
Decarbonization opportunity and Sustainable Finance

ESG Finance APAC, MUFG Bank

B20 Seminar, Jakarta

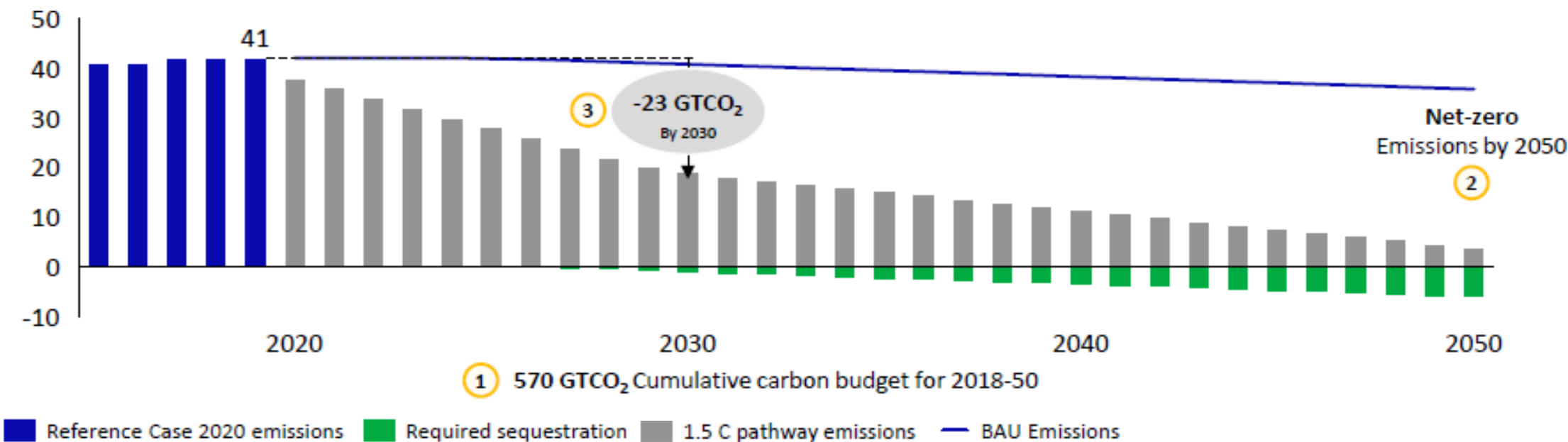
September 29th 2022



Diverse Opportunities for Businesses to Decarbonize

“This is a necessary market in the transition to net zero... an imperative, which is why we are putting so many resources into it” - **Mark Carney**

1.5 Degree Pathway to Emissions

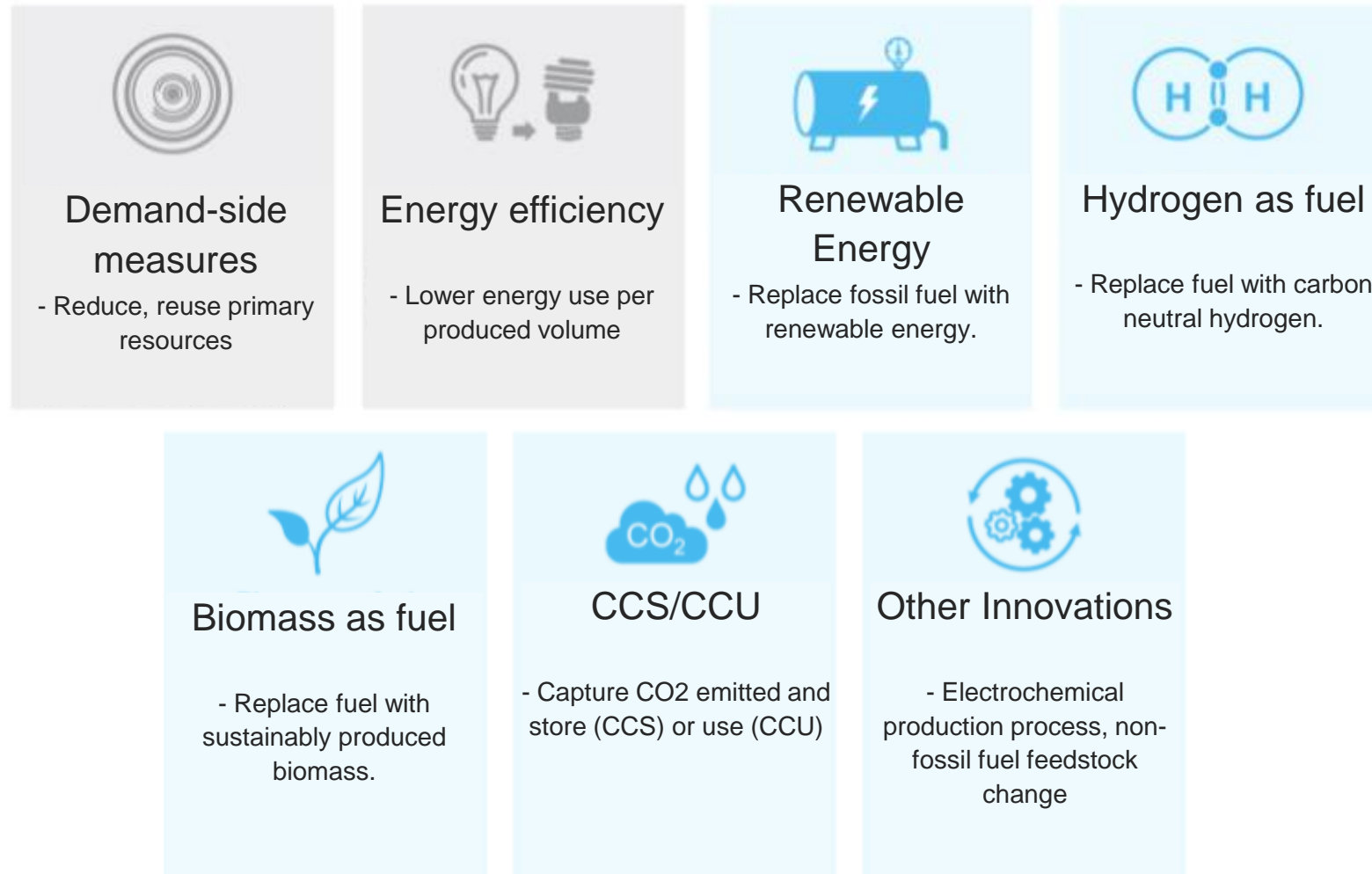


1 In order to reach the 1.5°C goal we must remain within the 570 GTCO₂ carbon budget

2 By 2050 all remaining emissions need to be fully offset by sequestration

3 To set us on this path, we must reduce net emissions by 23 GTCO₂ by 2030

Measures for Decarbonization



Comprehensive Financing Solutions to Support a Robust Transition

Bank services

Green and sustainable financing

Financing structures which allow established companies to increase credibility of green and transition activities, and tap into green investors

Capital raising and investing

Helping companies access capital from private and public markets, and proprietary fund structures (e.g., linked to AM / WM franchises)

Catalytic and blended capital structures

Innovative structures combining government and philanthropic grants, incentives and guarantees with private sector financing

Project Finance

Climate-positive investing to fund programs that bundle energy efficiency and clean energy measures

Voluntary carbon markets

Help build scale in carbon markets by providing services such as market-making, deal origination and stewardship

Research and advisory

Broad-based support for clients' transition plans, including education, data & analytics, policy and financial advice and project execution support

Financing needs

Incumbent Net Zero transformation

- Replacement of emission-intensive assets with low- emissions alternatives
- Capital investment to enhance process efficiency and cut emissions

Start-up / growth capital

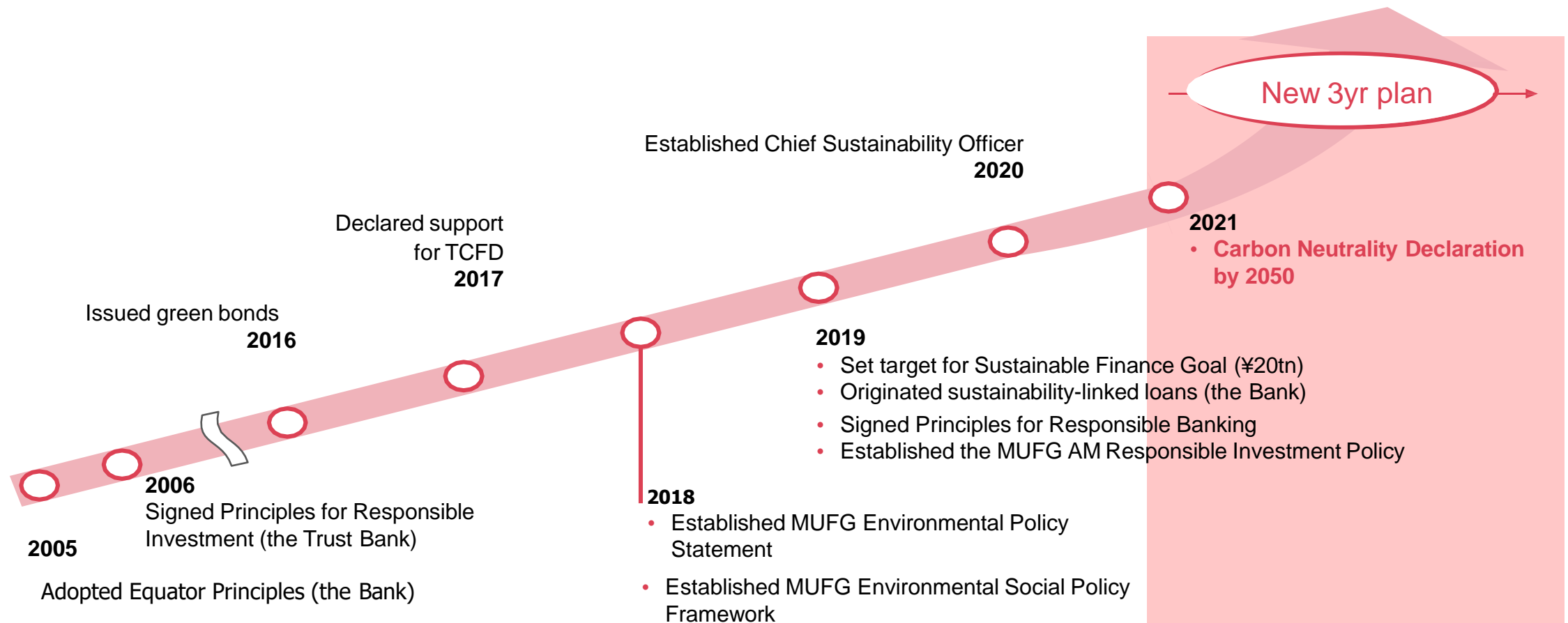
- R&D and working capital investments to support new green and low-emission technologies

Impact/ mission-oriented investments

- Investment in early-stage development of potentially revolutionary technologies
- Investment in green infrastructure at sub-market rates to support adoption and technological development

MUFG's journey to the Carbon Neutrality Declaration

"Response to climate change & environmental protection" is one of the most important issues for MUFG's Sustainability Management. Via tackling this issue, MUFG will contribute to creating a sustainable society by fostering a virtuous cycle between the environment and economy



Overview on Sustainable Finance

USE OF PROCEEDS BASED FINANCING



Green



Sustainability



Social

KPI/SPT-Linked Financing



Sustainability- Linked
Bonds/Loans

Definition

Green Financing applies where the proceeds are used to fund green projects that have positive environmental benefits

Sustainability Financing applies when the proceeds are used to finance or re-finance a combination of Green and Social Projects.

Social Financing can be applied to finance projects that directly aim to address or mitigate a specific social issue and/or seek to achieve positive social outcomes

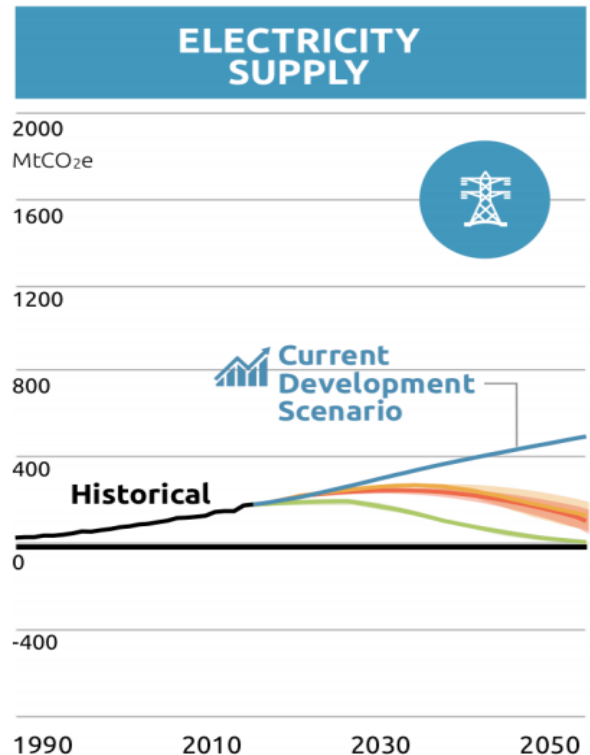
Sustainability-Linked Financing can be used for general corporate purposes and the sustainability discount applied depends on the borrower's sustainability performance against pre-identified KPIs.

Standard

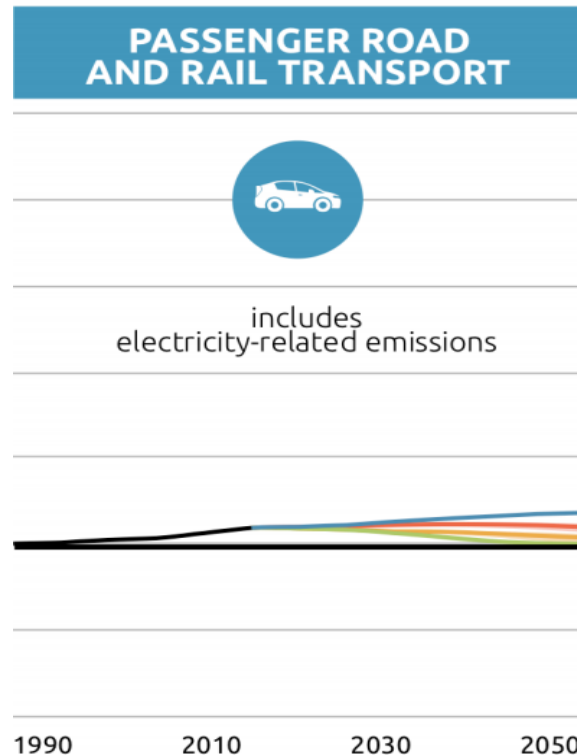


Indonesia focus sectors of emission reductions by 2050 and opportunities

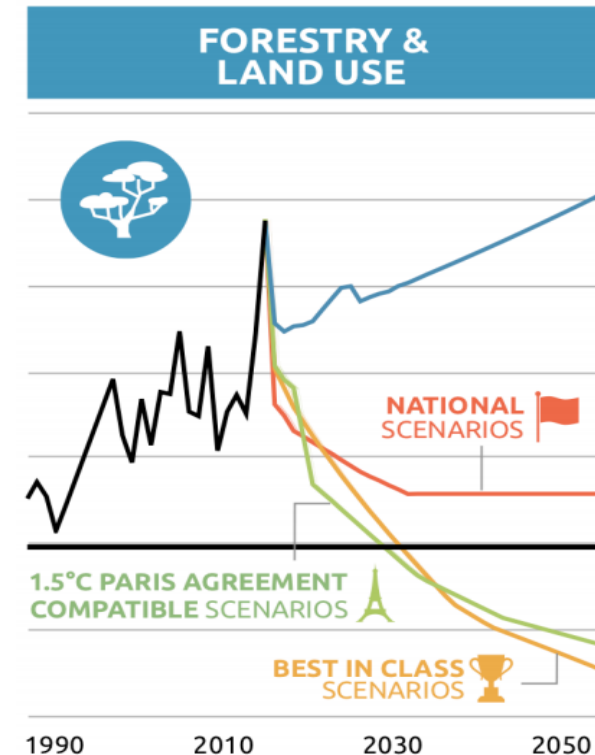
- Indonesia published carbon neutrality by 2060 with expectation of meeting earlier, i.e. 2050
- Net zero can be achieved via electrification and restoration of natural capitals. Targets renewable power generation at 48% by 2030 and conserve forest 5.8m ha and peatlands 1.9m ha by 2030.



- Increasing demand for electricity in Indonesia
- Integrate renewable energy into the grid.



- Develop public infrastructure for transportation.
- Electrification for modes of transportation.



- Commitment to zero deforestation.
- Re-forestation and conservation.

Indonesia Sustainable Finance Market Outlook

Sustainable Finance Issuances between 2018 - 2021

Issuer	Amount Issued (Millions)	USD equivalent	Format	No. of Deals	UoP/ KPIs
Green					
Republic of Indonesia	USD 2,750	2,750	Green Bond	3	Renewable Energy, Transport, Green buildings etc.
Perusahaan Penerbit Sbsn	USD 2,250	2,250	Green Bond	2	Renewable Energy, Transport, Green buildings etc.
Adimitra Energi Hidro	IDR 155,200	2,079	Green Loan	2	Hydro power plant
Star Energy	USD 1,690	1,690	Green Bond	3	Geothermal Energy
Bank Negara Indonesia	IDR 5,000,000	340	Green Bond	2	Renewable Energy, Transport, Green buildings etc.
Sarana Multi Infrastrukt	IDR 380,000	265	Green Bond	2	Renewable Energy and Transport.
Pembangkitan Jawa Bali	USD 112	112	Green Loan	1	Photovoltaic Power Plant
Barito Pacific	USD 100	100	Green Loan	1	Green and Sustainable Trade Finance
Social, Sustainability, Sustainability-Linked					
Republic of Indonesia	USD 4,300 EUR 500	4,891	Sustainability & Social Bond	4	COVID-19 Relief & Recovery efforts
Apical	USD 750	750	Sustainability-linked Loan	1	KPIs relating to Apical's commitment towards sustainable supply chains.
Bank Rakyat Indonesia	USD 500	500	Sustainability Bond	1	Basic Infrastructure, Employment Generation,
Bank Mandiri	USD 300	300	Sustainability Bond	1	Water Management, Employment Generation, Green Building, Renewable Energy, Energy Efficiency
Bank Mandiri	USD 300	300	Sustainability Bond	1	Water Management, Employment Generation, Green Building, Renewable Energy, Energy Efficiency
PT Inti Indosawit Subur	USD 120	120	Sustainability-linked Loan	1	KPIs are not publicly disclosed

Sustainable Finance Market outlook

- At the end of 2021, the Indonesian Sustainable Finance market was dominated by green theme.
- Indonesia issued its fifth sovereign sukuk worth USD750M under its green sukuk program launched in 2018.
- The Government of the Republic of Indonesia has been active in the issuance of Green, Sustainability and Social Bonds, total amount outstanding of US\$ 7.59b equivalent.
- Sustainable Finance Roadmap Phase II (2021 – 2025) was launched on 15 January 2021 with plans including development of a complete market ecosystem for sustainable finance and definition of an appropriate taxonomy in conjunction with other institutions.
- Bank Indonesia Governor, Perry Wrijiyo, announced the development of Sustainable Finance will be one of six priority agendas in the financial track of Indonesia's G20 Presidency in 2022.
- Demand and transactions for Sustainable Finance is expected to increase further from Governmental policies.

Key ESG Themes

- Green Energy Transition:** In May 2021, the Government announced the suspension of approval of new coal-fired power plants after 2023. They also plan to promote the transition of low —carbon fuels and clean power generation technologies to achieve carbon neutrality target
- Electric Vehicle:** Current state of infrastructure is limited but the country potentially contains world's largest production of Nickel needed for fuel cells in EVs, raising demand potential. Government set goals to become an EV hub in Asia with targets for 2,400 charging stations in 2025 and 31,000 in 2030
- Carbon Pricing Market:** Government plans to impose carbon tax on coal-based electric power plants with a rate of IDR 30 per kilogram CO2 starting April 2022 however was delayed due to the Ukraine war

MUFG's Global Dedicated ESG Finance Team

MUFG combines a truly global presence with ESG Finance team members across the entire MUFG network with a strong local capability supporting issuances in Asia Pacific.

Asia Pacific

Colin Chen,
Head of ESG Finance APAC

Joined MUFG Bank in 2000 and has been involved in structured finance for over 30 years. Prior to his current appointment, he was MUFG's Head of the Structured Finance, Asian Investment Banking Division. Under his leadership, MUFG has consistently been ranked one of the top project finance lenders in APAC.

Ayako Kageyama
Vice President, ESG Finance APAC

With 15 years experience in sustainable finance globally and Asia, she leads sustainable finance transactions, product development, thought leadership and market rule making. She has power and energy finance background and managed various sustainable finance and investment in prior roles at Fidelity International, Standard Chartered Bank and Japan Bank for International Cooperation.

UK/Europe

MUFG EMEA has a team of **4 dedicated ESG Finance professionals** based in London

Oceania

Rob Ward heads up MUFG's ESG Finance team in Oceania with **3 dedicated ESG Finance professionals**

Americas

MUFG Americas has a dedicated team **with 2 dedicated ESG Finance professionals** that handle origination and execution

Japan

MUFG also has a Sustainable Business Division based in Tokyo that has **more than 20 dedicated ESG Finance professionals.**

MUFG – a Leading ESG Debt House in APAC (ex-Japan)

MUFG is deeply entrenched in the ESG market, with strong track record and commitment to partner like-minded clients in the APAC (ex-Japan) region to being about positive change to the climate and society, through ESG Financing using green / sustainability-linked / social bonds and/or loans instruments:

- Green / Sustainability Coordinator / Advisor role to structure and provide advice, including drafting, the Green/Sustainable Financing Framework governing issuance of ESG bonds / loans
- Deep access and reach to Second Party Opinion (“SPO”) Providers, working closely with SPOs to achieve best outcomes for our clients.
- Sector expertise to ensure application of best industry ESG practices, through our experience and familiarity across the MUFG global network.

USD **12.1** Bn eq.

Total ESG Financing raised in APAC (ex-Japan) as Green / Sustainability Coordinator / Structuring Advisor

30

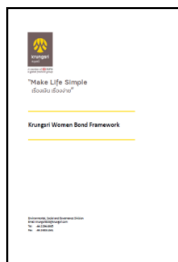
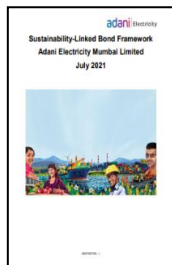
Total number of MUFG ESG Advisory / Coordinator Mandates since 2020

3rd

#3 in FY2021 APAC (ex-Japan) SLL Bookrunner League Table

Source: Loanconnector, Bloomberg as of 25 May 2022

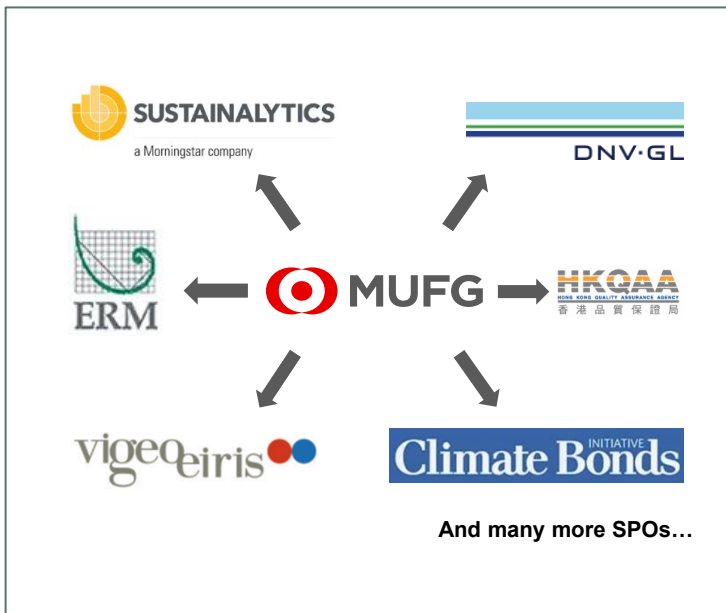
FRAMEWORK ADVISORY SERVICES



ESG EXPERTISE ACROSS VARIOUS SECTORS



DEEP ACCESS & NETWORK TO SPO PROVIDERS



MUFG is One of the Leading Financiers in Indonesia

2021 INDONESIA BOOKRUNNER[^]

Rank	Lender	Volume (USD Million)	No. of Deals
1	Bank Mandiri	878	7
2	SMBC	550	7
3	OCBC	413	7
4	MUFG	404	3
5	BNP	389	3
6	SCB	351	3
7	Deutsche	350	1
8	BOC	340	2
9	Maybank	308	3
10	HSBC	271	2

✓ MUFG ranked #4 on the 2021 Indonesia Bookrunner League Table

✓ MUFG ranked #4 on the 2021 Indonesia Mandated Lead Arranger League Table

*: Includes all major currencies (USD, EUR, JPY, AUD, HKD, SGD, NZD, GBP, CAD, offshore CNY) syndicated loans based on country of risk.

^: G3 Currencies (USD, EUR, JPY) syndicated and club loans based on country of risk.

SELECTED MUFG LED SYNDICATED AND ACQUISITION FINANCINGS



PERTAMINA HULU ENERGI

USD 2.5 Billion
Syndicated Term Loan Facility

**Sole Global Coordinator
Mandated Lead Arranger, Underwriter
and Bookrunner**

In Progress, Indonesia



PT INDOMARCO PRISMATAMA

JPY12 Billion
Syndicated Samurai Term Loan Facility

**Sole Mandated Lead Arranger &
Bookrunner, Facility Agent**

March 2021



PT ADIRA DINAMIKA MULTI FINANCE TBK

USD300 Million
Syndicated Term Loan Facility

Mandated Lead Arranger & Bookrunner

January 2020



PT JACCS MPM FINANCE INDONESIA

USD250 Million Equivalent
Syndicated Term Loan Facility

**Mandated Lead Arranger, Underwriter
& Bookrunner, Facility Agent**

July 2022



PT BANK RAKYAT INDONESIA (PERSERO) TBK.

USD1.0 Billion
Syndicated Term Loan Facility

**Mandated Lead Arranger &
Bookrunner**

September 2020



PT PERUSAHAAN LISTRIK NEGARA (PERSERO)

USD1.0 Billion
Syndicated Term Loan Facility

**Mandated Lead Arranger, &
Bookrunner**

October 2019



PT INTI INDOSAWIT SUBUR

USD120 Million
Syndicated Sustainability Linked Term
Loan and Revolving Credit Facilities

**Sole Sustainability Coordinator,
Sole Mandated Lead Arranger &
Bookrunner, Facility Agent,**

February 2022



PT SARANA MULTI INFRASTRUKTUR (PERSERO)

USD700 Million
Syndicated Term Loan Facility

**Global Coordinator
Mandated Lead Arranger &
Bookrunner, Facility Agent**

September 2020



INDONESIA EXIMBANK

USD900 Million
Syndicated Term Loan Facility

**Mandated Lead Arranger, &
Bookrunner**

September 2019



MIND ID / PT INDONESIA ASAHAN ALUMINIUM (PERSERO)

USD1.5 Billion
Syndicated Term Loan and Revolving
Credit Facilities

**Sole Coordinator, Mandated Lead
Arranger, Underwriter &
Bookrunner**

July 2021



PT BANK NEGARA INDONESIA (PERSERO) TBK

USD970 Million
Syndicated Term Loan Facility

**Mandated Lead Arranger &
Bookrunner**

February 2020



PT MITRA PINASTHIKA MUSTIKA FINANCE

USD250 Million Equivalent
Syndicated Term Loan Facility

**Mandated Lead Arranger,
Underwriter & Bookrunner, Facility
Agent**

January 2019

MUFG's Experience & Coordination for International Capital Markets

SELECTED RECENT MUFG LED INDONESIA LOANS AND BONDS



Pertamina Hulu Energi
USD 2.5 Billion
Syndicated Term Loan Facility

Sole Global Coordinator
Mandated Lead Arranger,
Underwriter and Bookrunner
In Progress, Indonesia

- PHE's inaugural Syndicated term loan facility.
- Largest ever syndicated term loan by any Indonesian SOE and Pertamina's group.
- MUFG acted as the Sole Coordinator, Mandated Lead Arranger and Bookrunner.
- Currently out in the market for syndication.



PT Inti Indosawit Subur
USD120 Million
Syndicated Sustainability Linked
Term Loan and RCF

Sole Sustainability Coordinator,
Sole Mandated Lead Arranger &
Bookrunner, Facility Agent,
February 2022, Indonesia

- First Sustainability-Linked Loan for upstream Palm Oil producer.
- MUFG acted as the Sole Sustainability Coordinator, Mandated Lead Arranger and Bookrunner.
- The transaction attracted 3 international banks, diversifying PT IIS' investor base by adding Korean and Japanese investors into PT IIS's relationship banks.

TRACK RECORD OF INTERNATIONAL BONDS FROM INDONESIA ISSUERS



Tower Bersama
USD 400 Million
2.800% Notes due 2027

Joint Bookrunner
October 2021



Hutama Karya
USD 600 Million
3.750% Notes due 2030

Joint Bookrunner
April 2020



SMI
USD 300 Million
2.050% Notes due 2026

Joint Bookrunner
May 2021



PLN
USD 1 Billion
3.375% Notes due 2030
4.375% Notes due 2050

Joint Bookrunner
October 2019



PT Pertamina
USD 1.9 Billion
1.400% Notes due 2026
2.300% Notes due 2031

Joint Bookrunner
February 2021



PLN
EUR 500 Million
1.875% Notes due 2031

Joint Bookrunner
October 2019



Indonesia
JPY 100 Billion
Notes due 2023, 2025, 2027, 2030,
2040

Joint Bookrunner
July 2020



PLN
JPY 23.2 Billion
0.430% Notes due 2022
0.870% Notes due 2024
1.050% Notes due 2029

Joint Bookrunner
September 2019



MIND ID
USD 2.5 Billion
4.750% Notes due 2025
5.450% Notes due 2030
5.800% Notes due 2050

Joint Bookrunner
May 2020



Bank Mandiri
USD 750 Million
3.750% Notes due 2024

Joint Bookrunner
April 2019



Bank Mandiri
USD 500 Million
4.750% Notes due 2025

Joint Bookrunner
April 2020



INALUM
USD 4 Billion
5.230% Notes due 2021
5.710% Notes due 2023
6.530% Notes due 2028
6.757% Notes due 2048
Joint Global Coordinator
November 2018

MUFG Bank, Ltd.
(incorporated in Japan
with limited liability)

Singapore:
7 Straits View
#23-01 Marine One
East Tower
Singapore 018936

www.mufg.jp/english

Colin Chen
Managing Director
Head of ESG Finance
APAC
T: +65 6918 4798
E: colin_chen@sg.mufg.jp

Ayako Kageyama
Vice President
ESG Finance APAC
T: +65 9818 3980
E: Ayako_kageyama@sg.mufg.jp