



Live more,
Bank less

OUR PATH TO

NET ZERO

SUPPORTING ASIA'S TRANSITION
TO A LOW-CARBON ECONOMY

CHEMICALS

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

3.3. Chemicals

“ The chemical industry is a key enabler for practically every other industry, producing a wide array of products, with each having differing levels of GHG emissions intensity. This diverse product and emissions mix has led to difficulty in setting a standard path to net zero for the sector. The emissions reporting by corporates in the sector varies widely. Accordingly, DBS will be working with its clients to encourage them to measure and report their own levels of emissions and production, to improve the overall emissions data coverage for the sector.

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Adrian Chai

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

Our commitment:



DBS will exercise its influence to motivate clients in improving their reporting of emissions, thereby increasing emissions and production data coverage. We target raising data coverage from 45% to at least two-thirds of our large corporate clients (by client count) by 2030.



DBS will monitor its data target annually and seek to revise its data coverage target as the Chemicals sector's data landscape matures.



DBS will stay abreast of developments and set a quantitative emissions reduction target once data availability and quality noticeably improve and emissions reductions pathways for the Chemicals sector become more established.

3.3.1. Net zero in Chemicals

Chemicals is a high-emitting sector that contributes to about 5% of all global emissions⁶⁷. GHG emissions occur through the production of chemicals from energy-usage. For example, the Haber-Bosch process used to produce ammonia is highly energy-intensive due to the need to heat and pressurise the reaction, as well as the release of GHG as by-products from chemical processes.

There are decarbonisation options in the near term driven by enhancing both process and resource efficiencies across the value chain, for example, by switching from coal to gas fuel for power. In the longer term, nascent low-carbon technologies like green hydrogen production and CCUS can contribute to deep GHG reductions when they are available at a commercial scale. However, the applicability and impact of decarbonisation options vary significantly across a wide spectrum of chemicals.

3.3.2. DBS' targets for the Chemicals sector

There are certain challenges when it comes to measuring a meaningful emissions intensity in the Chemicals sector that can be compared to a standardised sector reference pathway. Firstly, the sector is extremely heterogenous in terms of the types of chemicals produced. Companies often make a wide array of chemicals, each with different levels of emissions intensities depending on the process and use of the chemicals. Secondly, there are currently no suitable sets of decarbonisation pathways for the sector. Available sector reference pathways vary significantly in their starting points and trajectories due to varying inclusions across scopes of emissions and types of chemicals. This lack of sector standards combined with the heterogeneity of chemicals makes it difficult to confidently determine where the current emissions performance of DBS' Chemicals portfolio stands and the trajectory it needs to follow to reach net zero. Lastly, emissions intensity data coverage is limited. Based on our assessment, over half of large corporate companies in DBS' Chemicals portfolio have yet to report emissions or production data. Additionally, the companies that do report typically do so with limited granularity across the different types of chemicals they manufactured. This lack of granularity in companies' reported emissions can pose a challenge when comparing companies' emissions to a decarbonisation pathway even when a suitable one is available as different chemicals may be included in companies' reports compared to the decarbonisation pathway. Given the lack of a clear pathway and limited data coverage thus far, a decarbonisation target to align with net zero for the Chemicals sector has not yet been set by any bank, as far as we are aware.

Having gone this far, we believe that it is appropriate for us to provide a conducive setting for decarbonisation target setting in the future. As such, DBS is committed to improving data coverage of its large corporate clients while staying abreast of developments in sector guidance on the reference pathway.

⁶⁷ According to carbon emissions data provided from the IEA Net Zero by 2050 report

3.4. Future developments and dependencies for Food & Agribusiness and Chemicals sectors

We will monitor our progress on the level of our data coverage targets for the Food & Agribusiness and Chemicals sectors. We anticipate that industry players and non-industry bodies will play a part, as we encourage our Chemicals and Food & Agribusiness clients to publish data. We are confident that other financial institutions will also be working with their clients on data disclosure. Furthermore, mandatory corporate governance, especially in relation to climate reporting, is on the rise globally. There is an increasing number of regulators and financial market operators with regulatory mandates requiring TCFD reporting (such as SGX), as well as developments related to the International Sustainability Standards Board which is expected to establish a global base line for sustainability reporting. Furthermore, we see global efforts in further developing GHG emissions measurement methodologies as well as digital technologies which will improve the sourcing and processing of environmental, social and governance data. As such, we remain optimistic and are open to revising our data coverage targets upwards, as these developments materialize.

In addition to data disclosure developments, we anticipate developments in the availability of reference scenarios in the coming years. Several bodies are working to create consensus around the level and speed of decarbonisation that are required in the Food & Agribusiness and Chemicals sectors. For instance, the MPP is working on recommendations for ways to decarbonise the Chemicals sector. As scenarios for these sectors further solidify, we will be better able to set our own quantitative emissions reduction targets. At the next review cycle, we will assess the feasibility of establishing emissions reduction targets for these two sectors.

“ **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.