S&P Global Ratings

Powered by Shades of Green

Climate Transition Assessment

DST Electric Vehicle Rental (Shenzhen) Co. Ltd.

Dec. 9, 2024

Primary contact

Bryan Popoola
Washington, D.C.
bryan.popoola
@spglobal.com

Location: China **Sector:** Automotive

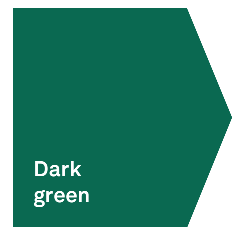
Climate Transition Summary

We assign an overall Dark green shade to DST Electric Vehicle Rental (Shenzhen) Co. Ltd. (DST). This reflects our view that for the foreseeable future, DST's pure-play green economic activities, focused solely in maintaining and expanding its electric vehicle (EV) fleet, will remain consistent with a low carbon climate resilient (LCCR) future and involve low obsolescence risk.

Despite its dependency on China's predominantly coal-based grid, DST strategically leverages its status as an early-stage, pure-play entity to spearhead the electrification of its logistics sector value chain in China, while also adapting to the country's shifting energy landscape. As China's national energy mix progresses toward cleaner sources in the medium term, DST is ramping up its sustainability disclosures and incorporating measurement and reporting of Scope 1, 2, and 3 greenhouse gas emissions. We believe this approach will expedite the reduction of its vehicles' lifecycle emissions within a shorter timeframe.

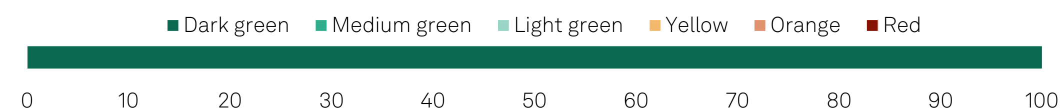
Future Shade

For Foreseeable Future

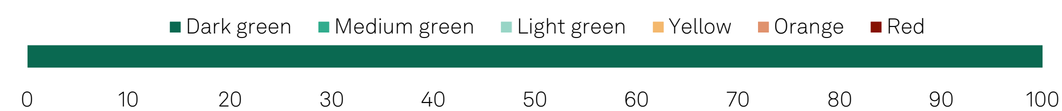


A Climate Transition Assessment shows the expected alignment of a company's activities with a low carbon climate resilient future once its planned transition changes are realized, considering implementation actions and risks.

Current activity: Revenue 2023 (% of total)



Investments: Capital expenditure (capex) 2023 (% of total)



Strengths	Weaknesses	Areas to watch
We view DST as a pure play green entity, essential for supporting the shift toward electrification of road freight activities as part of an LCCR future.	Voluntary liquidation of DST's Singaporean joint venture may have temporarily impacted the company's overseas strategy in APAC, as well as the achievement of its initial fleet expansion goals.	The company's lack of greenhouse gas emissions and medium-term fleet expansion targets present an area for improvement regarding DST's climate-related strategy and visibility of its overall business operations. DST's reliance on local grids, particularly in China where there is substantial coal generation capacity, underscores a challenge in the efficacy of EVs to reduce lifecycle emissions in the auto sector.

Company Description

Established in 2015 and headquartered in Shenzhen, China, DST provides full value chain operation services related to EVs for the logistics sector in mainland China. This principally involves leasing and sales of logistics of fully electrified new energy vehicles (NEVs), as well as services centering around the vehicles' lifecycle, including charging, maintenance, and digital solutions for fleet management. As of the end of 2023, the company had operations in more than 200 cities in China, including a vehicle fleet of over 100,000 units and 400 maintenance stations that only cater to EVs. The company does not own or operate any charging stations, but by the end of 2023 it had connected more than 1,000,000 third-party charging piles to its platform. The company has over 5,000 corporate customers.

Current Activity

2023 activity by shade (% of total)

Shade	Revenue (%)	Capex (100%)
Dark green	100	100
Activities: DST operates under one major division: transportation services for the logistics sector. Revenue-generating economic activities include EV servicing (40%), leasing (33%), and sales (27%).		
Medium green		
Activities: None.		
Light green		
Activities: None.		
Yellow		
Activities: None.		
Orange		
Activities: None.		
Red		
Activities: None.		

Opex--operational expenditure. Capex--Capital expenditure. Source: S&P Global Ratings.

DST generated all of its 2023 revenues from its green products and services around its fleet of logistics EVs. The company's overall strategy involves supporting the logistic sector's transition toward low-carbon transportation. As the urban logistics and distribution sector grows, DST has identified an opportunity to support its downstream businesses in reducing operational costs in addition to lowering environmental impacts from vehicular emissions. By providing EV maintenance, charging infrastructure, and leasing, DST helps address current barriers to EV adoption. Further, by acquiring its logistical EVs—from mini vans to light duty trucks—from Chinese automotive manufacturers that also produce internal combustion engine (ICE) vehicles, DST promotes increased EV production in the auto sector.

DST's approach to sustainability is focused on the delivery of its EV fleet services, with its key value chain considerations, albeit nascent in disclosures, centered on the circular economy and efficient resource utilization. Namely, it prioritizes initiatives to reduce raw material use and improve waste recycling rates for general waste streams and used EVs and their components. It also aims to reduce its energy and water consumption, but in all cases, the company has not yet tracked such environmental metrics or set forward-looking targets.

Despite China's high carbon intensity in its electricity grid, the nation's significant advancements in renewable energy positions it as a frontrunner in clean energy investment, influencing our analysis of DST's current activities as Dark green. While China's electricity grid maintains a high carbon intensity at 582 gCO2-equivalent per kilowatt-hour in 2023 (Ember, 2024; Energy Institute - Statistical Review of World Energy, 2023), the country's renewable mix has also grown rapidly in recent years. Notably, China commissioned as much solar PV as the rest of the world in 2022, while its wind additions also grew 66% year over year, supporting its position as a leading investor in clean energy. Given its size and the jurisdictional context, we believe DST is a "policy taker" with limited influence over the grid's immediate decarbonization pathway. We view favorably that within its capabilities, the company has positioned itself as a motivator of the climate transition for its upstream original equipment manufacturers (OEMs) and downstream logistics sector clients, focusing on vehicle services across the value chain that are harder to electrify. Our assessment of DST's current activities as Dark green reflects its proactive stance within the constraints of its operational environment.

Climate Transition Plan

Metrics And Targets

Transition targets

Transition metrics	Baseline metric (2021)	2024	2060
Measure and report its Scope 1-3 emissions	NA		
Emissions reduction (Scope 1-3)	NA		Net zero
Expand energy logistics EV fleet	50,471	140,000	

Source: Company Reporting and S&P Global Ratings.

As a currently Dark green company, DST's climate transition plan is focused on expanding its EV fleet and improving its visibility and transparency around its Scope 1, 2, and 3 emissions.

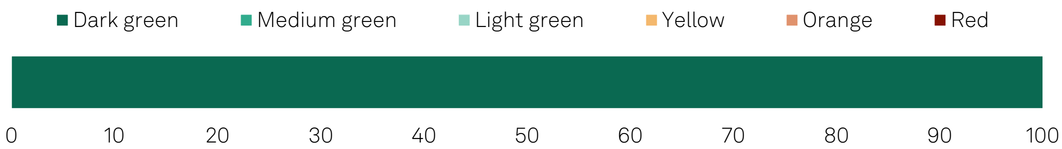
While steadily increasing its fleet numbers and aiming to expand beyond operations in China into other areas of Asia, the company does not currently have medium- or long-term targets for fleet size. DST sets its fleet expansion goals through year-end for budgeting purposes, but targets do not generally go beyond one year in the future and the company aims to remain flexible with regards to target-setting to reflect the relatively unpredictable the industry. DST cites the early stage of the overall EV market and supply chain as key reasons for the inability to set longer-term targets. We note that the recent voluntary liquidation of a joint venture (JV), Strides DST, alongside Singaporean transport operator SMRT's business arm Strides Holdings may have affected the company's fleet growth for 2024. The JV, of which DST was 40% owner, was intended to serve as a case study and eventually stimulate EV adoption in Singapore.

DST's transition plan does not yet consider its Scope 1, 2, and 3 emissions, which present some limitations to its transition strategy. DST is working with a third-party firm to assess its current GHG emissions and eventually set emissions targets. The project is still in its initial stages, but the company has identified seven relevant categories of Scope 3 emissions that it will aim to address throughout this process, including purchased goods and services, waste generated in operations, business travel, and use of sold goods, including leased assets. The end-of-life disposal or recycling of EV batteries are likely material to DST's Scope 3 emissions, for which the company has indicated it abides by internal policies to reduce resource consumption and improve the service life of its products to facilitate a more circular economy.

DST's downstream use of sold goods and upstream purchased goods and services, both of which it doesn't yet measure or have set targets, are the primary drivers of its lifecycle environmental impacts. The company does not take into consideration the grid intensity or trajectory of downstream markets in its expansion plans, which increases its risk of greater lifecycle emissions for its fleet. Also, while DST has procurement and qualification requirements for suppliers based on internal criteria with respect to operations, management, and R&D, this criterion is not related to environmental or climate mitigation factors such as emissions or risks related to sourcing and mining of natural resources, e.g., cobalt, lithium, and nickel, needed for upstream EV manufacturing. Relatedly, it does not include the GHG emissions of a suppliers' factories when selecting a supplier. We caution that the absence of such metrics could result in negative upstream environmental impacts.

Actions And Investments

2023 Capex breakdown by shade (% of total)



Source: S&P Global Ratings.

The company's core transition investment strategy seeks to reduce emissions across the transportation value chain by offering EV services designed specifically for the operational needs of its harder-to-abate logistics company clients. DST's range of services are aimed at supporting the broader adoption of EVs in the logistics sector not only for its clients but among its OEM vehicle suppliers. Despite the challenges it has faced in expanding its EV fleet, we view positively its contribution to lowering the lifecycle emissions of its value chain and commitment to its mission. We believe the EV market has good potential for growth in China, where there has been significant year over year increases (35%) in EV registrations from 2022 to 2023 (IEA, Global EV Outlook, 2024).

DST currently lacks a strategy for ensuring its logistics fleet uses renewable energy and depends on China's electrical grid, which is largely reliant on coal (63%), limiting the decarbonization impact of their EVs. While we view EVs as a key technology to decarbonize the transport sector, the degree to which they can reduce lifecycle GHG emissions is highly dependent on the carbon intensity of the grid where these vehicles are deployed. Without investing in on-site or contracted renewable energy infrastructure such as solar or wind power, the entity remains reliant on China's coal-derived grid, introducing risks around lifecycle emissions of its operations. China has stated its intention to reach peak emissions by 2030 and net-zero by 2060, but it continues to add new coal capacity in the near term. The country added nearly 47 GW of new coal capacity in 2023 and is expected to add another 44 GW in 2024 (S&P Global Commodity Insights, 2024). That said, China is experiencing a notable shift toward renewable energy sources, which now make up 34% of the country's energy mix. The grid's energy mix evolution will ultimately determine the decarbonization benefit of DST's business model. While this remains an area to watch for the company, we view the country's trajectory toward a cleaner grid as substantially improving the benefits of EVs in China's transportation sector in the medium- to long-term. In our view, this context, in addition to DST's focus on electrification of the harder-to-abate logistics supply chain, supports its contribution toward a low carbon climate resilient future.

Implementation Drivers

The entity has adopted governance mechanisms to help execute its transition strategy, but these are nascent. In recent years the company has worked on formally integrating sustainability into its corporate governance structure and created an ESG committee at the board level to help it monitor and assess climate change-related trends and their impact on the company's business. However, it does not yet maintain sustainability-linked executive compensation targets or responsibilities for sustainability at the senior management level, which we view as supportive to a growth-oriented transition strategy. DST has, however, introduced ISO 14001 to its business to improve its own environmental management system in 2023. The company also conducted a materiality analysis during reporting year 2021, using NASDAQ's ESG reporting guide and GRI standards to identify a list of potentially material issues. While the company maintains a good understanding of its most important sustainability issues because of this exercise (clean energy expansion, waste management and a circular economy, climate change resilience), it has not yet identified key climate risks to its assets, operations, and supply chain. DST's governance of transition issues is likely to continue maturing in the coming years.

We anticipate DST's continued EV fleet operation to be commensurate with its current core investment strategy, but it has faced some challenges around its recently shuttered joint venture in Singapore. Strides DST, an electric van leasing company in which DST holds a 40% stake, was voluntarily liquidated in March 2024. DST has stated that there will be no financial or operational constraints on the company's overseas expansion strategy as a result of this liquidation. While this unsuccessful venture may potentially present some reputational consequences in the short term, we do not believe that it will present substantial roadblocks to the company's expansion strategy. The company has in fact secured its first orders for logistics vehicles in South Korea as of early 2024. In addition, DST has received boosted funding capacity for its expansion plans in recent months. In late 2023, it secured US$80 million through its latest round of funding. China's recent policies, such as various renewables-friendly incentives and subsidies, may provide tailwinds for the company's sustainability endeavors, including its expansion goals. In the near-to-medium term, DST aims to collaborate with overseas EV manufacturers to offer a suite of digital services that center around the operation of logistics EVs, such as fleet management, charging, and maintenance. In the long-term, the company aims to replicate the full value chain approach from its Chinese operations to other parts of the globe, namely Asia-Pacific, the Middle East, and Europe.

S&P Global Ratings' Shades of Green

Assessments	Dark green	Medium green	Light green	Yellow	Orange	Red
Description	Activities that correspond to the long-term vision of an LCCR future.	Activities that represent significant steps toward an LCCR future but will require further improvements to be long-term LCCR solutions.	Activities representing transition steps in the near-term that avoid emissions lock-in but do not represent long-term LCCR solutions.	Activities that do not have a material impact on the transition to an LCCR future, or, Activities that have some potential inconsistency with the transition to an LCCR future, albeit tempered by existing transition measures.	Activities that are not currently consistent with the transition to an LCCR future. These include activities with moderate potential for emissions lock-in and risk of stranded assets.	Activities that are inconsistent with, and likely to impede, the transition required to achieve the long-term LCCR future. These activities have the highest emissions intensity, with the most potential for emissions lock-in and risk of stranded assets.
Example projects	Solar power plants	Energy efficient buildings	Hybrid road vehicles	Health care services	Conventional steel production	New oil exploration

Note: For us to consider use of proceeds aligned with ICMA Principles for a green project, we require project categories directly funded by the financing to be assigned one of the three green Shades.

LCCR--Low-carbon climate resilient. An LCCR future is a future aligned with the Paris Agreement; where the global average temperature increase is held below 2 degrees Celsius (2 C), with efforts to limit it to 1.5 C, above pre-industrial levels, while building resilience to the adverse impact of climate change and achieving sustainable outcomes across both climate and non-climate environmental objectives. Long term and near term--For the purpose of this analysis, we consider the long term to be beyond the middle of the 21st century and the near term to be within the next decade. Emissions lock-in--Where an activity delays or prevents the transition to low-carbon alternatives by perpetuating assets or processes (often fossil fuel use and its corresponding greenhouse gas emissions) that are not aligned with, or cannot adapt to, an LCCR future. Stranded assets--Assets that have suffered from unanticipated or premature write-downs, devaluations, or conversion to liabilities (as defined by the University of Oxford).

Related Research

- Analytical Approach: Climate Transition Assessments, July 18, 2024
- FAQ: Applying Our Integrated Analytical Approach For Climate Transition Assessments, July 18, 2024

Analytical Contacts

Primary contacts

Bryan Popoola
Washington, D.C.
bryan.popoola
@spglobal.com

Shirley Lui
Hong Kong
shirley.lui
@spglobal.com

Secondary contacts

Michael Ferguson
New York
michael.ferguson
@spglobal.com

Terry Ellis
London
terry.ellis
@spglobal.com