



Live more,
Bank less

OUR PATH TO

NET ZERO

SUPPORTING ASIA'S TRANSITION
TO A LOW-CARBON ECONOMY

AUTOMOTIVE



Disclaimer

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List of abbreviations

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Abbreviations (alphabetical order)	
AER	Annual efficiency ratio
AR6	IPCC's Sixth Assessment Report
BF-BOF	Blast furnaces-basic oxygen furnace(s)
CCUS	Carbon capture, utilisation and storage
CIX	Climate Impact X
CO ₂	Carbon dioxide
CRREM	Carbon Risk Real Estate Monitor
DCM	Debt capital markets
DRI-EAF	Direct reduced iron-electric arc furnace(s)
EAF	Electric arc furnaces
EAF-Scrap	Scrap-based electric arc furnace(s)
ECM	Equity capital markets
EU	European Union
EV	Electric vehicle(s)
GDP	Gross domestic product
GHG	Greenhouse gas(es)
IATA	International Air Transport Association
IBG	Institutional Banking Group
ICE	Internal combustion engine
IEA	International Energy Agency
IEA NZE	International Energy Agency's Net Zero Emissions by 2050 Scenario
IMO	International Maritime Organization
IPCC	Intergovernmental Panel on Climate Change
kgCO ₂ /MWh	Kilograms of CO ₂ emissions per megawatt hour of power produced
kgCO ₂ /p-km	Kilograms of CO ₂ emissions per passenger kilometre travelled
kgCO ₂ /vehicle-km	Kilograms of CO ₂ from tailpipe emissions per vehicle kilometre travelled
kgCO _{2e} /kg	Kilogram of CO ₂ equivalent per kilogram of crude steel produced
LLE	Loans and loan equivalent(s)
MPP	Mission Possible Partnership
MtCO _{2e}	Million tons of CO ₂ equivalent
N/A	Not applicable
NGFS	Network for Greening the Financial System
NZBA	Net-Zero Banking Alliance
O&G	Oil & Gas
OEM	Original equipment manufacturer(s)

List of abbreviations

PCAF	Partnership for Carbon Accounting Financials
REIT	Real estate investment trust(s)
SAF	Sustainable aviation fuel
SGX	Singapore Exchange
SPV	Special purpose vehicle(s)
TCFD	Task Force on Climate-Related Financial Disclosures

02 | Our net zero aligned emissions reduction targets

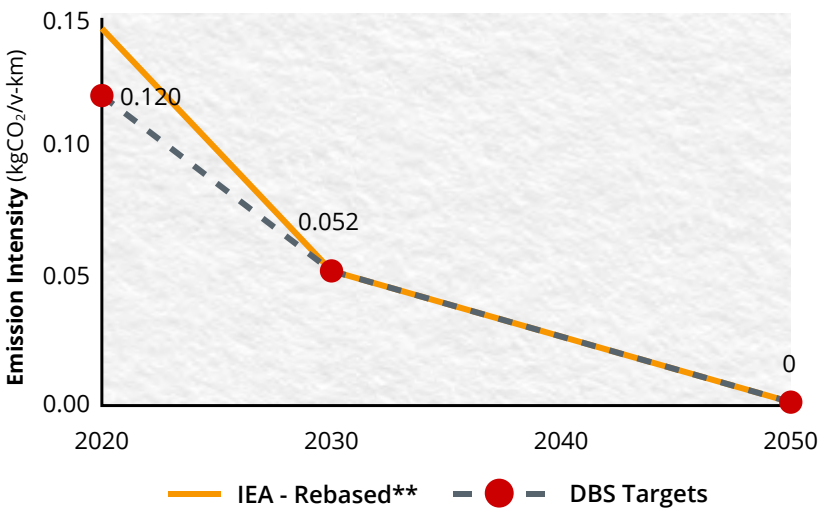
2.4. Automotive

“ The transition in the automotive sector is well under way. Improvements in electric vehicle (EV) technology is accelerating, and societies are starting to shift to green transportation. Many of our automotive clients have made clear commitments to move away from internal combustion engines. DBS will seek to be an active driver of this transition through our activity across the end-to-end EV value chain.



Adrian Chai
Group Head of Consumer Products, Automotive, Food & Agribusiness and Industrials

Automotive Targets



Year	IEA NZE reference (kgCO ₂ /v-km)	DBS targets (kgCO ₂ /v-km)	% Reduction vs. 2020
2020	0.144	0.120	-
2030	0.052	0.052	57%
2050	0	0	100%

What's included?

- Tailpipe emissions (Scope 3 downstream)
- Focus on new passenger vehicles only
- Multiple parts of the value chain
 - Automotive OEMs
 - Captive automotive finance companies*
 - Automotive distributors
 - Dedicated powertrain manufactures

Reference scenario

- IEA Net Zero Emissions 2021 (Rebased)** - global reference pathway

How we will achieve our targets

- Growing with clients that are better placed in the transition journey
- Further increasing our financing across the EV value chain
- Supporting our clients to establish transition plans and working towards achieving those plans

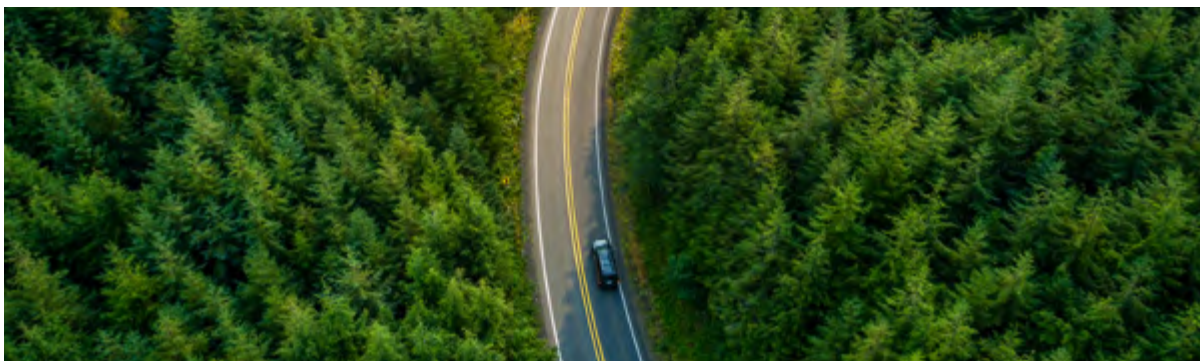
* Captive automotive finance companies refer to automotive finance, leasing or mobility service companies owned by and largely supporting captive brand sales of an automotive company in our value chain

** IEA NZE reference scenario for the Automotive sector has been rebased to account only for the emission intensity of new vehicle sales, instead of existing vehicle stock

2.4.1. Net zero in Automotive

Emissions from all automotive vehicles ranging from passenger vehicles to heavy duty trucks account for 12% of global emissions⁴¹. These emissions include those arising from vehicle manufacturing processes (Scope 1 and Scope 2) and materials used in manufacture such as steel and aluminium (upstream Scope 3). However, the most material of all are that from tailpipe emissions when vehicles are in operation (downstream Scope 3). Given the materiality of downstream Scope 3 emissions to the decarbonisation pathway of the automotive sector, the accelerated industry transition towards EVs⁴² is the most important consideration. This is also demonstrated in the IEA NZE, which focuses on tailpipe emissions. Its net zero scenario stipulates that 60% of all new vehicle sales should be EVs by 2030 and 100% by 2050 compared with 5% today⁴³.

Substitution between types of transportation undoubtedly plays an important role in the path to net zero. For example, replacing individual car usage or flights with mass transit rail transportation would dramatically reduce emissions even without additional electrification. Nonetheless, all realistic paths to net zero involve the continued growth in automotive transport, yet not without electrification yielding a dramatic reduction in the sector's tailpipe emissions. We follow this logic by setting an emissions intensity reduction target measured in kilograms of CO₂ from tailpipe emissions per vehicle kilometre travelled (kgCO₂/vehicle-km). Reduction of indirect emissions from additional EVs will occur by greening electricity supplies – the focus of our Power sector targets.



⁴¹ World Resources Institute (2022). World Greenhouse Gas Emissions in 2019. <https://www.wri.org/data/world-greenhouse-gas-emissions-2019>

⁴² The IEA NZE defines EVs as battery electric vehicles, plug-in hybrid electric vehicles. We additionally include fuel cell electric vehicles in the term in this document

⁴³ International Energy Agency (2021), Net Zero by 2050, IEA, Paris

2.4.2. DBS' targets for the Automotive sector

DBS' financing of the Automotive sector covers multiple players along the value chain, from parts manufacturers to OEMs and their captive financing companies, as well as distributors and mobility service providers. We have included OEMs, distributors (both captive and multi-brand), captive finance companies and parts manufacturers that are dedicated to powertrain production (both EV and internal combustion engine, or ICE) in our targets. We attributed to each player the vehicle tailpipe emissions that they contribute to by making, selling or financing, thereby focusing on all material segments and enablers of the broader sector's transition pathway. We have established baseline emissions for automotive companies through a bottom-up estimation based on the mix of vehicles manufactured, financed and distributed. Key factors such as engine type and size were also considered when differentiating emissions across vehicle types.

Our targets include only companies involved in the manufacturing or financing of passenger vehicles, making up the bulk of our portfolio. For our Automotive target setting, we have chosen the IEA NZE scenario which specifies an emissions trajectory for passenger vehicles consistent with our scope. We have made no adjustment for the countries in which we operate. This includes countries like Singapore which has made strong policy commitments to electrify its vehicle fleet⁴⁴ as well as India and Indonesia, which will likely require more time to build the necessary infrastructure (including their power infrastructure) to support a large-scale shift toward EVs.

Our metric takes the emissions intensities of newly-manufactured cars rather than the stock of vehicles. As we mostly finance the value chain for new cars, this benchmark is most reflective of our clients' activities and the emissions we influence.

DBS' portfolio in 2020 had a baseline emissions intensity slightly lower than industry average, reflecting a client selection of companies that are better positioned in the transition journey than the global average. To demonstrate our commitment to decarbonisation besides the net zero commitment by 2050, we have also set our interim target of a 57% emissions intensity reduction by 2030 compared to our 2020 baseline.

⁴⁴ LTA | Our EV Vision

02 | Our net zero aligned emissions reduction targets



We will achieve this by:

- **Growing with clients that are better placed in the transition journey.** Almost every major OEM has existing plans to transition to net zero. The successful achievement of these plans along with the achievement of country commitments in our key markets can deliver about two-thirds of the decarbonisation required to achieve our interim target for 2030.
- **Further increasing our financing across the EV value chain.** Directing an increasing portion of our sector financing to the EV ecosystem, either to companies that exclusively focus on EVs or through ring-fenced or special purpose financing to EV-related activities and subsidiaries of broader automotive companies.
- **Supporting our clients to establish transition plans and working towards achieving those plans.** This will be especially important for our clients in developing markets and for downstream automotive distributors. These companies are typically less advanced in their transition plans than global OEMs. We will encourage these clients to define and strengthen such plans and we will support their implementation with our financing. One example could be financing solutions that enable automotive distributors to secure distribution for a suitably broad range of EV models.

2.4.3. Future development and dependencies

In setting these targets for the Automotive sector, we have focused on the most material source of emissions: tailpipe emissions from passenger vehicles. However, we may in future consider expanding this to include commercial vehicles and widening the scope of emissions to include upstream Scope 3 and manufacturing emissions.

While we have set an ambitious target, it must be noted that our portfolio transition pathway places significant reliance on both our large clients and key markets in achieving their decarbonisation commitments. This, in turn, is predicated on the industry's accelerated pivot to EVs, itself dependent on various factors such as convergence of price of EVs on par with ICEs, availability of raw materials and charging infrastructure to support the pace of electrification. If the EV adoption trend does not continue at the pace expected, it will be challenging for us to achieve our targets.

04 | The way forward

“ **C**ommitting to net zero by 2050 and setting our 2030 interim targets mark an important milestone of DBS. Navigating this transition will be a long-term endeavour. Much needs to be done in order to fulfil our commitments set out in this report. It will entail a fundamental change in how we do business – both internally and externally. We will enhance the monitoring and reporting of our targets, review our targets and methodologies at regular intervals, and most importantly, support our clients on their transition to adapt to a net zero world.

“ **A**s we continue on our journey to supporting a just transition, we are working hard to integrate sustainability into everything we do. To achieve this, our employees are our greatest asset and we are enabling them to deliver new solutions to our clients. We will be very focussed on creating a robust ESG data architecture, develop new analytics tools, and above all, invest in our people by offering the relevant learning and development tools so that they can effect a fair and just transition with confidence.

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Yulanda Chung
Head of Sustainability,
Institutional Banking Group



Helge Muenkel
Group Chief Sustainability Officer



The way forward

1 Monitoring and reporting annually our progress against our targets – As an early adopter of the TCFD, we have been reporting under the recommendations since 2018. Now as a signatory to NZBA, we remain committed to being transparent about our efforts and will report annually our progress against both our 2030 interim targets and 2050 net zero targets within our sustainability reports. For the seven sectors of which we have set emissions reduction targets, this will entail updating the annual financed emissions for the sectors and analysing the progress against previous years and the respective targets.

2 Reviewing periodically and, if appropriate, updating our targets and methodologies – We expect the reference scenarios against which we have calibrated our emissions reduction targets to continually evolve. Precedent suggests that organisations that own these reference scenarios typically update them periodically. However, we do not intend to update our interim targets for 2030 each time these reference scenarios are revised or updated. Doing so would potentially create business uncertainty, both internally for our business planning and externally in our client engagements. However, we intend to review and, if necessary, revise our targets at least once every five years hereafter. Building on the foundation of this round of target setting, we look forward to the next round with more confidence of our approach.

04 | The way forward

3 Supporting our clients on their transition journey – Our ability to achieve our net zero ambition relies heavily upon the success of our clients in delivering their own transition plans. Hence, we are committed to engaging with our clients and supporting them to transition their businesses through sustainable and transition finance. In the past few years, we have seen a significant increase in the demand for sustainable

finance solutions, such as sustainability-linked and green loans. To accelerate the transition and meet the vast investment needs in the next few decades, we will proactively partner our customers, providing them with financial advisory and transition finance solutions, as we collectively work towards a low-carbon future.



- **To our clients:** we applaud your efforts to transition to net zero, and we stand shoulder-to-shoulder with you in those journeys.
- **To our investors:** we hear your demand for us to support the transition to net zero and we want to lead the way.
- **And to the wider community:** we are ready to support you in your decarbonisation efforts and realise a fair and just transition by 2050 in a world where no one is left behind.