



Comhar

Sustainable Development Council

Priorities for Sustainable Transport

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Presentation structure

- Context
- Five I's of transport policy
- Main policy recommendations
- Conclusions

Comhar SDC - Structure

- Established by government in 1999 building on experience of social partnership
- Mandate from Minister for Environment
- Independent chairman and 25 members representing stakeholders from 5 pillars:
 - Environmental
 - Community
 - Economic
 - Professional/ academic
 - State
- 3rd term commenced January 2006.



Comhar - Objectives

- Advise Government on policies which support sustainable development
- Engage with wider stakeholders and public to win support for sustainable development
- Bring added value to existing work and avoid duplication of work undertaken by other bodies
- Draw on broad representation to come to informed and balanced conclusions.



What is Sustainable Development?

- Brundtland definition:

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs”



Sustainability Challenges

- Growing concern about implications of the pace of economic growth for environmental quality and life satisfaction generally.
- Greenhouse gas emissions have increased by 23% since 1990: Ireland Kyoto target +8%
- 87% of Ireland's energy is imported
- Regional balance and spatial planning: population of Dublin exceeds 1 million
- Over dependence on the construction sector: now accounts for almost 25% of economy
- 19% of population at-risk of poverty in 2004 and 7% in consistent poverty
- Tax revenue shortfall forecast €7.5 billion in 2008.

Climate and transport policy context

Programme for Government (agreed June 2007):

- “The Government will set a target for this administration of a reduction of 3% per year on average in our greenhouse gas emissions.”
- *“Appropriate fiscal instruments, including a **carbon levy**, will be phased in on a revenue-neutral basis over the lifetime of this Government.”*
- “The Government will mandate the Minister for Finance to present an outline carbon report (“carbon budget”) in conjunction with the annual financial budget.”

23rd January 2008 European Climate Change and Energy Package:

- *“The mainstay of the new policy is a core energy objective for Europe: **that the EU should reduce greenhouse gas emissions by 20% by 2020.** This objective will enable the EU to measure progress in re-directing today's energy economy towards one that will fully meet the challenges of sustainability, competitiveness and security of supply.”*

Endorsed by European Council, 8/9 March 2007

Sustainable Travel and Transport

- Irish Department of Transport published public consultation on Sustainable Travel and Transport Action Plan (STTAP) March 2008
- Main issues to be addressed:
 - Spatial planning and transport
 - Passenger transport
 - Freight transport
 - Additional measures

Comhar SDC input to STTAP

Series of expert seminars:

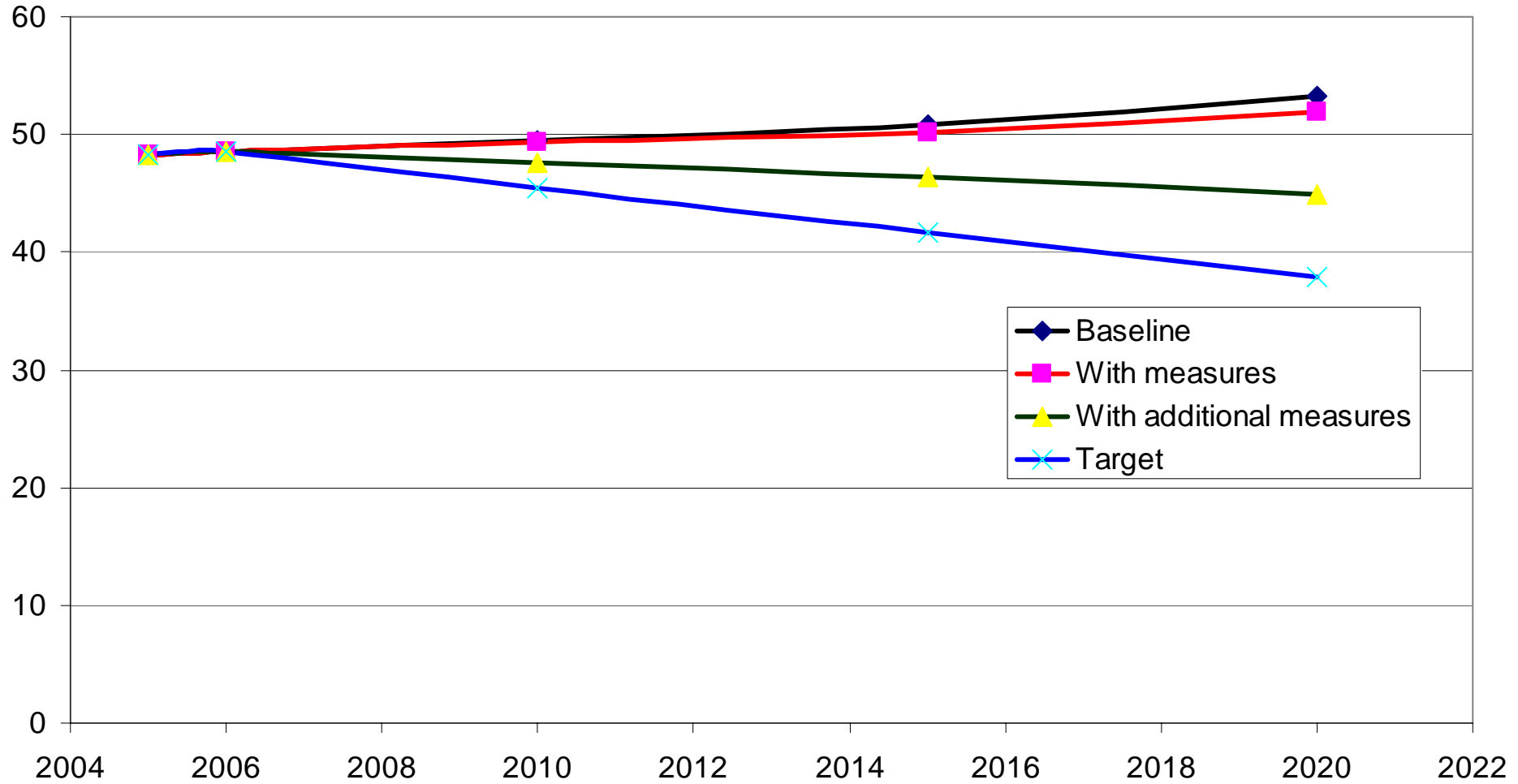
- June 2007 – cycling and walking;
- September 2007 – rural transport and social exclusion
- November 2007 – transport demand management with information measures
- December 2007– transport demand management with fiscal measures
- January 2008 – road freight transport

EPA GHG Emissions Projections

Mt CO ₂ e	1990	2005	2006	2020 (with measures)	2020 (with add. Measures)
Energy	11.85	16.34	15.59	22.0	18.68
Residential	7.35	7.38	7.29	6.51	2.12
Industry & Comm.	9.78	12.23	12.02	13.94	12.23
Agriculture	19.92	19.58	19.31	19.94	19.94
Transport	5.17	13.04	13.72	16.68	15.34
Waste	1.46	1.77	1.83	1.27	1.27
Total	55.5	70.3	69.8	80.33	69.74

Non-ETS sectors

Mt CO₂e



Source: EPA GHG Projections to 2020, September 2008.

Emissions from the Non-Trading Sector in 2005, and hypothetical targets for 2020 to meet the EU Cap.

Sector	Emissions in 2005 Million Tonnes of CO ₂ equiv	% of Total	Target if each sector reduced <i>pro rata</i> by 20 per cent in tonnes of CO _{2e}	Reduction needed in million tonnes of CO _{2e}
Agriculture[1]	19.6	41.3	15.7	-3.9
Transport	13.0	27.4	10.4	-2.6
Residential (non electric only)	6.9	14.6	5.5	-1.4
Service Premises (private offices and public buildings)	2.9	6.1	2.3	-0.6
Waste	1.8	3.8	1.4	-0.4
Other (industry not in EU ETS, tourism etc.)	3.2	6.8	2.6	-0.6
Total	47.4	100	37.9	-9.5

[1] Most emissions from agriculture and waste are methane.

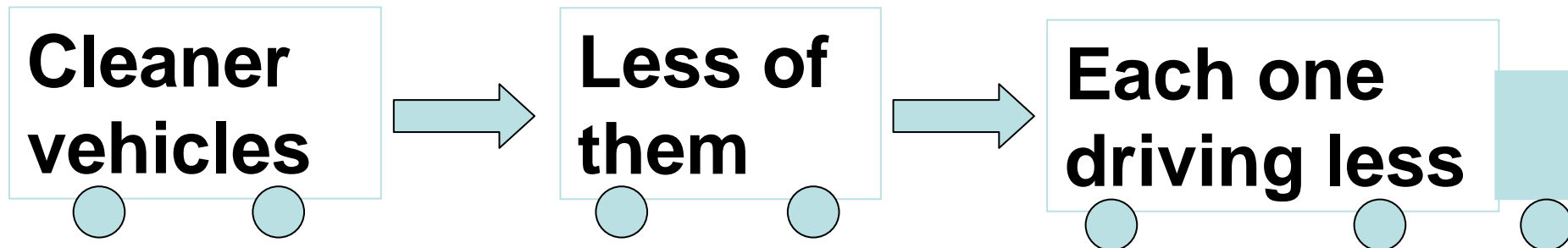
Source: Chairman's Commentary at <http://www.comharsdc.ie/publications/index.aspx?PAuto=165>

Transport Context

- *Environmentally*, transport faces a huge challenge in meeting the non-trading sector obligation of reduced emissions by 20% by 2020
- *Economically*, the challenge is to meet the carbon constraint and to reduce congestion and associated travel times.
- Given budgetary constraints, it is difficult to see how sustainability can be achieved without a carbon tax that is recycled to fund key features

How to reduce transport impacts on the environment ?

- Reduce the negative impacts produced per kilometre of travel, i.e. cleaner vehicles;
- Reduce the number of kilometres travelled per vehicle;
- Reduce the number of vehicles travelling.



Key Measures

- Ensure that the five 'Is' are in place:
 - Information,
 - Institutional arrangements,
 - Infrastructure,

 - Incentives (Fiscal measures)
 - integration with planning

Main recommendations

A. Information

- Information on transport performance generally, and in regard to sustainability dimensions in particular, is widely dispersed between sources such as CSO, DTO and NCT, NRA, RPA, SEI, Road Safety Authority, CIE Group, and there are important gaps.
- The relevant *information* should be supplied on time, to the requisite quality.
- Without good information people may not know all the transport options available to them or understand fully the consequences of their actions.

A. Information (2)

Key recommendations:

- Consistent, simple **environmental labelling** provided on all new vehicles sold
- **Ecodriving** training for private and commercial drivers obligatory at the time of first licensing
- **Real-time information** rolled out for all modes of public transport.
- **Transport data collection and modelling** necessary to inform evidence-based policy-making in the transport sector - a central facility for transport data and modelling.
- More **transport research** needed. In particular work on estimating marginal abatement cost curves and elasticities for Ireland for the sector are needed urgently.

B. Institutional Arrangements

The *institutional* arrangements appropriate to deliver policy on time and within budget :

- **Collaboration** of government departments, agencies, and local authorities needed in land use, transport, pricing, environment, climate change policy - national transport authority?
- For major urban areas, **independent transport authorities** with financial and human resources to provide creative urban transport strategies and the power to implement them.
- The **reform of the 1932 Road Transport Act** urgently needed to address legal issues regarding the provision of new transport services.
- **Mobilising** and integrating Agencies under the jurisdiction of DoT to provide information (see above) and develop and implement sustainable transport strategies.

C. Infrastructure (1)

Passenger and freight transport alternatives to road transport need to be provided in order to provide citizens with real choices when facing fiscal charges. Revenues from transport fiscal measures should be hypothecated to fund infrastructure and other measures promoting sustainable transport.

- **Multicriteria analysis (MCA)** to prioritise infrastructure investment in a transparent manner. Priority given to investment in transport infrastructure that is environmentally effective, cost efficient and that takes long term demographics into account.
- **Lower cost investment options** such as improved bus services and pedestrian and cycling facilities implemented ahead of higher cost alternatives.
- **Bus and rail services** to provide services driven by demand and social policy. CIE should review timetabling and service provision to assess whether demand for services is met.
- The **reform of the 1932 Road Transport Act** urgently needed to address the legal issues regarding the provision of new transport services.
- **Public transport** should be more **attractive, i.e.** Integrated ticketing, real-time information on bus routes; reliable, frequent services.

C. Infrastructure (2)

- **Land use and planning** must be aligned with the **National Spatial Strategy** and be **integrated** into transport decision-making and vice-versa.
- Review the amount and design of **motorways** planned. Optimisation of the use of existing motorways prioritised over building new motorways.
- A **national distribution centre** outside Dublin for freight transport to improve the logistics of small freight operators in particular and to enable the efficient use of existing infrastructure.
- Give serious consideration to moving the location of:
 - Dublin **port** to a more accessible location, which will not require freight to be trucked round Dublin city centre on the M50.
 - The **oil depot** and installing an oil pipeline from Dublin port to the north of Dublin.
- Develop **rail freight** in appropriate areas with public money (from transport fiscal measures) if the benefits outweigh the costs from a societal perspective.
- **Maximise** the use of **existing resources**: i.e. Luas lines at night for freight?
- **Biofuels** targets should be performance-based not volume targets. Sustainability criteria needed as a minimum standard for biofuels supplied to the market.

D. Incentives / Fiscal measures

- National measures
 - The first best solution is national **road pricing** (2012/13)
 - User based charges set per kilometre
 - Dependent on geographical location, time-of-day, and vehicle technology
 - Other options under investigation:
 - **Carbon levy** (2009)
 - A **Cap-and-share** scheme (2009/10)
 - **Fuel excise duty escalator** (*immediately*)
 - Emissions-differentiated **vehicle taxes** (*immediately*)
- **Local measures** (in the absence of national road pricing)
 - Congestion charging in cities with congestion
 - Intelligent parking pricing.
- The implementation of fiscal transport policies should be aligned with investment in improved transport infrastructure such as Transport 21.

Timing of fiscal measures

2008	2009	2010	2011	2012	2013	2014	2015
	Fuel price escalator + CO ₂ vehicle taxes				T r a n s p o r t 2 1		
		Carbon levy or cap-and-share					
	Preparation work on Road user charges	Scheme design and announcement		Road user pricing			

Revenues from Fiscal Measures

- **Distributional impacts** should be considered with any fiscal policy instrument and revenue should be used in an appropriate way to mitigate any undue hardship for vulnerable groups. Any compensation however should not counteract the objective of the fiscal instrument, namely to reduce the incentives for unsustainable travel.
- Revenues should be used to invest in **transport infrastructure** and energy efficient services to encourage further sustainability in transport and travel. Particularly relevant in rural Ireland where in many geographical areas there is currently no public transport; it will be crucial to use revenues generated by fiscal measures to fund alternative modes of transport.

E. Integration with Planning

- Policy measures with longer term impact
- Poor planning without heed to transport requirements has created much of the residential sprawl throughout Ireland and led to car dependency.
- **Land use and planning** must be aligned with the **National Spatial Strategy** and be **integrated** into transport decision-making and vice-versa.

Comhar SDC Road freight seminar

Issues arising

- Design of roads:
 - Damage associated with HGVs is higher than for passenger cars.
 - County roads are not strengthened to take HGVs, and the proposed larger trucks will cause even more severe damage. HGVs are restricted from some roads/areas and can be restricted from more, this occurs in many European Countries.
 - A motorway strategy for Ireland should have been produced a long time ago, the planning has been very piecemeal and now we have situations where motorways run alongside national roads.
 - Bicycles and HGVs should not mix. Proper cycle lanes are needed to ensure that bicycles are separate to traffic. Cycle lanes should be taken off main roads and put on small roads. They should be enforced properly.
 - Bus lanes could be dedicated commercial traffic corridors in off-peak hours.
- The social cost of bigger (super-) trucks needs to be examined to test whether they are a good idea.

Reducing CO₂ emissions from freight transport

- Without an alternative to road freight - little chance of achieving reductions in freight transport CO₂ emissions
- Because of the population densities and distributions in Ireland road freight distribution will remain the most practical method for many locations in Ireland. Almost all rail trips begin and end with a road trip.
- Improvements in efficiencies due to better supply chain management could contribute to carbon emission reduction rather than to cost as is now the norm.
- We need to change consumption patterns, in particular to reduce packaging. After construction goods, consumer goods are the biggest volumes of freight moved in Ireland.
- Little incentive for haulage operators to pay a higher price for more environmentally-friendly vehicles.
- A regulator needs to be appointed to catch the illegal operators. Enforcement of the present regulations is currently the main problem.

Suggestions for government intervention

- Many small freight transport operators with little coordination so external leadership and funds needed to establish a municipal freight distribution centre facilitating night deliveries.
- An independent/ state container depot is required that can operate 24 hours a day; currently many of the operators have long leases in Dublin port and close at 17.30, making night deliveries very difficult.
- A subsidy could be given to night-time deliveries and retro-fitting low-noise technologies (as they do in Holland with the “PEAK” Project).
- Put in an oil pipeline from Dublin port to north of Dublin to replace the oil depot in Dublin port.

Conclusions

- Integrated policy measures – no infrastructure without fiscal measures and vice versa
- Remember the five I's – Information, Institutions, Incentives, Infrastructure and Integration!
- No quick fix for Irish freight transport
- Need to begin immediately



Principles for Sustainable Development

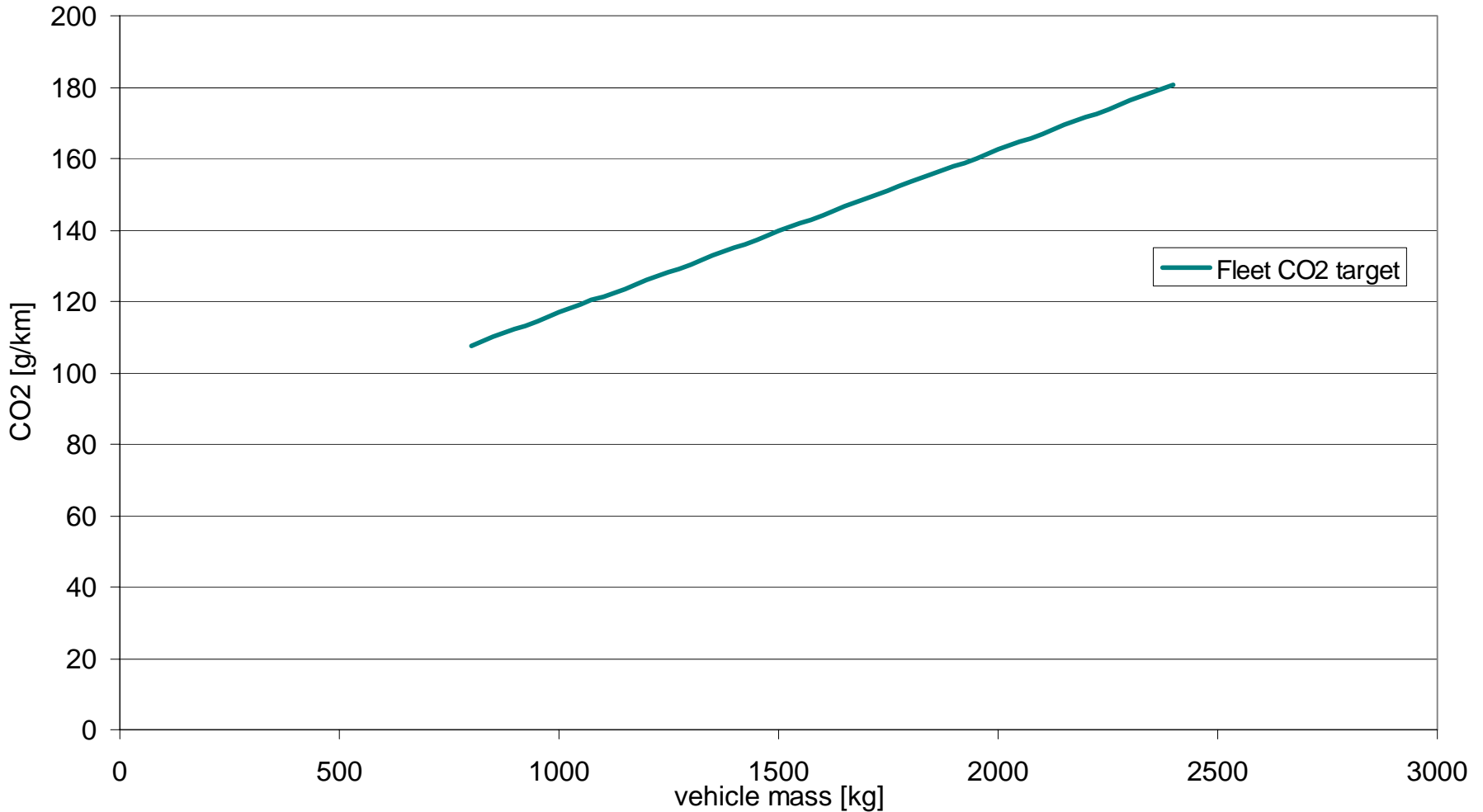
- 12 principles built around 7 themes
 - Satisfaction of human needs by the efficient use of resources
 - Equity between generations
 - Respect for ecological integrity and biodiversity
 - Equity between countries and regions
 - Social equity
 - Respect for cultural heritage/ diversity
 - Good decision making

EU proposals to legislate automobile CO₂ emissions

Commission proposals to reduce average CO₂ emissions of new passenger cars

- Average emissions of CO₂ from EU new passenger cars to reduce by 19% - from around 160 g / km to 130 g / km in 2012.
- Targets based on a limit value curve of CO₂ emissions for new vehicles by mass of the vehicle - 130 g/km CO₂ fleet average
- Heavier cars will have to improve more than lighter cars compared to today
- Cars with emissions above the limit value curve must be offset by cars below the curve
- Several manufacturers can group together to form a pool to meet the targets
- Special provisions for manufacturers who sell fewer than 10,000 vehicles per year and Special purpose vehicles
- **Penalties:** Excess emissions premium if average emission levels are above the limit value curve – based on g/km that an average vehicle sold by the manufacturer is above the curve, multiplied by the number of vehicles sold by the manufacturer. €20 per g/km in the first year (2012), rising to €35 in the second year (2013), €60 in the third year (2014) and €95 as of 2015.

Fleet CO2 emissions targets based on average vehicle weight



Main debate

- Public ministerial debate on the plans in Luxembourg on 5 June.
- Support from some governments for date change from 2012 to 2015 for 130g/km deadline
- EU industry commissioner Günter Verheugen sympathetic to a 2015 deadline. But the European parliament's rapporteur on the plans, Italian Guido Sacconi, resisting any delay
- Governments divided over vehicle mass or “footprint” as parameter to set 130g/km target
- Also split over the slope of a curve assigning emission targets to different car models (60%?)
- Debate also on level of financial penalties and flexibility in way they are applied. Should revenues go to EU budget or be earmarked for environmental purposes? Or remain with national treasuries?
- Widespread agreement on the need to add a long-term emission reduction target; Slovenia proposes a figure of 95g/km by 2020 but some member states say it is too early to set a concrete figure
- Vote in committee/plenary in autumn 2008.

Conclusions

- Integrated policy measures – no infrastructure without fiscal measures and vice versa
- National road pricing scheme scoping must begin immediately
- EU legislation will require lower new car CO2 emissions
- No quick fix

