

FORMAT		
1. Name of resource	Accelerating Zero Emissions Delivery: An innovative approach to transforming the last mile	
2. Location	https://supplychain.edf.org/resources/accelerating-zero-emissions-delivery/	
3. Alternative location		
4. Author[s]	A. Nowlan and S. Usmani	
5. Publisher/producer/host	Environmental Defense Fund (EDF)	
6. Year	2021	
7. Suggested citation	Nowlan, A. and S. Usmani (2021). Accelerating Zero Emissions Delivery: An innovative approach to transforming the last mile. EDF, available at https://supplychain.edf.org/resources/accelerating-zero-emissions-delivery/	
8. Languages in which available	English	
9. Geographic area resource relates to	Global	
10. Does the resource relate to a specific time frame?		
11. Type	Report	Yes
	Toolkit/Framework/Roadmap	Yes
	Sign-post to other resource (database)	
	Case studies	
	Other	
12. If this is part of an initiative, what is the initiative?		
COLLECTIONS AND COLLECTIONS-BASED INSTITUTIONS		
13. Explicit links to collections	No	
14. Explicit links to museums/libraries/archives	No	
15. Types of institutions the resource covers	Museums	X
	Archives	X
	Libraries	X
	Other	X
16. Does the resource relate to specific disciplines?	Arts, humanities and social sciences: philosophy, psychology, religion, social sciences, law, politics,	X

	language, arts and recreation, architecture, literature, history, geography and ethnology, anthropology, archaeology	
	Science, natural history, technology, medicine, engineering, manufacturing	X
17. If no explicit links to collections, justification for inclusion	Collections-based institutions are responsible for a lot of shipping and transportation, both of goods, and of collections items through loans for exhibition and research. This resource can help collections-based institutions familiarize themselves with, support and make a case for zero-emissions deliveries. Many collections-based institutions are in city and town centres, which already have poor air quality; prioritizing efforts to improve air quality, notably in the most deprived districts, and reduce carbon emissions should be an important priority.	
HOW IT CONTRIBUTES TO SUSTAINABLE DEVELOPMENT		
18. Collections-related activities the resource relates to (mark all that apply)		
Develop collections to protect and safeguard wider cultural and natural heritage more effectively, for example by targeting collecting to threatened forms of heritage in strategic ways		
Use collections to promote learning and educational opportunities that contribute to sustainable development more effectively, for example education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development and/or skills development relating to collections		
Use collections to promote cultural participation/social inclusion more effectively, for example by reducing barriers to participation, to ensure no-one is ‘left behind’		
Use collections to promote sustainable tourism more effectively, for example by developing new products based on local cultural heritage, and/or considering the rights of stakeholder groups in relation to collections		
Use collections to support research that contributes to sustainable development (including all forms of personal and self-directed research at all levels that make use of stored collections) more effectively, for example by providing effective facilities, collections and information to meet researchers’ needs		
Make decisions around collections that contribute to sustainable development more effectively		
i.	employment (recruiting, staff training, staff safety)	
ii.	energy consumption, greenhouse gas emissions,	X

reduction, monitoring and reporting		
iii.	waste management and reduction of waste	X
iv.	transport (forms of transport, energy use)	X
v.	commercial activities including copyright and IP	X
vi.	governance and management	
vii.	security, disaster preparedness and risk reduction	X
Direct external leadership, partnerships and collaborations towards sustainable development more effectively , for example by developing impactful partnerships		
19. Does the resource relate clearly to any international conventions (mark all that apply)?		
Culture conventions:		
1952, 71 Protection of Copyright and Neighbouring Rights		
1954 Protection of Cultural Property in the Event of Armed Conflict		
1970 Fighting Against the Illicit Trafficking of Cultural Property		
1972 Protection of the World Cultural and Natural Heritage		
2001 Protection of the Underwater Cultural Heritage		
2003 Safeguarding of the Intangible Cultural Heritage		
2005 Protection and Promotion of the Diversity of Cultural Expressions		
Rio Conventions:		
Convention on Biological Diversity (CBD), Convention to Combat Desertification (UNCCD), Framework Convention on Climate Change (UNFCCC)		X
AIMS AND CONTENT		
20. What issues does the resource aim to address?		<p>“Accelerating Zero-Emissions Delivery: An innovative approach to transforming the last mile introduces a new financing model for Zero Emissions Delivery Zone (ZED Zone) that can accelerate commercial vehicle electrification and enable companies to hit their clean shipping goals... Further, the model can unlock substantial financial, social and environmental returns for forward-thinking investors. For example, the report finds that by sponsoring just 15 zero-emissions delivery vehicles, companies can create \$1 million of health benefits from reduced air pollution.”</p> <p>“Electrifying transportation is critical as the world works toward creating a more sustainable and equitable future. Online sales are rapidly growing, which is increasing the demand for more delivery vehicles that contribute to air pollution, greenhouse gas emissions and congestion. The health of the planet and communities are at risk. The urgency to find innovative solutions for fleet electrification that can drive down air pollution and climate pollution is at an all-time high as the world</p>

	<p>struggles with COVID-19 and more frequent natural disasters. We believe there is a better way...</p> <p>Accelerating Zero-Emissions Delivery introduces an innovative model for accelerating commercial vehicle electrification by harnessing customer demand to overcome a variety of barriers. Giving independent contractors access to electric trucks without becoming cost burdened, enables brands like us to continuing progress against our sustainability and delivery commitments even when we don't own or control the vehicles that operate in our supply chain.</p> <p>By leveraging the collective purchasing power of brands, we can send a message to transportation suppliers, policy makers and communities that zero emissions deliveries are a priority and are possible. The transition to a sustainable transportation future is not only possible today, it's more important than ever before"</p>
21. Intended audience of resource	[businesses, organisations and local government involved in procurement and purchasing]
22. Process of development	[authored toolkit]
23. Organisation/structure/contents	<p>Foreword 1</p> <p>Executive summary 2</p> <p>Introduction 4</p> <p>How a zero-emissions delivery 6</p> <p>zone (ZED zone) works</p> <p>The business case for fleet electrification is clear 9</p> <p>Increased demand for last-mile delivery 9</p> <p>Health consequences from air pollution 13</p> <p>ZEV readiness for last-mile delivery 15</p> <p>Barriers addressed 17</p> <p>Zero-emissions delivery zone model 19</p> <p>Increased resources and certainty 19</p> <p>Focus on at-risk neighborhoods 23</p> <p>Best practice for financing 24</p> <p>Other potential impacts 25</p> <p>Scenario: GHG and air pollution impact 26</p> <p>Conclusion 27</p> <p>Glossary of terms 28</p> <p>References 29</p>
FRAMEWORKS	
24. Framework structure	The Zero Emissions Delivery (ZED) Zone model can be considered as a framework.

	<p>"In a ZED Zone model, a shipper or a group of shippers will "sponsor" ZEVs [Zero Emissions Vehicles]. The number of vehicles will depend on shipper demand, charging availability, depot size and other factors.</p> <p>A ZED Zone model could take three forms:</p> <ul style="list-style-type: none"> • Model A (Sponsorship): Shippers pre-pay for shipping and receive monthly discounts on a long-term contract. • Model B (Guaranteed Monthly Minimum): Shippers sign a long-term contract with one carrier at a minimum monthly spend. • Model C (Shared Rental): Shippers sign a long-term contract with an EV [Electric Vehicle] manager guaranteeing vehicle use and requiring carriers to rent ZEVs from the EV manager." (p.6)
25. Relevant policy considerations	Yes
26. Resources for implementation identified	Yes
27. Specific assessment points/indicators/milestones/action plan for monitoring	Yes
28. ASPECTS OF SUSTAINABILITY COVERED BY RESOURCE (mark all that apply)	
People (social sustainability)	X
Planet (environmental sustainability)	X
Prosperity (economic sustainability)	X
Peace	X
Partnerships	X
29. CROSS-CUTTING CONSIDERATIONS COVERED BY RESOURCE (mark all that apply)	
Gender perspectives	
North and South perspectives	
HOW THE RESOURCE CONTRIBUTES TO AGENDA 2030 AND THE SDGs	
HOW AGENDA 2030 AND THE SDGs FEATURE IN THE RESOURCE	
30. SDGs and Agenda 2030 specifically mentioned?	No
31. SDGs specifically mentioned?	No
32. SDG targets specifically	No

mentioned?	
33. SDG indicators specifically mentioned?	No
SDGs AND SDG TARGETS AND LINKAGES	
34. Comments on SDG linkages	<p>The resource helps support a number of SDG targets related to the adoption of policies and practices that support sustainable development, including 12.6 (adopt sustainable business practices), 12.7 (green procurement), 13.3 (climate action) and 16.B (adopt policies for sustainable development).</p> <p>The resource supports SDG targets related to the uptake of renewable sources of energy and move away from fossil fuel-based transport, including 7.2 (increase the use of renewables in the global energy mix), 8.4 (decouple economic growth from environmental degradation), 9.4 (upgrade infrastructure and retrofit industries to make them sustainable) and 12.2 (use natural resources sustainably).</p> <p>Implementing the resource supports 11.6 (reduce the environmental impact of cities, notably in terms of air quality), which in turn supports SDG 3.9 (substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination).</p> <p>Working in partnership to support zero emissions transport supports SDG 17.17 (public, public-private and civil society partnerships for sustainable development).</p>
35. SDGs and SDG targets the resource helps advance	
SDG 3: Ensure healthy lives and promote well-being for all at all ages 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	<p>Plans, policies and procedures in place to prevent harmful exposure to hazardous chemicals associated with collections, or collections-related activities.</p> <p>Plans, policies and procedures in place to ensure hazardous chemicals and other forms of pollutant are properly managed and disposed of, to prevent release into the natural environment.</p>
SDG 7. Ensure access to affordable, reliable, sustainable and modern energy for all 7.2 By 2030, increase	<p>Proportion of energy that comes from renewable sources.</p> <p>Date to achieve net zero, and milestones towards that date.</p>

substantially the share of renewable energy in the global energy mix	
SDG 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead	Plans in place to increase resource efficiency, reduce consumption, and to decouple economic growth from environmental degradation.
SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	Number and proportion of collections facilities that: 1. make efficient use of resources, with an ongoing drive for efficiencies and reductions in energy use and waste of all forms. 2. use clean and environmentally sound technologies, including climate-friendly energy sources and materials, with an ongoing commitment to reduce greenhouse gas emissions and waste of all forms. 3. adopt and/or prioritise collections-related processes and practices to reduce greenhouse gas emissions and waste of all forms.
SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable 11.6 By 2030, reduce the	Plans in place to reduce negative impacts on air quality, and volume and forms of waste. Plans in place to eliminate waste of all forms as soon as

adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	possible.
SDG 12 Ensure sustainable consumption and production patterns 12.2 By 2030, achieve the sustainable management and efficient use of natural resources	Reduction of material footprint in terms of reductions in consumption of biomass, fossil fuels, metal ores and non-metal ores.
SDG 12 Ensure sustainable consumption and production patterns 12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	<p>Clear visions, strategies and plans in place for all aspects of sustainability – environmental, social and economic (people, planet, prosperity)- across all areas of activity.</p> <p>Visions, strategies and plans relating to sustainability to be publicly available and incorporated into planning documents.</p> <p>Commitments to be in line with local, regional, national and/or international targets and ambitions.</p> <p>Incorporation of sustainability into reporting for funders and other stakeholders, including the public. Reporting to include commitments and progress towards targets.</p>
SDG 12 Ensure sustainable consumption and production patterns 12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities	Incorporation of sustainability considerations into procurement, in terms of advertisement and invitation to tender, contracts, and selection criteria for suppliers.
SDG 13. Take urgent action to combat climate change and its impacts 13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	<p>Plans in place to enhance positive contributions to addressing climate change through use of collections. Plans in place to ensure collections, collections institutions and broader society can adapt effectively to climate change.</p> <p>Plans in place for effective education and awareness raising on climate change mitigation, adaptation, impact reduction and early warning.</p>

		Plans in place to reduce negative contributions of collections-related functions, e.g. measuring greenhouse emissions with plans and targets in place to reduce them.			
SDG 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. 16.B Promote and enforce non-discriminatory laws and policies for sustainable development		<i>16.B.1 Proportion of population [audience/users/non-users] reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law</i> Number and proportion of policies that incorporate sustainable development considerations, in the full sense of recognizing all three of social, economic and environmental considerations.			
SDG 17. Partnerships for the goals 17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships		<i>17.17.1 Amount of United States dollars committed to public-private and civil society partnerships</i> Number and/or increase in number, and diversity of local, national and regional multi-stakeholder (public, public-private and civil society) partnerships that address the SDGs drawing on collections, or that otherwise involve collections-based organisations and institutions.			
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	