

Climate and Energy Benchmark in the Transport Sector

Methodology Report

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World
Benchmarking
Alliance



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The Intergovernmental Panel on Climate Change 2022 Impacts, Adaptation and Vulnerability report makes a clear statement: ‘The scientific evidence is unequivocal: climate change is a threat to human wellbeing and the health of the planet. Any further delay in concerted global action will miss the brief, rapidly closing window to secure a liveable future.’¹

To accelerate action towards a global decarbonisation and energy transformation, while continuing to work in partnership with [CDP](#) on decarbonisation assessment for the benchmark, the World Benchmarking Alliance (WBA) has formed a strategic partnership with the [Assessing low-Carbon Transition \(ACT\)](#) initiative developed by ADEME, the French Agency for Ecological Transition.

WBA’s [Climate and Energy Benchmark](#) measures and ranks high-emitting companies on key issues underpinning the decarbonisation and energy transition. The benchmark engages companies themselves, evaluating their current – and importantly – their future decarbonisation plans, as well as their past and present performance to assess their alignment with the Paris Agreement.

From this year on, the Climate and Energy Benchmark will also integrate measurements of companies’ contributions to a socially just transition. Embedding the Sustainable Development Goals’ (SDGs) principle to ‘leave no one behind’, WBA’s benchmark will fill a critical accountability gap bringing data and insights on what companies are doing to respect

the rights of workers, communities and other affected stakeholders while working towards low-carbon goals. The benchmark aims to create transparency and corporate accountability through holistic assessments, and stir companies towards commitment and action.

This report presents an overview of why WBA benchmarks companies in the transport sector. It also details the ACT Transport methodology and the social and just transition indicators used in the benchmark. Additionally, it explains our principles for selecting the 90 companies assessed in the 2022 benchmark and presents the list of these companies.

“Transport has the highest reliance on fossil fuels compared to any sector. In 2020, the COVID-19 regulations led to a temporary fall in transport sector emissions, but the demand for transport has rebounded in 2021 and is predicted to continue growing. The transport sector is critical to the decarbonisation and energy transformation that we need to achieve the Paris goals and the SDGs. The industry needs to make a deep transformational change if we are to meet the well-below 1.5°C ambition.”

Vicky Sins,

Decarbonisation and Energy Transformation Lead, WBA

The clock is ticking. Without urgent action on climate change, the world will experience more extreme weather events, rise in sea levels and negative impacts on biodiversity, ecosystems and oceans. These will have a disproportionate effect on the poorest and most vulnerable populations for decades to come.

Overall, climate change affects billions of people, in both current and future generations. The IPCC 2022 Impacts, Adaptation and Vulnerability report shows that global warming, reaching 1.5°C in the near term, will cause unavoidable increases in climate hazards and present multiple risks to ecosystems and humans.

In 2015, 196 countries signed up to the Paris Agreement for climate change action. In the same year, 193 countries committed to the UN Sustainable Development Goals (SDGs). However, the world still needs a major decarbonisation and energy transformation if we are to align global efforts to achieve the goals set out in the Paris Agreement and prevent the worst impacts of climate change. These goals include limiting global warming to well below 2°C and, further still, to below 1.5°C. Moreover, these efforts need to be carried out in a just and equitable way, so that no one is left behind.

Of all sectors, transport has the highest reliance on fossil fuels. It accounts for 37% of CO₂ emissions among all end use sectors². In the US and EU-28 countries, the transport sector accounted for 29% and 27% of total greenhouse gas (GHG) emissions respectively^{3,4}.

In China, the sector accounted for 10% of total GHG emissions in 2021, with the share growing rapidly⁵.

Regardless of the anticipated growth in transport demand, the Net Zero Emissions by 2050 Scenario requires transport sector emissions to decrease by 20% to 5.7 gigatonnes (Gt) by 2030¹. Companies in the transport sector thus play a critical role in ensuring decarbonisation aligned with the Paris Agreement agenda.

Statistics from 2020 show that passenger transport accounts for around 55% of global transport GHG emissions, while logistics transport is responsible for 42.2%⁶. Furthermore, the impacts of the transport sector are not confined to this industry alone but extend to other sectors as an important source of scope 3 emissions. Scope 3 emissions of transportation including business travel, upstream and downstream transportation and distribution weighs significantly in some sectors such as Banks, Diverse Financials, Insurance and Pharmaceuticals, Biotechnology & Life Sciences⁷. Transport companies' engagement with clients, therefore, has a significant role to play in the low-carbon transition within the sector as well as across the whole value chain.

Benchmarking the transport sector

WBA produces different benchmarks assessing the progress of 2,000 companies across seven system transformations. These transformations are needed to achieve the UN's Sustainable Development Goals (SDGs) and accelerate sustainable business beyond 2030. The private sector has a crucial role to play in advancing the SDGs, but there needs to be real change in the way that business impact is measured. By publishing free and publicly available benchmarks, WBA envisions a future where companies, investors, policymakers, civil society and individuals are empowered with data to take action and encourage more sustainable business practices across all sectors.

The WBA Climate and Energy Benchmark is an accountability mechanism that measures corporate progress against the Paris Agreement and whether companies are contributing to a just transition. Private sector engagement alongside action by governments and civil society are critical for meeting the SDGs and the Paris goals.

In 2022, the Climate and Energy Benchmark will assess and rank 90 transport companies on their alignment with a low-carbon world and their contributions to a just transition. This report sets out how we will do that.



Benchmark assessments for a just climate and energy transition

Since 2019, WBA's Climate and Energy Benchmark has used the ACT methodologies to assess and benchmark keystone companies in high-emitting sectors for their decarbonisation efforts. In 2021, we launched our just transition indicators which – used together with our core social indicators – assess companies' responsible business conduct and their ambitions and actions to address the social impacts of the low-carbon transition.

This year, for the first time, the Climate and Energy Benchmark will assess and rank companies from its 4th sector using the ACT methodology, as well as the core social and just transition indicators in concert. This will provide a holistic assessment of companies' efforts to achieve a low-carbon transition and their efforts to make the transition just and equitable. This is aligned with WBA's strategy to integrate the social transformation assessment at the heart of each of the seven system transformations that it focuses on, so that we move towards a world where companies value all people and leave no one behind.

Assessing low-carbon transition: ACT methodology

The sectoral [ACT methodologies](#) assess organisations' readiness to transition to a low-carbon economy, using future-oriented indicators. This includes assessing companies' climate strategies, business models, investments, operations and management of GHG emissions. Based on the sectoral decarbonisation approach developed by the [Science Based Targets initiative \(SBTi\)](#), ACT evaluates a company's alignment with the transition to a low-carbon world. It establishes a decarbonisation

pathway for each company, which can be compared against its publicly stated low-carbon targets and transition plan. The application of the sectoral decarbonisation approach is described in the ACT framework.

ACT published its [Transport sector methodology](#) in February 2021. This year, WBA will use the company assessments derived using this methodology to generate its 2022 Transport Benchmark.



Scope of the methodology and the benchmark

The ACT Transport methodology is designed to assess the different types of companies engaged in this sector, including activities categories listed in the table below.

According to the transport sector guidance of the Task Force on Climate-Related Financial Disclosures (TCFD), the transportation sector includes but is not limited to the sub-industries listed in the table below. The ACT Transport methodology categorisation of these activities is provided in the right-hand column of the table.

Transport Sub-industry by ACT categories	Transportation Industry/ Sub-industry by TCFD	NACE code by ACT
Freight air transport	Air Freight	51.21
Passenger air transport	Passenger Air	51.10
Sea & coastal freight water transport Inland freight water transport	Maritime Transportation	50.20 50.40
Freight rail transport Passenger rail transport, interurban	Rail Transportation	49.20 49.10
Bus/Freight transport by road	Trucking Services	49.41
Urban and suburban passenger land transport	Automobiles*	49.31

*Automobiles are excluded from 2022 Transport Benchmark, but were covered by [2021 Automotive Benchmark](#).

The 2022 Transport Benchmark will exclude companies with only sea and coastal passenger water transport and inland passenger water transport activities. This is because no aggregated data was found to design the low-carbon pathways for these types of companies. Besides, the ACT Transport methodology specifies companies engaging in activities of sub-contracting and public service delegation. The Transport Benchmark will apply the specific assessment and scoring approaches to these companies accordingly.

WBA Transport Benchmark as a roadmap

The WBA Transport Benchmark will act as a roadmap for companies to show how they can contribute to achieving the SDGs and the Paris Agreement goals. The assessments based on the ACT methodology will place a particular emphasis on key areas such as:

- Alignment of a company's targets across the value chain (i.e. emission scopes 1, 2 and 3)
- Projected future emissions intensity across the value chain
- Locked-in emissions (i.e. emissions planned or 'locked in' by a company between the reporting year and 15 years onwards from the reporting year, compared to its carbon budget)

Companies will also be assessed on their implementation of low-carbon business models, which include developing and shifting to more sustainable fuels; offering combined transport of goods and improving transport efficiency; and engaging with and leading clients towards

low-carbon transport services. Companies' development of low-carbon transition plans and scenario analysis, which determine the impact of the transition on their strategy or business model, will also be important elements of the assessments.

The ACT Transport methodology was developed with input from the multistakeholder Transport Technical Working Group. The development process included a public consultation and a thorough technical 'road test', wherein ACT sought the views and opinions of a wide range of stakeholders including companies, civil society, academics and other relevant experts.

The ACT methodology includes indicators that align with the information disclosed by companies using CDP, GRI and SASB reporting frameworks. It is also aligned with and supports the objectives of the recommendations made by the TCFD. Mappings of alignments on transition plan elements across some frameworks could be found in a [CDP paper](#) (p. 5) and [GFANZ paper](#) (p. 61). The technical team in SBTi has also been in consultation for ACT transport methodology development. In keeping with this alignment and collaboration, WBA will continue to embrace multi-stakeholder dialogue and consultation throughout the benchmark development process.

The assessment score based on the ACT methodology will consist of performance, narrative and trend:

- **The performance score** - a number from 20 (highest) to 0 (lowest): represents a company's performance across key levers for the low-carbon transition.
- **The narrative score** - a letter from A (highest) to E (lowest): represents a company's state of alignment with the Paris Agreement goals with a holistic overview including consistency and reputation matters.
- **The trend score** - "+" for improving, "=" for remaining the same, or "-" for worsening: signals the near-term movement of the company's alignment with the low-carbon economy.

Notably, the ACT Transport methodology weighs the different modules that make up the performance scores according to each company's business model's impact on climate change. Indicator weights, therefore, vary depending on whether a company operates its own fleet or is engaged in sub-contracting or public service delegation – but all companies will receive a comparable ACT rating. Regardless, the ACT scores of all companies will be normalised to 100 to enable comparisons and benchmarking.

Benchmark assessments for a just climate and energy transition



Social transformation and the low-carbon transition: WBA core social and just transition indicators

Social transformation sits at the heart of the WBA model, embedding the ‘leave no one behind’ principle in every transformation area that WBA focuses on. In keeping with this, WBA is committed to integrating social criteria in all benchmarks. This includes the Climate and Energy Benchmark, which will integrate assessments based on the common set of core social indicators (applicable to all 2,000 companies within the scope of WBA’s benchmarks) as well as a set of just transition indicators developed in 2021.

Considering the crucial role the private sector must play in achieving a low-carbon world, the Climate and Energy Benchmark intends to assess 450 companies by 2023 on their contribution to a just transition by assessing their alignment with the Paris Agreement goals alongside their approach to addressing the social challenges of a low-carbon transition. These 450 companies employ around 24 million people and hold immense influence to power a just transition.

Core social indicators (CSIs)

The social transformation framework sets out the societal expectations for business conduct that companies should meet in order to leave no one behind. The framework establishes three pillars that companies should uphold; namely, they should: respect human rights, provide and promote decent work and act ethically. In doing so, companies can support the SDGs, address inequalities and contribute to a sustainable future for all.

Benchmark assessments for a just climate and energy transition

The CSIs measure how companies perform on these high-level expectations for social transformation. Eighteen core social indicators act as ‘signposts’ towards companies’ performance in relation to the three pillars of social transformation. The Climate and Energy Benchmark will assess 450 companies using these CSIs.



Each CSI will be scored on a scale of 0 to 1 based on publicly available information. The scale will be divided into three levels to gauge company performance:

1. **Fully met:** a company meets all of the elements for a particular indicator (1 point).
2. **Partially met:** a company meets some elements for a particular indicator (0.5 points).
3. **Not met:** a company meets none of the elements for a particular indicator (0 points).

In cases where a company meets only one element of an indicator, there isn’t a possibility to assign a ‘partially met’ score of 0.5 points. Thus, a company can either only ‘fully meet’ (1 point) or ‘not meet’ (0 points) such indicators.

Each CSI will be singly weighted, except for the following indicator topics that are part of the human rights due diligence process: CSI 4 (Assessing human rights risks and impacts) and CSI 5 (Integrating and acting on human rights risks and impacts). Given the foundational importance of human rights due diligence, these two indicator topics will receive double weighting. The 18 CSIs will therefore represent a total of 20 points.

Just transition indicators

Decarbonisation of the global economy will only succeed if it includes solutions for affected workers and communities, also known as a 'just transition'. The WBA just transition assessments are the first of their kind and will be integrated into the transport benchmark.

The assessments will make use of 6 just transition indicators (JTI):

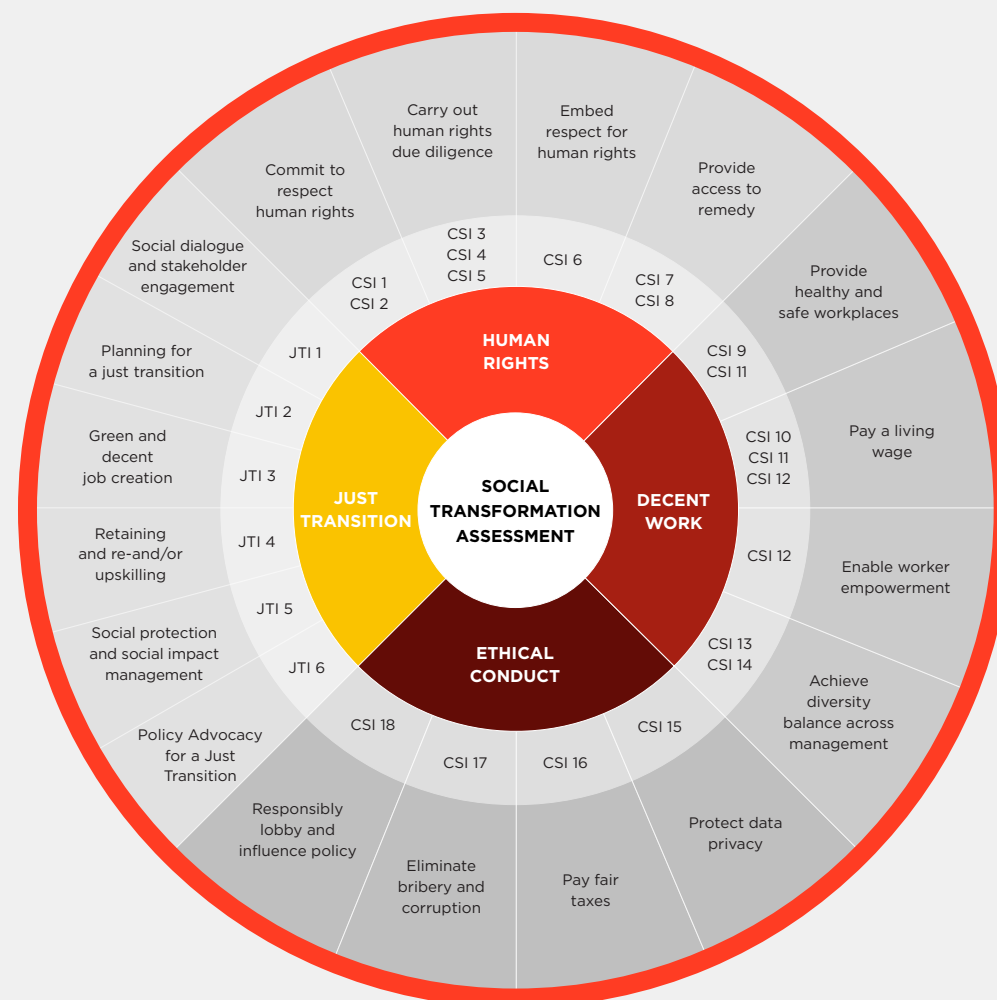
1. Social dialogue and stakeholder engagement
2. Just transition planning
3. Creating and providing or supporting access to green and decent jobs
4. Retaining and re- and/or upskilling
5. Social protection and social impact management
6. Advocacy for policies and regulations

Each JTI will be scored on a scale of 0 to 2 points based on publicly available information. The most recently published information (within the last three years) will be used to ensure it is relevant to the just transition. For simplicity, each indicator has four indicator elements, (a) to (d), with each element typically representing 0.5 points. So, for example, if a company meets elements (a) and (b), but not elements (c) and (d), it would get 1 point out of a maximum of 2.

Each JTI will be singly weighted, except for JTI 1 (Social dialogue and stakeholder engagement in a just transition) and JTI 2 (Just transition planning). Given the relative importance of these indicator topics, JTI 1 and JTI 2 will receive double weighting – so the 2 points available in

this case will represent a maximum of 4 points. The 6 JTIs will therefore represent a total of 16 points.

FIGURE 1 SOCIAL TRANSFORMATION ASSESSMENT IN THE CLIMATE AND ENERGY BENCHMARK

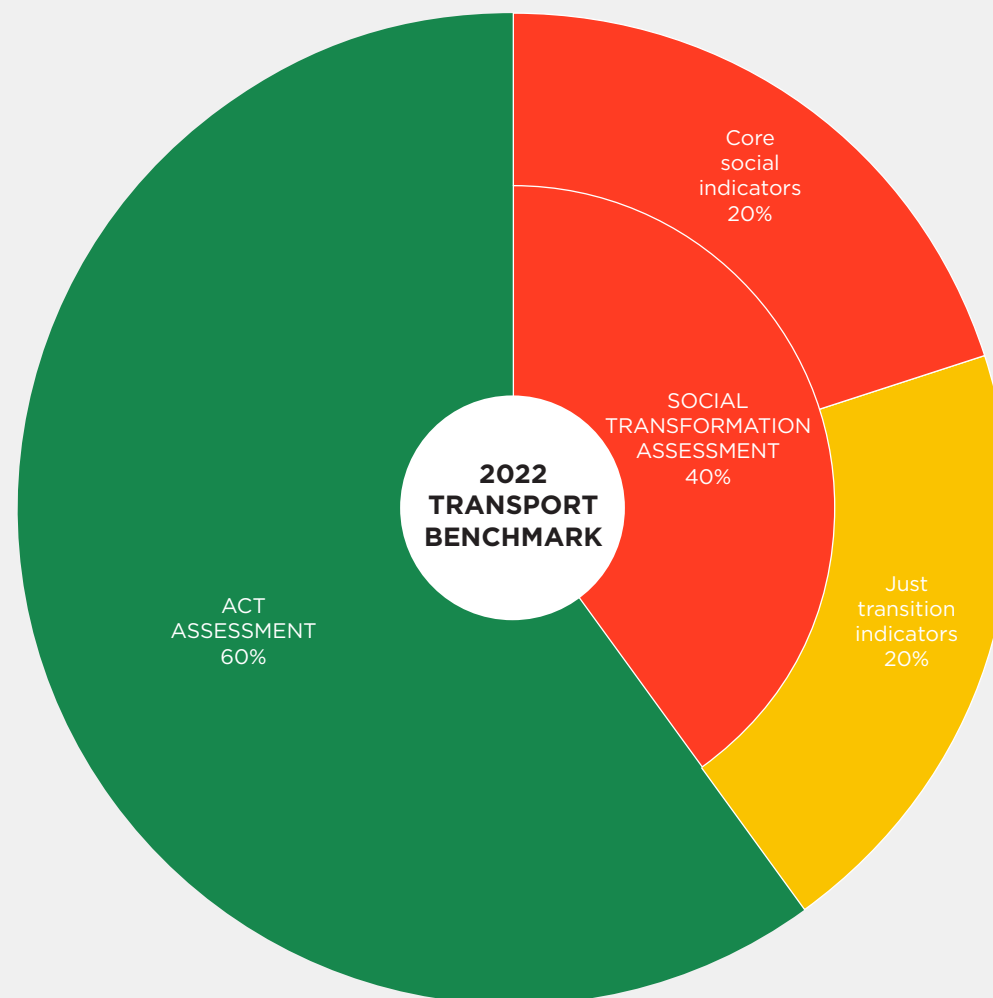


From 2022 onwards, all Climate and Energy Benchmark assessments will comprise the Assessing Low-carbon Transition (ACT assessment) and the social transformation assessment. The 2022 Transport Benchmark will be the first Climate and Energy Benchmark integrating companies' scores for these two assessments. The companies will be ranked based on one integrated score, comprising their ACT assessment and core social and just transition indicator scores. The weightings of the ACT, CSI and JTI scores will be set to 60%, 20% and 20% of the total score respectively. This decision was made based on feedback received during the public consultation on our just transition methodology and in dialogue with WBA's Just Transition Advisory Group.

The following graphic visualises how the three scores will be integrated into one overall score on a scale of 1 to 100.

The benchmark ranking based on these integrated scores will therefore provide the performance of companies in terms of the low-carbon transition, as well as their relevant impacts on the social transformation. Furthermore, the benchmark will provide the ACT, core social and just transition scores at the indicator level, and stakeholders can use these to rank companies separately.

FIGURE 2 2022 TRANSPORT BENCHMARK



Selecting the 90 keystone transport companies

WBA has applied systems thinking to identify 90 transport companies that will have a disproportionate influence on meeting the SDGs and the Paris Agreement. We have built on leading academic research that puts forward the idea of keystone actors, inspired by the concept of ‘keystone species’ in ecology. This is because the most influential companies in a given industry operate similarly to keystone species in ecological communities. This means that these companies can have a disproportionate effect on the structure and system in which they operate⁸.

We have used the following five criteria and principles established by WBA for selecting the 90 keystone transport companies:

1. The company dominates global production and service revenues and/or volumes within the transport sector.
2. The company controls globally relevant segments of production and/or service provision. For the 90 keystone transport companies, this was based on an assessment of company size metrics, where available, including: number of passengers, number of miles transported, fleet size, twenty-foot equivalent unit (TEU) capacity, etc.
3. The company connects (eco)systems globally through subsidiaries and their supply chains.
4. The company influences global governance processes and institutions.
5. The company has a global footprint, particularly in developing countries.

These principles are applied holistically. For principle 5, which is a crucial element to WBA’s work, we have considered companies from all regions, resulting in the inclusion of some companies that have relatively small revenues and production volumes compared to some others, to balance this with principles 1 and 2.

Additionally, we have used various sources to inform the selection of the 90 companies, such as cross-checking which companies are assessed by the Transition Pathways Initiative (TPI)⁹ and Climate Action 100+¹⁰ initiative to ensure maximum alignment. The list of the selected 90 companies is provided in Annex I.



Next steps

1. WBA will contact all 90 companies in the coming months to encourage their engagement throughout the benchmarking process. In Q2-Q3 2022, the WBA and CDP teams will share the ACT assessment and social transformation assessment data with each company for validation. Companies will be provided with resources and materials to learn more about the ACT, social transformation assessments and the WBA Transport Benchmark ahead of the data collection period.
2. We strongly encourage companies to participate in the data validation process. We will be on hand to answer any questions companies have about the assessments and the benchmark. Companies may only submit an appeal regarding their assessment result if they have actively participated in the data validation process. Please see our FAQs here for further details.
3. The benchmark results will be published in Q4 2022.
4. We intend for our work at WBA to contribute to a multi-stakeholder movement. In tandem with the development of the Transport Benchmark, we will therefore be engaging with our global Alliance and a broad range of stakeholders to build communities of practice and action to take forward the benchmark findings.



If you have questions about the Climate and Energy Benchmark, please reach out to:

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Appendix I: Companies and categories in the 2022 Transport Benchmark

Alphabetic order	Company name	Country of headquarters
A	A.P. Moller - Maersk	Denmark
	Aeroflot	Russian Federation
	Air France-KLM	France
	Alaska Air Group	United States of America
	American Airlines Group	United States of America
	ANA Holdings (All Nippon Airlines)	Japan
B	Bolloré	France
C	C.H. Robinson Worldwide	United States of America
	Cathay Pacific	Hong Kong, China
	Central Japan Railway	Japan
	China Airlines	Taiwan, China
	China COSCO Shipping	China
	China Eastern Airlines	China
	China National Aviation Holding Corp. (Air China)	China
	China Post Group	China
	China Southern Airlines	China
	China State Railway Group Company, Ltd.	China
	CJ Logistics Corporation	Republic of Korea
	CMA CGM	France

Alphabetic order	Company name	Country of headquarters
	ComfortDelGro Corporation	Singapore
D	Delta Air Lines	United States of America
	Deutsche Bahn	Germany
	Deutsche Post (DHL)	Germany
	DSV Panalpina	Denmark
E	Emirates	United Arab Emirates
	Ethiopian Airlines	Ethiopia
	Euronav	Austria
	Evergreen Marine Corporation	Taiwan, China
	Expeditors	United States of America
F	FedEx	United States of America
	Ferrovie dello Stato Italiane (FS Italiane)	Italy
	FirstGroup	United Kingdom
G	Great Eastern Shipping	India
	Grindrod	South Africa
H	Hankyu Hanshin Holdings	Japan
	Hapag Lloyd	Germany
	Hyundai Merchant Marine	Republic of Korea

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Alphabetic order	Company name	Country of headquarters
I	Indian Railways	India
	IndiGo	India
	International Airlines Group	United Kingdom
J	J.B. Hunt Transport Services	United States of America
	J&T Express	Indonesia
	Japan Airlines	Japan
	JD Logistics	China
K	Korean Air Lines	Republic of Korea
	Kuehne + Nagel International	Switzerland
L	La Poste	France
	LATAM Airlines Group	Chile
	London Underground	United Kingdom
	Lufthansa	Germany
M	MISC Group	Malaysia
	MSC Mediterranean Shipping Company	Switzerland
	MTR	Hong Kong, China
N	National Express Group	United Kingdom
	National Railroad Passenger Corporation (Amtrak)	United States of America
	Nippon Express	Japan
	Nippon Yusen	Japan
	NS Groep	Netherlands

Alphabetic order	Company name	Country of headquarters
O	OBB-Holding	Austria
	Ocean Network Express	Singapore
	Old Dominion Freight Line	United States of America
Q	Qatar Airways Group	Qatar
R	Renfe Operadora	Spain
	Rossiyskiye Zheleznye Dorogi (JSC Russian Railways)	Russian Federation
	Royal Mail	United Kingdom
	Ryanair Holdings	Ireland
	Ryder System	United States of America
S	S.F. Holding	China
	Schneider National	United States of America
	SG Holdings	Japan
	Singapore Airlines	Singapore
	Sinotrans	China
	SNCF Group	France
	Southwest Airlines	United States of America
	Teekay	Bermuda
T	Tokyu Corporation	Japan
	Transdev	France
	Turk Hava Yollari (Turkish Airlines)	Turkey

Appendix I: Companies and categories in the 2022 Transport Benchmark

Alphabetic order	Company name	Country of headquarters
U	U-Ming Marine Transportation Corporation	Taiwan, China
	United Airlines Holdings	United States of America
	United Parcel Service (UPS)	United States of America
	US Postal Service	United States of America
W	Wallenius Wilhelmsen	Norway
	Wan Hai Lines	Taiwan, China
X	XPO Logistics	United States of America
Y	Yamato Holdings	Japan
	Yang Ming Marine Transport Corp	Taiwan, China
	YRC Freight	United States of America
Z	ZIM Integrated Shipping Services	Israel
	ZTO Express	China

Appendix II: References

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