

The Role of Subnationals in Implementing NDC: Lesson Learned from Indonesia

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Indonesia is in the process of formulating its second nationally determined contribution (SNDC) which must be informed by [the outcomes of the first Global Stocktake \(GST1\)](#). **The next cycle of NDC must set more ambitious climate targets, not only reflected through high quantitative targets, but also ensuring that it can be effectively implemented. An implementable NDC involves clear pathways for enabling NDC implementation at the subnational level, including by local governments, communities, and private sectors.**

By drawing lessons learned from East Nusa Tenggara and Central Sulawesi, this brief aims to provide an overview of the current condition of subnational climate actions, including challenges and opportunities that arise to scale up climate actions, followed by a set of recommendations. At the end of the brief provides a snapshot that maps out the main issues as well as the practical measures that can be put into account when implementing climate actions at the subnational level.

Summary

- The role of subnational governments in Indonesia is essential to achieve the objective of the Paris Agreement by implementing national climate targets, as reflected in the Nationally Determined Contribution (NDC), into locally grounded actions. However, they often lack the authority, financing, and capacity support to execute effectively.
- The [outcomes of the first GST1](#) highlighted the need for stronger multilevel governance and implementation. In Indonesia, this underscores the urgency to institutionalize subnational roles in the next NDC cycle.
- As Indonesia prepares its SNDC, a critical opportunity to embed just transition principles and community-driven priorities into national planning, including by enabling the implementable NDC at the local level, is available.

- Experiences from provinces like East Nusa Tenggara and Central Sulawesi show that meaningful subnational participation improves project ownership, social safeguards, and policy coherence, especially in the climate-related sector, like energy and land-use.
- Empowering subnational actors through direct financing, delegated authority, and capacity-building will not only support national ambition but also advance regional climate leadership rooted in equity in accordance with the local needs and priorities.

Subnational Landscape in Indonesia

A. Uneven Potentials, Needs, and Capacities at the Subnational Level

The principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC) is fundamental not only in guiding global climate cooperation but also in shaping domestic climate governance. In Indonesia, this principle emphasizes **the need to recognize the diverse levels of infrastructure and institutional readiness, human capacity, and the degree of political will at the subnational level to respond effectively to national climate change mandates**. This condition implies that climate actions need to consider the different local contexts as well as the needs and priorities of the provinces. This further highlights the different needs of capacity building programs, including the upskilling and reskilling, financing, and other interventions that could empower subnational actors to implement climate actions.

B. Insufficient Political Authority

Key subnational actors in Indonesia—including provincial and district governments (along with their environmental, energy, and development planning agencies), civil society organizations, educational institutions, and communities — are expected to contribute in achieving the national climate commitments. The [Presidential Regulation Number 98 of 2021 on The Implementation of Carbon Pricing to Achieve NDC Target and Control over GHG Emissions in the National Development](#) provides a **formal mandate for subnational governments to contribute in achieving Indonesia's NDC targets** including the GHG emissions reduction, increasing climate resilience, and the implementation of carbon pricing. However, some of these mandates countered the relevant sectoral policies, which also regulate the roles of local governments.

Another structural barrier also lies in **subnational governments' lack of legal authority over NDC key sectors**. Compared to the decentralization models in some developed countries, where considerable autonomy and policy implementations are allowed, subnational governments in Indonesia are still dominated by the national government. For the last few years, the national government has introduced a number of policies that promote centralization, which further deteriorates subnationals' authorities. [Law Number 6 of 2023 on the Enactment of Government Regulation in Lieu of Law Number 2 of 2022 on Job Creation](#), in particular, has consolidated centralization in policymaking process related to National Strategic Projects

development¹. For instance, the development of renewable energy and industrial projects, especially those that fall under the National Strategic Project lists, is determined at the national level, where the subnational government cannot make substantial interventions, as reflected in the Law. This condition often results in the **top-down implementation of national projects with minimal local consultation, as well as limiting subnational governments from assessing and reviewing the impacts of the projects' implementation**. When such projects are implemented without adequate consultation or safeguards which should meet local needs and priorities, they may pose social and environmental risks to the local community, such as land-use conflicts or biodiversity loss.

Subnational governments are only able to stress their standpoint on local needs and priorities through the governor's recommendation to the national government. This has restricted them from fully contributing to implementing the ambitious commitment to the NDC target. The imbalance of power on subnational authority is also shown in the legislative branch, where senate members as official subnational representatives have little influence over the ratification process of proposed bills deliberated within the parliament. These conditions further undermine regional aspirations to be included in Indonesia's strategic policies.

C. Challenges Related to Finance

Subnational governments in Indonesia generally rely on central government transfers, in the form of special allocation funds (DAK)². Although there is no dedicated DAK for climate change, mitigation and adaptation actions can be funded through relevant sectoral DAK schemes, such as DAK for small-scale renewable energy infrastructure. However, the financial scale that is provided through DAK is inadequate compared to the actual needs of finance. Aside from that, to access DAK, **the subnational government needs to provide feasibility studies to justify the needs. However, the subnational government often does not have the financial capacity to develop good quality of feasibility studies**. Hence, accessing the DAK also becomes a challenge for the sub-national governments in Indonesia.

In most cases, the funding available that can be accessed by the subnationals are focusing on the infrastructure, rather than the pre- and post-construction components which are critical to ensure the sustainability of the infrastructure in the long-term. The mentioned components include feasibility studies, community training, institutional setup, and monitoring. While infrastructure itself may attract commercial financing, public funds like DAK typically focus only on construction, leaving gaps that lead to project failure. The unavailability of sufficient finance throughout the project cycle has led subnational governments to rely on funds from international development institutions which are also limited. Several national financiers, such as state-owned enterprises, are available to provide finance but often in the form of loans

¹ National Strategic Projects encompass a wide range of infrastructure projects, including toll roads, railways, airports, ports, oil refineries, gas pipelines, waste-to-energy facilities, renewable energy infrastructures, and water supply systems. More recently, the scope has expanded to include sectors like education, health, and food security.

² Funds sourced from the State Budget allocated to certain regions to fund special activities that are considered regional affairs and in accordance with national priorities.

that only finance the infrastructure development. Not only the debt adds burden to the subnational fiscal capacity, but the absence of financing for the operations and maintenance (O&M) of the facilities made the project unaffordable for the subnationals which often leads to project failure and underperformance.

A more holistic financing approach is needed to support the full project cycle, including enabling access to local financial instruments like cooperatives, village-owned enterprises (BUMDes), and micro, small, medium enterprises (MSMEs). Yet, these actors also face several challenges, such as **inadequate knowledge regarding financial instruments** that are applicable for climate actions. Almost all provinces in Indonesia also have regional development banks, with the local governors as the main shareholders. **The political will of the local governors, hence determine the abilities of the subnationals to mobilize finance for climate actions at the local level.**

D. Opportunities and Limitations to Just Transition

Despite the challenges, there is growing recognition of the strategic role of local government. Many provinces in Indonesia have begun to integrate climate objectives into their Regional Medium-Term Development Plan (RPJMD) in alignment with the National Medium-Term Development Plan (RPJMN). Opportunities are also emerging as subnational governments increasingly engage in climate innovation, community-based solutions, and energy transition initiatives tailored to the local context. In [East Nusa Tenggara](#), some **vocational schools and universities already offer renewable energy curricula**. However, more skilled lecturers are needed in the universities. Unfortunately, opportunities to further improve their capacity through training and certification programs are only available in big cities, which requires additional travel costs. In addition to that, although NTT has hundreds of graduates with renewable energy background education (e.g., Electrical Engineering), only few graduates are employed in the relevant sectors due to limited job and internship opportunities. This shows that **the readiness to absorb new workers that are relevant to low greenhouse gas emissions and resilient development, is low.**

[Central Sulawesi](#) shows its commitment for low greenhouse gas emissions and resilient development through developing small-scale and community-based renewable energy infrastructures, participating in Indonesia's Climate Village Programme (Proklam), as well as **improving the adaptive capacity of coastal ecosystems through conservation efforts**. However, **the province still needs to ensure that the development of the renewable energy sector, needs to be conducted in a justly manner**, by consulting the surrounding community regarding the potential impacts of the project development. One of the cases of hydro power plant development in Poso regency has caused declining water quality, submergence of rice fields, as well as loss of endemic fish in Poso River that leads to the reduction of fishery yields. Meanwhile, the electricity generated by the power plant is used for industrial needs, rather than for local energy security.

In [Greater Pekalongan](#), the high intensity of tidal flooding has transformed into a permanent coastal inundation. The permanent inundated area has resulted in the forced relocation of

several villages. However, since permanent coastal inundation is not categorized as a disaster, the subnational government has faced difficulties in providing support to the affected communities, particularly in addressing the social and economic impact. For example, in providing upskilling and reskilling programs for those affected and facing their loss of livelihoods.

Recommendations

A. Ensuring Consistency and Clarity in Policymaking

Promoting vertical policy alignment can begin with **addressing disparities in institutional and financial capacities, and differences in societal as well as environmental contexts** across Indonesian regions. Identifying where the gap lies can provide information on the interventions required to enable the subnationals to contribute to national climate targets. The interventions may vary from financial assistance, capacity building programs, or other means of implementation. Furthermore, having **clearer mandates in delegations of functions and authorities** by the central government, **accompanied with the appropriate means of implementation**, becomes another crucial key in enabling subnational participation. In addition, **consistency in policymaking is needed to allow more effective subnationals participation** which ensures the sustainability of the program, hence achieving their long-term climate goals.

B. Improving Access to Finance by Mobilizing Local Climate Finance

Strengthening direct financing mechanisms for local governments is crucial to enable them to implement climate actions that are based on the local needs and priorities. Aside from mobilizing national and international finance, **there are opportunities to leverage local finance at the subnational level** to accelerate locally-led climate action. For instance, **mobilizing finance through regional development banks (BPD), regional state-owned enterprises (BUMD), village-owned enterprises, and cooperatives. MSMEs** can also take part in supporting low-carbon livelihoods and circulating local financing. However, untapping these potentials requires several interventions, such as **capacity building on climate change and climate finance instruments, mobilizing local governors' political will, and strengthening institutional capacity.**

In the context of adaptation, financing at the subnational level can be improved by **integrating climate risk into the local development planning (RPJMD) including the local budget.** Unlocking these potentials requires targeted capacity building on climate risk, climate finance instruments, strengthening institutional readiness, enabling regulations that embed adaptation priorities, and engaging private sector partners to co-finance initiatives. **Supporting MSMEs and cooperatives that operate climate-vulnerable sectors** (e.g., agriculture, fisheries) also enhances economic resilience and ensures that adaptation financing reaches those most affected.

C. Ensuring Just Transition in Local Climate Action

Subnational actors are capable of implementing their climate actions, including the just energy transition, once equipped with necessary skills and modalities. Capacity building programs, such as **upskilling and re-skilling**, are critical to empower subnational actors to engage in NDC implementation. Establishing **vocational training programs** tailored to renewable energy sectors can contribute to such efforts by equipping individuals with relevant skills and knowledge. However, as most regions have limited numbers of qualified teachers and practitioners in the renewable energy fields, **expert deployment and/or expert exchange** programs are needed. Yet, this effort must be followed by **collaboration with industries and local/state-owned enterprises** to open pathways for internships and employment, **ensuring job creation and economic diversification** in the low GHG emission sectors.

Just transition must also apply to adaptation, such as in **areas facing slow-onset impacts like permanent coastal inundation**. In coastal regions, where this event has displaced communities and disrupted livelihoods, livelihood supports need to be made available, such as efforts for relocation to adequate housing, upskills and re-skilling to access new jobs, and access to social protection and microfinance.

D. Strengthening Multistakeholders' Collaboration at Various Levels

Strong coordination between different levels of administrations is key to aligning national climate targets and subnational development plans. Coordination between central and local government is also required in the context of allocating finance and technical assistance, which are crucial for local governments to establish enabling conditions for just transitions. **Multisectoral coordination is also fundamental to ensure synergies between climate actions and sectoral development goals.** For example, in the context of biofuel development, interconnectedness between energy and forestry and other land use (FOLU) sectors must be addressed to avoid biodiversity losses and damages, which is critical for local food security.

Additionally, **horizontal collaboration among local stakeholders is crucial to expand resource mobilization and strengthen implementation.** Local governments play a central role in institutionalizing climate action through planning instruments, regulatory support, and facilitation of multi-actor platforms. Local vocational schools and training centers play an essential role in preparing human resources, such as for renewable energy deployment. To ensure effective workforce absorption, collaboration with the private sector is required, through internships, employment, and co-investment in capacity development. Meanwhile, civil society organizations serve as connectors between communities and policy processes, ensuring inclusive participation, building local capacity, and advancing transparency. These actors have a mutually reinforcing role in building an enabling ecosystem to support climate actions, as well as ensuring a just transition that is inclusive, locally driven, and economically sustainable.

Snapshots

Some subnational actors in Indonesia have demonstrated interests in engaging in climate actions, including in the context of NDC implementation, from local government, educational institutions, and local communities. Considerable constraints present in policy, financing, planning, and implementation aspects, however. Below are snapshots of what are the key issues dealt at the subnational level to accelerate climate ambition, and what are the required interventions to unlock subnationals' potentials in accelerating climate actions, based on our findings on the ground.

	Issues	Interventions
Political Authority	Overlapping delegations of functions to subnational governments	Adequate guidance on mandates for subnational governments in general and by sectors, which should be clearly stated and consistent in regulations, and periodic evaluations of the given mandates.
	Disparities in institutional capacity and societal readiness across regions	Assess each administration's readiness, and identify necessary modalities e.g., finance, capacity building, institutional capacity
Capacity Building	Shortage of qualified lecturers and practitioners at school and/or higher-level education	Experts exchange, where local lecturers are sent to prominent universities to acquire knowledge and skills; and where professionals from other provinces are invited to provide specialized knowledge and skills to local lecturers or practitioners
	Limited access to certification programmes	Invite qualified assessor to carry out group certification in the region to reduce certification cost
	Low job absorption rate	Strengthen collaboration with industry and state-owned enterprises
Local finance mobilization	Absence of financial instruments to finance climate actions at the subnational level	Improve the knowledge of local banks, village-owned enterprises, and MSMEs regarding climate finance instruments and climate change
	Leveraging the role of regional development bank (Bank Pembangunan Daerah/BPD), where the	Mobilize political will of the local government

governor is the main shareholder

Lack of adaptation finance

Integrate climate risk into local development planning and budget instruments to support actions related to adaptation, including supporting MSMEs and cooperatives that operate climate-vulnerable sectors.

Further Readings

IRID. 2024. [Discussion Paper: Peran Pemerintah Daerah Sulawesi Tengah dalam Menyelaraskan Aksi Iklim Daerah dengan Target Iklim Indonesia.](#)

IRID. 2024. [Discussion Paper: Menyelaraskan Aksi Iklim Daerah dengan Target Iklim Indonesia \(Provinsi Sulawesi Tengah\).](#)

IRID. 2024. [Discussion Paper: Memastikan Upaya-Upaya Adaptasi di Indonesia Selaras dengan Persetujuan Paris.](#)

IRID, PIKUL. 2024. [Laporan Kajian: Transisi Energi Berkeadilan di Nusa Tenggara Timur.](#)

IRID, PIKUL. 2025. [Laporan Kajian: Peran Daerah di dalam Pencapaian Target *Nationally Determined Contribution* \(NDC\) Indonesia.](#)

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