

# Mobility Management



# MM in a nutshell

promote sustainable transport  
manage the demand for car use



changing travellers' attitudes and behaviour



**"soft" measures**

information and communication,  
organising services  
coordinating activities of different partners



**hard measures**

infrastructure  
technology  
pricing

enhance effectiveness  
improve cost-benefit ratio



# Difficult to prove?

Effectiveness of mobility management

Impact assessment of various policy scenarios to reduce CO<sub>2</sub>-emissions from passenger cars

(Report by Centre for European Economic Research 2006)

3 scenarios

Scenario 1: baseline

Scenario 2: 120 g CO<sub>2</sub>/km by 2020

Scenario 3A: 125 g CO<sub>2</sub>/km by 2020

Scenario 3B: 125 g CO<sub>2</sub>/km + information, taxation and management measures

# Difficult to prove?

**Table 5.3:** Impact of the Policy Scenarios on greenhouse gases emissions

Variation on baseline, tonnes	Scenario 2		Scenario 3A		Scenario 3B	
	2015	2020	2015	2020	2015	2020
CH <sub>4</sub> exhaust	-24	-69	-2	-17	9	12
CH <sub>4</sub> well_to_tank	-2,239	-4,299	-2,326	-4,365	-2,312	-4,326
CO <sub>2</sub> exhaust	-33,359,456	-59,783,248	-35,070,376	-61,693,861	-34,715,967	-60,874,782
CO <sub>2</sub> well_to_tank	-4,373,958	-7,835,501	-4,615,698	-8,120,898	-4,574,376	-8,025,147
N <sub>2</sub> O exhaust	-38	-200	109	120	193	304
N <sub>2</sub> O well_to_tank	-1,119	-1,996	-1,232	-2,163	-1,225	-2,147
WtW CO <sub>2</sub> Equiv	-38,127,895	-68,369,336	-40,071,838	-70,520,361	-39,648,806	-69,544,626
CO <sub>2</sub> eq = CO <sub>2</sub> + 23 x CH <sub>4</sub> + 296 x N <sub>2</sub> O						

Source: TREMOVE

Scenario's generate comparable results = so what ?

# Difficult to prove?

**Table 5.6:** Cost effectiveness of GHG Abatement 2010-2020

Cost estimation		Scenario 2	Scenario 3A	Scenario 3B
Conservative	M€	-53,123.2	-24,988.0	-7,214.0
	Mt CO <sub>2</sub>	-403.5	-420.6	-415.8
	€/ton CO <sub>2</sub>	131.7	59.4	17.4
Alternative	M€	-33,582.2	-10,237.0	4,527.6
	Mt CO <sub>2</sub>	-398.7	-415.5	-410.8
	€/ton CO <sub>2</sub>	84.2	24.6	-11.0

Source: TREMOVE

Scenario 3B = only 17,4 € / ton CO<sub>2</sub> in a conservative estimate

Scenario 3B even generates net benefits in an alternative estimate

**MM fortifies the effects of measures on vehicle technology and energy efficient use of passenger cars**

# Success stories

## Report of EEA 2008 (conducted by the Transport Research Laboratory)

6 cases reviewed, quantitative results in terms of CO<sub>2</sub>-reduction

Ecodrives programme in the Netherlands:	222.000 tonnes
Speed control in Rotterdam:	1.000 tonnes (15%)
Congestion charging in London:	16,4 %
Environmental Zone in Prague:	1.650 tonnes
Freight Consolidation Centre in London:	75 %
Teleconferencing in UK (BT):	100.000 tonnes



# Success stories

## Conclusions

Transferability	schemes are transferable and are already being implemented in other cities and regions
Implementation	stakeholder involvement is crucial
Co-benefits	air quality, reduced noise, reduced congestion, improvements in traffic safety
Economic benefits:	technology adaptations tend to generate net costs BUT behavioural changes tend to generate net benefits !
Success factors:	implementation of accompanying measures (mobility management), strong leadership and awareness raising

# MM for companies

- objective = reduction of motorised trips
- target group = commuter-trips, business trips
- instrument = mobility plan with a wide variety of measures

BUT what to do?

- Depending on objectives
- Site-specific (location, accessibility of the site, ...)
- depending on level of appreciation of employees
- depending on level of commitment of employers

In other words: no ready-to-use solutions ! A tailored approach is necessary

# MM for companies: any hints?

measure	% of implementers
Allowance for cyclists	42 %
Covered cyclestands	33.5 %
Secure cyclestands	27.4 %
Showers	23 %
Lockers and dressing rooms	22 %
Company bikes	8.5 %
Carpool scheme	5 %
Guaranteed trip to home	1.5 %
Extra allowance for PT-users	22.6 %
Information about PT	9 %
Concertation with local authority or provider	4.7 %
No extra measures taken	77.4 %

Belgian case  
(based on national travel  
survey)



# MM for companies: any hints?

## Presence of a mobility manager

- » Car use: 70.1 % → 67.7 %
- » Train use: 9.3 % → 12.9 %
- » BTM: 5.8 % → 6.8 %

## Telework

- » Car use: 70.1 % → 56.9 %
- » Train use: 9.3 % → 25 %

## Covered cyclestands

- » Cycle use: 5.8 % → 9.4 %

## Extra allowance for PT-users

- » No allowance: 6.6 %
- » Allowance: 17.3 %

## Parking policy

- » Paid parkings
- » Less parking spots than employees



# MM for companies: any hints?

## COMMERCE

(creating optimal mobility measures to enable reduced commuter emissions)

Fase in WTP	Result of typology
Motivation	Most popular: parking problems, congestion, accesibility
Travel survey	Common practice but large variety in methods and level of measurement (qual. – quan.)
Objectives	Kwantitatief geformuleerde doelen zijn zeldzaam
Roles en Responsibilities	Intern: employees and management Extern: local authority and transport provider  Successful plans have well defined roles, an open process and external stakeholder involvement.
Communication	Communication mainly towards employees (do's and don't 's)
Measures	Short but surprising
Monitoring and evaluation	Very litte quantitative data available
Results	Little data available Tendency to indicate more results than previously stated as an objective

# MM for companies: any hints?

Most popular measures in 57 good practices in Europe

objective	measure
Promoting walking	<ul style="list-style-type: none"> <li>• Improvements in walking facilities on site</li> </ul>
Promoting cycling	<ul style="list-style-type: none"> <li>• Enlargement of cycle stands</li> <li>• Facilities for cyclists (showers and lockers)</li> <li>• company bikes</li> <li>• cycle lanes on site</li> <li>• incentive-schemes such as breakfast, cycle repair shop</li> </ul>
Promoting PT	<ul style="list-style-type: none"> <li>• allowance for PT-users</li> <li>• shuttle service / vanpooling</li> <li>• individual travel advice</li> </ul>
Promoting carsharing / carpooling	<ul style="list-style-type: none"> <li>• carpoolsystems, databases</li> </ul>

# MM for companies: any hints?

Motivational instrument	Measure
Financial	<ul style="list-style-type: none"> <li>• paid parking</li> <li>• differentiation in parking tariffs</li> <li>• choice between cash and company car</li> <li>• mobility budget</li> </ul>
Organisational	<ul style="list-style-type: none"> <li>• telework</li> <li>• flexibel working hours</li> </ul>
Infrastructural	Parking lots further away on the company site
Campaigns	Campaigning, awareness raising, communication campaigns

# MM in FLEAT: example

## City of Turnhout

- Company cars combined with shared cars (Cambio, carsharing company)

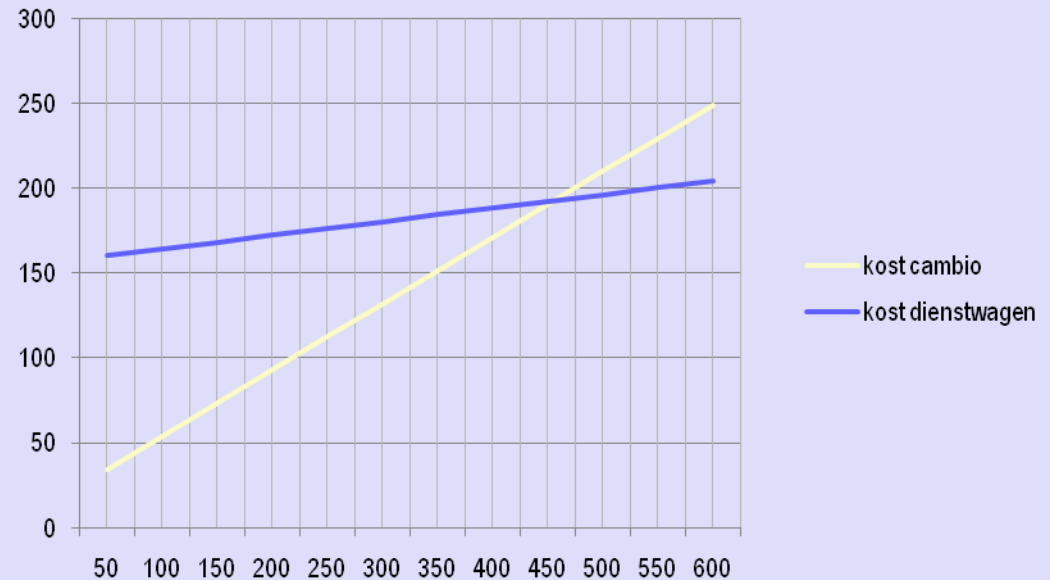
Company car	Shared car
Renault Modus	VW Polo
Ecoscore 67	Ecoscore 72
99 g/km CO <sub>2</sub>	145 g/km CO <sub>2</sub>
6 l/100 km	3.8 l/100km
Fixed cost = 156,18 € / month	Fixed cost = 15 € per month
Variable cost = 0.08 € / km	Variable cost = 0.39 € / km

# MM in FLEAT

## City of Turnhout

Results after 1 month of testing

- 65, 32 euro cost reduction
- 575 g CO2 reduction



BUT no total replacement

- Variable cost of shared car will eventually lead to more costs than company car
- No real internalisation of external costs in Belgian system

Conclusion

- Combined offer results in cost reduction and environmental benefits
- Green procurement policy will help to increase effects

# Mobility Management

## Concluding...

- Mobility Management (in combination with hard measures) works !
- Lots of good practice available all over Europe
- Need for sharing and exchange of practice and knowlegde

But still some work to do...

- Lack of consistent and quantified data on results
- Lack of monitoring and evaluation schemes

Initiatives underway

- FLEAT – toolbox ([www.fleat-eu.org](http://www.fleat-eu.org))
- Standardised workplace travel plans ([www.commerce-eu.org](http://www.commerce-eu.org))
- Monitoring (MAX-SUMO, [www.max-success.eu](http://www.max-success.eu))

# Thank you !

**thanks for listening !**

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