

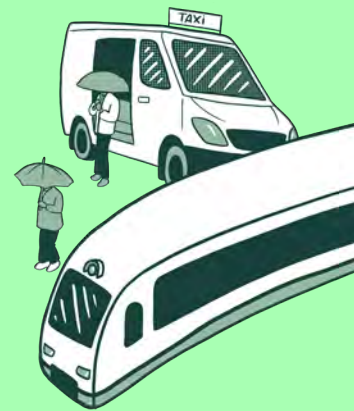


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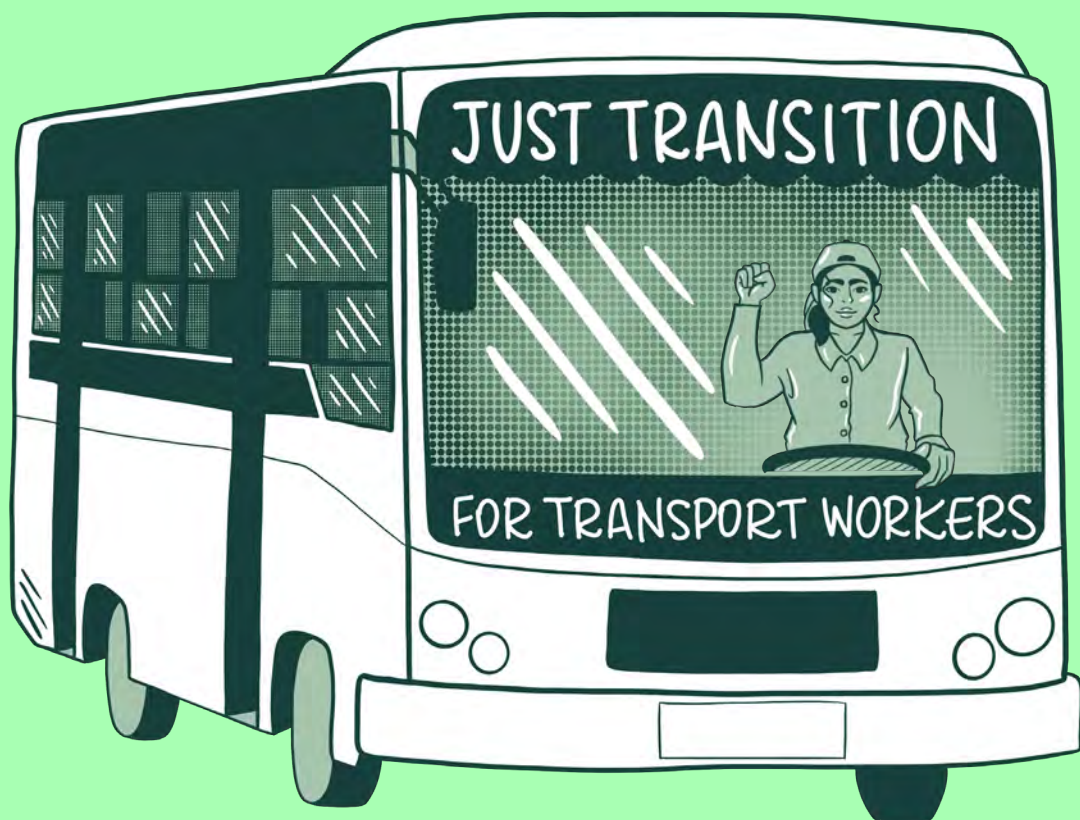
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# A JUST TRANSITION FOR URBAN TRANSPORT WORKERS



Issues and Experiences from  
Unions in Cities of the Global South

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**March 2022**

# EXECUTIVE SUMMARY

A just transition in urban transport focuses on the need to make changes that reduce carbon emissions but at the same time combat existing inequalities. To meet the challenges of climate change justly, we must take into account the impacts on urban transport workers' security and welfare, on the communities who depend on urban transport, and involve unions in ensuring workers experiences, views and demands are represented in the process. This project used a Participatory Action-based Research (PAR) methodology to engage urban transport workers in six cities of the Global South: Nairobi (Kenya), Bogota (Colombia), Hyderabad (India), Santiago (Chile), Cebu City (Philippines) and Jakarta (Indonesia). Workers discussed their lived experiences, put forward a collective just transition framework and are taking actions to make the framework a reality.

There are two interconnected processes affecting urban transport workers that require action on just transition: climate change through extreme weather events and technological change introduced to make urban transport systems sustainable. This report highlights the ways in which extreme weather events, flooding, air pollution and draughts are impacting workers, especially women and young workers who often hold the most precarious jobs and have the least protection. It also features the effects of two technological changes often justified as related to combating climate change: the expansion of electric buses and the introduction of automated ticket vending technology.

Urban transport workers' response to these processes is the worker-led just transition framework for urban transport. The framework addresses immediate as well as systemic changes required to address the climate crisis and combat inequality. The 10-point framework includes:

- 1. FORMALISATION**
- 2. A GENDER EQUAL JUST TRANSITION**
- 3. ADDITIONAL PAY DURING EXTREME WEATHER EVENTS**
- 4. A JOB GUARANTEE**
- 5. PENSION SUPPORT FOR WORKERS NEARING RETIREMENT**
- 6. HEALTH AND SAFETY AS A FUNDAMENTAL RIGHT**
- 7. DEMOCRATIC CONTROL OF URBAN TRANSPORT**
- 8. PUBLIC TRANSPORT AS A PUBLIC GOOD**
- 9. TECHNOLOGY SOVEREIGNTY**
- 10. MODAL SHIFT TO PUBLIC TRANSPORT**

The climate crisis is not only about carbon emissions. It is a systemic, socioeconomic and environmental crisis. The solutions need to address the specific needs that everyday work demands (hazardous work pay incentives, social security protection) and the systemic changes that cities have to embrace (modal shifts to public transport, more publicly-owned and operated transportation, democratisation of transport).

The just transition framework built in this project is constructed on the struggles that workers and unions are experiencing on the ground. The struggles for formalisation of work, for gender equality, for good working conditions and better pay, are inextricably connected to the need to tackle the climate crisis. Workers understand that connection. It is time that employers, governments, and international financial institutions also understood it, by listening to the voices of those who experience the consequences of the climate emergency every day.

# 1.

## INTRODUCTION

### AN OVERVIEW ON JUST TRANSITION

Just transition is a contested terrain in climate politics. Originated in the trade union movement in the United States, it is rooted in the need to address the effects of environmental degradation on workers and communities, with a focus on reconciling different socio-environmental concerns. Until the mid-2000s, the concept, and the policies associated with it, were rooted in the struggles of workers and the communities around production locations. The concept has expanded across the trade union movement, social movements, governments, and corporations<sup>1</sup>. Since the 2015 Paris agreement, just transition has been an integral part of the official United Nations Convention on Climate Change, and governments have had to include it in their Nationally Determined Contributions<sup>2</sup>.

As a consequence of trade union activism on the issue, the International Labour Organization (ILO) published a concrete tool to negotiate just transitions, the Just Transition guidelines<sup>3</sup>. These are intended to act as a guiding framework for just transition processes, focused on a common understanding between unions, employers and governments. The guidelines emphasise the need for social dialogue as a key pillar in processes of transition, reinforcing the role of collective bargaining along the way. They point to a whole-economy approach, where a specific transition needs to be consistent with broader economic, social and environmental goals. The guidelines also highlight that the negotiating process needs to include frameworks that consider macroeconomic development, occupational health and safety, and policies promoting social security and skills development.

Just transition has been present in different trade union policy proposals and forums for decades. The two most used meanings of just transition focus on for whom the transition is required. Sweeney and Treat<sup>4</sup> frame the difference regarding a “worker-focused” approach, and a societal shift approach. In the case of the “worker-focused” just transition, they explain it as a term used to highlight concerns about the likely impacts of climate and environmental policies on specific categories of workers. The second use of just transition, based on a societal power shift, refers to the increasing use of the term to explain broader and deeper socio-economic transformations that are necessary to transform society and move to a low-carbon economy. These two categories of union-based just transition approaches interact and complement each other. As in the context of the just transition framework presented in this report, **there are specific, worker-focused demands combined with transformative demands that challenge the status quo in cities.**

The broad range of interpretations of just transition has meant uprooting the concept from its transformational potential. **Just transition is meant to represent the experiences on the ground: vision, and aspirations of the labour movement and of frontline communities affected by climate change.** The vague references by governments and corporate interests to just transition have depoliticised the concept. The work of this project, reflected in this report, is to re-politicise just transition in the context of urban transport, putting forward a framework that is transformative in addressing the realities of workers in the cities of the Global South.

1 <https://bteam.org/our-thinking/news/join-the-business-pledge-for-just-transition-and-decent-green-jobs>

2 For a detailed analysis of the just transition components in NDCs, see [https://link.springer.com/referenceworkentry/10.1007/978-3-030-22759-3\\_221-1](https://link.springer.com/referenceworkentry/10.1007/978-3-030-22759-3_221-1)

3 ILO 2015, Just Transition Guidelines [https://www.ilo.org/wcmsp5/groups/public/@ed\\_emp/@emp\\_ent/documents/publication/wcms\\_432859.pdf](https://www.ilo.org/wcmsp5/groups/public/@ed_emp/@emp_ent/documents/publication/wcms_432859.pdf)

4 Sweeney and Treat (2018). Trade unions and just transition.

## JUST TRANSITION IN THE CONTEXT OF URBAN TRANSPORT

Analysis of the transition to low-carbon emissions rarely consider workers in the urban transport sector, those most at risk. Energy production and distribution workers, just like their industry, have garnered the bulk of the attention in climate discussions and specifically and specifically those related to just transition. But climate change and the policies implemented by governments are directly impacting urban transport workers, affecting the ways they do their jobs, the capacity to keep one, and the way the communities they serve can access services.

Urban transport workers are affected by three interconnected processes: climate change is affecting their daily lives in the workplace and at home, increasingly through extreme weather events; technological fixes to climate change (such as electric vehicles [EVs], in particular electric buses) are displacing the current workforce, especially informal transport workers; and the deepening of neoliberal policies informing the introduction of new urban transport systems exacerbates precarious working conditions.

Workers suffer the consequences of extreme weather events without appropriate protection, with no mitigation strategy, while climate adaptation policies are leading to their displacement from their jobs. The three processes are more intense for women workers and young workers, who hold the most precarious jobs within the transport system, and are the most exposed to extreme weather events. This situation of vulnerability and instability makes it all the more important to engage and coordinate a just transition framework that addresses the multiple interconnected processes which urban transport workers are experiencing.

While there is a general push to reduce emissions in the transport sector, which **represents 21% of global carbon emissions**, the workers who run transport systems and the communities they serve are often an afterthought in the plans of governments and employers. Improving and expanding urban

transport is often presented as a ‘win-win’ scenario for climate, jobs, and for the overall health of cities. However, not engaging directly with workers and their organisations has meant the exclusion of their perspectives, and a lack of internal debate on the issue within the trade unions themselves. Some of the unions involved in this project had previous discussions on just transition, in broad terms. But only the NCTU in the Philippines had engaged with the issue in the context of urban transport, and specifically in relation to the changes taking place in their jobs.

**IT WILL BE CHALLENGING TO  
MAKE SUBSTANTIAL CUTS IN  
EMISSIONS WITHOUT SIGNIFICANT  
INVESTMENT IN PUBLIC  
TRANSPORT”**

A just transition for urban transport is a contested topic because public transport is so important in any climate strategy. It will be challenging to make substantial cuts in emissions without significant investment in public transport infrastructure and operations. According to the latest International Energy Agency (IEA) World Energy Outlook, to meet the goals of the Paris Agreement and keep warming below 1.5°C and so avoid catastrophic climate change, cumulative carbon dioxide equivalent emissions from urban passenger transportation must fall by roughly 54 gigatonnes in the next 30 years relative to their current trend<sup>5</sup>.

Cities around the world are pushing through new programmes that seek to lower emissions by transforming urban transport<sup>6</sup>. These often include the incorporation of electric vehicles, introducing bus rapid transit (BRT) systems, the automation of certain functions within the transport system, especially ticket vending functions, and the concentration of operations into fewer (but larger) companies<sup>7</sup>.

<sup>5</sup> IEA, Net Zero by 2050, <https://www.iea.org/reports/net-zero-by-2050>

<sup>6</sup> See Seizing the Urban Opportunity, 2021 [https://urbantransitions.global/wp-content/uploads/2021/03/Seizing\\_the\\_Urban\\_Opportunity\\_WEB.pdf](https://urbantransitions.global/wp-content/uploads/2021/03/Seizing_the_Urban_Opportunity_WEB.pdf)

<sup>7</sup> See previous ITF work on impacts of BRT systems, including specific studies on Nairobi and Dakar at <https://www.itfglobal.org/en/sector/urban-transport/bus-rapid-transit->

Although this process is taking place around the globe, cities in the Global South are experiencing it differently to the Global North because of two major factors:

**1.** A large portion of the population walks rather than using public transport (although the amount of individual car use is going up).

**2.** The most popular and cheapest forms of transport rely on informal labour<sup>8</sup>. This creates a different dynamic for governments and employers when implementing new urban transport systems, as well as for the transport unions that organise the workers in the sector.

Any just transition framework for urban transport in the Global South needs to engage with these two distinct realities.

These dynamics play out against two backdrops: urban transport workers have experienced transitions in the past (sometimes in recent years); and those transitions were not fair and did not incorporate the views of workers. Workers are sceptical of announcements that speak of thousands of new jobs, and the ‘transformation’ of a transport system, since they have heard them before and were excluded from those discussions.

**“WE HAVE UNDERGONE TRANSITIONS BEFORE. IN THE TRAINS, WE WENT FROM COAL-POWERED, TO DIESEL, AND NOW TO ELECTRIC. THERE HAVE BEEN CONTINUOUS CHANGES IN THE RETRAINING OF THE WORKFORCE AND MODERNISATION OF THE EQUIPMENT. WE CAN SAY THAT EVERY TRANSITION HAS BROUGHT AS A RESULT A REDUCTION IN JOBS, THE ELIMINATION OF CERTAIN TASKS VITAL FOR THE SERVICE, AND HAS MADE WORKING CONDITIONS MORE PRECARIOUS.”**

*Train worker, Santiago, Chile*

From the perspective of trade unions and workers, previous transitions have threatened livelihoods while prioritising profit. Labour was inherently in conflict with reorganisation plans because of pressure to subordinate worker interests to those of capital<sup>9</sup>. The climate crisis changes only slightly this perception. Workers

need adaptation and mitigation strategies to address the inescapable effects of extreme weather events, flooding, heatwaves and air pollution. But these responses cannot happen at the cost of job losses.

**“WORKERS NEED STRATEGIES TO ADDRESS THE INESCAPABLE EFFECTS OF EXTREME WEATHER EVENTS”**

The lack of previous consultations reinforces workers’ fears about recent change, and explains why unions are sceptical that workers will only be consulted after decisions have been made.

**“TRANSPORT WORKERS HAVE NOT BEEN INVOLVED IN CITY PLANNING. OUR NEEDS IN THE CONTEXT OF CLIMATE CHANGE ARE NOT ADEQUATELY PROVIDED FOR OR GIVEN ANY CONSIDERATION. [SO, FOR EXAMPLE,] ALTHOUGH MOST OF US HANG AROUND BUS TERMINALS, THERE ARE NO STRUCTURES WHICH CAN PROTECT US FROM HEAVY RAIN AND EXTREME HEAT.”**

*Informal transport worker, Nairobi, Kenya*

Climate justice, and just transitions are understood to be about four core ideas:

- 1.** Procedural justice (making sure everyone affected is involved in the process).
- 2.** Distributive justice (those who have the least should get the most out the transformation).
- 3.** Recognition justice (making sure that those who have not been involved in the past have space).
- 4.** Restorative justice (it is also about reparations for previous injustices)<sup>10</sup>.

<sup>8</sup> <https://www.lse.ac.uk/cities/publications/blogs/mobility-for-the-masses>

<sup>9</sup> Bela Galgoczi (2020)

<sup>10</sup> For a detailed explanation of each of these elements, see the work by UCL on the issue [https://www.ucl.ac.uk/public-policy/sites/public-policy/files/cop26\\_just\\_transition\\_policy\\_paper\\_-\\_final\\_.pdf](https://www.ucl.ac.uk/public-policy/sites/public-policy/files/cop26_just_transition_policy_paper_-_final_.pdf)

These elements were explicit and implicit in the conversations that urban transport workers had across the cities that took part in this project, and they inform the framework that came out as a result.

An initial conclusion from the project is that, given the complexity of the processes involved and the context in which a transformation is taking place around the world, **a just transition in urban transport needs to go beyond the carbon crisis**. Confronting the climate crisis entails addressing existing inequalities in urban

transport systems, and elsewhere, which are often reproduced and reinforced with the introduction of policies that only address an emissions problem. There should be a holistic approach, looking at all the issues.

**JUST TRANSITION NEEDS TO BE PERCEIVED AS A MOVE OUT OF INEQUALITIES, NOT ONLY OUT OF THE CARBON CRISIS”**



Our Jobs, Our Planet, Our Public Transport rally in Jakarta, November 2021 | Credit: SPKA.

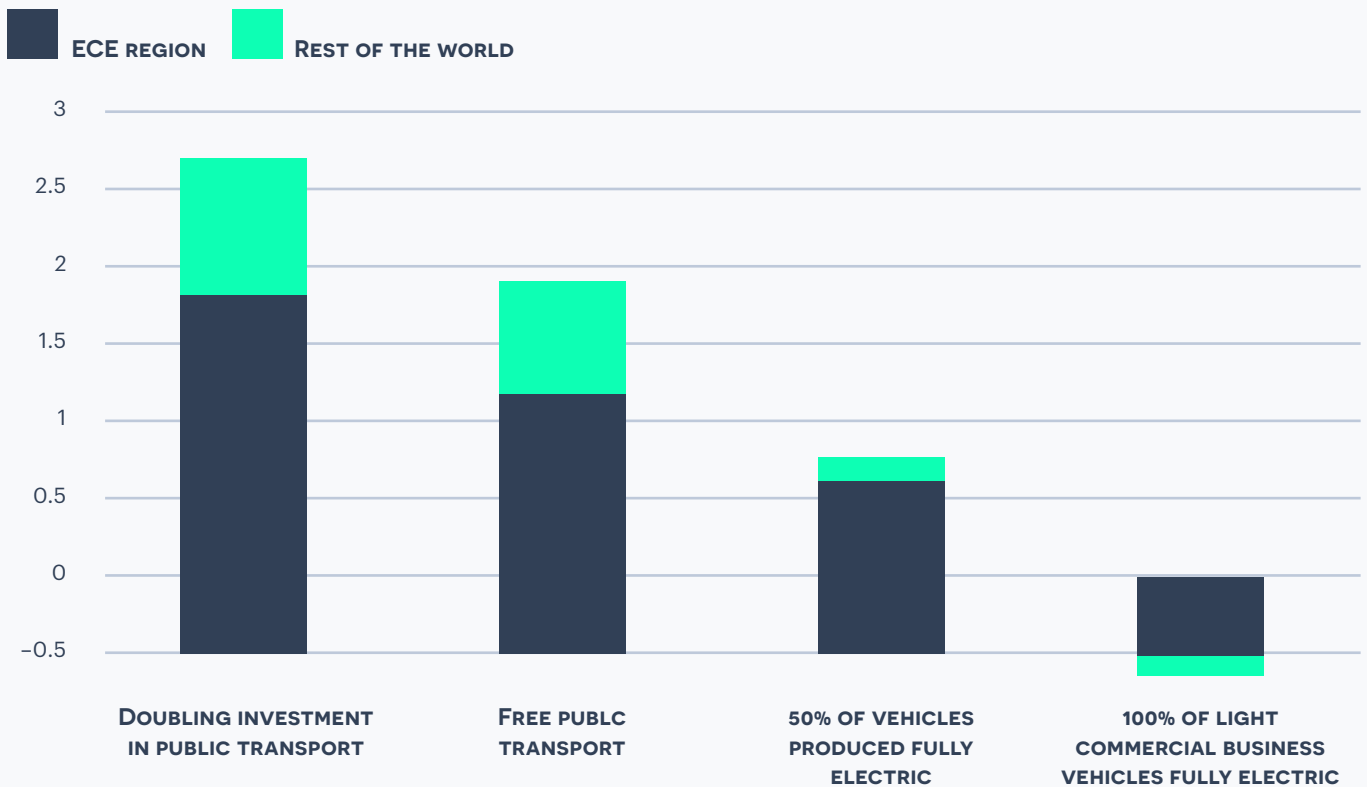


## THE WIN-WIN SOLUTIONS THAT DO NOT MATERIALISE

Expanding public transportation is one of the ‘win-win’ solutions that could improve access and services for communities, create millions of jobs and lower carbon emissions, all at the same time. There is a consensus that cities and public transport will play a central role in the recovery from Covid-19. From investments in sustainable mobility, to enhancing the role of public transport and electrification, these discussions have often centred on the potential for the transport sector to provide green jobs, lower emissions, and to create access in the post-Covid world.

The ILO published a report highlighting the massive potential for jobs and for lowering emissions if we focus on investments which double down on public transport and electrification. The report looks at four possible strategies, including a key one, making public transport free. The job creation potential is enormous. The report is particularly valuable because it talks about ‘net’ job creation. It is common to hear total numbers, without considering the jobs that are lost in traditional transport sectors, as the ITF labour impact assessments for Dakar and Nairobi have shown<sup>11</sup>.

**Figure 1.** Net Job Creation (in millions) in the transport sector under each of the scenarios modelled in the UNCE/ILO study



Source: United Nations Commissioner for Europe and ILO, 2020.

<sup>11</sup> See Labour Impacts Assessments for Nairobi <https://www.itfglobal.org/en/reports-publications/nairobi-bus-rapid-transit-labour-impact-assessment>

And for Dakar <https://www.itfglobal.org/en/reports-publications/dakar-bus-rapid-transit-labour-impact-assessment-research-report-2020>

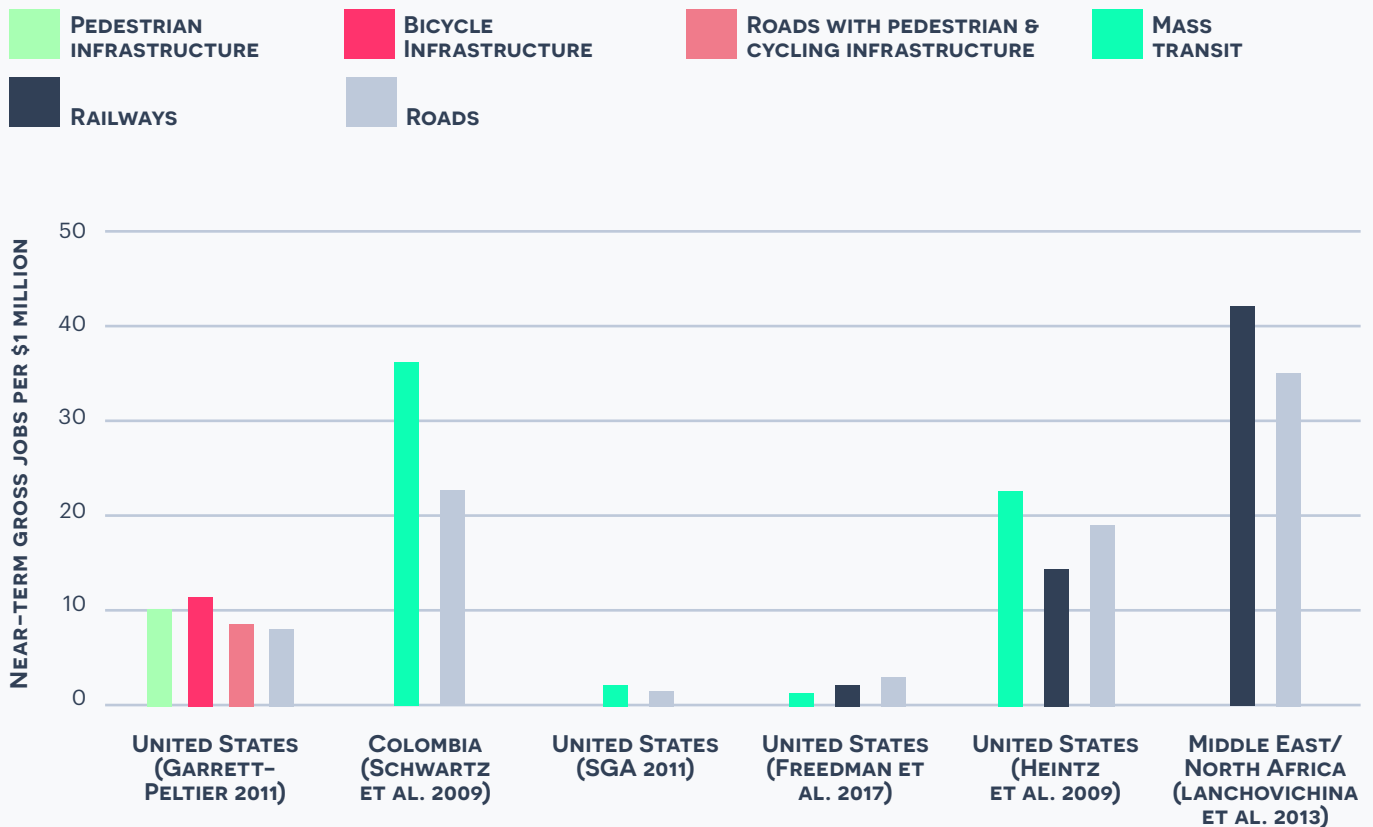
Similarly, ahead of COP26, the World Resources Institute (WRI) launched a study, together with the International Trade Union Confederation (ITUC), entitled *The Green Jobs Advantage*, which highlights the per-dollar benefits of investing in green jobs when compared to fossil fuel investments. **Public transportation investment creates 1.4 times more jobs than road construction per USD 1 million investment<sup>12</sup>.**

The report *Making it COP26 Count<sup>13</sup>*, launched together by the ITF and C40 Cities, makes a similar argument. It says:

**“NEW MODELLING IN FIVE GLOBAL CITIES SHOWS THAT INVESTING IN PUBLIC TRANSPORT AT THE LEVEL NEEDED TO LIMIT GLOBAL WARMING TO 1.5°C WOULD CREATE OVER 650,000 NEW, GOOD-QUALITY TRANSIT JOBS IN THOSE CITIES ALONE AND ANOTHER 650,000 MORE JOBS GLOBALLY.”**

This could especially benefit cities in the Global South, where dependence on public transportation is higher, and where informal public transport dominates the landscape.

Figure 2. Jobs per \$1 Million in Public Transportation versus Roads



Source: WRI/ITUC 2021

12 WRI/ITUC 2021.

13 <https://www.itfglobal.org/en/reports-publications/c40itf-report-making-cop26-count>

Similarly, investments in expanding clean urban transport modes are happening across the cities that took part in this project:

- The Nairobi Metropolitan Transport Authority in Kenya is promising to create thousands of new jobs with the electrification of buses, and has started to pilot electric-bus-only corridors in the city<sup>14</sup>. This builds on a previous commitment that the BRT corridors will be job creators.
- In Bogota, Colombia, the city government announced the introduction of over 400 electric buses (and more to come) to clean air in the city and create thousands of jobs<sup>15</sup>.
- In Jakarta, Indonesia, one of the most outspoken city-level governments is promising to provide public transport within 500 metres of 95% of residents' homes by 2022, and have 14,000 electric buses in service along with a public transport mode share of 60% by 2030, all the while promoting the job creation potential of these measures.
- In Santiago, Chile, the subway administration is expanding metro lines across the city, with associated job creation potential<sup>16</sup>.
- In Hyderabad, India, the state-level government has committed to expanding EV adoption, increasing subsidies for drivers who want to shift to EVs.
- In Cebu, Philippines, local government has been leading the Public Utility Vehicle Modernization programme, as well as the construction of new BRT lines in the city<sup>17</sup>.

Estimates like those presented in the reports above, and the ones announced in different cities, show a picture of investing in public transport that is positive overall. The investments create good-quality jobs, lower carbon emissions, and improve the overall wellbeing of society.

<sup>14</sup> <https://nairobewire.com/2021/11/nairobi-set-for-piloting-of-electric-buses.html>

<sup>15</sup> <https://bogota.gov.co/mi-ciudad/movilidad/primer-lote-de-483-buses-electricos-en-bogota>

<sup>16</sup> <http://www.diarioestrategia.cl/texto-diario/mostrar/2626753/hacienda-extension-linea-3-metro-obras-como-esta-permiten-crear-empleos>

<sup>17</sup> <https://www.pna.gov.ph/articles/1131588>

The problem is that one cannot assume the benefits of new jobs will be distributed fairly. While jobs are created with the introduction of new technologies or systems, many jobs are also lost in the process. The workers who benefit from the new jobs are often not existing workers, or workers who need to be prioritised in the process. Women workers are not given the support they need to grasp the new opportunities. Younger workers become ever more precarious with new technologies. These are the unexplored gaps between the true situations and the numbers governments and employers present. That gap is at the core of the just transition debate in urban transportation. And urban transport workers are well aware of that.

**“WHILE JOBS ARE CREATED WITH THE INTRODUCTION OF NEW TECHNOLOGIES, MANY JOBS ARE ALSO LOST”**

Governments, funding agencies and employers increasingly promote the idea of a just transition as part of these transformations. But the just transition they promote does not address any elements of worker and climate justice: it does not address who wins, who loses, how it happens, and, most importantly, why. The narrative delinks the concept of just transition from workers' experiences and perspectives, placing the focus on the role of the technological shift. In short, they present a just transition that is stripped of its inherently political nature, and that can create backlashes among those who suffer the (negative) consequences.

The electrification of urban transport is a case in point. The rush to show new fleets of electric buses, electric two- and three-wheelers, and electric taxis has often clashed with realities on the ground that contradict the narrative. In the city of Bogota, the local government started to introduce the largest fleet of electric buses anywhere outside China, without meaningfully engaging public transport unions, communities, or the current operators. This has resulted in delays in implementation, as well as in the displacement of about 6,000 workers from the traditional bus system<sup>18</sup>. While the union pushed for a just transition negotiating path, the municipality insisted it does not employ workers directly, and that inclusion of existing drivers will depend on the needs of private operators.

<sup>18</sup> See details of the specific case study on Bogota in section 3.

To this day, private operators are struggling to hire the numbers of electric bus drivers they need to start operations.

**THE DOMINANT NARRATIVE DELINKS THE CONCEPT OF JUST TRANSITION FROM WORKERS, PLACING THE FOCUS ON THE ROLE OF THE TECHNOLOGICAL SHIFT”**

The urban transport sector is lagging behind on concrete discussions about a just transition. While power generation has been at the centre of the discussion, transport also represents a significant level of emissions, and it is undergoing a transformation that is faster than the power sector. The phase-out of combustion vehicles, introducing electric-battery vehicles, as well as the central role of transport in the air pollution discussions has meant that transport is a key player.



Our Jobs, Our Planet, Our Public Transport rally in Jakarta, November 2021 | Credit: SPKA.

## THE WAY FORWARD

This introduction presents a complex context for urban transport workers. Governments, funding agencies and employers are promoting change that directly affects workers, without considering employment impacts (both positive and negative) and involving workers in the decision-making. The transformations are happening at a fast pace. Thousands of electric buses are being introduced; automated ticket vending machines are displacing thousands of workers; BRT corridors are expanding at the expense of informal transport workers.

The just transition framework created as a result of this project is in line with what Sean Sweeney and John Treat call a ‘social shift’ approach to just transition. In their own words:

**“TO ADDRESS CLIMATE INSTABILITY AND ITS CONSEQUENCES, SERIOUS SOCIAL AND ECONOMIC CHANGES WILL BE NECESSARY — CHANGES THAT WILL NEED TO BE BOTH RAPID AND RADICAL, IF THERE IS TO BE ANY SERIOUS ATTEMPT BOTH TO MITIGATE THE IMPACT OF EMISSIONS (TO MINIMISE FURTHER DAMAGE TO THE EARTH’S CLIMATE SYSTEMS), AND TO HELP COMMUNITIES ADAPT TO THE CONSEQUENCES OF WARMING THAT IS ALREADY “LOCKED IN” (FROM EMISSIONS ALREADY RELEASED). THIS SHIFT IN USAGE REFLECTS AN INCREASINGLY CLEAR AND EXPLICIT RECOGNITION THAT TRANSITIONING TO A SUSTAINABLE FUTURE SOCIETY WILL INVOLVE A DEEP TRANSFORMATION OF THE CURRENT ONE”<sup>19</sup>.**

Similarly, alliances of community groups, scholars, and trade unions in South Africa refer to the concept of ‘deep just transitions’, which put climate justice at the centre of any just transition plan, that question existing power relations and that put public control at the core of the process<sup>20</sup>.

In the sections that follow, this report will highlight the experiences from the cities that took part of this project.

**Section 2** provides an analysis of the effects of climate change on urban transport workers, and the consequences of technology fixes, concentrating on electric buses and ticket vending automation. These two effects are pressuring workers and communities to engage with the climate crisis and put forward responses based on their realities.

**Section 3** highlights a case study from each of the participating cities, focusing on different aspects of the transition and the effects on a broad group of workers.

**Section 4** sets a framework for a Just Transition in Urban Transport that incorporates demands from workers on the ground. These ten points of agreement represent a combination of workplace, specific, just transition elements; and broader societal, transformative changes that need to take place.

**Section 5** sets recommendations for the ITF and its affiliates moving forward.

**Section 6** presents concluding reflections.

Every project city shared this common understanding: passengers and communities who depend on public transport are as important as workers. **Therefore, the commitment is not only to transform their workplaces, and their jobs, in view of the climate emergency. It is also a commitment to ally with the community, including workers in other sectors, in transforming the urban transport system.** In this way, the just transition framework that results from this project is set in the context of climate justice.

<sup>19</sup> Sweeney and Treat (2018). Trade unions and just transition.

<sup>20</sup> [https://www.safsc.org.za/wp-content/uploads/2020/08/Final-Climate-Justice-Charter\\_EN\\_August2020.pdf](https://www.safsc.org.za/wp-content/uploads/2020/08/Final-Climate-Justice-Charter_EN_August2020.pdf)

## 2. CONTEXTUALISING THE JUST TRANSITION

### CLIMATE CHANGE IMPACTS ON WORKERS

All the workshops in this research saw the connection between climate change and health and safety hazards for workers. To paraphrase Tony Mazzocchi, the original thinker behind the just transition concept, if the workers are not safe, neither are the communities who live around them and use their services.

More common extreme weather events are a problem for workers, for communities, and also for employers. A 2021 publication in Nature highlights growing concerns over the effects on labour of extreme weather events, in particular heatwaves. The article says that in high humidity:

**“WORKERS MUST SLOW WORK, HYDRATE, AND TAKE BREAKS IN THE SHADE TO ALLOW THE BODY TO COOL OFF AND MAINTAIN A SAFE INTERNAL BODY TEMPERATURE OR RISK INJURY, ILLNESS, OR DEATH IF THEY CONTINUE TO WORK AT HIGH EXERTION LEVELS. WORKERS IN MANY LOW-LATITUDE LOCATIONS ALREADY EXPERIENCE HEAT EXPOSURE THAT MAKES PHYSICAL LABOUR UNSAFE. LABOR PRODUCTIVITY LOSSES ASSOCIATED WITH REDUCTIONS IN WORK RATE DUE TO HEAT EXPOSURE CAN BE AS HIGH AS ~280–311 BILLION \$US PER YEAR”<sup>21</sup>.**

Extreme weather events are complex to address for urban transport workers who offer a continuous service. While sectors such as agriculture and construction have instituted mitigation measures like shifting working time to cooler parts of the day, that kind of response is impossible in urban transport.

Workers in urban transport systems are directly impacted by the changes in weather patterns, increased flooding, air pollution and lack of action by governments and employers.

Climate change has been a dominant force to reckon with, and increasingly it has become a health and safety hazard for workers in urban transport.

The climate crisis affects both workplaces and communities served by urban transport workers. Its negative impacts are exacerbated by informal employment, gender-based discrimination against women workers, outsourcing, precarious work, low wages, and a lack of freedom of association. It reinforces a system that profits from cheap labour, unpaid women’s work, and the continued squeeze on the public services that workers provide.

Power relations within society are thrown into sharp relief by the consequences of climate change. Women in urban transport networks hold the jobs that are most precarious, and are exposed to extreme weather events. Outdoor ticket sellers, service support workers, food providers and cleaners are commonly women, often working in precarious conditions, in informal employment, and especially exposed to extreme weather events. Environmental stressors like extreme weather events make women even more vulnerable, especially by restricting their capacity to make meaningful choices and meaningful choices<sup>22</sup>.

**“CLIMATE CHANGE HAS BEEN A DOMINANT FORCE TO RECKON WITH, AND INCREASINGLY IT HAS BECOME A HEALTH AND SAFETY HAZARD FOR WORKERS IN URBAN TRANSPORT”**

In a survey conducted among jeepney<sup>23</sup> workers who took part in the research in Cebu, they asked fellow workers to give their opinions and priorities regarding the Public Utility Vehicle (PUV) modernisation process that the government launched.

<sup>22</sup> Rao, N.; Mishra, A.; Prakash, A.; Singh, C.; Et.al (2019).

<sup>23</sup> A jeepney is a form of minibus in the Philippines, originally using (and so named after) ex-WW2 US military jeeps.

<sup>21</sup> <https://www.nature.com/articles/s41467-021-27328-y>

The respondents were all positive in their assessment of jeepney modernisation, focusing on the effects in combating climate change, and also in improving the living conditions of the jeepney workers themselves. The severity of extreme weather events has meant that workers are more aware here than in other locations. Their answers reveal that there is a broad understanding of the need to mitigate the impact of climate change, along with other benefits of modernisation.

The impacts of the climate crisis on workers create something known as “climate-related uncertainty”<sup>24</sup>. This refers to the inability to predict the scale, intensity and the impact of climate change on human and natural environments. This explanation for climate uncertainty matches the experiences of workers on the ground:

**“AS A DRIVER OUT IN THE STREETS EVERY DAY, YOU SEE CHANGES IN WEATHER. INDEED, GLOBAL WARMING IS THE NUMBER ONE CAUSE OF BAD WEATHER AND WEATHER CHANGES YOU CANNOT PREDICT.”**

*App-based delivery worker, Cebu, Philippines*

The uncertainty is not a standalone; it interacts with other socio-economic conditions. Climate uncertainty reinforces existing patterns of inequality, in particular gender inequalities. As highlighted in the examples below, climate uncertainty is very much present in the daily experiences of urban transport workers.



Our Jobs, Our Planet, Our Public Transport rally in Hyderabad, India, November 2021 | Credit: IFAT.

<sup>24</sup> Mehta, L., Srivastava, S., Adam, H.N. et al. (2019).

## EXTREME WEATHER EVENTS

Urban transport workers are highly exposed to the intensification of extreme weather events. Workers have to continue operating transport, delivering food, helping passengers and making cities run in the direst circumstances. Extreme weather events are becoming more frequent. Cities and employers have not adapted to the new realities that workers experience in these conditions.

During hot days, workers suffer from a lack of shelter, appropriate cooling at their workplaces and adequate clothing. This often leads to dehydration. The lack of sanitary facilities makes women workers especially more reluctant to hydrate themselves.

A landmark report in 2019 by the ILO, entitled *Working on a Warmer Planet*, highlighted the impacts of climate change and increasingly hot temperatures on workers, especially outdoor workers. A general conclusion of the report was that heat stress is a health and safety hazard:

**TEMPERATURES ABOVE 24–26°C ARE ASSOCIATED WITH REDUCED LABOUR PRODUCTIVITY. AT 33–34°C, A WORKER OPERATING AT MODERATE WORK INTENSITY LOSES 50 PERCENT OF HIS OR HER WORK CAPACITY. EXPOSURE TO EXCESSIVE HEAT LEVELS CAN LEAD TO HEATSTROKE, SOMETIMES EVEN WITH A FATAL OUTCOME**<sup>25</sup>

Heat waves across the world have resulted in disruption of public transport systems. A study published by the *Lancet* in 2018<sup>26</sup> highlights increasing risks of dehydration for workers exposed to heatwaves, in particular outdoor workers. A follow up study on the impact of heatwaves on workers states that:

**IN OCCUPATIONAL SETTINGS, AND ESPECIALLY WHEN WORKERS ARE EXPOSED TO HEAT EXTREMES DURING WORK AND LEISURE TIME (INCLUDING OVERNIGHT), ADEQUATE REHYDRATION APPEARS TO BE CHALLENGING, AS INDICATED BY THE HIGH PREVALENCE OF LOW HYDRATION STATUS AT THE ONSET OF WORK IN OCCUPATIONS WITH HIGH HEAT STRESS.**<sup>27</sup>



**Knee-Deep Floods in Cebu**

Source: <https://www.everythingcebu.com/lifestyle/public-services/media/knee-deep-floods-in-cebu/>

25 ILO (2019).

26 Flouris, A.; Dainas, P.; Ioannou, L.; et al. (2018)

27 Ebi et al 2021.



Responses from participants from the ticket vending company Recaudo Bogota in our workshops in Colombia reinforce these facts:

**“LACK OF ACCESS TO WASHROOMS IS ONE OF OUR BIGGEST PROBLEMS. WOMEN WORKERS DO NOT HAVE ACCESS TO COMPANY-PROVIDED FACILITIES, WHILE THE NEARBY RESTAURANTS DO NOT ALWAYS ALLOW US TO GO IN. MANY WORKERS TRY TO DRINK NO WATER DURING THE SHIFT SO AS NOT TO HAVE TO USE THE WASHROOM. IT IS COMMON FOR WOMEN WORKERS TO SUFFER FROM DEHYDRATION ON THE JOB, ESPECIALLY ON SCORCHING DAYS.”**

*Vivian Acosta, Ticket Vending worker, and SNNT union representative*

The same 2021 publication in the *Lancet* addresses the consequences of heatwaves and extreme heat conditions on outdoor workers. It stresses that having no policy to adapt workplaces (such as access to drinking water, proper sanitation or proper breaks) means lower productivity, and higher rates of accidents and sick leave<sup>28</sup>.

Heatwaves are becoming commonplace across major cities. The worsening impact of climate change on the incidence of hot days has been gauged through a model set at 32°C for extreme heat. Taking a base year of 1971, the model produces staggering results on commonplace heatwaves.

For Manila in the Philippines, there were 146 days in 1971 when the temperature breached 32°C. By 2021, there were 204 days. For Cebu, in the same country, in 1971 there were 54 days when it was hotter than 32°C. By 2021, there were 117 days higher than that level. For Jakarta, the model estimates the 155 days above 32°C in 1960, will reach over 250 days by 2030<sup>29</sup>. Similar patterns can be established for most cities in the Global South. This will have a direct impact on workers' health and safety, and the quality of public transport. Cities, employers and unions need to address the issue urgently.

Another common occurrence is the gap in temperatures within the same working day. Many urban transport workers start their workday in the early morning hours and continue throughout the afternoon.

This came up especially in high altitude cities (Santiago, Chile and Bogota, Colombia), but it is also becoming an issue in the other locations. It is not only an issue of shelter and access to adequate sanitation, there is also a need for appropriate protective equipment and clothing that is adaptable to the changing weather.

**“WHEN I STARTED WORKING IN THE SUBWAY MANY YEARS AGO, THE CLOTHING WE HAD WAS USEFUL FOR THE WEATHER. BUT TODAY, THE CLOTHING IS NOT USEFUL AT ALL. DURING WINTER, WE START WORK WITH TEMPERATURES OF -3°C, AND BY MIDDAY WE ARE HITTING OVER 20°C.”**

*Subway station supervisor, Santiago, Chile*

Urban transport workers perceive extreme heat as a problem that affects mostly poor workers, while the wealthy have access to shelter, sanitation, and air conditioning. A participant in the workshops in Hyderabad, expressed this inequality in stark terms:

**“WHILE THE RICH MAY HAVE SIX AIR CONDITIONERS IN THEIR HOUSES, WE DON'T HAVE ACCESS TO COOLING AT WORK OR AT HOME. IT IS VERY DIFFICULT TO COPE THIS WAY.”**

*Platform passenger service driver, Hyderabad, India*

Similar observations were made in Jakarta:

**“THE AIR TEMPERATURE IS GETTING WARMER, BUT THE WEATHER CAN CHANGE DRASTICALLY TO HEAVY RAIN, BUT PEOPLE ARE NOT AWARE OF THE CHANGE OF WEATHER WHILE WORKING. THE WORK SCHEDULE SOMETIMES BECOMES UNSUITABLE AND CANNOT BE ARRANGED ON TIME. PEOPLE WHO WORK IN JAKARTA USUALLY LIVE IN THE BODETABEK AREA. THEREFORE, WORKERS NEED TO PAY ATTENTION TO WEATHER CONDITIONS BOTH IN THOSE AREAS WHERE THEY LIVE AND WHERE THEY WORK.”**

*Train worker, Jakarta, Indonesia.*

<sup>28</sup> Ibid.

<sup>29</sup> <https://www.nytimes.com/interactive/2018/08/30/climate/how-much-hotter-is-your-hometown.html> (subscription required)

## FLOODING

Extreme weather events mean flooding occurs both more often and more intensely, leaving urban transport workers vulnerable, while the pressure to continue providing services increases in those circumstances. Workers across cities in the Global South who took part in the workshops told us that flooding increases the level of stress and stability at home and in their workplace. Most workers pointed out that their own houses get flooded often during heavy rains, which adds to the stress of having to continue providing transport during the emergency. This is especially pressing for food delivery workers, who are expected to continue providing their services when floods make cities nearly impossible to navigate.

**“WE’VE FELT THAT THE TYPHOONS ARE GETTING WORSE, INCREASING FLOODING IN THE CITY, AND THEY REQUIRE US TO DO THE DELIVERIES UNDER ALL CIRCUMSTANCES WITHOUT EXTRA SUPPORT.”**

*Delivery worker, Cebu, Philippines.*

On the other side of the world, the problem is similar.

**“WE FACE PERMANENT RISK FROM HAVING TO WORK OUTSIDE, AND BEING SUBJECT TO CONTINUAL CHANGES IN THE WEATHER PATTERNS. WE ALSO ‘BREATHE IN’ POLLUTION ALL THE TIME. TRAFFIC ACCIDENTS ARE VERY COMMON, ESPECIALLY DURING HEAVY RAINS.”**

*Delivery worker, Bogota, Colombia*

In countries with wet and dry seasons, changes to weather patterns are clear to urban transport workers. The rainy season is increasingly unpredictable, both in its timing and in the overall force it will have.

**“IT USED TO RAIN IN OCTOBER, BUT NOW WE NEVER KNOW [WHEN IT WILL RAIN]. I WORK AT THE BUKIT DURI ELECTRIC TRAIN WAREHOUSE, WHICH IS SURROUNDED BY THE CILIWUNG RIVER. EVERY NIGHT, IF THERE IS A LITTLE RAIN, WE IMMEDIATELY CHECK THE CONDITION OF KATULAMPA AND MANGGARAI FLOODGATES TO OPEN THE FLOOD ANTICIPATION POSTS. I WORK IN A WAREHOUSE WHERE THERE ARE A LOT OF ELECTRIC TRAIN SPARE PARTS THAT NEED TO BE SECURED. THE POSITION OF THE WAREHOUSE IS ON THE FIRST FLOOR, WHILE LAST YEAR THE FLOOD REACHED TWO METRES.”**

*Train worker, Jakarta, Indonesia*

In Nairobi, Kenya, unpredictable rains were a key factor in connecting lower standards of work and income. Most workshop participants associated flooding with a loss of income, since it disrupts operations and leads to traffic congestion. Often, it results in fare hikes for passengers.

Other studies tell a similar story. In a 2020 study of Kinshasa, Democratic Republic of the Congo, a group of World Bank researchers found that:

**“FLOOD DISRUPTIONS CAUSE INCREASES IN PUBLIC TRANSIT HEADWAYS, TRANSIT REROUTING, DECREASES IN TRAVEL SPEEDS, WHICH TRANSLATE INTO TRAVEL DELAYS AND LOSS OF JOB ACCESSIBILITY. THIS INDUCES SUBSTANTIAL ECONOMIC COSTS TO LOCAL COMMUTERS – ABOUT \$1.2 MILLION DAILY – AND HINDERS THE ESTABLISHMENT OF AN INTEGRATED CITYWIDE LABOUR MARKET”<sup>30</sup>**



30 He, Y.; Thies, S.; Avner, P.; Rentschler, J. (2020)

## AIR POLLUTION

Each year, millions of people die from air pollution. Urban transport workers are especially exposed to vehicle fumes, which leads to several chronic illnesses, in particular respiratory illnesses, many of which only really materialise towards the end of the workers' careers. The impact of air pollution on workers' health is the main reason behind the fact that workers support the introduction of electric urban transport. It is perceived both as a major solution to the respiratory illnesses that workers (in particular drivers, service support workers and ticket vendors) suffer, and a solution to the overall problem of air pollution in cities.

**AIR POLLUTION IS THE MAIN REASON WORKERS SUPPORT THE INTRODUCTION OF ELECTRIC URBAN TRANSPORT”**

Air pollution is markedly worse in cities of the Global South, and the intensity of pollution directly affects workers. Many urban transport workers do not have adequate ventilation when working indoors, and as outdoor and semi-outdoor workers, they are denied any options for mitigating their exposure to air pollution. They provide an essential service, so they must work even when the risk levels are such that other industries would be suspended. Lack of quality personal protective equipment (PPE), a structural problem well before the Covid-19 pandemic, has worsened.

**“TRAFFIC AND POLLUTION ARE THE MAIN CAUSES OF STRESS FOR US. DELIVERIES GET DELAYED AND CUSTOMERS GET ANGRY, AFFECTING OUR INCOME. WHEN WE LOSE INCOME, THERE IS LESS MONEY FOR MAINTENANCE OF THE MOTORCYCLE WHICH CAN LEAD TO ACCIDENTS. STRESS OFTEN RESULTS IN ROAD RAGE.”**

*Delivery rider, Cebu, Philippines*

31 Cremades, R.; Sanchez-Plaza, A; Hewitt, R.; Et al (2021) “Guiding cities under increased droughts: The limits to sustainable urban futures” Ecological Economics, Vol. 189, 107140. <https://doi.org/10.1016/j.ecolecon.2021.107140>

32 Plautz, Jason (11 April 2019) Drought is not just about water. It affects air pollution, too. <https://www.science.org/content/article/drought-not-just-about-water-it-affects-air-pollution-too>

33 Nature, ‘Feeling the Heat’ <https://www.nature.com/articles/s41558-018-0169-y>

## DROUGHTS

Transport workers are also susceptible to increasing dry conditions and lack of rain. This leads to shutdowns in water supply<sup>31</sup>, and access to drinking water was already problematic. Dehydration, due to a lack of access to drinking water, has become a major cause of illness for urban transport workers.

Although most directly connected to problems in water supply, there is increasing concern about the effects of droughts on air pollution<sup>32</sup>. Also, droughts are interrelated with extreme heat and the capacity to adapt to heatwaves. As a 2018 editorial in *Nature* asserted:

**“DROUGHT AND HEAT WAVES, HOWEVER, ARE INEXTRICABLY LINKED, AND IT IS OFTEN DIFFICULT TO TREAT THEM AS DISTINCT PHENOMENA. [...] WARMER TEMPERATURES<sup>32</sup> (DURING HEATWAVES, FOR EXAMPLE) ENHANCE EVAPORATION AND AMPLIFY DROUGHT CONDITIONS. BUT THE CONVERSE IS ALSO TRUE. DROUGHT CONDITIONS CAN ENHANCE OR DAMPEN HEATWAVE TEMPERATURES.”<sup>33</sup>**

Droughts make working conditions less stable. In some cities with extensive drought seasons, like Santiago, Chile, the frequency and intensity of the dry season are a commonplace concern:

**“THE AIR QUALITY IN OUR CITY HAS WORSENE WITH THE CONTINUED DROUGHT THAT WE’VE BEEN EXPERIENCING. IT HASN’T RAINED FOR MONTHS AND WE ARE WORRIED ABOUT ACCESSING DRINKING WATER.”**

*Bus worker, Santiago, Chile*





# HOW DOES CLIMATE CHANGE AFFECT URBAN TRANSPORT WORKERS?

AS WORKERS IN THE PUBLIC TRANSPORT SYSTEMS IN OUR CITIES, WE ARE ON THE FRONTLINES OF THE CLIMATE EMERGENCY.

CITIES & EMPLOYERS HAVE NOT ADAPTED TO THE REALITIES OF WORKER EXPOSURE TO INTENSIFYING WEATHER:

- SHELTER
- ADEQUATE CLOTHING
- APPROPRIATE COOLING
- SANITARY FACILITIES

## AIR POLLUTION

TRANSPORT WORKERS HAVE A HIGHER INCIDENCE OF RESPIRATORY ILLNESSES.

"WORKERS ARE FORCED TO WORK OVERTIME, IN TOUGH CONDITIONS, WITHOUT APPROPRIATE PROTECTIONS & NO EXTRA PAY."

NAIROBI, KENYA

## EXTREME WEATHER EVENTS

"WHILE THE RICH MAY HAVE 6 AIR CONDITIONERS IN THEIR HOUSES, WE DON'T HAVE ACCESS TO COOLING AT WORK, NOR AT HOME."

HYDERABAD, INDIA

## DROUGHT

DEHYDRATION DUE TO LACK OF ACCESS TO DRINKING WATER HAS BECOME A MAJOR CAUSE OF ILLNESS FOR TRANSPORT WORKERS.

OUR PUBLIC TRANSPORT

## FLOODING

"WE'VE FELT THAT THE TYPHOONS ARE GETTING WORSE, CREATING MORE FLOODING IN THE CITY. & WE ARE REQUIRED TO DO THE DELIVERIES UNDER ALL CIRCUMSTANCES WITHOUT EXTRA SUPPORT."

Representation of effects of climate change on urban transport workers  
Art Credit: Elizabeth Niarhos, @lizar\_tistr

## TECHNOLOGY ON ITS OWN DOES NOT OFFER A COMPLETE SOLUTION

Governments and employers have responded to the climate crisis by speeding up the processes of electrification and automation. While workers in urban transport support clean, safe and reliable public services, the processes of electrification and automation are failing workers and communities, by displacing good-paying jobs, deepening precarity, privatising services, and cutting access to communities. Technological fixes by themselves are false solutions. Workers have the knowledge, skills, and experience that are critical to reinventing transport holistically to confront the climate crisis.

Workers' experiences with these processes contradict the idea that these are 'win-win' solutions. In all our workshops, workers said that introducing new technologies usually had more to do with the search for profit, rather than the improvement of urban transport systems or tackling climate change.

**NEW TECHNOLOGY USUALLY HAS MORE TO DO WITH PROFIT THAN IMPROVING URBAN TRANSPORT SYSTEMS OR TACKLING CLIMATE CHANGE”**

Changes towards low-carbon urban transport systems need to move beyond technological fixes and incorporate the needs of urban transport workers and communities as a priority in planning, design, and implementation. The transition can be a tool to transform cities away from profit-driven transport and into publicly owned, regulated, accessible and clean urban transport systems.



## ELECTRIC BUSES ARE NOT A SUFFICIENT RESPONSE TO THE CLIMATE CRISIS

All over the world, cities are undergoing a process of electrification, often focused on buses. Electric buses are presented as a panacea for climate woes. Three arguments are often presented in favour of electric buses.

- 1.** They pollute less, which is the most important environmental concern in cities.
- 2.** Although there are high upfront costs, electric buses will save thousands of dollars in maintenance and fuel consumption, making transport cheaper in the medium and long term.
- 3.** They improve users and public transport workers' health.

These three points have led city governments, major employers and international financial institutions to overwhelmingly support electric buses. Communities around the world are also supportive of this policy. People want to live with cleaner air, travel on green buses, and experience what they perceive to be a better service than traditional combustion services. Stakeholders around the world have expressed the substantial environmental and public health benefits that electric buses can provide. Public transport workers (drivers, mechanics) can benefit directly from electric buses through the improvement in air quality (both within and outside the buses). Electric buses have 75% lower greenhouse gas emissions over their lifetimes than diesel buses.<sup>34</sup>



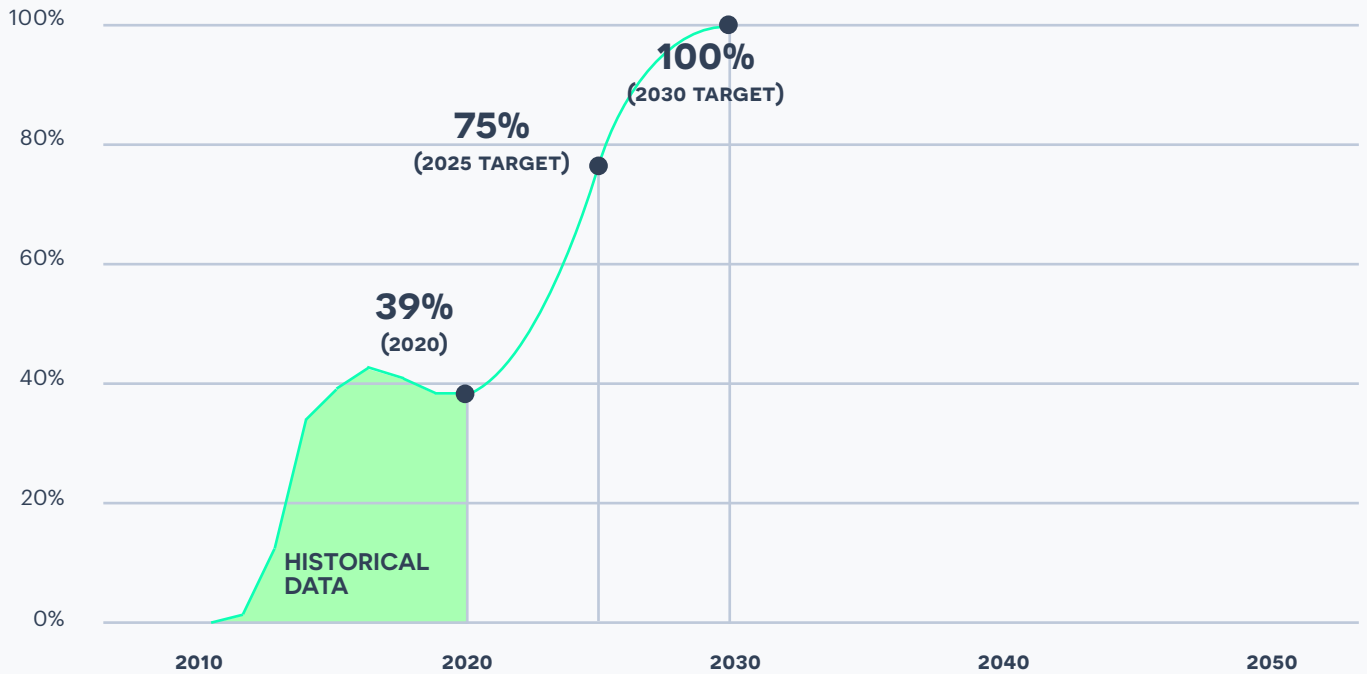
Electric bus in Jakarta, Indonesia Credit: Pradamas Gifarry

<sup>34</sup> Jobs that Move America 2019.

According to the WRI State of Climate Action 2021 report, although lacking in most fields, action on electrification of public transport (especially buses) is one that is moving at a fast pace.

**Figure 3.** Share of electric buses worldwide. WRI 2021: 103.

**OFF TRACK:** CHANGE IS HEADING IN THE RIGHT DIRECTION AT A PROMISING BUT INSUFFICIENT PACE

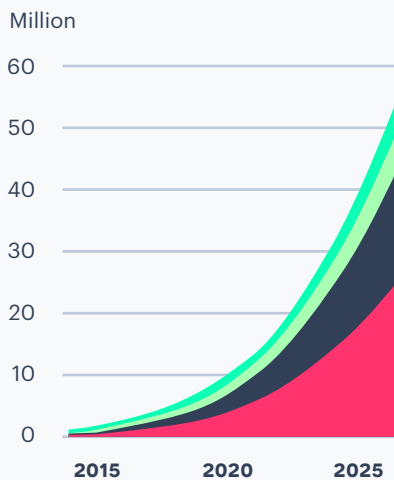


**NOTE:** GRAPH SHOWS SHARE OF BATTERY ELECTRIC VEHICLE BUS SALES ONLY; FUEL CELL ELECTRIC VEHICLE BUS SALES WERE NEAR ZERO FOR ALL COUNTRIES EXCEPT CHINA, WHERE THEY NUMBERED ROUGHLY 2,500 UNITS IN 2019  
**SOURCE:** BLOOMBERGNEF (2021A)

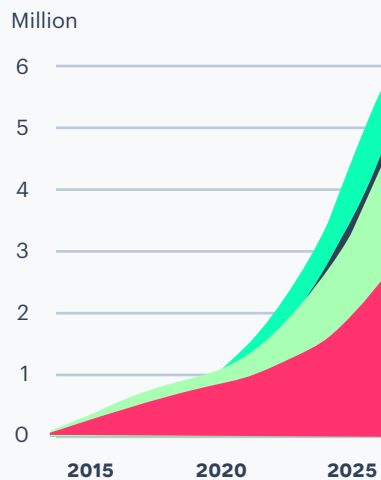
But it is interesting to compare this with the global tendency for all EVs.

**Figure 4.** Global EV fleet by segment and market BNEF 2021. Global EV Outlook 2021.

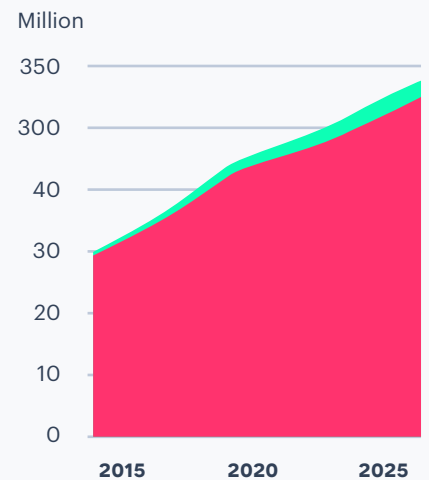
**PASSENGER EVS**



**E-BUSES & COMMERCIAL EVS**



**ELECTRIC TWO- & THREE- WHEELERS**



**SOURCE:** BNEF. **NOTE:** TWO-WHEELERS INCLUDES MOPEDS, SCOOTERS AND MOTORCYCLES, EXCLUDES E-BIKES



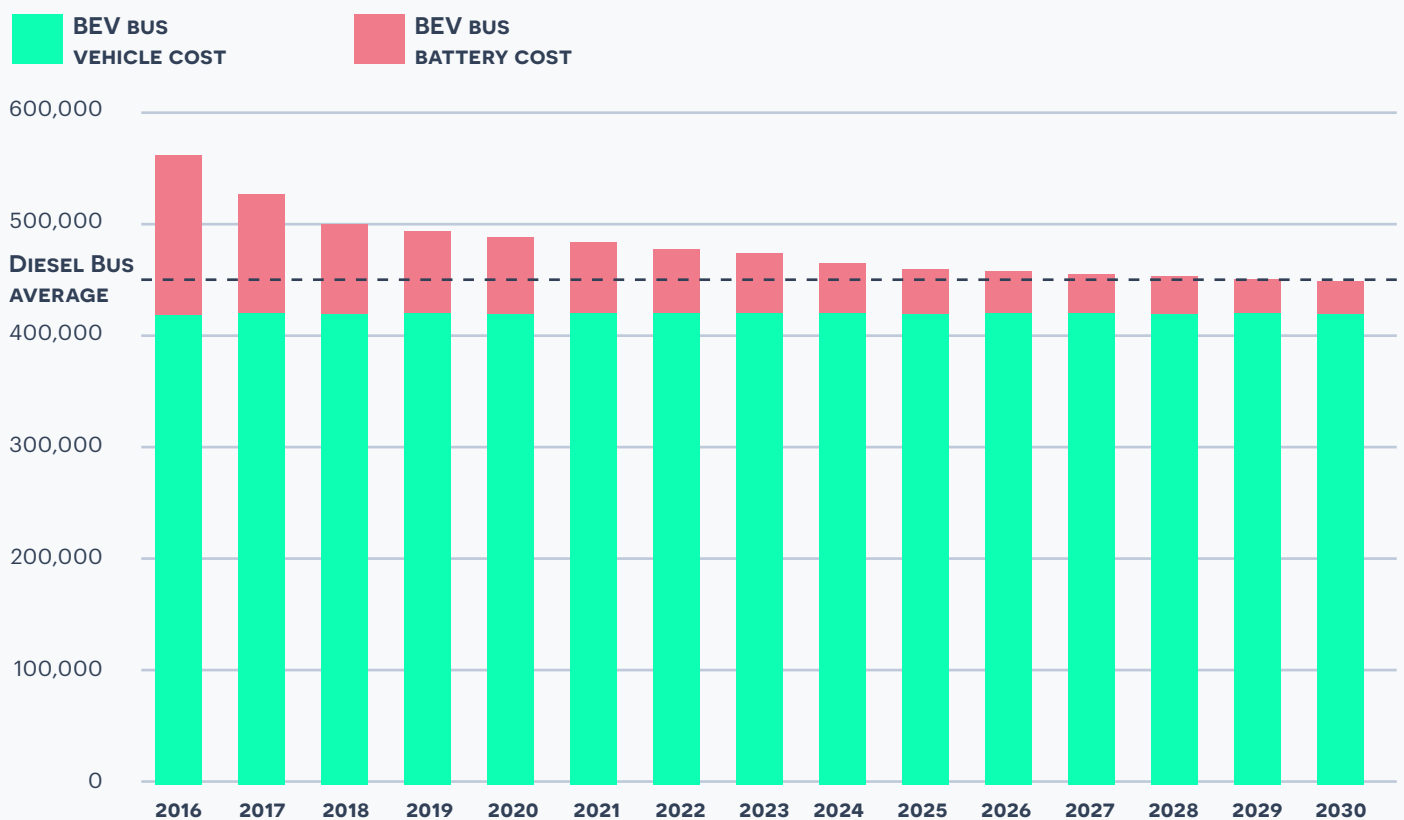
While electric buses are going to become the norm, electrification in two-and-three-wheelers is moving at a much faster pace. This speed is based on lower up-front costs and easier charging infrastructure (two-and-three wheelers can be charged from any charging station, including at home).

Although the movement upwards has been substantially led by China’s introduction of electric buses, it is a process that is happening all over the world, with increasing speed.

Between 2010 and 2020, the sector witnessed exponential growth, and despite slowing down in the pandemic, there seems to be an uptick again in 2021.

The process has been seen in most of the cities that took part in this project. Bogota is phasing in electric buses in January 2022, expecting to have the largest fleet of electric buses in Latin America within two years.

**Figure 5.**  
Cost of electric bus vs Diesel bus, in US Dollars



WRI 2021 STATE OF CLIMATE ACTION REPORT. 104

Electric buses seem to be a win-win solution. Transforming public transport while lowering carbon emissions, it’s a formula that no city will want to miss out on. The recent experience from workers around the world points to a few issues that need to be addressed when introducing electric buses, and that refer not

so much to a problem with the technology per se, but with the political economy of electric buses’ introduction. Four issues for workers and communities have come up in discussing just transition throughout this project: jobs; costs and logistics; access and services; decision-making.

35 Jobs to Move America, p.5 [https://jobstomoveamerica.org/wp-content/uploads/2019/12/BEB-Report\\_electronic.pdf](https://jobstomoveamerica.org/wp-content/uploads/2019/12/BEB-Report_electronic.pdf)



# JOBS

The main narrative is that introducing electric buses will create more jobs. According to a comprehensive report produced by Jobs to Move America in 2019, the benefits of electric buses can be significant. For every 1 million US dollars invested in Battery-Electric Buses (BEB), about 5.7 jobs (US market) would be created along the value chain<sup>35</sup>. The report by WRI and ITUC points to a similar increase in the number of jobs, as does ITF’s own report with C40 Cities.

However, as witnessed in the cases of Bogota and Cebu, as well as the labour impact assessments from the BRT projects in Dakar and Nairobi, there is the question of net jobs and who gets the jobs on the new electric buses. Older workers are usually left out of new bus operation and maintenance, while companies do not consider the roles that informal workers often have in public transportation. Avoiding these issues leads to the displacement of thousands of workers central to the operation of public transport, who could contribute directly to the electrification process.

## THERE IS THE QUESTION OF NET JOBS AND WHO GETS THE JOBS ON THE NEW ELECTRIC BUSES”

Electric buses have, on average, 80% fewer parts than conventional internal combustion buses. This means that there is far less mechanical maintenance needed, and so lower numbers of maintenance staff are required<sup>36</sup>. Regular Battery Electric Bus maintenance is distinct from diesel bus maintenance; the largest difference is the emphasis for BEBs on electric systems within the buses and charging stations as well as in the charging monitoring system and communication system.

By some estimates in the US, only 15% of mechanics had been trained to maintain electric buses<sup>37</sup>. The Amalgamated Transit Union (ATU), an ITF affiliate in the US, estimates that only 3% of its members are trained in electric bus operation and maintenance.<sup>38</sup>

### IMPORTANT CONSIDERATIONS FOR WORKERS WITH THE INTRODUCTION OF ELECTRIC BUSES

Issue	Implications for workers
<b>Operation</b>	Drivers will need to be retrained in:
	• Safe operation
	• Charging procedures
	• Different braking and drive characteristics
	• Eco-driving to reduce energy consumption
	Drivers pay and working time need to be renegotiated considering charging schedules.
<b>Maintenance</b>	Fewer mechanics, more electricians:
	• Less need for mechanical maintenance staff, higher need for electrical
	• Electrical work becomes more extensive and specialist, including high voltage power equipment
	• Overall staff numbers are expected to decrease for maintenance
<b>Charging</b>	Work process at terminal changes from ‘fuelling and cleaning’, to ‘charging and cleaning’. Retraining needed for workers to manage charging stations
	Different safety hazards operating with high voltage equipment

Source: Adapted from EBRD/IUTP/GIZ 2021<sup>39</sup>

36 EBRD/UITP 2021. [https://cms.uitp.org/wp/wp-content/uploads/2021/06/EBRD\\_UITP\\_GIZ\\_Going-Electric-A-Pathway-to-Zero-Emission-Buses\\_June2021.pdf](https://cms.uitp.org/wp/wp-content/uploads/2021/06/EBRD_UITP_GIZ_Going-Electric-A-Pathway-to-Zero-Emission-Buses_June2021.pdf)

37 <https://ttd.org/policy/policy-statements/the-impacts-of-zero-emission-buses-on-the-transportation-workforce/>

38 <https://www.smartcitiesdive.com/news/electric-vehicle-transition-labor-unions-see-worker-protections/599067/>

39 [https://cms.uitp.org/wp/wp-content/uploads/2021/06/EBRD\\_UITP\\_GIZ\\_Going-Electric-A-Pathway-to-Zero-Emission-Buses\\_June2021.pdf](https://cms.uitp.org/wp/wp-content/uploads/2021/06/EBRD_UITP_GIZ_Going-Electric-A-Pathway-to-Zero-Emission-Buses_June2021.pdf)

The question of what happens to the existing maintenance staff is central, as well as the training needed for workers to be able to transition to electric buses. More electricians and fewer conventional mechanics will be needed. Drivers will need to receive different training on the operation of the bus, especially in the fields of recharging and operating high-voltage batteries.

Women workers especially need to be incorporated in hiring plans for electric buses. Cities are announcing programmes that promote the employment of women workers in the operations of the new electric buses, but these programmes are often incomplete and do not provide sufficient support for women workers to be able to take advantage of the opportunity.

In Bogota, the government announced 450 of the new 1500 electric bus drivers were going to be women<sup>40</sup>. Although the announcement was made in late July 2021, six months later the electric bus company in charge of the operations, Green Movil (a Transdev-owned operator), had only hired 15 women drivers<sup>41</sup>, due to a lack of sufficient qualifications from candidates and a lack of support needed for women workers to be able to take advantage of the opportunity. Although the programme required women drivers with a car licence, it did not take into account that in Colombia, according to the numbers of transit authorities, in 2021 only 27% of driving licences were in women's hands<sup>42</sup>. This barrier shows that transition programmes need more thought and negotiation.

## **COSTS AND LOGISTICS: TECHNOLOGY SOVEREIGNTY**

Electric buses in the Global South depend on technology that only a few companies have, and that includes the supply chain for new parts. In comparison to internal combustion buses, electric bus manufacturing and maintenance can lead to the centralisation of power in a few (often private) hands, with little control for governments, especially local ones, over major decisions. As an example, Bogota is going through a concentration of bus operations, with hundreds of companies providing services in the traditional bus system, to only a handful in the electric buses. This has impacts along the local supply chain, and opens questions about technology sovereignty (see Section 4).

## **ACCESS & SERVICES**

A third issue to discuss is whether electrification of buses could lead to a cut in services (due to the high upfront cost, which makes municipalities reduce expenses in other areas). This was certainly the case in neighbourhoods of Bogota, where electric replaced traditional buses and cut off services from communities. Similarly, the modernisation of the jeepney fleet in the Philippines has led to increasing fares for passengers, making transport less accessible. In short, public bus electrification could lead to an "underfunding trap": investing a lot of money in the infrastructure without putting sufficient into operating budgets. This leads to loss of services and a lack of sufficient workers to provide a quality service.

40 [https://lanotapositiva.com/actualidad/bogota-formar-y-emplear-mujeres\\_60380](https://lanotapositiva.com/actualidad/bogota-formar-y-emplear-mujeres_60380)

42 RUNT Colombia <https://www.runt.com.co/runt-en-cifras>

41 Interview with Vivian Acosta, SNTT worker representative.

## DEMOCRATIC CONTROL

Despite the discourse on the need to decentralise public transport and make it more inclusive, the high cost and technical complexity of operating and maintaining electric buses is actually leading to a concentration of decision-making in a few hands. This is a problem for public transport workers, for users of public transport and for elected officials, in particular local authorities.

**THIS IS WHY HAVING PUBLICLY OWNED OPERATORS, DEMOCRATICALLY RUN WITH WORKERS AND USER INVOLVEMENT IS ESSENTIAL”**

Large multinational companies like Transdev now control the operation of public transport in many cities. These new actors may not be as accepting of unions as the previous ones.

If anything, as the case of TESLA shows, they may be openly opposed to workers’ organisations. This is why having publicly owned operators, democratically run with workers and user involvement is essential.

The question of what happens to the existing maintenance staff is central, as well as the training needed for workers to transition into the electric buses. More electricians will be needed, while less conventional mechanics. Drivers will need to receive different training on the operation of the bus, especially in the fields of recharging and operating high-voltage batteries.

This does not imply that workers oppose electric buses, but that a just transition policy needs to incorporate concrete plans within the operation and maintenance of the buses to include the needs of these workers.



Our Jobs, Our Planet, Our Public Transport rally in Jakarta, Indonesia, November 2021 | Credit: SPKA

43 [https://www.itfglobal.org/sites/default/files/node/page/files/Women\\_in\\_Public\\_Transport\\_OPT.pdf](https://www.itfglobal.org/sites/default/files/node/page/files/Women_in_Public_Transport_OPT.pdf)

<https://www.itfglobal.org/en/reports-publications/impact-future-work-women-in-public-transport>

<https://www.itfglobal.org/sites/default/files/node/page/files/Chapter%205%20Worker%20control%20of%20technology%20-%20the%20smart%20city.pdf>

## TICKET VENDING TECHNOLOGY. WOMEN WORKERS LEFT BEHIND

The findings of this report reinforce the work done by the ITF in recent years on the impacts of automation, especially in the ticket selling sector, on women workers.<sup>43</sup>

A second major technology impacting on urban transport workers is the automation process, specifically in the ticket vending section. The process is also called ‘cashless payments’, accelerated during the Covid-19 pandemic, has led to the displacement of thousands of mostly women workers in urban transport around the world. Employers, city governments and international financial institutions are increasingly promoting this cost-saving measure under the guise of tackling climate change.

See the presentation by the Interamerican Development Bank (IADB), a major funder of public transport projects in Latin America, on how it frames the introduction of digital payments as a form of sustainability:

**“CONTACTLESS PAYMENT SYSTEMS’ EASE-OF-USE IS LIKELY TO ENCOURAGE USERS TO LEVERAGE TRANSIT AND MICRO-MOBILITY OPTIONS, REDUCING THE USE OF CARS, AND ALSO CREATE A COMPELLING USE CASE FOR FORMAL FINANCIAL PRODUCTS, WHICH COULD HELP DRIVE PROGRESS TOWARDS GREATER FINANCIAL AND DIGITAL INCLUSION.”<sup>44</sup>**



Informal transport ticket collector in Dakar, Senegal  
Credit: ITF



Metro train in Santiago, Chile  
Source: Wikipedia Commons

In one long sentence, the bank sets the premise that introducing automation in ticket selling will promote public transport and get people out of cars (there is no evidence so far that this one innovation is actually leading that change), and also incorporate “formal financial products”. The piece is actually promoting a partnership between the IADB and Visa, a major credit card company.

This language on automation of ticket vending processes is often also joined by a ‘cost-saving’, which is largely based on the displacement of workers who operate as cashiers in the different forms of transport. Automation is presented as the way to make public transport more efficient. There is also a language of convenience and modernisation associated with it. Cashless payments are already a reality for societies, and in the post-Covid world, may become more so. The issue is that this policy leads to two processes worth highlighting from the perspective of urban transport workers.

First, it leads to displacing workers in the ticket vending sector, who are predominantly women workers around the world. This is the case in Nairobi, Kenya, where cashless payments have displaced thousands of women workers.<sup>45</sup> In the subway of Santiago, Chile, stations which introduced automated ticket machines went from six ticket sellers, to just one (See Santiago case study for more).

<sup>44</sup> <https://blogs.iadb.org/transporte/en/digital-payments-for-urban-mobility/41>

<sup>45</sup> ITF (2022) Cashless Ticket Payments & Impacts on Labour in Public Transport in Nairobi. <https://www.itfglobal.org/en/sector/urban-transport/additional-policy-material>

In the TransJakarta bus system of Jakarta, Indonesia, workers are also undergoing a shift to cashless payments that is leaving them without work alternatives. It also leads to the second effect, which is a decrease in the quality of public services. The absence of support workers at the stations is leading to frustration among users about lack of support with the new system:

**“THERE ARE STILL MANY TRANSJAKARTA BUS USERS WHO DON’T UNDERSTAND HOW TO USE ELECTRONIC MONEY CARDS AND VENDING MACHINES. THE REASON IS THAT SOCIALISATION ABOUT ELECTRONIC MONEY CARDS IS NOT MASSIVE SO THAT THERE ARE STILL MANY CUSTOMERS WHO DO NOT UNDERSTAND HOW TO USE ELECTRONIC MONEY CARDS AND AUTOMATIC TICKET VENDING MACHINES, ESPECIALLY CUSTOMERS WHO COME FROM OUTSIDE JAKARTA. IF THERE ARE CUSTOMERS WHO COMPLAIN TO THE TRANSJAKARTA CUSTOMER SERVICE CONTACT, THEY RARELY GET AN IMMEDIATE RESPONSE. THIS HAPPENS BECAUSE THE NUMBER OF TECHNICIANS TO HANDLE PROBLEMS AT THE VENDING MACHINE IS VERY SMALL – ONE TECHNICIAN FOR THREE CORRIDORS – SO THAT COMPLAINTS HANDLING OFTEN TAKES A LONG TIME EVEN THOUGH NOT ALL BUS STOPS HAVE THE VENDING MACHINE.”**

*TransJakarta bus worker, Jakarta*

In Bogota, Colombia, the union organising ticket sellers at Recaudo Bogota has been resisting the process of automation, since it is directly leading to job losses, and to more temporary contracts for women workers (who represent roughly 80% of the workforce).

**“WE USED TO HAVE THE MAJORITY OF WORKERS UNDER PERMANENT CONTRACTS, WHICH GAVE PEOPLE STABILITY AND UNION REPRESENTATION. IN 2019, WE USED TO HAVE 2700 WORKERS EMPLOYED IN RECAUDO, AND NOW WE ARE LESS THAN 2000. WE USED TO HAVE FOUR PEOPLE IN EACH SHIFT AND THAT HAS NOW BEEN CUT TO TWO. COLLEAGUES ARE COMPLAINING ABOUT OVERWORK, SINCE THE DEMANDS FROM USERS CONTINUE TO BE HIGH, DESPITE AUTOMATION. WITH THE AUTOMATION OF SO MANY STATIONS, NOW THE COMPANY IS ONLY HIRING WORKERS FOR A THREE-MONTH CONTRACT THAT MAY OR MAY NOT GET RENEWED. AT THE END OF**

**THE YEAR THEY ARE EFFECTIVELY DISMISSED, AND REHIRED AT THE BEGINNING OF THE NEXT YEAR, EFFECTIVELY LOSING ALL POSSIBILITY OF GAINING SENIORITY. THIS MAKES IT VERY DIFFICULT TO MAKE A LIVING, CONSTANTLY WITH THE STRESS OF POSSIBLY GETTING LAID OFF AND INCREASING WORKERS’ PRECARIOUS EMPLOYMENT.”**

*Vivian Acosta, Ticket vending worker, Bogota*

As the Santiago case study shows, the displacement of ticket sellers has led to job losses and outsourcing of existing jobs, and has also led to a lower quality service. Stations are increasingly empty of workers. In cases of emergency, in serving the elderly population, or those in need of support, public transport systems are leaving users to fend for themselves. This is especially worrisome during extreme weather events.

Machines cannot replace the valuable social contributions of workers. They may make some tasks more effective, and in pandemic times workers and users may welcome this, but they cannot replace the human response that is needed to operate a truly sustainable and adaptive public transport system. Although the dominant narrative from innovation companies and transit agencies places ‘user experience’ and sustainability at the centre of automation, a backlash from users is directed at workers, many of whom are losing their jobs along the way.

Three key issues must be addressed around the issue of automation in ticket vending:

- 1.** Labour impact assessments of the technological change to know how many workers will be affected.
- 2.** Retraining and relocation opportunities for workers displaced by automation.
- 3.** A negotiation process with women workers about the introduction of new technologies.

### 3. **LOOKING AT SPECIFIC SITUATIONS FOR A JUST TRANSITION: AN OVERVIEW OF EACH CITY**



## **CEBU CITY, PHILIPPINES: A WORKER-LED JUST TRANSITION: THE JEEPNEY CO-OPS IN CEBU CITY**



Modern Jeepney Co-operative in Cebu City, Philippines, June 2021.  
Credit: NCTU

In 2016, the government of the Philippines announced it would push for a Public Utility Vehicle (PUV) Modernisation programme. Announced as a “comprehensive system reform that will entirely change the public land transportation industry”, the programme aims to restructure all land transportation to reduce carbon emissions in cities in the country.

Although the programme refers to all land transportation, the government focused especially on the jeepneys, a popular mode of transportation based on the jeeps left by the US military after the Second World War. Jeepneys represent almost half the trips in Metro Manila and they carry between 18 and 30 passengers. Despite the reputation of jeepneys and buses as smoke belchers, they are efficient in terms of carrying capacity and thus lead to a reduction in traffic, fuel cost, greenhouse gas emissions and air pollution<sup>46</sup>. In the largest cities, private vehicles outnumber public utility vehicles by a factor of 25:1. Jeepneys comprise only 2% of all registered vehicles<sup>47</sup>.

**“ DESPITE THE REPUTATION OF JEEPNEYS AND BUSES AS SMOKE BELCHERS, THEY ARE EFFICIENT IN TERMS OF CARRYING CAPACITY ”**



New NCTU Co-op in Cebu, Philippines, 2021  
Credit: NCTU



Just Transition workshops, Cebu City, Philippines, May 2021 | Credit: NCTU

The PUV Modernisation programme focused first on the phase-out of 240,000 traditional jeepneys, putting almost 500,000 jobs at risk of displacement. The government pushed for a policy that will see the complete phase-out of internal combustion engine jeepneys and force a mandatory replacement by electric or cleaner engines (Euro IV, V or VI), as well as a concentration of the operator’s market. Around 70% of jeepneys in the Philippines are small operators (under four units per operator). The modernisation programme originally established that the new jeepney franchises would need to have at least 30 units.

In 2017, organised jeepney workers from different unions went on a concerted national strike, demanding that the modernisation programme should include a just transition. NCTU called for:

- A five-year moratorium before phasing out of old jeepney units as a preparation period.
  - An end imports of surplus or used vehicles from other countries.
  - State subsidy or some form of financial assistance to modernise transportation.
  - A Special Certificate of Public Convenience (CPC) for climate-friendly vehicles and engines.
  - Pilot-testing of government alternatives, like electric public transport vehicles and engines.
- Jeepney workers accepted clean vehicles were necessary but said they needed a just transition into the new operations, as well as a broader transition that allowed for local manufacturing of new units to be part of it and for a publicly run alternatives to be developed.

The strike won partial and temporary concessions from the central government:

- A three-year moratorium, pushing the phase-out to the end of 2020.
- A drop in capitalisation to 20,000 PHP per unit (USD 415), allowing for the formation of transport co-ops and giving them priority in bids over their present routes. This last element will be essential to a worker-run public transport, through the organisation of NCTU members into worker co-ops around the country.

46 ILO Regional Office for Asia and the Pacific, 2014

47 De Torres 2021.

The strike for a just transition opened the door to an idea and a transformation that shaped the process into a worker-run and -controlled public transport alternative.

**“THE CO-OPS WERE CHALLENGING BECAUSE MOST OF THE MEMBERS WERE SINGLE OPERATORS AND THEY HAVE HAD BAD EXPERIENCES WITH CO-OPS IN THE PAST. THIS WAS THEIR BREAD AND BUTTER FOR THE LONGEST TIME. WE HAD TO DO A LOT OF WORK TO EXPLAIN THAT THIS WAS OUR ONLY CHANCE TO TRANSITION, THAT THE CO-OPERATIVES WOULD PROVIDE STABILITY TO WORKERS AND THAT COLLECTIVE OWNERSHIP (AND STRUGGLE) WAS THE ONLY WAY WE WERE GOING TO KEEP OUR LIVELIHOODS.”**

*Angie Mata, NCTU leader from Cebu*

After an initial hesitation, the co-operative activities picked up to prepare for the deadline for the phase-out. The NCTU has formed 18 co-operatives in nine cities and provinces, with 4,392 members. In the city of Cebu, the NCTU has organised 12 different workers’ co-operatives so far. Over 2000 workers are part of them.

**“SO MANY THINGS HAVE CHANGED. WORKERS WENT FROM AN INDIVIDUALISED WORKING DAY, WHEN THEY DID NOT INTERACT WITH THEIR PEERS MORE THAN TO COMPETE OVER PASSENGERS, TO A SYSTEM OF COLLECTIVE ORGANISING. THEY ARE NOW PART OF A COMMON, COLLECTIVE PROJECT.”**

*Angie Mata, NCTU leader from Cebu*



Modern Jeepney Co-operative, Cebu City, Philippines, June 2021 | Credit: NCTU





## JAKARTA, INDONESIA: JUST TRANSITION VICTORIES AND CHALLENGES



1 May rally in Jakarta, Indonesia, May 2021 | Credit: Enung Yani

The city of Jakarta has taken a leadership role at the global level to push to expand public transport that directly tackles the climate crisis. The current government seems set on making the city an example for the Global South, expanding train lines, electrifying buses, and expanding walking and cycling possibilities.

The central government directly controls the railway sector in the city, allowing for a more direct control over transition processes. In recent years, the government introduced automatic ticket vending machines, which put at risk the jobs of 318 workers affiliated with the SKPA (the union that represents train workers in Jakarta). Through a process of negotiation, the union repurposed the jobs of those workers, leading the company to create a new position, boarding officers, who provide

help to passengers in stations. The 318 affected workers were transferred to this new role, maintaining their jobs and working conditions.

**“THROUGH A PROCESS OF NEGOTIATION, THE UNION REPURPOSED THE JOBS OF THOSE WORKERS”**

PT KCI, an operator of electric train services in Jabodetabek, stopped selling paper tickets, and moved to using vending machines. Automatic counters were reduced. However, the effect of reducing the number of counter attendants has not been too significant because of the emergence of a new role. Passenger service workers educate customers on how to buy and use tickets, use tickets, and how to get on the train for those using the train for the first time.

**RAILWAY SECTOR INNOVATED IN TICKETING VENDING MACHINES FOR COMMUTER LINE TRAINS, AUTOMATICALLY REDUCING THE COUNTER TICKETING STAFF. ALONG WITH IT, THERE IS A NEW PROFESSION FOR PASSENGER SERVICE TO EDUCATE NEW CUSTOMERS TO BUY TICKETS AND TRAVEL BY TRAIN. THEREFORE, THE REDUCTION OF EMPLOYEES IS NOT SIGNIFICANT.”**

*Choerul, SPKA, Jakarta, Indonesia*



Our Jobs, Our Planet, Our Public Transport rally in Jakarta, Indonesia, November 2021 | Credit: SPKA

In the TransJakarta bus service, the picture is different. While the general regulation of the system is in the hands of the government, the actual operation of the buses (both in BRT and non-BRT routes) is outsourced to private companies, which often push for higher profits. The union publicly denounced the fact that, in 2021, over 500 accidents involved TransJakarta buses. The increase in accidents comes after companies introduced an “efficiency policy” which reduced the number of bus service officers, who used to be in charge of safety as well as ticket vending.

In the now-automated BRT routes, support officers have been eliminated completely, displacing over 780 workers. The SPTJ, the union organising TransJakarta bus workers, publicly denounced companies and the government.<sup>48</sup> Support officers were essential in supervising driver behaviour, and maintaining quality services. As well as reducing support officers, TransJakarta went from three controlling officers per route to one, leading to an increase in accidents.<sup>49</sup> The policies of prioritising profit have had costly consequences for passengers and workers.

The unions involved in the public transport system in Jakarta (SPKA, SPDT and SPTJ) are collectively promoting a just transition negotiation with the district government, to guarantee that the workers directly affected by the process of technological change, and by the introduction of cleaner modes of transport, are taken care of and continue to be part of the public transport system.



Our Jobs, Our Planet, Our Public Transport rally in Jakarta, Indonesia, November 2021 | Credit: SPDT



Just Transition discussion workshops in Jakarta, Indonesia, June 2021 | Credit: ITF

48 <https://amp.kompas.com/megapolitan/read/2021/12/07/17313551/serikat-pekerja-transjakarta-layanan-menurun-karena-perusahaan-utamakan>

49 <https://voi.id/en/berita/111547/buses-often-accident-trade-union-criticizes-transjakarta-prioritizing-cuan>



## HYDERABAD, INDIA: THE APP-UNION FIGHTING FOR A JUST ELECTRIFICATION OF DELIVERY AND PASSENGER VEHICLES



Just Transition workshop and social security registration in Hyderabad, India, October 2021 | Credit: IFAT

App-based workers in Hyderabad, India, are pushing for a just transition that includes their needs in the context of the electrification policies that the State government, as well as major employers like Ola, Uber, and Swiggy are pushing through locally. There is growing concern among drivers that cities will ban non-electric vehicles, as was announced in Gurgaon in 2021, leading to massive protests by drivers<sup>50</sup>.

The IFAT/TFWDA launched the Climate Warriors campaign to mobilise its members, and pressure governments and employers along three different lines:

**1.** Working and living conditions for those working in urban transport (through the organisation of a network of climate warriors carrying forward an environmental audit of their communities), with a focus on women’s safety.

**2.** Support for transitioning drivers and riders to electric vehicles (calling on government and employer support to make that transition possible, including through increased funding for the acquisition of electric vehicles).

**3.** A modal shift towards public transport. Delivery and passenger workers know that the broad solution to climate change will require more public transport, and a reduction of private vehicles. In the workshops conducted with delivery and app-based workers in Hyderabad, there was a common consensus that simply electrifying their vehicles would not be an end solution.



Climate Warriors Campaign, Hyderabad, India, November 2021 | Credit: IFAT

<sup>50</sup> <https://timesofindia.indiatimes.com/city/gurgaon/not-let-in-e-rick-zone-cng-auto-drivers-protest/articleshow/85441428.cms>

The workshops in Hyderabad showed clear connections between the effects of climate change on people's working and living conditions. As part of the just transition project, participants decided to form groups within the union of "climate warriors" who are carrying forward audits in their communities about the effects of climate change, and the needs in terms of public transport, housing and sanitation.

**“EACH ENROLLED INFORMAL WORKER GETS AN E-SHRAM CARD MAKING THEM ELIGIBLE FOR ACCIDENT AND DISABILITY INSURANCE”**

As part of the just transition project, and leading with the call for expanding social security as a response to the climate crisis, IFAT connected the workshops with a massive social security registration drive. Following a recent decision by the central government to provide social security for informal workers (including app-based workers), IFAT organised a camp to enrol drivers/riders, working family members and workers from the nearby industrial area on the E-shram social security portal recently launched by the Government of India for informal workers. Each enrolled worker gets an E-shram card making them eligible for accident and disability insurance. In the future, government schemes and benefits for informal workers will be distributed via this ID card.



Just Transition discussion workshops in Hyderabad, India, September 2021 | Credit: IFAT



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**SANTIAGO, CHILE:**  
THE SUBWAY TICKET VENDORS  
BEING EXPELLED FROM THEIR JOBS  
ARE ESSENTIAL WORKERS IN THE  
CLIMATE EMERGENCY

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Metro train in Santiago, Chile | Source: Wikipedia Commons

Santiago de Chile has one of the most extensive subway systems in South America, in a process of constant expansion. It is owned by the national government, but operated mainly through outsourcing contracts with private companies. Although the system has expanded in recent years, the jobs of subway workers have become more precarious, and thousands have been displaced because of a push for automation. This has lowered the quality of service, with passengers often confused about the new systems, and there has been a lack of support for workers during climate emergencies. Massive floods have taken place in the subway in recent years, which cannot be resolved with further automation of tasks, and require experienced workers.

**“WHILE THE ADMINISTRATION CLAIMS THAT THEY WANT TO IMPROVE THE SUBWAY SYSTEM, THEY DISMISSED OVER 1,500 WORKERS, ESPECIALLY TICKET SELLERS, AND OVER 600 CLEANING WORKERS IN THE SPAN OF TWO YEARS.”**

*Eric Campos Bonta, President FESIMETRO<sup>51</sup>*

**“THE AUTOMATION OF TICKET VENDING HAS LED TO THE MASS DISMISSAL OF TICKET SELLERS. WE WENT FROM SIX PER STATION TO ONLY ONE. THAT REPRESENTS 1500 FEWER WORKERS, THE VAST MAJORITY OF WHOM ARE WOMEN.”**

*Yolanda Maltes, Secretary General, FESIMETRO*

**“WE ARE LOSING QUALITY OF SERVICE AND THE CAPACITY TO RESPOND DURING CLIMATE EMERGENCIES, WHICH ARE BECOMING MORE COMMON. WE LOST SO MANY CO-WORKERS TO AUTOMATION IN TICKET VENDING MACHINES AND IN SELF-DRIVEN TRAINS. IN RECENT YEARS, WE’VE HAD MASSIVE FLOODS IN THE SUBWAY, AND WE COULD NOT RESPOND TO PASSENGERS’ NEEDS DUE TO A LACK OF PERSONNEL. SOMETIMES I WAS BY MYSELF IN THE ENTIRE STATION.”**

*Ticket-seller woman worker, Subway, Santiago*

The subway of Santiago is the nodal link to the buses, the collective taxi system and the overall transport system in the city. The subway workers union, together with unions and workers from the inter-city train services, the bus services, and collective taxi transport services have launched an Inter-Union Public Transport Alliance (Mesa Intersindical del Transporte Publico), which will put a just transition for public transport workers on the agenda of local, regional and national governments, as well as in Chile’s new constitution, which will go to a vote during 2022<sup>52</sup>. The network will specifically focus on the role of the State in managing a just transition in public transport that guarantees the right to mobility for users and the labour rights of the workers in the system.



Santiago metro, Chile | Credit: Andres Valdes

51 <https://www.elmostrador.cl/mercados/2021/01/15/eric-campos-presidente-de-federacion-de-sindicatos-de-metro-es-raro-que-se-hable-de-un-ambiente-de-mayor-seguridad-cuando-se-han-despedido-600-trabajadoras-del-aseo-en-los-ultimos-meses/>

52 <http://www.sindicatometro.cl/web/con-exito-se-llevo-a-cabo-el-lanzamiento-de-la-mesa-intersindical-del-transporte-publico/>



## BOGOTA, COLOMBIA: THE TRANSITION THAT WASN'T. TRADITIONAL BUS PHASE-OUT AND THE CHALLENGE OF GOING BEYOND STATEMENTS<sup>53</sup>



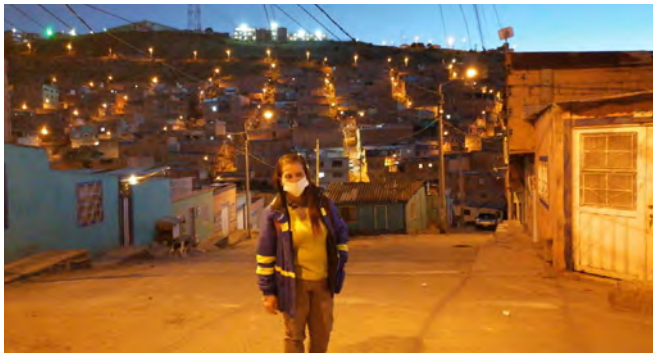
Our Jobs, Our Planet, Our Public Transport rally in Bogotá, Colombia, November 2021 | Credit: SNTT

<sup>53</sup> <https://www.equaltimes.org/after-30-years-on-bogota-buses-if-YbziTX3ML9A>



December 2021 was the last date for the traditional bus services of Bogota to be phased-out of the transport system. The city government had committed to replacing the old, polluting buses with a new fleet of electric buses. Despite a fight by traditional bus workers, and engagements with the municipal government, the vast majority of the estimated 6,000 direct (and over 10,000 indirect) workers had lost their jobs by the end of 2021. The job fairs promised by the city government did not deliver the intended outcomes. Many older workers, close to retirement, did not have the option of being re-trained and rehired by the new electric bus operators.

**“THE VAST MAJORITY OF THE ESTIMATED 6,000 DIRECT (AND OVER 10,000 INDIRECT) WORKERS HAD LOST THEIR JOBS BY THE END OF 2021”**



Recaudo Bogota ticket vending worker leaving her home early morning, in Bogota, Colombia, October 2021  
Credit: SNTT

The SNTT marched, organised protests, engaged city government and employers calling for a just transition for the traditional bus workers<sup>54</sup>. The fact that so many workers in the traditional bus system are without a job to transition to speaks of a failed policy, one that the workers and communities who are supposed to benefit from the electrification of public transport will remember.



SNTT leadership meeting workers affected by the phase-out of traditional minibuses, in Bogota, Colombia, June 2021 | Credit: SNTT



Survey of workers affected by the phase-out of traditional minibuses, conducted by the Bogota Municipality, June 2021 | Credit: SNTT

The failure is not about the financial capacity of the city government, or the employers, but speaks broadly about the inability to create programmes that involve the directly affected workers and communities. Many of the workers who lost their jobs due to the traditional bus phase-out could be employed by the new electric bus operators. The main electric bus operator, GreenMovil (a local subsidiary of multinational Transdev), is currently struggling to find enough drivers so their operations can begin. In informal communications with union leaders at SNTT, the company admitted it had less than 400 workers hired at the end of December 2021, while it needs just over 1,500 to begin operations.

Similarly, the city government has made extensive commitments to hire hundreds of women<sup>55</sup> drivers to operate the new electric buses. Despite positive public announcements, the electric bus companies are having a difficult time in hiring women drivers, because of a lack of training and of support for that group of workers.

Bogota is an example of the challenges on the ground for the transition to clean buses. While mayors, employers and international funders celebrate electric buses, not giving consideration to the needs of the workers and communities affected can lead to displacement, and resentment towards those policies, by the same population that is supposed to benefit from them.

54 <https://snttdecolombia.org/campana-transicion-justa/transicion-energetica-transicion-justa/>

55 <https://bogota.gov.co/mi-ciudad/mujer/capacitacion-para-mujeres-conductoras-tuvo-exitosa-convocatoria>



## NAIROBI, KENYA: WORKERS PREPARE FOR AN ELECTRIC TRANSFORMATION



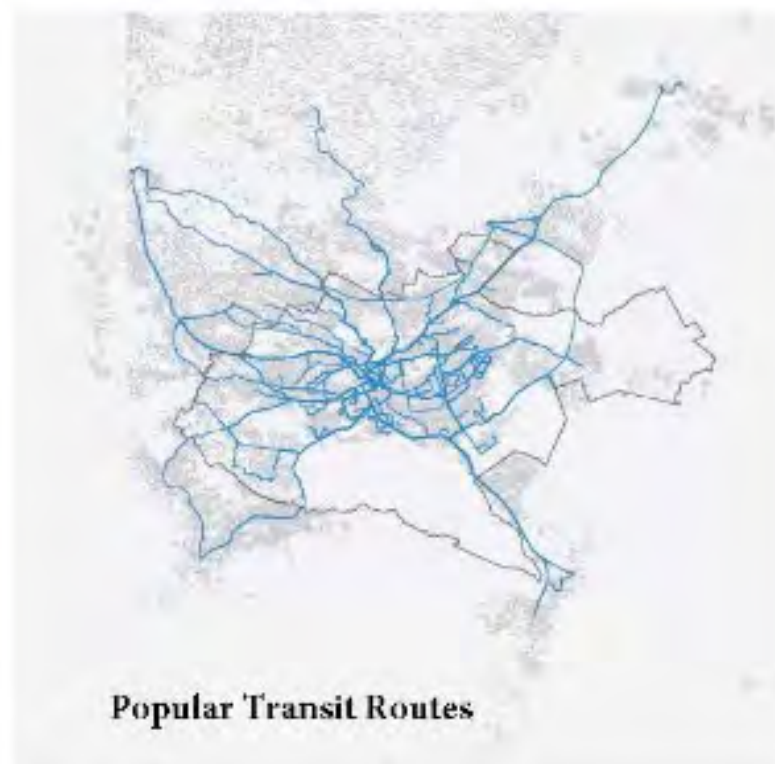
Our Jobs, Our Planet, Our Public Transport rally in Nairobi, Kenya, November 2021  
Credit: ITF

Nairobi is a leading city in Africa in tackling the climate crisis through its public transportation policies. Despite the challenges of low roll out of electric vehicles in Kenya, significant progress has been made compared to neighbouring countries:

- The decision by Kenya Power and Lighting Company (KPLC) and Kenya Power Generating Company (KenGen) to roll out a country-wide network of electric charging stations at strategic locations will not only increase the number and coverage of electric vehicle usage within Nairobi City and its environs but also gradually across the country. This should preferably be done in consultation with public transport workers' unions.
- The decision by the government to reduce excise duty on importation of electric vehicles from 20% to 10% to increase the uptake of electric vehicles in the country.

- The collaboration between Meta electric Kenya and Neo Kenya Mpya will see the introduction of electric matatus (privately-owned minibuses) along the Thika Super highway as a pilot project. Matatus are the primary means of public transport in the country.
- The city government is moving towards electric-bus-only BRT lines.
- SACCOs (minibus operating companies) have made several announcements on their intention to bring electric buses to the matatu industry.<sup>56</sup>

Unions have been facing the challenge of climate change and introducing technologies like electric buses and cashless payment systems in a transport system that is heavily characterised by informal transport as the most popular form of transportation.



Formal versus Popular transit routes, Nairobi

Source: Urban Age project, LSE Cities. <https://urbanage.lsecities.net/data/popular-transit-nairobi>

<sup>56</sup> <https://www.bbc.com/news/av/world-africa-47533601>

Urban transport workers in Nairobi are facing the potential of vehicle electrification with scepticism, since the lack of formal labour relations means it could lead to more displacement of informal transport workers. Recent experience with the introduction of the BRT system informs this scepticism.

Due to the impacts of climate change on their daily work, the unions that congregated to be part of the just transition project have been supportive of decisions like introducing electric vehicles.

**“WE ACKNOWLEDGE THAT THE NEED TO TRANSITION FROM PETROLEUM RUN MOTOR LOCOMOTIVES TO ELECTRIC VEHICLES AS PROPOSED UNDER CLIMATE ACTION IS A MOVE IN THE RIGHT DIRECTION THAT WILL SIGNIFICANTLY REDUCE GREENHOUSE GASES FROM THE PUBLIC TRANSPORT SECTOR. HOWEVER, [WE] NOTE THAT SUCH A MOVE WILL ALSO HAVE A POTENTIAL NEGATIVE EFFECT ON PUBLIC TRANSPORT WORKERS, IF NOT WELL TAKEN CARE OF. TO THIS END, WE AFFIRM THE NEED TO COME UP WITH APPROPRIATE MITIGATION MEASURES BEFORE THE SITUATION GETS WORSE, . . . TO ENSURE A TRANSITION WITHIN THE SECTOR.”**

*A collective statement by the unions (TAWU, RAWU and BOTTAX) involved in the just transition workshops*



Our Jobs, Our Planet, Our Public Transport rally in Nairobi, Kenya, November 2021 | Credit: ITF

The statement will be followed by three courses of action by unions:

- Educational workshops to connect with the membership and consolidate their understanding of a just transition.
- Pressuring the local and national governments to incorporate workers in the planning and implementation of policies to tackle the climate crisis.
- Engaging employers in each of the sub-sectors (minibuses, railways, taxis, boda boda bicycles and motorcycle taxis) over the processes of electrification that will be taking place in the city.



Our Jobs, Our Planet, Our Public Transport rally in Nairobi, Kenya, November 2021  
Credit: ITF

## 4. EMERGING DEMANDS FOR URBAN TRANSPORT WORKERS: 10 POINTS FOR A JUST TRANSITION

The effects of climate change on urban transport workers are clear:

- Increasing instability in jobs.
- Unpredictable conditions that worsen existing conditions of informality.
- Gender-based discrimination.
- Precarious working conditions.
- Lack of collective participation in decision-making.

Urban transport workers are not respected as fundamental agents of change for a transition in cities. In every one of the participating cities, workers were asked to draft Just Transition Frameworks – what they envisioned would be needed to both confront the climate crisis and challenge the existing inequalities in the urban transport system.

The ten points presented below are not a definitive solution, rather they summarise and encapsulate the main debates that took place in all locations, keeping in mind that the realities on the ground vary significantly, not only from one city to the next but also from union to union and worker to worker.

Two common threads emerge from the discussions:

- First, urban transport workers have a clear connection with the communities that depend on their services. This is especially strong for public transport workers, who have argued consistently for a just transition that also lowers the fares of public transport and increases accessibility to it.

- The second common element is that workers feel that tackling the climate crisis is urgent, but that it's part of a bigger picture. The climate crisis is not perceived solely as a problem of carbon emissions, but as a broader societal crisis that reinforces existing problems.

Societal problems are interrelated with climate ones, and the crisis needs to be a moment to seize the opportunity and address them together. A just transition in urban transport needs to focus on reducing carbon emissions and combatting existing inequalities. Urban transport is not only infrastructure – the buses, the subways, the taxis, the two-and-three wheelers. It is also the workers who run it and the communities who depend on it.

**A JUST TRANSITION IN URBAN TRANSPORT NEEDS TO FOCUS ON REDUCING CARBON EMISSIONS AND COMBATTING EXISTING INEQUALITIES.”**

Urban transport workers are on the frontlines of the climate crisis. This crisis has exacerbated existing inequalities and precarious work conditions, low wages, unsafe working conditions, gender-based discrimination, lack of effective rights to collective bargaining and freedom of association, and overall exclusion from the most relevant decisions on urban transport development.

# 1. A JUST TRANSITION TO WORKER-LED FORMALISATION



In the Global South, the vast majority of urban transport work and service is informal. This means these workers do not have access to stable pay, decent working conditions, health and safety protection, or any recognition of their trade union rights. Because of these conditions, informal workers are especially vulnerable to climate change and to the consequences highlighted in the previous sections.

A first step is recognising the rights to freedom of association and collective bargaining for informal transport workers. It is often assumed that informal workers do not have collective organisations, when often trade unions in the sector are already present. When introducing changes to transport systems, it is essential that informal transport workers have a seat at the table collectively.

Once that recognition and negotiation is in place, core concerns of informal urban transport workers need to be addressed:

- A worker-led formalisation
- A change to fixed, decent and stable wages
- Extending, in law and practice, to all workers in the informal economy, social security, maternity protection, and decent working conditions
- Regulating, in coordination with workers, informal transport networks.<sup>57</sup>

**“GOVERNMENTS SHOULD REGULATE AND PRESSURE EMPLOYERS TO MAKE A SHIFT FROM COMMISSION-BASED (VARIABLE PAY) WORK TO FIXED PAY STABLE INCOME WORK.”**

*App-based worker, Hyderabad, India*

Workers across participating cities expressed doubt about government initiatives for changing transport systems, since they often ignore informal workers, do not count them on the total job gains, and constrain their capacity to make a living. In Cebu, Philippines and Bogota, Colombia, electric buses displace informal public transport and also informal support workers (cleaners, cooks, maintenance), who lose access to an income without having the consideration of governments. In Bogota, a conservative estimate of 6,000 workers were displaced by introducing electric buses and the phase-out of the traditional bus services in the city.

<sup>57</sup> This point builds on the work carried on by the ITF on worker-led formalisation in urban transport. See <https://www.itfglobal.org/en/reports-publications/trade-union-guide-worker-led-formalisation-and-https://www.itfglobal.org/en/reports-publications/bus-rapid-transit-brt-and-formalisation-informal-public-transport-trade-union>

## 2. A GENDER EQUAL JUST TRANSITION

Women workers are on the frontlines of the climate crisis, have the least protection, and work in the most precarious or informal jobs. A just transition needs to centre on the needs and demands of women workers, guaranteeing that they are prioritised within the process of formalisation, that they receive appropriate protection, are given access to sanitation facilities, and that they are given a leading role in the design of urban transport systems. A just transition needs to dismantle gender-based occupational segregation, requiring an end to gender-based violence and harassment in the industry, where demands for sexual favours in return for employment are common.

**“SO FAR THERE HAS BEEN NO GENDER FOCUS ON THE TRANSITIONS. MOST OF THE NEW JOBS ARE OCCUPIED BY MEN, WHILE WOMEN PREDOMINANTLY DO THE OUTSOURCED, PRECARIOUS JOBS. DISCRIMINATION AND EXCLUSION OF WOMEN WORKERS NEEDS TO BE PUT AT THE CENTRE OF THE DISCUSSIONS.”**

*Subway worker, Santiago, Chile*

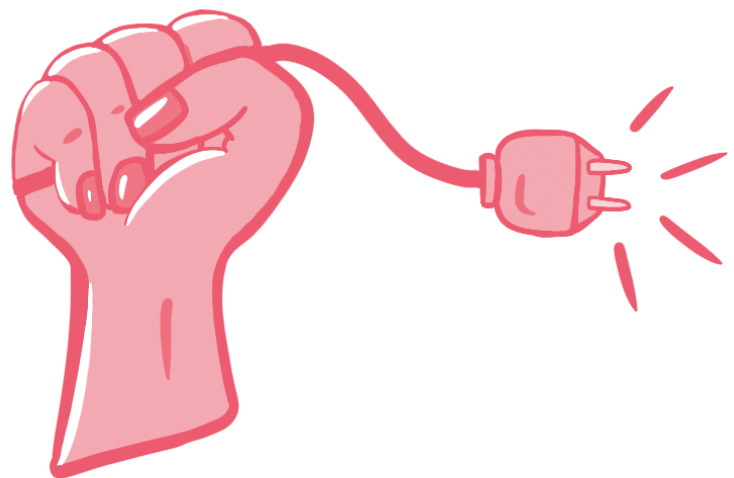
**“WOMEN WORKERS OFTEN HAVE THE MOST PRECARIOUS AND POORLY PAID JOBS IN THE TRANSPORT SYSTEM. WE ARE THE MOST EXPOSED TO AIR POLLUTION AND HAVE THE WORST HEALTHCARE COVERAGE. MANY OF US WANT TO BE PART OF THE TRANSITION AND BE ABLE TO SHOW THAT WE HAVE THE SKILLS AND CAPACITY TO DO OTHER JOBS WITHIN THE SYSTEM. THE TRANSITION SHOULD BE ABOUT CLEAN ENERGIES AND CHANGING THE DOMINANT PATRIARCHAL CULTURE WITHIN OUR PUBLIC TRANSPORT SYSTEM.”**

*Ticket vending worker, Bogota, Colombia*

Urban transport is also a fundamental, sustaining element for production and reproduction. Design and implementation of transformative policies need to consider the views of women workers and users, prioritise their needs, and implement a transition that centres on women as users and workers in urban transport, challenging the patriarchal design that currently dominates transport systems across the world.

The project has explored and developed a set of immediate and long-term demands. These demands are inextricably connected and could apply to both categories.

The demands emerged from the discussions and experiences of urban transport workers. They can broadly be divided into immediate, workplace-related issues, which have become more pressing in the context of the climate crisis; and longer-term, systemic demands that focus on a need to reorganise public transport systems, including more democratic control, with worker and trade union participation in decision-making, a larger role for the public sector, a significant modal shift away from private vehicles and with a central role for women workers and women users in the transition.



### 3. ADDITIONAL PAY DURING EXTREME WEATHER EVENTS

To continue to provide a service during extreme weather events, urban transport workers require additional pay increases. This is especially the case for workers in app-based technologies, where the algorithm that controls their work already includes changes in pay depending on demand. These payments can be determined through specific thresholds (for example, the level of pollution in the air, or a maximum and minimum temperature). In extreme weather events, work needs to be declared hazardous, and pay should be increased accordingly. Workers highlighted income losses as the major consequence of climate change, and particularly of extreme weather events.

**“WE ARE EXPECTED TO DELIVER UNDER ANY CIRCUMSTANCES, IN THE WORST WEATHER CONDITIONS, WITHOUT SUPPORT, PROTECTION OR EXTRA PAY. WE TAKE ALL THE RISK TO KEEP PEOPLE FED.”**

*App-based worker, Bogota, Colombia*

In Jakarta, Indonesia, more than half of the TransJakarta bus system workers who took part in a workshop chose decreased income as the most significant impact of climate change.

### 4. A JOB GUARANTEE FOR URBAN TRANSPORT WORKERS

A job guarantee has been in the discussion of climate issues for a while and, in recent years, it has gained momentum as a result of the Green New Deal debate in the Global North. A job guarantee could provide for a ‘public option for good jobs’<sup>58</sup> that targets specific needs in society, and in the case of transport workers, it could guarantee their participation in the urban transformation taking place.

**“IN THE TRANSITION TO ELECTRIC VEHICLES, WE COULD LOSE A LOT OF JOBS DUE TO LACK OF TRAINING, ESPECIALLY IN SECTORS LIKE VEHICLE MAINTENANCE. WE NEED A GUARANTEE THAT CURRENT WORKERS WON’T LOSE THEIR JOBS AND WILL BE CONSIDERED A PRIORITY IN RETRAINING THE WORKFORCE.”**

*Matatu worker, Nairobi, Kenya*

A job guarantee could include retraining opportunities, as well as stability during the relocation into other sectors of the urban transport system. This would directly address the negative expectations workers have, given their experiences with previous transitions.

Some argue a limitation for just transition programmes is the lack of funding for major reinvestments. In the case of a job guarantee, city governments already have the potential to create jobs related to new investments (such as electric buses). There are broad proposals for job guarantees in the Global South<sup>59</sup>, and concrete ideas (and in some instances existing programmes) are already in place. The proposed Decentralised Urban Employment and Training (DUET) in India<sup>60</sup>, would mirror the already existing National Rural Employment Guarantee (NREGA), which guarantees work in rural areas to over 100 million workers. The aim of the proposal to focus on urban women workers is of special relevance to this framework<sup>61</sup>.

58 Tcherneva, Pavlina. The case for A Job Guarantee. 2020

59. <https://www.rosalux.de/en/news/id/41764/modern-monetary-theory-in-the-periphery>

60 <https://www.ideasforindia.in/topics/poverty-inequality/duet-re-examined.html>

61. <https://www.thehindu.com/opinion/lead/a-duet-for-indias-urban-women/article33273503.ece>



## 5. PENSION SUPPORT FOR WORKERS NEARING RETIREMENT

While many urban transport workers could be retrained and re-employed in new forms of urban transport, many are close to their age of retirement. For this group of workers, who are also harder to retrain and re-employ in transport systems that require significant capacity-building, a bridge to pensions is the most sensible policy in a just transition framework.

**“WORKERS ARE SEEN AS ‘OBJECTS’ WHO CAN BE CHANGED OR ‘RETIRED’ WHEN THEY ARE NO LONGER NEEDED. MANY OF US HAVE GIVEN DECADES OF OUR LIVES TO THIS CITY, AND DESERVE TO BE TREATED WITH RESPECT WHEN WE ARE NEARING RETIREMENT AND WILL NOT BE HIRED BY NEW COMPANIES.”**

*Bus driver, Bogota, Colombia.*

Bridges to pensions have been used successfully in just transition programmes for fossil fuel workers and could be implemented in urban transport as well. This policy would also open the door for new entrants to decent jobs in urban transport, with women and young workers as core priority groups.

## 6. HEALTH AND SAFETY AS A FUNDAMENTAL RIGHT

The impacts of climate change on urban transport workers demand raising the floor of health and safety protection. Several health and safety needs of urban transport workers could already be covered under existing infrastructure (such as protection shelters during extreme weather events), but they require increased coordination between different actors in the organisation of a city’s workforce.

Among the health and safety needs of workers, shelter spaces for protection from extreme weather events is a priority for app-based delivery workers, who rarely have access to existing spaces, and are in greater need during climate emergencies.

Sanitation facilities are essential for workers, especially during heatwaves and with particular emphasis for women workers, who are the most affected by lack of access to sanitation, leading to significant psychological-health impacts.

Greater social security coverage regarding air pollution is also a major component of a just transition framework, given the exposure that urban transport workers have to it.

**“OUR JOBS ARE QUALIFIED IN THE LOWEST POSSIBLE CATEGORY WITHIN THE HEALTH INSURANCE SYSTEM. WE ARE CONSIDERED OFFICE WORKERS, BUT WE SPEND MOST OF OUR WORKING TIME OUTSIDE, EXPOSED TO THE FUMES OF THE BUSES WHICH LEAD TO RESPIRATORY ILLNESSES.”**

*Ticket vending worker, Bogota, Colombia*

Lastly, a commitment to paid sick days for all urban transport workers would be a major advancement in this process.

## 7. DEMOCRATIC CONTROL OF URBAN TRANSPORT

Urban transport decisions often exclude workers' and users' participation. Cities have to move beyond superficial consultation processes and incorporate genuine democratic participation from urban transport workers and trade unions, and from users' collectives. Workers need to be recognised as fundamental agents of change in the transition, and not just another stakeholder.

**“WE WANT TO BE INCLUDED IN THE DECISION-MAKING PROCESS BECAUSE WE WANT TO BE PART OF THE TRANSITION. WORKERS HAVE A SENSE OF BELONGING AND RESPONSIBILITY WITH THE TRANSPORT SYSTEM IN THE CITY, AND WANT TO BE PART OF MAKING IT BETTER.”**

*Train worker, Jakarta, Indonesia*

Democratising urban transport would improve the support of workers and users for the transformations that cities are putting in place, while guaranteeing that urban transport would remain affordable and accessible to all, especially those in most need.

**“WORKERS ARE OFTEN DISCRIMINATED AGAINST BY THE CITY GOVERNMENT, SEEN AS A PROBLEM AND NOT AS CONSTRUCTIVE MEMBERS OF THE COMMUNITY. WE NEED TO HAVE A SEAT AT THE TABLE OF DECISIONS BECAUSE OUR LIVES ARE AT STAKE. AND WE NEED TO BRING USERS AND COMMUNITY GROUPS AS WELL. THEY WILL BE DIRECTLY AFFECTED TOO.”**

*Bus worker, Bogota, Colombia*

Trade union participation in decision-making needs to be a central component of the transition, as well as the promotion of broad, deep and genuine consultations with users and communities. Given the recent successful experiences with workers' co-operatives in cities of the Global South, these need to be given priority, especially for the minibus and ride-hailing sectors, where smaller, decentralised and worker-control operators could better reach communities, while keeping fares affordable and working conditions decent.

**“WE HAD TO DO A LOT OF WORK TO EXPLAIN THAT THIS WAS OUR ONLY CHANCE TO TRANSITION, THAT THE CO-OPERATIVES WOULD PROVIDE STABILITY TO WORKERS AND THAT COLLECTIVE OWNERSHIP (AND STRUGGLE) WAS THE ONLY WAY WE WERE GOING TO KEEP OUR LIVELIHOODS.”**

*Jeepney operator, Cebu, Philippines*

Evidence from cities across the world shows that giving power to transport workers and involving community members results in efficiency, innovation, responsiveness and, ultimately, greater public confidence in public transportation.

**“AS A MEMBER OF THE WORKERS' CO-OPERATIVE, I NOW FEEL PART OF THE COMMUNITY AND I AM VISIBLE TO PEOPLE. OUR EFFORTS ARE RECOGNISED WITHIN THE CO-OPERATIVE, ARE VALUED BY EVERYONE, AND WE ARE NO LONGER DISCRIMINATED [AGAINST] FOR DOING A MAN'S JOB.”**

*Woman jeepney worker, Cebu, Philippines.*

## 8. PUBLIC TRANSPORT AS A PUBLIC GOOD

The public sector needs to play a defining role in tackling climate change and challenging existing inequalities. Urban transport has often been left at the mercy of private sector operators and their search for private sector profits, while public funds are mobilised to support. This way of developing urban transport needs to change, and it needs to bring back the public sector not only as a regulator and coordinator but also as an active operator of urban transport, guaranteeing accessible public services, with decent work, trade union participation and accountability to the population.

**“WE WANT THE CITY TO ESTABLISH A PUBLIC OPERATOR, TO BE THE LEADING OPERATOR OF ELECTRIC BUSES, SETTING THE EXAMPLE OF A TRANSITION TO CLEAN ENERGIES THAT ALSO INCLUDE DECENT, STABLE WORK. MANY OF THE TRADITIONAL BUS WORKERS SUPPORT THE NEED TO CHALLENGE THE MONOPOLY OF OPERATIONS IN THE HANDS OF A FEW PRIVATE COMPANIES.”**

*Bus dispatcher, Bogota, Colombia*

The privatisation of public transport has only deepened the climate and social crises.

**“WE HAVE A PUBLICLY OWNED SUBWAY SYSTEM THAT OUTSOURCES MOST OF THE WORK TO PRIVATE FIRMS, WHICH OPERATE WITH A PROFIT MANDATE. WE NEED TO CHANGE THE ROLE OF THE PUBLIC SECTOR, TO REVERSE THE PROCESSES OF PRIVATISATION AND TO PROVIDE GOOD, CHEAP AND RELIABLE SERVICE AS A PRIORITY.”**

*Subway worker, Santiago, Chile*

This privatisation process needs to be reversed, putting the sector back in public hands, including an integrated strategy for publicly led urban transport apps that can include delivery and ride-hailing services, connected with existing public transport.

**“RICKSHAW AND TWO AND THREE-WHEELER DRIVERS COULD BE CONNECTED IN A PUBLIC TRANSPORT SYSTEM, FILLING THE LAST MILE CONNECTIVITY GAPS.”**

*App-based driver, Hyderabad, India*

Having a central role for the public sector will also mean taking the profit-motive out of the equation in urban transport. Despite the rhetoric, the public sector has shown repeatedly that it is not ‘unresponsive’ and ‘ineffective’, but quite the contrary. Given the level of the climate and the socioeconomic crises, the existing solutions cannot depend on the capacity of private corporations to make a profit. It is only through a strong, service-oriented public sector that a just transition can be guaranteed in cities around the world.

## 9. TECHNOLOGY SOVEREIGNTY

At the workplace level, workers need to understand, be consulted and give consent to the use of technologies that change the way their work is being done. This applies to the new ticket vending machines that are introduced in most major cities, to the security cameras now incorporated in most buses, trains and subways, as well as the data-driven services that dominate delivery. Data is a major aspect of today's urban transport system, and it is often used without workers' consent. Sovereignty means that workers need to have decision-making power over the data that is extracted from them, the uses of it, and a broader discussion centred on their needs.

Data-driven changes to public services are erasing the role of workers, while deepening outsourcing and making jobs more precarious, undermining working conditions. A process of just transition that considers technology sovereignty will also allow for a discussion in which technologies are necessary for improving services, which should be ahead of other priorities (like improving profits for private operators).

**“THE INTRODUCTION OF DIGITAL TECHNOLOGIES CAN NEVER FULLY REPLACE WORKERS. WE HAVE ALREADY SEEN THAT HUMAN RELATIONS WILL ALSO BE NECESSARY TO RUN OUR TRANSPORT SYSTEM. THE DIGITAL SOLUTION WON'T BE POSSIBLE WITHOUT WORKERS ACTIVELY INVOLVED IN THE PROCESS.”**

*Bus worker, Jakarta, Indonesia*

At a societal level, technology sovereignty is also important for countries in the Global South which are at the lower end of the intellectual property rights regime. In urban transport systems, this means that new technologies are manufactured, and often maintained abroad, disconnecting local industries and directly affecting jobs in the maintenance sectors. Governments need to use their procurement powers to build, or revitalise, local supply chains, so that the transformation of urban transport does not deepen dependency on imports and priorities established elsewhere.

**“WE IMPORT THE CARS THAT WE USE ON THE ROADS. BUT THERE ARE NOW LOCAL PROJECTS TO MANUFACTURE AND MAINTAIN ELECTRIC TWO-AND-THREE WHEELERS. THE GOVERNMENTS SHOULD SUPPORT THESE PROJECTS AND MAKE IT A PRIORITY OF THE TRANSITION.”**

*Boda Boda driver, Nairobi, Kenya*

**“WE WANT THE GOVERNMENT TO INVEST IN LOCALLY MADE ELECTRIC MINIBUSES. OTHERWISE, WE WILL BE AT THE MERCY OF FOREIGN COMPANIES THAT WILL NOT EVEN ALLOW FOR MAINTENANCE TO BE DONE LOCALLY.”**

*Jeepney driver, Manila, Philippines*

## 10. MODAL SHIFT TO PUBLIC TRANSPORT

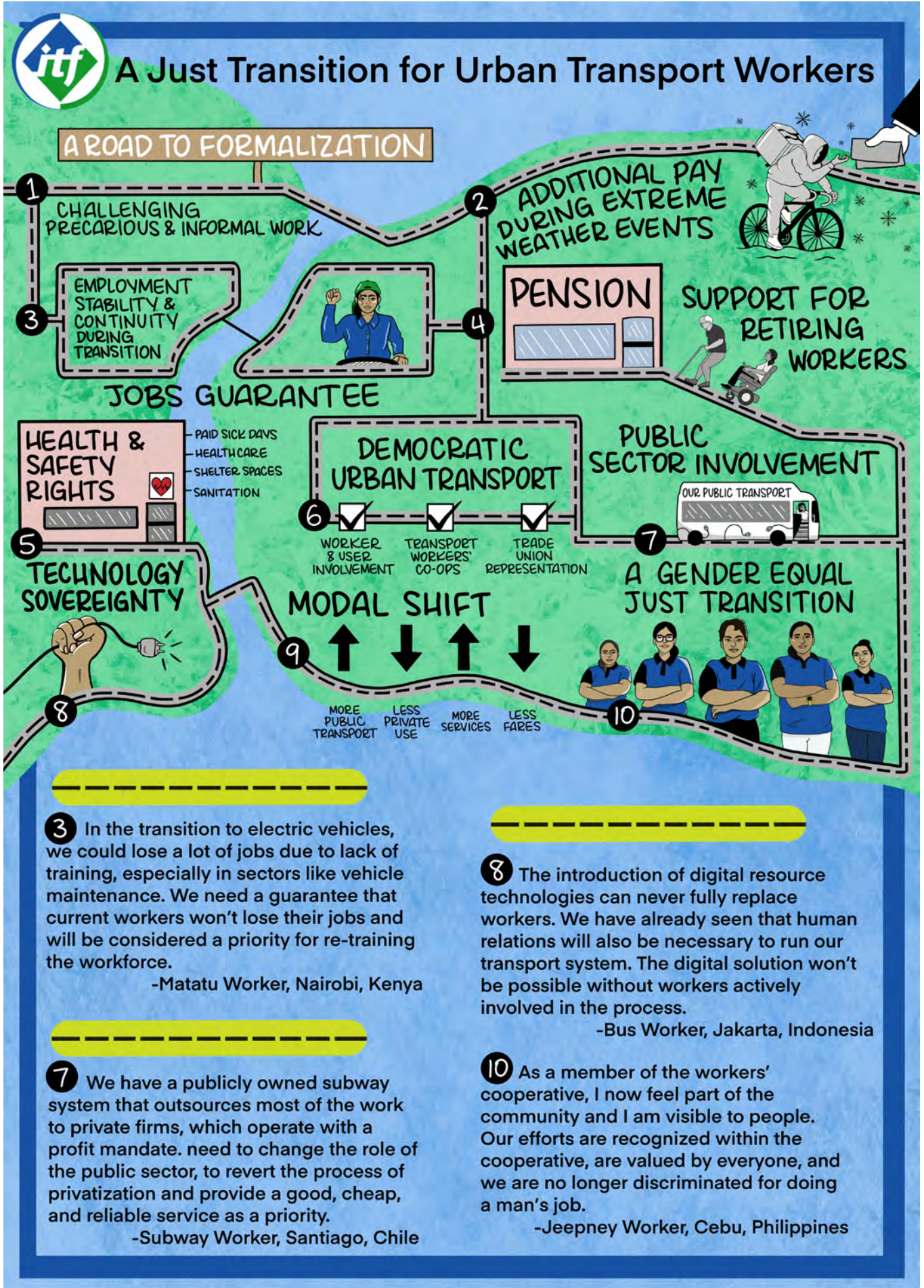
The transition to a low-carbon urban transport system, and cleaner cities, will not be possible through technological fixes alone, especially if these encourage the use of private cars. A modal shift towards public transport, walking and cycling need to be part of a just transition. The focus on technology fixes like electric vehicles often means that necessary broader shifts in public transport are hidden. Low fares, and accessible and reliable public transport are fundamental to addressing the needs of a low-carbon just transition.

**“WE NEED TO IMPROVE PUBLIC TRANSPORTATION NOT JUST BY BRINGING ELECTRIC BUSES. WE ALSO NEED MORE BUSES ON THE ROADS, RUNNING MORE FREQUENTLY AND GETTING PRIVATE CARS OFF THE STREETS.”**

*App-based worker, Hyderabad, India.*

**“GOVERNMENTS SHOULD INVEST IN CYCLING AND WALKING INFRASTRUCTURE THAT COULD SUPPORT THE SYSTEMS OF DELIVERY. RIGHT NOW ALL THE PRIORITY GOES TO PRIVATE CARS THAT TAKE UP MOST OF THE SPACE, POLLUTE OUR STREETS AND ARE AGGRESSIVE TOWARDS CYCLISTS.”**

*App-based delivery worker, Bogota, Colombia.*



**3** In the transition to electric vehicles, we could lose a lot of jobs due to lack of training, especially in sectors like vehicle maintenance. We need a guarantee that current workers won't lose their jobs and will be considered a priority for re-training the workforce.

-Matatu Worker, Nairobi, Kenya

**8** The introduction of digital resource technologies can never fully replace workers. We have already seen that human relations will also be necessary to run our transport system. The digital solution won't be possible without workers actively involved in the process.

-Bus Worker, Jakarta, Indonesia

**7** We have a publicly owned subway system that outsources most of the work to private firms, which operate with a profit mandate. need to change the role of the public sector, to revert the process of privatization and provide a good, cheap, and reliable service as a priority.

-Subway Worker, Santiago, Chile

**10** As a member of the workers' cooperative, I now feel part of the community and I am visible to people. Our efforts are recognized within the cooperative, are valued by everyone, and we are no longer discriminated for doing a man's job.

-Jeepney Worker, Cebu, Philippines

Representation of 10-points for a just transition  
 Art Credit: Elizabeth Niarhos, @lizar\_tistr

# DELIVERY WORKERS FACING CLIMATE CHANGE: YOUNG WORKERS ON THE CLIMATE FRONTLINES

Precarious working conditions are commonplace for app-based workers around the world. The vast majority of delivery workers are young. App-based delivery workers who participated in the workshops undertaken in this project were on average under the age of 30. While some of them had previous experience with trade union organisations, for the majority, collective organising and fighting for workers' rights were new experiences.

The climate crisis has thrown into sharp relief how precarious jobs are in delivery services. Workers are exposed to extreme weather events without appropriate protection, while they have to battle on to maintain deliveries. Delivery workers participating in the project in Cebu, Bogota, Santiago and Hyderabad highlighted the problems they face during floods, extreme heat (without any shelter), typhoons and the exposure to air pollution. The societal implications promoted by app-based companies, pressure to continue deliveries and to provide the service at all times, has meant that delivery workers cannot stop working even under conditions where other services are cancelled.

If municipal governments have been reluctant to engage urban transport workers in general, that reluctance is greater when it comes to delivery workers. Their employment status, the role city-level planning has on their jobs, and the role they play in the city, are conversations that governments were not willing to have. Some of them have never even thought about them. For example, a Bogota government officer said to the Unidapp workers during a meeting: "we had no idea that you were that many, and we don't have a policy for the sector".

The 10 points for a just transition apply directly to the needs of app-based delivery workers. While app-based companies like Uber, Rappi, FoodPanda and Ola sell an image of sustainable businesses, and increasingly promote electrification as a solution to the climate crisis, delivery workers have climate-related demands of their own. As highlighted in the 10-points framework, core elements of a just transition for delivery workers need to:

- Recognise their rights as workers, including the right to organise and bargain collectively. This would allow workers to have access to health and safety rights, pensions and a role in the way data is used in the process.
- Provide for additional pay for workers under extreme weather events. Parameters for this can be easily established by already-existing weather predictions. For example, workers could receive extra pay for days when air pollution is higher than a negotiated threshold, or when temperatures are higher or lower than set limits. This could be added to the app, just like the existing high demand algorithms.
- Include shelter spaces for delivery workers to use, with sanitation facilities, recharging areas and protection for extreme weather events.
- Democratic control over the use of data coming from the app, as well as sovereignty over personal data that the app extracts from workers.
- Meaningful participation for app-based workers and their organisations in decision-making for all aspects of urban transport development.

## ITF GIG ECONOMY EMPLOYER PRINCIPLES:

- 1.** Health, safety and PPE for all workers with adequate and appropriate provision of personal protection equipment and sanitation facilities, and specific protections against violence and harassment in the workplace;
- 2.** Correct employment status classification and an end to disguised employment relationships;
- 3.** A labour protection floor that enforces ILO Fundamental Principles and Rights at Work, including gender rights, freedom of association and collective bargaining. These rights should be embodied in the algorithms themselves.
- 4.** Living wages, regardless of employment status, with negotiated cost recovery formulas for fairly classified self-employed workers. Workers must be paid on time, and should receive tips in full at the moment they are paid.
- 5.** Human and humane control where workers in the gig economy have their work conditioned and controlled by software and data. Named individuals should be responsible for the software and its impacts on workers.
- 6.** Fair digital contracts – flexibility should not come at the cost of decent working conditions. Deactivations from the app should follow a fair process in which appeals are heard. Contracts should specify rights to data, and changes to working conditions should be consulted and negotiated. Workers ratings should be portable across apps.
- 7.** Workers’ data rights – workers produce data that is then used to control their work, so they have the right to know what data is collected, what it is used for, where it is stored, and how the software built on it works. They should enjoy free access to all the data collected on them during working time, in recognition that it is their data since they created it.
- 8.** Gender neutral software – platforms must ensure that their algorithms and digital processes are tested so that gender biases against women in relation to pay, safety and other issues can be eliminated.
- 9.** Access to social protections including healthcare, pensions and other forms of social security and insurance protection; and,
- 10.** Paying taxes – social protections are paid by the state, but can only be paid for if companies adopt responsible business practices, such as paying their share of taxes.



## 5.

# RECOMMENDATIONS FOR THE ITF: STRATEGY DEVELOPMENT & IMPLEMENTATION

- Expand the current just transition project to incorporate other urban transport affiliates undergoing similar situations as those described in this report.
- Promote collaboration between unions to lead coordinated global actions that put the just transition framework on the map of the climate justice debate and public transport policy. This could support the conclusion from the ILO technical meeting to engage the UNFCCC on just transition in sectoral policy.
- Map the processes of electrification that are taking place around the world and the impacts on work and employment, and coordinate a global strategy based on the findings. Although the electrification process is taking place in different modes of urban transport, starting with mapping electric bus production, operation and impacts should be a priority given the roll-out happening in cities in the North and South.
- Undergo labour impact assessments as a product of electrification, combined with the existing work on the labour impacts of the introduction of BRT services.
- Analyse, debate and respond to employers' narratives which advocate increasing automation and digitalisation to achieve sustainability, which leads to the displacement of workers and making life more precarious for those who keep their jobs. This is especially relevant for women workers affected by processes of automation in ticket vending. ITF needs to challenge the idea that automation leads to a more sustainable urban transport system on its own. Narratives from this report highlight the role of workers in cases of climate emergencies. This could be a starting point to question the need to displace workers from key sections of urban transport systems.
- Further engagement on climate issues in the work on the gig economy by the Youth Department and the Future of Work program. The effects of climate change on app-based workers, as well as the necessary responses need to be further explored and discussed.
- Mobilise around the Future is Public Transport campaign in cities where mayors have signed the COP26 global coalition statement<sup>62</sup>. Use the campaign as a tool to engage and hold them to their commitments. In cities where mayors have not signed up, encourage them to sign up and commit to specific just transition roadmaps.
- Expand the framework to incorporate other sections of the ITF also affected by the double effect of climate and automation.

<sup>62</sup> The Future is Public Transport (2021) Global Coalition Statement, <https://thefutureispublictransport.org/coalitionstatement/>

## 6. CONCLUSION

The Just Transition in Urban Transport project is an initial step in building a collective and worker-led response to the climate crisis, while advancing workers' rights. This report:

- Outlines the impacts of climate change on urban transport workers.
- Describes the consequences of resolving the climate crisis only through technological fixes promoted by governments, employers and international funders.
- Establishes a framework for a just transition in urban transport that participating workers and unions built themselves, based on their experiences and local demands. This will shift power relations in the long term.

Urban transport workers demonstrated throughout this project their capacity to understand the climate crisis, explain it to each other and formulate responses that address the scope of the crisis. The just transition framework that results from this cross-city exchange addresses workplace specific issues and systemic ones. Workers recognised that restrictive notions of just transitions will not be enough to tackle the climate crisis.

The climate crisis is not only about carbon emissions. It is a systemic, socioeconomic and environmental crisis. The solutions need to address the specific needs that everyday work demands (things like hazardous work pay incentives, social security protection) and the systemic changes that cities have to embrace (modal shifts to public transport, more publicly-owned and operated transportation, democratisation of transport).

**“THE CLIMATE CRISIS IS NOT ONLY ABOUT CARBON EMISSIONS. IT IS A SYSTEMIC, SOCIOECONOMIC AND ENVIRONMENTAL CRISIS”**

The just transition framework built in this project is constructed on the struggles that workers and unions are having on the ground. The struggles for formalisation of work, for gender equality, for good working conditions and better pay, are inextricably connected to the need to tackle the climate crisis. Workers understand that connection. It is time that employers, governments, and international financial institutions also understood it, by listening to the voices of those who experience the consequences of the climate emergency every day.

There is no one-size-fits-all solution to the climate crisis. There are no single-handed technological fixes that can be brought to lower emissions and address structural inequalities in urban transport. As this report has shown, the processes of electrification and automation of urban transport resolve one part of the equation. There is a larger section that needs to be addressed and does not rely on technological innovation. It is a political challenge about power, and urban transport workers are poised to play a role in it.

As other sections of the ITF join the conversation on workers' responses to the climate crisis, urban transport workers have created a stepping stone to the formulation of a whole-economy approach to tackling this crisis.

# APPENDIX 1

## THE JUST TRANSITION PROJECT

The Covid-19 pandemic continues to affect urban transport services in cities around the world. Despite almost two years of living with the pandemic, governments and employers have yet to provide clear roadmaps to sustainable transport, including workers' safety and reliable, accessible services.

Transport workers provided a critical service during the pandemic, bringing essential workers to and from work; giving entire populations access to testing, medical services and basic necessities; and with the relaxation of restrictions, reconnecting populations to their workplaces.

The effects of the climate crisis continue to affect transport workers in cities, increasing their exposure to extreme weather events and worsening air pollution, while deepening existing problems of precarity, informality, low wages, lack of social protection, and gender-based discrimination. Climate instability exposes women workers especially. They have the most precarious jobs, with the least protection.

The Covid-19 pandemic and the worsening climate crisis have highlighted the need for integrated approaches to just and sustainable development in cities. The lived experiences, realities and opinions of transport workers and the communities they serve need to be at the centre of the response to these problems. Urban transport workers, in delivery services and in public transport were indispensable during the emergency. This project is about focusing on how the changes taking place in our climate and the responses from city governments and employers are affecting these groups of workers.

The part played by urban transport workers during the Covid-19 pandemic received a lot of media focus. But their role as 'climate workers' has not received the same attention. Mayors have become outspoken about the need to

tackle the climate crisis through transforming urban spaces. These announcements rarely have workers as participants or recognise workers as agents of change. In reality, workers play a key role in realising urban transport services on the ground.

Over the last two years, cities, mayors and, increasingly, employers have included the idea of 'just transition' in their announcements. Often, there is a vague reference to a just transition "to a greener and more equal city". But they do not go into detail or misuse the term which entrenches the invisibility of those most affected by climate catastrophe. Just transition, since its inception, has been about workers and communities affected by environmental degradation.

This project builds on the work of the ITF in urban transport. In particular, it is a continuation of the development of a People's Public Transport Policy (PPTP), which highlighted 28 policy demands related to six key areas of public transport: public ownership, public financing, employment and decent work, women in public transport, worker control of technology and climate change<sup>62</sup>.

Core elements of the PPTP supported the workshops and the development of the just transition framework, in particular:

- A just transition for informal workers.
- How central women workers are to the transition.
- The role of democratic control (with regards to planning, data, and participation).
- Publicly owned and operated transport.
- The crucial role of public transport in combating climate change.

A just transition framework from the perspective of urban transport workers is the core aim of this project, and this report: focused on the realities of urban transport workers, the effects of climate change and of policies to curb emissions; and the responses that workers demand. The project used participatory action-based research in seven cities of the Global South to work together with urban transport workers. It is not exhaustive of the multiple realities of urban transport workers in the Global South, but it highlights common realities and responses. The 10-point just transition framework is collective, negotiated, the result of dozens of workshops and actions with workers in the participating cities. The framework reinforces many of the elements highlighted in the ITF's Our Public Transport program, and also brings new ones.

Workers have shown a capacity to understand the problems at hand (climate change and neoliberal policies), and to come up with alternative solutions in urban transport to tackle these interrelated crises. Workers have also shown that the road to a just transition shall be travelled by acting from below. A just transition will not be handed over from above, nor negotiated by the good intentions of governments and employers. This report represents a snapshot of what they have been working on.

## APPENDIX 2

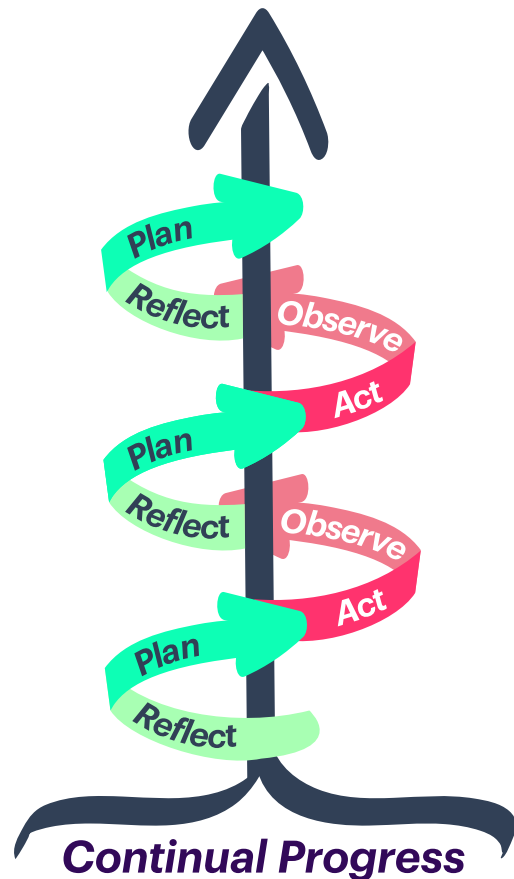
### METHODOLOGY

The Covid-19 pandemic continues to affect urban transport services in cities around the world. Despite almost two years of living with the pandemic, governments and employers have yet to provide clear roadmaps to sustainable transport, including workers' safety and reliable, accessible services.

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The Covid-19 pandemic and the worsening climate crisis have highlighted the need for integrated approaches to just and sustainable development in cities. The lived experiences, realities and opinions of transport workers and the communities they serve need to be at the centre of the response to these problems. Urban transport workers, in delivery services and in public transport were indispensable during the emergency. This project is about focusing on how the changes taking place in our climate and the responses from city governments and employers are affecting these groups of workers.



The project is building capacity for the ITF's urban transport affiliates in two ways. First, identifying how the climate crisis affects urban transport workers. Second, building a just transition framework that addresses the needs of workers in the sector, considering gender and intergenerational issues, as well as the communities who depend on urban transport for their livelihoods.

In each of the cities that took part, the project worked with a range of trade unions, workers' collectives, community groups and stakeholders in urban passenger transport to organise, mobilise and influence integrated urban transport plans based on just transition narratives and climate action in cities undergoing urban transformations.

The process has been divided into three main stages: first, building capacity on climate change, specifically looking at the impacts of climate change on urban transport workers. This required collective research into the main issues affecting urban transport workers with regards to climate change, followed by a collective discussion and exchange on the lived experiences of workers. This process was intended to focus the broader discussions on climate on to the everyday realities of the workplace and homes. At the end of this reflection, workers took different actions which included talking to their coworkers about the issues, taking photos of a day at work during a climate emergency, mapping who was part and who was not part of this conversation. The goal of these actions was to expand the conversation to those who were not part of the workshops, and to also build evidence of the effects of climate change on their lives.

A second stage centred on discussing and putting forward ideas to build a just transition framework that connects with workers' and unions' existing demands while recognising the need to address the climate crisis. Workers had to get together to establish common priorities between the different groups (conductors, ticket sellers, delivery riders, taxi workers, etc) and come up with demands that tackled the effects of climate change on their lives. This exercise was the basis for the 10-point just transition framework. This stage also led to reflections on the technological innovations presented by governments and employers as important to combat climate change, and the role they actually played.

A third stage involved taking actions to put elements of the just transition framework, in coordination with their existing demands. Participants, facilitated by local researchers, identified potential allies as well as opposition. They then agreed on different actions which could be taken collectively, including protests at government offices, rallies, press conferences, social media campaigns, recording videos and building capacity within their organisations.

Conducting a participatory project during the COVID-19 pandemic in different cities around the world was a significant challenge to the methodology. Participants struggled to stay connected. The online workshops were reduced to less than two hours, and participants were encouraged to join WhatsApp or Facebook groups in each city, to continue the exchange of ideas and to coordinate next steps. This made it easier for people to participate, especially women workers who often face greater barriers to attending workshops (online or in-person).

It also allowed young workers to be more involved in the project. They are often more familiar with the online tools available. The groups collected evidence in simple formats (for example, taking a photo of a workplace during an extreme weather event), which kept the conversation grounded in reality.

The fact that these actions, and reflections, are ongoing means that the framework that results from this project is a work in progress, and subject to change. Participatory action-based research also means that new strategies, as different realities arise, may change the outcome of the framework.

Local lead researchers facilitated the process in each of the participating cities. The researchers involved were:

**Benjamin Velasco (Cebu);**

**Daniel Hawkins (Bogota);**

**Andres Arce (Santiago);**

**Rakhi Sehgal (Hyderabad);**

**Heranisty Nasution (Jakarta);**

**Erick Manga (Nairobi);**

**Muttaqa Yushau (Lagos).**

## LOCATIONS

The project focused on cities of the Global South across four different regions: Latin America, Asia Pacific, South Asia, and Africa. The criteria for selecting them for the project consisted of a combination the following considerations:

- 1. Cities that are members of the C40 alliance, particularly cities that have ratified the Green and Healthy Streets Declaration**
- 2. Cities where ITF affiliates had the most potential to engage in the project, and their current work benefited from the project outputs.**
- 3. Cities with the most potential to build alliances between ITF affiliates in public transport and inner-city delivery around the project goals.**
- 4. Cities where there is the greatest potential to build alliances between ITF affiliates and informal workers' organisations around the project goals.**

In light of the above criteria, the following cities were selected for participation in the project:

- **Cebu (Philippines)**
- **Hyderabad (India)**
- **Jakarta (Indonesia)**
- **Nairobi (Kenya)**
- **Bogota (Colombia)**
- **Santiago (Chile)**

## PARTICIPATING TRADE UNIONS

Participating unions included public transport unions, inner city delivery unions, and app-based passenger services and delivery organisations. The focus and participation of ITF affiliates relied on guidance provided by the regional ITF offices and the ITF's London office. In some locations, the participants were predominantly from one sector and one union, while other cities had a combination of different sectors and unions involved. Here are the participating organisations:

- **Cebu:** National Confederation of Transport Unions, NCTU; PM Cebu riders collective;
- **Jakarta:** Serikat Pekerja Kereta Api, SPKA; Serikat Pekerja Transportasi Jakarta, SPTJ; Serikat Pekerja Dirgantara dan Transportasi, SPTD;
- **Hyderabad:** Indian Federation of App-based Transport Workers, IFAT;
- **Nairobi:** Railway and Allied Workers Union, RAWU; Transport and Allied Workers Union, TAWU; Bodaboda, Tuktuk and Taxi Workers Union BOTTAX;
- **Bogota:** Sindicato Nacional de Trabajadores del Transporte, SNTT; Unidapp;
- **Santiago:** Federación de Sindicatos del Metro, FESIMETRO; Sindicato RedBus; Sindicato Sisumile de Subus; Sindicato Elías Lafertte Empresa RedBus; Sindicato Elías Lafertte Empresa RedBus; Coordinadora Nacional Conductores de Transporte Mayor; Sindicato de Empresa Metro Regional Valparaiso Maquinistas y Afines; Sindicato de Tracción, Afines y Conexos Trenes Metropolitanos;

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