

DECARBONIZATION OF HEAVY-DUTY TRANSPORT IN NORTH AMERICA:
MAKING CLIMATE JUSTICE
CENTRAL TO THE PROCESS

**MULTI-STATE MEDIUM- AND HEAVY-DUTY ZERO-EMISSION
VEHICLE ACTION PLAN CONSULTATION**

By the David Suzuki Foundation and Équiterre
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Équiterre^o

DAVID SUZUKI FOUNDATION

The David Suzuki Foundation (DavidSuzuki.org | @DavidSuzukiFdn) is a leading Canadian environmental non-profit organization, founded in 1990. We operate in English and French, with offices in Vancouver, Toronto and Montreal. We collaborate with all people in Canada, including Indigenous leadership and communities, governments, businesses and individuals to create a sustainable Canada through scientific research, traditional ecological knowledge, communications and public engagement, and innovative policy and legal solutions. Our mission is to protect nature's diversity and the well-being of all life, now and for the future. We envision a day where we all act on the understanding that we are one with nature.

ÉQUITERRE

Équiterre seeks to make the necessary collective transitions towards an equitable and environmentally sound future more tangible, accessible and inspiring. Deeply concerned about climate change, Équiterre has developed significant expertise in public policy aimed at reducing greenhouse gas (GHG) emissions over the years. Through demonstration, education, awareness-raising, research, coaching and mobilization projects, Équiterre rallies citizens, social groups, businesses, public organizations, municipalities, researchers and elected officials in the fields of food, transportation, fair trade, sustainable energy, consumption and the fight against climate change.

Équiterre has 25,000 members and over 130,000 supporters who participate in its actions. The organization, which celebrated its 25th anniversary in 2018, is one of the leading environmental organizations in Quebec.

CONTRIBUTIONS

RESEARCH AND WRITING

Charles Bonhomme

Communications and Public Affairs Specialist | David Suzuki Foundation

Stéphanie Harnois

Research Officer, Environmental Science | David Suzuki Foundation

Andréanne Brazeau

Policy Analyst – Sustainable Mobility | Équiterre

PAGE LAYOUT

Annie Trudeau

Graphic Designer | David Suzuki Foundation

DECARBONIZATION OF HEAVY-DUTY TRANSPORT IN NORTH AMERICA: MAKING CLIMATE JUSTICE CENTRAL TO THE PROCESS

According to Environment and Climate Change Canada (ECCC), between 1990 and 2019, GHG emissions from freight transportation rose by 130%. More specifically, emissions from heavy-duty trucks tripled over that period, while those from other freight transportation methods rose by 6%¹. With population growth, which is driving increased trucking activity, and the low efficiency gains of heavy-duty vehicles compared to light-duty vehicles, projections indicate that GHG emissions from heavy-duty vehicles will continue to rise as long as there is no strong, swift, and ambitious action to improve energy efficiency and reduce the sector's carbon footprint. Given the above and the fact that the development of technological solutions is still in its infancy, the path forward is clear².

In Quebec, the transport sector is responsible for nearly half of GHG emissions (43.3%), as freight transportation is increasing: it accounts for 36.5% of all sector emissions³. In the heavy-duty subsector, GHG emissions rose by 194% between 1990 and 2019. As part of its 2030 *Plan for a Green Economy*, the province also committed to adopting a zero-emission vehicle (ZEV) standard for the medium- and heavy-duty transport sector, in addition to proposing different ambitious electrification targets in North America⁴.

Despite such commitments, one aspect is often omitted from measures aimed at decarbonizing transport and fighting climate change: environmental justice. In this regard, the David Suzuki Foundation and Équiterre are joining forces to propose improvements to the NESCAUM action plan so as to make climate justice central to its approach and leave no one behind. The two organizations welcome the Quebec government's decision to join the *Multi-State Zero-Emission Vehicle Task Force* and focus on the electrification of heavy-duty transport; nonetheless, they believe that greater attention must be paid to the issue of climate justice, which is still rarely addressed by public officials and relatively unknown to the general public. That is why the analysis focuses on this particular aspect, even though both organizations possess significant expertise in public policy and transportation.

Divided into three (3) parts, this submission contains an overview of environmental justice with a focus on the current situation in Quebec, an overview of the connections between environmental justice and heavy-duty transport, and recommendations and comments from the David Suzuki Foundation and Équiterre regarding the *NESCAUM and Multi-State Medium- and Heavy-Duty Zero-Emission Vehicle Task Force* action plan.

¹ Environment and Climate Change Canada (ECCC), *Greenhouse gas emissions*, 2022.

² Équiterre, *Redoubler d'efforts pour la planète et nos communautés*, [French only] 2022.

³ Gouvernement du Québec, *Inventaire québécois des émissions de gaz à effet de serre en 2019 et leur évolution depuis 1990*, [French only] 2021.

⁴ Gouvernement du Québec, *Inventaire québécois des émissions de gaz à effet de serre en 2019 et leur évolution depuis 1990*, 2021.

1. ENVIRONMENTAL JUSTICE: THE CASE FOR QUEBEC

The David Suzuki Foundation and Équiterre start by defining the concepts of environmental justice and environmental racism to frame their recommendations on NESCAUM's action plan.

1.1 WHAT IS ENVIRONMENTAL JUSTICE?

The impacts of the climate crisis and the related health risks are felt all over the world, including in Quebec. However, those impacts are not evenly distributed⁵. Some individuals and groups, considered vulnerable, are at greater risk of suffering harms related to climate change than others. Environmental justice recognizes that vulnerable populations are disproportionately burdened by environmental degradation while benefiting less from the advantages of a healthy environment, even though they bear little responsibility for that degradation.

According to the Institut du Nouveau Monde, environmental justice is intended to guarantee the rights of humans, regardless of age and origin, to a healthy environment, i.e., the right to breathe clean air, work in a healthy environment and have access to potable water, adequate sanitary facilities, balanced ecosystems, nontoxic environments and fresh, sustainably produced food. This right also includes not only access to education and information about the environment, but also participation in dialogue on environmental policies and legal recourse in the event of damage to the environment⁶.

1.2 WHAT IS ENVIRONMENTAL RACISM?

Included in the concept of environmental justice, environmental racism shines a light on the fact that people who are subject to environmental harm are also exposed to other forms of inequality. This phenomenon occurs when, intentionally or not, environmental practices or policies result in disproportionate negative effects on certain individuals, groups or communities due to race or colour, as well as unequal access to environmental benefits. For example, in Montréal-Nord, a borough in the city of Montreal, racialized communities are more likely to experience the effects of heat islands and a lack of green spaces (3.9% of green spaces in Montréal-Nord vs. 11.4% across Montreal)⁷.

1.3 ENVIRONMENTAL RACISM: A PRIORITY ISSUE FOR QUEBEC

If we ignore the relationship between environment and social inequality as we decarbonize our society, we will only exacerbate inequality. Since the government of Quebec claims to be concerned about environmental issues, it is critical that it integrates such concepts into its discourse and into its policies and programs designed to fight the climate crisis. The government of Quebec must stand out by going further, i.e., by making environmental issues inseparable from their social consequences. Racialized communities and new immigrants make up a significant portion of the Quebec population and workforce. In 2021, 19% of the Quebec workforce was made up of immigrants⁸. However, those populations are the most affected by environmental injustices.

⁵ Government of Canada, *Health of Canadians in a Changing Climate: Advancing Our Knowledge for Action*, 2022.

⁶ Institut du Nouveau Monde, *L'état du Québec 2021 : Faire place à la justice environnementale et sociale à l'école*, [French only] 2021.

⁷ Radio-Canada, ICI Grand Montréal - La Presse canadienne, *L'organisme Hoodstock dénonce le racisme environnemental*, [French only] 2021.

⁸ Government of Quebec, *Faits saillants - État du marché du travail au Québec. Bilan 2021* [French only], 2022.

1.4 TAKING INSPIRATION FROM CANADA AND THE UNITED STATES

In Canada, the absence of disaggregated data on environmental risks and their effects on low-income racialized people in Canada has concealed the problem, hindering efforts to advance environmental justice. In response to this issue, if Bill C-226, an *Act respecting the development of a national strategy to assess, prevent and address environmental racism and to advance environmental justice*, were adopted, it would require the federal Minister of Environment to develop a strategy on environmental racism and environmental justice. Among other things, it would make it possible to collect and include information and statistics on the location of environmental risks and study the connections between race, socio-economic status and environmental risks, as well as the resulting health outcomes.

On June 22, 2021, the Standing Committee on Environment and Sustainable Development filed its report on the Bill with the House of Commons. It is currently in second reading. Quebec could encourage the federal government to adopt the Bill quickly.

In the United States (U.S.), the matter is much further ahead; the country has been looking at the issue for decades. Work surrounding environmental justice in the U.S. results from the 1994 executive order titled *Federal actions to address environmental justice in minority populations and low-income populations*⁹, which enabled the U.S. government to equip itself with tools and programs allowing it to gather information and statistical data on the situation of at-risk populations. By doing so, the government gave itself the means to act on this large-scale issue.

1.5 COURSES OF ACTION FOR QUEBEC

Looking at Canada and the U.S., we see that there are ways to fight environmental racism. Now it is Quebec's turn to find such ways. To maintain its leadership in transport electrification, as a member of the *Multi-State ZEV Task Force*, Quebec has every interest in joining the movement and implementing measures designed to make sure the transition is effective and socially inclusive.

Matters of social justice are not the exclusive purview of the federal government. Quebec has jurisdiction over what happens on its own territory and can move forward with a law inspired by Bill C-226 without encroaching on federal jurisdiction. By legislating on the matter, Quebec will be able to make decisions on its own and will demonstrate its willingness to act on this critical issue.

Data collection is essential to move from concept to reality. As Quebec is lagging on environmental and social data collection, such a bill could help by providing an assessment of the current situation and measuring the extent of the problem, both of which are prerequisites for action. Quebec can and must review its plan to fight climate change from the perspective of social justice, by analyzing the consequences of measures deployed on its populations and by redirecting funds toward the most marginalized populations on its territory.

⁹ Government of the United States, [Executive order: Federal actions to address environmental justice in minority populations and low-income populations](#), 1994.

2. ENVIRONMENTAL JUSTICE AND HEAVY-DUTY TRANSPORT

Heavy-duty transport initiatives must address the environmental injustices created by the current network and must guarantee a net reduction in emissions in communities particularly vulnerable to poor air quality. Moreover, such communities must be the first to benefit from the positive spinoffs of network electrification. Engaging those communities is also key to developing fair solutions that meet their needs, promote better health, and guarantee a healthy environment for their members.

2.1 MAIN ENVIRONMENTAL INJUSTICE ISSUES RELATED TO THE TRANSPORT SECTOR

North American populations are unevenly affected by the negative impacts associated with the heavy-duty transport sector. Communities living near major roads are more exposed to risks of injury and accident, respiratory diseases, and mental health issues (caused by stress and sleep difficulties, for instance), as well as noise and visual disruptions. Pollution and the development of heavy-duty transport infrastructure also have an impact on recreational activities in those communities by hindering activities such as wildlife observation, fishing, and commuting, or endangering the safety of children playing in the parks.

The electrification of the heavy-duty transport network could inequitably affect the employment status of populations in areas where it will be deployed. The numerous front-line jobs generated by the current industry, which is concentrated in certain communities, are being compromised by the implementation of a new electric network. Furthermore, access to public transit is currently limited in some neighbourhoods and communities, reinforcing the importance of considering the needs of marginalized populations in planning the electrification of the heavy-duty transport network. It should also be noted that the increasing use of medium-duty vehicles as a result of the e-commerce boom of recent years is adding to the impacts on quality of life and the environment for populations in neighbourhoods that are largely residential¹⁰. Similarly, the use of diesel school buses across Quebec exposes children and drivers to air and sound pollution daily. Less densely populated regions, where vehicles are required to travel long distances are more affected by this issue.

In Quebec, instances of flagrant environmental injustice related to heavy trucks prevail in some communities in the province such as in the neighbourhoods of Limoilou, Vanier and Basse-Ville in Quebec City. These densely populated sectors, where the level of material and social deprivation is the highest in the region, are located near major roads and many industrial parks. In addition to being downwind from dominant winds and therefore exposed to air contaminants, the residential neighbourhoods are in a precarious situation because of traffic and road, port and industrial expansion projects¹¹. The concerns of residents in the Hochelaga-Maisonneuve neighbourhood, on the other hand, relate to the visual and sound pollution created by the REM de l'Est project and its overhead installations¹². Such issues exist in most major cities in Quebec.

¹⁰ Équiterre, Pembina Institute & Jalon, *Réduire les émissions des camions à Montréal: Principes de base et boîte à outils pour décarboniser le transport de marchandises en milieu urbain*, 2021.

¹¹ Centre intégré universitaire de santé et de services sociaux de la Capitale-Nationale du Québec, *Inégalités socio-environnementales et pollution - Comment créer des synergies utiles au changement*, [French only] 2019.

¹² Radio-Canada, *Des citoyens d'Hochelaga-Maisonneuve inquiets de l'impact du REM de l'Est*, [French only] 2021.

3. RECOMMENDATIONS ON THE ACTION PLAN

The David Suzuki Foundation and Équiterre welcome the fact that the NESCAUM action plan integrates principles and orientations that focus on equity and the right to a healthy environment. This plan must advance practices and policies that will guarantee environmental justice and will benefit vulnerable and marginalized communities across North America.

3.1 GENERAL RECOMMENDATIONS

Nonetheless, we believe that the following should be added to the action plan:

- Develop a clear, effective vision that goes beyond electrification to promote:
 - A reduction in the number of vehicles on the road, the optimization of freight transport logistics, and other innovative urban environment solutions such as deploying cargo bikes given that GHG emissions are rising in this sector.
 - Other freight transport methods traditionally used in North America (light trucks, rail, air and maritime transport) because environmental justice issues are not exclusive to heavy-duty transport.
- Promote the adoption of local solutions using a participatory approach; consider the needs and resources of each territory, while including the principle of self-determination of communities, and methods to promote it, in the action plan.
- Provide details on how heavy-duty transport can exacerbate inequalities that already exist in society (see Part 2.1), considering for example that people in vulnerable communities, in addition to living in areas more exposed to pollutants, often hold industrial jobs (e.g., truck drivers, bus drivers, and warehouse, rail and dock employees) that expose them to the same health risks. The action plan mentions unpleasant odours and noise pollution on page 43, but we must also address issues such as visual pollution, injuries and accidents, chronic illness (e.g., obesity), mental health, and threat to recreational activities.

3.2 SPECIFIC RECOMMENDATIONS

SPECIFIC RECOMMENDATION 1		
Highlight the multiple environmental injustices related to the current heavy-duty transport network that marginalize certain population groups and make them vulnerable.		
COMMENTS	SECTIONS	
<p>1 The NESCAUM action plan cites the current unequal distribution of the negative economic and mental health impacts largely suffered by low-income and racialized communities living near heavy-duty transport infrastructure. As recommended in Section 3.1, the economic impacts on vulnerable populations should be fully explained (since the health impacts related to air pollution are adequately described). This would make it easier to understand the scope of the impacts and promote action.</p>	<p>Part III [<i>Why Zero-Emission Trucks And Buses? - The Disproportionate Impact On Overburdened Communities</i>], page 10 (first paragraph)</p>	
<p>2 The NESCAUM action plan discusses the social issues related to mineral extraction for battery production in foreign countries where the local workforce is often being exploited (including examples of poor working conditions and health risks). Such environmental justice issues should be mentioned in the introduction, listing the wide range of injustices currently observed in the heavy-duty transport sector and extending even overseas. As recommended in Section 3.1, it would also be a good idea to extend the consideration and to go beyond electrification to reduce GHG emissions from heavy-duty transport by adopting a clear, effective vision that includes reduction at the source.</p>	<p>Part V [<i>Building Market Momentum And Addressing Barriers - Lithium-Ion Battery Production And Recycling</i>], page 23 (first paragraph)</p>	
<p>3 Recommendations concerning vulnerable and marginalized communities should be mentioned earlier in the document, as a priority. However, we understand that it is sometimes preferable to explain how the measures included in the project will be implemented before elaborating on the target location and populations to which the recommendations will apply as a priority.</p> <p>We acknowledge the appropriateness of the order selected for the items on pages 25 to 30, where the concept is explained before the justice issues are cited.</p>	<p>Part VI [<i>Strategies And Recommendations - Electric Utility and Utility Regulator Actions</i>], page 33 (point 4)</p>	

SPECIFIC RECOMMENDATION 2

Make sure that the project is based on participatory governance at every stage of implementation, and that it first engages communities that are vulnerable to the impacts of the current heavy-duty transport network.

COMMENTS	SECTIONS
1 We wholeheartedly support positioning environmental organizations and vulnerable communities first in the list of stakeholders in the action plan.	Introduction, page 3 (second paragraph)
2 The items listed in this subsection (<i>Principles for a Just and Equitable Transition</i>) best reflect participatory governance. This same discourse should therefore be included in the introduction where the authors address topics such as making sure stakeholders participate in the decision-making process and are involved at every stage of the project; recognizing community expertise; and more.	Part II [<i>Supporting A Just And Equitable Transition To Zero-Emission Trucks And Buses - Principles for a Just and Equitable Transition</i>], page 7 (first item)
3 We find the items in this list very significant, because they advocate for equity and democracy in terms of electrification (for example, translating documents into several languages to reach all the affected populations, holding meetings at times that accommodate family/work schedules, writing information in plain language, etc.).	Part II [<i>Supporting A Just And Equitable Transition To Zero-Emission Trucks And Buses - Principles for a Just and Equitable Transition</i>], page 7 (third sub-item)
4 We support the idea to allow the government and communities to adapt their practices based on their own needs and resources, which is another relevant aspect of equity and justice.	Part VI [<i>Strategies And Recommendations</i>], page 25 (first paragraph)

SPECIFIC RECOMMENDATION 3

Share information that shows why and how electrifying the heavy-duty transport network would have a positive impact on social and environmental well-being.

COMMENTS	SECTIONS
1 We welcome the inextricable link between the climate emergency and the decarbonization of energy sectors advanced in the action plan.	Introduction, p. 1 (first paragraph)
2 We suggest adding statistics that quantify the current greenhouse gas contribution of heavy vehicles.	Introduction, p. 1
3 It would be advisable to specifically identify communities near heavy-duty transport infrastructure (low-income and racialized communities) that are the most exposed to the impacts of air pollution, which confirms the need to step up data collection efforts.	Part II [<i>Supporting a just and equitable transition to zero-emission trucks and buses</i>], page 5 (first paragraph)
4 We agree that it is a good idea to explain how heavy vehicles contribute to greenhouse gas emissions, even if they are less numerous on the road (due to their high mileage, diesel engines, etc.). Statistics to quantify their contribution would be useful.	Part III [<i>Why Zero-Emission Trucks And Buses?</i>], page 9 (second paragraph)
5 It would be useful to include the exact estimated reduction in greenhouse gas emissions as a result of the complete decarbonization of the heavy-duty transport network by 2050, and to reference scientific studies and modeling (" <i>Fully decarbonizing the electric grid by 2050 would deliver even greater emission reductions</i> "), while demonstrating the feasibility of such an undertaking.	Part III [<i>Why Zero-Emission Trucks And Buses?</i>], page 11 (second paragraph)
6 We support the recommendation for governments to develop tools and resources on heavy-duty transport decarbonization that are informative, educational, easy to understand and accessible to marginalized populations and vulnerable communities. This idea stems from the democratic processes of the action plan that we strongly support.	Part VI [<i>Strategies And Recommendations - Outreach and Education</i>], page 38 (item 2)
7 We support the idea of prioritizing the installation of air-quality detectors in vulnerable areas where the population is most at risk from air pollutants (children, people with chronic illnesses, etc.).	Part VI [<i>Strategies And Recommendations - Community Air Monitoring</i>], page 43 (point 1)
8 For the purposes of illustrating the benefits of implementing an electrified network, it would be useful to have an estimate of the jobs created by this energy sector versus the jobs lost. Data on the potential economic benefits would make it possible to better visualize the gains of electrification.	Part III [<i>Why Zero-Emission Trucks And Buses? - Maximizing the Economic Benefits of the Transition</i>], page 12 (third paragraph)
9 We suggest that, in addition to data on air and sound pollution and traffic-related safety, the NESCAUM plan include data on the emission of unpleasant odours, visual pollution, and transport infrastructure-related accidents. That way, the positive impacts of electrification on environmental and social well-being would be more detailed.	Part VI: <i>Strategies And Recommendations - Community Air Monitoring</i> , page 43 (item 4)

SPECIFIC RECOMMENDATION 4

Guarantee an equitable, competitive and inclusive job sector, by prioritizing vulnerable communities and front-line workers who hold jobs in the current network.

COMMENTS	SECTIONS
<p>1 One of the goals of the electrification project is to promise high-quality jobs and offer competitive salaries. It would be very useful to understand what other employment benefits are anticipated for the workforce to make sure the sector is competitive.</p>	<p>Part III [<i>Why Zero-Emission Trucks And Buses? - Maximizing the Economic Benefits of the Transition</i>], page 12 (third paragraph)</p>
<p>2 We support the language in the NESCAUM action plan that emphasizes equitable access to employment, by prioritizing front-line workers and vulnerable communities and by focusing training and recruitment efforts on them.</p>	<p>Part VI [<i>Strategies And Recommendations - Economic Equity for Workers</i>], page 40 (first paragraph)</p>
<p>3 We suggest adding to all these recommendations the implementation of recruiting and hiring programs or strategies that prioritize workers from vulnerable communities, as discussed in the action plan at the end of the first paragraph on page 40. This will complement the workforce training efforts covered under item 6 on page 41.</p>	<p>Part VI [<i>Strategies And Recommendations - Economic Equity for Workers</i>], page 1</p>
<p>4 The NESCAUM action plan raises the issue of misclassification, which refers to the fact that truck drivers who are hired as contractors must bear the new equipment- and technology-related costs associated with their trucks. The Task Force cites the importance of implementing measures that will deter misclassification, without, however, explaining how that will be done.</p> <p>We therefore invite the Task Force to detail the methods that will be used to deal with the issue and to formally integrate them into their recommendations. The methods must make it possible to guarantee that the transport industry and companies will bear all equipment-related costs incurred as a result of the technology change and energy transition if no government assistance is provided.</p>	<p>Part VI [<i>Strategies And Recommendations - Economic Equity for Workers</i>], page 40 (point 1)</p>

SPECIFIC RECOMMENDATION 5

Align the efforts of various entities and organizations and ensure institutional collaboration (ministries, agencies, departments, divisions, etc.), in order to guarantee just and equitable processes.

COMMENTS	SECTIONS
<p>1 The action plan rightly points out that the issues related to worker transition involve various organizations. It would be a good idea to detail how this collaboration between organizations, aimed at guaranteeing high-quality jobs, would become a reality (as stated on page 40). Common efforts and intersectionality are critical to ensuring inclusive and collaborative cross-sector decarbonization.</p>	<p>Part II [<i>Supporting A Just And Equitable Transition To Zero-Emission Trucks And Buses</i>], page 6 (third paragraph)</p>
<p>2 In New Jersey, a recent Executive Order signed by the Governor requires executive branch agencies to work together as they apply the principle of environmental justice to their operations. These agencies are required to implement action plans and assessments to advance environmental justice in communities across the state, with the support of the newly formed Environmental Justice Interagency Council.</p> <p>We recommend that the <i>Multi-State MHD ZEV Task Force</i> use the government approach currently being deployed in New Jersey as a model.</p>	<p>Partie II [<i>Supporting A Just And Equitable Transition To Zero-Emission Trucks And Buses</i>], page 6 (box)</p>
<p>3 The action plan discusses the need for inter-agency coordination and collaboration to develop a “whole-of-government” approach (like in New Jersey). It would nonetheless be useful to present additional examples on how this collaboration between governments and with the civil society would be implemented (thereby including community members and different task forces).</p> <p>The text talks about aligning training needs and resource engagement, but the forms of collaboration should be described in more detail to ensure efforts are better coordinated (for example, by planning periodic meetings, follow-ups, advisory committees, regulations, annual accountability reporting, etc.).</p>	<p>Part II [<i>Supporting A Just And Equitable Transition To Zero-Emission Trucks And Buses</i>], page 7 (first paragraph)</p>
<p>4 The action plan recommends that the government participate in task forces or training programs on air quality monitoring. However, it is essential to make sure that such groups and activities are set up through rigorous monitoring of the plan’s commitments. The annual accountability reporting and review mechanisms designed to achieve the objectives of the action plan should be detailed in the action plan. That will ensure that governments are directly involved in the matter for the long term.</p>	<p>Part VI [<i>Strategies And Recommendations - Community Air Monitoring</i>], page 43 (point 3)</p>

SPECIFIC RECOMMENDATION 6

Demonstrate the economic benefits of electrifying the heavy-duty transport network in participating territories.

COMMENTS	SECTIONS
<p>1 We recognize the importance of outlining the role of heavy vehicles in the daily life of the population, both on the economic level (freight transport) and on the social level (public transit and school transportation, etc.). We could also mention vehicles in other sectors that are key to the smooth functioning of our society: firetrucks, ambulances, etc.</p>	<p>Part III [<i>Why Zero-Emission Trucks And Buses?</i>], page 9 (first paragraph)</p>
<p>2 Once again, we recognize the importance of prioritizing local employability and the equitable redistribution of economic benefits in the government policies of participating territories.</p>	<p>Part III [<i>Why Zero-Emission Trucks And Buses? - Maximizing the Economic Benefits of the Transition</i>], page 12 (second paragraph)</p>

SPECIFIC RECOMMENDATION 7

Clarify certain statistical, technical or scientific aspects to ensure optimal understanding and democratization of all the information in the NESCAUM action plan.

COMMENTS	SECTIONS
<p>1 As far as scientific information is concerned, it would be advisable to make the harmful effects of certain gases and air pollutants easy to understand. We suggest providing a better description of the polluting potential of <i>particulate matter</i> and PM25 and explaining how such substances are harmful to health or the environment. An Équiterre report on the benefits of electrification of school buses provides such detailed information.</p>	<p>Part III [<i>Why Zero-Emission Trucks And Buses?</i>], pages 9 et 10</p> <p>Part III [<i>Why Zero-Emission Trucks And Buses? - Quantifying the Public Health and Climate Benefits of Zero-Emission Trucks and Buses</i>], page 11</p>
<p>2 This section of the action plan discusses a quick transition and the resulting benefits, although it mentions shortly after that this transition will take time, especially for heavy trucks. The focus should rather be placed on ways to effectively and quickly initiate the transition by involving all sectors.</p> <p>We recommend emphasizing effective methods designed to facilitate a relatively quick transition (e.g., strict regulations, research and development, efforts to support the marketing of electric vehicles, financial incentive policies, the deployment of renewable energies, a just transition strategy).</p>	<p>Part III [<i>Why Zero-Emission Trucks And Buses? - The Disproportionate Impact on Overburdened Communities</i>], page 11 (first paragraph)</p>
<p>3 The action plan points out that electric vehicle sale requirements would make it possible to prioritize the deployment of such vehicles in communities near road networks. This information could be clarified, because the link between regulations (that apply to manufacturers and buyers of heavy vehicles) and the distribution of electric vehicles might seem unclear.</p>	<p>Part VI [<i>Strategies And Recommendations - Sales and Fleet Purchase Requirements</i>], page 25</p>

CONCLUSION

The David Suzuki Foundation and Équiterre acknowledge the outstanding work that went into the action plan drafted by the *Multi-State ZEV Task Force* and designed to eliminate harmful truck and bus emissions. Quebec's contribution to the Task Force should be viewed as an opportunity for the province to raise the bar across Canada for the decarbonization of medium- and heavy-duty transport and environmental and climate justice.

To achieve its objectives, the Task Force must develop a clear, effective vision that focuses on promoting cooperation and reducing the number of vehicles on the road, while leaving no one behind. That vision must also be supported by relevant, reliable and up-to-date scientific data on current environmental inequalities.

FURTHER RESOURCES

The David Suzuki Foundation and Équiterre wish to share further resources on the decarbonization of heavy-duty vehicles and environmental justice.

ÉQUITERRE DOCUMENTS

- Brief "[Redoubler d'efforts pour la planète et les communautés](#)" [French only] (2022) by Équiterre
- Recommendations ([Fact Sheet 1](#) and [Fact Sheet 2](#) [French only]) taken from the pan-Quebec campaign [My Electric Bus](#) (2021) by Équiterre
- "[Decarbonizing urban freight transport](#)" (2021) by Pembina Institute, Équiterre and Jalon
- [The Canadian Electric School Bus Alliance](#) (2022), a new initiative that advances the benefits of transitioning to electric vehicles
- Brief "[Le secteur des transports au Québec - Clé de voûte pour atteindre la cible climatique de 2030 et maintenir notre leadership en électrification](#)" [French only] (2021) by Équiterre

FURTHER RESOURCES

- Canadian Association of Physicians for the Environment (2022). Mobilizing Evidence: Activating Change on Traffic-Related Air Pollution (TRAP) Health Impacts. Accessed at <https://cape.ca/wp-content/uploads/2022/04/CAPE-TRAP-2022.pdf>
- Government of Canada (2022). Climate Change and Health Equity In P. Berry and R. Schnitter (ed.), Health of Canadians in a Changing Climate: Advancing our Knowledge for Action. Accessed at <https://changingclimate.ca/health-in-a-changing-climate/chapter/9-0/>
- Carrier, M. et al. (2014). The application of three methods to measure the statistical association between different social groups and the concentration of air pollutants in Montreal: A case of environmental equity. Accessed at <https://espace.inrs.ca/id/eprint/2324/1/Carrier-2014-The%20application%20of%20three%20methods1.pdf>
- Intergovernmental Panel on Climate Change (2022). Summary for policymakers. In *Climate Change 2022: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Accessed at https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf
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