DBS Live more, Bank less

OUR PATH TO

NET ZERO

SUPPORTING ASIA'S TRANSITION TO A LOW-CARBON ECONOMY

POWER

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List of abbreviations

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
$kgCO_2/p\text{-}km$	Kilograms of CO_2 emissions per passenger kilometre travelled
$kgCO_2/vehicle\text{-}km$	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

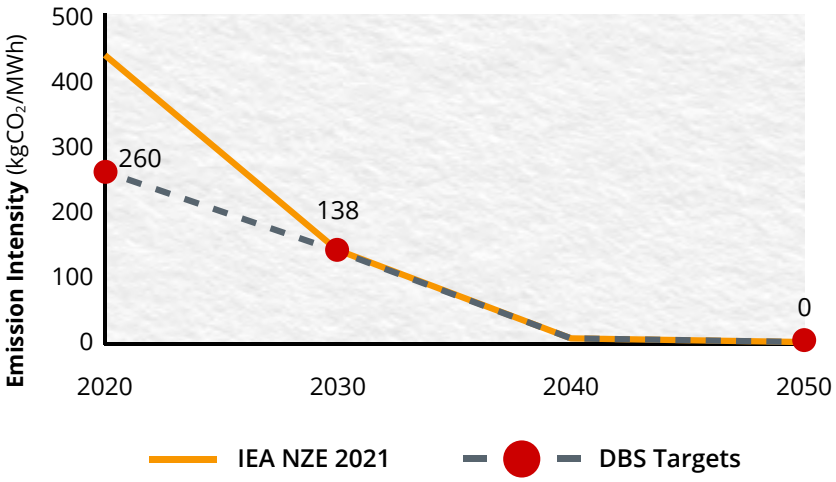
PCAF	Partnership for Carbon Accounting Financials
REIT	Real estate investment trust(s)
SAF	Sustainable aviation fuel
SGX	Singapore Exchange
SPV	Special purpose vehicle(s)
TCFD	Task Force on Climate-Related Financial Disclosures

2.2. Power

> As identified by IEA, decarbonising the power sector is critical for the global economy to reach net zero by 2050. At DBS we are committed to help our clients chart their own pathways consistent with IEA's net zero targets. This will mean advising and financing our clients to meet the growing energy needs of our societies in a sustainable manner.

Kelvin Wong
Deputy Head of Energy, Renewables and Infrastructure

Power Sector Targets



Year	IEA NZE reference ($kgCO_2$/MWh)	DBS targets ($kgCO_2$/MWh)	% Reduction vs. 2020
2020	438	260	-
2030	138	138	47%
2050	0	0	100%

What's included?

Power generation
(Scope 1 emissions)

Power part manufacturers
(Scope 3 emissions)

Reference scenario

- IEA Net Zero Emissions 2021 – global reference pathway

How we will achieve our targets

- Helping our clients to achieve their decarbonisation targets, and encouraging more to set and achieve them
- Exiting thermal coal
- Increasing share of renewable energy in our portfolio
- CCUS after 2030

2.2.1. Net zero in Power

Use of emission intensity. Power, more than any other sector, must decarbonise if the world is to achieve net zero emissions by 2050. The sector is the single biggest source of carbon emissions, accounting for about 40% of all global emissions[36], largely due to the burning of coal and natural gas in fossil fuel-based power generation. Power also plays a vital role in the transition to net zero because electrification is a key lever for decarbonising other industries that depend on grid electricity, chiefly automotive, real estate, and hard-to-abate sectors such as steel and cement. A significant change in the way power is delivered is therefore needed, involving the production of power without generating net GHG emissions.

Adoption of IEA NZE. Achieving net zero requires the Power sector to significantly ramp up production of renewable energy, such as wind, solar and geothermal and provide this through effective storage and efficient grid systems. In order to fulfil the IEA NZE scenario, not only is a two-thirds reduction in emissions intensity of power production by 2030 required, the sector also needs to reach zero emissions intensity by 2040, ahead of other sectors' net zero timelines.

While decarbonisation of power is central to every country's NDCs plans, it is also the case that countries have different energy mixes, as well as widely divergent plans when it comes to decarbonisation. Achieving net zero is further complicated by several factors, especially in emerging markets:

- Fossil fuel-based power plants have long lifespans of around 25-40 years typically. Retiring them prematurely involves writing down these assets. Without early retirement (or the retrofitting of CCUS technology), the Power sector will not be able to transition fast enough to reach net zero by 2040, which is required for the world economy to reach net zero by 2050[37].
- The supply of energy, as well as security of supply, is critical for stability and economic growth especially in emerging markets. Fossil fuel-based power is a stable, non-intermittent source of power that can be delivered in a consistent manner.
- Access to types of renewable energy is not equal across countries. For instance, solar energy often requires use of a vast land area. This presents a challenge for land-scarce and densely populated cities such as Singapore and Hong Kong.
- Currently, most sources of renewable energy suffer from intermittency which makes them unreliable as a single source of power without storage and a highly effective grid system.

[36] Greenhouse Gas Emissions from Energy: Overview – Analysis - IEA

[37] Net Zero by 2050 – Analysis - IEA

2.2.2. DBS' targets for the Power sector

DBS provides a range of financial services to clients in the Power sector. Our financing covers the whole value chain from power equipment manufacturers, through power generation, to transmission, grids and downstream distributors.

We are setting commitments to achieve net zero consistent levels of emissions intensity for our financing to the Power sector, using the landmark global IEA NZE scenario as the reference pathway. An emissions intensity target is set for this sector, measured in kilograms of CO_2 emissions per megawatt hour of power produced ($kgCO_2/MWh$). We have included two subsectors from the Power sector within the targets:

1. Companies involved in power generation (both fossil fuel-based and renewable energy) based on their Scope 1 emissions (that is, the emissions released from power generation); and

2. Power equipment manufacturers based on their Scope 3 emissions[38] (that is, the power equipment produced is tagged to the type of power that the equipment generates). This, in turn, motivates our financing towards companies manufacturing renewable energy equipment, such as wind turbines and solar panels, which are critical to the scaling up of renewable energy. It also reflects the industry trend towards distributed power generation at a smaller scale, for instance, through the use of rooftop solar panels.

[38] Infrastructure & Supply Chain emissions as extracted from IPCC. https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_annex-iii.pdf

02 | Our net zero aligned emissions reduction targets

Renewable energy currently comprises around half of our Power portfolio

We have implemented our thermal coal financing policy since 2018, and our remaining exposure will run off by 2039.

1) **No new thermal coal assets;**
2) **Cease the onboarding of new customers who derive more than 25% of their revenue from thermal coal with immediate effect, and lower the threshold as time progresses;**
3) **Stop financing customers who derive more than 50% of revenue from thermal coal from January 2026, except for their non-thermal coal or renewable energy activities, and lower the threshold as time progresses;**
4) **Disclose DBS' thermal coal exposure annually in its Sustainability Report to provide transparency on progress made.**

Our targets are set on the basis of the activities we are financing. As mentioned earlier in Section 1, if we provide ring-fenced financing to a company for the development of a wind farm, we will include carbon emissions from the wind-farm activities rather than all the diversified activities of the parent company. Through our targets, we hope to contribute to global energy security by helping countries to wean themselves off fossil fuels and embrace renewables. Our Power portfolio starts with a notably lower emissions intensity than the IEA NZE scenario, reflecting the reshaping of our Power portfolio towards lower-emission activities in recent years. Renewable energy now comprises nearly half of our total Power portfolio. It also reflects our efforts to reduce thermal coal financing since 2018[39].

In line with the IEA NZE scenario, we are committed to a 47% reduction in emissions intensity by 2030 compared with our 2020 baseline position. We recognise that this is ambitious given our footprint in Asia, where demand for power is expected to continue to grow and where many governments have so far made plans to achieve net zero only beyond 2050. Nonetheless, DBS is committed to net zero by 2050, and we will proactively direct our financing towards lower emissions activities in the Power sector through the following key commitments:

- We are committed to phasing out thermal coal exposure. We have long recognised that while thermal coal represents an insignificant part (i.e. 0.26% of total IBG exposure at the end of 2021) of our portfolio[40], it has an outsized impact on the emissions intensity of our Power portfolio.
- We will encourage and support our clients in setting and achieving their decarbonisation targets by financing their transition activities and focusing on clients with ambitious decarbonisation targets.
- We will increase the share of renewable activities in our Power portfolio (i.e. specialist renewable companies, through ring-fenced specific purpose lending to renewable activities, or to the renewable subsidiaries of parent corporates).

[39] https://www.dbs.com/sustainability/responsible-banking/responsible-financing/our-approach-to-phase-out-thermal-coal-financing

[40] DBS Sustainability Report 2021

2.2.3. Future development and dependencies

The achievement of our interim target and ultimately net zero goal relies on the continued phase-out of fossil fuel-based power from our Power portfolio and on significant growth in our renewable energy portfolio. This is underpinned by: 1) government policy, whereby carbon taxes change the economic trade-off between unabated coal and gas and renewable energy decisively; 2) technological change; and 3) scaling up of renewable equipment manufacturing. We are mindful that if these trends do not continue or reverse, it will be challenging for us to achieve our targets. This is especially so for the 2030-2050 period, which requires either CCUS to be retrofitted at scale or a significant degree of early retirement of fossil fuel-based power plants (which in turn is likely to require policy shifts, such as increases in carbon taxes and economic relief measures for renewable energy). While not included in our targets, the success of the power transition will also depend on improvements in grid infrastructure, battery storage and on the scaling up of supply chains, including the mining of critical minerals for renewable energy sources.

> Committing 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.

Yulanda Chung
Head of Sustainability,
Institutional Banking Group

> As 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.

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.

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.