



Climate Action
Accelerator

TOOLKIT **FLEET**



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Lead author: **Fleet Forum**

We would like to thank the Fleet Forum team for their support in developing this toolkit



About the Fleet Forum

The world's only not-for-profit organisation dedicated to cleaner, safer and more effective humanitarian transport in developing nations. Through professional fleet management, we help our members to deliver life saving and life changing aid to communities in need.

We believe that professional fleet management in developing countries can help to save lives, save costs and save the planet.

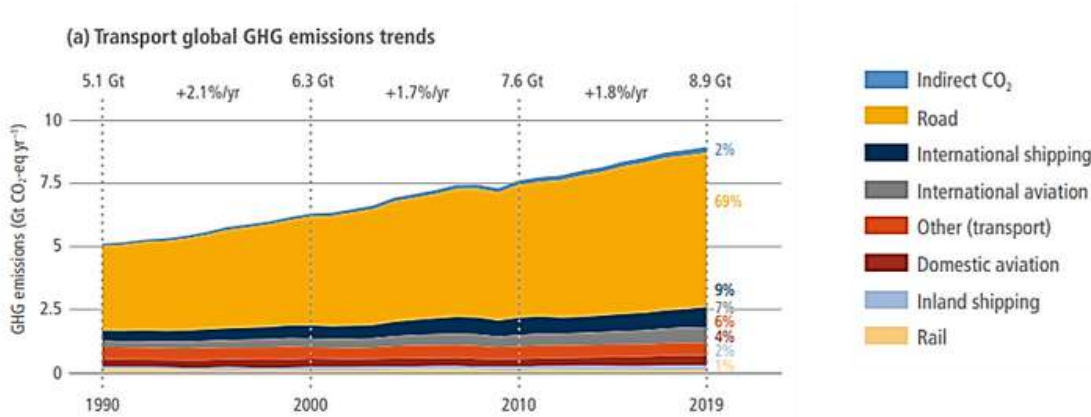
To find out more, visit <https://www.fleetforum.org/>.



INTRODUCTION

Why take action to reduce emissions from fleet management?

The transport sector (incl. aviation, shipping and road transport) accounts for 15% of global greenhouse gas emissions. In a business-as-usual scenario, emissions from transport could grow by between 16 and 50% by 2050. The transport of passengers and freight by road transport constitutes by far the largest emission source within the transport sector, accounting for 69% of transport-related greenhouse gas emissions, followed by international shipping and aviation. Passenger cars, two- and three-wheelers, and minibuses contribute about 75% of passenger transport-related greenhouse gas emissions, while collective transport services (bus and railways) generate 'only' about 7% of the passenger transport-related emissions despite covering a fifth of passenger transport globally. [1]

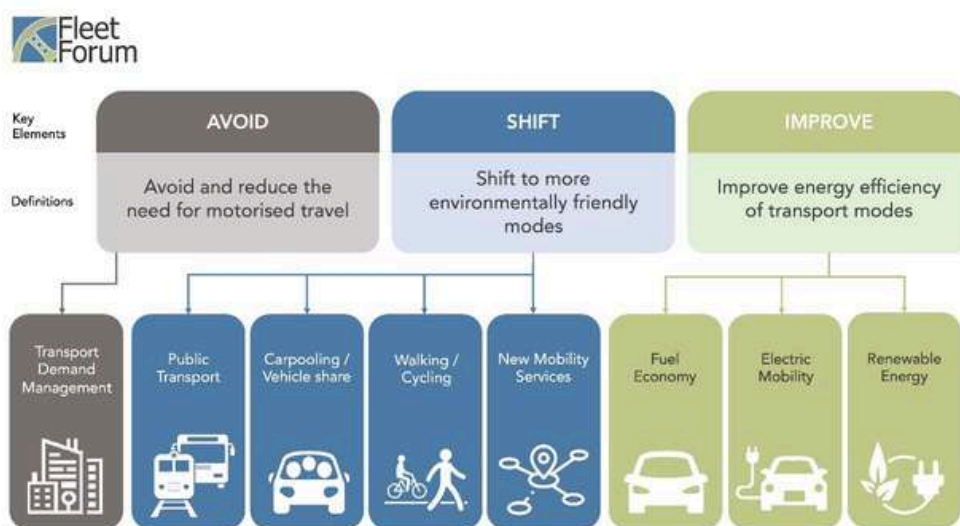


Source: [IPCC AR6 WGIII Chapter 10](#)

[1] Intergovernmental Panel on Climate Change, 'Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change', Cambridge University Press, 2022, Chapter 10 Transport, https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf, (accessed 15 September 2024).

Prioritisation

The main levers for reducing transport-related emissions are summarised in the typology "avoid, shift, improve". This framework considers that the lever of avoiding transport by moving less is the most impactful measure. Secondly, organisations should shift away from the most polluting transport modes to less impactful alternatives, and, thirdly, organisations should improve the energy performance of vehicles.



Structure of the toolkit

In the first part, tools to take stock of an organisation's existing fleet are provided, whilst the second part focuses on reducing the climate and environmental impact of fleets, following the "Avoid, Shift, Improve" approach.

Target audience and users

The toolkit is designed to support organisations with hands-on advice on how to reduce the climate and environmental impact of an organisation's fleet. It is geared towards fleet managers, project managers, and environmental focal points in the international aid sector, regardless of whether they have local, national, regional or global responsibilities.



Feedback

The toolkits are living documents. We encourage users to provide feedback and to contribute with good practices from their organisation. Please get in touch with us: contact@climateactionaccelerator.org.





OVERVIEW OF THE TOOLKIT COMPONENTS

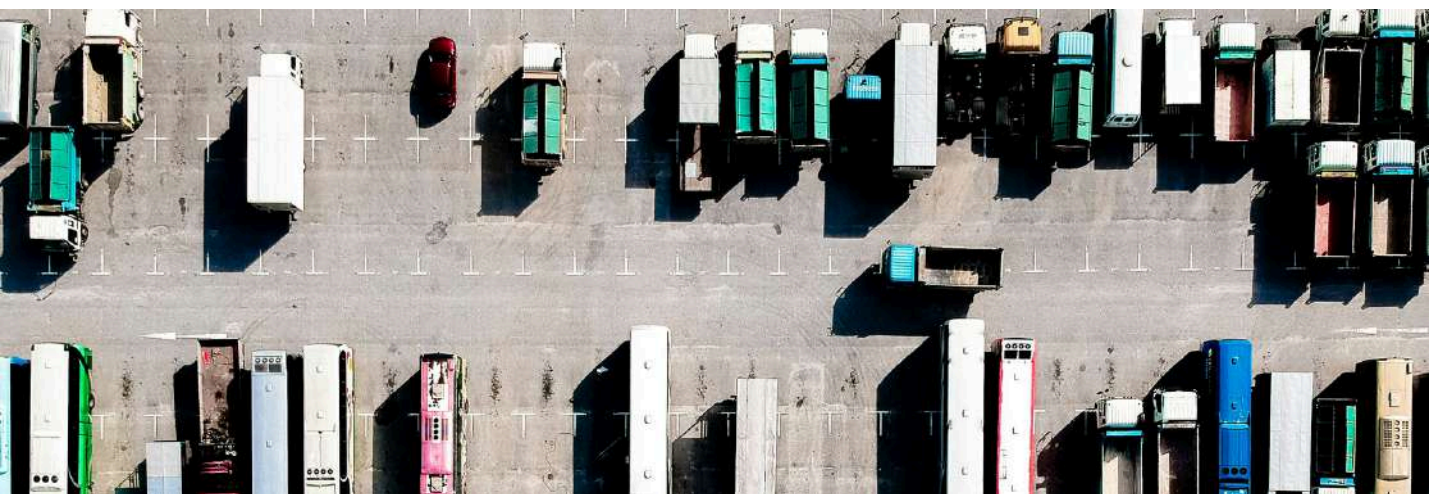
PART I: TAKE STOCK

Step 1: Establish a fleet inventory

- Excel file to establish a fleet inventory

Step 2: Estimate your fleet emissions

- Practical tool providing users insights into their fleet's current emissions and impacts





PART II: AVOID, SHIFT, REDUCE FLEET EMISSIONS

Step 3: Optimise and pool movements

- Pilot project examples

Step 4: Make less impactful choices

- Decision tree

Step 5: Right-size and right-profile your fleet

- Interview grid to assess mobility needs
- Right-profiling table to determine asset requirements

Step 6: Put in place environmental purchasing criteria

- List of exemplary sustainability purchasing criteria for vehicles



I. TAKE STOCK

STEP 1: ESTABLISH A FLEET INVENTORY

Aim: Understand the size and performance of an organisation's fleet by systematically collecting data. The fleet inventory can also serve as the basis to establish the fleet-related carbon footprint.

Tools:

- [Fleet Forum: fleet management data report](#)

Actions:

1. Collect data on current fleet

- a. Engage with regional offices and relevant internal departments as needed to collect necessary data.

2. Update the table on a monthly basis

- a. Collect and analyse data monthly in order to allow for comparisons and to monitor impacts of any changes to the fleet size and composition.

3. Use the data for the annual carbon footprint

- a. Review and use the collected data to calculate the fleet-related carbon footprint (see next step).

Outputs:

- An overview of the size, use and fuel efficiency of the current fleet.

STEP 2: ESTIMATE YOUR FLEET EMISSIONS

Aim: Provide an indication of the greenhouse gas emissions (Scope 1, 2 and 3) and local air pollutants related to the fleet of your organisation.

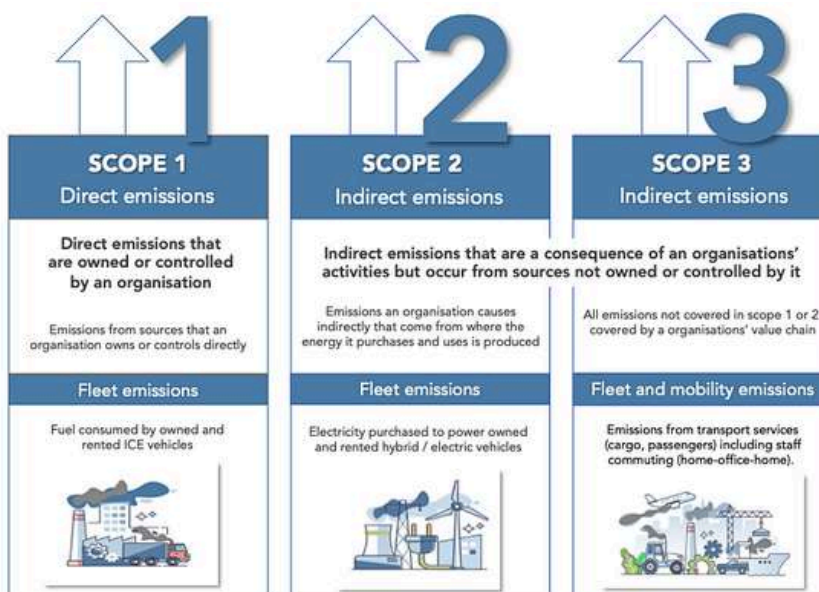
Tools:

- [Fleet Forum: Clean Fleet Toolkit](#)

Actions:

1. Collect data and set a baseline

- Setting a baseline for fleet emissions helps monitor and document the impact of the 'Avoid, Shift, Improve' strategy that has to be integrated to any fleet management approach attempting to reduce emissions consistently.
- Ensure that all scopes of emissions are covered (Scope 1, 2 and 3) in order to align with good international practices. Note that the emission factors used in the Clean Fleet Toolkit are fully aligned with the Humanitarian Carbon Calculator.





2. Measure the improvement of the fleet year-on-year

- a. Calculate fleet-related emissions on an annual basis in order to monitor improvements regularly.

Outputs:

- By setting a baseline of your fleet emissions you will be able to monitor and document the impact of the 'Avoid, Shift, Improve' strategy that has to be integrated to your fleet management approach in order to reduce fleet-related emissions consistently.

Disclaimer:

- The online Clean Fleet tool only provides estimates of emissions, costs and savings. Actual results are influenced by a number of factors, including: driver behaviour; road conditions; traffic patterns; fuel type and quality; vehicle age, condition, technology and standards; mileage; maintenance; altitude; and (in the case of plug-in electric vehicles) the type of power plant producing electricity.



II. AVOID, SHIFT, IMPROVE FLEET EMISSIONS

STEP 3: OPTIMISE AND POOL MOVEMENTS

Aim: Avoid transport-related emissions by sharing rides with peers.

Tools:

- [Fleet Forum: Vehicle Sharing Example](#)

In the aid and development sector, it is common practice that each NGO operates their own vehicle fleet, even though in many countries the centre of operations is limited to a low number of destinations.

Furthermore, in many organisations, vehicles are not fully used to their seating capacity, meaning that many times only one passenger uses the vehicle. Lastly, many vehicles are idle for long periods during the day. By adopting vehicle sharing practices, NGOs can contribute to cost savings, reduction of environmental impact and road crash risk.

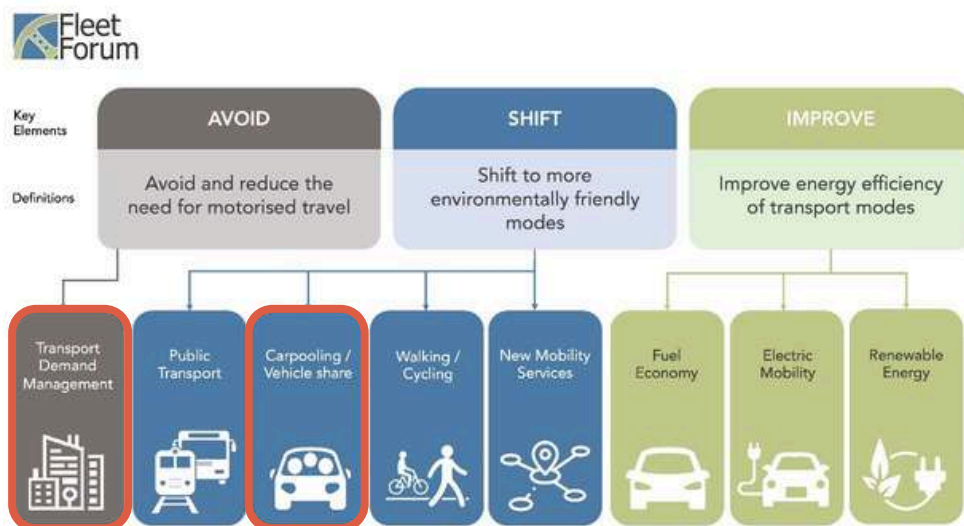
Shared transportation, understood here as increased occupancy rate of individual vehicles, represents a high potential to achieve environmental benefits, reduction of costs, improvement of public health, improvement of traffic congestion, reduction of air pollution (particles, noise), increase of efficiency (gains of time).



Actions:

1. **Join an existing carpooling/ride-sharing initiative**
 - a. Research if a vehicle sharing project already exists in the area you are operating in.

2. **Collaborate with other organisations and agencies**
 - a. Develop a carpooling/ride-sharing initiative with other organisations that work in the same area.
 - b. Start with the most travelled routes, e.g. from the city centre to the airport.
 - c. Contact the Fleet Forum or Hulo to gain insights about the experiences and learnings from their pilot projects in Lebanon and the Central African Republic. (Cyril at Cyril.Pierrot@fleetforum.org or Khalifa at mahmoud.khalifa@hulo.coop).



Outputs:

- Reduce individual rides and optimise the use of existing vehicles.

STEP 4: MAKE LESS IMPACTFUL CHOICES

Aim: Support users in making better informed decisions about which mode of transport to choose, including soft mobility, and to raise awareness about the possibilities of making less impactful choices.

The private car has heavily influenced the design of urban infrastructure, setting the standards and pace of cities and territories shaped around it. A significant portion of public space—such as roads, parking areas, and car parks—has been dedicated to it, while other modes of transport like walking and cycling have been confined to a much smaller share of the roadway.

Downsizing your fleet and optimising its usage are crucial strategies for enhancing sustainability. By striving to at least maintain and in the best case reducing the size of your fleet—despite anticipated increases in operations—you will significantly contribute to your emissions reduction goals. This approach will also yield positive impacts on safety and operational costs within your organisation.

Tools:

- [Fleet - Decision Tree](#)

Actions:

1. Encourage soft mobility

- a. Raise awareness about the importance of non-motorised mobility (e.g. bicycle and walking campaigns)

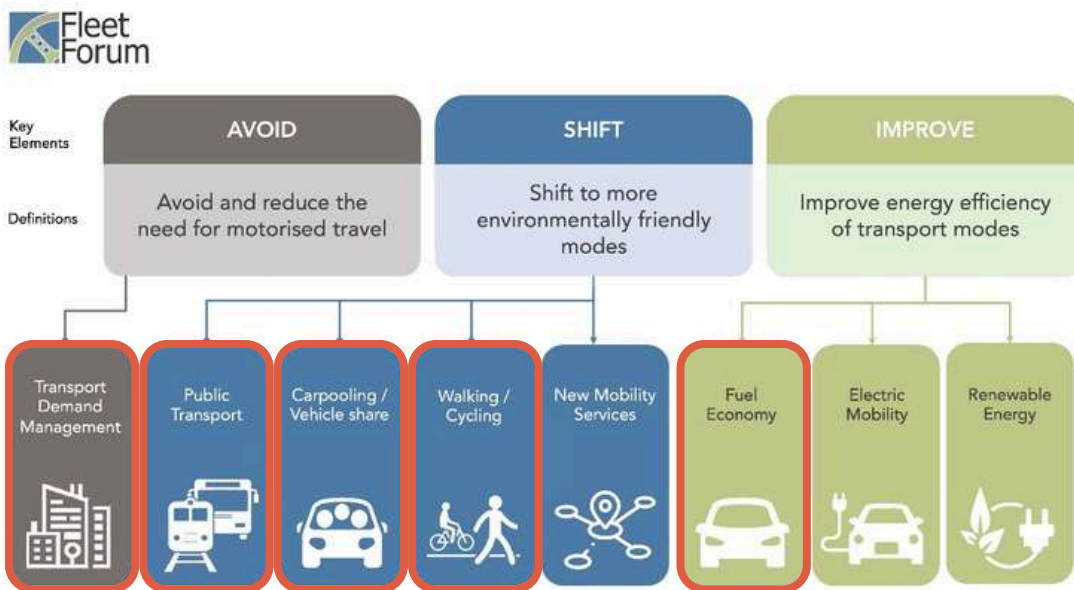
2. Use the decision tree to guide choices and as an awareness-raising tool

- a. Present and distribute the decision tree to all relevant staff.
- b. Print it as a poster and hang it in the office.



3. Institutionalise more sustainable choices, where possible

- a. Anchor less impactful choices in transport policies, processes and approval processes.



Outputs:

- Increased awareness of staff about more sustainable choices.
- Updated mobility policies to enforce more sustainable choices, where possible.

STEP 5: RIGHT-SIZE AND RIGHT-PROFILE YOUR FLEET

Aim: The size of the fleet is appropriate, based on a thorough analysis of transport needs. This also includes an evaluation of how public transport and soft mobility can fulfil transport needs.

The vehicle type selection is often driven by personal perceptions and/or experiences, rather than analysis. That might not only lead to overspending (by procuring vehicles that are overqualified for the planned tasks) but as well increased running and maintenance costs. Proactively seeking to introduce lighter, smaller vehicles (down-profiling) into your fleet will highly contribute to reducing your environmental footprint. The section on right-sizing and right-profiling is meant to support efforts in that direction.

Actions:

1. **“Right-size” your fleet – What are my mobility needs?**
 - a. Engage with users to understand their mobility needs, as well as their constraints in the mid-term. Do not use historical data.
 - b. Recommended additional considerations
 - i. Have alternative transport modes been investigated?
 - ii. Have ways to minimise motorised transport needs been explored?
 - iii. Is a freeze assets policy in place?
 - iv. Is a leadership commitment in place to embrace the “Avoid-Shift-Improve” approach for fleet?
 - v. Has a staff survey already been conducted?
 - c. Key questions to assess mobility needs:
 - i. What type of activities require mobility?
 - ii. What location is the travel intended to and the distance?
 - iii. How many persons are involved?
 - iv. What is the estimated duration and frequency of travel?
 - v. Are any partners involved?
 - vi. Are you aware of any options to pool mobility?

Tools: Use the [interview grid](#) for a full assessment of mobility needs.



2. “Right-profile” your fleet – What type of assets and how many are needed to achieve my transport needs?

Once mobility needs have been assessed at the user level for an estimate of transport demands, the next stage of the exercise should be to assess the assets required to achieve the desired transport needs at an organisational level.

- a. Distribute transport demands within modes of transport and determine asset requirements by using the following key questions:
 - i. What type of assets are needed?
 - ii. Number of days required per month for each type of vehicle
 - iii. Number of vehicles required
 - iv. Energy type for each vehicle category (diesel, gasoline, battery, electric, hybrid etc.)
 - v. What is the current fleet composition?
 - vi. Which adjustments are needed based on the assessed user needs?

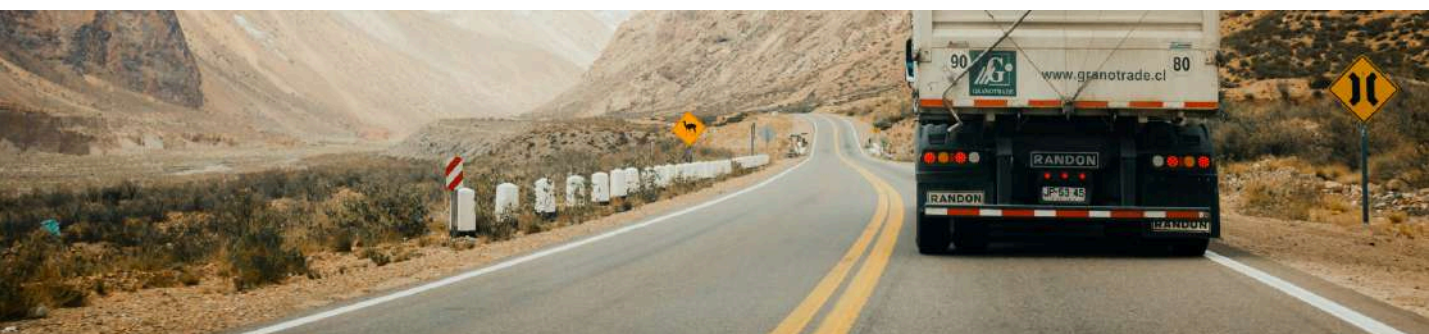
Tools: Use the [right-profiling table](#) as a guide to determine asset requirements for the identified transport needs.

Outputs:

- New ways of intervening and running operations differently are explored, thereby supporting the decoupling between operational growth and emissions growth.
- Use of the framework encourages the extension of the lifespan of vehicles, e.g. through better preventative maintenance and optimisation, e.g. by increasing utilisation rates, sharing and pooling of assets internally and inter-agency, as well as by increasing occupancy rates.

Conditions for success

- **From fleet management to mobility management:** In order to move away from the sole 'vehicle system' in application today, you should investigate and assess for other transport modes existing in your area of operation (public, private, soft, and active mobility...)
- **Leadership commitment:** Senior management and institutional commitment are instrumental to incentivise change in an organisation, assessing their level of commitment, of engagement and support to your proposals will allow you to gauge the intensity of change you'll be able to bring forward (ex: prohibiting the use of 4x4 in the city, making ridesharing and pooling business as usual, implement an asset stabilisation policy...)
- **Asset stabilisation policy:** Asset stabilisation refers to a policy decision to prevent the net increase of assets in an organisation, or business unit. This does not prevent replenishment and procurement of new assets, but rather that the net growth of assets should not increase, even if the operational volumes increase. If operational volumes decrease, net assets should decrease as well.
- **Staff engagement:** Understanding staff interests for environmental objectives, their personal openness to alternative transport modalities like walking and cycling as well as identifying barriers to change and determining what incentive could trigger change can be eased by a survey



STEP 6: ENVIRONMENTAL PURCHASING CRITERIA FOR VEHICLES

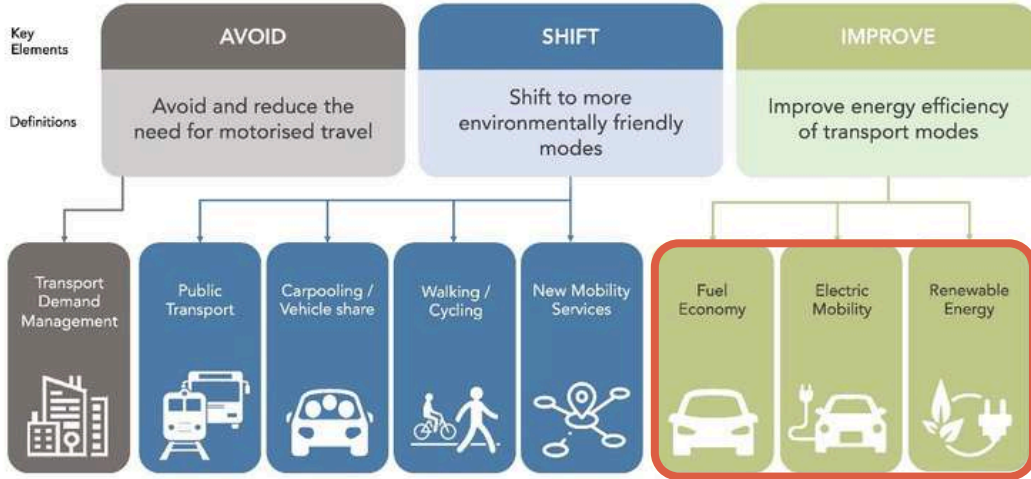
Aim: Understand the full environmental life cycle of used and procured assets, and sourcing the most sustainable ones to reduce emissions. The list of criteria can be used as a guide to improve environmental consideration when making light vehicle selections for your fleet, may it be for procurement or rental purposes.

Tools:

- [Climate Action Accelerator's Environmental criteria – Vehicles](#)

Actions:

1. **Review and modify the technical specifications of the items procured as well as their selection criteria:**
 - a. The maturity level of the 'market' on which the items/services are procured from will determine your capacity to impose more stringent criteria (items/services might not be available, suppliers/service providers might not be ready yet).
 - b. While raising sustainability expectations for products and suppliers may not yield immediate results in all areas (e.g., not all manufacturers have life cycle assessments available), integrating these requirements into procurement processes helps influence suppliers to modify their practices and offerings in the medium term.



Fleet inventory

Fleet emissions

Pooling movements

Transport choice

Fleet size and profile

Purchasing criteria



GLOSSARY

Pooling/ Carpooling: approach of sharing (internally or interagency) vehicles and drivers to provide staff mobility services regardless their function/department/activities (as opposed to single allocation of 1 vehicle to a single function/department/activity of the operations)

Ride sharing: Multiple passengers (from one or more agencies) travelling on the same vehicle for the same ride (or similar ride in terms of pick-up / drop-off times & locations)

Right-profile: Practice allowing to determine the composition of the fleet (type of vehicles). This concept is intertwined with the 'right sizing' of the assets constituting the fleet.

By regularly adjusting the profile of vehicles to its condition and context of use (usage, road conditions, seasons...) you avoid procuring vehicles that are overqualified for the planned tasks.

Right-size: Practice allowing to determine the size of the fleet required to manage given operations. This concept is intertwined with the 'right profiling' of the assets constituting the fleet.

By regularly evaluating and adjusting fleet size, managers can optimize vehicle use, save fuel, reduce emissions and repair & maintenance costs and improve safety.

Technical specifications: Technical specification refers to a high-level description of the features and functions of a product or service, written in a clear and concise language, so that all stakeholders, including purchase decision makers and suppliers, can understand it.



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Contact us

Chemin des Mines 2

1202, Genève

contact@climateactionaccelerator.org



climateactionaccelerator.org

