





# GREEN MOBILITY: ANCHORING ENVIRONMENT AND CLIMATE AMBITIONS IN THE TRANSPORT AND MOBILITY SECTOR

Transport is amongst the largest energy-consuming sectors and one of the main contributors to anthropogenic greenhouse gas emissions. It is also a key contributor to ambient air pollution, causing 4.2 million deaths annually. **Green mobility** aims to reduce GHG emissions from the transport sector, substantially reduce premature deaths and illnesses from air and noise pollution, create free public space in congested cities and build resilience to climate

change. Mobility planning has to move away from accommodating more vehicles, and instead focus on people and goods in order to create sustainable mobility systems. This note provides quick practical tips to maximise opportunities for environmentally sustainable and climate compatible mobility of passengers and freight. This includes road, rail, inland waterways, maritime and air transport.



## Reduce greenhouse gas emissions and pollution

Avoid travel by reducing and minimising the need for motorised travel for goods and people through:

- mixing of land-use (housing, employment, services) within territories and promoting compact cities to limit travel distances and number of trips;
- stimulation of telework, e-commerce, e-services;
- relocation of supply chains; prioritise short-distance trade to local/regional markets (for example, the EU 'From Farm to Fork' strategy promotes sustainable and circular food production, also taking rural transport into account).

1. Mobility of people and goods is supported by infrastructure. Siting, construction, use and decommissioning of infrastructure has significant impacts on hydrology, biodiversity, quality of air, water and soil, disease transmission, landscape, living conditions, etc. Environmentally sustainable and climate resilient infrastructure is subject of a separate Quick Tips document.



Multi-modal transport in Colombia



Tramway in Rabat, Morocco



Freight transport in Cameroon

#### Shift to low-carbon transport modes through promotion of:

- ▶ non-motorised travel such as walking or cycling (including public bicycle sharing schemes);
- (preferably electric) mass rapid transit (MRT) systems such as bus rapid transit or light rail, as well as alternative public transport systems, such as cable cars, on densely populated corridors, while limiting the use of personal fossil-fuel powered vehicles;
- rail or waterway freight rather than road freight (modal shift), including e.g. intermodal facilities, tariff barriers, maximum road freight for particular corridors;
- deploying electric and hybrid vehicles (with the understanding that decarbonising electricity generation is another pillar of the energy transition); in the medium term, the passenger vehicle fleet should become fully electric and batteries used adhere to the principles of a circular economy;
- electric freight transport, or fuels produced with renewable energy (hydrogen or hydrogen based synthetic fuels (Ptx)) for long-distance heavy-duty freight (trucks, ships, aircrafts).

#### **Improve energy efficiency** of vehicles and fuels and **reduce pollution** by:

- promoting increased occupancy rate of vehicles, for example through shared mobility services;
- ▶ improving the efficiency of traction systems (fuel consumption, emissions, etc.);
- promoting the use of clean, low-carbon fuels.



## Use green instruments with proven effectivity

- ▶ Promote a push and pull approach: combine high-quality public transport systems (pull) with transport demand management (push). A 'pull' approach can include physical integration, integrated ticketing, and integrated fares; 'push' can include development and protection of sidewalks, parking management, enforcement of vehicle certification and inspection, access restrictions, reducing trip distance by land-use planning and traffic calming (e.g. traffic light synchronisation, network efficiency, street design, speed limits).
- Provide affordable mobility for the most vulnerable people who spend an important part of their income on transport.
- Phase out fossil fuel subsidies and reflect environmental and health costs in fuel prices, complemented by compensatory schemes targeting the poor who may be impacted.
- ▶ Deploy fiscal instruments to promote green mobility (e.g. tax breaks and subsidies on clean technologies, higher taxes on inefficient vehicles and fuels).
- ▶ Promote the development of green freight labels, which factor-in energy and environmental concerns for better-informed shipping and consumer decisions.
- Promote the development of standards for noise and air pollution levels, including zoning.
- Address noise pollution through low-noise road engineering, better insulation standards, noise barriers, and land use planning to protect homes.
- ▶ Use Environmental Impact Assessment (EIA) and/or Climate Risk Assessment (CRA) to identify alternatives that minimise adverse impacts on the environment and on climate vulnerability. If supporting strategic planning, use Strategic Environmental Assessment (SEA) to integrate environmental concerns into the planning process.
- New mobility infrastructure, especially in relatively untouched areas, can have significant direct and indirect impacts (e.g. deforestation, biodiversity loss). Please refer to the <u>Infrastructure Projects Quick Tips</u> for further guidance.



## Promote resilience to climate change

- Assess climate change risks and vulnerability of networks, services, people and goods in transport planning and decision-making.
- ▶ Build spare capacity into the system to absorb disruptions, for example by providing safe alternative routes around high risk flood areas (redundancy).
- Make sure capacity is available to mobilise resources and services in case of emergencies (resourcefulness).
- Climate change and continuous innovation create uncertainty for long-term investments: conduct systematic monitoring and constantly upgrade and adapt (learning).
- ▶ Design and maintain climate-proof transport infrastructure, taking into account climate change and extreme weather events for its entire lifespan (robustness).



#### Contribute to international environment and climate commitments

- ► Check if the partner country's Nationally Determined Contributions (NDC) under the Paris climate agreement includes transport/mobility related measures and prioritise interventions that will support their implementation.
- Check if the transport sector is included in, contributes to or interferes with the National Biodiversity Strategy and/ or Action Plan.
- ► Verify how the activities proposed contribute to the **Rio Conventions** related to climate change mitigation and adaptation, biodiversity, and combating desertification. (See Guidance on activities that qualify for Rio Markers for inspiration)
- ▶ Promote and implement the respective G20 Quality Infrastructure Principles on climate change and environment at policy dialogue and operational project levels.





## Integrate environment and climate change in budget support in the transport sector

- ▶ Use SEA to strengthen the environmental sustainability and climate resilience of the transport sector strategy and the EU support programme, including the selection of performance indicators.
- ▶ Include environmental and climate-related considerations in the transport policy dialogue.
- If there are significant environmental or climate-related risks or opportunities, make sure mitigation measures are in place and ensure appropriate performance indicators and requirements for monitoring are included.
- ▶ Provide technical assistance to strengthen the partner government's capacity on environment and climate change, including institutions for training and awareness raising.



#### Integrate environment and climate change in investments

- ▶ Ensure that environmental safeguards used by lead and intermediary financial institutions are up to EU standards and promote green public procurement in mobility contracts.
- Whenever possible, promote SEA to ensure the project pipelines respond to an environmentally-sensitive mobility sector strategy.



# Further information and support:

- ► The European Green Deal factsheet on Sustainable Mobility
- ► Green Deal Policy Note on Sustainable Mobility (available soon)
- ► <u>Global Roadmap of Action toward Sustainable Mobility</u> to evaluate performance, explore policies and tailor action plans, use the <u>Online tool</u> with 181 different measures
- ► ESCAP Sustainable Urban Transport Index (SUTI)
- ► Transformative Urban Mobility Initiative
- ► Paris Process on Mobility and Climate (PPMC)
- ► Partnership on Sustainable, Low Carbon Transport (SLOCAT)
- ► Mobility and Transport Sector Operational Framework for AFD Group
- ► Sustainable Development Goal 13
- ▶ Guidelines "Integrating the environment and climate change into EU international cooperation and development".
- ▶ OECD DAC Guidance on Rio markers for climate in the transport sector that qualify for Rio markers (page 15 & 16).
- ► EU Green Public Procurement page, including Criteria for Road Transport
- ► G20 Quality Infrastructure Principles, July 2019
- \* All documents are available on capacity4dev (public group: Environment, Climate Change and Green Economy)

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