Climate Risk Management

What is it about and how to manage this?

For the 8th seminar – Trends and Opportunities for Green and Sustainability-link loan - A Banking Perspective

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2-way relationship with climate –
Changing climate will affect banks' portfolio, while Banks' lending also affects the climate

Climate Risk Management

Reduce financial risks arising from climate change

Risk management not necessarily equal to portfolio greening

Portfolio Alignment

Shift the portfolio composition to bank's target climate goals

Portfolio greening not necessarily equal to less risk

DBS

Climate Risk manifests itself in mainstream risk types

Two transmission channels: Transition Risk & Physical Risk

Valuation and volatility of asset market prices

Disruptions to business operations and own properties

Transition Risk & Physical Risk

Transition risks

Physical risks

Transition Pathways
Integrated Assessment Models

Chronic Climate Impact
Earth System Models and Climate Impact Models

Acute Climate Impact
Natural Catastrophe Models

E.g. policy changes, technological advancements, change in consumer preferences

e.g. Sea Level Rise, Changes in surface temperature

e.g. Flooding, Strong Typhoons

Macro-financial impacts
Global Macroeconomic Models

E.g. changes in GDP, demand and supply, prices and shift in energy consumption

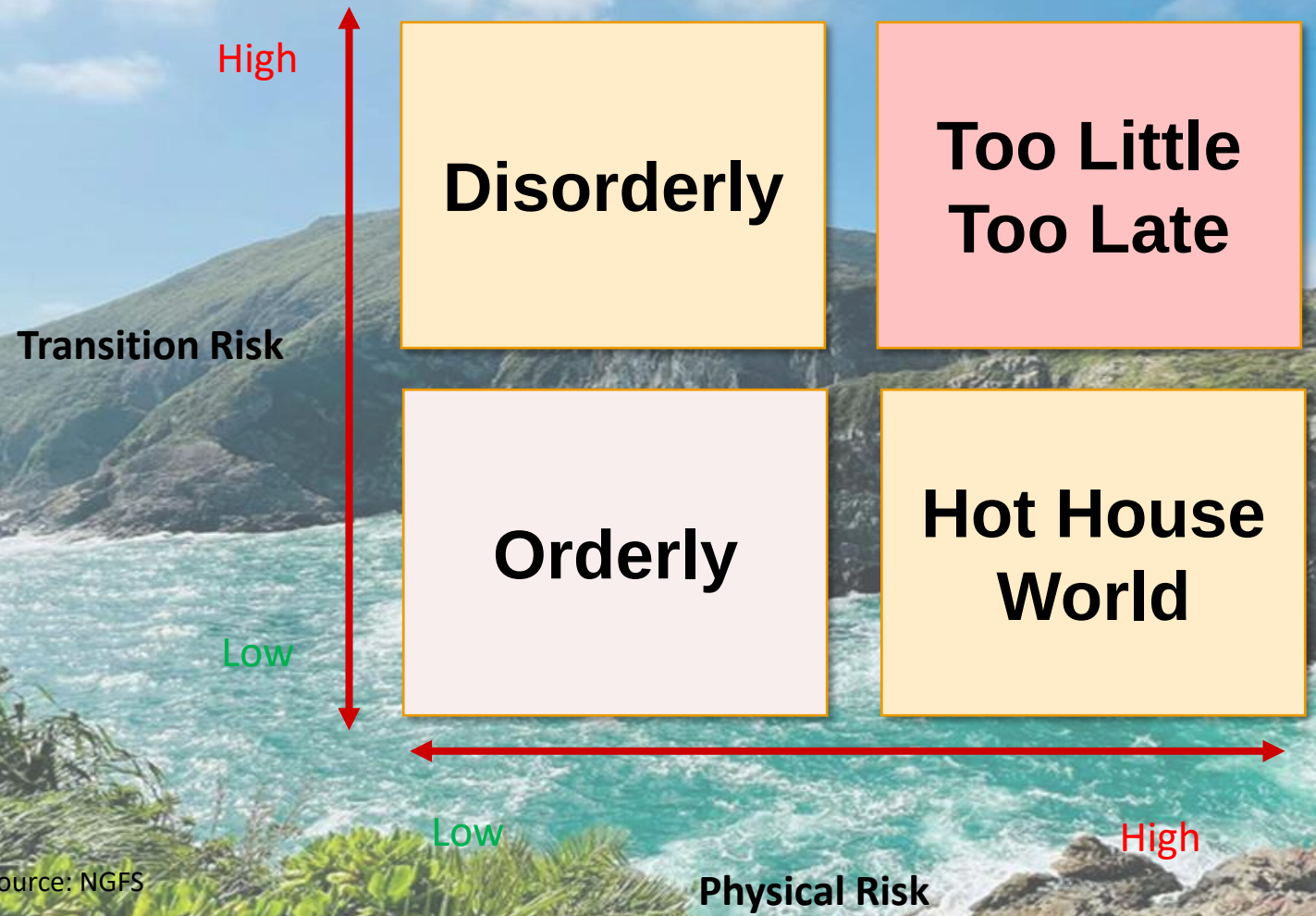
Impact on the financial strength of companies, e.g. revenue, cost of operations, capital expenditure and debt burden to transition to low carbon

Impact on company's productivity, change in consumer preference, and collateral market value

Impact on properties' collateral value due to damage, business disruptions affecting revenue

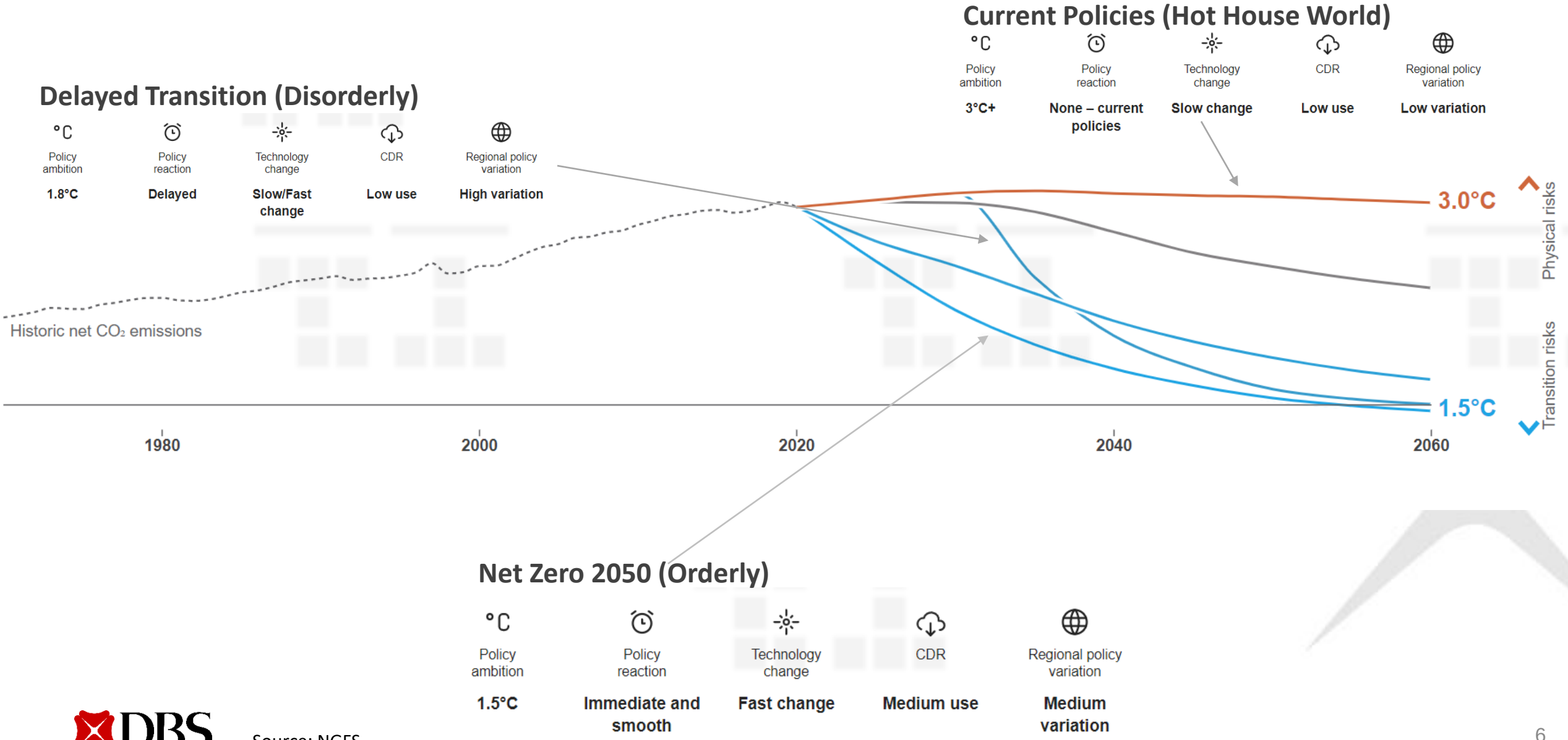
Source: NGFS

Scenario Analysis is one of the widely used tools to assess the potential financial impacts under predefined climate scenarios



Source: NGFS

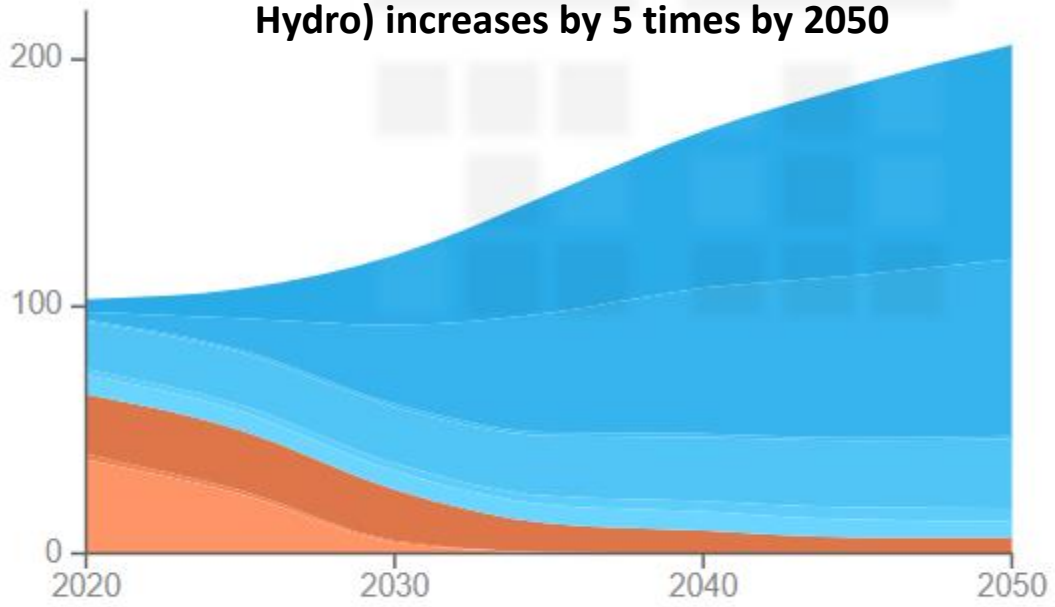
Scenario Pathways



Source: NGFS

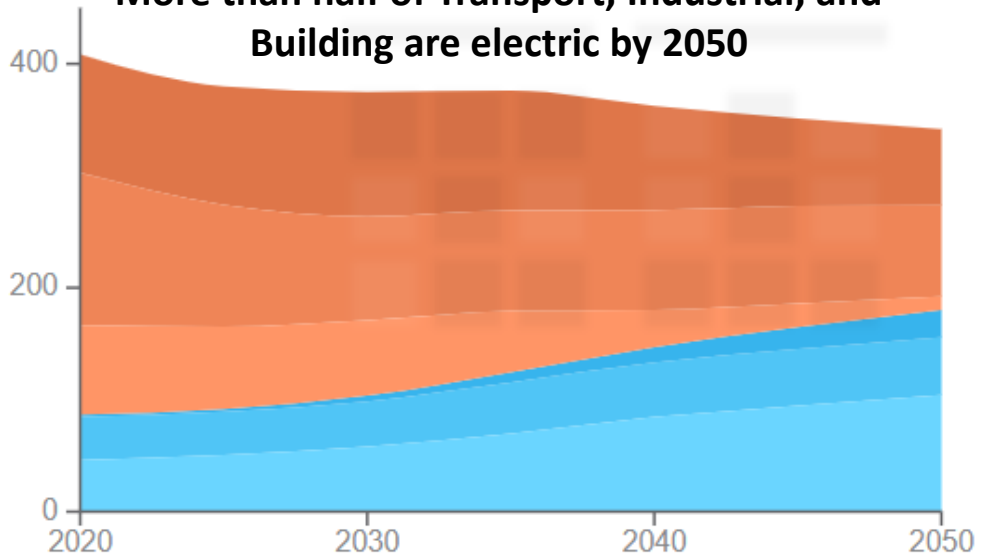
Reaching Net Zero by 2050

Electricity from Renewables (e.g. Wind, Solar, Hydro) increases by 5 times by 2050



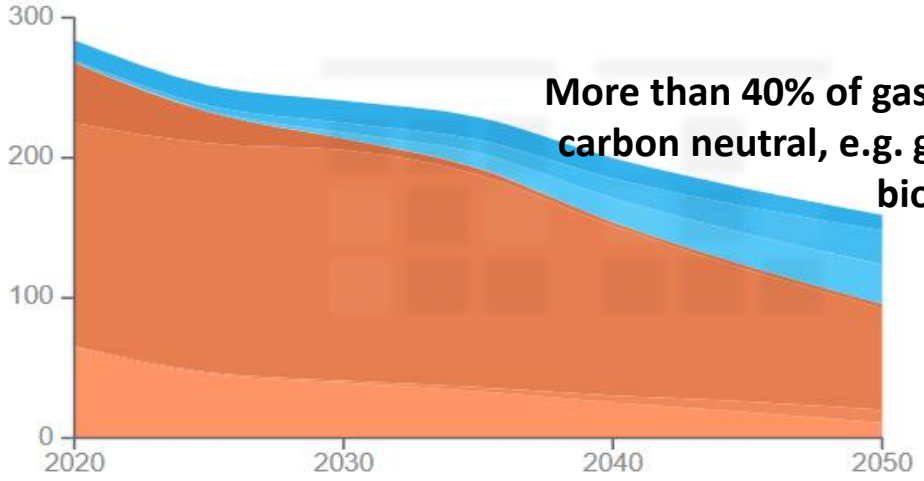
Electricity generation in EJ per year

More than half of Transport, Industrial, and Building are electric by 2050



Electricity and other fuel demand in EJ per year

More than 40% of gas, liquid and solid fuels are carbon neutral, e.g. green hydrogen, biomass, bioliquids



Gaseous, liquid and solid fuel production in EJ per year

Source: NGFS


DBS
Live more,
Bank less
Q & A
Thank you!