Green Inland Ports

Good Practices

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Mobility plan for port employees

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1.1 Description

A mobility/transportation plan to make the port better accessible for port employees can also include goals which aim to decrease GHG emissions and other emissions generated by commuting/travel activities by employees within the port area. Examples of what such a plan could include are:

- More sustainable ways or modes of transportation for commuting. The CIVATIS Project, in which the ports of Aberdeen, Antwerp, Constanta, Klaipeda and Trieste collaborated, illustrates how sustainable mobility can enhance both functional and social integration between city centres and ports, promoting economic growth and enhancing the appeal of urban environments. The measures focused for example on promoting active transportation (walking and cycling), public transit and electric vehicles (Maslaric, M. et al., 2024). Company cars that are being used to commute as well as cars that are being used to navigate within the port area can both be electrified.
- More possibilities for and assistance in remote working: The employer can assist the employees in creating a dedicated work-from-home space, resources can be offered to guarantee physical and mental health for teams that work (often) from home (flexible schedules, mental health resources such as podcasts, tutorials and apps, supporting healthy eating and activity, and expanded health benefits), eliminating low quality and low benefit (physical) meetings from the calendar to name some options (Day, A., n.d.).
- Giving employees certain benefits that could be used outside commuting as well, such as a public transport pass or a bicycle plan.
- Change the company parking policy, so that only employees which commute more than 15 kilometres can park here.

To monitor the impact of a mobility plan for employees, different tools, like an app on a mobile phone, are available to calculate the carbon footprint of employees' commuting and business trips and determine the effect of a mobility plan.

1.2 Specific aim of the measure

A mobility plan often consists of a range of measures/actions within the field of transportation/mobility of employees. According to Friendly, M. b. C., (2023), benefits of a mobility plan to society include the following:

- Reduction of energy consumption
- Reduction of GHG emissions and air pollutants
- Reduction of noise
- Reduction of healthcare costs, absenteeism and traffic accidents
- Less traffic jams on roads (due to for example more remote working and public transport)

- Reduction of vehicle infrastructure and more efficient use of public space, as car usage and possession takes up more space than alternative ways of transportation
- Reduction of social exclusion
- Improving urban mobility
- Awareness at employees about the impact of travelling and possibilities to reduce their footprint.

Direct benefits for employees include:

- Private vehicle costs savings by carpooling, public transport, active modes of transport or remote working.
- The perception of any economic benefit if the company decides to encourage alternative means of transportation.

1.3 Inland ports with a mobility plan

- Port of Strasbourg
- Ports of Lille
- Port of Venlo
- Port of Zwolle
- Compagnie Nationale Du Rhône (Port of Lyon)
- Niedersachsen Ports
- Port of Karlsruhe (Option of an e-bike for employees and many possibilities to create a home office.)
- Port of Brussels (The port has a corporate travel plan. It financially supports employees' train, public transport and self-service bicycle subscriptions. It reimburses 87 euro cents per kilometre travelled for bicycle journeys. Finally, it encourages working from home.)
- DeltaPort (Wesel) (It enables the use of pool electric vehicles, bikes that are owned by the port authority, and there are compensations for local public transport.)
- Port of Stuttgart
- HAROPA Port

1.4 Stakeholders

The main stakeholders of this good practice are:

- Companies within the port: the stakeholder that has to implement the good practice and decide what the mobility plan should look like.
- Employees of port companies: the stakeholders on which the good practice will have the most impact.
- Governmental parties: in many cases, the (main) shareholders of a port authority are governmental parties, such as a municipality or national government. They would be responsible for the financial aspect. Governmental parties often play a role in the tendering of public transportation.
- Public transportation company: They are responsible for the execution of public transport in certain areas, which means that if a route has to be created to the port area or public transportation must be more frequent, the public transportation company is responsible for the execution.

1.5 Voluntary or mandatory

In general, every company (including a port authority) can voluntary develop a mobility plan. For port authorities in specific it can also be mandatory if the port authority's main shareholder is a city or municipality with their own goals, then it could be mandatory for the port authority to implement a mobility plan. This is because the port authority would fall under governmental organization structure and should fulfil governmental goals. A mobility plan may, but does not have to be mandatory for all employees within the port authority. It can only apply to employees that are able to switch to plausible sustainable alternatives or that live within a certain distance from the port area.

1.6 Realised/potential impact

Within the Netherlands, the Netherlands Chamber of Commerce & Netherlands Enterprise Agency, (n.d.) have created an overview of effective ways and measures to encourage companies and businesses to contribute to the energy transition and reduce carbon emissions from mobility. Allowing employees to work from home would remove all GHG emissions from the employees commute, as the employee does not need to travel to/from work. A bicycle scheme would also avoid GHG emissions, mainly for employees that live relatively close to work. A public transport card would not avoid all GHG emissions, but the majority.

CE Delft publishes key figures for emissions of modes of transport in the Netherlands since 2008. As the averages have been calculated based on the Dutch scenario, port authorities and stakeholders in other countries should be cautious when taking over the following emission quantities. According to STREAM Tank-To-Wheel emission key figures for 2020 (CE Delft, 2023), a car emits on average 114.8 CO2-eq per traveller- kilometre, while a public transit bus emits around 85.9 CO2-eq per traveller- kilometre, and a train around 2.4 CO2-eq per traveller- kilometre. When vehicles are being used with low or no emissions, a significant decrease in GHG emissions can also be realized. A plugin hybrid car emits on average 107-108 CO2-eq per traveller- kilometre, which is a slight decrease. A fully electric car emits 0 CO2-eq per traveller- kilometre, not taking Well-To-Tank emissions into account.

1.7 Possible obstacles

- For electrification of cars and other modes of transport:
  - Sufficient electricity capacity needs to be available on the grid.

    - The amount of electric vehicles that are available within the market should be sufficient for companies to reach their goals, when they want to put effort in using more electric cars within their fleet.
    - The distance the vehicles can travel is often limited. Battery capacity is expected to increase in the coming years and the weight and costs of batteries will decrease.
    - The purchase costs of electric vehicles are still higher than fossil fuel vehicles. If a port authority is a public company, it can be difficult to bear the higher costs (Wuczkowski, M., 2023). Leasing may be a solution.
- According to the port of Venlo in The Netherlands, it is common for port areas to be poorly connected to public transportation. In case of a bus connection, the frequency is often low. Even within a port area, there can be large differences in the connection to public transportation (Van Wijlick, P., 2023).
- Within port areas, there are employees that are not able to work from home, which would decrease the sustainability potential.
- Ports are rarely centrally situated. It is more common for ports to be located more out of town, which can be a major obstacle when active mobility (such as walking or bike riding) is part of the mobility plan.
- Inland ports have indicated that this measure is relatively easy to implement, as it scores an average of 3.2 (1 means very easy, 10 means very difficult). However, the responses on how interesting this measure is for different port areas are very mixed (Ecorys et al., 2024).

1.8 Key learnings

- A mobility plan for the port area may consist of all kinds of measures, such as the application of electric (pool) vehicles, enabling employees to purchase or rent e-bikes (possibly with fiscal benefits), facilitating the use of public transportation (also allowing employees to use public transportation outside of commuting).
- Ports are rarely centrally situated, which should be taken into account when implementing certain measures within the mobility plan. This could also be a challenge when arranging public transport.
- When a port is going to use electrical lease cars, it is very important to be able to realize the charging infrastructure as a boundary condition. It is also necessary to have sufficient funds to be able to purchase electric vehicles as they are still more expensive. Leasing could be a solution.

1.9 Sources

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