% and 49.99% of the company's annual revenue is derived from sustainability-related products or services

SCG Chemicals offers its "SCG Green Choice" range, "which includes three qualities: 1) energy conservation and reduction of global warming, 2) natural resource conservation and lifespan extension, and 3) promotion of well-being". Examples include, among others, energy-saving coating materials for industrial furnaces, and pontoons for total solution solar floating farms. The company discloses that 49% of its FY2021 revenue was derived from this range.

Sources

SCG Chemicals Sustainability Report 2021 (FY2021)

E.3.1.16 - Hazardous Products

100	25.00%	25.0
Raw Score	Weight	Weighted Score

There is no evidence of the company offering this kind of products

Sources

CHEMSEC, www.chemsec.org; accessed 25 May 2022

E.3.1.19 - Hazardous Substances Management

50	30.00%	15.0
Raw Score	Weight	Weighted Score

The company has an adequate programme

Criteria

- Monitoring, measurement and reporting of hazardous substance management performance
- Objectives or targets to improve the management of substances of high concern
- Policy commitment to assess safer alternatives for hazardous substances of concern and promote their substitution
- Procedures in place to identify, review and manage the hazardous substances used in the company's products
- The company has activities in place to reduce or phase out hazardous substances from its products

Sources

The company provided feedback on 16 June 2022

Appendix

Exposure Details



Business Ethics

EA.E.2 - Accounting and Taxation

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.E.3 - Animal Welfare

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.E.4 - Anti-Competitive Practices

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.E.6 - Bribery and Corruption

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.E.7 - Business Ethics

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.E.21 - Intellectual Property

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.E.23 - Lobbying and Public Policy

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.E.30 - Sanctions

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.E.48 - Society - Human Rights

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.F.1 - Operating Performance

0.00
Beta Signal

Data for this company is not yet available.

Appendix



Exposure Details

EA.F.2 - Solvency

0.00
Beta Signal

Data for this company is not yet available.

EA.F.3 - Financial Flexibility

0.00
Beta Signal

Data for this company is not yet available.

EA.F.4 - Asset Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.S.1 - Qualitative Overlay

0.00
Beta Signal

The analyst did not apply a qualitative overlay.

EA.S.2 - Subindustry Correction Factor

0.00
Beta Signal

EA.S.3 - Exceptional Event Adjustment

0.00
Beta Signal

Appendix



Management Details

G.1.1 - Bribery & Corruption Policy

75	12.50%	9.4
Raw Score	Weight	Weighted Score

The company has a strong policy

Criteria

- Definition and prohibition of facilitation payments
- Definition of bribery or corruption
- Definition of conflicts of interest and commitment to minimize these
- Guidelines of what is considered acceptable behaviour
- Prohibition of bribery
- There is no evidence of a formal policy but the company has a general statement addressing the issue

Sources

Prior to research start, the company sent documents/comments on 16 May 2022
 SCG Chemicals Anti-Corruption Policy, released April 2022
 SCG Chemicals Code of Conduct, released April 2022
 The company provided feedback on 16 June 2022
 The company provided feedback on 25 June 2022
 The updated ESG Report was sent by email to SCG Chemicals on 31 May 2022

G.1.2 - Whistleblower Programmes

75	25.00%	18.8
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- An independent, reporting hotline available 24/7
- Available in local languages
- Available to suppliers, customers and other third parties
- Disclosure on the number of reports received, the types of misconduct and measures taken
- Non-retaliation policy
- Possibility for anonymous reporting and reports are treated confidentially
- Proactively communicated to employees
- Structures in place to process whistleblower reports

Sources

Prior to research start, the company sent documents/comments on 16 May 2022
 SCG Chemicals Code of Conduct, released April 2022
 SCG Chemicals Whistleblower Policy, released April 2022
 SCG Group Annual Report 2021 (FY2021)
 The company provided feedback on 16 June 2022

G.1.4.3 - Animal Testing Policy

100	10.00%	10.0
Raw Score	Weight	Weighted Score

The company's products are not tested on animals

SCG Chemicals confirmed, through feedback provided in June 2022, that the company has no business-segment related to, or that requires, animal testing.

Criteria

- Commitment not to use animal testing except where legally required
- Commitment to reduce animal testing
- Commitment to refine animal testing
- Commitment to replace animal testing
- Reference to best practice standards or commitment to seek animal testing certification
- The company does not conduct animal testing

Sources

The company provided feedback on 16 June 2022

G.1.4.3.1 - Animal Testing Programme

100	20.00%	20.0
Raw Score	Weight	Weighted Score

The company does not conduct animal testing

SCG Chemicals confirmed, through feedback provided in June 2022, that the company has no business-segment related to, or that requires, animal testing.

Criteria

- Initiatives to reduce animal testing
- Initiatives to refine animal testing
- Initiatives to replace animal testing
- Managerial or board responsibility for overseeing animal testing
- Regular audits of animal testing practices
- Reporting on animal testing issues
- The company does not conduct animal testing

Sources

The company provided feedback on 16 June 2022

Appendix



Management Details

G.3.1 - Political Involvement Policy

75	17.50%	13.1
Raw Score	Weight	Weighted Score

The company has an adequate policy

Criteria

- Approved by senior management
- Commits the company to disclose political donations and/or lobbying expenditures
- Partially prohibits political involvement
- Prohibits political involvement of any kind on the company's behalf

Sources

SCG Chemicals Anti-Corruption Policy, released April 2022
 SCG Chemicals Code of Conduct, released April 2022

G.3.2 - Lobbying and Political Expenses

100	15.00%	15.0
Raw Score	Weight	Weighted Score

The company states that it does not make political contributions or political spending

Sources

LobbyFacts, www.lobbyfacts.eu; accessed 25 May 2022
 OpenSecrets, www.opensecrets.org; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)

Appendix

Exposure Details



Resource Use

EA.E.33 - Water Use

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.F.1 - Operating Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.F.2 - Solvency

0.00
Beta Signal

Data for this company is not yet available.

EA.F.3 - Financial Flexibility

0.00
Beta Signal

Data for this company is not yet available.

EA.F.4 - Asset Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.G.5 - Regional Water Stress

0.00
Beta Signal

Data for this company is not yet available.

EA.S.1 - Qualitative Overlay

0.00
Beta Signal

The analyst did not apply a qualitative overlay.

EA.S.2 - Subindustry Correction Factor

0.00
Beta Signal

EA.S.3 - Exceptional Event Adjustment

0.00
Beta Signal

Appendix



Management Details

E.1.1 - Environmental Policy

100	2.50%	2.5
Raw Score	Weight	Weighted Score

The company has a very strong policy

Criteria

- Approved by senior management or the board of directors
- Commitment to consult with stakeholders on environmental issues
- Commitment to create environmental awareness
- Commitment to environmental protection
- Commitment to implement an environmental management system
- Commitment to monitor the company's environmental performance
- Commitment to reduce emissions, releases and waste
- Commitment to report regularly on environmental issues
- Commitment to use natural resources or energy more efficiently

Sources

SCG Chemicals Code of Conduct, released April 2022
 SCG Chemicals Environment and Climate Policy, released April 2022

E.1.2 - Environmental Management System

100	10.00%	10.0
Raw Score	Weight	Weighted Score

The company has a very strong EMS

SCG Chemicals discloses that, for FY2021, 100% of its subsidiaries were certified in accordance with ISO 14001 standard. This assures that a very strong company-wide environmental management system is implemented.

Criteria

- Assigned roles and responsibilities
- Compliance with environmental regulation
- Corrective actions to stimulate continual improvement
- Environmental performance records
- Environmental programmes
- External environmental audits
- Identification of products, activities and services that have significant impacts on the environment
- Internal and external communications on environmental management issues
- Internal environmental audits
- Managerial or board level responsibility for environmental issues
- Monitoring and measurement
- Objectives, targets and deadlines
- Training and awareness programmes for employees

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)

E.1.2.7 - Water Intensity

100	15.00%	15.0
Raw Score	Weight	Weighted Score

The company's water intensity is well below the industry median

SCG Chemicals Co., Ltd. Sustainability Report 2021

	2020
Water Intensity (cubic meters/million)	5318
Industry Median	7297

E.1.2.7.1 - Water Risk Management

100	20.00%	20.0
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- Detailed reporting on risks posed by water scarcity or their absence
- Integration of water scarcity into regular risk assessments and business strategy
- Managerial or board level responsibility for addressing risks posed by water scarcity
- Participation in relevant multistakeholder or industry initiatives
- Recognition of the risks posed by water scarcity or the absence of such risks
- Reporting on contextualized water metrics

Sources

SCG Chemicals Corporate Website, Governance & Economy, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)
 The company provided feedback on 25 June 2022

Appendix



Management Details

E.1.2.7.2 - Water Intensity Trend

25	10.00%	2.5
Raw Score	Weight	Weighted Score

The water intensity of the company has increased significantly, compared to the previous three-year average

SCG Chemicals Co., Ltd. Sustainability Report 2021

	2020
Water Intensity Trend	12.3

E.1.3 - EMS Certification

100	2.50%	2.5
Raw Score	Weight	Weighted Score

90% or more of the company's activities have received external certification

SCG Chemicals discloses that, for FY2021, 100% of its subsidiaries were certified in accordance with ISO 14001 standard.

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022

SCG Chemicals Sustainability Report 2021 (FY2021)

E.1.3.4 - Water Management Programmes

100	30.00%	30.0
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- Initiatives to reduce fresh water use
- Managerial responsibility for water use
- Policy commitment to reduce water use
- Water reduction targets and deadlines
- Water use monitoring and measurement
- Water use reporting

Sources

SCG Chemicals Code of Conduct, released April 2022

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022

SCG Chemicals Environment and Climate Policy, released April 2022

SCG Chemicals Sustainability Report 2021 (FY2021)

SCG Chemicals Sustainable Development Policy, released April 2022

E.1.6.2 - Physical Climate Risk Management

100	10.00%	10.0
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- Detailed reporting on physical climate change risk drivers
- Initiatives to manage or adapt to physical climate change risks
- Integration of physical climate change into regular risk assessments and business strategy
- Managerial or board level responsibility for climate change risks
- Recognition of the physical risks related to climate change

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022

The company provided feedback on 16 June 2022

The company provided feedback on 25 June 2022

Appendix

Exposure Details



Emissions, Effluents and Waste

EA.E.14 - Emissions, Effluents and Waste

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.F.1 - Operating Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.F.2 - Solvency

0.00
Beta Signal

Data for this company is not yet available.

EA.F.3 - Financial Flexibility

0.00
Beta Signal

Data for this company is not yet available.

EA.F.4 - Asset Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.G.1 - Headquarters Location

0.00
Beta Signal

Data for this company is not yet available.

EA.G.2 - Assets Location

0.00
Beta Signal

Data for this company is not yet available.

EA.P.18 - NOx Emissions

- 0.10
Beta Signal

The company's NOx intensity indicates moderately lower exposure to this issue.

SCG Chemicals Co., Ltd. Sustainability Report 2021

Appendix

Exposure Details

EA.P.19 - SOx Emissions

- 0.10
Beta Signal

The company's SOx intensity indicates moderately lower exposure to this issue.

SCG Chemicals Co., Ltd. Sustainability Report 2021

EA.S.1 - Qualitative Overlay

0.00
Beta Signal

The analyst did not apply a qualitative overlay.

EA.S.2 - Subindustry Correction Factor

0.05
Beta Signal

EA.S.3 - Exceptional Event Adjustment

0.00
Beta Signal

Appendix



Management Details

E.1.1 - Environmental Policy

100	7.50%	7.5
Raw Score	Weight	Weighted Score

The company has a very strong policy

Criteria

- Approved by senior management or the board of directors
- Commitment to consult with stakeholders on environmental issues
- Commitment to create environmental awareness
- Commitment to environmental protection
- Commitment to implement an environmental management system
- Commitment to monitor the company's environmental performance
- Commitment to reduce emissions, releases and waste
- Commitment to report regularly on environmental issues
- Commitment to use natural resources or energy more efficiently

Sources

SCG Chemicals Code of Conduct, released April 2022
 SCG Chemicals Environment and Climate Policy, released April 2022

E.1.2 - Environmental Management System

100	7.50%	7.5
Raw Score	Weight	Weighted Score

The company has a very strong EMS

SCG Chemicals discloses that, for FY2021, 100% of its subsidiaries were certified in accordance with ISO 14001 standard. This assures that a very strong company-wide environmental management system is implemented.

Criteria

- Assigned roles and responsibilities
- Compliance with environmental regulation
- Corrective actions to stimulate continual improvement
- Environmental performance records
- Environmental programmes
- External environmental audits
- Identification of products, activities and services that have significant impacts on the environment
- Internal and external communications on environmental management issues
- Internal environmental audits
- Managerial or board level responsibility for environmental issues
- Monitoring and measurement
- Objectives, targets and deadlines
- Training and awareness programmes for employees

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)

E.1.2.6.3 - Effluent Management

100	20.00%	20.0
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- Incident investigation and corrective action
- Initiatives to reduce, reuse or recycle effluents
- Monitoring and measurement of effluent and effluent management
- Objectives or targets related to effluent management
- Policy commitment to manage or reduce effluents
- Reporting on effluent issues

Sources

Prior to research start, the company sent documents/comments on 16 May 2022
 SCG Chemicals Code of Conduct, released April 2022
 SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)
 SCG Group Environmental Management Framework, released July 2021

E.1.3 - EMS Certification

100	7.50%	7.5
Raw Score	Weight	Weighted Score

90% or more of the company's activities have received external certification

SCG Chemicals discloses that, for FY2021, 100% of its subsidiaries were certified in accordance with ISO 14001 standard.

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)

Appendix



Management Details

E.1.3.1 - Emergency Response Programme

100	12.50%	12.5
Raw Score	Weight	Weighted Score

The company has a very strong programme

Criteria

- Company-wide guidelines on how to prepare for and respond to emergencies
- Emergency training for employees or communities, including regular testing of the emergency response plans
- Identification of potential risks requiring emergency response
- Managerial responsibility for emergency preparedness, response and investigation
- Mechanisms for stakeholders to report emergencies
- Policy commitment to prepare for and respond to emergencies
- Protocols for communicating with external stakeholders
- Regional, site or unit level emergency response teams in place

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)
 The company provided feedback on 16 June 2022

E.1.3.2 - Hazardous Waste Management

100	20.00%	20.0
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- Commitment to reduce hazardous waste
- Initiatives to reduce hazardous waste
- Monitoring and measurement
- Targets and deadlines

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)
 The company provided feedback on 25 June 2022

E.1.3.3 - Non-GHG Air Emissions Programmes

100	20.00%	20.0
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- Commitment to reduce non-GHG air emissions
- Deadlines to reduce non-GHG air emissions
- Identification of relevant non-GHG air emissions
- Initiatives to reduce non-GHG air emissions
- Non-GHG air emission monitoring
- Targets to reduce non-GHG air emissions

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)
 The company provided feedback on 16 June 2022

E.1.6.2 - Physical Climate Risk Management

100	5.00%	5.0
Raw Score	Weight	Weighted Score

The company has a strong programme

Criteria

- Detailed reporting on physical climate change risk drivers
- Initiatives to manage or adapt to physical climate change risks
- Integration of physical climate change into regular risk assessments and business strategy
- Managerial or board level responsibility for climate change risks
- Recognition of the physical risks related to climate change

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 The company provided feedback on 16 June 2022
 The company provided feedback on 25 June 2022

Appendix

Exposure Details



Occupational Health and Safety

EA.E.20 - Occupational Health and Safety

0.00
Beta Signal

The company is not involved in any controversies of this type.

EA.F.1 - Operating Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.F.2 - Solvency

0.00
Beta Signal

Data for this company is not yet available.

EA.F.3 - Financial Flexibility

0.00
Beta Signal

Data for this company is not yet available.

EA.F.4 - Asset Performance

0.00
Beta Signal

Data for this company is not yet available.

EA.G.1 - Headquarters Location

0.00
Beta Signal

Data for this company is not yet available.

EA.G.2 - Assets Location

0.00
Beta Signal

Data for this company is not yet available.

EA.S.1 - Qualitative Overlay

0.00
Beta Signal

The analyst did not apply a qualitative overlay.

EA.S.2 - Subindustry Correction Factor

0.00
Beta Signal

EA.S.3 - Exceptional Event Adjustment

0.00
Beta Signal

Appendix



Management Details

S.1.6.2.1 - Health and Safety Management System

100	37.50%	37.5
Raw Score	Weight	Weighted Score

The company has a very strong management system

SCG Chemicals discloses that, for FY2021, 100% of its subsidiaries were certified with OHSAS/TIS 18001/ISO 45001 Occupational Health and Safety Management Certification. This assures that a very strong company-wide health and safety management system is implemented.

Criteria

- Emergency preparedness procedures
- Formal health and safety policy commitment
- Internal or external health and safety audits conducted at least every three years
- Managerial responsibility for health and safety issues
- Operating guidelines or procedures that are relevant for the industry
- Performance monitoring and measurement
- Procedures for hazard identification and risk assessment
- Regular health and safety training programmes for employees
- Reporting on health and safety programmes and performance
- Targets to reduce health and safety incidents

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)

S.1.6.4 - Health & Safety Certifications

100	12.50%	12.5
Raw Score	Weight	Weighted Score

90% or more of the company's facilities have received external certification

SCG Chemicals discloses that, for FY2021, 100% of its subsidiaries were certified with OHSAS/TIS 18001/ISO 45001 Occupational Health and Safety Management Certification.

Sources

SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
 SCG Chemicals Sustainability Report 2021 (FY2021)

S.1.6.5 - LTIR Trend

100	12.50%	12.5
Raw Score	Weight	Weighted Score

The company's lost-time incident rate has declined

SCG Chemicals reports on its Lost Time Injury Frequency Rate (cases/1,000,000 hours worked) for its employees for the period between FY2018-2021:
 FY2021: 0
 FY2020: 0
 FY2019: 0
 FY2018: 0.059
 The company's LTIFR in FY2021 decreased by 100% in comparison to the average of the past three years (0.02).

Sources

SCG Chemicals Sustainability Report 2021 (FY2021)

S.1.6.6 - Employee Fatality Rate

100	12.50%	12.5
Raw Score	Weight	Weighted Score

No fatalities have occurred in the last three years

Sources

SCG Chemicals Sustainability Report 2021 (FY2021)

Appendix



Management Details

S.2.2.5 - Contractor Safety Programme

Raw Score	Weight	Weighted Score
100	12.50%	12.5

The company has a very strong programme

Criteria

- Compliance with safety guidelines included in contractual agreements.
- Monitoring of contractor safety performance
- Objectives or targets regarding contractor safety
- Operating guidelines on contractor safety management
- Policy commitment to protect the safety of contractors
- Prescreening of contractors for safety performance and risks
- Reporting on contractor safety management
- Safety training for contractors

Sources

- SCG Chemicals Code of Conduct, released April 2022
- SCG Chemicals Corporate Website, Environment, www.scgchemicals.com; accessed 25 May 2022
- SCG Chemicals Corporate Website, Society, www.scgchemicals.com; accessed 25 May 2022
- SCG Chemicals Sustainability Report 2021 (FY2021)
- The company provided feedback on 16 June 2022

S.2.2.6 - Contractor Fatalities

Raw Score	Weight	Weighted Score
75	12.50%	9.4

Between 1 and 4 fatalities have occurred among contractors in the last three years

SCG Chemicals reports the following fatalities amongst its own contractors:
 FY2021: 3
 FY2020: 0
 FY2019: 0

Sources

- SCG Chemicals Sustainability Report 2021 (FY2021)

SCG Chemicals PCL

Commodity Chemicals Thailand

GLOSSARY OF TERMS

Beta (Beta, β)






A factor that assesses the degree to which a company's exposure deviates from its **subindustry's** exposure on a **material ESG issue**. It is used to derive a company-specific issue exposure score for a material ESG issue. It ranges from 0 to 10, with 0 indicating no exposure, 1 indicating the subindustry average, and 10 indicating exposure that is ten times the subindustry average.

Corporate Governance Pillar

A pillar provides a signal about a company's management of a specific Corporate Governance issue.

ESG Risk Category

Companies' **ESG Risk Rating scores** are assigned to five ESG risk categories in the **ESG Risk Rating**:

-  **Negligible risk:** enterprise value is considered to have a negligible risk of material financial impacts driven by ESG factors
-  **Low risk:** enterprise value is considered to have a low risk of material financial impacts driven by ESG factors
-  **Medium risk:** enterprise value is considered to have a medium risk of material financial impacts driven by ESG factors
-  **High risk:** enterprise value is considered to have a high risk of material financial impacts driven by ESG factors
-  **Severe risk:** enterprise value is considered to have a severe risk of material financial impacts driven by ESG factors

Note that because ESG risks materialize at an unknown time in the future and depend on a variety of unpredictable conditions, no predictions on financial or share price impacts, or on the time horizon of such impacts, are intended or implied by these risk categories.

ESG Risk Rating Score (Unmanaged Risk Score)

The company's final score in the **ESG Risk Rating**; it applies the concept of **risk decomposition** to derive the level of **unmanaged risk** for a company.

Event Category

Sustainalytics categorizes events that have resulted in negative ESG impacts into five event categories: Category 1 (low impact); Category 2 (moderate impact); Category 3 (significant impact); Category 4 (high impact); and Category 5 (severe impact).

Event Indicator

An indicator that provides a signal about a potential failure of management through involvement in controversies.

Excess Exposure

The difference between the company's **exposure** and its **subindustry exposure**.

Exposure

A company or **subindustry's** sensitivity or vulnerability to ESG risks.

Idiosyncratic Issue

An issue that was not deemed material at the **subindustry** level during the **consultation process** but becomes a **material ESG issue** for a company based on the occurrence of a Category 4 or 5 event.

Manageable Risk

Material ESG risk that can be influenced and managed through suitable policies, programmes and initiatives.

Managed Risk

Material ESG Risk that has been managed by a company through suitable policies, programmes and initiatives.

Management

A company's handling of ESG risks.

Management Gap

Refers to the difference between what a company has managed and what a company could possibly manage. It indicates how far the company's performance is from best practice.

Management Indicator

An indicator that provides a signal about a company's management of an ESG issue through policies, programmes or quantitative performance.

Material ESG Issue

A core building block of the **ESG Risk Rating**. An ESG issue is considered to be material within the rating if it is likely to have a significant effect on the enterprise value of a typical company within a given **subindustry**.

Subindustry

Subindustries are defined as part of Sustainalytics' own classification system.

Unmanageable Risk

Material ESG Risk inherent from the intrinsic nature of the products or services of a company and/or the nature of a company's business, which cannot be managed by the company if the company continues to offer the same type of products or services and remains in the same line of business.

Unmanaged Risk

Material ESG risk that has not been managed by a company, and includes two types of risk: **unmanageable risk**, as well as risks that could be managed by a company through suitable initiatives, but which may not yet be managed (**management gap**).

SCG Chemicals PCL

Commodity Chemicals Thailand

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