



2018 ESG INCIDENT REPORT

WHO'S GOOD, PBC

FEBRUARY 2019

TOP 200 KOREAN
LISTED COMPANIES

ABOUT WHO'S GOOD, PBC

Who's Good provides corporate ESG* analysis of listed Korean companies by leveraging public big data and artificial intelligence (AI). Who's Good's main offerings are ESG Performance Analysis, ESG Incident Analysis, and TackleTox. ESG Performance Analysis provides traditional ESG analysis, ESG Incident Analysis delivers analysis of big data-based corporate ESG incidents in real-time, and TackleTox tracks corporate toxic chemical emissions in Korea and the US.

** ESG: Non-financial information of a company with regards to Environmental, Social, and Governance (ESG) criteria that investors use to reduce long-term risks in their investment portfolios.*

Contact us

info@whosgood.org

<http://www.ESGIncident.com>

<http://www.whosgood.org>

<http://www.tackletox.com>

CONTENTS

I. Methodology

II. Summary of 2018 ESG Incidents

III. Companies with the highest ESG risk scores in 2018

1. Korean Air Lines Co., Ltd. (4.7)
2. Samsung Electronics Co., Ltd. (4.7)
3. Samsung C&T Corp. (4.3)
4. KT Corp. (4.2)
5. Lotte Corp. (4.2)
6. SK Holdings Co., Ltd. (3.9)
7. Korea Electric Power Corp. (3.9)
8. Hyundai Motor Co., Ltd. (3.9)
9. Daewoo Shipbuilding & Marine Engineering Co., Ltd. (3.9)
10. Kia Motors Corp. (3.5)

IV. Appendix – Definition of ESG Issues

ESG INCIDENT ANALYSIS

Who's Good ESG Incident Analysis is a real-time corporate ESG risk analysis platform based on incidents reported in news media. The product provides overall corporate risk scores, detailed analysis of each event, as well as access to the original articles to allow the users to gain quick insights into the impact an incident may have on corporate ESG performance. The product also offers a long-term corporate ESG risk trends based on the incident patterns accumulated over the past five years.



HIGH IMPACT INCIDENTS

ESG incidents cause human, natural, financial, political and legal damage to many stakeholders including the company itself.



LONG-TERM TRENDS

The analysis highlights 17 ESG (environmental, social, and governance) issues, and tracks ESG risk for a particular company over time.



DAILY NEWS ANALYSIS

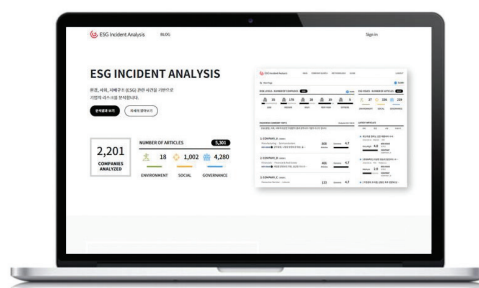
It provides a company's ESG risk score based on our analysis of daily news articles from 93 Korean media sources, covering over 2,000 Korean listed companies. News articles are automatically updated every day.



ROBO-ANALYZED

The automated processes enables Who's Good to analyze 5 million news articles yearly.

**ANALYZE CORPORATE ESG RISK
DAILY FROM NEWS DATA
USING AI ALGORITHMS**



2018 Corporate ESG Incident Analysis Overview

During the analysis period of 1 January until 31 December 2018, 5,223,890 news articles covering 2,210 Korean listed companies were published. Our analysis of corporate non-financial(ESG) incidents found that 189 companies were involved in ESG incidents and 6,058 articles covered the incidents. When broken down into ESG categories, 10 companies were involved in environment issues, whereas 175 and 172 companies were involved in social and corporate governance issues, respectively.

Analysis period	1 January – 31 December 2018
Number of companies analyzed	2, 210
Number of articles used to analyze	5,223,890
Number of companies with ESG incidents	189
Number of articles on ESG incidents	6,058
Number of companies with ESG incidents by category	E: 10, S: 175, G: 172

This report only covers corporate ESG incidents of top 200 listed companies in Korea. The top 200 companies were selected based on the KOSPI 200 Index¹.

¹ The KOSPI 200 Index is a capitalization weighted index of Korean stocks.

I. METHODOLOGY

ESG Incident Analysis uses AI algorithms (machine learning) to extract and analyze data from news articles about ESG incidents, and to score a company's ESG risk level. The entire analysis process is automated using AI and natural language processing (NLP). Based on NLP algorithms, an article depicting an ESG incident is categorized as one of the 17 ESG categories, and its impacts, stakeholders (general, human, environmental, financial, political, and legal) and severity of issue are analyzed. The risk assessment of an incident is based on Risk Assessment Methodology of Due Diligence, and each article is scored using machine learning algorithms.

RISK SCORE

ESG Incident Analysis assesses a company's ESG risks by analyzing the incident's severity, frequency and impacts.

All articles are scored from 0 to 5 based on the severity of risks, and categorized into five levels (Low, Medium, High, Very High, Extreme).

4.6 - 5.0	EXTREME
3.6 - 4.5	VERY HIGH
2.6 - 3.5	HIGH
1.6 - 2.5	MEDIUM
0 - 1.5	LOW

II. SUMMARY OF CORPORATE ESG INCIDENTS OF TOP 200 LISTED COMPANIES IN 2018

Out of the surveyed 200 listed companies, 93 (46.5%) companies were involved in ESG incidents. Of those, 67 companies experienced corporate governance issues, 64 companies were involved in social issues and 8 companies had environmental issues. 4,338 articles in total were written about the ninety-three companies with ESG incidents.

4 out of 10 companies in KRX 200 experienced at least one ESG incident in 2018

The total number of companies embroiled in ESG issues has dropped slightly from the previous year, from 101 in 2017 to 93 in 2018. The article count also fell by 28%, from 6,038 in 2017 to 4,338 in 2018. The surge in 2017 was due to the ongoing trial for the Presidential Scandal in Korea which implicated some Korean conglomerates on bribery charges.

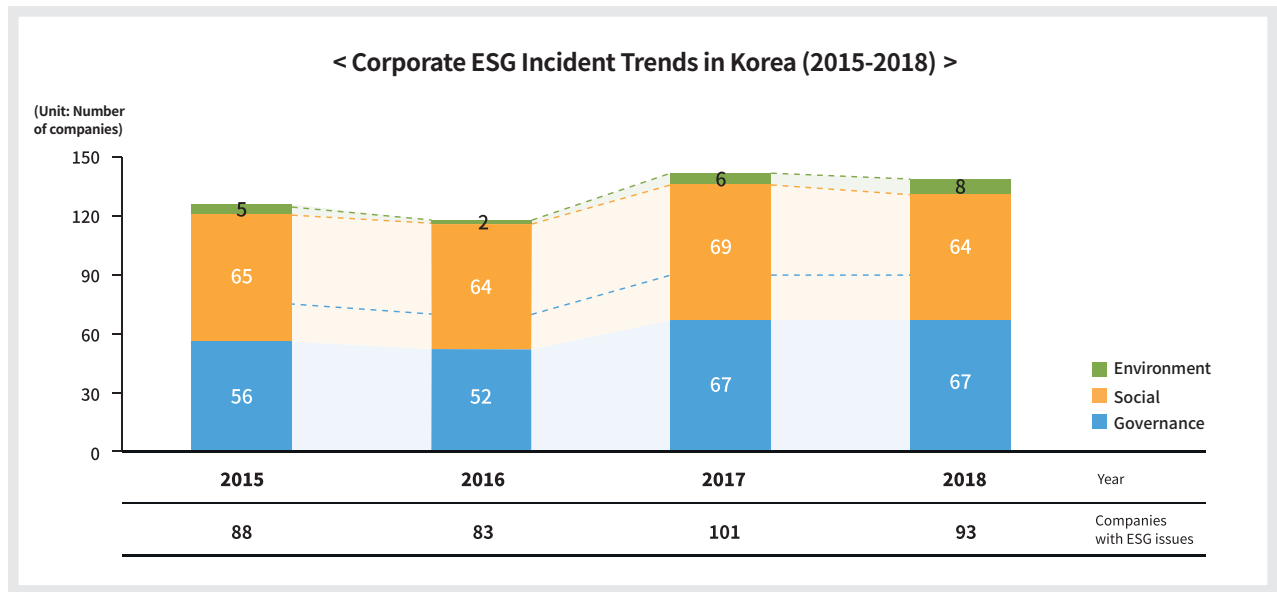
<Summary of Corporate ESG Incidents of Top 200 Listed Companies in 2018>

Number of companies with ESG incidents	93
Number of articles covering ESG incidents	4,338
Companies with the highest ESG incident risk score	Korean Air, Samsung Electronics

NON-FINANCIAL INCIDENTS BEGAN TO GARNER MORE ATTENTION IN 2018

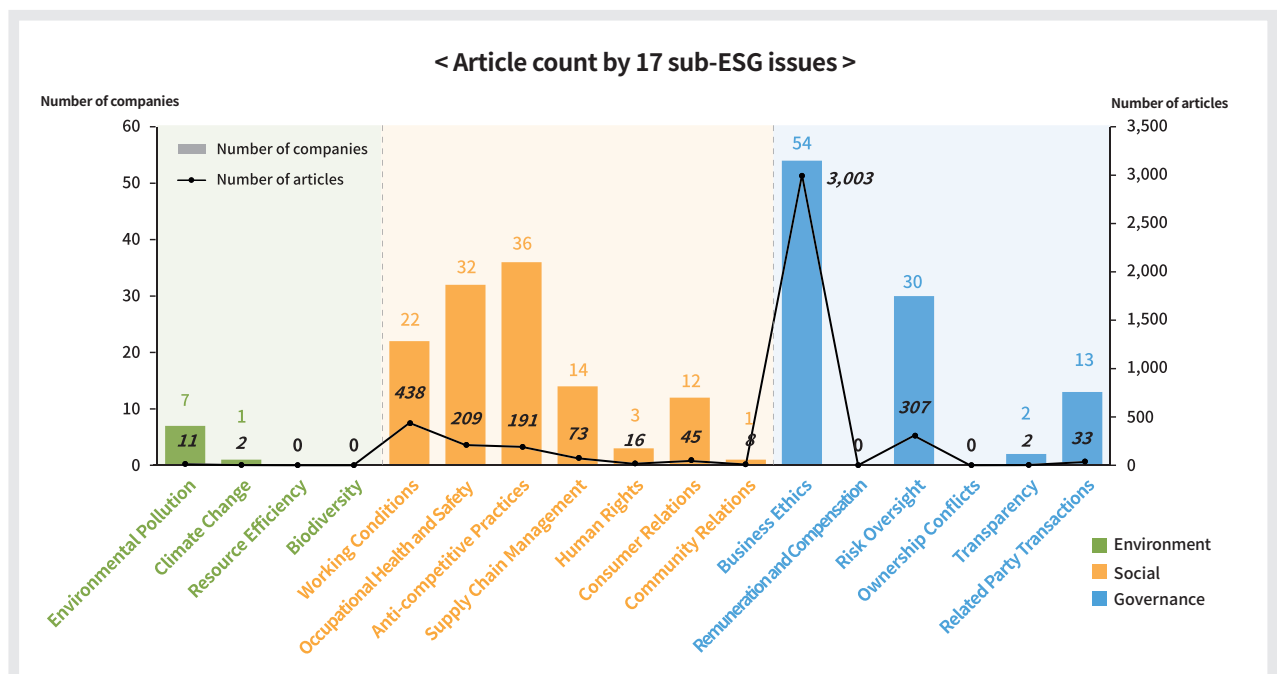
Looking at ESG incident trends from 2015 to 2018, growing interest levels for corporate ESG incidents in Korea is palpable. The number of companies implicated in ESG incidents increased from 88 in 2015 to 93 in 2018. The article count also increased by almost 40% since 2015, exemplifying growing interest in corporate ESG issues in Korea.

The prevalence of corporate ESG incidents, particularly concentrated in social and corporate governance, was another noticeable trend. Social category includes Working Conditions, Occupational Health and Safety and Anti-competitive Practices. Corporate governance category includes issues such as Business Ethics and Related Party Transactions.



69% OF ARTICLES WERE ABOUT BUSINESS ETHICS

After categorizing all articles into 17 ESG issues, it was observed that 3,345 articles (77.1% of all articles) covered corporate governance issues, 980 articles dealt with social issues (22.6%) and 13 articles were about environmental issues (0.3%). The number of articles is not only reflective of the frequency of corporate ESG incidents but of the growing interest towards corporate governance issues in Korea. Concurrently, it highlights corporate governance as the most common and problematic area of corporate ESG issues in Korea.

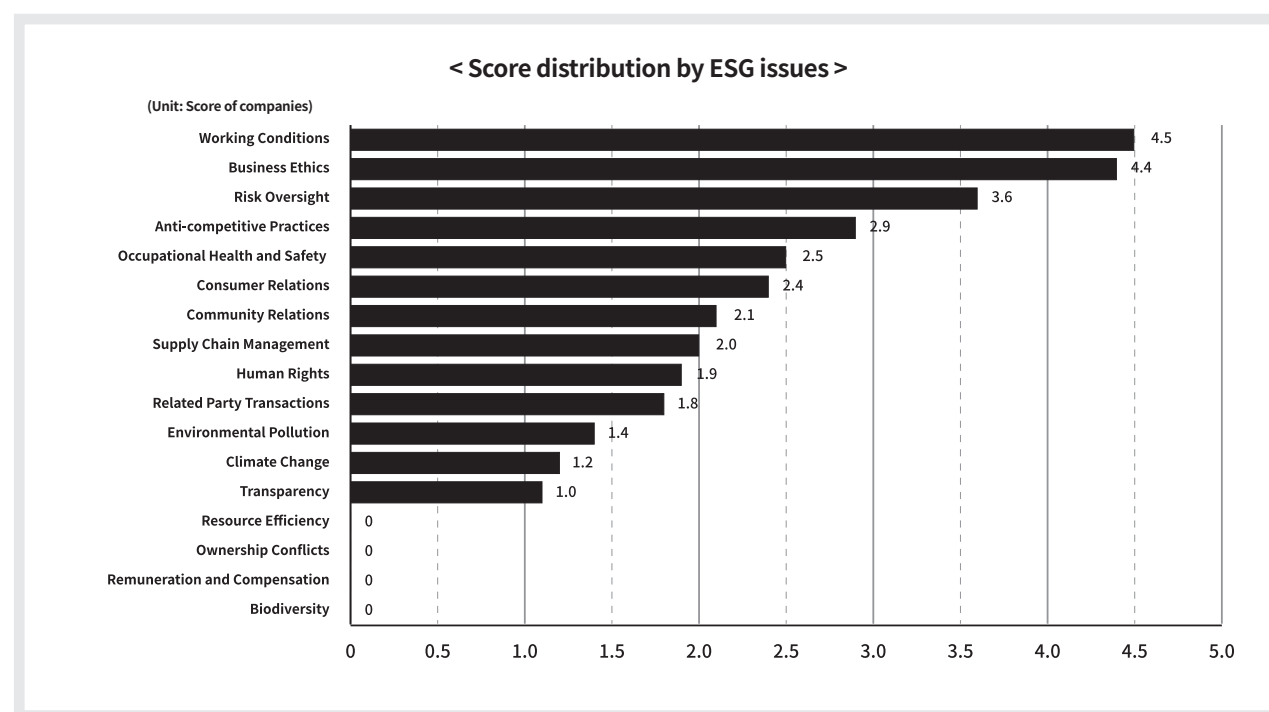


In corporate governance, 54 out of 93 companies were implicated in Business Ethics incidents. This coupled with the fact that 65% of all articles covering ESG incidents were written on this topic made Business Ethics the most critical and prevalent corporate governance issue. Working Conditions and Anti-competitive Practices in Social

were widely covered topics by the Korean media. Working Conditions dealt with socially contentious issues such as labor union relations and work-life balance, while Anti-competitive Practices included price rigging, monopoly, unfair transactions, and copyrights violations.

‘BUSINESS ETHICS’ AND ‘WORKING CONDITIONS’ ISSUES POSE GRAVE THREAT TO CORPORATE SUSTAINABILITY

When sorted by severity of incidents based on the article risk score, Business Ethics and Working Conditions had the vast majority of articles with the highest risk scores. The common incidents in Business Ethics concerned corruption, abuse of power, tax evasion and accounting fraud. Unfair work conditions and severely strained union-management relations were common incidents in Working Conditions.



Besides the aforementioned issues, Risk Oversight, Anti-competitive Practices, Occupational Health and Safety and Consumer Relations were other noticeable corporate ESG issues in 2018.

KOREAN AIR AND SAMSUNG ELECTRONICS HAD THE HIGHEST CORPORATE ESG RISK IN 2018

Analyzing the seriousness of ESG risks of top 200 KRX companies, Korean Air and Samsung Electronics scored 4.7², making them the companies with the highest ESG risk in 2018. Korean Air's high ESG score was due to Business Ethics-related incidents connected to the owner family's abuse of power and the ongoing investigation and trial of Chairperson Cho Yang-ho for embezzlement. Samsung Electronics' high risk score stemmed from both Business Ethics and Occupational Health and Safety issues. Samsung Electronics scored high on Business Ethics due to the bribery trial of Lee Jae-yong³, Head of Samsung Electronics. A company-led attempt to disintegrate its labor union and the death of its employee led to a high Occupational Health and Safety risk score for Samsung Electronics.

Samsung C&T (4.3), KT (4.2), Lotte (4.2), SK (3.9), KEPCO (3.9), Hyundai Motors (3.9), Daewoo Shipbuilding and Marine Engineering (DSME, 3.9) and Kia Motors (3.5) were eight other companies with very high or high ESG risks for 2018.

Gapji, a term that became synonymous with poor business ethics in Korea, was a common issue for Korean Air, Hanjin Heavy Industries, MP Group, CJ and Chong Kun Dang Holdings.

More information on 2018 ESG risk issues per company can be found on ESG Incident Analysis platform at <http://www.ESGIncident.com>

² The ESG risk score ranges from 1 to 5, with 5 being the highest ESG risk score.

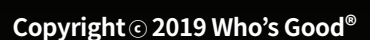
³ Lee Jae-young is also known as Jay Y. Lee

The below map shows the companies with the highest ESG risks and their risk levels, as of 27 February 2019

[Samsung Electronics Co. Ltd. : 4.7]
 [POSCO : 4.6]
 [Lotte Corp. : 4.6]
 [DAEWOO SHIPBUILDING & MARINE ENGINEERING Co. Ltd. : 4.4]
 [Korean Air Lines Co. Ltd. : 4.4]
 [KT Corp. : 4.4]
 [Hyundai Motor Co. Ltd. : 4.3]
 [Samsung C&T Corp. : 4.3]
 [Hyosung Corp. : 4.3]
 [SK Holdings Co. Ltd. : 4.3]
 [Kia Motors Corp. : 3.9]
 [Korea Electric Power Corp. : 3.9]
 [Hyundai Heavy Industries Co. Ltd. : 3.9]
 [CJ Corp. : 3.8]
 [Hanwha Corp. : 3.7]
 [KB Financial Group Inc. : 3.3]
 [Korea Aerospace Industries Ltd. : 3.3]
 [Daelim Industrial Co. Ltd. : 3.2]
 [Daewoo Engineering & Construction Co. Ltd. : 3.2]
 [Korea Gas Corp. : 3]
 [GS Engineering & Construction Corp. : 3]
 [Kangwon Land Inc. : 3]
 [LG Electronics Inc. : 3]
 [SK hynix Inc. : 2.9]
 [Kakao Corp. : 2.9]
 [HYUNDAI ENGINEERING & CONSTRUCTION CO. LTD. : 2.8]
 [Lotte Shopping Co. Ltd. : 2.8]
 [Lotte Chemical Corp. : 2.8]



More information on 2018 ESG risk issues per company can be found on ESG Incident Analysis platform at <http://network.ESGIncident.com>



III. COMPANIES WITH THE HIGHEST ESG RISK SCORES IN 2018

01	Korean Air Lines Co., Ltd. (003490)	4.7 / 5.0
02	Samsung Electronics Co., Ltd.(005930)	4.7 / 5.0
03	Samsung C&T Corp. (028260)	4.3 / 5.0
04	KT Corp. (030200)	4.2 / 5.0
05	Lotte Corp. (004990)	4.2 / 5.0
06	SK Holdings Co., Ltd. (034730)	3.9 / 5.0
07	Korea Electric Power Corp. (015760)	3.9 / 5.0
08	Hyundai Motor Co., Ltd. (005380)	3.9 / 5.0
09	Daewoo Shipbuilding & Marine Engineering Co., Ltd. (042660)	3.9 / 5.0
10	Kia Motors Corp. (000270)	3.5 / 5.0

KOREAN AIR LINES CO., LTD.

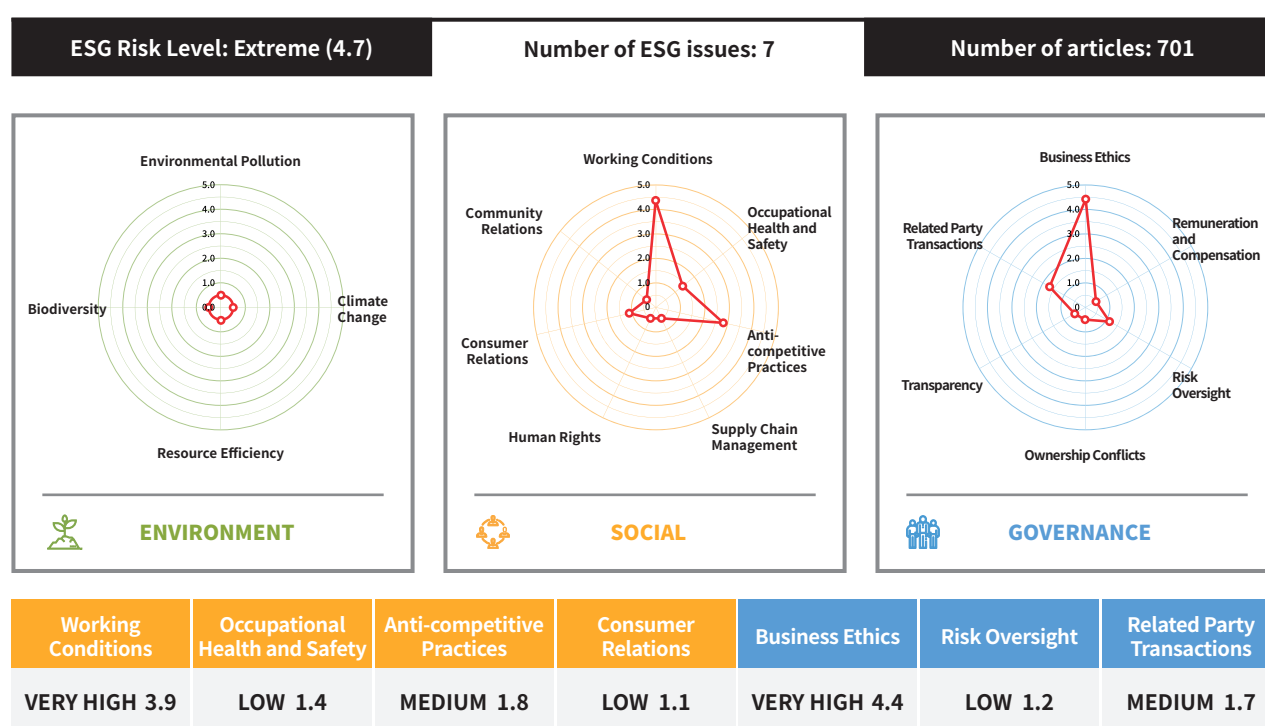
EXTREME 4.7

Korean Air is the representative company of Hanjin Group, and engages mainly in the air transport business. Its sales in 2017 was about 12 trillion KRW, and has 15,158 employees. Hanjin Group has 28 subsidiaries.

Industry: Transportation
KRX: 003490

KOREAN AIR HAD THE HIGHEST ESG RISK OUT THE TOP 200 KOREAN LISTED COMPANIES IN 2018 (4.7)

Of the 7 ESG issues, 'Working Conditions' had the highest S risk score (3.9; Very High), and 'Business Ethics' had the highest G risk score (4.4; Very High)



DESCRIPTION

Korean Air came under public scrutiny in 2018 for Business Ethics-related incidents, such as the “water rage” incident, when senior vice president Cho Hyun-min, the daughter of Hanjin Group’s chairperson Cho Yang-ho, threw a cup of water at the staff of an external advertisement agency (April). In addition, the verbal and physical abuse by Lee Myung-hee, the wife of Cho Yang-ho, as well as Ms. Lee’s illegal hiring of a domestic helper (May) was also heavily criticized in the Korean media. The company also made headlines with the news of ex-vice president Cho Hyun-ah’s alleged smuggling

(May), as well as Cho Yang-ho’s prosecutor inspection for the alleged embezzlement of 270 billion KRW (May) and his indictment (October). For Working Conditions-related incidents, there was the pilot union’s protests against the Cho family’s management rights in response to the incessant scandals by the family (May), and the compensation sentence for the cabin crew who were victims during the “nut-rage” scandal (November). Overall, the company’s Business Ethics issues, centered around the founding family’s *gapjil*⁴ and illegal practices, thrust the company into the limelight in 2018.

Date	Article Title	ESG Issue	Media
2018-04-24	Korea Fair Trade Commission widens probe into Korean Air’s unfair trade practices	Related Party Transactions	etoday
2018-05-04	Police issues arrest warrant for Cho Hyunmin over “water rage” incident, citing assault and obstruction of business	Anti-competitive Practices	The Korea Economic Daily
2018-06-01	Arrest warrant issued for Lee Myung-hee, Korean Air HQ raided by prosecutors	Business Ethics	MBC
2018-06-08	Korean Air pilot union urge Cho family to give up management rights	Working Conditions	Kyunghyang Shinmun
2018-11-01	President Cho Yang-ho to face first trial next month over alleged embezzlement of 270 billion KRW	Business Ethics	Financial News
2018-12-19	Korean Air worker awarded compensation of 20 million KRW over ‘nut rage’ incident	Working Conditions	Dong-a Ilbo

⁴ *Gapjil*: defined as “the abuse of underlings and subcontractors by executives who behave like feudal lords” in Sang-hun, Choe (2018) *Sister of Korean ‘Nut Rage’ Heiress Accused Of Throwing Her Own Tantrum* - <https://www.nytimes.com/2018/04/13/world/asia/nut-rage-sister-korean-air.html>

SAMSUNG ELECTRONICS CO., LTD.

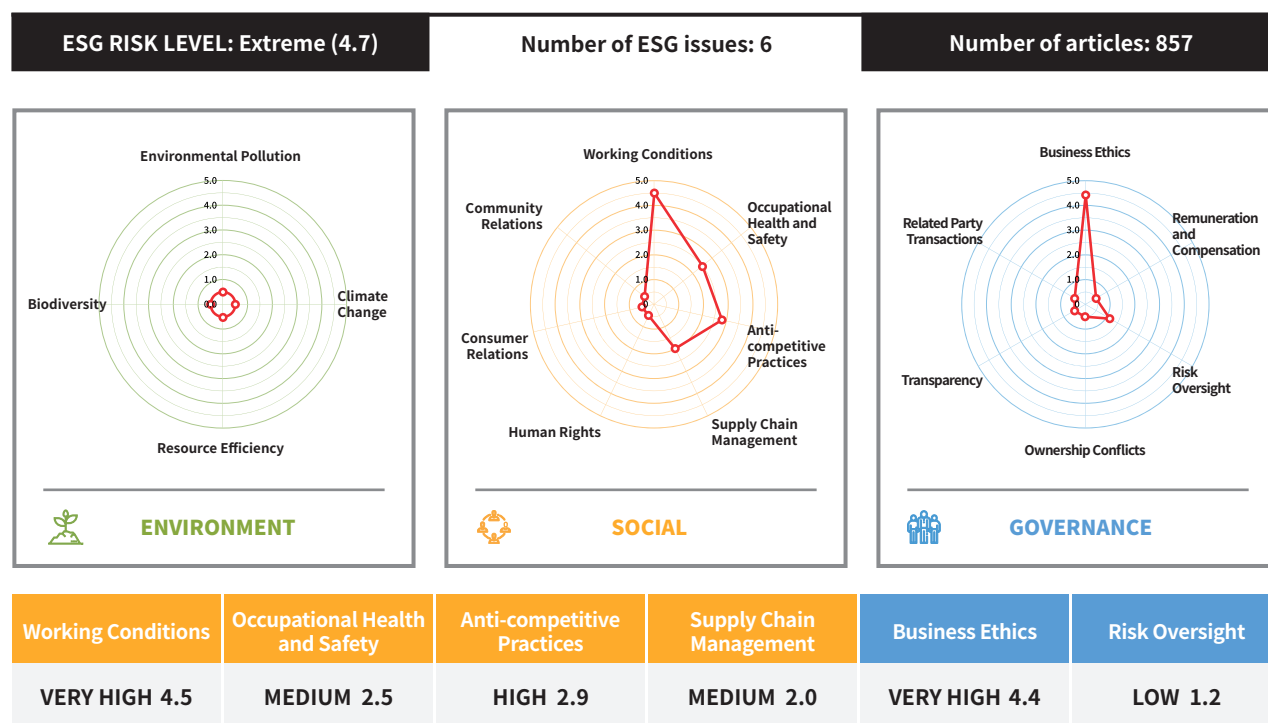
EXTREME 4.7

Samsung Electronics is the representative company of the Samsung Group, which is made up of 256 affiliate companies globally. In 2017, the company had 238 trillion won in sales and 84,462 employees. The company's main business areas are consumer electronics, IM (smartphones), semiconductors, and display panels.

Industry:
Semiconductors
KRX: 005930

ESG RISK FOR SAMSUNG ELECTRONICS IN 2018 IS 'EXTREME' (4.7)

Of the 6 ESG issues, 'Working Conditions' had the highest S risk score (3.1; High), and 'Business Ethics' had the highest G risk score (4.5; Extreme)



DESCRIPTION

Samsung Electronics' working conditions were criticized by the media after it was revealed that 32 of its employees, including the chairman of the board of directors Lee Sang-hoon, were arrested and put on trial for claims of systematically trying to dissolve the labor union (September). The company's Occupational Health and Safety was scrutinized when a subcontractor died and four more were injured during the construction of a logistics warehouse (March), after a carbon-dioxide exposure accident took the lives of 3 workers (September), and when

936 violations were uncovered during the special supervision by the Ministry of Employment and Labor (November). With regards to its Business Ethics, the Korean court stated that the company had paid 14.8 billion KRW to former presidents Lee Myung-bak and Park Geun-hye (October). Previously, the company's vice president Lee Jae-yong was arrested in 2017, and released on probation in February 2018 after having served for 353 days.

MAJOR NEWS ARTICLES

Date	Article Title	ESG Issue	Media
2018-02-06	Samsung's Lee Jae-yong released on probation on appeal after 353 days in prison	Business Ethics	MBC
2018-02-15	Former Samsung vice chairman Lee Hak-soo summoned over bribery allegations	Business Ethics	OBS
2018-03-19	1 dead and 4 injured at Samsung Electronics logistics warehouse construction accident	Occupational Health and Safety	Segye Ilbo
2018-04-29	US class action suit alleges Samsung and SK Hynix of DRAM price fixing	Anti-competitive Practices	The Korea Economic Daily
2018-11-16	936 safety violations uncovered at Samsung Electronics' Giheung site	Occupational Health and Safety	Kyeongin Ilbo
2018-12-18	13 Samsung employees indicted on charges of interfering with labor union	Working Conditions	Seoul Shinmun

SAMSUNG C&T CORP.

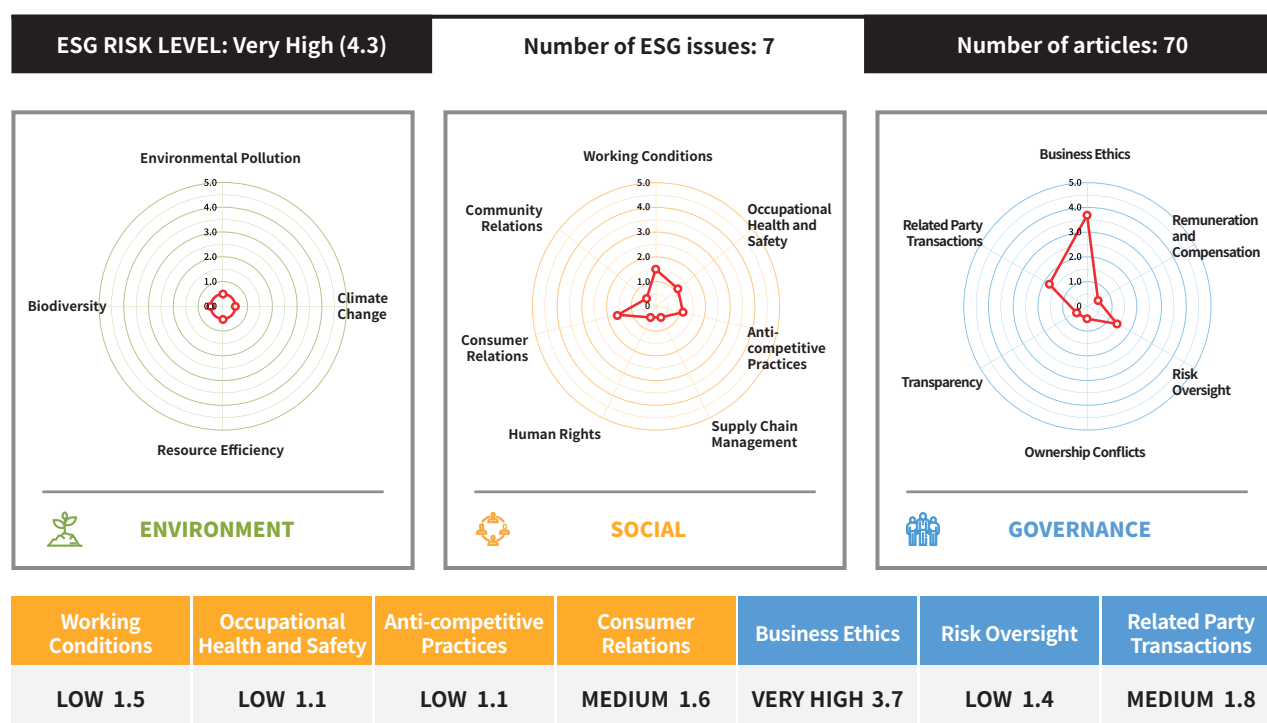
VERY HIGH 4.3

Cheil Industries changed its name to Samsung C&T after merging with Samsung C&T in 2015. An affiliate of Samsung Group, the company had 29 trillion KRW in sales during 2017 and employs 9,351 workers. Its main businesses include construction, trading & investment, fashion, and resorts.

Industry: Commercial & Professional Service
KRX: 028260

ESG RISK FOR SAMSUNG C&T IN 2018 IS 'VERY HIGH' (4.3)

Of the 7 ESG issues, 'Business Ethics' had the highest G risk score (3.7; Very High)



DESCRIPTION

The biggest issue for Samsung C&T in 2018 was Business Ethics. Specifically, the company was probed by the prosecutor's office and the financial authorities in November, due to suspicions of fraudulent accounting that unfairly boosted the value of Samsung Biologics during the merger of Samsung C&T and Cheil Industries. In October, the decision of Everland, a theme park operated by Samsung C&T, to ban the visually impaired from riding a roller coaster was ruled

as discrimination against disabled people by the court. The FTC⁵ also accused Samsung Group's chairperson Lee Kun-hee of omitting Samsung C&T's ownership of its affiliates in November. Regarding Anti-competitive Practices, civic groups filed lawsuits on behalf of the shareholders in March with claims of price-fixing by 4 construction companies, including Samsung C&T, during the Four Major Rivers Project from 2009 to 2012.

MAJOR NEWS ARTICLES

Date	Article Title	ESG Issue	Media
2018-03-16	Shareholder derivative lawsuit against 4 companies for suspicions of price-fixing during Four Major Rivers Project	Anti-competitive Practices	The Hankyoreh
2018-10-11	Restricting visually impaired on roller coasters is "discrimination"	Consumer Relations	Maeil Business Newspaper
2018-11-14	FTC accuses chairperson Lee Kun-hee of false reporting	Related Party Transactions	Asia Today
2018-11-20	SFC ⁶ accuses Samsung Biologics of accounting fraud	Business Ethics	Kyeongin Ilbo
2018-12-18	Prosecutor office issues arrest warrant for vice-president Kang Kyeong-hoon on claims of attempts to dissolve labor union	Working Conditions	Kyunghyang Shinmun

⁵ Fair Trade Commission

⁶ Securities & Futures Commission

KT CORP.

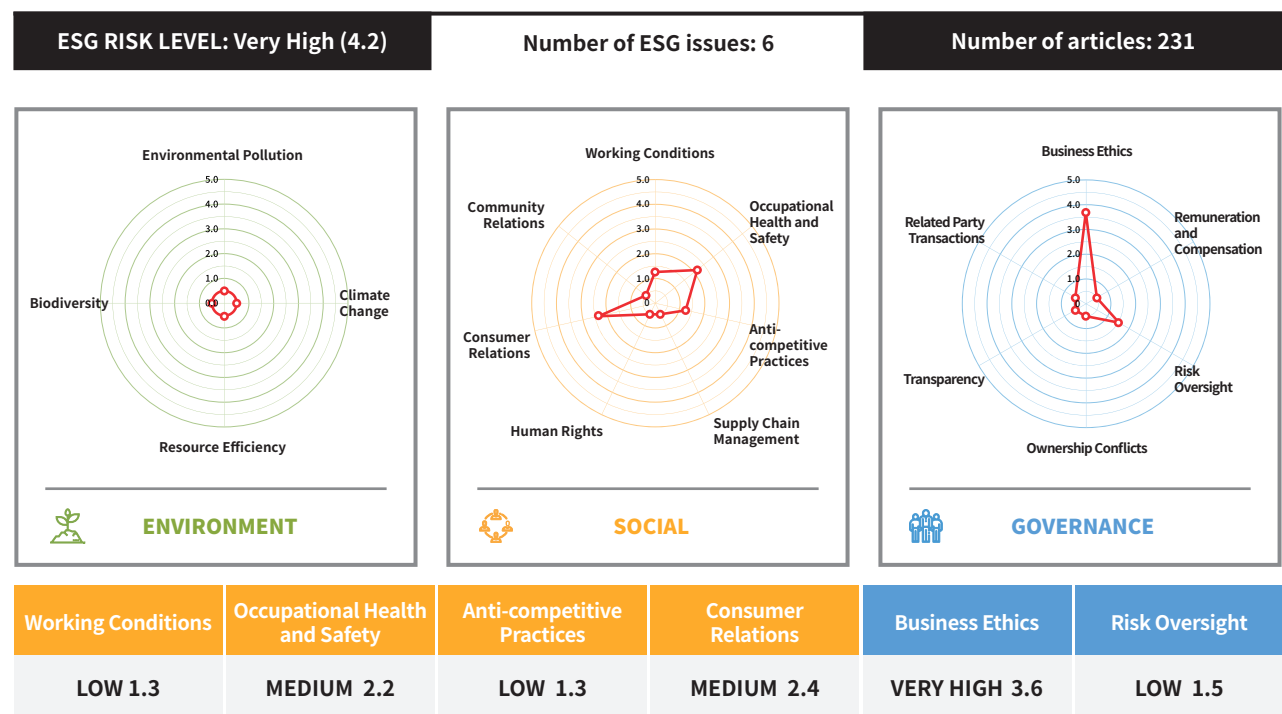
VERY HIGH 4.2

KT is a prominent player in the telecommunications space with 36 affiliates, sales of 23 trillion won in 2017 and 23,676 employees.

Industry:
Telecommunication
KRX: 030200

ESG RISK FOR KT IN 2018 IS 'VERY HIGH' (4.2)

Of the 7 ESG issues, 'Business Ethics' had the highest G risk score (3.6; Very High)



DESCRIPTION

KT has been under police investigation for 7 months for suspicions that KT executives, including its CEO, Hwang Chang-gyu, made illegal political contributions to 99 National Assembly members in June. Currently still ongoing, the investigation has revealed that former and current KT executives had systematically made illegal political contributions under the instructions of CEO Hwang.

In November, a fire in a KT building in Chungjung-ro was extinguished in 10 hours without any casualties. However, the fire damaged 220 trillion optical cables and the delay in repair caused a wide-scale communications blackout, resulting in about 31.7 billion KRW of damages.

MAJOR NEWS ARTICLES

Date	Article Title	ESG Issue	Media
2018-03-20	FTC conducts investigations on price-fixing by 3 telecommunications companies	Anti-competitive Practices	EDAILY
2018-06-07	KT SAT stirs controversy with sales of Koreasat 3 (Mugungwha 3)	Risk Oversight	Hankook Ilbo
2018-06-18	Arrest warrant for KT CEO Hwang Chang-gyu issued for illegal political funding claims	Business Ethics	EBN
2018-11-25	Compensation claims for KT fire expected to skyrocket	Consumer Relations	EDAILY
2018-12-06	KT labor union members occupy lobby of North Daegu branch	Working Conditions	Kyongbuk Ilbo
-	-	-	-

LOTTE CORP.

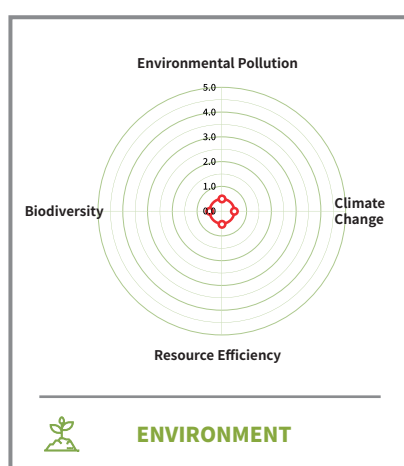
VERY HIGH 4.2

Lotte Corp. is a holding company for Lotte Korea with 107 affiliate companies in Korea. It was formed through the merger of Lotte Confectionery, Lotte Chilsung Beverage, Lotte Food, and Lotte Shopping. Lotte Corp., Lotte Holdings, and Japan's Koujunsha together make up the holding companies of the Lotte Group.

Industry:
Financial & Real Estate
KRX: 004990

ESG RISK FOR LOTTE CORP. IN 2018 IS 'VERY HIGH' (4.2)

Of the 4 ESG issues, all were Governance-related, with 'Business Ethics' had the highest G risk score (4.4; Very High)

ESG RISK LEVEL: Very High (4.2)
Number of ESG issues: 4
Number of articles: 543


Business Ethics	Risk Oversight	Transparency	Related Party Transactions
VERY HIGH 4.4	LOW 0.8	LOW 1.1	MEDIUM 1.8

DESCRIPTION

Lotte Group's chairperson, Shin Dong-bin, was arrested in February for bribery charges up to 7 billion KRW and released on probation in October. In addition, honorary chairperson Shin Kyuk-ho was convicted of embezzlement and misappropriation and sentenced to three years in jail on the same month. Of the 543 ESG-related articles reported on the company, 536 articles (98.7%) were related to Business Ethics. Most of the articles were related to crimes committed by the founding family, which resulted in very high Business Ethics risks.

Transparency issues were cited as the cause for the indefinite postponement of Lotte Hotel's listing in March. The group tried to shift its corporate structure from Japan to Korea by merging its subsidiaries in chemicals, distribution and food after the listing of Lotte Hotel, but the listing was postponed by the arrest of chairperson Shin Dong-bin. The shares for Lotte Hotel are still focused in Japan, with Lotte Japan holding 19.07% of the company's shares, L Investments (wholly-owned by Lotte Japan) holding 72.7%, and Koujunsha holding 5.45%.

MAJOR NEWS ARTICLES

Date	Article Title	ESG Issue	Media
2018-02-21	Warning signs in relations with Lotte Japan emerge due to Shin Dong-bin's absence	Risk Oversight	The Korea Economic Daily
2018-03-29	Lotte Hotel's listing postponed indefinitely	Transparency	ET News
2018-08-22	Honorary chairperson Shin Kyuk-ho fined 100 million KRW for fraudulent reporting of overseas affiliate shares	Related Party Transactions	Seoul Economic Daily Co. Ltd.
2018-10-05	Shin Kyuk-ho's sentence from unethical management reduced to 3 years after appeal	Business Ethics	Aju News
2018-10-05	Shin Dong-bin released after 234 days on probation	Business Ethics	Seoul Economic Daily Co. Ltd.
-	-	-	-

SK HOLDINGS CO., LTD.

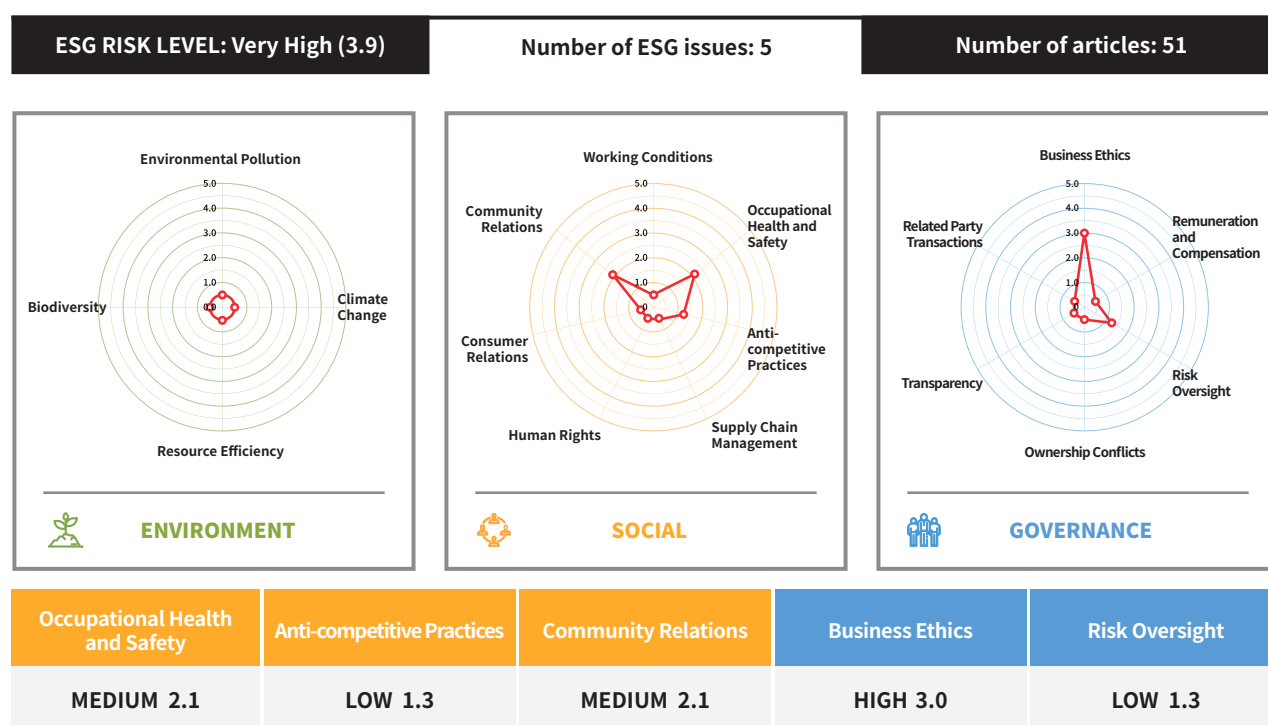
VERY HIGH 3.9

SK Holdings is the holdings company for SK Group. It has 3,833 employees in its workforce, 101 affiliates, and its sales in 2017 amounted to 93 trillion KRW.

Industry:
Financials & Real Estate
KRX: 034730

ESG RISK FOR SK HOLDINGS CO., LTD. IN 2018 IS 'VERY HIGH' (3.9)

Of the 5 ESG issues, 'Business Ethics' had the highest risk score (3; High)



DESCRIPTION

For its Business Ethics issues, the Korean court recognized SK's 8.9 billion KRW political contribution as a bribe for the early release of senior vice-chairperson Choi Jae-won.

In July, the collapse and flooding of the Laos hydroelectric dam, built by SK's subsidiary SK E&C, resulted in the flooding of 6 towns and more than 40 casualties. SK Group made a relief donation of 11

billion KRW, but when the cause was revealed to be a construction malpractice by SK E&C, the listing of SK E&C was put into question, increasing the risks faced by the entire SK group.

In addition, subsidiary SK Energy was fined by the US Department of Justice for price-fixing in November, increasing risks to the parent company, SK Holdings.

MAJOR NEWS ARTICLES

Date	Article Title	ESG Issue	Media
2018-02-18	Most bribery charges involving former president Park accepted, making penalties inevitable	Business Ethics	MBC
2018-04-06	Abuse of presidential authority, guilty of 16 charges and 24 years of prison sentenced	Business Ethics	Segye Ilbo
2018-07-24	Collapse of Laos Dam results in hundreds dead or missing	Community Relations	SBS
2018-11-15	SK Energy fined 140 billion by US Department of Justice for price-fixing	Anti-competitive Practices	Aju News
-	-	-	-
-	-	-	-

KOREA ELECTRIC POWER CORP.

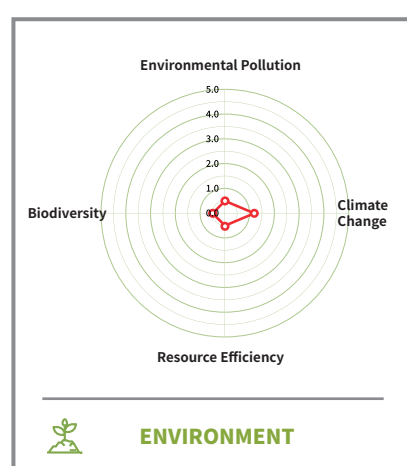
VERY HIGH 3.9

Korea Electric Power Corp (KEPCO) is engaged in electric power resource development and generation and maintains a monopoly in power transmission and distribution in Korea. It has 27 affiliated companies, has 22,114 employees, and had sales of 59 trillion KRW in 2017.

Industry: Utilities
KRX: 015760

ESG RISK FOR KEPCO IN 2018 IS 'VERY HIGH' (3.9)

Of the 5 ESG issues, 'Business Ethics' had the highest risk score (3.1; High)

ESG RISK LEVEL: Very High (3.9)
Number of ESG issues: 5
Number of articles: 56


Climate Change	Anti-competitive Practices	Supply Chain Management	Business Ethics	Risk Oversight
LOW 1.2	LOW 1.5	LOW 1.3	HIGH 3.1	MEDIUM 2.3

DESCRIPTION

KEPCO frequently made the news due to the frequent scandals of its employees involved in bribery and corruption cases. In January, there was a bribery case related to the solar energy business, and another bribery incident in February. The company was prosecuted and raided in June and continued to make headlines with news of

bribery and corruption throughout July, October, November, and December. Although relatively low risk, the company's Climate Change saw an increase in risk after criticisms that the government's plans to increase renewables by 2040 could negatively impact KEPCO's business.

MAJOR NEWS ARTICLES

Date	Article Title	ESG Issue	Media
2018-01-18	KEPCO Suncheon branch manager arrested after accepting solar energy bribes	Risk Oversight	Kyunghyang Shinmun
2018-01-31	KEPCO manager sentenced to 2 years and 6 months of jail for accepting bribes	Business Ethics	Kyungnam Domin Ilbo
2018-02-11	KEPCO employees jailed for exchange of bribes	Business Ethics	Kyunghyang Shinmun
2018-05-04	Prosecutor office to raid KEPCO's headquarters for bribery investigation	Anti-competitive Practices	YTN
2018-10-10	Public institutions under the Ministry of Trade, Industry and Energy filed 8,000 false business trips over the span of 10 years	Risk Oversight	Herald Corporation
2018-11-09	Former and current KEPCO employees jailed for bribery counts	Business Ethics	The Munhwa Il-bo

HYUNDAI MOTOR CO., LTD.

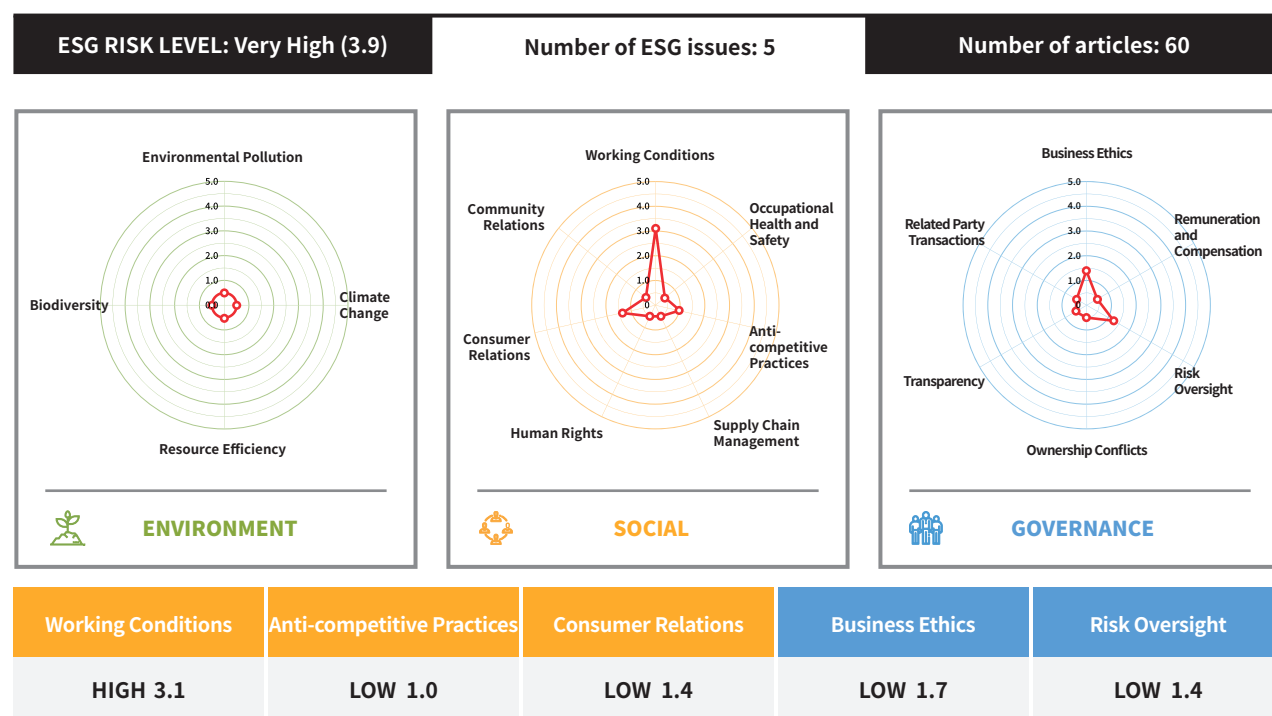
VERY HIGH 3.9

The largest automobile manufacturer in Korea, Hyundai Motor has 56 affiliates, sales of 96 trillion KRW in 2017, and a workforce of 68,870 employees.

Industry:
Automobile Manufacturers
KRX: 005380

ESG RISK FOR HYUNDAI MOTOR IN 2018 IS 'VERY HIGH' (3.9)

Of the 5 ESG issues, 'Working Conditions' had the highest risk score (3.1; High)



DESCRIPTION

Hyundai Motor had a high S risk score, mainly due to controversies in Working Conditions, Anti-competitive practices, and Consumer Relations. In the case of Working Conditions, labor relations played a key role. The company saw a partial union labor strike regarding wages and collective bargaining agreements in January and a failed labor-management provision in July. There was a supreme

court ruling against the workers' rally in November and a damage compensation ruling by the supreme court in December.

The company also saw increased Business Ethics risks when the company was questioned over providing former President Lee Myung-bak's slush funds in exchange for the special pardon of former Hyundai Motor President Chung Mong-koo.

MAJOR NEWS ARTICLES

Date	Article Title	ESG Issue	Media
2018-01-04	Hyundai Motor union members go on a 5-day strike, demanding wage raises	Working Conditions	Kukmin Ilbo
2018-03-12	Hyundai Motor questioned for unfair business practices and affiliate hand-over	Business Ethics	MBC
2018-07-19	Hyundai Motor union's labor-management provision put on hold before the holidays	Working Conditions	Ulsan Mael
2018-10-26	Hyundai & Kia show poor Q3 earnings due to recall issues	Consumer Relations	Money Today
2018-11-08	Claims of conglomerates disrupting ghost rallies dismissed	Working Conditions	YTN
2018-11-21	Hyundai Motor, GM Korea, Hyundai Heavy Industry unions join	Working Conditions	The Asia Business Daily

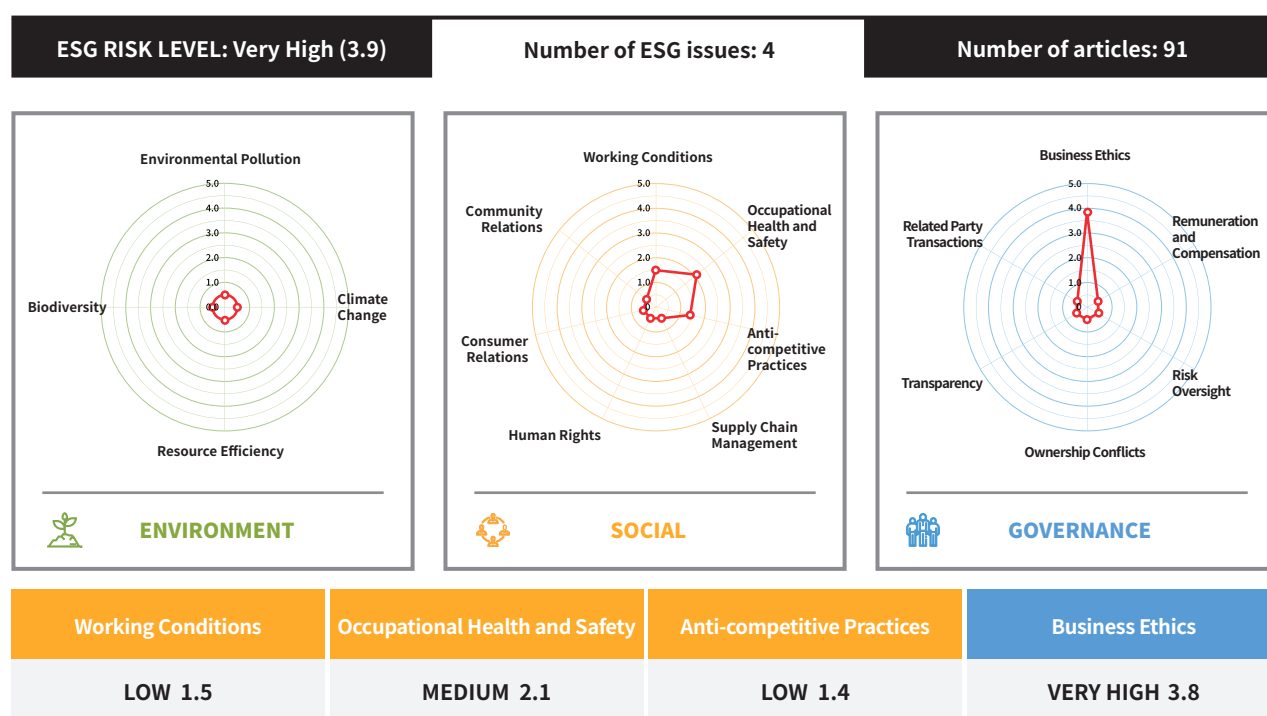
DAEWOO SHIPBUILDING & MARINE ENGINEERING CO., LTD. VERY HIGH 3.9

Daewoo Shipbuilding & Marine Engineering (DSME) specializes in manufacturing of LNP and LNG transportation vessels, container ships, floating oil production storage facilities, fixed marine facilities, and drilling ships. In 2017, it had sales of 11 trillion KRW and employed 11,763 workers.

Industry:
Industrial Equipment
KRX: 042660

ESG RISK FOR DSME IN 2018 IS 'VERY HIGH' (3.9)

Of the 5 ESG issues, 'Business Ethics' had the highest risk score (3.8; Very High)



DESCRIPTION

DSME's governance risk scores were closely related to Business Ethics issues, namely illegal acts by the company's executives. In 2017, former CEO Nam Sang-tae was sentenced to prison for 20 billion KRW in damages to the company, as well as accounting fraud amounting to couple hundred billion KRW. In January 2018, it was revealed that Nam had bribed his way to his re-election as CEO, and

in May, Nam was also involved in a case involving 17.5 billion KRW in embezzlement and illegal slush funds. Additionally, former CEO Ko Jae-ho was indicted on charges of bribery in July.

A ship fire accident in 2015 was shown to have been caused by employee negligence, increasing the Occupational Health and Safety risks for the company.

MAJOR NEWS ARTICLES

Date	Article Title	ESG Issue	Media
2018-01-19	Park Soo-whan re-jailed for Nam Sang-tae's re-election lobbying	Business Ethics	The Hankyore
2018-05-16	Architect Lee Chang-ha to serve 3 years with connections to DSME corruption	Business Ethics	Seoul Economic Daily Co. Ltd.
2018-07-13	Former DSME CEO Ko Jae-ho fined for illegal lobbying	Business Ethics	The Asia Business Daily
2018-07-20	Supreme court rules ship fire as worker negligence	Occupational Health and Safety	The Munhwa Il-bo
2018-08-29	DSME union goes on full-strike the day of a 443.5 billion KRW naval ship order	Working Conditions	The Korea Economic
2018-12-11	Former DSME CEO Nam Sang-tae sentenced to 5 years of jail time	Business Ethics	Maeil Business Newspaper

KIA MOTORS CORP.

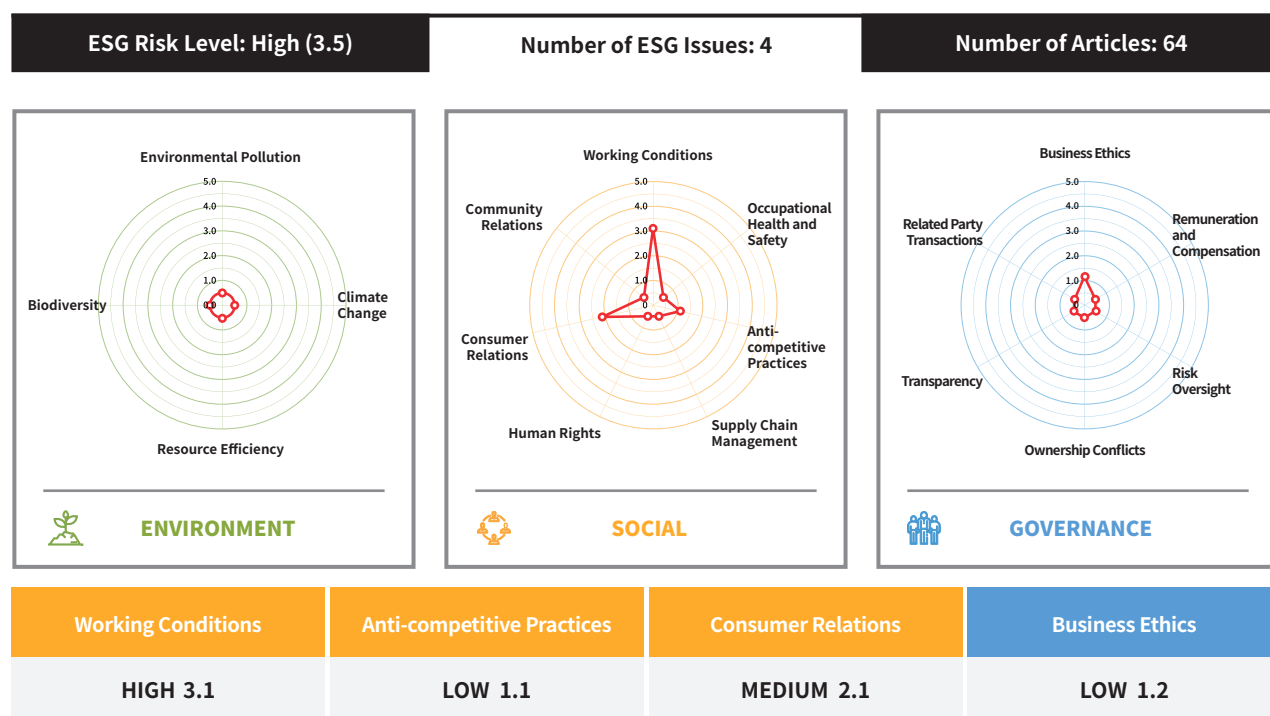
HIGH 3.5

Kia Motors is a representative company of Hyundai Motor Group, and engages in automobile manufacturing. Its sales in 2017 was about 53 trillion KRW, and has 32,720 employees.

Industry:
Automobile Manufacturers
KRX: 000270

ESG RISK LEVEL OF KIA MOTORS IN 2018 IS 'HIGH' (3.5)

Of the 4 ESG issues, 'Working Conditions' and 'Consumer Relations' had high S risk scores



DESCRIPTION

Kia Motors' labor union continued its strikes from March to October 2018 to oppose the company's continuous illegal dispatch of subcontractor employees and to demand full-time employment. Despite of the Ministry of Employment and Labor ruling against the practice in 2004, Kia Motors had continued to hire dispatch workers provided by a third party agency. Dispatch workers demanded for direct employment under the same conditions as other full-time

employees.




In April, Kia Motors recalled 230,000 vehicles due to faulty fuel pipes that increased fire risks, and recalled 210,000 vehicles in June due to defective air conditioners that also increased fire risks. In addition, Kia's top U.S. executives refused to attend congressional hearing on reports of engine fires of hundreds of its vehicles in October.

MAJOR NEWS ARTICLES

Date	Article Title	ESG Issue	Media
2018-01-31	Kia ex-executive at Gwangju factory labor union accused of employment fraud	Anti-competitive Practices	Jeonnamilbo
2018-04-12	Prosecutors not accuse labor unions of illegal strikes	Working Conditions	Sedaily
2018-04-26	Kia recalls 230,000 vehicles of fire risks	Consumer Relations	YTN
2018-06-14	Kia recalls 11 type 210,000 vehicles	Consumer Relations	Asia Today
2018-08-02	Ex-labor union leader arrested for receiving bribery for employment	Business Ethics	Gwangjuilbo
2018-09-22	Hyundai-Kia contractors demonstrate at Seoul Regional Employment and Labor Administration	Working Conditions	Sedaily

Definition of ESG issues

APPENDIX

Category	ESG Issues	Definition
Environment 	Environmental Pollution	Refers to chemical accidents such as leakage, explosion, and environmental contamination.
	Climate Change	Refers to a company's greenhouse gas (GHG) reduction, adaptation and emission trading issues.
	Resource Efficiency	Refers to issues regarding inefficient use of energy and materials. Ineffective use of resources impacts a company's sustainability.
	Biodiversity	Refers to a company's environmental destruction and negative impacts on biodiversity caused by business activities.
Social 	Working Conditions	Refers to any labor-related conflicts such as unfair labor conditions, labor rights violations and unfair pressure imposed on labor unions.
	Occupational Health and Safety	Refers to occupational health and safety accidents at workplace. Safety measures need to be in place to prevent industrial health and safety accidents.
	Anti-competitive Practices	Refers to any unfair business practices such as price-fixing, monopoly, unfair transactions, and copyrights violations.
	Supply Chain Management	Refers to ESG incidents in a company's supply chain.
	Human Rights	Refers to human rights infringement incidents such as child labor, forced labor, and discrimination at work.
	Consumer Relations	Refers to issues related to a company's products and services such as product safety, recall, data privacy and any conflict with consumers.
	Community Relations	Refers to a company's conflicts with local communities. A company has a responsibility to contribute towards community development and to build positive relationships with the community.
Governance 	Business Ethics	Refers to moral hazard issues among top management, such as executives' corruption, <i>gapjil</i> , tax evasion and unethical management.
	Remuneration and Compensation	Refers to the issues surrounding the process of determining the appropriate level of remuneration and compensation for the board and management.
	Risk Oversight	Refers to poor risk management systems, such as lack of policies and procedures and inappropriate decision-making processes, that could lead to a company's increased risk exposure.
	Ownership Conflicts	Refers to a conflict of interest for company stakeholders regarding company ownership. The lack of company level policy and manual on mitigating conflict of interests amongst various stakeholders could exacerbate ownership conflicts.
	Transparency	Refers to issues concerning the transparency of the board and shareholder rights. It concerns the lack of independence of the board and the negligence of shareholders' interests.
	Related Party Transactions	Refers to individuals or entities associated with the management or board members pursuing business relationships outside the company in exchange for goods and services.

AUTHORS

Thomas Yoon

Lisette Brackel

Suk Chun

Vasundhara Dehiya

KNOWLEDGE ADVISOR

Bruce Lee *CEO*

Zebra Investment Management

WHO'S GOOD, PBC

No part of it may be circulated, quoted, or reproduced for distribution without prior written permission from WHO'S GOOD
Copyright© 2019 by WHO'S GOOD, PBC
All rights reserved.

Contact

info@whosgood.org
<http://www.ESGIncident.com>
<http://www.whosgood.org>
<http://www.tackletox.com>

The ownership and all intellectual property rights of non-financial (ESG) data analysis results and methodology herein are vested exclusively in WHO'S GOOD, PBC. Methodology and analysis results using its raw data cannot be reproduced, disseminated, commingled, created as derivative works, furnished in any matter, resold and redistributed. The analysis in this report was based on news articles and public data about companies using machine learning technology. The information herein is provided solely for informational purposes and therefore is not an offer to buy or sell securities. Who's Good does not accept any liability for damage arising from the use of this publication or information contained herein in any manner whatsoever.



ESG INCIDENT ANALYSIS REPORT

COPYRIGHT©2019 WHO'S GOOD
ALL RIGHTS RESERVED.