



# The Contradictions between Environmental Sustainability and Urban Development in Indonesia

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Figure 1. Kampung Bukit Duri, one week after eviction (Photo by Rita Padawangi, October 2016).

*I came back to Kampung Bukit Duri, a flood-prone riverbank settlement in Jakarta, after the violent forced eviction of Kampung Pulo, the settlement across the river in August 2015. Within a little more than five months, the embankment of Kampung Pulo had already caused the Ciliwung riverbank in the area to become a tall concrete lever. Touted as a flood alleviation project, the concrete embankment and levee replaced all the trees that used to line the river. Kampung Bukit Duri side followed a similar fate one year after Kampung Pulo's eviction, changing the river landscape from an organic settlement with some big trees lined up by the river to a rigid concrete wall. Some people say it's better because it's cleaner, neater, and shows effort to alleviate floods. But for those affected by the eviction, they were forcefully uprooted, displaced. Moreover, the area still experiences regular flooding when the river water rises higher than the concrete levees. For sure, there is now more concrete and less trees.*

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In a recent Cambridge Element publication, *Urban Development in Southeast Asia* (2022), I wrote that two main issues regarding urban development in the region are **social justice** and **environmental justice**.<sup>2</sup> This applies very much to Indonesia, in which social and environmental issues are interconnected with urbanisation.

As much as we would like to believe that cities could be solutions to environmental problems, history shows otherwise. The rise of earth's temperature in the past century is in line with the rate of urbanisation in the world. Such a pattern is predictable, considering the scale of industrialisation that has occurred throughout the past century. Southeast Asia, including Indonesia, experienced an exponential scale of industrialisation, and its corresponding urbanisation, after the end of World War II, when foreign direct investments started to flow into the newly emerging nations and shifted manufacturing production to this part of the world. During the period from 1960 to 1980, we saw industrial zones growing in Indonesia. In the 1980s, Indonesian

<sup>1</sup> The views expressed are those of the author and do not necessarily reflect the views of the author's employer, organization, committee or other group or individual.

<sup>2</sup> Rita Padawangi, *Urban Development in Southeast Asia*, Cambridge University Press, 2022.

urbanisation continued as large real estate development projects grew rapidly. The emergence of these private housing developments was a market response to the lack of affordable housing provided by the government amidst a growing economy (Figure 2). In fact, some Indonesian real estate developers grew to be some of the largest in the region (Bloomberg, 2017).<sup>3</sup> Urban development was also characterised by a lack of government support in providing urban public transportation, leaving the service to private providers—small and big—to run (Rimmer & Dick, 2009).<sup>4</sup>

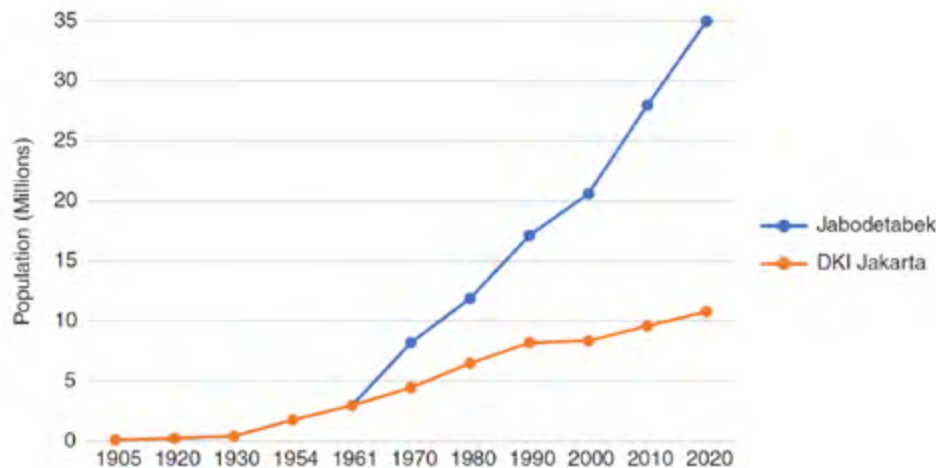


Figure 2. Population of Jakarta-Bogor-Depok-Bekasi metropolitan area (Jabodetabek) and DKI Jakarta, reflecting the growth of housing development—small and large—outside the city proper. (Sources: Douglass & Jones, 2008; BPS Census, 2010; and Population Projection, 2020).

What do these developments have to do with the climate crisis? For sure, these developments followed the same pattern. They follow the market: the demand for manufacturing industries under the New International Division of Labour (NIDL) in the 1970s, the demand for housing, the demand for automobiles, and so on (Douglass & Jones, 2008).<sup>5</sup> Structural social inequality—both in labour and housing—formed alongside market expansion. Development-induced environmental hazards grew along with social inequality, as the distribution of environmental costs of development continues to be unequal. Those who are forced to bear the risk of hazards are unlikely to be the ones who benefit or profit the most from the development that causes environmental degradation.

Take, for example, flooding, as illustrated in the opening vignette. This is the most common urban disaster in Southeast Asia and is the most common environmental hazard in Indonesian cities. Jakarta, for example, has had severe episodes of regular flooding, so much so that the authorities have cited floods as one of the reasons to move the capital away. Yet, the floods do not take place simply because Jakarta is located where it is. The geography of Jakarta is a delta that is relatively prone to flooding; however, a wide range of research has shown that the scale of flooding that it has

<sup>3</sup> Move Over Tech. Here Come Southeast Asia's Builders. Bloomberg News, 6 December 2017. <https://www.bloomberg.com/news/articles/2017-12-06/move-over-tech-southeast-asian-builders-come-in-focus-in-2018>

<sup>4</sup> Peter Rimmer & Howard Dick, *The City in Southeast Asia: Patterns, Processes and Policy*, NUS Press, 2009.

<sup>5</sup> Mike Douglass & Gavin Jones, The Morphology of Mega-Urban Regions Expansion, in Gavin Jones & Mike Douglass (eds.), *Mega-urban Regions in Pacific Asia: Urban Dynamics in a Global Era*, NUS Press, 2008, pp. 19–40.

experienced throughout the past two decades was development-related.<sup>6</sup> The degradation of the river system reduces its capacity to hold water runoffs. The over-extraction of groundwater and overdevelopment of buildings contributes to the sinking of the land. All these are causes of floods that are attributable to urban development.

Besides consuming land taken from waterways and flood plains, cities consume energy. Urban areas, with a higher population density of population earning a relatively higher income, consume more energy than rural areas. With Indonesia’s population currently more than 50% urban, it is clear that energy consumption will increase alongside urbanisation. Considering more than 60% of Indonesia’s energy generation still relies on coal, this increase in energy consumption also carries the consequences of increased environmental damage from coal mining, transporting, and burning. In fact, the trend since 2015 shows an increasing share of coal in Indonesia’s electricity generation every year, with the share of coal-powered electricity reaching 67.21% in 2022 (Figure 3).

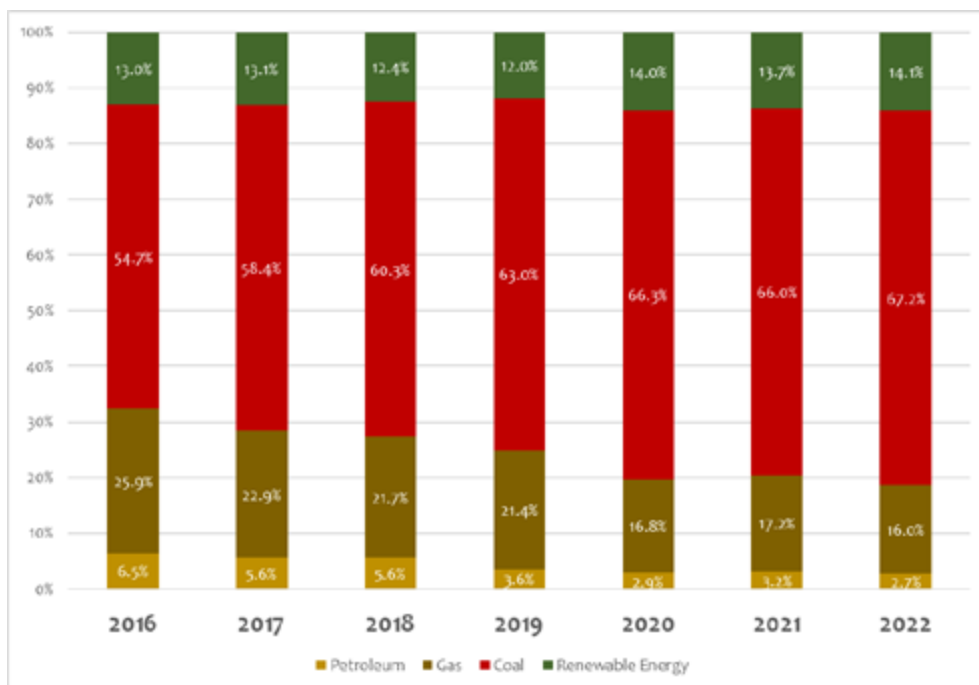


Figure 3. Indonesia’s electricity power sources, 2016-2022  
(Data source: ESDM, as reported by Putri, 2023 on CNBC Indonesia)<sup>7</sup>

With the increasing global media attention on the climate crisis, there have been calls for reducing Indonesia’s reliance on fossil fuel, including coal. Indonesia’s official promotion of electric vehicles (EVs) is one of the programs in line with these calls, and public policies created support for EVs. Presidential Regulation 55/2019 provided fiscal and non-fiscal incentives for electric-battery-powered vehicles, including the reduction of a luxury goods tax on EVs and a reduction or elimination of national and local taxes. The regulation also paved the way for local governments to provide incen-

<sup>6</sup> Rita Padawangi & Mike Douglass, “Water, Water Everywhere: Toward Participatory Solutions to Chronic Urban Flooding in Jakarta,” *Pacific Affairs* 88 (3), 2015. <https://pacificaffairs.ubc.ca/articles/water-water-everywhere-toward-participatory-solutions-to-chronic-urban-flooding-in-jakarta/>

<sup>7</sup> Aulia Mutiara Hatia Putri, “EBT Jauh, Pembangkit Listrik RI Masih Didominasi Batu Bara”, *CNBC Indonesia*, 23 May 2023. <https://www.cnbcindonesia.com/research/20230523113140-128-439740/ebt-jauh-pembangkit-listrik-ri-masih-didominasi-batu-bara>

tives, such as an exemption from odd-even plate number restrictions in Jakarta and a reduction in parking fees by local governments. President Joko Widodo also issued Presidential Instruction 7/2022 for using EVs as operational and individual vehicles for national and local government offices, and promoted EVs as official cars for the G20 meeting when Indonesia hosted in 2022.

However, environmental activists and researchers have pointed out that the promotion of electric vehicles as a conversion to clean energy is flawed. The significant share of coal in Indonesia's energy generation means that electric vehicles in Indonesian cities are likely only shifting air pollution from automobile exhaust to coal power plant smoke stacks, mines, and barges.

Moreover, batteries for electric vehicles rely on either lithium or nickel, both of which depend on environmentally destructive and socially fraught resource extraction. For example, residents in Wawonii Island experience water quality degradation, loss of fisheries and agriculture, and public health issues since the presence of nickel mining activities in August 2022 (Yuli, 2023). Another recent case was from Halmahera Island in the North Moluccas, when the colour of Sagea River water turned brown in August 2023. Residents and activists pointed to mining activities in the upstream area of the river for the environmental degradation that threatens livelihoods and the well-being of Sagea (Save Sagea, 2023).<sup>8</sup>

The recent calls for attention to climate justice, not just climate change, is a reminder of the unequal distribution of climate change-induced environmental hazards. But in the case of Indonesia, the focus on justice requires moving away from a large infrastructure project approach to an approach that focuses on social and environmental justice. And the understanding of justice requires attention not only towards the distribution of impacts, costs and benefits, but also on the procedures towards achieving justice.

## **Civil Society and Environmental Movements**

In terms of procedural justice, Indonesia has a lot of potential with a good range of civil society groups that are working in both social and environmental issues. The environment is, in fact, a strategic issue that sheds light on the political functioning of civic spaces in Indonesia. On the one hand, the literature points towards environmental activism being potentially anti-political, for its normative and non-negotiable positioning on sustainable urban practices. On the other hand, environmental issues can also be strategic to initiate civic discussions in places where other social activism is limited (Marolt, 2014; Sullivan & Xie, 2009).

Wahana Lingkungan Hidup Indonesia (WALHI), an environmental advocacy organisation with more than 487 member organisations from non-governmental organisations (NGOs) to nature explorer groups, is an example of contemporary environmental activism in Indonesia. WALHI's establishment in 1980 and its rapid growth in the following decade was inseparable from the initiative of the then Environment Minister Emil Salim and his networks. The establishment of WALHI was possible amidst the military regime because environmental issues were seen as apolitical. "The government welcomed the growth of environmental NGOs, especially those

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<sup>8</sup> See Selamatkan Kampung Sagea on Instagram, <https://www.instagram.com/savesagea/>

that joined WALHI forum, because they were considered sterile from political aspects” (Sejarah WALHI, 2018).<sup>9</sup> The relationship between the government and WALHI gradually transformed antagonistically, and for the first time in 1988 WALHI filed a lawsuit against the government, including against the Environment Minister who played an important role in its establishment. From ten lawsuits against the government from 1988 to 2000, WALHI only won one, on the Right to Information from PT Freeport in year 2000 (Sejarah WALHI, 2018). After Reformasi, WALHI transformed into a social movement to resist “neoliberal hegemony under the name of globalisation” (Sejarah WALHI, 2018), and subsequently become a platform and network of environmental activists.

In the case of environmental activism, the historical trajectory of WALHI suggests a process in which the organisation becomes increasingly political. The organisation itself acknowledges a “change of direction” towards becoming critical of the government. “WALHI works to push for the acknowledgement of rights to the environment and the protection of human rights as the responsibility of the State to secure citizens’ livelihoods” (WALHI, 2018). Included in the organisation’s background statement is the critique of the global capitalist regime that dictates economic, social and cultural lives in cities and villages. Environmental activism as a critique of capital accumulation and dispossession of the poor tends to be found in voices critical of the state and private companies, as demonstrated in the lawsuits that WALHI has filed, including against the reclamation of Jakarta’s north coast.

As environmental degradation continues to occur on a large scale, critical environmental activism continues to grow. Jaringan Advokasi Tambang (JATAM/[Anti-] Mining Advocacy Network), for example, started in 1995 from an anti-mining advocacy workshop in Banjarmasin (Sejarah JATAM, 2023) and has become one of the most consistently critical voices against unjust mining practices.<sup>10</sup> With the aim to “fight destruction through building alternative consumption and production that is just and sustainable,” JATAM engaged in social-environmental campaigns, namely to defend the karst mountains, campaign against coal, and to save small islands and coastal lands. JATAM has also launched publications and conducted training sessions. Furthermore, the organisation engages in electoral politics by publishing information on how local political candidates stand on the issue of mining.

Besides these two examples, there is a plethora of environmental organisations and groups. These organisations and groups focus on various aspects of the environment. Many focus on sustainable environment practices for individuals and organisations, such as cycling, garbage management, green building, and tree planting. Campaigns to reduce plastic bag usage and activities for beach and river clean-ups can be found in many parts of Indonesia.<sup>11</sup>

Connections among environmental civil society organisations and activists have also formed throughout the years. In 2019, #BersihkanIndonesia (Clean up Indonesia) emerged as a coalition of civil society organisations to urge Indonesians to actively push for progressive policy changes in energy, economy, and environment.<sup>12</sup> The coa-

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<sup>9</sup> <https://walhi.or.id/sejarah/>

<sup>10</sup> Jaringan Advokasi Tambang (JATAM), <https://www.jatam.org/>

<sup>11</sup> Examples of these activities can be seen in “Pulau Plastik” documentary (2021), <https://pulauplastik.org/en>

<sup>12</sup> Bersihkan Indonesia, <https://bersihkanindonesia.org/>

lition demanded presidential candidates during the election to commit to Indonesia’s energy sovereignty (“Indonesia Berdaulat Energi”). Energy sovereignty has a greater scope than energy security. It aspires to accountability of energy provisions within the economy, and to overcome oligarchic systems in energy provision (Figure 4). The coalition consists of various organisations beyond environmental movements, which also includes Indonesia Corruption Watch and Indonesia Women’s Coalition (Koalisi Perempuan Indonesia).



Figure 4. Critical caricature by Toni Malakian for #BersihkanIndonesia coalition, highlighting the contradiction of EVs for “energy transition” to “clean energy” during Indonesia’s hosting of G20 meeting in 2022 (Source: Toni Malakian for #BersihkanIndonesia, 2022).<sup>13</sup>

## Environmental Sustainability Rhetoric in Electoral Politics

However, elements of environmental activism with less resistance can also seep into political actors’ campaigns to paint electoral candidates in a positive light. The bicycle, for example, has been associated with Joko Widodo who, both as president and as the former governor of Jakarta, often used bicycles as giveaways in public events. Besides citing his own nostalgia towards riding bicycles when he was young, Widodo reasoned that “cycling is healthy, friendly for the environment, because it’s pollution-free”<sup>14</sup>. Environmental cleanliness has also become a feature that benefits candidates in electoral politics. State-supported and state-driven environmental initiatives are in line with some of the environmental activists’ programs, such as garbage cleaning, promotion of cycling, and plastic bag reduction. Nevertheless, environmental activism that yields in critical discussions—the political—rarely appeal to the popular realm.

<sup>13</sup> Bersihkan Indonesia Instagram post, 9 December 2022, <https://www.instagram.com/p/C18yFEMJrP6/>

<sup>14</sup> Waskita, Ferdinand. “Inilah Alasan Presiden Jokowi Kerap Bagi-bagi Sepeda, Ada Makna Filosofinya.” *Tribunnews*, 27 August 2017 <http://www.tribunnews.com/nasional/2017/08/27/inilah-alasan-presiden-jokowi-kerap-bagi-bagisepeda-ada-makna-filosofi-nya?page=3>

“Green” projects can also serve as subjects of political campaigns. For example, Joko Widodo’s presidential campaign in 2014 took pride in his leadership as the Jakarta governor who rehabilitated Waduk Pluit into a green park. The former mayor of Surabaya, Tri Rismaharini, is well-known for her achievements in rehabilitating green spaces in Surabaya and for her hands-on approach in cleaning the city streets.<sup>15</sup> The attractiveness of cleaning campaigns is also observable in the popularity of the “orange squad” (cleaning squad) of Jakarta, and the fear of a decline in cleaning services over the change of governor in 2017<sup>16</sup>, although concerns over where the garbage eventually went after collection remain limited.

More recently, President Joko Widodo is a strong proponent of the idea to move the national capital to Nusantara, a location in East Kalimantan, touted as a “forest city”. Official propositions of the project often refer to its “sustainability”, in comparison to the traffic and flooding problems of Jakarta. The framing of the new capital city as a project of “environmental sustainability” continues in the campaign rhetoric of presidential candidates for the 2024 elections, particularly those who portray their agenda as continuing Joko Widodo’s legacy. The representation of the new capital city as an “environmentally sustainable” project latches political campaign rhetoric onto sustainability narratives.

### **Going forward: Is there hope?**

Environmental issues will continue to be important for the future of Indonesia as a nation and as a society. Moreover, Indonesia is an important nation-state actor in the world’s climate crisis. However, Indonesia is also an urbanising country and urbanisation requires resources to support its economy. Resource extraction to support this urbanising economy has historically been in conflict with environmental sustainability, as shown by the examples of flooding in Jakarta. The campaign for a conversion to electric vehicles, which is usually associated formally with environmental sustainability in the global effort against climate change, is problematic since Indonesia still depends on coal for electricity generation and as a country in which resource extraction for components of the electric vehicle is questionable from the perspectives of social and environmental justice. An illustration of this contradiction can be seen in one of JATAM’s recent campaigns to raise public awareness of the social and environmental problems of nickel mining in Indonesia (Figure 5).

With these vicious cycles of social and environmental destruction, building more infrastructure is unlikely to be a wise response to the climate crisis. As demonstrated by the concrete embankment of Ciliwung River as a celebrated flood alleviation project, the hard infrastructure approach did not only fail to reduce flooding in Jakarta. In fact, three years later flooding was still the main reason to move the capital. But the Ciliwung river embankment in Jakarta also resulted in less green areas and the urban displacement of people, mostly of lower income. Furthermore, it is insufficient to

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<sup>15</sup> For example, see: “Wali Kota Risma Jatuh Usai Bersih-bersih Sampah di Pantai Kenjeran, Kondisinya Sekarang.” *Tribunnews Surabaya*, 24 February 2018. <http://surabaya.tribunnews.com/2018/02/24/wali-kota-risma-jatuh-usai-bersih-bersih-sampah-di-pantai-kenjeran-kondisinya-sekarang>

<sup>16</sup> Sari, Nursita. “Sandiaga Tegaskan Pasukan Oranye Tetap Akan Dikelola Pemprov DKI.” *Kompas.com*, 11 November 2017. <https://megapolitan.kompas.com/read/2017/11/22/09365621/sandiaga-tegaskan-pasukan-oranye-tetap-akan-dikelola-pemprov-dki>

assess Indonesia's commitment to environmental sustainability, and ultimately to address the global climate crisis, by the amount of "green" projects in place. As shown by social and environmental conflicts related to electric vehicles, new "sustainable" technologies can be counterproductive to the larger effort to address the climate crisis when they are applied in a problematic oligarchic economy, and in a socially and geographically unequal society.



Figure 5. "Your Electric Vehicle is Killing Residents Around Nickel Mines", a t-shirt by JATAM as part of their advocacy against unethical nickel mining practices in Indonesia (Source: JATAM, 2023)

In conclusion, I return to the two main issues in urban development in Indonesia: **social justice** and **environmental justice**. To address the climate crisis, it is necessary to adopt a viewpoint from which encompasses both issues. Without the vision to build towards social and environmental justice, any "environmental sustainability" project or infrastructure is likely to be contradictory and counterproductive, because of the systemic problems in Indonesia's social, political, and economic structures. The new capital city proposition is a case in point: in spite of the "sustainability" rhetoric, the project deserves skepticism and criticism for the lack of publicly accessible environmental impact assessments and social impact assessments.<sup>17</sup>

To achieve an environmentally sustainable Indonesia and an Indonesian nation-state that plays an active role in addressing the global climate crisis, it is imperative to assess any projects, infrastructure, and any political campaign promises from the perspectives of social and environmental justice. Given the level of social conflict and environmental degradation caused by projects and infrastructure in Indonesia over the past ten years, it is clear that these projects and infrastructure are not in line with social justice and environmental justice.

<sup>17</sup> CNA Insider, "Inside Indonesia's Move To New Capital Nusantara: Will Its People Be Ready?," *Channelnews-Asia*, 17 August 2023. <https://www.youtube.com/watch?v=XDumGD47Uls>



Despite these problems, one hopeful feature in Indonesia is the activism of civil society groups in Indonesia who actively work to form coalitions across organisations to share critical perspectives towards these problematic projects and policies, and their efforts to advocate for alternatives. The challenge is to continue to broaden the reach of these critical campaigns, amidst the overwhelming domination of the powerful political and economic actors and the mounting amount of campaign information (and misinformation) in the build-up to the elections.

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