Health Care

ESG Evaluation Key Sustainability Factors

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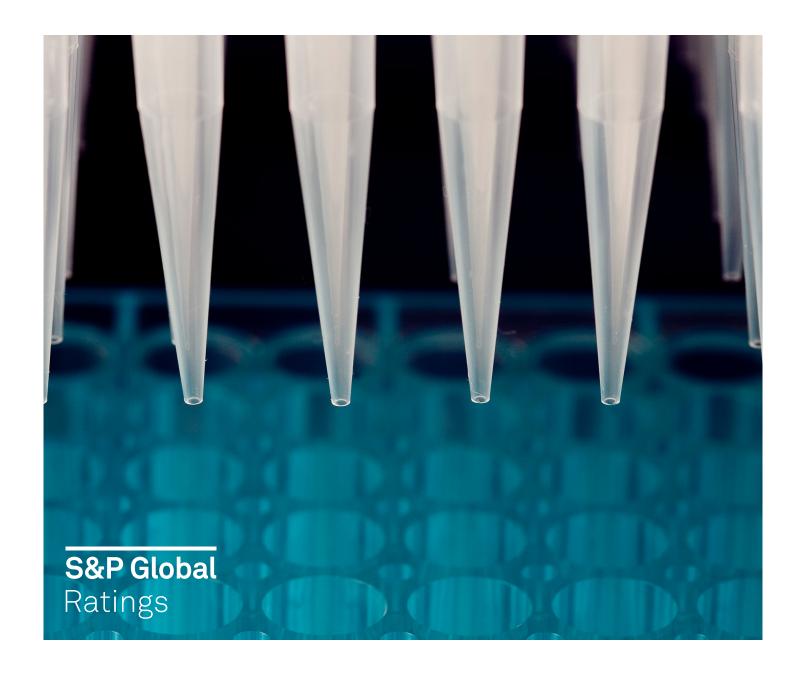
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Approach

Our key sustainability factors identify the most material environmental and social risks assessed in our ESG Evaluation. We assess the materiality¹ of those risks across the industry's value chain and reflect them in the weighting of our environmental and social factors. We also provide the quantitative indicators² used to assess a company's performance relative to its industry peers on each of those factors. For further information, please refer to our "Environmental, Social, And Governance Evaluation: Analytical Approach."

Scope

This KSF is for the health care sector and applies to companies operating within three key sub-sectors: 1) pharmaceuticals (pharma) & biotech, 2) health care equipment and supplies, along with life sciences, and 3) health care providers & services industries. The pharma and biotech segment includes companies that develop. manufacture, distribute or market branded pharmaceuticals, therapies, or generic drugs, and contract drug manufacturers (CDMOs). Health care equipment and supplies subsector includes companies that develop, manufacture, and market medical, surgical and dental devices and instruments, including consumable items, implantable devices, conventional supplies (for example, gowns, gloves, bandages, syringes) and capital equipment used by health care providers; contract manufacturers of health care equipment are also included in this subsector. Life science companies develop, manufacture, and market laboratory equipment, instruments, reagents, and diagnostic tests. Health care providers and services companies cover for-profit and not-for-profit entities engaging in the delivery of health care to patients. Hospitals, ambulatory surgery centers, skilled nursing facilities, urgent care clinics and other health care service providers are included in this segment.

Material Environmental Risks

Health care companies are exposed to material environmental risks across their value chain. The most material direct environmental impacts of the health care sector are waste, pollution, and GHG emissions resulting from the product development and manufacturing processes:

- Waste management- Negative environmental outcomes can result from hazardous and biohazardous waste because of the chemical and radioactive components involved in producing and delivering many drugs and therapies. The materiality of this factor will likely vary depending on the type of product or treatment the company produces or delivers. For example, some medical device companies may hardly use harmful chemicals but may use large amounts of single use plastics and will be exposed to a slightly different set of risks than a pharmaceutical company that would typically be less reliant on high volumes of plastic inputs.
- **GHG Emissions** The health care sector overall emits GHGs through the manufacture and delivery of therapies and services. The main sources of direct GHG emissions include energy consumed onsite at services, manufacturing facilities, or research and development facilities (scope 1) and electricity purchased from the grid (scope 2). Energy-intensive manufacturers also face risks of growing operational costs associated with carbon pricing regulation.

Environmental Factors: Weighting And KPIs

Our weighting of environmental factors varies by subsector, and we use different quantitative performance indicators to inform our opinion of an entity's management of environmental impacts. Also informing our ESG evaluation opinions are qualitative indicators such as an entity's climate-change-related policies and commitments. The following weightings are applied to the environmental factors:

Factor	Pharma and Biotech	Health Care Equipment and Supplies/Life Sciences	Health Care Providers and Services
Waste and pollution	30%	40%	25%
Greenhouse gas emissions	30%	25%	40%
Ç ↓ Water	30%	25%	25%
€€ €€ Land use and biodiversity	10%	10%	10%

Pharma and Biotech

Given the delicate manufacturing processes involved in producing drugs and therapies, pharma & biotech producers have equal exposure to risks stemming from GHG emissions, waste, and water. Land use is less material as the product manufacturing footprint is typically smaller than other sectors' where manufacturing operations can have a large footprint. The main quantitative performance indicators for this subsector are listed in the table below.

Factor		Key performance indicators	Other performance indicators
Waste and pollution	30%	 Normalized total waste generated (tons by revenue) % of waste that is recycled/reused/recovered % of hazardous waste 	- % of waste to landfill - Reportable waste/pollution-related incidents
Greenhouse gas emissions	30%	 Scope 1 intensity (tons of carbon dioxide equivalent [tCO2-e] per units produced and revenues) Scope 2 (tCO2-e per units produced and revenues) 	 Energy Intensity (MWh per revenues) Total renewable energy purchased or generated (MWh) Scope 3 intensity (tCO2-e per revenues)
⊈ Water	30%	 Water intensity (cubic meters [m3], by revenue or units produced) % of production from facilities operating in water-stressed regions 	- % of water that is recycled- Net freshwater consumption (m3)
⊕ ∰ € Land use and biodiversity	10%	 Number of instances of non-compliance with biodiversity-related regulations) 	 Proportion of suppliers assessed and audited on their biodiversity performance

Health Care Equipment and Supplies/Life Sciences

Relatively similar weights are applied to this sector as pharma & biotech because the development and manufacture of medical devices is similarly delicate as that of drugs and therapies. The higher weight on waste reflects higher exposure to manufacturing including plastics and other waste intensive materials and end of life waste, and therefore, on average, the sector is moderately exposed to waste from an environmental standpoint. The main quantitative performance indicators for this subsector are listed in the table below.

Factor		Key performance indicators	Other performance indicators
Waste and pollution	40%	 Normalized total waste generated (MT per revenue) % of waste that is recycled/reused/recovered % of hazardous waste 	- % of waste to landfill- Reportable waste/pollution-related incidents
Greenhouse gas emissions	25%	 Scope 1 intensity (tons of carbon dioxide equivalent [tCO2-e] per units produced and revenues) Scope 2 (tCO2-e per units produced and revenues) 	 Energy Intensity (MWh per revenues) Total renewable energy purchased or generated (MWh) Scope 3 intensity (tCO2-e per revenues)
∰ o Water	25%	 Water intensity (m3, by revenue or units produced) % of production from facilities operating in water-stressed regions 	- % of water that is recycled- Net freshwater consumption (m3)
⊕ ⊕ ⊕ Land use and biodiversity	10%	 Number of instances of non-compliance with biodiversity-related regulations) 	 Proportion of suppliers assessed and audited on their biodiversity performance

Health Care Providers and Services

The primary environmental risks facing hospital systems are the GHG emissions associated with operations and, to a lesser extent, the handling of hazardous waste that comes as a byproduct of patient care and ensuring plentiful clean water supply. Therefore, we apply a higher weight to GHG emissions, equal weighting to waste & pollution and water, and a lower weight to Land Use and Biodiversity. The main quantitative performance indicators for this subsector are listed in the table below.

Factor		Key performance indicators	Other performance indicators
Greenhouse gas emissions	40%	 Scope 1 intensity (tons of carbon dioxide equivalent [tCO2-e] per patient and revenues) Scope 2 (tCO2-e per patient produced and revenues) 	 Energy Intensity (MWh per revenues) Total renewable energy purchased or generated (MWh) Scope 3 intensity (tCO2-e per revenues)
Waste and pollution	25%	 Normalized total waste generated (MT per revenue) % of waste that is recycled/reused/recovered % of hazardous waste 	- % of waste to landfill - Reportable waste/pollution-related incidents
∰ o Water	25%	 Water intensity (m3, by revenue, units produced, or # patients per facility) % of production from facilities operating in water-stressed regions 	- Net freshwater consumption (m3)
⊕ ⊕ ⊕ Land use and biodiversity	10%	 Number of instances of non-compliance with biodiversity-related regulations 	- N/A

Material Social Risks

The most material ESG factors in the health care sector are predominantly social considerations. It is exposed to the broad spectrum of social risks, most notably safety, talent attraction and retention, and product affordability and access:

- **Product & Service Safety-** The health care business model is centered on promoting health and wellbeing of individuals and communities. Product safety, and the health of employees and patients are critical considerations for healthcare entities.
- **Accessibility and affordability-** Regulation and government policy influence company behavior, especially interms of access and affordability. Depending on the jurisdiction, public health care, private health care, or a combination of both can

be available. Moreover, the way health care is paid for varies greatly by country—many use a public single-payor system with the U.S. being a notable exception using a combination of public and private insurance options. Many jurisdictions also blend the two approaches by offering both public and private insurance options. While our scoring methodology neither exhorts nor penalizes a company for operating within the system of its jurisdiction, we contemplate the differences in outcomes, affordability, and access which may arise as a result.

- **Customer and community engagement** This factor affects health care entities' social license to operate by influencing their reputation among key stakeholders. For the health care sector, impacts on communities and customers are often intertwined and therefore, analysts may align the scoring of the two factors.
- **Data Privacy-** Sensitive patient data is collected during service provision and is often processed using life science tools and equipment. Ensuring patient data is private within each subsector is material to the company, and important for the customer.
- **Talent Attraction and Retention** Entities are competing to attract and retain top talent to foster scientific breakthrough and provide a high level of service, care, and innovation.

Social Factors: Weighting and KPIs

The weighting of our social factors varies by subsector. We use similar indicators across the subsectors to inform our opinion of an entity's management of its social impacts relative to peers in the same subsector, although some may vary. Also informing our opinion under our ESG Evaluation are qualitative indicators such as the quality and effectiveness of an entity's policy on safety and customer engagement, or its talent acquisition strategy. We apply the following weightings to the social factors.

Factor	Pharma and Biotech	Health Care Equipment and Supplies/Life Sciences	Health Care Providers and Services
	35%	30%	25%
Customer Engagement			
∀= ∀= ∀=	25%	40%	25%
Safety Management			
Communities	20%	10%	25%
ΪΝΪ	20%	20%	25%
Workforce and Diversity			

Pharma and Biotech

We view customer engagement to be the most material risk for pharmaceutical and biotech companies because the products they deliver to customers directly impact the customers' quality of life and in many cases, their ability to continue living. Moreover, issues of pricing, data privacy, and access drive regulatory, legal, and public scrutiny. Companies that successfully balance profitability with social imperatives to contribute positively to public health tend to experience fewer instances of high-profile controversies related to their customer relationships. Like the broader sector, the inherent nature of dealing with human life and health makes safety another material concern for these companies. The main quantitative performance indicators for this subsector are listed in the table below.

Factor	Weight	Key Performance Indicators	Other performance indicators
Customer engagement	35%	 % of revenue from products launched in past 3 years (branded drugs) Net price increase of key products or portfolio year over year (US and overall) Spending on R&D as a % of revenue 	s – Average price difference of key products or portfolio between U.S., Europe, and developing markets – % of revenue coming from value-based pricing contracts – Market share and trends in market share of key products by revenue and % of patient population – Number of products approved under accelerated process – Data privacy breaches: number of breaches, number of customers affected
∨= ∨= ∨= ∨= Safety management	25%	- Number of work-related employee/contractor fatalities - TRIFR (Total Recordable Injury Frequency Rate) - Number of product recalls issued by severity i.e. Class I and Class II - # of FDA/regulatory warning letters	 DART Rate (Number of OSHA Recordable injuries and illnesses that resulted in Days Away; Restricted; Transferred X 200,000) / Employee hours worked) Total value of recalled products as a % of revenue Total value of safety-related fines associated with entity's products
Communities	20%	 Cash contributions, employee volunteering and in-kind giving converted in reporting currency Contributions to patient access programs 	 Total cost of litigation arising from clinical trials Animal testing policy and breaches Clinical trial-related fines/breaches % of own operations, Tier 1 suppliers, and assessed for Human Rights issues Total value/impact/reach of product donations Foundation grants and donations to NGOs and universities as a % of revenue
ကိုကို Workforce and diversity	20%	 Voluntary/involuntary turnover rate (%) % of women in total workforce, junior and senior management positions, and in STEM functions 	 Number of R&D Employees % of ethnic minorities in total workforce and management positions Average number of hours per FTE of training and development Gender pay gap % of employees taking part in the employee survey (engagement) and the outcome on some key questions (satisfaction) Number of permanent employees Number of contractors/temporary workers

Health Care Equipment and Supplies/Life Sciences

These companies have less direct customer interaction and therefore have less exposure to community issues. We believe device companies' largest social exposure is from issues of product safety, especially for products installed within the human body. The main quantitative performance indicators for this subsector are listed in the table below.

Factor	Weight	Key Performance Indicators	Other performance indicators
∨= ∨= ∨= Safety management	40%	 Number of work-related employee/contractor fatalities TRIFR (Total Recordable Injury Frequency Rate) Number of product recalls issued by severity i.e. Class I and Class II # of FDA/regulatory warning letters 	 Total value of recalled products as a % of revenue Total value of safety-related fines associated with entity's products DART Rate (Number of OSHA Recordable injuries and illnesses that resulted in Days Away; Restricted; Transferred X 200,000) / Employee hours worked)

Factor	Weight	Key Performance Indicators	Other performance indicators
Customer engagement	30%	 - % of revenue from products launched in past 3 years (devices/equipment) - Spending on R&D as a % of revenue 	 8 – % of revenue coming from value-based pricing contracts Market share and trends in market share of key products by revenue and % of patient population Number of products approved under accelerated process Data privacy breaches: number of breaches, number of customers affected
MM Workforce and diversity	20%	- Voluntary/involuntary turnover rate (%) - % of women in total workforce, junior and senior management positions, and in STEM functions	 Number of R&D Employees % of ethnic minorities in total workforce and management positions Average number of hours per FTE of training and development Gender pay gap % of employees taking part in the employee survey (engagement) and the outcome on some key questions (satisfaction) Number of permanent employees Number of contractors/temporary workers
Communities	10%	 Cash contributions, employee volunteering and inkind giving converted in reporting currency Contributions to patient access programs 	 Total cost of litigation arising from clinical trials Animal testing policy and breaches Clinical trial-related fines/breaches % of own operations, Tier 1 suppliers, and assessed for Human Rights issues Total value/impact/reach of product donations Foundation grants and donations to NGOs and universities as a % of revenue

Health Care Providers and Services

The weighting of social factors below reflects the multiple social risks and the importance of holistic stakeholder management, balancing employees, customers, and communities for health care providers. The main quantitative performance indicators for this subsector are listed in the table below.

Factor	Weight	Key Performance Indicators	Other performance indicators
Customer engagement	25%	 Quality of care metrics (for example, HCAHPS rating for US hospitals) 	 Ratio of uninsured patients to total patients % collections on uninsured patients compared with average contracted rates (net revenue) Data privacy breaches: number of breaches, number of customers affected
∨= ∨= ∨= Safety management	25%	 Number of work-related employee/contractor fatalities TRIFR (Total Recordable Injury Frequency Rate) CMS Star Rating (US) or readmission rate (non-US hospitals) 	 DART Rate Number of Serious Reportable Events as defined by the National Quality Forum or local equivalent
Communities	25%	 Cash contributions, employee volunteering and inkind giving converted in reporting currency Charitable care provided to communities reported in dollars and number of people (US) 	N/A
MM Workforce and diversity	25%	 Ratio of permanent employees to contractors/temporary workers Voluntary/involuntary turnover rate (%) % of women in total workforce, junior and senior management positions, and in STEM functions 	- % of ethnic minorities in total workforce and management positions - Average number of hours per FTE of training and development - Gender pay gap - % of employees taking part in the employee survey (engagement) and the outcome on some key questions (satisfaction) - Nurse FTE/Adjusted admissions

Submit Feedback

You can submit your feedback online or by email.

Please specify which sector you are commenting on when submitting feedback.

We would particularly like to hear from you regarding:

- 1. Which risks are missing or not relevant?
- 2. Which KPIs are missing, could be enhanced, or are not relevant?
- 3. What views do you have on the suggested factor weights for the environmental and social analysis?
- 4. Do you have additional feedback(s) on this document?

Endnotes

¹ Events and issues are material for the ESG Evaluation when in our view they could meaningfully affect the entity's business operations, cash flows, legal or regulatory liabilities, access to capital, reputation, or relationships with key stakeholders and society more generally, either directly or through its value chain (upstream or downstream).

Related Research

- "The ESG Risk Atlas: Sector And Regional Rationales And Scores," published July 22, 2020
- "Our Updated ESG Risk Atlas And Key Sustainability Factors: A Companion Guide," published July 22, 2020
- "Environmental, Social, And Governance Evaluation: Analytical Approach," published Dec 15, 2020
- "How We Apply Our ESG Evaluation Analytical Approach: Part 2," published June 17, 2020

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² We are mindful that some may be produced using different methodologies and scopes.

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