

material efficiency schools energy saving  
consumers industry transport carbon dioxide  
wood chips traffic properties public sector  
recycling biomass renewable energy solar energy climate change  
energy efficiency energy auditing  
service sector hydro power wind energy cooperation

## Policies and measures in Finland – softer measures and campaigns to encourage modal shift

Kaisa Kauhanen, Motiva, 2014

heat pump environment municipal sector construction

# How does mobility management work?

## INFORMATION easily available

- Sites, applications, journey planners, counters, brochures

## GUIDANCE near people and gatekeepers

- Direct marketing, visits to companies and schools

## MARKETING for carefully selected target groups

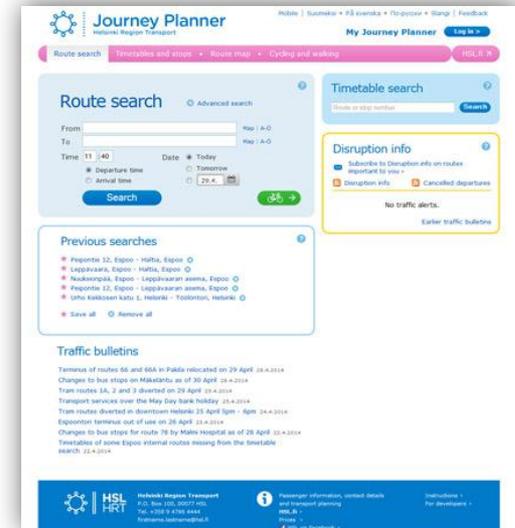
- Campaigns, experiments, competitions, new customer acquisitions

## PLANNING

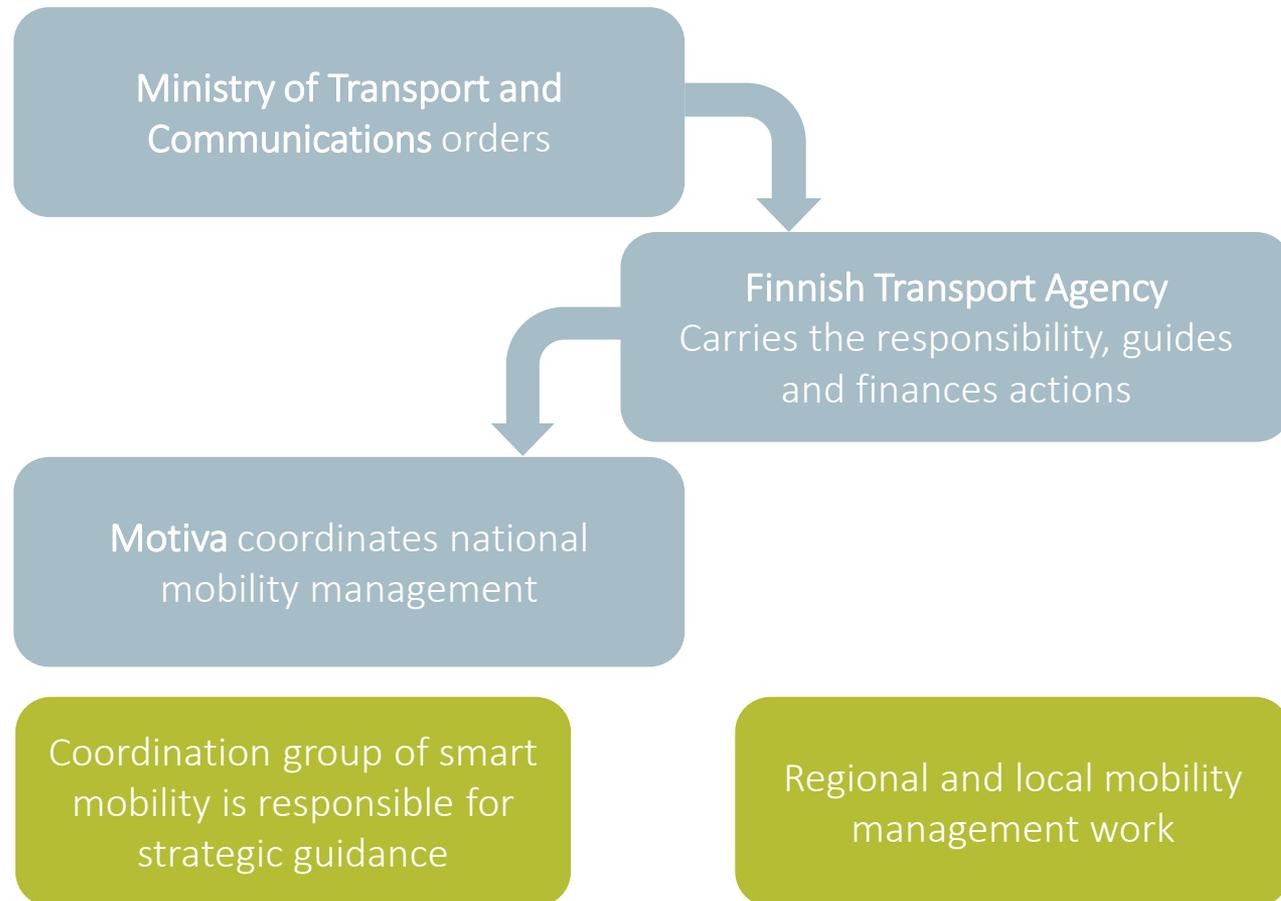
- Mobility plans, help for companies in finding the best locations

## SERVICE DEVELOPMENT

- Real estates, events, park & ride, car-sharing



# The organization of mobility management in Finland



# National Policies

- Government foresight report on climate and energy policy (2009): establishment of national Mobility Centre and support for local MM action mentioned.
- National Strategy for Walking and Cycling (2011).
- Government transport policy report to Parliament (2008): importance to influence travel behaviour and attitudes is mentioned as an important tool. The Ministry of Transport and Communication (2012): new Government transport policy report to Parliament, goals to years 2020-2030. Mobility management recognized as one tool.
- The Ministry of Employment and Economy has prepared a National Climate and Energy Strategy (2013).
- Transport policy guidelines and transport network investment and financing programme until 2020.
- Environmental Strategy for Transport 2013-2020.

# Legislative measures (incl. taxes)

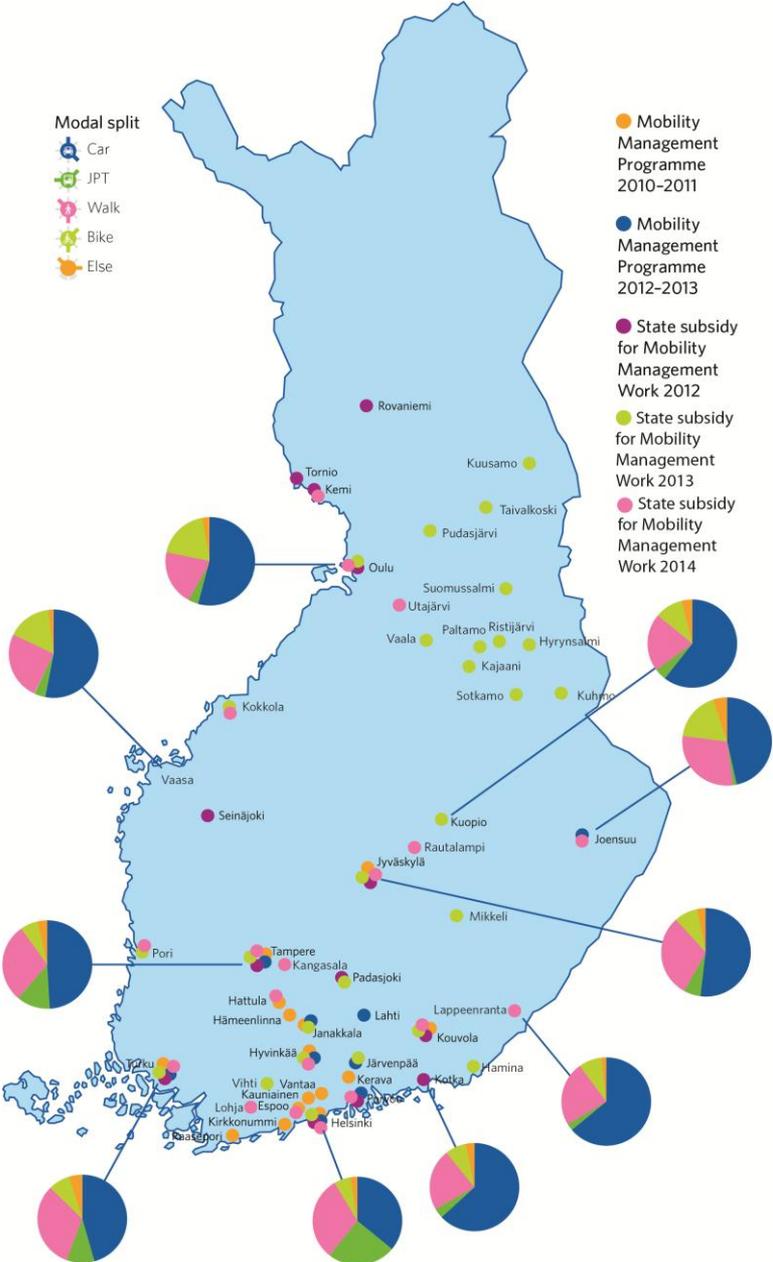
- Public transport ticket as employee benefit, tax break.
- Car tax is based on CO<sub>2</sub> emissions.
- Annual vehicle tax is based on CO<sub>2</sub> emissions (from March 2011 onwards).
- The new highway law says that before deciding about the construction of a new road it should be considered whether the problem could be solved in some other way (the four-step principle).
- Voluntary national ecolabeling is available for all new cars and most of the second-hand cars.



# Financial measures

- The Ministry of Transport and Communications, Finnish Transport Agency, The Ministry of Environment and Fit For Life –programme finance jointly R&D in Mobility Management:
  - 2010–2011 LOHJELMA1(500 000 €), 13 projects
  - 2012–2013 LOHJELMA2(460 000 €), 13 projects
- Regions can apply for yearly (approx. 500 000 €) governmental support to their MM work since 2012.
  - 2012 14 projects
  - 2013 19 projects
  - 2014 19 projects
- Separate R&D projects e.g. cross-administrative MM for companies and pre-study MM for retail sector
- The Transport Agency orders national mobility management coordination services from Motiva.

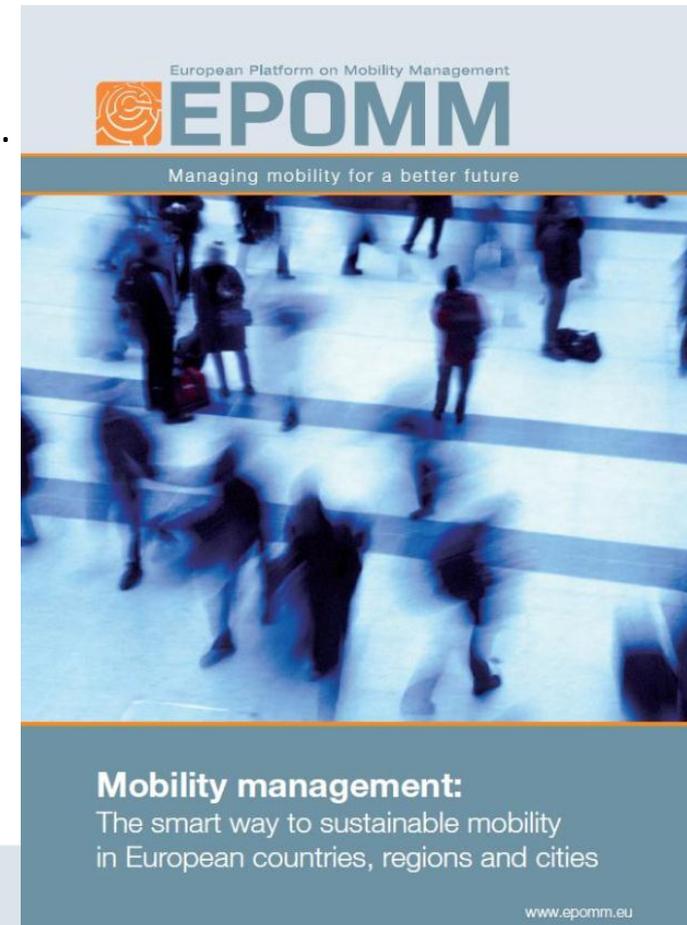
# Mobility Management Implementation in Finland



# The Achievements of MM in Finland

- The monitoring and evaluation of MM is in the beginning - more development will be needed.
- MM work in Finland is also in its early stage when compared to forerunning countries in Europe.
- The national coordination in Finland has received international attention.
- In order to be truly successful MM should be implemented to the regional and local level. This still needs a lot of work.
- More information: e.g. EPOMM book

<http://epomm.eu/index.php?id=2790>



# Promotion & awareness building

- Mobility Week (incl. car-free day and in Finland also a Teleworking day since 2011) has been organized during several years. From 2010 Motiva has been the coordinator.
- Cycling week is organized every May (incl. Cycle to Work day, launching of kilometres competition for the cycling season).
- Transport issues are covered also by the national Energy Saving week.
- Kulkulaari.fi web portal specializes in cycling and walking matters.
- Car owning households receive information about environmentally friendly cars with the annual vehicle tax invoice information.
- Ecodriving has been promoted in Finland actively.



# Promotion of electric vehicles – taxation of cars

Vehicle type	Taxation of passenger cars in Finland (class M1 or M1G)			
	Car tax after first registration (%)	Vehicle tax <sup>1)</sup> €/year	Tax on driving power	
			c/day/100 kg	€/year <sup>5)</sup>
Gasoline	5–50 <sup>2)</sup>	43–606 <sup>3)</sup>	0	0
Flexfuel	5–50 <sup>2)</sup>	43–606 <sup>3)</sup>	0	0
Diesel	5–50 <sup>2)</sup>	43–606 <sup>3)</sup>	5,5	401,50
Gas (CNG) <sup>4)</sup>	5–50 <sup>2)</sup>	43–606 <sup>3)</sup>	3,1	226,30
Hybrid (Gasoline)	5–50 <sup>2)</sup>	43–606 <sup>3)</sup>	0	0
Hybrid (Diesel)	5–50 <sup>2)</sup>	43–606 <sup>3)</sup>	5,5	401,50
Plug-in hybrid (Be)	5–50 <sup>2)</sup>	43–606 <sup>3)</sup>	0,5	36,50
Plug-in hybrid (D)	5–50 <sup>2)</sup>	43–606 <sup>3)</sup>	4,9	357,70
Electric vehicle	5	43 <sup>3)</sup>	1,5	109,50
Fuel cell <sup>6)</sup>	?	?	?	?

- 1) if CO<sub>2</sub> emission is not available, vehicle tax is defined on basis of total weight (kg)
- 2) according to CO<sub>2</sub> emission of the car (0–360 g/km or more); EVs: 0 g/km
- 3) according to CO<sub>2</sub> emission of the car (0–400 g/km or more); EVs: 0 g/km
- 4) only cars that use methane based gases (biogas, CNG).
- 5) example: car with a total weight of 2,000 kg (for instance, vehicle tax for a diesel car is  $0,055 \times 365 \text{ days} \times 20 = 401,50 \text{ €/year}$ )
- 6) Taxation of fuel cell cars has not yet been defined.

# Promotion of electric vehicles



- Low taxation of electricity compared to other fuels
- Subsidies by the Ministry of Trade and the Economy for purchase of EVs (2012-2014)
  - 30 % for capital cost of the leasing fee (36 months)
  - 35 % for investment of charging stations
- 68 Public charging stations (normal, fast charging)
- Today the structure of car taxation encourages purchase of EVs as much as possible
  - Due to high price and low re-sale value the total cost of EVs remains still too high given its moderate usability (limited range, long recharging time)

# Promotion of electric vehicles

- In total only 225 EVs in use (June 2013)
  - 137 cars, 88 vans
- Experiences
  - Technology neutral taxation is a fair way to promote EVs and plug-in EVs as well as other alternative fuel vehicles
  - Temporary subsidies for purchase EVs may help a little
  - Public charging stations can help daily use of EVs, although over 90 % of recharging is done at home/depots
- However, the total economy of EVs should still be considerably improved in order to make an EV a viable option for gasoline or diesel cars and vans

# Energy Efficiency of Logistics

- Training of truck and bus drivers
  - In accordance with the EU directive
  - Mostly lectures
- Raise of maximum dimensions and weight of trucks (Oct. 2013)
  - Total weight: from 60 tons to 76 tons
  - Total height: from 4.2 to 4.4 metres
  - Better energy efficiency and lower costs
  - Investments in roads and old bridges imperative
  - No results available yet
  - The use of modular vehicle concept (truck-dolly-semitrailer combination)



# Energy Efficiency of Logistics

- Energy Efficiency Agreements (EEA)
  - A Finnish, voluntary way to implement Energy Efficiency Directive (EED) and its predecessor Energy Service Directive (ESD)
  - A success story in industry and energy sector
  - In transport sector there has been problems in getting the transport entrepreneurs to join the agreement
    - The customers have so far not been enough interested in favouring transport companies having joined EEA

If you have any questions, please contact:

Expert Kaisa Kauhanen, [kaisa.kauhanen@motiva.fi](mailto:kaisa.kauhanen@motiva.fi),  
mobile phone +358 40 544 7879