HOW IS ‘JUSTICE’ CONSIDERED WITHIN INDONESIA’S ENERGY TRANSITION?

Recommendations from the research project:
”Towards a Just Energy Transition in Indonesia”

1. Why is energy justice important?

Low-carbon transitions are often assumed to be positive phenomena because they are associated with the benefits of reducing carbon emissions and initiating new economic development. However, without vigilance there is also the danger that they can in fact create new injustices and vulnerabilities, while failing to address the historical and structural underpinning of injustices in the energy sector and in broader socio-economic conditions [1]. Thus, implementation of the energy transition needs to ensure that the two processes of phasing out fossil fuels and expanding renewable energy 'leaves no one behind'.

This policy brief outlines how the principles of 'energy justice' have been taken into account in the planning and implementation of the first large-scale renewable energy (RE) projects in Indonesia, how the benefits of the energy transition can trickle down to affected communities, and how the potential consequences for marginalized and vulnerable communities can be addressed to prevent the perpetuation of injustice and inequality. The underlying energy justice framework allows us to zoom in on the possible causes of injustice, the implications for the affected communities and ways to resolve the detrimental consequences, harms, or grievances that are caused by the expansion of renewables [2]. Energy justice is composed of four fundamental principles that take account of the local activities and outcomes of the energy transition, including distributive, procedural and recognition justice. More recent literature also includes restorative justice as a critical element that accounts for previous harms while considering current developments (Fig.1). Distributive justice deals with the fair distribution of benefits and costs that should be accounted for in a just energy transition. Procedural justice refers to the involvement of the affected communities, including beyond the fair provision of information and a guarantee of being involved in decision-making. These require the need to recognize the affected stakeholders and communities in the first place to allow for adequate measures enabling procedural and distributive considerations. Finally, the principle of restorative justice urges the recognition of prior or anticipated harms to communities, while pointing out the responsibility to ensure appropriate and impactful compensation.

While the energy justice framework provides a theoretical approach aimed at shedding light on the fundamental prerequisites of equitable decision-making and at guiding equitable policy-making, it allows the underpinnings, interdependencies and consequences of related actions to be exposed in practice. Energy justice is therefore a vital consideration in both decision-making and project development in the energy domain. It deserves the attention of policy-makers, especially regarding how local communities are considered to be critical actors with the right to determine their own futures within the energy transition process. Energy justice therefore seeks to ensure fair socio-economic and political participation in the energy system and in decision-making regarding its transformation [3]. Procedural, distributional and recognition issues as central dimensions of justice are indicated by participatory processes, equitable benefit-sharing and conflict-resolution frameworks. By examining these aspects as manifested during the development and deployment of the first large-scale renewable energy projects, the study aimed to identify the gaps and establish the best practices to support just processes within Indonesia's energy transition. To examine the extent to which emerging renewable energy projects in Indonesia address elements of energy justice in relation to local communities affected by the development of such projects, this study employs a qualitative case-study approach, including stakeholder interviews, field observations and document analysis. Drawing on research conducted in two areas where large-scale renewable energy projects were developed **(**Cirata and Sidrap**,** ***see box on page 11*****)**, this policy brief discusses three central aspects that deserve particular attention: involvement of local governments and communities in the planning phase, equitable benefit-sharing and compensation.

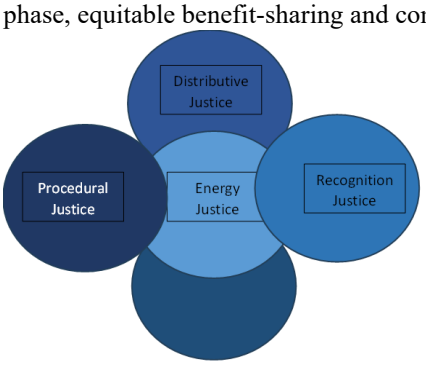

Figure 1: Energy Justice Tenets Conceptual Framework

2. Results

For developing countries like Indonesia, renewable energy is not only a cleaner alternative to coal when it comes to meeting the country's energy demand and increasing energy security, it is also an avenue bringing socio-economic benefits to the people, notably those communities living in the

regions. However, at the same time it presents the risk of sustaining existing injustices or starting novel conflicts if the social impacts are not sufficiently addressed. Large-scale solar and wind projects frequently encounter conflicts and complexities related to land acquisition [4,5]. Floating solar PV placed on water bodies presents an alternative solution that is often seen as a less intrusive infrastructure project capable of mitigating the growing land-use conflicts in the energy transition [6]. Considering these hopeful anticipations, it is imperative look at the actual socio-economic implications of new energy projects, including their impact on local communities, to reveal whether they live up to the expected benefits and identify the necessary requirements for achieving the desired co-benefits.

Local issues identified during fieldwork included community support and resistance, socio-economic benefits, environmental impacts and land-use conflicts. The research also explored how the procurement of large-scale renewable energy projects impinges upon social justice within communities and how the impacts, both positive and negative, of the projects and their development processes are negotiated locally.

Both community support and resistance are embedded in individual and group interests. Support arises from those who envisage and experience the tangible benefits of the projects they bring to the local economy and community, especially regarding labour and employment in the companies involved, despite the limited types and number of available jobs. For example, the village of Mattirotasi, which hosts a wind-farm project, was transformed from an underdeveloped into a developed village based on the creation of a social, economic and environmental development index after the project was completed in 2018.

In the case of the wind farm, support also came from residents who were compensated by the developer at an attractive price for providing their land and from those who benefit from the infrastructural development activities that were funded by the developer as part of its Corporate Social Responsibility (CSR) strategy. The wind-farm developer has built access roads and installed a water supply for the community located nearest to the project site. The new roads have opened up access to agricultural land for growing corn, thereby contributing to a new source of local income.

On the other hand, resistance or opposition to renewable energy projects arose when the project was found to affect incomes and livelihoods within the community. In the case of the floating solar project, deploying the solar farm on the water restricted access to the water body and displaced fishing activities in the vicinity of the installation. Although it was bound by a regulation that had existed before the solar farm had been built, the new infrastructural development substantiated an enforcement of the restriction that affected several fishers. The fishers no longer have access to larger parts of the reservoir but are left with the risk of being prosecuted for simply maintaining a living by continuing clandestine fishing activities. This is also embedded in a disagreement between the community and the developer about the exclusion of fishers, their entitlement to compensation and the level of compensation. Switching to a different occupation is almost inconceivable for people whose income relies almost entirely on fishing.

> *"I tried to work as a construction worker in the city, which I am not used to. It is tough, moreover, that kind of job does not give a steady income stream. If there is no construction, we are jobless. Being a fisher is something we do naturally. The skill has been passed from generations even before the reservoir existed, we used to catch fish from the river."* – fisher in Cirata.

In the case of both projects, the planning, siting and procurement processes have been exclusive, leaving important and affected groups, such as local governments and communities, out of the initial decision-making. The governance structures for large-scale renewable energy projects therefore carry the danger of exacerbating tensions and conflicts and perpetuating existing injustices by creating an environment in which local

> *"Private investors can directly engage the community. Only in some matters they think regional authorities are needed, they will involve us. We must safeguard the investment conditions as instructed by the president."* – provincial government.

> *"We were only involved during the first meeting regarding the Environmental Impact Assessment. After that we never heard from them again. No monitoring is done at our office."* – district government.

communities are largely marginalized, only their privileged members benefitting.

Although the elements of energy justice, as presented in Chapter 1, are interrelated, the following table classifies the topics in a matrix based on the type of (in)justice observed[7] in order to allow a more structured illustration.

Table 1. Findings based on types of injustice

Types of Injustice and Problems	Topics and Findings
Procedural (In)justice	Exclusionary Procurement In both projects, we observed a top-down approach towards siting and development. One project is classified as a Nationally Strategic Project, being commanded by the national government and the national utility company. The project was awarded to investors through a process that lacked transparency, sidelining the involvement of local government and stakeholders in initial locational decisions.
	Limited Participation The involvement of local communities and the government did not go beyond information provision, which did not allow for participation in decision-making processes and where local consultations were limited to information-sharing. In the Sidrap case, the district government's strong leadership, demonstrated through proactive stakeholder meetings, helped forge a collaborative partnership with the developer. This approach enabled the district government to facilitate dialogues between the developer, local authorities and community members. Despite limitations, each party showed its active engagement throughout the project's implementation.
Distributional (In)justice	Labour Market Inequalities Local residents had limited access to job opportunities, mainly due to limited skills and lower education levels that do not match the requirements for installing novel technologies, such as floating solar farms. Consequently, local residents were offered low-skilled, temporary positions, while skilled positions were filled by migrant workers from outside the village and even the province.
	Livelihood Displacement In the Cirata case, fishing communities were inadequately compensated for their lost access to water resources. The developer offered compensation for fishing equipment and short-term certified training programmes for a few individuals, but failed to address the long-term economic impacts on local livelihoods. In the case of Sidrap, landowners affected by the wind-farm project were granted compensation paid annually for the duration of the project's lifetime of twenty years. Additionally, as one of the project-developer's CSR activities, access roads were developed to the farms, which enabled co-existence and allowed residents to cultivate the land for agriculture.
	Local Content Shortcomings Indonesia's local content requirements proved ineffective due to complexities surrounding the industrial policy and the limited capacity of local manufacturing to cope with the scale of the solar project, creating a high degree of dependence on foreign technology and labour and reinforcing economic dependence.
Restorative (In)justice	Affected Livelihoods Water and land resources are unequally distributed, favouring powerful entities over local communities. The project enclosed water surfaces, thereby restricting access for fishing and recalling a historical case of dispossession associated with the establishment of the reservoir in the 1980s. The control of resources by the state and corporation has perpetuated existing patterns of dispossession.

Recognition (In)justice	Affected Livelihoods As with any large-scale infrastructure project, the designation and appropriation of land and resources for the development of renewable energy projects often overlooks the rights and knowledge of local and indigenous communities, as well as neglecting the cultural and historical connections to water resources and dependence on them.
	Exclusion of women and vulnerable groups from decision-making • Land acquisition In Indonesia, including West Java and South Sulawesi, land-ownership and community leadership roles are culturally male-dominated. This cultural context presents a barrier to the formal inclusion of women in high-level decisions regarding land-use for large-scale renewable projects. • CSR Program In the case of Sidrap, the project developer's CSR Program pays attention to women's empowerment and specific training in renewable energy and gender equality [8]. One of the programmes, house renovation, benefitted women and low-income households [9]. However, this can be enhanced by engaging them in the decision-making process and gradually reducing the top-down approach. • Skewed benefits in compensation and employment In the informal sector, female entrepreneurs (e.g. stall-owners and operators) may benefit temporarily from an economic boom, especially during the construction phase, which is not maintained through long-term contracts. In the Cirata case, seafood sellers, mostly women, experienced financial losses due to access restrictions to the reservoir. Women and low-income households face unequal access to compensation and high-quality employment. Yet, both projects employ female engineers and managers to some extent. Women and vulnerable groups were not the focus of stakeholder identification. In both Sidrap and Cirata, the focus on technical and financial success likely came at the cost of recognizing the cultural and social fabric of the communities they impacted.

3. Policy Implications

The key findings of this study include the three big themes of socio-economic benefits, community involvement and the role of local governments. The findings have been synthesized and categorized in accordance with the policy-making aspects of energy justice (Table 2).

The findings of this research clearly indicate that justice aspects of the energy transition are often undervalued for various reasons, including a shift in the direction of energy policy from decentralization to centralization, a procurement process that is prone to conflicts of interest, the focus on investment needs for infrastructural development, the lack of financial resources allocated for measures ensuring socio-economic justice and long-established practices that tend to overlook the interests of local communities.

To accelerate the energy transition, Indonesia needs a new combination of policies, approaches and business schemes. To achieve an inclusive, equitable and just expansion of renewable energy facilities, the energy justice framework should be recognized and integrated into policy development, national energy planning, regional planning and project development.

JETP provides an avenue for multilateral cooperation and a source of funding for a just transition. Despite the intentions and the progress under JETP, a just-transition framework and its implementation, it remains unclear how just transition measures for renewable energy projects are funded and by whom. The procedural and distributional underpinnings of the JETP tend to focus more on mitigating the consequences of the phasing-out of coal by protecting workers and businesses that depend on the fossil-fuel industry. However, there is also a need to recognize the livelihoods of those communities that are impacted by the development of renewable energy facilities.

Table 2. Policy-making Aspects of Energy Justice and Research Findings	
Policy-making Aspects	Topics and Findings
Power relations	1. *Dominance of the state and corporations* The state, through the state-owned utility company PLN, plays a central role in energy governance, acting as both regulator and key player in the power-generation business. This dual role creates conflicts of interest, favouring large-scale projects with high levels of access to capital that is aligned with corporate and national economic interests in preference to local community needs. A conflict of interest also arises when PLN acts as both majority shareholder and single off-taker. It can prioritize projects that benefit its own financial interests, often at the expense of overall project profitability and fairness to other stakeholders. 2. *Elite capture* Consequently, a system that relies heavily on significant capital investment restricts participation to actors with substantial financial resources. This means that only major corporations and individuals with considerable political influence can engage meaningfully in large-scale energy projects. 3. *Large-scale projects follow the centralized model, resulting in inequitable benefits* Although renewable energy has the potential to democratize power structures, dependence on large-scale projects, especially those with high levels of access to capital and equity, will reinforce the centralized model. As large companies may dominate decision-making processes and resource allocations, this poses the risk of perpetuating corporate control that will lead to inequitable benefits [10].
Multilevel governance	A lack of coordination across different levels of government and non-state actors in the energy planning • The centralized planning of the projects is evidenced by the inclusion of one of them in the list of Nationally Strategic Projects and the other as a national priority project that has received special treatment and facilities from the national government. The involvement of local governments is mostly perceived as an additional layer of bureaucracy or a permit requirement. The so-called 'streamlined permitting process' of a one-door procedure helps alleviate bureaucratic hurdles. However, the whole decision-making process often undermines local actors while paving the way for developers.
Role of local governments	Ambiguity of the role of local governments in energy planning and the energy transition • Because of the centralized nature of the planning, local governments, especially provincial governments, used to have no specific assigned roles in the planning of large-scale renewable energy projects. Presidential Regulation No. 11/2023 provided greater clarity regarding the division of roles and the budgeting authority for renewable energy between national and provincial governments. However, this new regulation is limited to the formulation and implementation of the Regional General Energy Plan (RUED), which is often not aligned with the Medium-Term Regional Development Plan (RPJMD). • The allocation of functions in energy-planning among different levels of government is skewed towards the central government. It holds the

	highest mandate in terms of both power and policy-making, leaving regional governments as mere implementors of the policy. While district governments have a critical role in land acquisition and community involvement, provincial governments are only relevant in cross-district projects.
Democracy and accountability in providing energy services to achieve energy justice	The laws and policies that govern the energy sector, including the Law on Energy, the Law on Regional Government and the Presidential Decree on National Energy Policy, incorporate the principles of energy democratization and accountability. However, implementation remains a work in progress, particularly in ensuring public participation and the enforcement of strict penalties. Targets determined in national economic policy and project-selection are not legally binding and have limited accountability. • A vague demand forecast, a lack of competitive bidding and a preference over PLN, the absence of a cost-effective approach and minimum regulatory oversight are attributed to the selection of projects included in the National Electricity Plan (RUPTL)[11]
Public participation ▪ Collective and collaborative action and public participation ▪ Involvement of local communities in decision-making and project development	Members of the public, especially communities living near the projects and their residents, are not always involved in the decision-making. • AMDAL (Environmental Impact Assessment) is the only mechanism that requires public participation. However, public participation in AMDAL is often tokenistic in that it almost always results in the approval of projects favouring the developers. Projects receiving funding from international financial institutions are required to be assessed against the donor's own standards, such as the Environmental and Social Impact Assessment of International Finance Corporation (IFC), even though they have been granted environmental approval by GOI [12]. • For such projects, regular public consultation and compensation mechanisms are in place, but there are challenges in the implementation of feedback mechanisms in the decision-making.
Gender and social inclusion	Women and vulnerable groups, including low-income households, experience disproportionate energy poverty, despite their key role in household energy management and the informal economy. • They are systematically excluded from decision-making processes (procedural injustice) and face structural barriers to fair compensation and employment (distributive injustice).
Evidence-based policy making	At the strategic level, Indonesia's energy policy incorporates demand forecasting, energy-economic modelling and investment plans. This has been improved in JETP's Comprehensive Investment and Policy Plan (CIPP). • However, Indonesia is still trapped in a fossil-fuel lock-in that contradicts the economic requirements for supporting renewable energy. In general, political and economic factors still drive most of Indonesia's energy policies, making the integration of local issues related to energy justice into policy more challenging.

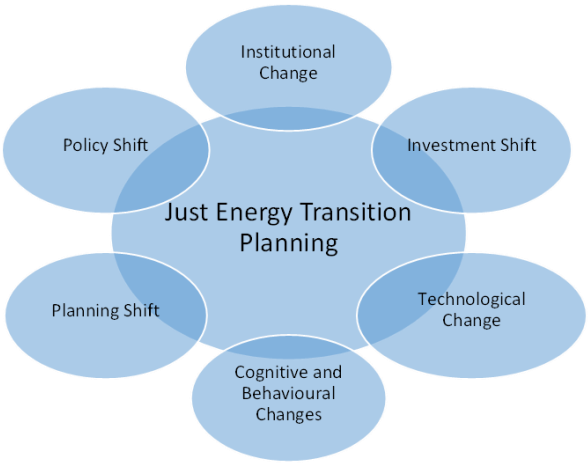

Figure 2. Just Energy Transition Planning (modified from [13]*)*

Figure 2 depicts a holistic framework for planning a just energy transition, showing that a just transition requires coordinated multisectoral actions. Otherwise we focus on institutional change, which includes the reform of relevant organizations, corporations, governance structures and regulations, and therefore explicitly incorporates shifts in policy and planning. To guide and accelerate all the changes, a set of cross-cutting policy interventions is required:

a) Energy and power sector: regulations, targets and incentives from electricity generation to distribution

b) Industrial policy: strategies to develop domestic renewable industries and manage transitioning fossil-based industries

c) Fiscal policy: the use of taxes, subsidies and public financial flows to encourage investments

d) Financial policy: the mobilization of public and private finance and the de-risking of investments in RE

e) Labour and social policy: the use of social protection mechanisms, retraining and inclusive dialogue to address the impacts of the transition on workers and communities

Sustainable funding and financing for justice elements

Changes in funding models and equitable benefit-sharing

Securing the necessary funding for the justice component of the energy transition presents a complex challenge. It demands significant financial resources and strategic allocations to achieve equitable results. As an example, despite challenges in the implementation, the European Commission's Just Transition Fund proposes an allocation of €17.5 billion for 2021-2027 (later increased to €19.3 billion) from the European Union budget to assist those regions that have been most severely impacted by the transition [14]. This fund will be used mainly to support economic diversification in small- and medium enterprises and the creation of new firms, the reskilling and upskilling of workers, environmental rehabilitation, clean energy investments, and emissions reduction projects in carbon-intensive installations [15].

JETP funding for Indonesia of USD 21.6 billion until 2027 comes mostly in the form of private loans and investments, with USD 153.8 million or around 0.7% earmarked for specific programs, such as the repurposing of coal-fired power plants (CFPP) for early retirement and a just transition [16]. This is far from sufficient to fund the justice aspects of the energy transition.

Equitable benefit-sharing models from commercial projects

In the absence of meaningful and tangible co-benefits emerging locally from the deployment of renewable energy projects in terms of the involvement of local labour and businesses, it is necessary to account for local benefits through measures that proactively distribute economic benefits locally. In addition to the self-imposed practices of developers that are embedded in CSR activities, there is the possibility of introducing national polices that involve the establishment of community development funds, benefit funds or payments to local districts that are financially supported by developers and jointly administered by local actors [17,18,19]. This is a common practice, even a legal requirement, for the development of large-scale renewable energy projects in some European countries in order to spur local economic development, acknowledge the exploitation of local resources, take account of tangible impacts, and recognize the affected communities as neighbours of commercial projects. In addition, the provision of benefit schemes can also be integrated as a requirement in the procurement of projects, along the lines of local content requirements. While benefit-sharing requires further efforts from developers, it has been demonstrated to foster mutual engagement and a positive relationship between developers, local actors and communities.

Mobilization of domestic resources from fossil-fuel subsidy reform and reallocation

Despite various funding options, domestic funding remains crucial for the energy transition in Indonesia. With limited fiscal capacity, Indonesia should consider reallocating fossil-fuel subsidies and compensation to public funding. This was successfully done in 2015 and can be repeated. Reallocation offers greater economic benefits than maintaining inefficient fossil-fuel subsidies [20].

Integrating the energy justice framework into policy and planning

National legal systems play a key role in defining justice within the energy sector. These institutions draw up regulations for the energy sector and implement them by resolving disputes between the various parties[21].

Indonesia's energy and electricity sector is governed by several pieces of legislation, including Law No. 30/ 2007 on Energy, Law No. 30/2009 on Electricity, Presidential Regulations No. 79/2014 on National Energy Policy, and Presidential Regulations No. 112/2022 on the Acceleration of Renewable Energy Development for Power Supply.

The Law on Energy incorporates justice in an interpretation that is confined to distributive justice, while other energy justice elements (procedural and recognition) are overlooked. Distributive justice is expressed in the articles that mandate affordable and equitable access to energy resources, while energy pricing is determined by the rationale of fair economic value and the use of subsidies to ensure affordability (Articles 3 and 7). This Law also mandates the management of energy resources to be based on the principle of utility, maximizing the use of energy for the benefits of society. However, energy management should also be geared towards people's welfare (Article 2).

The Law on Electricity considers justice elements through the mandate of electrification for all and affordable tariffs (distributive justice). The law marks the end of PLN's monopoly by allowing private companies, cooperatives and communities to participate in electricity generation (procedural justice). Nevertheless, important aspects of procedural justice, such as inclusive and participatory decision-making, are not yet explicitly mentioned in the two laws.

Justice elements are to be an integral part of the legislation and planning documents. The updated National Energy Policy, National Energy Plan, Regional Energy Plan and planning documents, including long-term and medium-term plans, should not only incorporate justice considerations but also guide and monitor their implementation.

Economic transformation across multi-development sectors will be the focus of an energy transition that promotes the participation of all levels of society, accommodating different interests and perspectives, including local, indigenous and marginalized communities.

To ensure recognition justice, energy transition policy should recognize the unique identities, the socio-cultural connections to livelihoods, and the challenges faced by women, low-income households and other vulnerable communities. Policies and project frameworks must explicitly identify diverse community groups, recognize rights to land and resources, and incorporate gender-sensitive impact assessments and disaggregated data collection.

Institutional strengthening

An important constituent for gearing the institutional arrangements towards a clear incorporation of local energy justice is the restructuring of PLN. A clear division of roles between PLN as the sole off-taker, co-owner of energy infrastructures and the MEMR partner as the regulator should be conceptualized and implemented immediately to prevent conflicts of interest and to make the power sector work more efficiently. Without a clearer separation of activities, PLN's dual role could lead to regulatory capture or inefficiencies in power procurement.

Given more efficient governance, Indonesia can reform its tariff setting, investment planning, infrastructure procurement and electrification efforts [22], leading to more transparent energy planning through reform of the revenue system.

Reforming PLN's revenue system will help ensure the sustainability of its financial health. The tariff system should be gradually improved, with subsidies and compensation to be removed in a phased approach in order to reach a cost-reflective tariff. This new model will uphold processual transparency by providing open access to information and public reporting and oversight [23], as well as in project planning. A more transparent PLN will enable public access to the planning and operational data, while still maintaining commercial confidentiality. This will improve the quality of decision-making [ADB, 2023] and allow for a public participation approach that includes a feedback mechanism from the public to enhance transparency and public accountability as key aspects of procedural justice.

Reforming public participation

Public participation at project level within the AMDAL process is vital because it ensures that the perspectives, concerns and knowledge of affected communities are integrated into project planning and decision-making. Apart from focusing solely on public participation, a reform of the whole AMDAL procedure may be necessary.

Involving the public can help identify potential social and environmental impacts early on, foster community ownership and build trust between stakeholders, ultimately leading to more sustainable and widely accepted project outcomes. Since AMDAL is currently the only mechanism mandating public participation at this level, reforming and strengthening this aspect should be a key priority. Improvements could include engaging the community right from the design phase, enhancing the transparency of the process, increasing access to information for all, providing capacity-building for communities to engage meaningfully, and developing more effective mechanisms for gathering and incorporating community feedback. Such reforms would make public involvement more meaningful and impactful, resulting in better-informed and more equitable project decisions.

Meaningful participation requires the provision of inclusive platforms that ensure involvement and facilitate the agency of women and vulnerable groups at all stages, from planning, procurement and approval to mitigation, grievance and benefit-sharing mechanisms. These should go beyond the instrumental implementation of consultations and instead support capacity-building and provide contextually tailored engagements to ensure their voices can positively shape a just energy transition on the ground.

4. Policy recommendations

Based on our findings, such as identified shortcomings in stakeholder engagement and equitable benefit-sharing in large-scale renewable energy projects, we recommend the following actions to ensure energy justice becomes an integral part of policy-making. Policy-makers, industry stakeholders and community representatives are expected to adopt a perspective that fully integrates the principles of energy justice into the development and implementation of future policies that determine planning and development practices. Therefore, we make the following recommendations:

For National Policy-makers (MEMR, BAPPENAS, Parliament):

1. Integrate a Comprehensive Just Energy Transition Framework into national legislation

a. Amend Law No. 30/2007 on Energy and Law No. 30/ 2009 on Electricity to explicitly incorporate and define all four tenets of energy justice: distributive, procedural, recognition and restorative justice.

b. Mandate on how energy justice principles will be implemented, measured, monitored, evaluated and funded in energy policy and planning documents, including the National Energy Policy (KEN), the National General Energy Plan (RUEN) and the National Medium-Term and Long-Term National Development Plans (RPJMN/RPJP).

c. Insert specific energy-justice criteria and indicators in the list of projects within the Electricity Supply Business Plan (RUPTL).

d. Mandate the integration of gender-sensitive and socially inclusive impact assessments into all national and regional energy planning, as well as project-level approvals. This should include the systematic collection of disaggregated data (by gender, income and ethnicity) explicitly to identify vulnerable groups, recognize their rights to land and resources, and ensure that their unique socio-economic realities directly inform policy design and project implementation.

2. Reform the AMDAL process to ensure meaningful public participation

a. Issue a joint ministerial regulation (MEMR and Ministry of Environment) to strengthen the public consultation process within AMDAL. Consultations should begin at the project design phase, not just at the approval phase. The consultation process should provide communities with accessible information in advance, offer support for capacity-building to help them engage effectively, and establish a transparent, independent grievance mechanism whose feedback should be formally addressed.

b. Evaluate the Omnibus Law (Law No. 6/2023 on the Enactment of Government Regulation in lieu of Law No. 2 of 2022 concerning Job Creation into a Law) to ensure that a wider public can participate in the public consultation, not only the directly impacted communities.

c. Establish requirements for inclusive, co-design processes that grant women and vulnerable communities tangible agency at all stages of

energy project development. This requires moving beyond one-off consultations to create platforms that ensure their voices directly shape outcomes and lead to equitable benefits.

3. Clarify and strengthen the role of local governments in energy planning

a. Issue the implementing regulations of Presidential Regulation No. 11/ 2023, which explicitly defines the roles and responsibilities of provincial and district governments in the planning, permitting, monitoring and evaluation of large-scale RE projects.

b. Require project developers to obtain a "Social License to Operate" from district or provincial governments, based on demonstrated community support and agreed benefit-sharing plans, prior to approval from central government.

4. Secure dedicated funding for the justice components of JETP

a. Work with JETP donors explicitly to earmark a significant portion of the US$ 21.6 billion package for just transition programmes beyond the coal sector.

b. Create a Just Transition Fund within JETP to finance programs for skills training for affected communities (fishers, farmers), economic diversification and community equity ownership models in new RE projects.

5. Mobilize domestic resources through fossil-fuel subsidy reallocation

a. Develop a clear, gradual strategy to reallocate fossil-fuel subsidies towards a fund for energy justice in the transition and social protection schemes.

b. Law No. 7/2021 on Tax Harmonization and Law No. 1/2022 on Financial Relations between the Central Government and Regional Governments open up possibilities for direct earmarking for environmental taxes. Introduce implementing regulations for the reallocation of fossil-fuel subsidies to financing economic diversification, training programs, community equity ownership in RE projects and improving social protection schemes.

For PLN and SOE reform:

1. Address the fundamental conflict of interests within PLN

a. Follow the PLN restructuring plan to separate PLN's roles as off-taker and as the owner of the power-generating business (as proposed in ADB 2023)

b. Establish an independent system operator (ISO) or legally ring-fence the off-taker function within PLN to ensure the fair, transparent and cost-effective procurement of power and projects.

2. Enhance transparency and public accountability

a. Mandate PLN to disclose publicly key planning data from the RUPTL, e.g. demand forecasts, project selection criteria and cost assumptions, while protecting commercial confidentiality.

For project developers:

1. Go beyond CSR: implement formal, equitable benefit-sharing agreements

a. Move from ad-hoc Corporate Social Responsibility (CSR) projects to formal, legally binding Community Development Agreements (CDAs) or Benefit-Sharing Agreements co-designed with communities.

b. Offer benefits agreed with relevant communities, for example: community equity stakes, revenue-sharing models and investment in local infrastructure (roads, clean water, schools).

2. Proactively implement restorative justice measures

a. Conduct livelihood impact assessments and create a restorative action plan for projects that displace livelihoods.

b. Provide compensation beyond cash for lost incomes, offer certified skills training and create alternative livelihood opportunities before project construction.

For local governments (provincial and district):

1. Act as a Strategic Bridge and Advocate for Communities

a. Local governments can play a proactive role by providing input to the central government and acting as a bridge between developers and local communities to help support improved energy services, enhanced community engagement and improve equitable economic development. For instance, local governments can organize public forums to gather community input on new developments, facilitate partnerships between developers and local organizations and advocate investments that directly address local needs.

b. Use the mandated role in planning (RPJMD and RUED) to align national energy projects with local development priorities

c. Establish a task force to facilitate dialogue between developer and communities

2. Build Local Capacity for the Transition

a. Map local labour skills and collaborate with vocational training centres to design curricula that match the needs of upcoming renewable energy projects. An example is Renewable Energy Skills Development in South Sulawesi (Politeknik Negeri Ujung Pandang).

b. Create local content and an employment database to help developers identify local suppliers and potential employees for their projects in order to benefit the local economy.

c. Create a training and incubation programme focused on skills in renewable energy and other possible entrepreneurial skills, such as digital marketing, financial literacy and product development for aspiring local entrepreneurs.

5. Conclusion

Based on our empirical research on Indonesia's large-scale renewable energy projects, this policy brief concludes that the current top-down, centralized approach to energy planning presents the risk of perpetuating injustices. Key findings reveal systemic shortcomings in procedural, distributive, recognition and restorative justice. Local communities and governments are frequently excluded from meaningful participation in decision-making, benefits are not always equitably shared, and vulnerable groups such as displaced communities suffer livelihood losses without adequate compensation or alternative opportunities. These injustices are exacerbated by governance structures, especially procurement procedures, that favour the state and large corporate interests, creating conflicts of interest and limiting democratic accountability.

To make progress with a just energy transition, the report recommends integrating a comprehensive energy justice framework into national legislation and planning. This includes reforming public participation processes, clarifying local government roles, securing dedicated significant funding for justice measures within the JETP and mobilizing domestic resources through fossil-fuel subsidy reallocation. Furthermore, it calls for institutional reforms, such as restructuring the state utility company PLN to avoid conflicts of interest, and it urges project developers to move beyond CSR to implement formal, co-designed benefit-sharing agreements. Ultimately, a multisectoral policy approach is essential to ensure that the benefits of renewable energy expansion are distributed equitably and that no one is left behind.

JUSTIN project

The research project entitled ***"Towards a Just Energy Transition in Indonesia" (JUSTIN)*** was carried out through close collaboration between the Technical University of Denmark, the University of Indonesia, Universitas Prasetiya Mulya, Dala Institute and the University of Cape Town. The project was undertaken from 2022 – 2024 and was funded by the Ministry of Foreign Affairs of Denmark. The project involved research on procurement modalities, community involvement and industrial development as part of the expansion of renewable energy.

The present policy brief focuses on community involvement in and local impacts of the development of large-scale renewable energy facilities. The specific study is based on 31 interviews and four focus group discussions in two different regions where two renewable energy facilities have been deployed. West Java where the Cirata Floating Solar PV is located, and Sidrap in South Sulawesi where the largest wind farm is situated. Empirical research was conducted before and after the construction of the floating solar project, and after the construction of the wind farm. Interviews were conducted with representatives from the renewable energy industry, provincial, regional and local authorities and members of local communities, and focus group discussions also involved representatives from village governments and community members. Questions and discussions focused on the development process as well as positive and negative impacts of the projects. The aim was to explore how fundamental dimensions of energy justice manifest and play out locally. The scientific output from the research project includes several journal papers dealing with different research foci.

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