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Para-Diplomacy Perspective in Climate Crisis Mitigation: Jakarta's Local-Global Collaborations for Sustainable Urban Transport and Mobility

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Abstract
This study aimed to describe how Jakarta's collaboration with local and global actors took shape in the development of sustainable urban transport and mobility. The climate crisis, seen as a global issue, has instigated the emergence of more actors to address the impacts and mitigate it. The world's cities have demonstrated their role by adopting sustainable policies and initiating transnational actions. While Jakarta, as a city in the Global South, was also exposed to the global trend toward sustainability, its initiatives to mitigate the climate crisis by developing sustainable urban transport and mobility were overlooked. This study used the qualitative descriptive method with a case study design and the concept of para-diplomacy. The findings show that Jakarta's local-global collaboration took shape in several initiatives, ranging from improvements to pedestrian facilities to multi-year mass transport projects. Such collaboration was meant to gradually reduce greenhouse gas emissions, involving various actors like corporations, NGOs/think tanks, and local communities. This study suggests that cities, especially those in the developing world, are also willing to catch up by integrating sustainability into local policies, including addressing global problems like the climate crisis through local initiatives. This study presents a perspective that para-diplomacy, emphasizing collaborations across national borders, should be perceived as a strategy for mitigating the climate crisis at the local level.
Keywords: *para-diplomacy, climate crisis, Jakarta, collaborations*

1. Introduction

Climate change is now an issue attracting global attention due to its multiple impacts, turning into a climate crisis that threatens nations regardless of their economic status or geographical location. Triggered by global warming caused by greenhouse gas emissions, the crisis has encouraged climate protection as a shared agenda. Gupta et al., (2007) suggests climate change requires global-local solutions since greenhouse gas emissions used to be "local" and have eventually piled up as "global" with global impacts.

Just like other world megacities, Jakarta was one of Indonesia's cities with the worst air pollution. Vital Strategies and Institut Teknologi Bandung (2024) revealed that 32-41 percent and 42-57 percent of Jakarta's air pollution was caused by motorized vehicles during the wet season and dry season, respectively. Catching up with a global trend, the Jakarta Regional Government responded by gradually improving the urban transport and mobility system involving multiple actors, called para-diplomacy. Sustainable urban transport and mobility is a best-practice model adopted by cities, particularly those in the developed world, to respond to the climate crisis (Laake, 2020). Despite this, Jakarta's initiatives to mitigate the climate crisis by developing sustainable urban transport and mobility were overlooked.

Studies demonstrate that sub-nationals (cities, provinces, states, etc.) have transformed into important actors in climate crisis response. Literature shows cities have ambitions to take part in tackling climate change through para-diplomatic activities. Global networks of cities have contributed to encouraging sub-national governments to initiate and locally implement policies compliant with global climate regimes

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(Alkanalka, 2024; Rei, 2017). The world's cities are now at the heart of climate action since they contribute more than 75 percent of global greenhouse gas emissions (Nieuwenhuijsen, 2024). On the other hand, Chaloux (2017) suggests the sub-national governments' role in initiating and shaping a regional climate regime, taking the Western Climate Initiative (WCI) as a case study.

Brazilian cities in climate crisis mitigation are cases frequently studied by scholars (de Macedo & Jacobi, 2019; Macedo et al., 2016; Ribeiro, 2023). Transnational actions and local policies strengthened multi-level climate governance in protecting the global climate, followed by initiatives to integrate global climate policies into local frameworks (de Macedo & Jacobi, 2019; Macedo et al., 2016). Despite progressive engagement, Ribeiro (2023) argues that those cities possessed a range of different commitments, from low to medium climate commitments. Mendes' study (2022) strengthens such findings, suggesting climate governance was seen as a technical issue rather than a complex social challenge.

Greenland's para-diplomacy in climate negotiations was studied by Westerling and Klöck (2023). The climate crisis encouraged the Arctic regional government's participation in the response. Despite the need for economic development, the region was shifting towards green development and embracing a commitment to be part of global climate policies (Westerling & Klöck, 2023).

The existing literature demonstrates sub-nationals' role and ambition in response to the climate crisis driven by global/regional regimes and transnational actions. Cities, particularly, have been frequently called to the forefront among local and non-state actors in either mitigation or adaptation of the climate crisis with policy innovation. However, the literature shows that urban initiatives in mitigating the climate crisis in terms of the development of sustainable urban transport and mobility through global-local collaborations are still understudied, especially in the case of Jakarta. Thus, this study aimed to describe how Jakarta's collaboration with local and global actors took shape in the development of sustainable urban transport and mobility.

2. Theoretical Perspective

This study employed para-diplomacy as the conceptual framework to narrow the gap. Para-diplomacy can be understood as international relations of actors other than national governments. Scholars define para-diplomacy as, for example, the "engagement in foreign relations" (Tubilewicz & Omond, 2021) or the "form of political communication" (Kuznetsov, 2015). Sub-nationals also possess the ambition to pursue certain interests, intended to achieve gains in terms of economy, culture, politics, or other forms of benefits (Kuznetsov, 2015). Studies also suggest that para-diplomacy is not the only privilege of sub-nationals, but also a participating arena for local non-governmental actors (Añorve et al., 2022; Meissner & Warner, 2021).

Para-diplomacy is "self-sustained" since sub-national governments may have expertise projected towards foreign governmental and/or non-governmental actors (Kuznetsov, 2015). Para-diplomacy can, too, be driven by opportunity structures (Lecours, 2002), allowing or attracting local actors to step forward in pursuit of specific interests distinct from national interests beyond national boundaries. Not only perceived to be "specific", but local interests are also more "targeted," and often "opportunistic" and "experimental" (Keating, 2013).

Para-diplomacy can be conducted in various forms, ranging from merely attending ceremonial events to shaping "distinct" national identity. Therefore, para-diplomacy is seen to have a couple of perceptions of

whether an opportunity or a challenge for a whole nation (Kuznetsov, 2015). Soldatos (2001) offers four models of para-diplomacy based on practical dimensions: cooperative-coordinated, cooperative-joint, parallel-harmony, and parallel-disharmony patterns. The first three models are based on the perceptual dimension and represent an opportunity for the nation as a whole. Sub-national governments are allowed to develop their regions with some flexibility according to the existing regional autonomy (and other structures), including taking options to get involved in international affairs without harming national interests (Kuznetsov, 2015).

Sub-national governments hardly count on themselves due to several constraints, such as gaps in certain expertise, technology, or resources. They can build transnational cooperation, which is commonly conducted through a sister city/province. However, those with bigger ambitions can actively participate in the Transnational Municipal Networks (TMNs) to pursue particular interests that cannot be achieved through bilateral ties between regions/cities (Luerdi & Fitria, 2023).

Sub-nationals can promote local goals and socio-economic development to make contact with global communities and increase cooperation. As a strategy for development, para-diplomacy can facilitate, for example, accessing international financial and technical assistance (Stren & Friendly, 2019), promoting innovation and knowledge exchange (Luerdi, 2023), or advancing the achievement of sustainable development goals (Sergunin & Joenniemi, 2014).

Using the para-diplomacy concept, this study sheds light on the para-diplomatic practice taking shape in the local-global collaborations between Jakarta and various actors. This study is expected to enrich the para-diplomacy concept, especially city para-diplomacy in developing countries, in addition to suggesting that cities in the Global South have also been exposed to a global norm like sustainability and are willing to embrace the commitment to a global agenda like climate protection at the local level. This study offers a new perspective: para-diplomacy should be viewed as a strategy for local climate crisis mitigation.

3. Method

This study employed a qualitative descriptive approach, specifically adopting a case study design. Researchers concentrated on gathering and analyzing the data obtained from both written materials and digital platforms. In the course of the research, primary data were collected, including official documents and relevant information published by the Jakarta Regional Government and collaborative partners. Additionally, secondary data were sourced from academic journals, books, and other materials relevant to the topic studied.

The data were analyzed through the interactive model, constituted by a cyclical process of data collection, data condensation, data display, and conclusion drawing (Miles et al., 2014), as follows:

a) Data collection. At this stage, as much information as possible was gathered relevant to the research phenomenon, regarding local efforts through para-diplomacy to mitigate the climate crisis;
b) Data condensation. The researchers had to present a set of critical questions to ease data condensation, meaning that not all the data already gathered would be beneficial in the research. This process could only take place if the researchers had decided and focused on particular critical questions. Such questions were related to the development of sustainable urban transport and mobility as Jakarta's para-diplomatic

practice, seen as a strategy for climate crisis mitigation at the local level;

c) Data display. This stage represented a structured information display in which the researchers began to see assumptions or a picture of the preliminary findings. At this stage, researchers began to focuss to deepen such findings: the forms of local-global collaborations the Jakarta Regional Government initiated to develop sustainable urban transport and mobility; and
d) Conclusion drawing. Before drawing conclusions, research activities of data collection, data condensation, and data display were still sustained so that the configuration, meanings, patterns, and propositions of the information were apparent and strong. At this stage, the researchers were finally able to see convincing conclusions or findings.

4. Result and Discussion

Climate crisis mitigation – the effort to reduce or prevent greenhouse gas emissions to slow down the rate of climate change – has been increasingly acknowledged as a responsibility of big cities. As a part of the global community, Jakarta declared its commitment to the climate crisis response on a few international occasions. The city announced the ambition to drop its emissions to 30 percent in 2030 and aspired to become a zero-emission city by 2050 (Luerdi, 2023).

The development of sustainable urban transport and mobility would be a key factor in mitigating the urban climate crisis. Furthermore, the city materialized the ambition in the form of the "Gubernatorial Regulation Number 31 of 2022 on the Urban Space Detailed Plan" to accelerate Jakarta as a center of business and a transit- and digital-oriented global city (Luerdi, 2023). Studies indicate that transnational actions and local frameworks were entangled in the climate crisis response (de Macedo & Jacobi, 2019; Macedo et al., 2016).

However, the regional government could not realize the agenda by itself but had to work together with multiple actors as stakeholders due to constraints in terms of resources and/or expertise. Thanks to international exposure and networking, Jakarta activated para-diplomacy to develop sustainable urban transport and mobility, taking shape into a wide range of local-global collaborations between the regional government and various entities, both local and international, such as enterprises, NGOs/think-tanks, and local communities. Such transnational actions were in line with the idea that para-diplomacy was a sustainable development strategy (Sergunin & Joenniemi, 2014).

Jakarta's global-local collaborations in developing sustainable urban transport and mobility, involving various collaboration partners, took shape in the various initiatives as follows.

Development of Mass Rapid Transit (MRT) and Light Rapid Transit (LRT*)*

Mass Rapid Transit (MRT) is widely regarded as a future system and mode of transport for the world's megacities and is often seen as a symbol of modernity. The Jakarta Regional Government and the Indonesian central government had long planned the MRT development, but only in 2013 did the execution begin. Jakarta underwent several phases of MRT development. For the long-term purpose of connecting the entire city, the regional government estimated to need additional phases of MRT construction. In addition, the regional government, together with the Indonesian central government, planned the development of Light Rapid Transit (LRT). The large-scale construction of LRT began in early 2017, and some of which was included in national strategic projects.

Both MRT and LRT were supposed to be long-term and multi-year projects that would be the backbone of sustainable urban transport and mobility. Studies indicate that policies on the development of mass transport systems offered several benefits, such as reduced congestion, reduced energy consumption, and time efficiency, which ultimately contributed to lowering environmental impact (Jing et al., 2022; Pranata et al., 2025).

In the projects of transport modes, the collaboration between the governments and local/national state-owned corporations (i.e., PT MRT Jakarta, PT LRT Jakarta, KAI, etc.) was necessary in addition to international partners due to funding and technology access considerations. The MRT construction was a consortium project involving Japanese corporations under the Japan International Cooperation Agency (JICA) (Shatkin, 2022). On the other hand, in the LRT project, for example, in the provision of rolling stock, the governments partnered with South Korea's Hyundai Rotem (Rois et al., 2025).

Studies suggest that JICA was acting as a part of Japan's foreign policy actor in maintaining cooperation ties in terms of financial and technical assistance with partner nations in diverse projects (Akon & Mia, 2024; Sanada & Zappa, 2025). In the case of the MRT project in Indonesia, both financial and technical support from JICA enabled Indonesia to access Japanese technology in developing sustainable transport.

Despite MRT and LRT development being embedded in national strategic projects, the regional government retained an important role in the implementation, thanks to decentralization. Tomasoa's study (2025) indicates that decentralization enabled decisive regional government actions amid various actors' involvement. From the perspective of para-diplomacy, it provided a structure for the regional government to project its specific interest beyond national boundaries in pursuing world-class infrastructure for the city through such multi-actor cooperation. However, as Soldatos (2001) and Kuznetsov (2015) suggest in the conceptual framework, such a move was still within the cooperative-coordinated dimension of para-diplomatic practice and was reflecting an opportunity for the nation. What the city aspired to achieve resonated well with national development.

Development of Cycling Infrastructure

Jakarta changed the development paradigm from car-oriented to transit-oriented development in the last few years. The previous paradigm was believed to be the root of problems, such as congestion and air pollution. As a consequence of the paradigm shift, the Jakarta Regional Government began to provide infrastructure for citizens' mobility based on a sequence of priorities: pedestrians, cyclists, public transport users, and private vehicle users (Luerdi, 2022, 2023).

Infrastructure for non-motor vehicles like bicycles was intensively encouraged. In the city's planning, the regional government aimed to reach a total of 609.4 km of cycling lanes by 2030 (Jakarta Regional Government, 2021). The development of cycling lanes was followed by the provision of parking areas for bicycles in both government-owned and private buildings, along with bike-sharing facilities. What Jakarta did was in line with a trend in which cities were actively promoting cycling through investments in infrastructure, services, and policy initiatives, recognizing environmental and health benefits (Wang et al., 2025).

Non-emission vehicles like bicycles were supposed to be one type of alternative mode of transport among citizens, especially to reach short-distance destinations. To support such an alternative, the regional government shall provide comfortable and safe infrastructure for cyclists. Bicycles were even allowed to be brought on the MRT and LRT. In terms of mobility, cycling, in addition to walking and

using public transport, was often perceived as one of the indicators among modern cities adopting sustainability principles in line with the climate crisis response.

In realizing the cycling infrastructure, the regional government had partnerships with several urban communities, such as Gowes Bike, the Forum Diskusi Transportasi Jakarta (FDTJ), and cyclist communities. The city's tagline, "City of Collaboration," provided opportunities for a bottom-up decision-making process in which inputs from the grassroots communities were vital for the city's decision-makers, so that the formulated urban policies met the needs of citizens as the main users (Luerdi, 2023). Studies also indicate that local NGOs and communities actively advocated for sustainability and justice in the city's transport infrastructure (Bonpalda & Ghofur, 2024; Octaviandy & Marom, 2024).

In addition, the regional government partnered with the Institute for Transportation and Development Policy (ITDP) – an experienced global non-profit organization offering innovation and providing technical expertise to accelerate the growth of sustainable transport and development around the world. Through the collaboration, the ITDP provided evidence-based recommendations to the regional government, particularly in terms of safe cycling infrastructure and bike-sharing facilities (Octaviandy & Marom, 2024). Jakarta's policy to develop cycling infrastructure corresponded to the ITDP's global campaign "Cycling Cities" to encourage the transformation into cyclist-friendly cities. Jakarta was one of Indonesia's cities that signed the commitment and joined the network.

Jakarta's para-diplomacy in developing cycling infrastructure involved not only local communities but also global NGO. While local communities bridged the interests of the people to the city's decision-makers in governance, the ITDP conducted studies and recommended policies that could be executed by the regional government. Such practice represents that para-diplomacy is not only conducted by local governments, but also provides a participation arena for other local actors, as the concept suggests (Añorve et al., 2022; Meissner & Warner, 2021).

Bus Rapid Transit (BRT) Expansion and Electric Bus (e-Bus) Provision

Realizing the complexity of the problem of population density, the Jakarta Regional Government attempted to build public transportation facilities using the Bus Rapid Transit (BRT) system under the operational name of "Transjakarta." The BRT system development emerged as a popular solution for urban transport problems in Indonesia since 2000, influenced by strategies or policies to mitigate or adapt to the climate crisis (Wijaya & Imran, 2019).

Due to limitations in financing and technical aspects exposed at the local and national levels to support the implementation of transportation using buses, collaboration between entities was certainly needed, including with parties outside Indonesia. Known as the longest system in the world and the first in Southeast Asia, the ITDP historically played a crucial role in birthing the BRT system in the city. Beginning its operation in the country in 2002, ITDP worked with the regional government, providing technical and advocacy assistance for its BRT development, and continued promoting and advocating for greater enforcement of the busway and expansions (ITDP, 2024b).

Over time, service development was carried out, taking into account environmental dimensions and sustainable development. This, for example, could be seen from the regional government's efforts to achieve the target of 60 percent use of public transportation and, by 2030, a hundred percent use of e-buses within the Transjakarta fleet

(Luerdi, 2022). To reach such an ambition, the regional government explored the possibility of expanding the availability of e-buses. The regional government and Transjakarta, for instance, signed a Memorandum of Understanding (MoU) with a British e-bus manufacturer, Switch Mobility Ltd, in 2022 (Luerdi, 2022, 2023).

Such effort was supported by the C40 Cities Climate Leadership Group (C40 Cities) with trials of a hundred e-buses, including aspects of financial feasibility and financial resources (C40 Cities, 2021). The C40 Cities – Jakarta is one of its members – is a TMN promoting urban sustainability to address the climate crisis. Just like the ITDP, C40 Cities was an important partner in developing sustainable urban transport and mobility. Furthermore, Jakarta signed the C40 Cities' Climate Action Plan in 2019 as a local commitment to respond to the climate crisis (Hafizha et al., 2024).

Jakarta showed high interest in participating in global forums, including those hosted by either ITDP or C40 Cities, becoming platforms to collaborate and exchange best practices in sustainable policies. Para-diplomacy, in fact, is not only in the form of sister city/province, but also membership and/or participation in global urban networks in which the city could project wider ambition, like global leadership among its counterparts. Recognized for its local achievement, Jakarta, under Governor Anies R. Baswedan, was appointed to be a steering committee member of the C40 Cities, together with Tokyo (Luerdi, 2023). The city was also able to promote its success story in developing sustainable urban transport and mobility beyond, thanks to the platforms, while grabbing the opportunity for financial and technical assistance, as the concept suggests (Stren & Friendly, 2019).

Pedestrian Facilities Improvement

In addition to the need for accessible public transportation facilities, support for pedestrian facilities was also assured. Pedestrian facilities were believed to be supportive pillars for the system of sustainable urban transport and mobility. Caprì et al., (2016) note that providing enough pedestrian facilities could be the most effective development strategy to create walkable communities, thus limiting motorization in cities.

Due to the limited and poor pedestrian facilities Jakarta had, the regional government planned the improvement of pedestrian facilities as a priority since 2018. Such facilities had an important role as the third space for citizens, not only facilitating interactions between them but also acting as a supporting means for public transport access.

The sidewalk areas were targeted to reach 1,808,594 square meters by 2026 (Pulungan, 2023). Revitalizations were followed by the designation of Transit-Oriented Development (TOD). Revitalization of pedestrian facilities at the Dukuh Atas area, for example, was designated as a pilot project of the TOD integrating various modes of transport, such as BRT, MRT, commuter line, airport train, and LRT Jabodebek (Luerdi, 2022).

As a collaborator partner, the ITDP, in its document, provided recommendations for the regional government regarding the development of pedestrian areas that were "complete, safe, comfortable, and humane," with the awareness that walking activities were physically, socially, and economically beneficial in addition to being environmentally friendly (ITDP, 2019). In more detail, the ITDP published a document on a roadmap for pedestrian and cyclist infrastructure development for 2023-2027, containing priority programs and estimates of the costs (ITDP, 2023).

In addition to the ITDP, the regional government collaborated with several local communities, like the FDTJ and the Pedestrian

Coalition, in complementing the pedestrian facilities with maps and signs, as well as providing inputs regarding just and sustainable access and facilities, especially in the TOD areas. Another collaborator partner, Urbanplus, designed sidewalks and other pedestrian facilities to be revitalized for comfortable and modern third spaces.

Bottom-up decision-making strengthened para-diplomacy by the regional government, inviting grassroots communities to get involved in the city's development. While maintaining local collaborators, the regional government utilized the expertise of a global NGO to urge citizens' walking habits as a necessary part of supporting sustainable urban transport and mobility. Similar to cycling infrastructure development, the collaboration model shows that para-diplomacy can be an arena for other local actors in addition to local governments (Añorve et al., 2022; Meissner & Warner, 2021). However, the regional government maintained the main roles of ruling and budgeting.

Public Transportation Integration

Despite the various modes of transport that Jakarta had to support mobility, citizens used to be reluctant to ride such public transport since they were not integrated enough. Moreover, using public transport was not comfortable or efficient, so private vehicles remained the priority mode. The ITDP (2024a) pointed out the city's public transportation integration, with 53 integration locations considered urgent, in addition to the geographical connectivity between Jakarta and neighboring cities.

The ITDP worked with many world's cities in assisting their public transport improvement, particularly in integration cases by conducting feasibility studies and providing evidence-based policy options. For Jakarta, the NGO published a document, "Jakarta Intermodal Integration Guideline", targeting the aspect of convenience for citizens using integrated modes of transportation (ITDP, 2020). Samuilovas and Ušpalytė-Vitkūnienė's study (2025) suggests that public transport integration could be a best practice of urban development that was adopted by cities to ensure both sustainability and accessibility.

The Jakarta Regional Government emphasized the implementation of the integrated public transportation policy in 2018, starting from revitalizing sidewalks in addition to the construction and revitalization of TOD areas. The latter would ease the shifting of citizens from one mode of transport to another. The regional government institutionalized an integrated public transportation system called "Jak Lingko," integrating not only the network and facilities, but also payment. The initiative to improve and expand the system continued so that all areas across the city could be covered gradually, encouraging the use of public transportation as a rational and ideal choice for mobility.

Jakarta was one of the world's cities that experienced significant progress in the transition to sustainable urban transport and mobility. The city's BRTs began to have a million riders per day in 2019 (Magnusson & Rachmita, 2021). According to the report of the TomTom Traffic Index, it was no longer among the world's ten worst cities in terms of congestion since 2020 (Luerdi, 2022). Jakarta also achieved the first position in the 2021 Sustainable Transport Award (STA) organized by the ITDP, thanks to the innovation in mobility and the provision of decent cycling lanes (Luerdi, 2023).

The case of Jakarta and the ITDP exemplified a model of city-NGO para-diplomacy in the developing world. Such foreign engagement was aimed at achieving urban development, referring to the benefits of para-diplomacy as the conceptual framework suggests (Kuznetsov, 2015; Tubilewicz & Omond, 2021). Well-exposed to the

collaborator partner's experience and expertise, the regional government worked to realize public transport integration to support sustainability, demonstrating a specific, targeted, opportunistic, and experimental goal in para-diplomatic practice as Keating (2013) suggests.

Private Vehicles Emission Test

Cities are the main contributors to the world's air pollution, that make themselves vulnerable. Tremendous impacts caused by air pollution have pushed air quality into a local agenda (Kurniawan et al., 2025). The Jakarta Regional Government, through its environmental policy, enforced the regulation for emission tests as part of the "Jakarta Blue Sky" program.

The collaboration between the regional government and Vital Strategies – part of Bloomberg Philanthropies – in a private vehicle emission test focused on increasing air quality. The NGO provided technical and strategic support, such as data analysis, research, and more responsive policy development towards the actual situation, ensuring the program ran effectively and sustainably (Dina & Papalia, 2023). It also got involved in the campaign of emission tests among citizens to raise common awareness of emission reduction, in addition to field staff training to ensure that such emission test operations met the international standard (Dina & Papalia, 2023). The collaboration was expected to reduce air pollution and lead to increased air quality.

The NGO also partnered with the networks of local governments, strengthening the city's chance to acquire financial and technical support. Globalization and other opportunity structures (i.e., networks, decentralization) allowed the regional government to carry out the collaboration as a form of para-diplomacy, as the concept suggests (Lecours, 2002). Para-diplomacy in the form of such collaboration that began in 2015 turned out to be a strong synergy in which the regional government took advantage of Vital Strategies to design the mechanism for efficient emission tests.

Low-Emission Zone (LEZ) in Kota Tua

The collaboration between the Jakarta Regional Government and the World Resources Institute (WRI) – a global research organization to develop practical solutions for environmental protection, balanced with economic development – aimed to transform Kota Tua into a Low Emission Zone (LEZ). Due to its status as a historical place with a high rate of tourist visits, it was necessary to maintain its air quality through a LEZ designation. Furthermore, the area was home to a lot of historical buildings that needed to be preserved from the harmful impact of air pollution.

As a pilot project starting in December 2020, the area was expected to be a model for the development of other LEZs across the city (Luerdi, 2023; Syalom & Astuti, 2024). The project would reduce the intensity of motorized vehicles and otherwise mainstream the use of environmentally friendly vehicles. The success of the LEZ project should be a benchmark for the concept implementation in other places, expected to contribute to reducing carbon emissions and air pollution as a whole. Studies show the LEZ implementation was a successful urban strategic initiative introduced in and adopted by many world cities to reduce air pollution and support urban mobility (Delgado-lindeman et al., 2025; Marta et al., 2025).

The WRI played a key role in the design and implementation of the program. The WRI provided in-depth analysis and research regarding the potential for emission reduction, environmental impact, and innovative solutions applicable to the area, in addition to technical recommendations to ensure that the infrastructure supporting the low-emission vehicles could be adopted, as well as

evidence-based policies for the regional government (WRI, 2022, 2024). In other words, through the collaboration, the WRI – acting as an NGO cum a think-tank, just like the ITDP – worked together with the regional government in making strategic policies and developing effective solutions for pollution-free Kota Tua.

As the conceptual framework suggests, gaps in expertise, technology, or resources would lead to cooperation between local governments and foreign actors. Involving the NGO promotes innovation and sustainability advancement in the city. As a political communication and self-sustaining activity, as argued by Kuznetsov (2015), para-diplomacy in the form of such collaboration was meant to facilitate local development in which the LEZs could be a necessary part for sustainable urban transport and mobility.

Paratransit Transformation

The transformation of paratransit modes in Jakarta was part of a big effort by the Jakarta Regional Government to integrate public transport as a whole. Paratransit – referring to microbuses – was focused on the areas that were not accessed by the larger system of the city's BRT and MRT. Thanks to the initiative, citizens, including those living in the areas that were not served by larger transport lanes, should be able to enjoy the integrated, effective, and efficient transport service. As a solution for smaller roads, the paratransit fleet had an important role in complementing the public transport ecosystem.

In the transformation process, the provision of a decent paratransit fleet in terms of quantity and quality shall be the main concern, covering the improvement of the standard of comfort, security, and accessibility, so that citizens were willing to shift to using public transport. The transformation also covered the inclusion of paratransit modes into the Jak Lingko system, even offering free fares for users. Such a breakthrough was expected to ease citizens' access to public transport as well as to reduce dependency on private vehicles. Studies indicate that connectivity between paratransit and mass transit systems improved efficiency and accessibility, which contributed to sustainability (Chandra et al., 2013; Chowdhury & Ceder, 2016).

In the paratransit transformation, the regional government worked together with the ITDP and the FDTJ, playing a collaborative role in supporting the implementation. While the ITDP helped to formulate the concept of transport integration and prepare technical recommendations for the implementation, the FDTJ functioned as a platform for communication and advocacy, ensuring the paratransit transformation met citizens' needs and matched urban development (Octaviandy & Marom, 2024). Thus, the regional government could gradually increase citizens' participation in using public transport, becoming more integrated and reducing congestion and air pollution.

Through such a form of collaboration, Jakarta's para-diplomacy reflects the role of transnational action in addressing the very local issue. Empirically, the NGO contributed to the city's sustainability agenda by transferring international experience and technical expertise to the local government, particularly in increasing broader transport integration. The participation was not limited to knowledge exchange, but also included engagement with local stakeholders as well as support for development and implementation initiatives to transform sustainable and responsive urban mobility. Though the collaboration contributed to boosting the city's efforts to develop the practice of sustainable transport, it does not mean that the city successfully achieved its whole mission, as challenges remained and the transformation was a long-term agenda. Rather, the case shows that paradiplomacy can provide local

government with additional capacity and international resources to advance sustainability at the local level, as the concept suggests (Kuznetsov, 2015; Sergunin & Joenniemi, 2014).

5. Conclusions

Jakarta's efforts to develop sustainable urban transport and mobility were a long-term project as well as a sustainable and cross-leadership agenda that could be one of the options to contribute to mitigating the climate crisis caused by greenhouse gas emissions. All forms of collaboration were aimed at building a system that gradually changed citizens' mobility habits, shifting from the use of private vehicles to the use of public transport, and contributing to reducing greenhouse gas emissions. Sustainable urban transport and mobility systems are now turning into a global demand and a shared characteristic of modern cities.

Since such ambition required various specific expertise and resources, the city needed to take a para-diplomacy approach in the form of local-global collaborations for various sustainable initiatives. Though the actors of para-diplomacy are often associated with sub-national governments, the Jakarta Regional Government, along with other local actors, should involve international actors as collaborative partners. For a long-term purpose, such transnational actions would help the city to be modern, resilient, and environmentally friendly.

This study sees para-diplomacy by local governments as an opportunity for local development, especially in urban areas that may contribute to national development and nation branding. Through the case discussed, this study suggests that cities in the developing world or Global South begin to integrate sustainability into local policies, particularly those actively participating in global city networking. Reducing emissions at the local level, for example, is a sub-national transnational action to contribute to tackling a global problem. In addition, this study offers a perspective that para-diplomacy should be perceived as a strategy for global problems, especially climate crisis response or mitigation.

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