



Ministry of Transportation
Republic of Indonesia

Climate Financing in the Transportation Sector in the Republic of Indonesia

Ministry of Transportation

Presents in the event of UNESCAP Regional Cooperation Mechanism on Low Carbon Transport :
Identification of Climate Financing Mechanism
Manila, May 16-17, 2024





Background



Indonesia is an archipelagic country with more than 17,000 islands that are vulnerable to the risks of climate change such as rising sea levels.

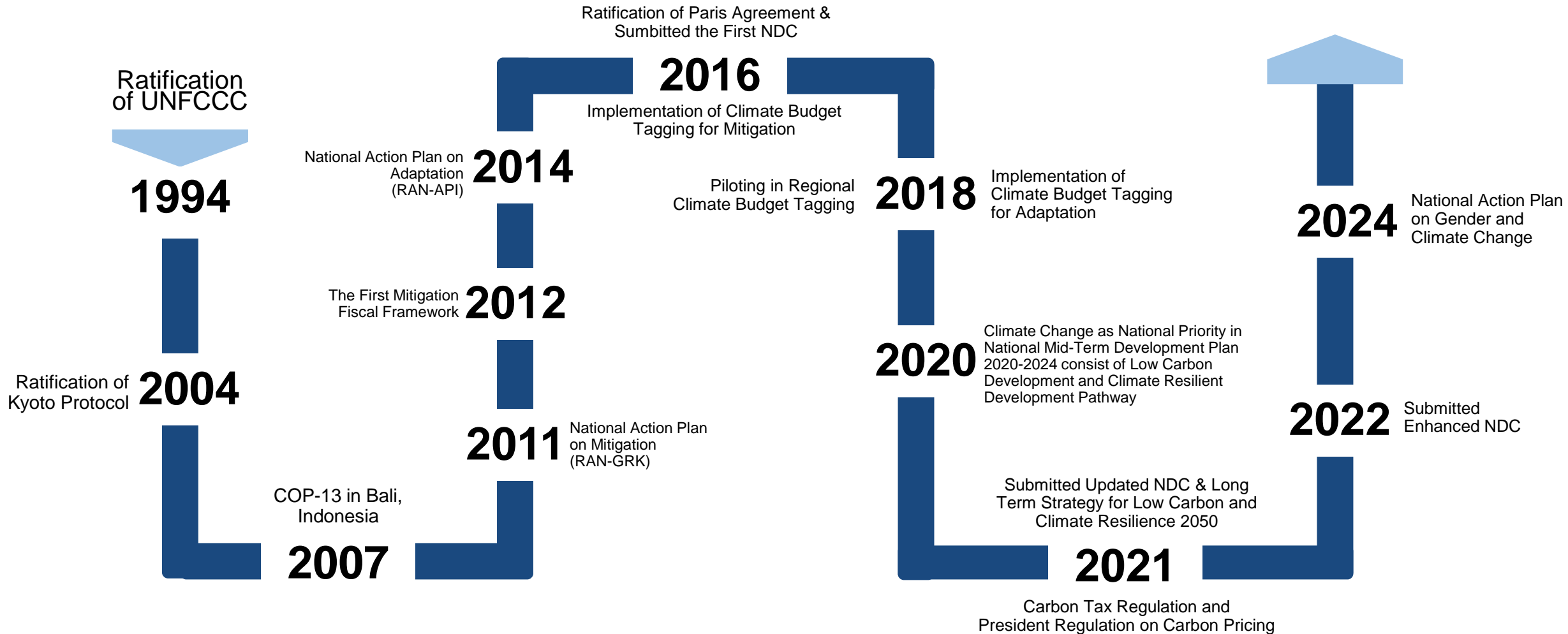
Climate change will increase the frequency and level of exposure. Hydrometeorological disasters currently dominate 80% of total disasters in Indonesia.

Indonesia is experiencing a rise in sea level of 0.8-1.2 cm per year, while around 65% of the population lives in coastal areas.

In 2020, GHG emissions per capita in Indonesia reached 2.24 tons of CO₂e per capita, with a growth rate of around 2.7% (CAGR) since 2000. The growth rate of GHG emissions is still relatively lower than the growth of GDP per capita which reached 3.4%.



Indonesia's Commitments and Milestones in Tackling Climate Change





Climate Change as National Priority

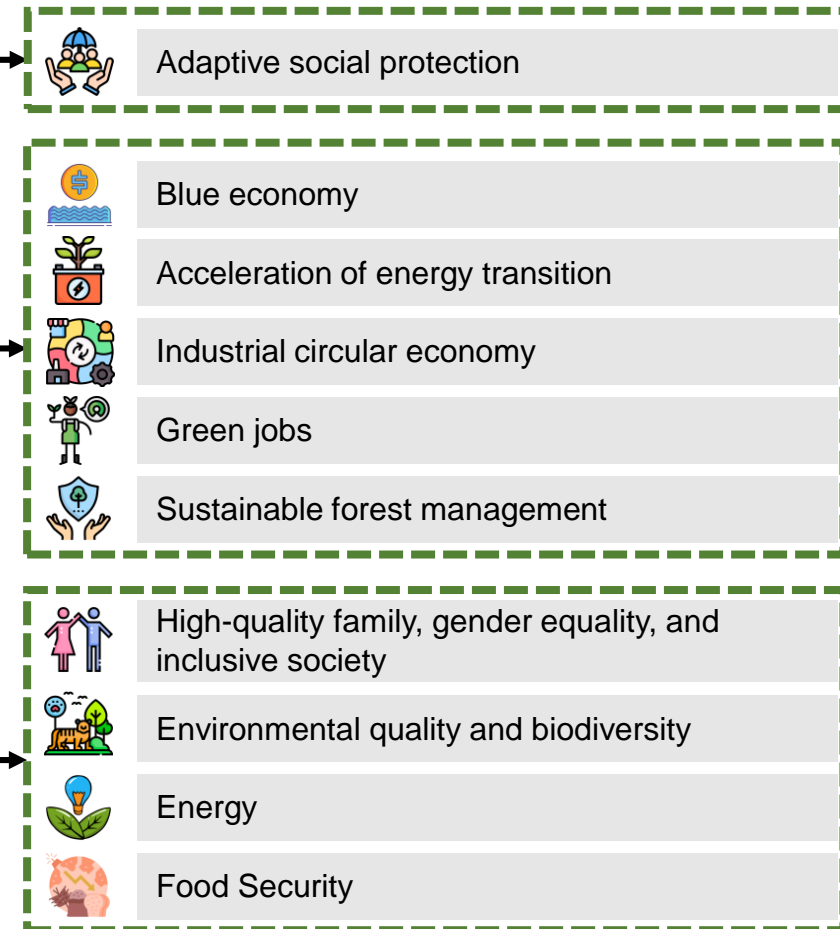
VISION OF GOLDEN INDONESIA 2045: "Towards A Sovereign, Developed, and Sustainable Archipelagic Country"

Long-Term Target 2025–2045

- 1 Income per capita equivalent to developed countries
- 2 Poverty towards 0% and reduced inequality
- 3 Increased international leadership and influence
- 4 Increased competitiveness of human resources
- 5 Decreased GHG emissions intensity and moving towards net zero emissions

Development Agenda in Mid-Term Strategies 2025 – 2029*

- 1 Social Transformation
- 2 Economic Transformation
- 3 Governance Transformation
- 4 Rule of law, stability, and Indonesian leadership
- 5 Social, cultural, and ecological resilience



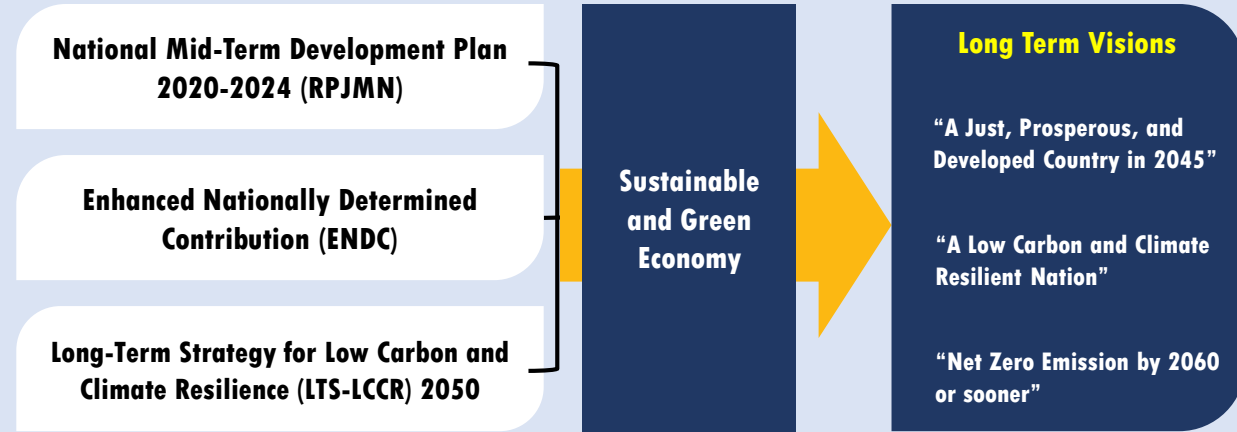
*based on technocratic design as December 2023



Climate Commitment and Financial Challenge

Indonesia Commitment on Climate Change

Indonesia long-term vision and commitments



Enhanced NDC Target & financial needs (Mton CO₂e)

	FOLU	Energy	IPPU	Waste	Agriculture	Total	
CM 1	31,89%	500	358	7	40	10	915
CM 2	43,20%	729	446	9	43,5	12	1.239,5

In 2022, Indonesia Government submitted the Enhanced Nationally Determined Contribution (ENDC) to the UNFCCC with more ambitious emission reduction target by 2030. The financial needs for Enhanced NDC is still under estimation process. However, the estimated financial requirements to reach the previous target on Indonesia updated NDC target (29% in 2030) is around USD 281,23 Billion (IDR 4.002,44 Trillion).

For adaptation, Indonesia focuses on three areas of resilience: economic resilience, social and livelihood resilience, and ecosystem and landscape resilience. These three areas of resilience have been elaborated in the NDC Adaptation Road Map which mainly covers several fields, namely food, water, energy, health, and ecosystems

Financial Consequence

Land & Forestry	Energy & Transportation	IPPU	Waste	Agriculture	TOTAL	MITIGATION
309,01	3.500,00	0,93	185,27	7,23	4.002,44	IDR Trillion
	245,99	0,07	12,99	0,50	281,23	USD Billion

Financial requirement to implement **adaptation action** is estimated at about USD 2.3 – 12.14 billion to build resiliency and adaptive capacity to reduce the risk of loss to 2.87% of GDP.



Strategies to Achieve Just and Affordable Green Transition

1

Enabling environment: prepare, develop, and implement supportive policies

2

Investment in renewable energy, energy efficiency, and sustainable transportation

3

Human resource development and job creation

4

Natural resource and conservation management

5

Expanding green transition financing and strengthening international cooperation

6

Enhancing community participation and equal access

UPDATED AS AT 19 FEBRUARY 2024

ASEAN TAXONOMY FOR SUSTAINABLE FINANCE VERSION 2



ASEAN Taxonomy for Sustainable Finance

In 2023, during Indonesia's ASEAN chairmanship, GOI successfully led the updating of ASEAN taxonomy to **incorporate transitional activities**, especially energy transition and coal phase-out.



Indonesia Taxonomy for Sustainable Finance

In February 2024, OJK has launched the TKBI (Taksonomi untuk Keuangan Berkelanjutan Indonesia), which also **adopts transitional activities** from the ASEAN taxonomy, including early retirement of coal-fired power plants. In 2024, it will start with the energy sector (in line with policy developments at the national and regional levels).



Climate-Related Fiscal Policy

STATE REVENUE



State revenue policies are directed towards maintaining the **sustainability of natural resources and environmental management**, stimulating **investment in renewable energy and clean technology**, and ensuring **a just and affordable transition**.

- Tax facilities to stimulate renewable energy, EV, and clean technology investment (VAT cut, property tax cut, tax allowance, tax holiday, luxury tax cut for EV)
- Import duty exemption on renewable energy and/or clean technology machines and equipment.
- Non-tax revenue from forestry, fishery, and geothermal management.
- Preparation of imposing carbon tax to Coal-Fired Power Plant

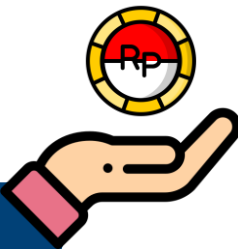
STATE EXPENDITURE



State expenditure policies also supporting **a low-carbon and climate-resilient development**, strengthening the capacity of regional expenditure through **ecological fiscal transfer**, providing fiscal buffers for **disaster financing**, and developing **green infrastructures**.

- Line Ministries mitigation and adaptation budget/spending
- Ecological Fiscal Transfer, indirect climate-related fiscal transfer such as Physical Special Allocation Fund (DAK Fisik), regional incentive fund (DID), profit sharing fund from sustainable natural resources management (DBH-DR, DBH Panas Bumi).
- Disaster Risk Financing

BUDGET FINANCING



The financing policy is aimed to **greening the financing** through ESG framework and promote more sustainable innovative financing instruments through the implementation of **Green Bond/Sukuk Framework** and **SDG Government Securities Framework**.

- The issuance of Global Green Sukuk and Retail Green Sukuk
- The issuance of SDG Bond that consist of Social Focus, Green Focus, and Blue Focus.
- The issuance of Samurai Blue Bond



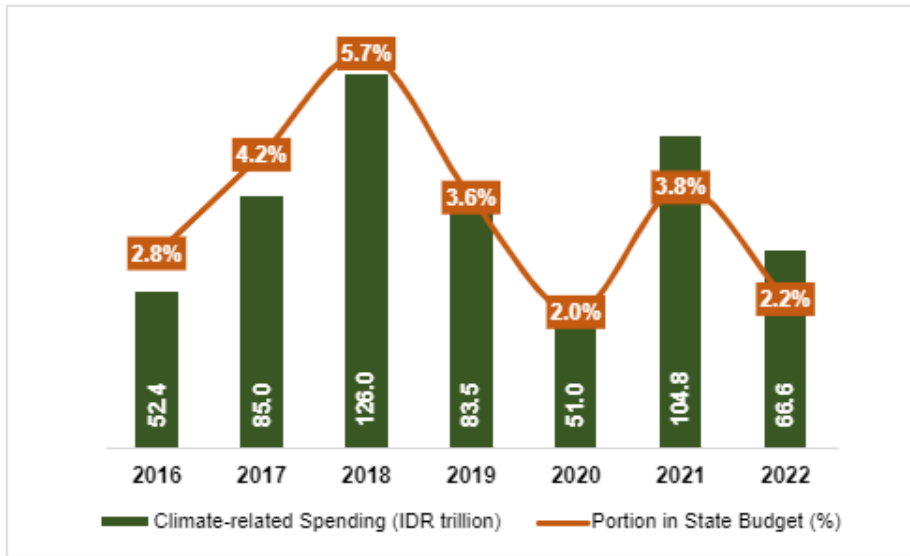
Tax Policy to Encourage Investment in Renewable Energy, Reduce Vehicle CO₂ Emissions, and Accelerate Usage *Battery Electric Vehicle (BEV)*

Instrument	Policy
Tax Holiday	100% tax discount for up to 20 years depending on investment amount for 17 pioneer industries.
Tax Allowance	Providing Tax Allowance for the geothermal business, renewable energy power plants, and bioenergy industry. Exemption from article 22 of income tax on imported goods for geothermal business activities.
VAT Facility	Exemption VAT on import goods for geothermal activities.
Import Tax Facility	Exemption from import tax on geothermal activities and main component of battery to support BEV development.
Land and Building Tax Facility	Reduction of Land and Building Tax up to 100% for the geothermal exploration phase.
Sales Tax on Luxury Goods: Vehicle	Based on the potential emissions issued by motorized vehicles. The higher the CO₂ produced, the higher the rate (0-95%) for 1 time imposition at the manufacturer or at the time of import. STLGs is also used to encourage consumption and investment in BEV in Indonesia.

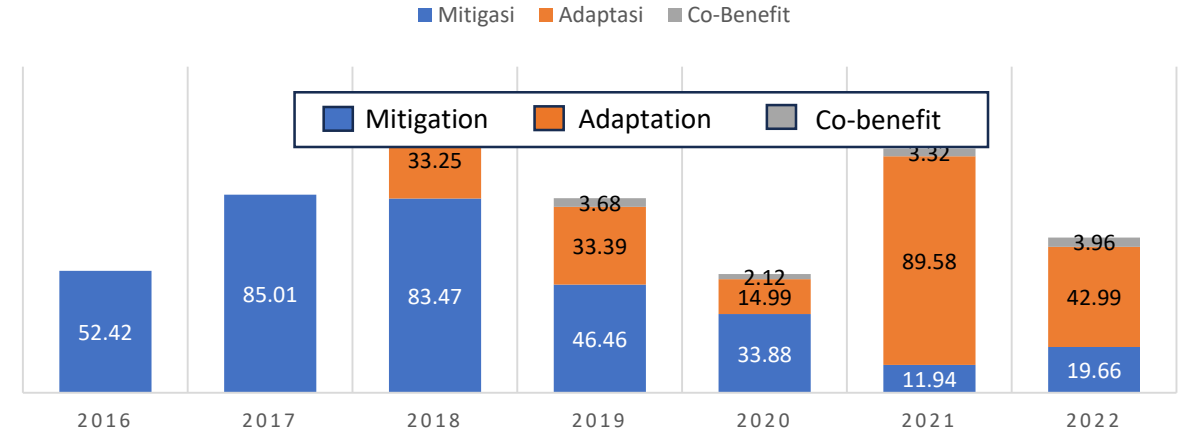


Central Government Spending for Climate Change

Annual Central Government Climate Spending (IDR trillion)



Development of Climate Change Budget Based on Actions from 2016-2022 (IDR Trillion)

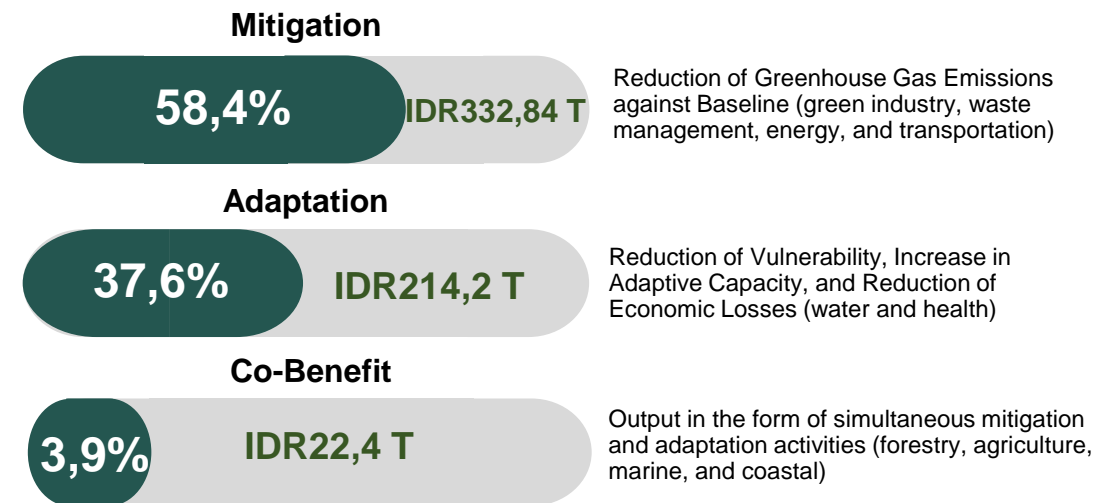


The implementation of climate change budget tagging since 2016 has helped the government in identifying expenditures for climate change actions. The cumulative realization of central government climate change action expenditure from **2016 to 2022** reached **IDR569 trillion or USD 37,9 billion**.

The **average expenditure** for climate change action from 2016-2022 was IDR81.3 trillion per year (**USD 5,4 billion**) or **3,5% of the state budget**.

The **funding requirement for mitigation actions based on BUR-3** for the period 2018-2030 is IDR4.002,44 trillion, or an average of **IDR307,88 trillion per year**. Meanwhile, the total **mitigation funding from the state budget** (mitigation actions & co-benefits) for the period 2018-2022 is IDR217,83 trillion, or an average of **IDR43,57 trillion per year**. Thus, the state budget so far has only been able to meet approximately **14% of the annual mitigation funding requirement**.

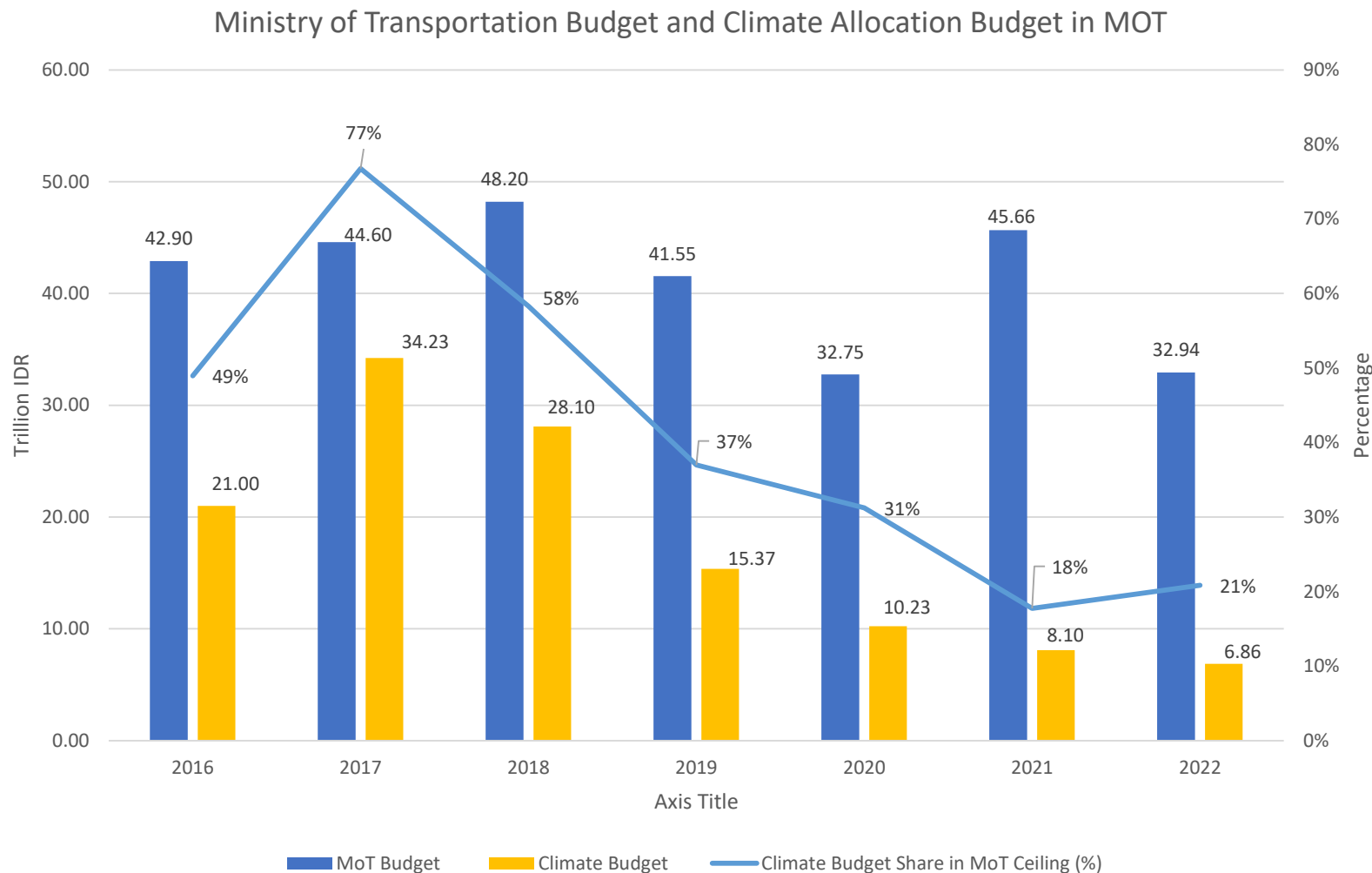
Composition & Total Budget for Climate Change Based on Actions from 2016-2022



Source: Ministry of Finance, Indonesia



Climate Budget in the Ministry of Transportation (based on Climate Budget Tagging)



Ministry of Transportation always support the process of Climate Budget Tagging since 2016, and mostly MoT climate budget is for mitigation action.

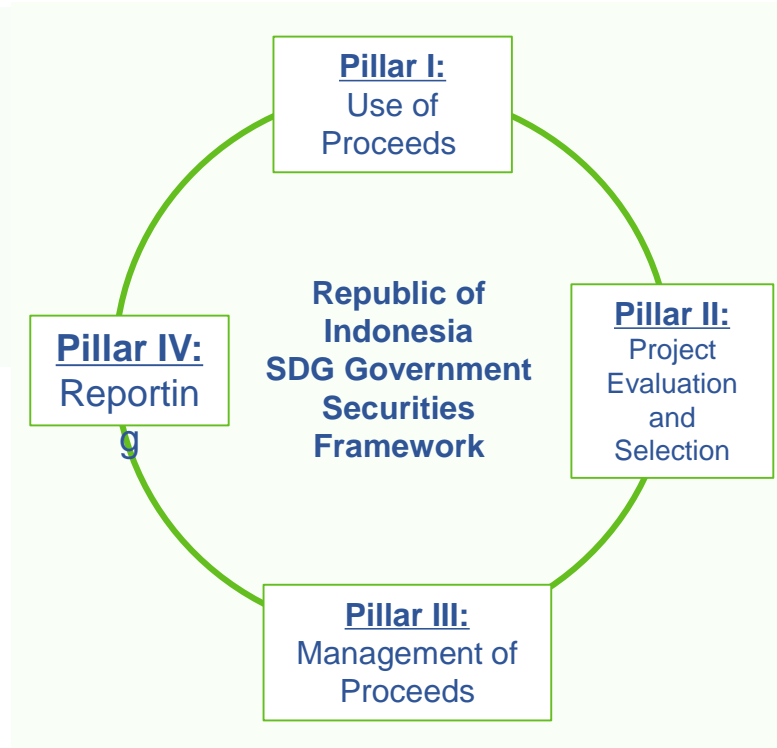
From this graph, we can take the average of MOT Budget from 2016-2022 is 41.23 Trillion IDR (2.66 Billion USD) per year, with the average of climate budget is 17.7 Trillion IDR (1.14 Billion USD) or average of 42% from the ministry budget.



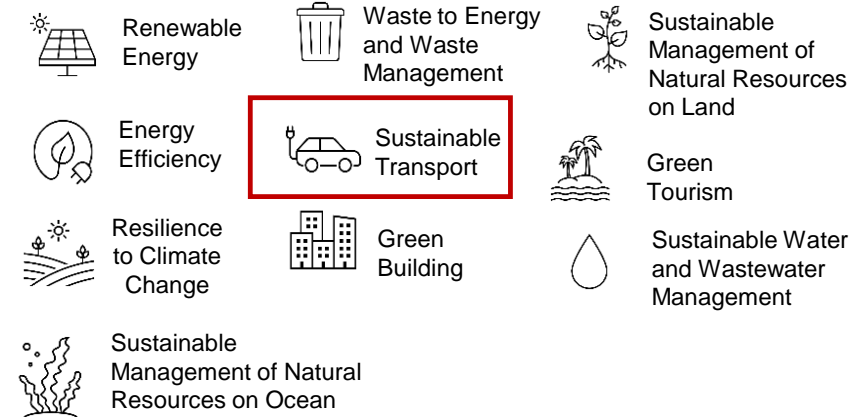
The Foundation of Indonesia's Green Sukuk & Thematic Bonds: Climate Budget Tagging & The Framework

In 2014, the Government of Indonesia, with the support from UNDP, has developed and implemented a **Climate Budget Tagging** – which allows for the tracking and monitoring of government’s spending within the state budget on climate change mitigation and adaptation activities.

The tagging result of Climate Budget Tagging has been utilized by the Ministry of Finance to develop **innovative financing instruments** in the form of **Green Bond/Sukuk**.



Eligible Green & Blue Sectors



Eligible Social Sectors



Through Thematic Bonds (Green Sukuk, SDG Bond, Blue Bond) Indonesia has successfully raised and mobilized over

USD 9.5 billion

- The Framework covers three main focuses: climate change mitigation and adaptation efforts (**green focus**): advancement of blue economy (**blue focus**) and positive social outcomes (**social focus**)
- Received an external Second Party Opinion review process by CICERO and IISD, to ensure its adherence to globally recognized principles and standards.
- Awarded “Medium Green” for the green aspects, and “Good” for the Framework’s overall governance structure.



Issuance of Indonesia Thematic Bond/Sukuk



GREEN SUKUK

Green Sukuk has been financing green projects in 5 eligible sector



Renewable Energy



Energy Efficiency

Resilience to Climate Change for Highly Vulnerable Areas and Sectors/ Disaster Risk Reduction



WTE & Waste Management



Sustainable Transport



BLUE BOND

GLOBAL MARKET

	1 st Issuance	2 nd Issuance	3 rd Issuance	4 th Issuance	5 th Issuance	6 th Issuance
Issuance date	March 2018	February 2019	June 2020	June 2021	June 2022	November 2023
Volume	USD 1.25 Bio	USD750 Mio	USD750 Mio	USD750 Mio	USD1.5 Bio	USD1 Bio
Tenor	5 years	5.5 years	5 years	30 years	10 Years	10 Years
Yield	3.75%	3.9%	2.3%	3.55%	4.70%	5.60%

DOMESTIC MARKET

	1 st Issuance	2 nd Issuance	3 rd Issuance	4 th Issuance	4 th Issuance
Issuance date	November 2019	November 2020	November 2021	December 2022	November 2023
Volume	IDR 1.4 Trillion	IDR 5.4 Trillion	IDR 5 Trillion	IDR 10 Trillion	IDR 6.8 Trillion
Tenor	2 years	2 years	2 years	2 years	4 years
Yield	6.75% (Floating with floor)	5.5% (Floating with floor)	4.8% (Floating with floor)	6.15% (Floating with floor)	6.5% (Floating with floor)

DOMESTIC (PROJECT BASED) MARKET

	1 st Issuance
Issuance date	2022 - now
Volume	IDR 8.35 Trillion
Tenor	7 years
Yield	6.625%

GLOBAL MARKET

	1 st Issuance
Issuance date	September 2021
Volume	EUR 500 Mio
Tenor	12 years
Yield	1,351%



SDGs BOND

DOMESTIC MARKET

	1 st Issuance	2 st Issuance
Issuance date	Okt 2022	2023
Volume	IDR 3.26 Trillion	IDR 7.25 Trillion
Tenor	8 years	7 years
Yield	7,375%	7,375%

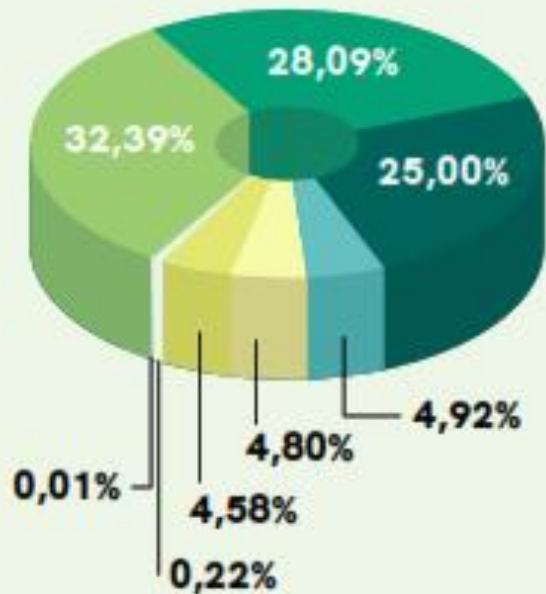
	1 st Issuance	
Issuance date	May 2023	
Volume	JPY 14,7 Bio	JPY 6 Bio
Tenor	7 years	10 years
Yield	1,2%	1,43%



Indonesia Green Sukuk

Cumulative Proceeds Allocation

CUMULATIVE BREAKDOWN PER SECTOR (2018-2022)



Green Sukuk Support



The emission reduction is projected to reach 10.5 million tons of CO₂e

More than 690 km construction of railway lines



Renewable energy power plant with total capacity of 7.3 million KWh



Improving waste management for 7.8 million households



Utilization of Non-State Budget Funding Sources for Mobilizing Climate Finance



Ministry of National
Development Planning



Ministry of
Environment & Forestry



Ministry of Finance

So far, climate funding for the transportation sector has only come from **Green Sukuk**





Conclusion

- The risk of climate change encourages Indonesia to mainstream climate change action as one of the priorities in the national development agenda.
- Indonesia is consistently involved in handling climate change as expressed through a commitment to achieving NDC targets.
- The fiscal policy response provided by Indonesia to handle climate change includes the use of budget instruments (revenue, expenditure and financing), as well as policies to encourage the mobilization of green funding from non-state budget sources

Challenge / Barrier

- Asymmetric information between central/local government and financiers/investors, including awareness of knowledge
- The energy transition requires technology that is also expensive
- Need to prepare the bankable project readiness and also regulations
- Need more innovative financing for mitigation action in the transportation action, to support sustainable transportation in Indonesia



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Thank You