# Experiences with Indicators and Targets for Governance in Indonesia:

## Elements of and Expectation from the Climate-Energy Governance Model for Indonesia

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**Indonesia's commitment to climate change**

- Indonesia's climate commitment was strengthened to 31.89% with its resources and up to 43.2% with international support in the Enhanced NDC document submitted by 2022
- Indonesia compiled the Long-Term Strategy on Low Carbon and Climate Resilience (LTS-LCCR) as a country committed to achieving NZE by 2060 or sooner
- Indonesia has set a target for the renewable energy mix in 2025 of at least 23% and 31% in 2050 through the National Energy Policy (KEN)

**Indonesian climate-energy profile**

- The emission reduction has only reached half of the 2019 target of 24%
- RE share in the Indonesian energy mix only reached 10.4% in 2022 (decreased by 1,1% compared to 2021), while coal increased to 43%
- By history from 2011-2022, the primary energy supply by sources is still dominated by coal and crude oil and products
- Coal still dominated the power generation mix by contributing 67,5%, while renewable energy share only contributed around 12.8%
- Investment in renewable energy failed to meet the targets in 2022, only 40% of the target of USD 3,97 billion

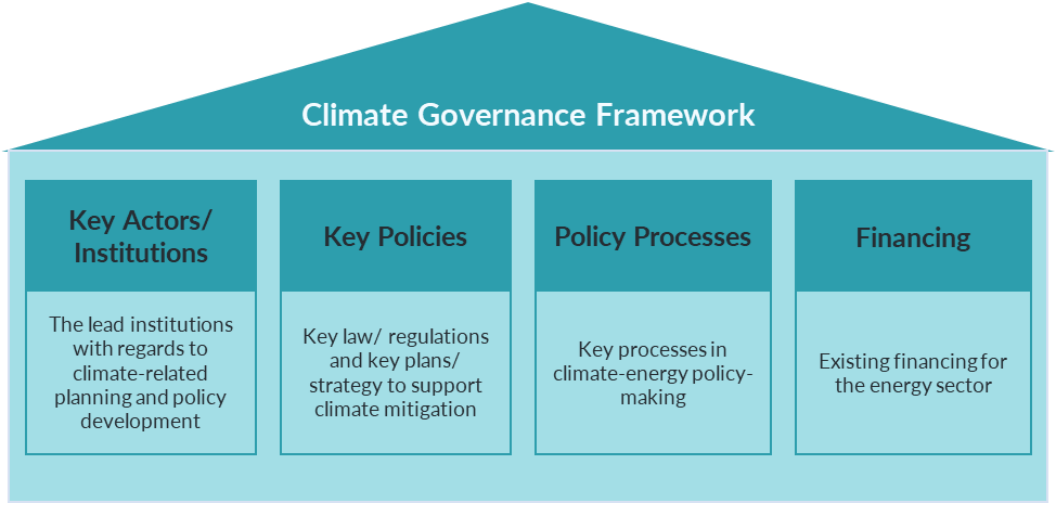
## Indonesia has set ambitious emission reduction targets but achievement was relatively slow

- Gap between the GoI's pledge to NDC, national policies, and programs to achieve it, illustrating how sectoral institutions are not aligned with NDC
- Complex institution arrangement in Indonesia has resulted in the different settings of success parameters from each ministry
- The overlapping sectors in climate change governance also obscure the roles that should be assigned to pertinent actors in the first place
- The inconsistencies between NDC target and national energy policy
- Several energy-related policies still incorporate a high proportion of coal in energy mix projection
- The potentials for climate change management funding are abundant, however the policymaking in Indonesia has not caught up the pace

**The Indonesian study proposed climate governance framework to accelerate the achievement of climate targets (NDC and NZE)**

# Climate Governance Framework

Improving Indonesian climate-energy governance for energy transition starts with understanding the systems that currently shape the development and implementation of relevant policies and measures.




1. Stakeholder involvement can enhance the stability of the climate governance framework system and support transformational potential through an active role in emissions reduction and policy development

2. The legal basis is key to enhancing the climate change framework's credibility, commitment, and overall stability, increasing governments' responsibility to deliver climate implementation and providing a clear anchor for all subsequent climate policies

3. Policy processes in climate governance should emphasize accountability, transparency and trust in government action on the transition.

4. Appropriate financing for climate mitigation would be determinant in supporting countries to achieve more ambitious emissions reduction targets.

# The Indonesian Existing Climate-Energy Governance Model

## Key actors/ institutions

The actors in producing climate-energy policies are **MoNDP, MoEF**, **MoEMR** and **DEN**. However, only **MoMER** and **DEN** remain the most influential within the network.

- The relevant ministries perceive of climate change action in silos, rather than seeing it as an integrated system within the Indonesian development agenda
- There were often internal conflicts caused by different interests

*Notes:*
*MoNDP: Ministry of National Development Planning Agency/ Badan Perencanaan Pembangunan Nasional*
*MoEF: Ministry of Environment and Forestry/ Kementerian Lingkungan Hidup dan Kehutanan*
*MoEMR: Ministry of Energi and Mineral Resources/ Kementerian Energi dan Sumber Daya Mineral*
*DEN:Dewan Energi Nasional/ National Energy Council*

## Key laws/ regulations

Energy policy trajectory: **Enhanced NDC 2022, NZE 2060, National Energy Grand strategy, RUEN 2017, RUKN 2019-2038, RUPTL 2021-2030**

- The energy policy-making tends to slow process of energy transition by increasing the utilization of fossil fuels rather than forms of renewable energy.

*Notes:*
*NZE: Net Zero Emission*
*RUEN: Rencana Umum Energi Nasional/ National Energy General Plan*
*RUKN: Rencana Umum Ketenagalistrikan Nasional/ National Electricity General Plan*
*RUPTL: Rencana Usaha Penyediaan Tenaga Listrik/ Electricity Supply Business Plan*

# The Indonesian Existing Climate-Energy Governance Model

## Policy Processes

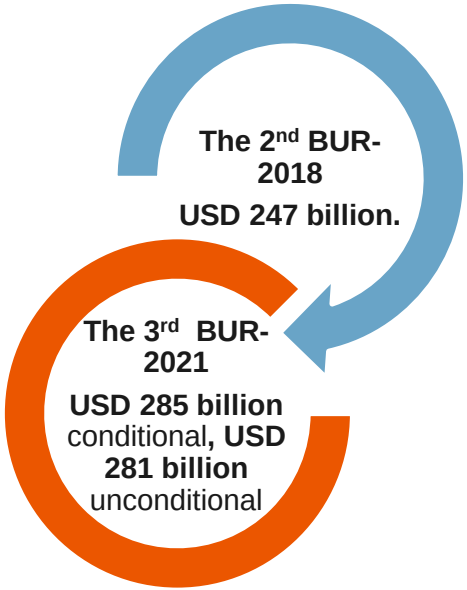
- The process of promulgating certain policies and regulations in the energy sector is still colored by informal practices, especially the emergence of Politically ExposedPersons in energy policy-making.
- The lack of transparency and accountability mechanisms has facilitates backstage practices including lobbying and negotiating in policy-making.
- National political commitment further clarifies the government's tendency to extend the operational period of coal and divert Indonesia from energy transition.

## Funding

- Indonesia still faces obstacles in closing the gap between finance availability and the required finance to meet the 23% renewable energy target by 2025
- Financing for NRE projects in Indonesia is still limited even though NRE is intended to be the first contributor to GHG emission reduction
  1. Total value of financial support only reaches at least USD 14 billion, less than 37% of the total projected financing needed by 2025 (IESR, 2022)
  2. Total public budget allocated for climate mitigation in the energy sector is only USD 67 million annually throughout 2018-2020 (only achieve 0.83% of the annual government budget)
  3. The annual investment for renewable energy only reaches USD 1,62 billion from 2017-2021, still far below the annual investment of USD 8 billion to meet the 23% renewable energy target by 2025
- Alternative financing sources are needed to aid Indonesia's energy transition.

# Financing for Energy Sector

**Estimated financial need for CCA and CCM action 2018-2030**




**Estimated Financial Need for the Energy Sector**

**2018** → **2023**

**USD 219.9 billion**

1. **Projection of needs** as a basis for developing financing strategy for the whole period of NDC implementation remains **challenging** (no standard and comprehensive method to calculate financial need). **Constrain**: Methodological approach, data availability and reliability, and diverse perceptions of stakeholders on NDC financing.
2. The energy sector is one of the main sectors in the NDC which has the **greatest need for funds**.
3. The main activities of the energy sector are the **construction of EBT power plants** and **clean technology investments**
4. The potential for reducing emissions is **298 million tons of CO2**

# Existing climate-energy governance model

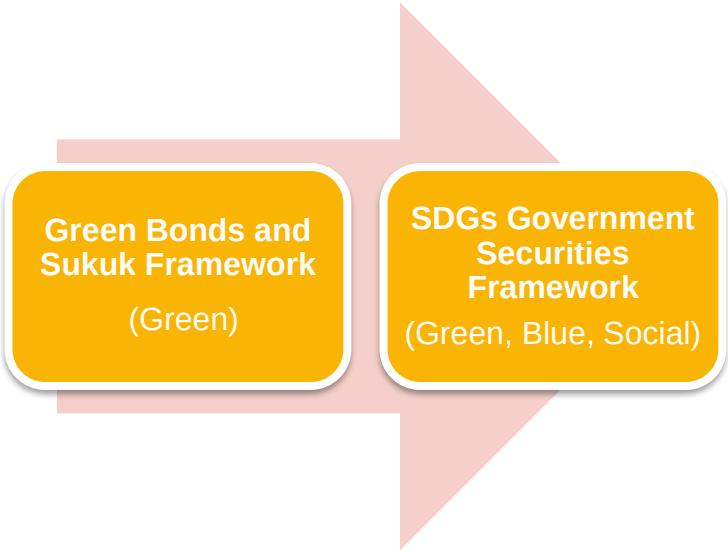
## Way Forward

1. The enhancement of DEN's roles within the Indonesian climate-energy network. This institution remains vital in advising the President and also the ministries, especially regarding policies in the energy sector.
2. The energy policy trajectory is still in the favour of fossil fuels, particularly coal, rather than of renewable energy. Nonetheless, the upcoming policy window of the Presidential election in 2024 will be either a strategic pivot towards renewable energy, or rather a perpetuated energy trilemma.
3. To date the NRE Act is still being formulated, a commitment towards just transition should also be translated into this regulation.
4. Limiting the influence of PEPs from the coal sector.
5. Renewable energy financing: capacity building and financial allocation for BPDLH to assess the project, induce the private sectors' contributions in just transition, ICF mobilization could also be synchronized and improved at the national level.

# Managing Climate Finance

Considerable challenge has been encountered in estimating investment needs for climate mitigation and adaptation, the GoI implement **Budget tagging system.**

1. The first budget tagging focusing on mitigation was done to **2015** state budget. Results of the budget tagging has helped government in **identifying activities in annual budget which can deliver mitigation and adaptation results.**
2. Climate Budget Tagging results showing a fiscal gap have encouraged the government to issue **Green Bonds and Sukuk Framework in 2018.**
3. The Indonesian government modified the framework in 2021, **integrating climate and SDGs targets** into the **SDGs Government Securities Framework**.



# Our suggestions on the supplementary indicators towards climate governance targets

1.

The existence of climate policy/regulation that integrates international and national commitments and integrates policies in each sector towards climate neutrality

2.

Existence of innovative climate finance with climate budget tagging, to support in achieving climate targets, by co-benefit with other targets (e.g. SDGs)

# THANKS!

# Note-1: Difference Between Metric and Indicator

Many terms are being risen since there is no universal terminology on the 'unit(s) of measurement'. Christiansen at al. (2018) provided a simple way to make a distinction between 'metric' and 'indicator':

| | Metric | Indicator |
|---|---|---|
| Definition | It might be used for the specific 'unit of measurement' with which to quantify it | It might be used for the particular element of adaptation success being assessed |
| Example | • Adaptation: A specifically designated vulnerability index value or water use in $m^3$/tonnes of harvest<br>• Mitigation: Carbon metric | • Adaptation : The level of climate change vulnerability in a given population or the resilience of crop yields to climate change-induced drought<br>• Mitigation: 'carbon footprints', 'financed emissions', and energy efficiency-related GHG emissions reduc3ons indicators |

*Source: Christiansen at al., 2018*

Any given *'indicator'* could have several *'metrics'*, whereas any given *'metric'* could refer to several different *'indicators'*.

# Note-2: Principles for Selecting Climate-related Metrics

***Climate-related metrics*** *is a quantities indicative of the level of historical, current, and forward-looking climate related risks and opportunities for a given organization (TCFD, 2021). The metrics have a role to play in the decision-making process to measure, manage and disclose climate risk (UK Gov., 2022)*

**Principles for Selecting Climate-related Metrics** (TCFD, 2021)**:**

- **Decision-useful.** Climate-related metrics help organizations understand potential impacts of climate risks and opportunities over a specified time period. To be decision-useful, these metrics **must be relevant to the organization's risks and opportunities**.
- **Understandable.** Climate-related metrics should be **presented in a manner that aids understanding** (e.g., both aggregated and disaggregated, where useful, clear labeling), and any limitations and cautions should be explicitly stated.
- **Verifiable.** Climate-related metrics are capable of **supporting effective internal controls** for the purposes of data verification and assurance.
- **Objective.** Metrics are **free from bias and value judgement** so that they yield an objective disclosure of performance that users can leverage regardless of their worldview or outlook.
- **Trackable over time and consistent.** Climate-related metrics should be **calculated and disclosed consistently from year to year** in order to facilitate comparative analysis and analysis of trends.

# Note-3: Difference Between Mitigation and Adaptation Metric

On metrics related to climate context, Leiter and Pringle (2018) map the differences between measurement units for mitigation and adaptation.

| Characteristic | Mitigation | Adaptation |
|---|---|---|
| **Ultimate objective** | '**Stabilization of GHG concentrations in the atmosphere** at a level that would prevent dangerous anthropogenic interference with the climate system' (UNFCCC, 1992, Article 2) | **There isn't one ultimate objective.** Several objectives: sustainable development achieved amidst climatic change; avoided negative climate impacts; reduced climate vulnerability & risk; increased climate resilience |
| **Global target** | **Quantitative**: keeping 'the global average temperature to well below 2 °C above pre-industrial levels' (Paris Agreement) | **Qualitative**: 'enhancing adaptive capacity, strengthening resilience and reducing vulnerability' (Paris Agreement) |
| **Subject of measurement** | **Mainly physical or chemical conditions**: GHG emissions, $CO_2$ concentrations in the atmosphere, | **Combinations of socio-economic and bio-physical conditions** |
| **Type of measurement** | **Direct**: emission reductions, GHG concentration and composition in the atmosphere | **Indirect**, because direct measurement of avoided climate change impacts is plagued with conceptual and methodological challenges. |
| **Place dependence of definition of measurement unit?** | **No**, **there is universal applicability** because the subject of measurement can be measured on objective scales (°C, metric ton). | **Yes, vulnerability, risk and resilience are context-specific**. |
| **Baseline** | **Absolute** anthropogenic emissions or GHG concentration and composition **in a particular year** or estimated future emissions (e.g. business as usual scenarios); GHG concentration and composition in a particular year. | **No agreed baseline.** Since **climate impacts are increasing and fluctuate over time**, the level of adaptation in the past may not be a meaningful reference point. |

*Source: Leiter & Pringle, 2018*

The different characteristics of mitigation and adaptation have implications for different approaches to measuring progress.

Mitigation metrics have limitations and uncertainties, given that they simplify the complexity of the physical climate system and its response to past and future GHG emissions (IPCC, 2022).

# Note-4: Principles for Setting Climate-related Targets

- **Based on recognized metrics**. Climate-related **targets should be based on a set of recognized metrics**, including cross-industry, climate-related metrics, sector-specific metrics, and organization-specific metrics.
- **Quantified and granular enough to enable progress tracking.**
- **Designed in consideration of an organization's strategy and forecasting**, and **informed notably by scenario analysis and climate science**.
- **Clearly specified over time**:
  - **Baseline**: consistent base year across targets;
  - **Time horizon**: defined time horizon by which targets are intended to be achieved; should be consistent across targets and, if feasible, consistent with key dates tracked by climate-related organizations or regulators.
  - **Interim targets**: any mid-term and long-term targets should have interim targets at appropriate, granular intervals (e.g., 5–10 years) covering the full mid-term or long-term target time horizon
- **Reviewed and updated,** when appropriate. Organizations should have a clear process for reviewing climate-related targets, at least every five years, and updating if necessary.
- **Reported progress annually**.

*Source: TCFD, 2021*