

### THE ROAD TO A SUSTAINABLE TRANSPORT SECTOR IN THE DANUBE REGION

THE MOST IMPORTANT HIGHLIGHTS FROM NECPS





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### Introduction



- Transportation is the only sector to see a rise in emissions over the last two decades.
- In the Danube Region transport sector emissions grew faster than the EU average.



- Improved fuel efficiency is not enough to offset the effect of the rising demand.
- Renewable energy is crucial to limit the emission of the transport sector.

## **Targets of the transport sector**





#### Planned share of renewable energy in the transport sector

 The majority of countries did not commit a higher value than the obligatory minimum RES-T target, regardless of the current proportion of RES-T

#### **Expected effects on transport relatred GHG emissions**



 Countries estimate a declining GHG trend in WEM scenarios and strong reductions in WAM, which seems very optimistic compared to trends in the past



## How to achieve the targets?

Goal category	Goal	Infrastructure investments	Financial incentives	Regulatory obligations	Information, awareness
Fuel Switch	Electric vehicles (road)	EV charger network	Purchase subsidy Tax/fee allowances CO <sub>2</sub> -based taxes, tolls	Green public procurement obligations Restriction for purchase on use of ICEs	Promoting EVs
	Biofuels -		-	Biofuel mandates	-
	Electrification of railways		-	-	-
Modal Shift	To public transportation	Network development		-	-
	To non- motorised modes	Bicycle roads, B+R	Bicycle roads, B+R car use		Promoting cycling and healthy mobility
	To rail (freight transport)	Network development		-	-
Efficiency Improvement	Energy efficiency	-	Taxation, tolls and fees of car use	Emission standards Restriction for purchase or use of ICEs	Eco-driving trainings

### STRUCTURE OF THE ANALYSIS

- 3 main policy goals
- 4 main type of policy measures
- One measure can affect more goals at the same time

### **EVALUATION**

Based on a modified version of the policy cycle approach (M. Ramesh and Michael P. Howlett, 1995)

not in target/no information	proposed but no targets or measures
policy formulation / decision making	implementation



## **Infrastructure investments**

Infrastructure investments	AT	BG	cz	DE	HR	HU	RO	SI	SK
EV charger network									
Electrification of railways									
Railway development									
Bicycle infrastructure									
Pedestrian infrastructure									
	Not in target / Proposed, but no Policy formulation Implementation								

### EV chargers in densely populated areas

- Supporting the construction of private e-charging stations in apartment buildings (AT)
- Adopting regulation for embedding echarging points in dense residential areas (SI)

#### **Electrification of regional railways:**

Test of battery-electric and fuel cell technologies (AT)

### Improving pedestrian infrastructure

 Only Austria and Slovenia include pedestrian infrastructure in plans for non-motorised transport modes

## **Financial incentives**

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Financial incentives	AT	BG	CZ	DE	HR	HU	RO	SI	SK
Purchase subsidy for EVs									
Purchase subsidy for public transport vehicles									
Allowances (taxes, tolls, fees) for EVs									
CO <sub>2</sub> -based taxes, tolls and fees									
Subsidising rail transport									
	Not in target / Proposed, but no Policy formulation Implementation								nentation

### Subsidising rail against air transport via taxation (DE)

- Reduced VAT for long-distance rail tickets (7%)
- Increased tax on air tickets, prohibition of dumping prices (below taxes and fees)

### Targeting the purchase subsidies

- Limit on purchase price (DE, SI, HU)
- Limit based on emission (g/km) (RO)

#### **Targeting the allowances**

- Emission based taxation, fees and tolls (AT, DE, HR, SI)
- Special depreciation allowance for company cars (DE)

## **Regulatory obligations**



Regulatory obligations	AT	BG	cz	DE	HR	HU	RO	SI	SK
Green public procurement obligations									
Biofuel mandates (general)									
Promotion of advanced biofuels									
Restriction on purchase and use of conventional vehicles									
Restricted areas									
Not in target / Proposed, but no horizon Policy formulation Implementation Implementation									

### Generation change for biofuels

- Limiting the share of first generation biofuels (DE)
- Obligatory blending rates for advanced biofuels (BG, CZ, DE, SK)

## Restriction on purchase of conventional vehicles

- Prohibition on imports of motor vehicles with Euro 3 and Euro 4 ratings (BG, RO)
- Newly registered taxis and rental vehicles must operate emissions-free from 1 January 2025 (AT)



## Information, awereness campagins

Information, awareness	AT	BG	cz	DE	HR	HU	RO	SI	SK
Sustainable transport (general)									
E-mobility									
Cycling									
Eco-driving trainings									
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Not in target / Proposed, but no No information Implementation targets, measures / decision making Implementation



# **Plans of the non-EU countries**

Goal category	Goal	ВА	ME	MD	RS	UA
	Electric vehicles (road)	without measure	EV charger network	Taxation		without measure
Fuel Switch	Biofuels	without measure	without measure	without measure	without measure	without measure
	Electrification of railways		without measure			
	To public transportation	without measure	without measure	without measure	without measure	Network development
Modal Shift	To non- motorised modes	without measure	Cycling and pedestrian infrastructure	Cycling infrastructure		
	To rail (freight transport)		Infrastructure development			Network development
Efficiency	Renewal of car fleet	Emission standards Taxation	without measure	Taxation		Emission standards Taxation
Efficiency Improvement	Other	Road infra- structure development	Subsidy for new public transport vehicles	Road infrastructure development	Eco-driving trainings Regulation of tyres	

- Less detailed documents: strategic goals rather than specific measures
- Most targets and measures aim to improve energy efficiency:
  - Replacing old vehicles
  - Road development
- Sharp contrast to measures in EU countries (electromobility)





#### **Commitment vs. expectations**

- Most countries are committed to the minimum RES-T target required by regulation
- But expects to return the trend of growing GHG emission (with existing measures)

## Electromobility is (considered to be) the key

- Most common measures: development of charging networks, purchase subsidies and allowances for EVs.
- Rail and bicycle infrastructure development is also considerable.

#### What DR countries can learn from each other

- Incentivizing modal-shift could be more essential part of the plans.
- The development plans for non-motorised transport modes could also cover pedestrian infrastructure.
- Emission-based taxation and pricing (tolls and fees) should replace tax allowance and subsidy systems.
- Implement support schemes for advanced biofuels and related blending requirements.
- Consumer awareness campaigns should be widespread and fundamental to sustainable mobility strategies.



### Thank you for your attention!

Disclaimer: Opinions expressed in this presentation are those of the authors. They do not necessarily represent REKK's or the Danube Region Strategy's views.

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