



Climate Resilience & Sustainable Financing

ESG for the Built Environment

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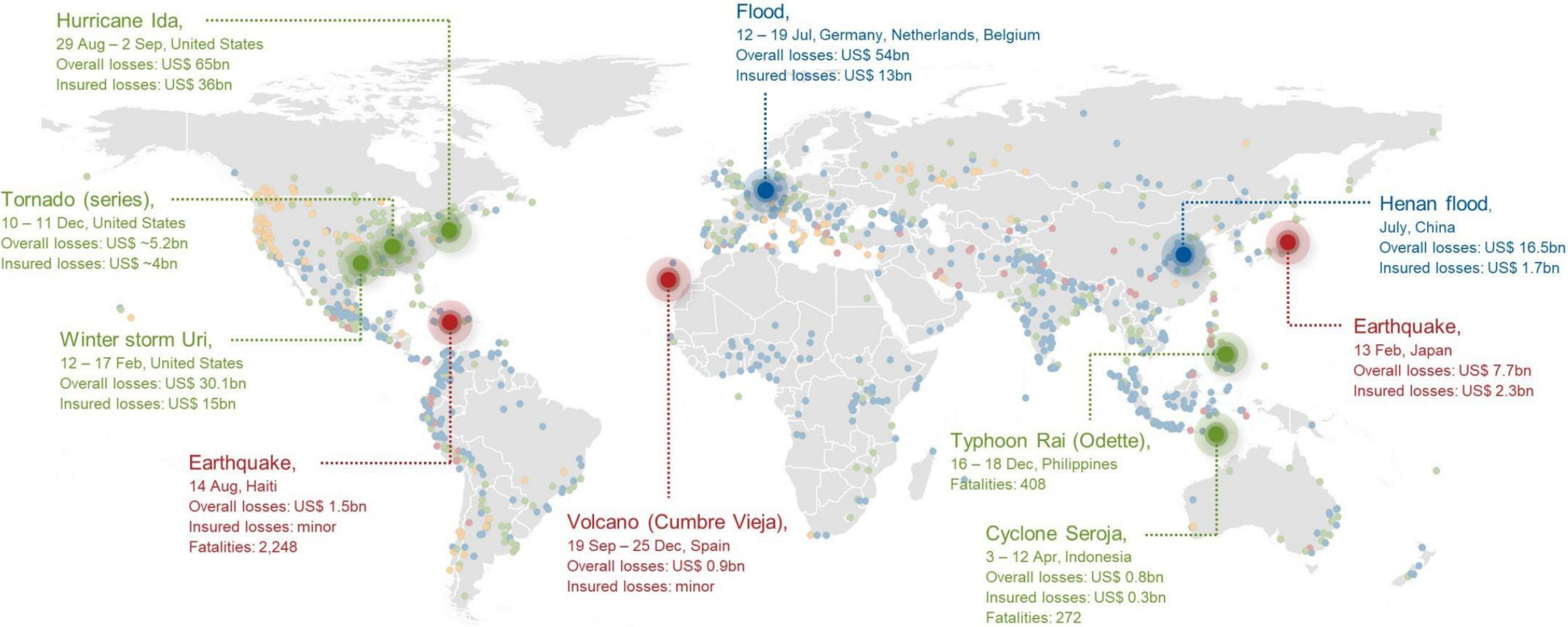
19 October 2022



CONFIDENTIAL

Natural disasters caused worldwide losses of US\$280bn in 2021

Economic damages caused by natural disasters in the APAC region reached US\$22bn in 1H22



Geophysical events
Earthquake, tsunami,
volcanic activity



Meteorological events
Tropical storm, extratropical storm,
convective storm, local storm



Hydrological events
Flood, mass movement



Climatological events
Extreme temperature,
drought, wildfire

○ Significant catastrophes
○ Small, medium and large loss events

The call for collective climate action

Financial institutions are a key enabler and local regulators increasingly require financial institutions to manage impacts arising from climate-related risks



Joint Committee on Climate Change



BANK NEGARA MALAYSIA
CENTRAL BANK OF MALAYSIA



Suruhanjaya Sekuriti
Securities Commission
Malaysia

The JC3 platform was established in September 2019 to pursue collaborative actions for building climate resilience within the Malaysian financial sector.

Bank Negara Malaysia's policies & guidelines:

- Climate Change and Principle-based Taxonomy (CCPT)
- Climate Risk Management & Scenario Analysis (CRMSA)
- Task force on Climate-related Financial Disclosures (TCFD) Application Guide
- 2024 Climate Risk Stress Test

The implication of physical and transition risks on real estate

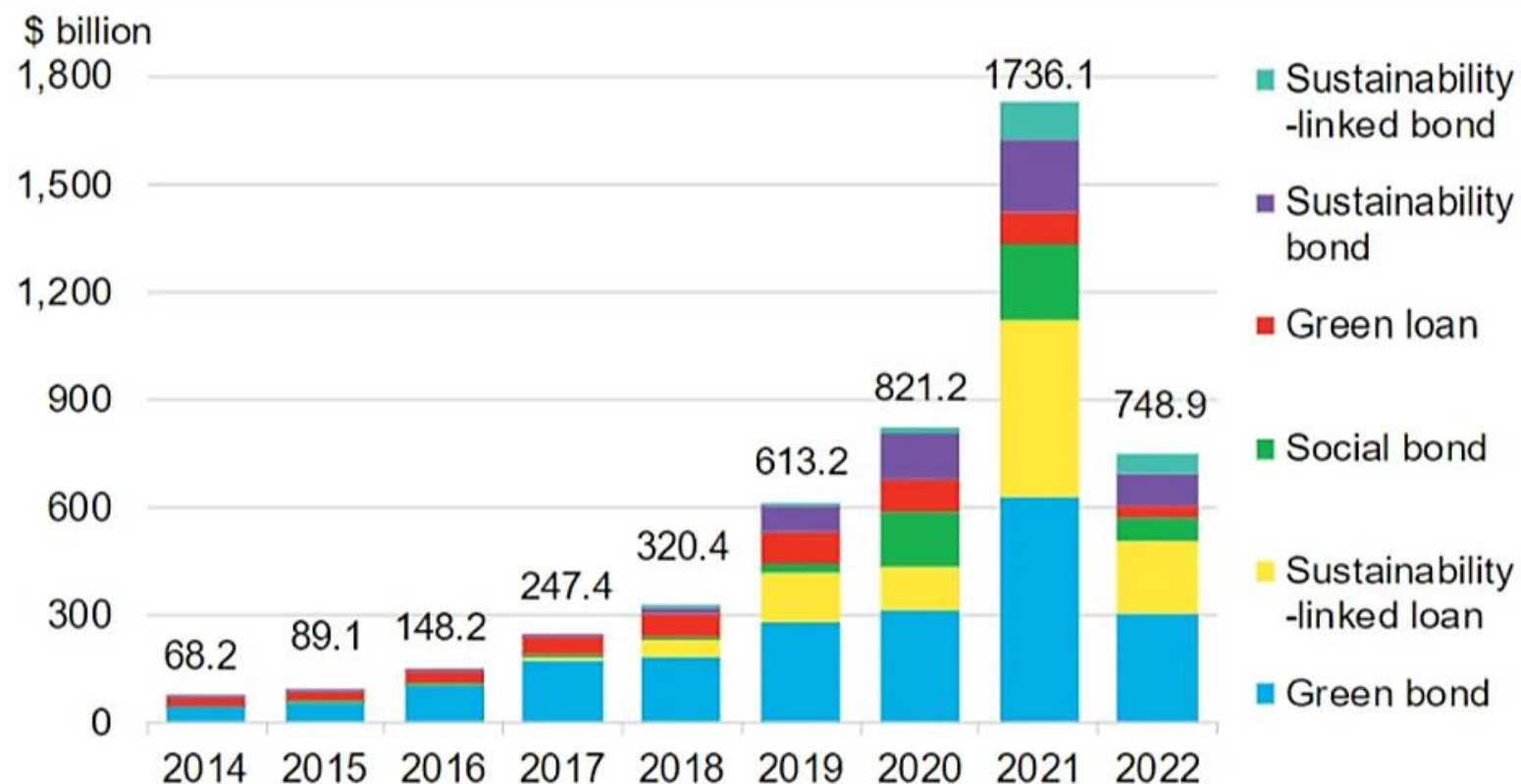
	Physical Risks		Transition Risks	
	More frequent & severe adverse natural events <ul style="list-style-type: none"> Storms, floods, landslides, droughts, wildfires Rising average sea levels & temperatures 		Changes made in response to climate issues <ul style="list-style-type: none"> Economy, regulation, consumer preferences, technology, and other human responses 	
	Direct effect	Indirect effect	Direct effect	Indirect effect
Revenue	Operational disruptions due to severe / repeated physical-hazard events	Reduced demand due to logistical / transportation infrastructure disruptions	Carbon-intensive asset is unattractive to climate-committed occupiers	Lower demand / occupancy from decline in local economy or sector
Operating costs	Increased maintenance costs	Increased credit / insurance costs – adjusted underwriting models	Increased utility costs given carbon-intensive building systems	Carbon charges due to local regulations
Capital costs	Investments to improve building resilience	Increased investments to protect broader communities	Investments in lower-emissions building materials to meet local standards / tenant demands	Increased financing costs market-level transition risks are priced in
Capitalisation rate	Changes due to market participants' perceptions of physical & transition risks			

Material ESG influences across the Built Environment Lifecycle



Sustainable Financing has grown exponentially

Annual Sustainable Debt Issuance



Source: BloombergNEF, Bloomberg Terminal.

- Volume of sustainable debt issued surpassed **USD1.7 trillion in 2021**
- **Sustainability-linked bonds and loans** quadrupled in size year-on-year.
- In **developed APAC (excluding China)** markets, the **real estate sector dominates** the domestic sustainable finance market
- **USD750 billion** of sustainable debt instruments were issued in the **first half of 2022**, where **green bonds made up 41%** (>USD300 billion)

OCBC Malaysia's MOU with Bursa Malaysia

#financing4ESG: Advancing Malaysian PLCs' ESG Journey

BURSA MALAYSIA **OCBC Bank**

Bursa inks MoU with OCBC, Alliance to introduce sustainable financing for PLCs

Sunway REIT partners with OCBC Bank for sustainability-linked bonds

DATUK MUHAMMAD UMAR SWIFT
Chief Executive Officer, Bursa Malaysia Berhad

DATO' ONG ENG BIN
Chief Executive Officer, OCBC Bank (Malaysia) Berhad

WONG CHIUN CHIEK
SEVP, Bursa Data Business, Bursa Malaysia Berhad

TAN AI CHIN
Managing Director Senior Banker & Head of Investment Banking, OCBC Bank (Malaysia) Berhad

VIRTUAL SIGNING CEREMONY

Related News

MARKETS
Tuesday, 07 Dec 2021
2:51 PM MYT

Sunway REIT net property income up 86.5% in Q6 FY2021

CORPORATE NEWS 20 Jun 2022
Hap Seng issues first tranche of sustainability-linked bonds

CORPORATE NEWS 28 Jun 2022
Sunway REIT net property income up 86.5% in Q6 FY2021

PROPERTY 13 Dec 2021
Insight - Sunway REIT sees benefits of diversification


KUALA LUMPUR: SunREIT Unrated Bond Bhd (SUB) has issued the first tranche of Sustainability-Linked Bonds (SLBs) as part of Sunway Real Estate Investment Trust's (Sunway REIT) inaugural sustainable financing exercise in partnership with OCBC Bank (Malaysia) Bhd.

In a joint statement today, they said the SLBs feature a pricing adjustment mechanism benchmarked against the achievement of predetermined Sustainability Performance Targets (SPTs).

The SPTs measure the improvement in Sunway REIT's sustainability goals, including sourcing energy requirements and achieving and maintaining a minimum Building Energy Intensity (BEI) score.

- A collaboration to enhance and accelerate ESG adoption by PLCs through the provision of comprehensive sustainable financial solutions.
- To jointly develop sustainable financing options that recognise PLCs' ESG credentials in accordance with the FTSE4Good assessment criteria.
- OCBC had successfully structured Malaysia's first Sustainability-linked Bond for Sunway REIT, the first sustainable financing transaction after the MOU, a testament to OCBC's commitment towards promoting ESG initiatives.

Sustainable Financing vs. Sustainability-Linked Loans

Financing	Green / Social / Sustainable		Sustainability-linked
Objective	Providing capital for green and/or social projects		Promoting sustainable business practices
Financing instrument	<ul style="list-style-type: none"> Corporate sukuk / bond Project financing sukuk / bond 	<ul style="list-style-type: none"> Term financing Project financing sukuk / bond 	<ul style="list-style-type: none"> Term financing Revolving credit facility Corporate sukuk / bond
Key Features	<ul style="list-style-type: none"> Exclusively finance eligible Green / Social projects as defined under the relevant guidelines or standards Pricing structure – No tangible difference with plain-vanilla financing or sukuk 		<ul style="list-style-type: none"> To finance general corporate and working capital purposes Includes interest rate ratcheting linked to pre-determined sustainability targets
Guidelines / Standards			<p>Green Loan Principles Supporting environmentally sustainable economic activity</p>  <p>Sustainability-Linked Loan Principles Supporting environmentally and socially sustainable economic activity</p> 

OCBC's Sustainable Financing Categories



Renewable Energy

Renewable energy generation from Solar PV, Hydro, Wind, Biomass, etc., and associated infrastructure & technologies



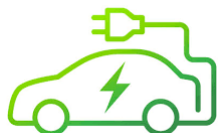
Energy Efficiency

Improve energy efficiency, reduce energy consumption / carbon emissions



Built Environment

Advanced fabrication and material technologies relating to green construction



Clean Transportation

Low emission vehicles with green maritime transport technologies, alternative aviation fuel, carbon management technologies



Pollution Prevention & Control

Waste reduction and avoid pollution generating activities



Affordable Housing

Construction of public housing that primarily service a target population as defined by local governments



Sustainable Management of Living Natural Resources & Land Use

Sustainable food, environmentally sustainable agriculture



Sustainable Water & Wastewater Management

Improve water efficiency, efficient water management and water recycling



Eco-efficient or Circular Economy

Recyclable waste processing, procurement of environmentally sustainable products



Climate Adaptation

Reduce vulnerability to climate change through research, monitoring, and/or reinforcement

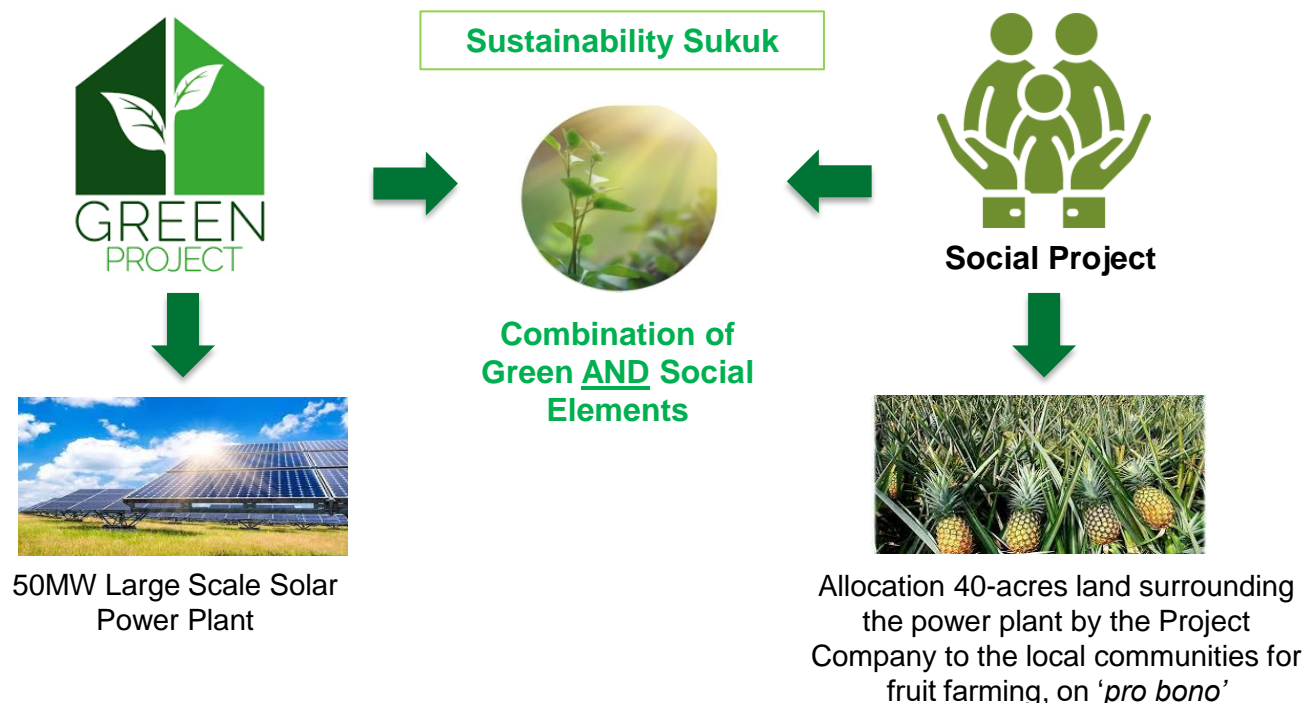
Green Financing Case Study

First ASEAN Sustainability SRI Sukuk in Malaysia

Deal Summary

Project Company	Malaysian solar power plant / producer
Facility	ASEAN Sustainability Sustainable and Responsible Investment (SRI) Sukuk ("Sukuk")
OCBC's Roles	<ul style="list-style-type: none"> ▪ Sukuk Sustainability Framework Adviser ▪ Shariah Adviser ▪ Sole Principal Adviser/ Lead Arranger ▪ Joint Lead Manager / Bookrunner ▪ Facility and Security Agent
UN SDGs	<div>7 AFFORDABLE AND CLEAN ENERGY</div> <div>8 DECENT WORK AND ECONOMIC GROWTH</div>
External Reviewer	<ul style="list-style-type: none"> ▪ RAM Sustainability

Transaction Structure



Best ASEAN Sustainability SRI Sukuk (Malaysia & Regional)
The Asset Islamic Finance Awards 2020



Malaysia Capital Markets Deal of the Year
IFR Awards 2019



Best SRI Sukuk
Alpha South-East Awards 2019

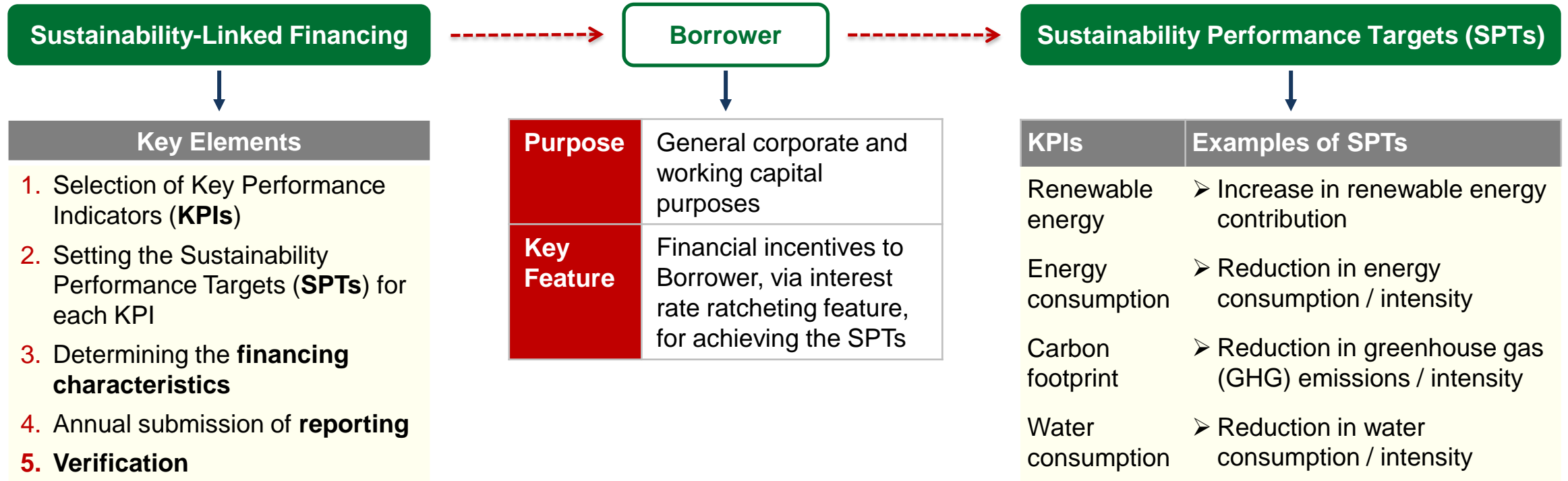


Best Islamic Finance deal – Asia Pacific
The Banker



Sustainability-Linked Financing

An Overview



Key Elements of KPIs and SPTs

KPIs shall be **relevant, core, and material to Borrower's nature of business.**

KPIs must be

- **quantifiable**
- **measurable**
- **externally verifiable**

SPTs shall represent **material improvement, consistent with Borrower's overall sustainability agenda, and have predetermined timelines for compliance**

Actual achievement of SPTs is subject to independent 3rd party verification

Sustainability-Linked Bond Case Study

Pioneering Sustainability-Linked Bonds in the Malaysian Market

Deal Summary

Issuer	Malaysian Real-Estate Investment Trust (REIT)
Transaction	Inaugural Sustainability Linked Issuance of via an Unrated Medium term Notes Programme
Purpose	General working capital and capital expenditure
OCBC's Roles	<ul style="list-style-type: none"> ▪ Principal Adviser ▪ Lead Arranger ▪ Lead Manager ▪ Sustainability Structuring Coordinator ▪ Facility Agent ▪ Security Agent
External Reviewer	MARC

Sustainability Performance Targets (SPTs)

Increase in Renewable Energy Generation

Reduction in Building Energy Intensity

Alignment with United Nations' SDGs:




The issuer was the first Malaysian REIT to integrate ESG factors into its capital management strategy, further strengthening their ability to access to diverse sources of funds while contributing positively to the development of sustainable finance in the domestic capital market.

Sustainability-Linked Financing Case Study

World's First Islamic Sustainability-Linked Financing

Deal Summary

Borrower	Malaysian multinational telecommunications conglomerate
Transaction	Syndicated Multi-Currency Shariah compliant sustainability-linked set of financing facilities
Purpose	General corporate and working capital purposes
OCBC's Roles	<ul style="list-style-type: none"> ▪ Lead Coordinating Bank ▪ Sustainability Structuring Adviser ▪ Shariah Adviser ▪ Facility Agent
UN SDGs	
External Reviewers	<ul style="list-style-type: none"> ▪ SIRIM QAS International ▪ FTSE Russel

Sustainability Performance Targets (SPTs)

Reduction in Group's total carbon footprint

Maintain inclusion in the FTSE4Good Bursa Malaysia Index

This sustainability-linked financing offers the borrower a reduction in financing cost in return for its commitment to reduce its overall carbon footprint and to ensure compliance with the stringent ESG criteria set by FTSE Russell.



Green and Sustainable Finance Deal of the Year and Service Awards

Islamic Finance News Awards 2021



Islamic Finance Best ESG Green Financing in Southeast Asia (Malaysia)

Alpha Southeast Asia Best Deal & Solution Awards 2020



Thank You