



European Partners for the Environment

Concluding Report

First Laboratory

10-11 December 2012, Brussels Holistic Mobility Management: A European Trade Unions Dialogue with Interested Parties

Second Laboratory

4-5 February 2013, Brussels Sustainable Mobility and Integrated Planning in Urban Areas: Trade Union Dialogue with Local Authorities

Supported by:



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1 Background

Increasingly, public policy attention is directed towards how to address the rising greenhouse gas emissions from transport, (which account for a third of all EU emissions) and promote sustainable transport practices, whether through emission standards on different modes of transport equipment or by addressing transportation networks and shifts in transport modes. In April 2011, the Commission produced its Communication on the Single Transport Area as a sectoral roadmap within the framework of the Roadmap 2050, which would see greenhouse gas emissions from transport reduced by 60% by 2050.

These changes are having, and will continue to have, major implications for workers within the transport and transport equipment manufacturing sectors and related workforces, in terms of anticipated restructuring, industrial or sectoral policy and, fundamentally, on working conditions and quality of work in a future sustainably mobile society.

It was the intention of this series of laboratories to bring together experiences and perspectives from different trade union branches (e.g. the European Transport Workers Federation and the European Metalworkers/Industrial workers Federation), as well as the work already undertaken by trade union confederations at the national level, in developing inter-professional responses and negotiated solutions. This was to be achieved in a policy dialogue with other non-union stakeholders (e.g. public authorities at EU, national, and especially local levels, and industry associations and environmental organisations specialised in transport questions) around the topic of sustainable urban mobility. The overall aim of the laboratories was to use this policy dialogue to generate or feed the ongoing trade union debate on mobility questions, and to elaborate the key trade union demands at European level in this field, as well as identifying future strategic partnerships to achieve these demands.

The first laboratory within the framework of this project was organised on 10-11 December 2012 on the theme of "Holistic Mobility Management: A European Trade Unions Dialogue with Interested Parties".

The second laboratory within the framework of this project was organised on 4-5 February 2013 on the theme of "Sustainable Mobility and Integrated Planning in Urban Areas: Trade Union Dialogue with Local Authorities".

Two background papers were prepared by European Partners for the Environment for these laboratories to steer the discussion with the audience during the various sessions. The conclusions from the laboratories will result in a resolution on sustainable mobility to be submitted to the European Trade Union Confederation Executive Committee in 2013, and an implementation strategy including strategic partnerships being developed to accompany the position.

The project has been managed by a steering committee which has met on two occasions to prepare and follow up the laboratories. The steering committee comprised: the European Trade Union Confederation (ETUC), the European Transport Workers Federation (ETF), IndustriALL and European Partners for the Environment (EPE).

The presentations given at the two laboratories are available at: http://www.etuc.org/a/10684

2 First Laboratory Report

The first laboratory addressed the 'Role of Workers in the Promotion of Holistic Mobility Management'. It tackled the overall framework of different transport modes and their various mixes, considering the concept of holistic mobility management. This included the role of workers in relation to vehicle manufacturers, suppliers, the fuel industry, policy-makers, infrastructure providers, vehicle buyers and users, logistics planners, public transport providers, city planners, financiers, and others. This laboratory was framed in the light of the role of sustainable mobility as a component of a social growth model, promoting the broader agenda of prosperity and a good life for all.

The specific objectives of the laboratories were to:

- identify current trends and collect policy options and industry best practices which could be essential to trigger a move towards the combined benefits of sustainable mobility and job creation in the EU;
- address the social and ecological innovations necessary to secure a Just Transition for the workforce, in relation to sustainable mobility, as supported by the EU in the UNFCCC Cancun agreement (December 2010);
- evaluate the employment implications (challenges and potential) of sustainable mobility, both in terms of employment trends and the quality of work, within the sectors directly concerned and the wider workforce;
- develop and promote an exchange of information and good practice among trade unions, and with non-union actors, on sustainable mobility policies, tools and measures;
- provide a basis for strategic partnerships on sustainable mobility at the European level.

3 Recommendations and Points for Action Resulting from the First Laboratory

Transition to Sustainable Mobility

One of the main challenges arising from climate change is the so-called 'employment challenge' – how to simultaneously mitigate climate change, maintain or even increase employment levels, and secure or improve job-quality standards.

Implementation of green business practices may have a twofold impact on jobs. It may affect the quantity of jobs by creating new ones, eliminate current inefficient jobs or substitute them with greener ones, or transform current jobs by introducing new types of environment-related responsibilities. Green business practices may also affect the quality of jobs, defined in four dimensions: career and employment security, skills' development, health and well-being, and the reconciliation of the work/life balance.

To ensure a socially responsible transition towards high-quality green jobs, concerted efforts by governments, employees, employers and other stakeholders are crucial in anticipating and managing this process.

No straightforward conclusions can be made on the overall impact of climate change on job quality. The main effect of the economic and financial crisis has been to slow down (mainly through cuts in public funding) the overall pace of greening across industry in the EU. Skills' development is the job-quality dimension most notably affected by climate change; the impact on the other dimensions is less clear.

The evidence gathered during the laboratories suggests that employees in the transport sector need to be engaged by employers in green change processes towards sustainable mobility; they need to be fully convinced why greening is necessary, and this is often not clearly associated with better quality jobs.

Since the transition to sustainable mobility is mostly a policy-driven process, the anticipation of "green" change should be more straightforward and explicit, while management measures need to be planned and launched from the beginning. Public authorities play a crucial role in helping the transport sector to eco-innovate and achieve the desired level of low-carbon economy across industry.

To ease the transition to sustainable mobility, public authorities could apply well-balanced regulatory and financial measures, accompanied by non-financial measures and coordinate new training programmes. Innovative best practice examples of sustainable mobility are abundant and concentrated at the local level. Central and regional government should coordinate actions with local governments and involve local institutions in order to bundle and mainstream sustainable mobility practices.

Challenges arising from climate change in the transport sector could be summarised as follows.

- Demand for mobility (longer commuting distances, more international travel) leads to growing transport flows (especially in road and air transport) and hence more CO₂ emissions.
- Public pressure for cleaner and more energy-efficient transport, especially road and public transport.
- Rising energy prices and stringent environmental policies, in particular, put pressure on the automotive transport sector which represents both a challenge and an opportunity for companies in the sector.

Key Trade Unions Issues

European transport trade unions are committed to cooperating with employers' organisations and the institutions in building solutions that lead to sustainable transport systems, and promote cooperation rather than competition between transport modes and preserve quality employment. Anticipating change and managing change is a major challenge for transport unions. It is with this in mind that they have been working on different projects which build on their own vision and strategy for dealing with the impact of transport on climate change. In view of a necessary socially and ecologically sustainable transport policy, concepts must be developed which will pursue sustainable objectives in the wider interests of society, including those of employees in the transport industry. We need integrative approaches, which will create a fair, balanced and sustainable transport system.

The vast majority of these projects suggested that a coherent and ambitious climate change policy can create millions of direct jobs within the transport industry and millions of additional indirect jobs. Those jobs would be created mainly in public transportation and infrastructure. Concretely, what is needed is:

- 1. a social impact assessment
- 2. measures for Just Transition during the transition period
- 3. an analysis of potential job losses or need for reconversion.

The ETUC framework for a Just Transition covers:

- 1. Regulation: setting a legal framework with a timetable that will lead to economic actor responsibility;
- 2. Innovation: supporting R&D in technology sectors in order to reach objectives independently, in particular in terms of GHG emissions, which will also create employment;
- Training: greening skills in order to bring about change: aiding workers to retrain propose that suitable training begins at schools and universities, without focusing on only training the top tiers;
- 4. Participation: social dialogue: workers can bring innovative solutions to companies;
- 5. Social protection: in order to guarantee quality jobs (employment contracts and decent working conditions).

An ambitious climate change policy needs the strong political will of European, national, regional and local decision-makers if it is going to be able to fulfil the reduction targets for greenhouse gasses and energy consumption on the one hand, and create new direct and indirect jobs in the transport industry on the other. It needs massive public investment in sustainable transport modes and infrastructure.

Sustainable mobility should be put on the agenda of the sectoral social dialogue committees. The creation of an Environmental and Social Observatory for transport is needed which would act as a form of watchdog regarding sustainability targets, and make proposals when objectives are not reached.

Evidence from successful pilot sustainable mobility projects at the local level, further demonstrates the need to:

- support the use of public transport by commuters
- promote access for pedestrians, cyclists and car-poolers
- introduce the figure of a mobility manager in mobility plans
- introduce transport fares in collective bargaining
- improve working conditions through a new commuting pattern
- support occupational health and safety strategy
- contribute to the work and family life balance and gender equality
- act against discrimination and promote decent work

4 Second Laboratory Report

The second laboratory focused on 'Sustainable Mobility in Urban Areas' and aimed to promote a constructive dialogue between trade unions and key actors at the local level, looking at holistic mobility management and integrated planning. Considering that over 70% of people in Europe live and work in cities and urban areas and this is set to rise, developing a policy on sustainable mobility necessitates a reflection on the needs of workers in urban mobility.

The specific objectives of this laboratory were to:

- identify current trends and collect policy options and industry best practices which could be key triggers in a move towards the combined benefits of sustainable urban mobility and job creation at local level in the EU;
- address the social and ecological innovations necessary to secure a Just Transition for the workforce, in relation to sustainable urban mobility, as supported by the EU in the UNFCCC Cancun agreement (December 2010);
- evaluate the employment implications (challenges and potential) of sustainable urban mobility, both in terms of employment trends and the quality of work, within the sectors directly concerned and the wider workforce;
- develop and promote an exchange of information and good practice among trade unions and non-union actors about sustainable urban mobility policies, tools and measures;
- provide a basis for strategic partnerships on sustainable urban mobility at a European level.

5 Recommendations and Points for Action Resulting from the Second Laboratory

Transition to Sustainable Mobility

In view of the final ETUC-EPE workshop in May, leverages to explore include in particular:

- 1. The creation of a Trade Union Mobility Task Force at city level, starting with the 63 cities registered as part of CIVITAS or signatories of the Covenant of Mayors. Cities are the places where major integrated planning tools, new financial initiatives, participatory mechanisms and collaborative consumption/use are developed.
- 2. The request for an EU regulatory framework for transport and workers based on the existing mandatory system in EU Member States
- 3. The organisation of a workshop on EU inclusiveness, transport and poverty.

The transport and mobility sector is a significant contributor to economic activity and society in Europe, employing around 10 million people (60% road, 30% rail and public transport, 10% air) and accounts for 5% of GDP (EC 2012). 8-16% of household income is typically spent on transport (Worldwatch Institute 2008). However, with growing freight and passenger transport, pollution and congestion is getting worse. The number of cars worldwide is set to increase from roughly 1 billion at present to around 1.3 billion over the next ten years.

Sustainable mobility is seen as having a huge potential for job creation. Policies aimed at creating more balance through a greater use of rail and public transport and reducing the volume of traffic by the order of 10% would produce a fourfold increase in the number of direct and indirect jobs in rail and public transport, while employment in road freight transport would decline by 50% and in the automotive sector by 60%.

The transition to new sustainable mobility alternatives will require investments in R&D and infrastructure that can lay the foundation for immediate job creation today and sustained economic growth in the future. Due to the complex nature of the transportation sector, achieving this transformation will require a fundamentally new approach in addressing environmental sustainability and the reduction of carbon emissions. The network of stakeholders that directly or indirectly influence the sector spans a wide range of constituents that include stakeholders both within and outside the transportation sector. To successfully address the sector's environmental sustainability challenges, the perspectives of all stakeholders in the system must be considered and integrated.

Addressing sustainable mobility from this integrated systems approach enables policy-makers and other stakeholders to better assess the complex challenges and multitude of opportunities available to the transportation sector to achieve its targets. It also allows for more effective policies to be implemented that assess the trade-offs between modes and technologies, and enable the whole sector to reach its emission reduction targets rather than favouring a single mode. Finally, it also brings the potential for risk-sharing of investment into new technologies among stakeholders throughout value chains.

New mobility concepts cannot be imposed. To promote more sustainable behaviour, better mobility planning has to be actively encouraged. Development of the concept will require common EU standards that respect EU competition rules. To be more effective, technological research needs to be complemented with a systems approach, taking care of infrastructure and regulatory requirements, coordination of multiple actors and large demonstration projects to encourage market take-up.

Key Trade Union Issues

The Carbon Trust in the UK estimates that most businesses could easily save between 10 and 20 per cent of their energy costs through simple low-cost or even cost-free measures. To do this, workers on the ground must be involved. However, staff will not be able to deliver changes if they do not understand and support the reasons why they are being introduced. The TUC's GreenWorkplaces project demonstrates that employers need to see unions as part of the solution. Union involvement can lead to business benefits through improved environmental performance.

The following recommendations were collected from practical projects presented during the laboratory:

Invest in collaborators specialised in mobility management (MM). This should take place at different levels:

- at national or regional levels where mobility and urban planning policies are designed
- at local levels where sustainable urban mobility plans are developed
- at the level of industrial areas or individual companies (company mobility coordinators)

These people need to be trained in the field of mobility in order to join the debate with sufficient expertise. The mobility coordinator at company or industrial area level is not only the main contact person for the employer(s) but also for the workers.

Create a mobility platform within the trade union. An internal consensus within the whole trade union about the need for a more sustainable mobility system is necessary before awareness can be raised among others, or a debate entered into with employers. Courses need to be organised on the impact of the current mobility system and its impact on the social, economic and physical wellbeing of all workers. Finally, the appointment of a mobility specialist or the creation of a mobility cell within the trade union organisation can clearly facilitate the spread of interest and attention for sustainable mobility.

Urban planning first. Avoiding the need to use a car is the most efficient mobility management measure. Trade unions must play a major role in stressing the importance of a good location for new workplaces. A good business location from the point of view of sustainable mobility would favour both workers and potential workers. It would also show the clear commitment of the company to assume its social responsibility. Companies with poor access to public transport services can invest in shuttle buses or implement carpool-matching systems to improve accessibility for workers without a car.

Company obligation to a sustainable mobility plan. Some kind of obligation seems to be a necessary precondition for a mental shift in awareness among employers and employees into changing behaviour and embracing sustainable mobility, together with clear support and/or engagement by public authorities. An obligation to develop a mobility plan creates the opportunity for trade unions to bring mobility issues to the negotiating table. Trade unions should be involved in the development and the drafting of the plan as they have a major responsibility in persuading all workers of the need to change their mobility patterns.

Support companies in its implementation. Sustainable mobility is not the core business of most companies or institutions. In order to implement some measures, it is necessary to collect and analyse key data. In most countries private consultants are used to do this. It is often a difficult process to make resources available for investment in sustainable transport solutions (shuttle buses, bicycle parking). Local or regional governments can facilitate and encourage investments in sustainable transport through the public funding of private projects.

Awareness campaigns. Persistent, long running awareness campaigns can be beneficial for changing employee perception, as both employers and employees are easily persuaded about the profit of sustainable mobility when they are confronted with facts and good examples. Data on mobility management projects should be collected in a systematic and objective way. It would be of major interest for trade unions all over Europe to have access to objective data and convincing examples of successful mobility projects. It would be worthwhile to examine the possibility of extending the obligation in Belgium (where companies with more than 100 employees have to provide some key mobility data) to other EU countries

Exchange of expertise and good practice. Expertise and knowledge is necessary to facilitate discussions about sustainable mobility. An exchange of knowledge and good practice through awareness campaigns would be a very efficient way to learn from each other and build a common understanding of the problem and of possible solutions. A European observatory on worker mobility should also be set up to gather and disseminate the information.

Fiscal and legal framework. A fiscal and legal framework that favours sustainable transport modes for commuters is a clear incentive for workers to choose cycling, public transport or car-

pooling. Apart from the financial stimulus given by this kind of legislation, it also symbolises the mobility policy of the authorities. By giving financial advantages to cyclists, public transport users or car-poolers a government shows its intention to generate a modal shift. This would be even more valid if, besides stimulating sustainable transport, single car use was financially discouraged via taxation, road pricing or higher parking charges.

The key ETUC demands on this topic can be summarised as follows.

At EU level:

- address social and industrial concerns
- monitor and share information on: R&D, Standardisation, TEN-T
- promote social dialogue on greening the economy and sectoral skills/training initiatives
- initiate social dialogue on sustainable mobility strategies (interprofessional/sectoral) and alliance building
- press for a framework directive on anticipation of change/restructuring

At Member State level:

- fair taxation incentives and labour law provisions (teleworking, flexible working time arrangements)
- support innovative public transport infrastructures
- national training programmes
- national bargaining and alliance building
- improved working conditions for transport workers

At regional/local level:

- support urban planning that better includes sustainable mobility
- develop regional approaches in training schemes
- build and engage in multi-stakeholder dialogue initiatives
- set up regional job observatories

At company level:

- demand rights for workers to negotiate/consult on mobility plans
- raise awareness via E-learning modules
- engage workers in mobility plans
- improved I&C

Appendix I: First Laboratory Summary of Presentations

<u>DAY 1</u>

SESSION 1 - Sustainable Mobility in Europe: Setting the Scene

European Policy Perspective on Sustainable Mobility

Monique Van Wortel - European Commission DG Mobility and Transport

Urban transport has been integrated into the European Commission's White Paper of 2011. Its aim is the reduction of EU greenhouse gases (GHG) emissions and dependency on fossil fuels, as well as dealing with the problem of congestion, with the overall objective of furthering the competitiveness of the EU economy. Therefore, the challenge now is how to better meet the transport needs of users and companies.

The 2011 White Paper includes:

- 1. Solutions for long-distance transport:
 - Passengers: adequate capacity and improved overall travel experience (efficient links between airports and rail, minimum hassle for personal security screening);
 - . Freight: high global maritime standards, more efficient hinterland connections for ports, modern vessels and cleaner fuels for shipping (air, rail and maritime).
- 2. Intercity travel and transport (intelligent transport systems seamless multimodal travel improvements-clean trucks):
 - . Passengers: seamless multimodal travel (online multimodal information and ticketing, multimodal hubs), quality service and enforced passengers' rights, near-zero casualties for road;
 - Freight: paperless logistics, multimodal long-distance freight corridors, no barriers to maritime transport, cleaner trucks on shorter distances.
- 3. Urban transport and commuting:
 - . Passengers: non-fossil fuel mobility (clean and efficient cars, higher share of public transport, alternative propulsion for urban buses and taxis, better infrastructure for walking and cycling);
 - . Freight: better interface between long distance and last-mile, freight consolidation centres and delivery points, ITS for better logistics, low-noise and low-emission trucks for deliveries.

The ten goals for competitive and sustainable transport that have been set in the White Paper do not only aim at regulating, but also at changing behaviours. Two of these goals deal with urban mobility:

- 1. halve the use of 'conventionally-fuelled' vehicles in urban transport by 2030, phase them out by 2050
- 2. achieve essentially CO₂-free city logistics by 2030 in major urban centres

These goals aim at achieving the transition from car-based mobility to mobility based on walking, cycling and high quality public transport.

The European Action Plan on Urban Mobility ran from 2009 to 2012. A report to be released in spring 2013 will deliver conclusions for the follow up of this Action Plan.

The CIVITAS Initiative (FP Programme), which was created 10 years ago, covers the conception, testing, evaluation and dissemination of innovative solutions for urban mobility. The CIVITAS Plus II programme will offer €18 million in funding.

An urban mobility package to be launched in the summer of 2013 consists of 3 specific initiatives:

- 1. sustainable urban mobility plans to link EU funds to a sustainable urban transport strategy
- 2. a framework for urban road user charging and access-restriction zones (ITS: single ticket-important for intercity travel)
- 3. zero-emission urban logistics in major urban centres by 2030

The Sustainable Urban Mobility Plan (SUMP) is a strategic plan designed to satisfy the mobility needs of people and businesses in cities and their surroundings for a better quality of life. It builds on existing planning practices and takes due consideration of integration, participation, and evaluation principles. Local authorities should look at the environmental as well as the social aspects when setting up their sustainable mobility plans. Inclusive participation needs to be considered too. SUMPS are a framework for local authorities to integrate policies on urban mobility and therefore should include non-motorised and public transport, land-use planning, housing, infrastructure development, ITS, city logistics, inclusiveness (people with limited mobility). Efficient public transport with a high quality service is required (information, accessibility, frequency, reliability, intermodal integration, safety, security) in order to encourage mobility behaviour. A dedicated website was created sustainable in 2011 (www.mobilityplans.eu), which can be useful for local authorities to exchange best practice and to support educational activities and guidelines.

A View on Transport from Trade Unions

Eduardo Chagas, European Transport Workers Federation (ETF)

The transport of goods and people plays an increasingly important role in today's market and in the organisation of a global economy. The introduction of the zero-stocks' system and just-intime delivery depends highly on the good functioning of the transport chain, where any disruption disturbs the whole process. This, together with the delocalisation of manufacturing to lower-cost countries, has introduced a new vulnerability for companies which they try to avoid at all costs. The liberalisation of postal services encouraged major postal operators to expand into other areas of transport. Deutsche Post WorldNet, for example, has become one of the world's biggest freight and logistics operators. These developments benefit from EU liberalisation and deregulation policies which affect all transport sectors represented in the ETF. In the railway sector, the fourth liberalisation package will soon be published; the deregulation of road freight is being actively pursued in an attempt to break trade union organisation and allow employers to use unprotected, low cost labour; in civil aviation, we witness the proliferation of low-cost companies, some of which deny their workers' basic rights, such as freedom of association and collective bargaining, while further liberalisation is obsessively pursued in ground handling. In maritime transport, seafarers are excluded from most of European social legislation and EU workers are discriminated against on the basis of their country of origin.

While the Commission uses the argument that liberalisation will end monopolies and provide better and cheaper services for users, in many cases we witness the replacement of state monopolies by oligopolies with substantial job losses; an increase in prices for end users; and a decrease in the quality and quantity of the services delivered; all of which becomes an additional burden for national budgets as a consequence. Collective passenger transport has developed from being a classic public service into an industry in which private companies aim at generating profits, cherry picking those lines and services which guarantee the fastest return for their investments.

With the last White Paper, adopted in March 2011, the Commission identified a number of critical issues to be addressed over the course of the next decade but where we can see concrete measures, they concern further liberalisation of transport, whilst the urgent measures that are required to reverse transport's influence on the climate are more like wishful thinking, not least given the long-term goals it sets.

Anticipating change and managing change is therefore a major challenge for transport unions. It is with this in mind that the ETF has been working since 2006 on different projects to build its own vision and strategy for dealing with the impact transport has been having on climate change. In view of a necessary socially and ecologically sustainable transport policy, we must develop concepts which will pursue sustainable objectives for the wider interests of society, including those of employees in the transport industry. We need integrative approaches, which will create a fair, balanced and sustainable transport system.

Between 2006 and 2008 the ETF ran an 18 month EU-funded project called TRUST – Trade Union Vision on Sustainable Transport, which aimed on the one hand, to promote better

understanding and cooperation amongst transport workers from all transport modes, and on the other, to develop a trade union vision of sustainable transport which, contrary to other positions on this matter, integrated the necessary social dimension into the core of the discussions on transport policies. The outcome of this project was the basis for an extensive resolution on sustainable transport adopted at the ETF 2009 Congress, in which the ETF recognised the shared responsibility of the transport sector for climate change, and the need and the interest of the transport industry and the trade unions to support a sustainable transport system in Europe and worldwide. In the resolution, the ETF commits to addressing the need for a sustainable transport system in Europe with the European employers' organisations and to put sustainable transport on the agenda of the sectoral social dialogue committees. The ETF Congress Resolution also demands the creation of an Environmental and Social Observatory for transport, which would act as a kind of watchdog regarding sustainability targets and make proposals when reaching the objectives fails.

With the TRANSUNION project, which ran between 2010 and 2012, the ETF involved all the ETF sections in the debate on possible responses to that challenge, again reaffirming the will from trade unions to be a part of the solution rather than part of the problem. Competition between different modes of transport should never affect the cooperation and solidarity between transport workers and their trade unions and the ETF plays a major role in integrating different points of view and coming to joint positions. The TRANSUNION project suggested that a coherent and ambitious climate change policy can create millions of direct jobs within the transport industry and additional millions of indirect jobs. Those jobs would be mainly created in public sector. In concrete situations, a social impact assessment and measures for a Just Transition will be needed during the transition period, which will also address possible job losses and the need for retraining.

The ETF is of the opinion that a coherent and ambitious climate change policy, which is able to fulfil the reduction targets for greenhouse gasses and energy consumption on the one hand, and create new direct and indirect jobs in the transport industry on the other, needs the strong political will of European, national, regional and local decision makers. It needs massive public investment in sustainable transport modes and infrastructure. The current austerity policies are detrimental to those policy objectives and in addition, are leading Europe into a further recession with more unemployment, they risk jeopardising the targets set by the Commission in the White Paper published last year.

Entering more specifically into the different transport sectors, an EU climate change policy should be based on the principles of REDUCING, SHIFTING, IMPROVING and ELECTRIFYING. Reducing unnecessary or senseless transport, shifting towards more sustainable transport modes, improving the environmental performance of the different transport sectors in terms of technology, organisation and behaviour and electrifying transport. For each transport mode there is a different weighing up of these four elements of climate change policy. This would be subject to social dialogue and the project also provides some ideas we want to raise with the European employers' organisations.

European transport trade unions are committed to cooperating with employers' organisations and the institutions in building solutions that lead to sustainable transport systems, promoting cooperation rather than competition between transport modes and preserve quality employment.

The current liberalisation and privatisation policies must also come to an end in the transport sector. They have been responsible for many more job losses than those created by the crisis. The obsession with putting an end to public monopolies has often made way for private monopolistic structures. Sustainable transport concepts must be further developed at the EU level and at national level in the Member States by appropriate rules. The necessary means must also be made available for R&D in sustainable transport concepts, not least for the development of the necessary infrastructure. The development and implementation of an ecologically and socially sustainable transport concept will only be successful, when the true costs of all transport modes are duly taken into account.

As in freight transport, urban and long-distance public passenger transport systems must be given a properly developed and necessary public infrastructure, which must be realised by

appropriate public policies. Collective transport systems have to be given priority. Unrestricted and barrier-free mobility is a necessary prerequisite for people's participation in social and public life. This means that quality and affordable public transport must be accessible to all. The supply of public transport services must therefore be continuously developed and adapted to the needs of the people concerned and their opportunity to use such systems must be ensured by the adoption of appropriate social tariffs. The funding of urban public transport must be guaranteed by the sufficient provision of public funding and local rates. Generally, a reasonable integrated transport concept means that public transport must be harmonised with all types of individual passenger transport to provide a well-functioning and balanced overall concept.

A View on Manufacturing from Trade Unions

Luc Triangle, industriAll European Trade Union

There are currently 13 million workers in Europe working in the mobility sector: 12 million in the automotive industry, 400,000 in the railway equipment industry, 300,000 in aerospace and between 150,000 and 200,000 in shipbuilding. The aerospace sector is the only one that is doing relatively well at the moment.

We often face several dichotomies in the process of rethinking mobility:

- 1. Individual versus collective forms of transport/mobility
- 2. Needs of the urban versus rural regions
- 3. Regional service versus long-distance traffic

industriAll's position on the 2011 White Paper on transport released by the European Commission focussed on the following elements:

- 1. long-distance connections
- 2. the lack of a coherent overall approach
- 3. the statement "curbing transport is not an option"

industriAll Europe's position:

- 1. believes there are conflicting interests between subsectors;
- 2. shares the general concern about climate change and the impact of traffic;
- 3. recognises that there are several issues forcing us to change our way of organising transport / mobility, but also that there are tight budgets, limited resources, etc.
- 4. (quality) employment is an important issue in the debate, but not the only one.

industriAll considers there is a need for an EU strategy to promote local production, in a context where the sector is saturated and would need investment. For that matter, ship transport offers huge room for improvement, like removing trucks from roads to reduce pollution. industriAll sees a future for individual transport, but this will imply significant change:

- 1. Ownership vs. usage
- 2. Engines / self-drive train evolution
- 3. Need for a new European strategy that implies management of change with workers

The railway is considered to be among the most efficient forms of transport. Nonetheless, there is competition between long-distance (EU-financed) and regional infrastructures (lack of budgets). Ships are the best transport for certain goods; they remove traffic from roads as well as out-dated engines. Aerospace is a driver for technology, but improvement in efficiency is needed.

Moreover, much more needs to be done as far as noise pollution is concerned.

In conclusion, intelligent sustainable mobility systems will only work if we develop an appropriate share between transport means. Improve intermodal cooperation with existing tools while developing new ones is a key driver for change. It should be noted that anticipation and involvement of social impacts are essential. Trade unions should be part of the debate to bring about change in policies in order to develop an intelligent and sustainable system of mobility/transport with particular focus on having an appropriate share between transport means.

SESSION 2 – A Vision from the Industry

Challenges for Public Transport Operators

Jean Dekindt, International Association of Public Transport (UITP)

The International Association of Public Transport (UITP) is the international network for public transport authorities and operators, policy decision-makers, scientific institutes and the public transport supply and service industry. It is a platform for worldwide cooperation, business development and the sharing of know-how between its 3,400 members from 92 countries. UITP is the global advocate of public transport and sustainable mobility, and the promoter of innovations in the sector.

The UIPT has adopted a voluntary strategy, which aims at doubling the use of public transportation by 2025. Currently:

- 1. Public transport = 15% of transport in the EU
- 2. Private and motorised means of transport = 55% of transport in the EU
- 3. Non-motorised means of transport = 30% of transport in the EU

In Europe, the urban population will be 15% higher in 2025 than it is today. If we carry on business as usual, the use of personal cars will tend to rise, unlike public transport and non-motorised transport means. Urban transport will be 95% reliant on oil. The share of oil consumed by the public transportation sector will be 15% higher in 2025 compared to today.

Not only would we face an overall 30% rise in GHG emissions from urban transportation, but also fatalities in urban transport would increase 30% by 2025. They will increase by more than 85% in developing countries in Africa, the Middle East and Asia and moreover, a 60% increase in urban traffic in 2025 will lead to a lower quality of life.

This is the scenario proposed by the UITP by 2025 in the EU:

- 1. 40% for cars
- 2. 30% for non-motorised
- 3. 30% for public transport

If the scenario were correctly implemented, fatalities in urban transport would be reduced by 15%. This strategy would create between 7-14 million jobs in the transportation sector. This would represent 1.2 - 2 million green jobs in Europe in the transportation sector.

Intelligent Transport Systems Fostering Sustainable Mobility

Hermann Meyer, ERTICO – ITS Europe

ERTICO is the network of Intelligent Transport Systems and Services stakeholders in Europe. It connects public authorities, industry players, infrastructure operators, users, national ITS associations and other organisations. ERTICO's partners and their dedicated team of highly skilled professionals work on a portfolio of activities to accelerate the development and deployment of ITS across Europe and beyond.

ERTICO aims at developing smarter, safer and cleaner mobility. This starts with the users of intelligent transport systems (ITS). Not only does technology need to be developed, but it also has to be thoroughly tested to ensure its operability. Technology must have:

- Space accuracy (localisation of an event)
- Latency (how fast you can communicate the information)

What is needed for the potential development of ITS:

- 1. Information
- 2. Awareness
- 3. Warning
- 4. Avoidance (of incidents)
- 5. Mobility management: bringing all the above information together

6. Automation

ERTICO's priorities are therefore the following:

Safer mobility:

- 1. Provision of updated safety-related road and traffic data
- 2. Deployment of pan-European eCall
- 3. Deployment of cooperative ADAS including a move towards highly automated driving
- 4. Safe interaction between users, vehicles and infrastructure

Smarter mobility:

- 1. Optimal use of traffic and travel data for EU-wide multi-modal travel and traffic information
- 2. Europe-wide platform for cooperative ITS services
- 3. Demand responsive cooperative transport and network management
- 4. Deployment of information and booking systems for safe and secure truck parking

Cleaner mobility:

- 1. Support for drivers to adopt a more energy-efficient way of driving
- 2. Energy-efficient cooperative fleet management and logistics operations
- 3. Energy efficient traffic network management and infrastructure
- 4. Integration of electric chargeable vehicles into the transport and energy networks.

None of the above are planned for the distant future: ERTICO is already deploying projects in pilot cities, which provide test cases and are actually working well. The needs in terms of competences can be summarised as follows:

- 1. Vehicle manufacturing
- 2. Mobile communication
- 3. Transport infrastructure
- 4. Public transport/Fleet management/logistics

Sustainable mobility's potential in Europe will lead to:

- 30% reduction in the number of fatalities across Europe
- 30% reduction in the number of those seriously injured across Europe
- 15% reduction of road traffic-related congestion
- 20% improvement in energy-efficiency
- 50% increase in availability of real time traffic and travel information

This will be made possible by the development and deployment of new products and services, which will lead to the creation of jobs, economic growth and social welfare. The fact that Europe seems to lead in this area represents a huge opportunity to become a leader in the sector worldwide.

Enhancing Supply Chain Efficiency Within Europe – The Port of Antwerp *Jan Van Dessel, Port of Antwerp*

The Port of Antwerp has been an indispensable link in world trade since the Middle Ages. Today, 150,000 people contribute to this success story and there is close co-operation between private enterprises, the authorities and the Port Authority. Antwerp is located in the heart of Europe and contains the main European centres of production and consumption. 60% of European purchasing power is within 500 km from Antwerp. The 1,650 employees of the Antwerp Port Authority ensure the efficient and safe day-to-day operation of the port.

In order to handle the growing cargo volumes to the hinterlands, the port mainly focuses on containers and liquid bunk.

Two strategies have been put in place:

- 1. Active modal split policy
- 2. Collaboration with hinterland hubs

The port of Antwerp aims at developing a fully fleshed modal split:

- Ships: from 34% today to 42% in 2020
- Rail: from 10% today to 15% in 2020
- Trucks: from 56% today to 43% in 2020

In order to develop this modal split, the port of Antwerp needs to:

- 1. Develop infrastructure
 - . Liefkenshoek rail tunnel
 - Albert Canal adapted to 4 layer-container transport
- 2. Optimise market conditions to offer competitive rail and barge services
 - . Open access cleaning, repair and tank service for rail equipment
 - Education of locomotive drivers (bottleneck profession)
 - Barge Traffic System (BTS)
- 3. Facilitate new railway conditions
 - . Neutral platform for rail users of the port of Antwerp
 - Connect Antwerp via rail to China and UK
 - Premium Barge Service intra port transport by barge

Collaboration with hinterland hubs necessitates:

- Optimisation of barge and railway network
- Supporting logistics platforms in the natural hinterland of Antwerp (e.g. Liège, Genk, Venlo, Duisburg, etc.)

The supply chain and hinterland strategy of Antwerp port comprises three geographical layers:

- 1. Intraport
 - Strong emphasis on increasing efficiency and avoiding congestion
 - . Trimodal approach
- 2. Core hinterland network
 - . High density and frequency intermodal network to/from the most important destinations in "core hinterland"
 - . Barge as 1st choice
- 3. Hinterland corridors
 - Develop specific (rail) corridors to a number of strategic destinations
 - . Rail as 1st choice

SESSION 3 – Best Practices on Holistic Mobility Management

A view on Road Transport

Ralf Diemer, Association of the German Automotive Industry

The Association of the German Automotive Industry (VDA) consists of around 600 member companies, who have come together to research and produce clean and safe auto-mobility for the future. The VDA represents the automotive manufacturers and supply companies to ensure the continued competitive utilisation of their experience and skills.

Lately, the economic situation has been favourable for the automotive industry. China, the US, Asia and Latin countries have significant growth rates, which is an important niche for the automotive industry worldwide. On average, there are 20 vehicles for every 1000 inhabitants in China; there are 400 vehicles for 1000 inhabitants in the EU.

Passenger cars are a potential growth market. Such a development cannot be done using the same methods because of the challenges we are facing in terms of CO_2 and its effect on the climate. The automotive industry's consumption has decreased by 3,5%.

The VDA's objective is to reduce C0₂ emissions at 120mg/km. At the end of the 1950's, a normal truck consumed 50 litres of fuel for only 32 today, but we still need to make further improvements.

In order to achieve the decarbonisation of Europe by 2050, the objective of 95g/km must be reached by 2020. The electrification of cars or the use of hydrogen could be innovative solutions but consumers should still be able to afford to own a car and/or drive. This calls into question whether EU regulations are too ambitious. Too ambitious regulations lead to cars becoming too expensive and customers will then buy later or cheaper because sales prices are determined by the market. This neither helps employment nor the environment.

The automotive industry needs revenue from customers in order to invest in new technologies, especially because technical competences have a price. What kind of incentives can be put in place in order to promote technological alternatives that are more expensive?

In terms of employment, premium brands sell vehicles at a higher price, which allows for more technology and employment in Europe. In addition, by producing worldwide, Germany has been able to maintain its employment rate thanks to exports.

The vision for the future of the VDA includes:

- 1. Fostering Investment in Research and Development
- 2. Technology-neutral Incentives for Customers
- 3. Keeping individual mobility affordable
- 4. Public procurement for cars with alternative powertrain systems
- 5. No politics against premium
- 6. Concepts of better regulation and an integrated approach
- 7. Qualification of people (engineers, for example)

Collaboration Concepts for Co-Modality (From CO₂ to CO³)

Frans Cruijssen/Dirk 't Hooft, Argusi B.V.

The purpose of the CO³ project, financed by the EU under the FP7 programme, is to encourage a structural breakthrough in the competitiveness and sustainability of European logistics by stimulating horizontal collaboration (also known as 'Carpooling for Cargo') between European shippers. To achieve this goal, horizontal flow bundling and co-modality scenarios, designed to be repeatable and scalable, will be created in a number of test cases.

Among the several strategies to be undertaken, this project is aimed at addressing horizontal collaboration. Capacity in the European transport system is being structurally underutilised. Horizontal collaboration or smart bundling of goods flows by different companies, offers a powerful and innovative solution to tackle this problem.

Companies who collaborate and bundle their logistic flows can achieve dramatic benefits on economic, social and environmental levels. Up to now, shippers who wanted to collaborate in this way were too often hampered by practical obstacles. It is one of the goals of the project to eliminate these obstacles.

During its lifespan, the CO³ project will implement real life test projects across Europe the results and learning from which, will be in the public domain. As such, the project will reach out and provide valuable information to logistics' practitioners (businesses, shippers, logistics service providers). CO³ will also offer conferences and specific workshops and a platform where they can find potential collaboration partners.

The vision of the EU and CO³:

- 1. Reduce Europe's dependence on imported oil
- 2. Cut transport carbon emissions by 60% by 2050
- 3. Modal shift: 30% off road by 2030 50 % by 2050
- 4. Multi-modal: European corridor network (low carbon/green)

The development of the supply chain can be considered a collaborative process, which would increase sustainability. The CO³ project focuses on: improving efficiency, effectiveness, and sustainability simultaneously with horizontal collaboration and cross-company flow bundling.

Trustee and horizontal cooperation are two key elements of the CO³ project. Trustees have the important role of managing the collaboration and their functions are divided into:

- Online: harmonious organisation of daily collaboration processes
 - . Load combinations
 - Prioritisation
 - . Synchronisation
 - . Contact person
 - IT Interfaces
- Offline: Neutral external support to the collaborators
 - . Create critical mass
 - . Stability and fairness
 - Legal compliance
 - . Entry and exit
 - . Conflict resolution
 - Data confidentiality

Horizontal cooperation is also an important element in achieving the goals of the CO³ project. The CO³ project considers these two elements as essential in terms of a legal framework:

- A) Cartel prohibition (Art. 101 EU), but is not prohibiting
 - cooperation between non-competitors;
 - cooperation between competing companies that cannot independently carry out the project or activity covered by the cooperation.

B) EU Guideline (2011/C 11/01) on Art. 101 EU 'horizontal cooperation agreements' is not prohibiting Horizontal Collaboration, if using a trusted party (eg 'joint purchasing organisation')

In conclusion:

- Horizontal collaboration makes transport efficient and sustainable
- A structured development process for collaboration is needed
- A trustee function is required
- Fair gain sharing is important to avoid anti-trust
- Good legal foundation is important

<u>DAY 2</u>

SESSION 1 – Barriers to Change and Just Transition

A View on Just Transition

Benjamin Denis, European Trade Union Confederation

The global organisation of production implies new mobility needs (e.g.: Belgian shrimps that are peeled in North Africa and then sent back to Europe to be packed). The amount of production sites has greatly changed and imply new global mobility needs.

The need for mobility at a local level is connected to the way we re-think space: urbanisation and urban sprawl and the private car as a mode of transport is the cause of such a need. Urbanisation designs concentric circles that generate mobility needs that cannot always be met by the public transportation system as efficiently as by (individual) car.

We are a society of movement. This shows its limits for several reasons:

- 1. Environmental reasons. Transportation is responsible for 35 40% of the greenhouse gas emissions in industrial countries. It also causes the release of particulate matter, depletion of natural resources, soil sealing (and water flow);
- 2. Health reasons. The WHO declared that particulate matter is carcinogenic. Noise, road fatalities, diabetes, cardiovascular events due to a lack of physical activity are other consequences of the intensive use of cars.
- 3. Economic reasons. Mobility has costs in terms of infrastructure, social and health expenses. The more we wait to take decisions and implement them, the more costly it will be for society.

To get out from this model, we must go towards a Just Transition which includes accepting and recognising the need for a paradigm shift, agreeing that everyone must fight against climate change for 2100. We need to organise this shift in a fair way in terms of employment (maintain quality and quantity).

There are 5 priority areas for achieving a Just Transition, according to the ETUC:

- 1. Regulation: setting a legal framework with a timetable will lead to the economic actors taking responsibility;
- Innovation: supporting R&D in technology sectors in order to reach our objectives independently, in particular in terms of GHG emissions, which will also create employment;
- 3. Training: greening skills in order to bring about change: training workers of all categories to re-qualify propose appropriate training beginning at school and in universities,
- 4. Participation: social dialogue: workers can bring innovative solutions to companies;
- 5. Social protection: in order to guarantee quality jobs (employment contracts and decent working conditions).

The obstacles to a Just Transition include:

- 1. Austerity: there is not enough (public) investment in infrastructure or training.
- 2. Flexicurity: hostility to any form of regulation, short-term contracts are an obstacle to the setting up of a sustainable mobility programme for workers.

The Role of UNEP - Green Economy Report for the Transport Sector

Chris Vanden Bilcke, UN Environmental Programme (UNEP)

The global vehicle fleet is set to triple by 2050; over 90% of this growth will take place in developing and transition countries. This results in two key problems; high levels of urban air pollution (with rapid urbanisation increasing numbers of those affected) and greenhouse gas emissions. The transport sector is growing more rapidly than any other – going from around 25% of all energy-related CO_2 emissions to about one third by 2050.

Not surprisingly CO_2 emissions from the transport sector follow the same trend as this growth in vehicles. The IPCC and the G8 have called for at least a stabilisation in the emissions of the

global fleet – the red line scenario. We need three types of actions to achieve stabilisation of greenhouse gas emissions, and if possible even a decrease. From the global transport sector we need actions in all three areas. The solution would be to:

- avoid transport whenever we can, for example through better urban planning (living and working nearby)
- a shift to cleaner modes of transport (i.e. public transport and non-motorised)
- improvement in transport modes (cleaner cars and buses)

UNEP has an active transport programme that is located at their head quarters in Nairobi. UNEP has sub-programmes contributing to all three areas AVOID – SHIFT – IMPROVE. Most of our work is in the area of IMPROVE, where we support countries with the introduction of technology and the development of policies to ensure cleaner fuels and vehicles.

UNEP is implementing four campaigns in the field of sustainable mobility:

- 1. The Partnership for Clean Fuels and Vehicles (PCFV) campaign: reducing small particulate matter air pollution through cleaner fuels and vehicles
- 2. The Global Fuel Economy Initiative (GFEI): vehicles and demands of climate change to double the fuel efficiency of the global fleet
- 3. UNEP Share the Road programme: investment in non-motorised transport road infrastructure in Africa
- 4. Promote Bus Rapid Transit Systems Africa

Firstly, the Partnership for Clean Fuels and Vehicles. This is the leading global programme promoting clean fuels and vehicles. It has 120 partners, governments, international organisations, the private sector (both fuels and vehicle industry) and civil society. UNEP is hosting the Secretariat that is implementing the work plan of the Partnership. It has been in operation for more than 10 years and has achieved some noted successes – including the global elimination of the use of leaded petrol.

The other global campaign is to introduce low sulphur fuels worldwide. This is important because it will reduce particulate pollutant emissions, and it will allow the introduction of cleaner and more efficient vehicles - both for used and new vehicles. Without clean, low sulphur fuels, it will not be possible to run modern, efficient cars.

A second initiative that UNEP is involved in, is the Global Fuel Economy Initiative (GFEI). Six leading global organisations (UNEP, IEA, ITF, ICCT, UC Davis and the FIA Foundation) are working together on a global programme to support countries to put in place policies to promote more efficient vehicles. There are many benefits to this – reduced climate emissions, but also reduced air pollution, cost savings (through less fuel use) by consumers and energy security. Most developed countries have put in place such policies, for example putting efficiency labels on cars so consumers are aware of fuel consumption, or by promoting more efficient cars by reducing taxation, and at the same time increasing taxation for more inefficient cars (as is the case in Europe), or through the restriction of imports of used vehicles. However, few developing countries have such policies in place. And as their fleets are rapidly growing, it is timely to put these policies in place now. The European Commission is one of the key supporters of the GFEI programme.

UNEP, along with other partners, is also promoting a programme in Africa to encourage more walking and bicycle lanes. UNEP is working with several governments to put in place a policy so that when new urban roads are constructed, or existing ones refurbished, a small part of the budget, normally only a few percent points, will be systematically set aside for non-motorised transport infrastructure – i.e walking and cycling lanes. In Africa most people are still using non-motorised transport and we need to make sure that it stays that way. However, often there are no facilities and as a result traffic accidents and road deaths are very high.

Mobility is essential to development, but current infrastructure investment is unsustainable and largely disregards the poor, who rely on NMT modes. Over 90% of the 1.3 million people who die in road crashes every year are in low-income and middle-income countries – in large part due to pedestrians & cyclists lacking NMT infrastructure. Investing in NMT infrastructure is a win-win-win situation; it provides facilities for those that walk and cycle (often the poor and children), it improves road safety and it is good for the environment.

Some final observations.

- The solution is mainly through making existing combustion technology cleaner; electric will take decades.
- Even then, we will obtain results if a combination of: Avoid + Shift + Improve is implemented.
- The average life of a vehicle is 20 years, hence the introduction of policies now on new vehicles will take 20 years to show results.
- Most of the car growth in AF is yet to happen.

Employment impacts of GHG Reduction Policies for Transport Sander de Bruyn, CE Delft

The Directorate-General for Climate Action (DG CLIMA) commissioned CE Delft, ICF and Ecologic to carry out a study in 2011 on the potential impacts of a large scale market penetration of EVs (electric vehicles) in the EU, with a focus on passenger cars and light commercial vehicles. This study includes an assessment of both the transport part (e.g. the composition of the vehicle fleet) and electricity production, and provides estimates of the impacts on well-to-wheel GHG emissions, pollutant emissions, other environmental impacts, costs, etc. The objective was to:

- identify the potential for market uptake of EV cars in the EU by 2030.
- conduct modelling on car ownership, car use, electricity generation, environmental impacts.

Indirect economic impacts of EV include:

- consumer spending: if the stimulation of EVs is done in such a way that the TCO is decreased through EV, additional consumer spending may have a permanent positive employment benefit;
- reduced oil consumption will have a temporarily positive employment impact (until the balance of trade is restored);
- innovation and competitiveness may be enhanced in EU car manufacturing (also because of the potential shortage in the long-run of engineering personnel).

In the short term, at least over the next five years, EV technology will not reach maturity and government support is needed to speed up innovation. In this phase, however, it is important to avoid unfair competition with other types of energy-efficient vehicles and sustainable biofuels. To prepare for the longer term, a consistent overall fiscal and regulatory framework should be developed, providing consistent treatment and coverage of EVs and all competing technologies. In this light, the following policy recommendations were made.

- Extension of the current CO₂ regulation for cars and vans to a system covering well-towheel GHG emissions for both ICEVs and EVs. The key challenge here is to develop a set of GHG intensity figures for all energy carriers.
- Development of a more detailed accounting methodology for EV electricity consumption, in the light of the Fuel Quality Directive (FQD) and the Renewable Energy Directive (RED), and possibly also for their renewable electricity consumption. Additionally, to prevent unfair competition, the RED-multiplier of 2.5 for renewable electricity used for EVs should be re-examined once actual electricity consumption data are available.
- In the short term, impacts on the EU ETS are likely to be negligible. But changes should be considered for after 2030, once more accurate predictions of EV market uptake and power consumption can be made.
- Options for compensating potential loss of tax revenue, for example raising energy taxation levels for both electricity and transport fuels and/or road charging, should be studied further. In this light it is recommended that options for separate metering and taxation of electricity for EVs are assessed. Harmonisation of the various circulation and purchase tax differentiations should also be considered.

- To ensure that local distribution grids become EV-ready, the European Commission can initiate best-practice exchange, and support pilot and demonstration projects. Regulations could be developed obliging power generators to implement smart charging at a certain stage, e.g. when the share of EVs in the vehicle fleet in their distribution district reaches 5%.
- Common plug and charging standards and protocols for data exchange need to be developed as soon as possible.

The study concluded that:

- EV is likely to become a realistic alternative in the near future for ICE.
- Employment benefits may be part of the reason for stimulating more uptake of EV, however these cannot be discerned from the current strand of literature.
- If the TCO is taken as a measure to guide policies, and if policies are steered towards lowering the TCO through EV, employment benefits are likely.
- The impact of EVs on a large range of policy areas (and vice versa) and many of them (e.g. standardisation of charging, charging infrastructure, implementation in the RED, harmonisation of fiscal policies) require action in the short to medium short term.

SESSION 2 – Financing the Transition

Investment and Taxation Related to Sustainable Mobility

Nina Renshaw, Transport & Environment (T&E): Member of the Steering Committee of Green Budget Europe

T&E (Transport & Environment) is the leading NGO voice on smarter and greener transport policies at the EU level in Brussels. Their advocacy work has contributed to a number of high profile policy changes, including Europe's first legally binding CO₂ targets for new cars, the inclusion of aviation in the EU-ETS and smarter EU rules on road charging for lorries. T&E has also led calls for EU action to deal with the negative impacts of current biofuel targets and for a move away from high carbon oil.

T&E recently released a report on how clean European cars are: the conclusions are encouraging. 2007 was the turning point when carmakers focused on emissions. In this respect the EU is doing better than the US. In addition, the cost of new cars has fallen, despite the introduction of clean technology.

Standards are lowering EU exports. Nonetheless, car manufacturers are doing better than they thought they would in 2007. Other countries also have fuel economy standards, but European manufacturers are responding best to this challenge (cutting emissions). The solution is to look beyond 2020, for example by seeking to reach 60g/km by 2025.

Fuel taxes are socially unfair: ¹/₄ of people in the EU do not have a car. Besides, setting low fuel taxes does not only help the poorest people. Thus, fuel taxes should be based on revenues.

Luxembourg is off the scale in CO₂ emissions per capita. On the other hand, it also has very high tax revenues from oil since all neighbouring countries buy their fuel there in order to avoid fuel taxes in their countries.

In 2013 some countries are launching (or plan on launching) a km-based lorry charge. The gains could be invested for the general good. T&E thinks the reinvestment should be decided at the local level (cycle path, other infrastructure, etc.)

EU to do list should include.

- Strict car CO₂ standards: 80g/km 2020, 60g/km 2025
- EU fuel tax rules: higher minimum rates, reflecting energy and CO2
- Mandatory internalisation of all external costs in all modes by 2020
- Going beyond external costs
- Long-term targets are the best route to ultra-low emissions cars

Alternative Financing Mechanisms in Support of Sustainable Mobility Wout Korving, Rebelgroup

Rebel is a platform for socially responsible entrepreneurs working at the interface of public and private initiatives. Rebel is a specialist in public/private corporation fostering innovation. For 10 years, they have been creating new ways of cooperating between the private and public sector.

The banking sector has changed dramatically over the last few years (job losses, overall collapse etc). Thus, we need to look at other innovative financing mechanisms to enable the green economy.

It is almost impossible to invest in projects in Europe nowadays: banks are collapsing and governments must borrow. Nonetheless, there is money available worldwide. The role of governments may have to change in the near future: they will not be the lender anymore but will act as organisers by taking initiatives and managing active change.

The financing of projects is a multi-stakeholder issue: individuals, companies, governments, financiers. One of the proposed alternative mechanisms pledges to make future payments by reducing the charges of air traffic travellers. The idea is to pledge future revenues to financiers, making them interested in financing projects that will be fruitful in a near future. An incentive is to commit both public and private sectors over 5 to 10 years and, if it does not work, they will have to pay compensation.

Rebel's strong suit is the efficient management of innovative public procurement cases, such as the regional tramway projects in Groningen and Nijmegen. These projects were realised through optimal risk-sharing between public and private parties. Rebel also looked at the market as a whole and stimulated market forces where necessary, always with a solid basis in fact. For Randstadnet 2028, for instance, they assessed the financial consequences, costing options and finance arrangements of their vision and ambitions for the public transport network which resulted in economic and environmental gains.

The Financing of Transport European Networks (TENs) in Mediterranean Regions

Carmen Sandoval, Region of Murcia Spain

The conference of peripheral and maritime regions of Europe (CPMR) has been working on the European Commission's White Paper on transport to provide proposals for Mediterranean regions. The draft contains general proposals on:

- Financing
- Governance
- Environmental sustainability
- Improving corridors and train networks.

Improving accessibility for peripheral maritime regions is a crucial factor for the maintenance of their economic competitiveness and for aiding the mobility of their populations. Regions play close attention to the current negotiations between the Council and Parliament on the Trans-European Transport Network (TEN-T) Review and the Connecting Europe Facility (CEF) Regulation. CEF is a key instrument for promoting growth, jobs and competitiveness through targeted infrastructure investment at European level. It will support the development of high performing, sustainable and efficiently interconnected trans-European networks in the fields of transport, energy and digital services. CEF 2014-2020 in figures: €50 billion divided into:

- €9.1 billion (energy infrastructure)
- €9.2 billion (broadband infrastructure)
- €31.7 billion (transport infrastructure)
- €21.7 billion Member States
- €10 billion (earmarked from the Cohesion Fund for investments exclusively in the Member States eligible for Cohesion Fund support)

For the period 2014-2020, €31.7 billion will be invested, via the CEF, to support the TEN-T development. This financing includes €10 billion ring-fenced in the Cohesion Fund exclusively for

transport projects in the countries eligible for the Cohesion Fund. The remaining €21.7 billion will be available for all Member States, including those eligible for Cohesion Fund support, for investing in TEN-T infrastructure. CEF investments will focus on projects with high EU added value, such as building missing cross-border links and removing bottlenecks along main trans-European transport corridors. Priority will be given to transport modes that are less polluting, to the deployment of telematic applications and the use of innovative technologies. The aim is to contribute to making the European transport system more sustainable, more efficient and give consumers more choice about how they want to travel.

There is a need to strengthen the territorial balance of these two instruments and their support for maritime transport in relation to the specific contexts of each of the sea basins.

The region of Murcia is completing the construction of a corridor between the North of Spain, the South of France and Northern Italy (Inter-Mediterranean network). They have developed the "easy Europe programme", which consists of informing all sectors about the existing financing possibilities in the Connecting Europe Facility (CEF).

The region of Murcia is advocating:

- an appropriate budget for the CEF;
- a satisfactory governance of this instrument for the Regions;
- intervention criteria for funding the TEN-T to meet the following objectives:
 - . priority to territorial cohesion
 - . improving accessibility
 - sustainable maritime transport
- that the Cohesion Fund budget proposed by the European Commission be a nonnegotiable minimum, and that 50% of the fund should effectively be dedicated to the TEN-T;
- a need to focus attention on the maritime sector;
- that port investments need to be encouraged to reduce greenhouse gas emissions and European funding provided for maritime transport services and Motorways of the Sea, using a more comprehensive instrument than the current Marco Polo programme (via an "eleventh priority corridor" dedicated to maritime transport)

SESSION 3 - The Role of Trade Unions in Promoting Sustainable Mobility

The Transport Global Agenda

Peter Glynn, European Partners for the Environment

The actors shaping the global sustainability agenda:

- 1. European Union
 - "The future we want" (Rio + 20)
 - Paragraph 132: Sustainable transport
 - Transport as a means to improve social equity, health, resilience of cities, urban linkages and productivity in rural area
 - Sustainable transport systems and energy efficient multi modal transport systems Paragraph 147-157: Full and productive employment, decent work and social protection systems
 - UN climate convention (Kyoto Protocol)
 - KP 1: Annex 1 countries accept legally binding commitment to emission reduction targets to be achieved by 2012 EU 92%
 - KP 2: 2013-2020 EU 80%
 - Adaptation and mitigation strategies are in the approved manner
 - CDM and ETS
 - The provision of a Just Transition, decent work and quality jobs
 - Climate and Clean Air Coalition (Launched February 2012)
 - A partnership of governments, intergovernmental organisations, representatives of the private sector, the environmental community, and other members of civil society

- Voluntary
- Reducing black carbon, methane, tropospheric ozone and HFC's
- Accelerating the introduction of stricter emission standards
- Developing SLCP national action plans (for short-lived climate pollutants)
- Promoting best practices
- Improving scientific understanding

2. Corporate sector

- UN global compact
- ILO/OECD MNE declarations
- GRI/CSR
- 3. Trade Unions
 - ITUC
 - National unions
- 4. Research
 - OECD Report: Green growth and transport
 - UNEP 2012 Report: GREEN economy; Pathways to Sustainable Development and Poverty Eradication
 - ILO 2012: Working towards sustainable development; Opportunities for decent work and social inclusion in a green economy
 - CEDEFOP/ILO 2011: Skills for Green Jobs: A Global View

It is worth noting that the ILO 2012 research concluded that:

- employment, decent work and social inclusion are integral parts of the sustainability strategy
- social dialogue should be placed at the centre of policy making to improve coherence and to ensure the successful shift to a new development model
- there will likely be large scale shifts of employment within and across transport firms, as well as major reskilling of workers

As to the EU strategies, the following are worth noting:

- EU submissions to Rio and COP 18
- EU 20:20:20 strategy
- EC White Paper Roadmap to a single European Transport Area- towards a competitive and resource-efficient transport system
- EU resolutions regarding the Rio implementation strategy and timelines
- EESC Plenary Agenda 12/13 December

Following its close involvement in the 2012 Rio+20 conference, the EC is now assessing whether policy decisions taken in Rio are being translated into action at all levels. In its upcoming opinion the Committee will call for greater involvement by civil society in designing the future global economy.

Despite the achievements of the European model, we do know that public policy in some Member States does not always provide a labour market plan to facilitate the transition to a domestic low carbon economy, or that social dialogue is at the centre of that policy. The EU has commissioned advice on the policy mix that will deliver its 2050 targets which, it has acknowledged, cannot be met with its current policy mix. Engagement by the Union movement in the macro and micro policy debate is essential to ensure the transition is smooth and just.

A Perspective from Spanish Trade Unions

Llorenç Serrano Gimenez, Spanish Trade Union Confederation (CCOO)

The CCOO supports the output of a study on mobility based on the premise that everyone must meet their mobility needs via public transport.

In addition, the CCOO has established a partnership with the Dutch Embassy in Spain in order to launch an awareness-raising campaign.

The CCOO has produced a guide with best practices on commuting and how to set a price on public transport for students, vulnerable people or active people with more favourable tax treatment. It has also organised and monitored mobility training courses for union representatives; onsite visits as part of mobility courses; dissemination seminars; participation in mobility training courses; participation in environmental training courses etc.

The sustainable mobility proposals of the CCOO can be summarised as follows:

- support for the use of public transport by commuters
- promotion of access for pedestrians, cyclists and car-poolers
- introduction of the figure of mobility manager in mobility plans
- introduction of transport fares in collective bargaining
- improvement of working conditions through new commuting patterns
- support for occupational health and safety strategy
- contribution to work- life balance and gender equality
- action against discrimination and the promotion of decent work

More specifically, the CCOO has drafted a document with 10 proposals for a more sustainable mobility model. The proposal includes the:

- 1. creation of the figure of Mobility Manager
- 2. a bid on public transport, with criteria of rationality
- 3. ensuring safe and unrestricted accessibility to workplaces for pedestrians.
- 4. promotion of carpooling and car-sharing, ensuring their effectiveness and reserving parking areas.
- 5. promotion of cycling, guaranteeing certain routes and safe parking.
- 6. company-subsidised public transport fares and reduction of parking areas.
- 7. introduction of commuter mobility and accessibility to workplaces.
- 8. inclusion of mobility audits in studies to obtain quality certifications (EMAS or ISO).
- 9. exclusion of driving licences and vehicle ownership as criteria for labour force hiring (there might be additional conditions, but not exclusive).
- 10. introduction in collective bargaining of systematic relocation of workers in workplaces closer to their homes.

A Perspective from UK Trade Unions

Colin Potter, Unite/TUSDAC

Unite considers there is a need for a regulatory framework for achieving the 'Just Transition' on a local scale. Regulation has to be used to drive investment, and adjustment to demographic change will be a really significant challenge in the future.

We should be aware of the negative and positive aspects of modal shifts in terms of employment. Social protection measures should be put in place before the transition is made, in order to make sure that workers are protected.

The solution to mainstream sustainable mobility lies in:

- learning the facts about transport emissions: what are the transport emissions (from what companies say and what statistics actually show)?
- applying a multimodal solution (The enemy is speed: moving more slowly reduces the footprint of transport);
- education;
- sustainable development.

Unite actively campaigns for freight by rail: while the railway can move a tonne of goods for 246 miles on a gallon of diesel, road transport can only move the same tonne of goods for 88 miles. However there is a problem in capacity in the rail network in the UK. Security and safety of the network is also at stake: low bridges/tunnels (Victorian architectural style). Furthermore, rail, which was privatised, and the consequent introduction of profit motivation in ticket pricing, has resulted in cost cutting. For instance, some services had to be brought in-house because of cost savings. The result has been reduced quality and control over safety, resulting in accidents as well as higher prices.

A Perspective from Sweden

Aleksandar Zuza, IF Metall

Sweden is a fairly large country, which makes good transport and infrastructure essential. That is why Swedes try to assemble trucks and take them down south by trains. This system requires good infrastructure and organisation (subsidies), the government plans to invest €55 billion over 20 years. Most of the budget represents maintenance, which gives very little room for innovation. Investment is not made on the infrastructure and the network does not seem to be adapted to needs or the weather, particularly in winter.

There is a need for intermodal hubs in order to move merchandise at any time, with any mode, and road safety should be considered as an issue and should therefore boost investments.

New mines are being constructed in the north of the country which has prompted the need for a new hub and transportation stations.

Appendix II: Second Laboratory Summary of Presentations

<u>DAY 1</u>

SESSION 1 - Sustainable Urban Mobility in the EU

Sustainable Mobility and Logistics in Urban Areas

Cathy Macharis, Vrije Universiteit Brussels

As professor at the Vrije Universiteit Brussel, Cathy Macharis teaches courses in operations' and logistics' management, as well as in transport and sustainable mobility. Her research group MOBI – (Mobility, Logistics and Automotive Technology) is an interdisciplinary group focusing on sustainable logistics, electric and hybrid vehicles and travel behaviour. They have developed several tools and models to enable in-depth research in these domains.

Value chain collaboration and the bundling of services is key in optimising logistics services towards sustainable mobility. The need for facilitators in this process has been highlighted. The 4 As of sustainable mobility are as follows:

- 1. Avoidance
- 2. Awareness
- 3. Act and Shift
- 4. Anticipation

However, often the implementation of the 4 As model fails because of the conflicting positions of the stakeholders involved in the implementation. A new multi-stakeholder evaluation framework is needed.

In order to pursue a sustainable mobility policy there is an essential need for a better understanding of the growth in mobility and its repercussions on people, regions and society, and for profound knowledge on current travel behaviour and people's modal choice. MOBI is active in the field of sustainable mobility and contributes to these needs by studying travel behaviour and modal choice, and by performing socio-economic evaluations of sustainable mobility policies and strategies. The evaluation techniques include Social Cost Benefit Analysis (SCBA), Life Cycle Analysis (LCA) and Multi-Criteria Analysis (MCA). In order to emphasise the societal impacts in a SCBA, MOBI developed an External Costs Calculator (ECC). Another MOBI development is the Multi-Actor, Multi-Criteria Analysis (MAMCA), which allows different stakeholders' opinions to be simultaneously taken into account in the evaluations. Multi-Actor Multi-Criteria Analysis (DCA) uncluse a conventional Multi-Criteria Analysis (MCA) where alternatives are evaluated using several criteria, the MAMCA methodology explicitly includes the points of view of the different stakeholders.

The first step is to define the problem and identify the alternatives. These alternatives can take different forms according to the problematic situation. They can be different technological solutions, different policy measures, long term strategic options, etc. Next, the relevant stakeholders are identified (step 2). Stakeholders are people who have an interest, financial or otherwise, in the consequences of any decisions taken. Thirdly, the key objectives of the stakeholders are identified and given a relative importance or priority (weights) (step 3). Fourthly, for each criterion, one or more indicators are constructed (e.g. direct quantitative indicators such as money spent, number of lives saved, reductions in CO₂ emissions achieved, etc. or scores on an ordinal indicator such as high/medium/low for criteria with values that are difficult to express in quantitative terms etc.) (step 4). The measurement method for each indicator is also made explicit (for instance willingness to pay, quantitative scores based on macroscopic computer simulation etc.). This allows each alternative performance in terms of its contribution to the objectives of specific stakeholder groups to be measured. Steps 1 to 4 can be considered as mainly analytical, and they precede the "overall analysis", which takes into account the objectives of all stakeholder groups simultaneously and is more "synthetic" in nature. The fifth step is the construction of the evaluation matrix. The alternatives are further described and translated into scenarios which also describe the contexts in which the policy options will be implemented. The different scenarios are then scored on the objectives of each stakeholder group. For each stakeholder an MCDA is performed. The different points of view are brought together in a multi-actor view. This multi actor, multi-criteria analysis yields a ranking of the various alternatives and reveals their strengths and weaknesses (step 6). The stability of the ranking can be assessed through a sensitivity analysis. The last stage of the methodology (step 7) includes the actual implementation. Based on the insights of the analysis an implementation can be developed, taking the wishes of the different actors into account.

The MAMCA methodology has already proven its usefulness for several transport-related decision problems. It was used to cope with an intermodal terminal location decision problem, for a study on the choice between waste transport alternatives in the Brussels region, for the location choices of a new high speed train terminal, for the evaluation of DHL's hub strategy at Brussels airport, in the project 'Night Deli' for the evaluation of different night distribution scenarios and in the Flanders in Action Process to structure the discussions on how to turn Flanders into a top region by 2020 in terms of logistics and mobility.

Sustainable Energy Action Plans Dealing with Transport and Mobility Sebastian Marx, City of Gothenburg

Gothenburg and western Sweden is Scandinavia's automotive centre with companies like Volvo Trucks and Volvo Cars. The goal of the region to 2020 is a 30 % reduction of CO₂ compared to 1990 by:

- an increase in energy efficiency lower electricity usage
- lower heating demand energy efficiency in buildings
- lower CO₂ emissions from transport
- an increase in local renewable energy production
- an increase in usage of renewables in the entire energy mix

The Sustainable Energy Action Plan (SEAP) of the city of Gothenburg is part of the requirement of each Covenant of Mayors' signatory municipalities to go beyond the 20% energy saving reduction by 2020 indicated in the EU climate change targets. The SEAP of Gothenbourg is:

- a good tool for pooling resources and for creating the bigger picture
- enhances cooperation between departments
- provides a communication tool

The city of Gothenburg, containing Scandanvia's largest port, has developed an innovative system of rail shuttles for inland transportation of freight. By replacing a large number of shortdistance truck journeys, the RailPort project has seen a significant reduction in traffic congestion, noise and air pollution, CO₂ emissions, energy usage, and cost. With the amount of freight transported by rail expected to increase in the future, the City of Gothenburg seems wellequipped to meet and possibly overtake EU climate and energy targets. To increase the share of regional and local trips made by public transport, they have developed a long-term strategy for public transport in the Gothenburg region. The strategy, named K2020, aims to:

- link and develop major transport nodes
- prioritise public transport to achieve shorter journey times
- integrate public transport better with city development
- increase overall quality and customer experience

The aim is to increase the share of public transport trips from 25% to 40%, as at the same time the total amount of traffic in the region is expected to grow. This means that there will be 1 million public transport trips per day in 2025 (Up from 450,000 public transport trips per day in 2005).

SESSION 2 - Co-modality and Workers' Involvement in Support of Sustainable Urban Mobility

Integrated Planning for Sustainable Urban Mobility: Experiences from CIVITAS *Frank Wefering, Rupprecht Consult - Forschung & Beratung*

The Sustainable Urban Mobility Plan is a way of tackling transport-related problems in urban areas more efficiently (both for goods and passengers). Building on existing practices and regulatory frameworks in the EU Member States, its basic characteristics are:

- a participatory approach;
- a pledge to sustainability;
- an integrated approach;
- a clear vision, objectives and measurable targets;
- a review of transport costs and benefits.

The CIVITAS initiative was launched in 2002 and its fundamental aim is to support cities in introducing ambitious transport measures and policies towards sustainable urban mobility. The goal of CIVITAS is to achieve a significant shift in the modal split towards sustainable transport, an objective reached through encouraging both innovative technology and policy-based strategies. In the first phase of the project (2002 to 2006), 19 cities participated in four research and demonstration projects; and in CIVITAS II (2005 to 2009), 17 cities participated over a further four projects. The initiative is currently in its third phase, CIVITAS Plus (2008 to 2013), and 25 cities are now working together on five collaborative projects. In total, 63 European cities have been co-funded by the European Commission to implement innovative measures in clean urban transport, an investment volume of well over EUR 300 million.

The fields of action where the CIVITAS initiative is involved can be summarised as:

- alternative fuels, energy efficient vehicles
- collective transport and integration modes
- demand management strategies
- mobility management: influencing travel behaviour
- safety and security
- car-independent lifestyles
- new concepts for the distribution of goods
- transport telematics
- integrated planning
- public involvement

The characteristics of sustainable urban mobility planning can be summarised as having:

- the active involvement of all stakeholders and the engagement of citizens
- a commitment to sustainability, i.e. balancing social equity, environmental quality and economic development
- an approach "beyond borders"
 - an integrated approach between policy sectors
 - cooperation between levels of authority
 - coordination across neighbouring authorities
 - a focus on achieving ambitious, measurable targets
- a targeting cost internalisation i.e. reviewing transport costs and benefits for society
- an involvement in all steps of the life cycle of policy making and implementation

Some thoughts for discussions include:

- moving away from the automobile-dependent city => it will no longer be the car industry that secures jobs
- sustainable mobility = sustainable business => new (European) technologies and concepts such as car-sharing, telematics, SUMP, mobility management schemes, freight concepts, etc. are exportable
- the need to be ahead of the game => new qualifications for employees will be required
- application of (union) principles of participation and co-decision making => traffic, transport and mobility is close to peoples' real lives and participation is the key to integrated urban mobility planning

Workers Involvement in Promoting Co-modality

Ulf Jarnefjord, TIF (Swedish Transport Workers Union)

In 2011, 61 million tonnes of greenhouse gases were emitted in Sweden, 16 per cent below 1990 levels. Emissions from domestic transport accounted for a third of all emissions and have increased 4 per cent since 1990. Most of these are from road transport - passenger cars and heavy duty vehicles. Emissions from passenger cars have decreased 9 per cent since 1990 although traffic has increased. One reason for this decrease is more energy efficient cars and the increased use of biofuels. The decrease is counteracted by emissions from heavy duty vehicles, which increased 44 per cent during the same period.

The Gothenburg congestion tax was introduced on 1 January 2013 and as a result:

- traffic has gone down by 23 percent in the city centre
- parking spaces in the city centre have 30 percent fewer cars
- bus travel from the neighbouring towns has increased by 30 percent

However, the Swedish Trade Union has pointed out that the right to mobility is important for users. In addition, electric vehicles still pollute because electricity generation still relies on coal.

The Swedish project City Deliverables has been introduced and its main aims are:

- less CO₂ emissions = Better Environment
- fewer big trucks = Safer for pedestrians and cyclists
- better and safer work environment for drivers
- cosy, pleasant city-centres = more customers
- reliable deliveries on time
- creation of new jobs

The Swedish Trade Union ITF also runs education courses, one of which is dedicated to climate change and transport workers. It provides a secure space for learning and sharing information, in a structured but flexible way. The course is divided into five modules with the same five-part structure: Presentation - Read an article - Watch a film - Do an activity and Supplementary readings. These explain the RSI (Reduce – Shift – Improve) framework which provides a model for cutting transport emissions.

In addition, the ITF has designed activities to be useful for participants to develop policies on climate change within their unions. It creates an engagement which leads to better understanding. It is also an opportunity to build bridges between workers worldwide.

Many psychological and social structural barriers stand in the way of behavioural changes that would help limit climate change. It is not possible to continue with the current form of growth that we have - the planet is not big enough. The trade union movement must also become more involved in standardisation and in particular around issues of climate change, transition and services.

SESSION 3 - Urban Transport Workers and Users

Strategies for Sustainable Mobility for European Commuters (E-Cosmos) *Manel Ferri, Spanish Trade Union Confederation (CCOO)*

The aim of the EU-funded Project 'European Commuters for Sustainable Mobility Strategies' is to study, quantify and define procedures in favour of socially and environmentally sustainable mobility for commuters in the EU. The project was led by the CCOO Union Confederation and included as its partners various European unions such as the Italian CGIL, Belgian ABVV and Auto Club Europa representing the German trade union confederation DGB.

E-Cosmos partners considered that the current mobility model, focusing mainly on private motor vehicles, faces serious limitations .The current mobility model has three types of impact.

1. Social impact: exclusion of workers who do not have a driving licence.

2. Economic impact: externalities that imply loss of competitiveness and individual and collective costs of mobility.

3. Environmental impact: transport consumes around 40% of primary energy in industrialised countries and is considered to have an equivalent share in the increase of greenhouse gas emissions.

The objectives of the project were to:

- conduct a comparative survey on commuters' mobility problems in Belgium, Germany, Italy and Spain.
- make a comparative analysis of public policies to promote sustainable mobility in these four European countries.
- Define guidelines to support trade unions' and employers' actions in favour of sustainable and safe access to workplaces.
- Provide inputs for a possible legal framework at EU-level to support an evolution towards more sustainable work-related mobility.

The project included:

- the development of a comparative study on mobility problems in Belgium, Germany, Italy and Spain;
- a comparative analysis of public policies to promote sustainable mobility in these four European countries ;
- the definition of guidelines to support trade union actions in companies in order to grant safe and sustainable access to workplaces;
- laying the foundations of a future EU legal framework to support sustainable mobility for commuters

A comparison of the modal split between means of transport was conducted in four countries within the framework of the project. The results were:

- a high share of car use in Italy
- an equal share of public transport in every country
- that cycling is especially popular in Belgium and Germany and (almost) non-existent in Italy and Spain
- there is a high share of walking in Spain (and Germany)
- the registration of car-pooling not available in all countries

There are different ways to encourage sustainable mobility:

- providing cheap public transport fares for commuter travelling
- obliging companies to reimburse the cost of public transport use for their workers
- allowing tax-free incentives for cyclists
- penalising the use of the car via road charging or taxation of parking spaces
- creating a difference in fiscal treatment or cost reduction depending on the modal choice of the workers (e.g. cost of single car use being less deductible than car-pooling)

The following recommendations were produced at the end of the project.

1 – Create a mobility platform within the trade union.

- Trade unions can play a major role in working towards a more social, more ecological and more efficient mobility system.
- An internal consensus within the whole trade union movement about the need for a more sustainable mobility system is necessary before being able to raise awareness amongst others or to enter into a debate with employers.
- Courses should be organised on the impact of the current mobility system on social, economical and physical wellbeing of all workers.

A broad basis on the issue of sustainable mobility should be established to help avoiding conflicts of interest.

• A mobility specialist within the trade union organisation can clearly facilitate the spread of interest and attention for sustainable mobility, or a mobility cell can clearly facilitate the spread of interest and attention for sustainable mobility too.

- 2 Exchange of expertise and good practice.
 - Expertise and knowledge is necessary to facilitate discussions and awareness campaigns on sustainable mobility.
 - An exchange of knowledge and good practices would be a very efficient way to learn from each other and to build a common understanding of the problem and of possible solutions.
 - Trade unions can collect all relevant findings on mobility on their website. However, it would be much more effective if the expertise could be shared on a European level.
 - The E-Cosmos project wants to launch the idea of having a European observatory on worker mobility.
 - The activities and the outputs of the observatory could be published on, or linked to, well-known mobility management sites as *www.epomm.eu*
- 3 Obligation of sustainable mobility plan for companies.
 - A form of obligation seems to be a necessary precondition for a mental shift amongst employers and employees towards a more sustainable mobility consciousness and change in behaviour.
 - The partners in the project believe that an obligation will only work on two conditions:
 - the focus should be more on the implementation of actions and less on the study process (avoid administrative burden for companies)
 - there should be clear support and/or engagement by the public administration.
 - An obligation to develop a mobility plan creates the opportunity for trade unions to bring mobility issues to the negotiation table in companies.
 - The focus of the obligation should clearly be on the output: which actions are the company willing to take to promote sustainable mobility? Which commitment can be asked from the workers?
 - As a company's mobility plan involves both employer and employees, there is a key role to be played by the trade unions. Trade unions should be involved in the development and the drafting of the plan as they have a major responsibility in persuading all workers of the need to change their mobility patterns.

4 – Collect data for debate.

- Persistent, long-running awareness campaigns are necessary in order to change employees' perceptions.
- There is still a wide spread point of view amongst employers that how workers travel to work is an individual choice without any involvement or obligation from the employer's side.
- Both employers and employees are more easily persuaded about the gains of sustainable mobility when they are confronted with the facts and good examples.
- Only by showing the effect of investing in sustainable mobility can the debate be held more objectively.
- Data on mobility management projects should be collected in a systematic and objective way. The lack of reliable data is the main problem within the field of mobility management. It would be of major interest for trade unions all over Europe to have access to objective data and convincing examples of successful mobility projects.
- The partners in the E-Cosmos project believe that some work-related mobility management-observatory at EU level would also be helpful. The observatory could be the main source of arguments and support for promoting a change in commuter behaviour towards sustainable mobility.
- It would be worthwhile examining the possibility of extending the obligation in Belgium (where companies with more than 100 employees have to provide some key mobility data) to other EU countries.

5 – Mobility coordinators at all levels.

- Trade unions should invest in collaborators specialised in mobility management:
 - \circ $% \left({{\left({{\left({{{\left({{{}}}}} \right)}}}} \right,$
 - \circ at local level where sustainable urban mobility plans are developed;
 - at the level of industrial areas or individual companies (company mobility coordinators)

- Trade unions have to organise themselves so that they can have one, or more, workers in charge of all mobility issues. These people would need to be trained in the field of mobility in order join the debate with sufficient expertise.
- The mobility coordinator at company or industry level would be the main contact person not only for the employer(s) but also for the workers.

6-Support companies in implementation.

- Sustainable mobility is not the core business for most companies or institutions. In order to implement some measures, it is necessary to collect and analyse key data. In most countries private consultants would be available for this.
- Experience and good practices show that public authorities could focus better on supporting the implementation phase of mobility plans.
- It is often a difficult process to make resources available for investment in sustainable transport solutions (shuttle buses, bicycle parking) in companies. Local or regional governments can facilitate and encourage investment in sustainable transport through the public funding of private projects.

7 – Fiscal and legal framework.

- A fiscal and legal framework that favours sustainable transport modes for commuters would be a clear incentive for workers to choose cycling, public transport or car-pooling. Apart from the financial stimulus given by this kind of legislation, it also symbolises the mobility policy of the authorities.
- By giving financial advantages to cyclists, public transport users or car-poolers a government shows its intention to generate a modal shift. This would be even more valid if besides stimulating sustainable transport, single car use could be financially discouraged via taxation, road pricing or higher parking fees.

8 - Mobility Management (MM).

- Mobility management can provide various economic, social and environmental benefits compared to new road infrastructure.
- Conventional, car-oriented solutions generally focus on improving the flow of car traffic whereas mobility management takes into account different aspects like energy conservation, use of public space, health issues, road safety and social mobility issues (e.g. access to the labour market for different target groups).
- There is an obvious need for a correct and integrated assessment methodology for mobility projects.
- By collecting and comparing data in a systematic way the benefits of mobility management compared to investments in road infrastructure would be clearly noticeable.

This would allow social partners, and trade unions in particular, to prove the efficiency of investments in mobility management.

9 – Urban planning first.

- Avoiding the need to use a car is the most efficient mobility management measure imaginable.
- Locating workplaces in relation to public transport and/or bicycle networks. Trade unions must play a major role in stressing the importance of a good location for new workplaces.
- A good location from the point of view of sustainable mobility would favour both workers and potential workers. It would also show the clear commitment of the company to assume its social responsibility.
- Employers that choose a location in, or close to a city centre, or near a main railway station will in the long run, have a strategic advantage in terms of recruiting and keeping their staff.

10 – Invest in sustainable mobility = avoid labour exclusion.

- A car-oriented mobility approach discriminates against workers who have no access to a car or who do not have a driving licence.
- Achieving equal labour opportunities is a key aspect of trade union activity.
- The choice of location is of major importance from the point of view of social mobility.

- Workplaces with good public transport services will provide the opportunity for people without car mobility to apply for a job.
- Companies with a poor public transport service can invest in shuttle buses or implement carpool-matching systems to improve accessibility of workers without a car.

Car Pooling and Car Sharing: New Integrated Schemes and User Behaviour

Angelo Meuleman, Cambio - Taxistop

Cambio is one of the biggest independent car-sharing providers. Over 50,000 customers are using more than 1,500 cambio cars in 15 German cities and in 27 cities throughout Belgium. 45 percent of all cambio trips are business trips. Currently, more than 1,200 companies and authorities are using cambio.

Currently, the cambio group in Germany and Belgium provides more than 1,500 vehicles at 490 stations. The group is one of the three largest car-sharing companies in Germany.

Since March 2011 cambio and Greenpeace Energy have provided fully electric vehicles in Hamburg. The vehicles are charged from the surplus energy of 100% renewable-energy power plants. In Cologne electric vehicles have been on offer since March 2012. It has been estimated that 1 cambio car replaces at least 10 private cars and that car sharing as a strategy to make smarter use of urban space, and limited ressources, is cheaper than car owning (<10 000 Km). Nowadays access is more important than ownership and work-life balance and flexibility are becoming more important than having a company car.

There are 780,000 car sharers in Europe. There are expected to be 15 million by 2020.

The impacts of car-sharing:

- Lower car-mileage travelled (more use of PT, rail and bike)
- Appropriate cars for purpose of journey (downsizing of cars)
- Better cars available (new cars, high emission standards)
- Direct CO₂ reduction

Workers' Involvement in Putting Urban Sustainable Mobility into Practice: an Example from the UK

Andrew Cassy, British Telecom UNISON

The presence of green union reps is having a significant impact upon UK workplaces encouraging a growing number of employers to adopt cost-saving energy efficiency measures and persuading colleagues to become more environmentally-aware at work.

Transport is currently responsible for more than 25% of the UK's carbon emissions, and is rising rapidly. In addition:

- a further 53% of employers have some measures in place for tele/video conferencing
- 51% have some measures in place for providing secure cycle storage, lockers and showers.
- Prospect reps at Scottish National Heritage Work say that the travel policy is guided by a travel hierarchy which dictates that employees first have to consider video conferencing, followed by public transport and shared car use, while air travel is restricted to overseas trips except in exceptional circumstances.
- A UNISON rep at Hackney council says the council heavily promotes cycling and walking to work and offers a cycle to work scheme and cycling allowances for work trips at 20pence per mile.

Following the recent survey Green Unions at Work 2012:

• 79% said there was no training in eco-driving techniques - compared to 5% offering comprehensive schemes

- 76% said there were no subsidies for public transport use or any company transport - compared to 8% and 5% offering comprehensive schemes
- Just under 70% said that no fleet hybrid, dual fuel vehicles had been purchased for their employer's fleet
- compared to 5% of employers who had a comprehensive scheme
- Even though season ticket loans for public transport makes it into the top five initiatives most likely to be part of a comprehensive scheme,
 - 62% said their employer did not provide any support for this.

A major barrier to public transport use is the lack of knowledge regarding public transport services, their times and the areas that they serve. It is important that high quality information is provided to ensure that lack of knowledge is not a barrier to public transport use.

A recent survey contained many examples of union reps successfully negotiating green transport initiatives based on their knowledge of what would be well received by employees despite sometimes encountering little support from the employer.

- Prospect reps at a scientific centre in Scotland have secured cycle shelters.
- UNISON reps at EDF energy explained that environment reps organise annual 'Cycle Surgeries', which involve a local charity cycle campaigner visiting the office to check the road-worthiness (MOT) of bikes and offer cycling tips and freebies.
- Prospect reps working for a weapons manufacturer saw that shower facilities were installed for cyclists and the creation of dedicated parking for car sharers.
- GMB rep in local government describes how the union successfully campaigned for a cycle scheme and a shared driving scheme.
- Prospect reps at a utility company were pivotal in the introduction of a shuttle bus for employees, whilst a
- PCS rep explained how the union negotiated increases in subsidies for public transport use when the employer relocated to an area that meant increased travel for many employees.
- A Unite rep at a software company has had great success in pushing telephone conferencing or video conferencing over travel.
- CWU reps working for mail distributor Parcelforce have pushed for the purchasing of greener vehicles.
- A PCS green rep at DWP is working with other reps in the branch to hold an event to promote more car sharing and other public transport.
- A GMB rep at a recycling company says that management is looking at using cooking oil for fuel, following an employee's suggestion.

The implemented schemes have to be sensitive to employees' needs and if not done with proper consultation can lead to conflict, as a UCU rep in the Midlands explained.

- A Unite rep in the NHS transfusion service explained that there was a struggle to promote cycling due to limited cycle parking and almost no shower facilities and no changing facilities.
- A Unite rep at a building services company complained that the cheapest vehicles were chosen regardless of energy use.
- An FBU rep explained that due to budget restrictions, a popular cycling scheme that has run for a number of years is now on hold.

Making the case for trade union involvement:

- The Carbon Trust estimates that most businesses could easily save between 10 and 20 per cent of their energy costs through simple low-cost or even cost-free measures. To do this, workers on the ground must be involved.
- Staff will not be able to deliver changes if they do not understand and support the reasons why they are being introduced.
- The TUC's Green Workplaces project demonstrates that employers need to see unions as part of the solution. Union involvement can lead to business benefits through improved environmental performance.

The recent survey findings from the LRD report, 'Green Unions at Work 2012' concluded that: • travel and transport have mutual benefits.

- There is a common ground for discussion

- Needs to be managed with fairness & sensitivity.
- Need for employee involvement.
 - Time to carry out audits & surveys
 - Time off for training
 - Right to establish a joint environment forum
- Unions can provide learning & support
 - training, conferences, resources & networks.

Sustainable Mobility: a View from the European Transport Workers' Federation Alain Sutour, European Transport Workers' Federation

Recent decades have shown that the mobility of people and goods contributes to Europe's prosperity. Structural change across the transport sector has been endured to serve this purpose and broader economic and environmental objectives call for further reform.

The transport sector certainly has to address its infrastructure needs. But it is also expected to tackle congestion, pollution, social exclusion and poor accessibility: it is urged to become sustainable. If these sustainability goals lead to additional restructuring efforts, particular attention should be drawn to their impact on people.

Official figures show that 4.6 million workers, around 5% of Europe's total workforce, are employed in the transport network. It is a sector based on people providing a service of public interest.

Today, job losses, wage dumping and poor working conditions within the transport sector extend the debate to a social dimension: are sustainability strategies ready as a bridge to growth and competitiveness leading to more and better jobs? Yes, sustainable transport should mean that Europe evolves towards a more efficient, competitive, greener, well-managed transport system ready for the coming years and beyond. However, above all, it remains a system run by people working for people. Transport workers must have their say.

The European Transport Workers' Federation, representing workers in all transport sectors and fisheries across an enlarged Europe, launched a broad debate towards a Trade Union Vision on Sustainable Transport. TRUST is an EU-funded project which intends to:

- give guidance to a trade union's contribution to sustainable transport policies.
- focus on the social dimension of a long-term outlook for the future of transport in Europe.
- highlight the importance of the "employment pillar" of the Lisbon Strategy: more and better jobs.
- stress the need for appropriate assessment of restructuring processes.
- mainstream gender-equality issues across a discussion on sustainability.
- promote best-practice examples towards new forms of organisation.

Conclusions drawn from these exchanges were instrumental in the setting up of a new policy framework, allowing social sustainability and workers' needs to enter into the mainstream of European transport policy design.

TRUST was an 18-month project that ran across four phases.

Preparatory phase. This information-gathering stage contemplated the elaboration of the first discussion papers. A Steering Committee monitored the organisational aspects of the whole process.

Sectoral workshops. Seven two-day sectoral workshops - corresponding to ETF sections: Civil Aviation, Fisheries, Ports, Road, Railways, Maritime Transport, Inland Waterways - discussed a common agenda based on four core topics.

- The Lisbon Strategy and transport workers.
- Restructuring and developments in the transport sector.
- Transport and Environment.

• Infrastructure financing, state aid and the role of the state.

Cross-sectoral conferences. Conclusions from the sectoral workshops, compiled in policy papers, were discussed in three cross-sectoral conferences aimed at building a common view on the core topics.

Final Conference. Results of the whole exercise were presented in a closing event, where trade unions made public their final contribution on Sustainable Transport for a Sustainable Social Europe.

SESSION 4 - Sustainable Mobility in Rural Areas

Sustainable Mobility: A Regional Perspective - Innovating for the Future

Melville Kendal, Hampshire County Council / Assembly of European Regions

The focus of EU policy is in growing transport and supporting mobility while reaching the 60 % Greenhouse Gas emission reduction target'. The challenge is to break the transport system's dependence on oil without sacrificing its efficiency and compromising mobility. The paramount goal of European transport policy is to help establish a system that underpins European economic progress, enhances competitiveness and offers high-quality mobility services while using resources more efficiently. The EU needs to halve the use of 'conventionally fuelled' cars in urban transport by 2030; phase them out in cities by 2050 and achieve essentially CO2-free city logistics in major urban centres by 2030 (10). Moving away from oil requires a new concept of mobility, supported by a cluster of new technologies as well as more sustainable behaviour.

There are three main focus points for development:

- 1. vehicle efficiency through new engines, materials and design;
- 2. cleaner energy use through new fuels and propulsion systems;
- 3. better use of network and safer and more secure operations through information and communication systems.

New mobility concepts cannot be imposed. To promote more sustainable behaviour, better mobility planning has to be actively encouraged. Development of the concept will require common EU standards that respect EU competition rules. To be more effective, technological research needs to be complemented with a systems approach, taking care of infrastructure and regulatory requirements, the coordination of multiple actors and large demonstration projects to encourage market take-up. Interoperable interconnected solutions for the next generation of multimodal transport management and information systems (including for charging) are vital to ensure take-up evolves. Coherence at EU level is vital — a situation where (for example) one Member State opted exclusively for electric cars and another only for biofuels would destroy the concept of free travel across Europe.

The Assembly of European Regions has recently started to campaign for electric vehicles. The AER has consulted with the European Automobile Manufacturers Association, and Eurelectric, the association of electricity in Europe, who are both pushing for policies to help boost the market for electric vehicles. The agreement is that the AER should use the collective voice of the regions to push for developments at the European level, while using the local influence of regions to help boost vehicle usage locally (in partnership with supportive industry where possible). An AER report will be adopted in May of this year. It makes a number of references, on how to increase consumer confidence in electric vehicles and thereby help to develop the market. Central to this is a need for the supporting infrastructure, particularly registration and payment systems and standardisation of charging methods, to be universally accessible, and the need to promote the use of electric vehicles more widely.

Drivers of electric vehicles need to know that they will be able to access charging points wherever they need to drive and that they will be able to use the charge points easily, and not have the possible inconvenience of dealing with different registration and payment systems. The way in which consumers are able to use their bank cards at ATM machines across Europe is a good example of the model which charging schemes should follow - namely that registration with one company or agency should allow you access to all other companies' or agencies' systems. A member of the public who may consider driving an electric vehicle also needs to know the potential benefits of doing this, and be informed about the available infrastructure.

The recommendations for the use of electric cars include:

- European legislation, which should support the universality of registration and payment systems, to help develop consumer confidence and reduce possible inconvenience. Particularly important at this stage is to identify a Director General at European level who will support this aim. A possibility exists to influence the future of electric vehicles in an important and innovative way.
- At the same time regions can promote the benefits of electric vehicles using their local influence, for example in the:
 - creation of information hubs
 - provision of vehicles for car sharing schemes,
 - promotion of the use of electric vehicles in tourist areas (i.e. by visitors)
 - provision of financial support to electric vehicle users (i.e. through taxation, parking and toll-road charging)
 - creation of opportunities to view or drive electric vehicles at 'green events'
 use of electric vehicles within their own fleets
- Regions can also map the location of charge points in their locality, working with industry to create a comprehensive picture that again assists with creating consumer confidence. Universality in mapping of infrastructure is another goal.

The European Commission announced on 24th January that the "Type 2" electric vehicle plug would be used as the common standard for the whole of Europe. In working towards proposed targets for publically accessible charging infrastructure by 2020 they addressed one vital issue. Lack of plug standardisation was hindering investment as parties could not be confident that their costly investment might then be superseded by alternative charging technology, leaving it largely obsolete. However, standardised charge point infrastructure needs to be complemented by universal registration and payment systems to maximise consumer confidence, and in turn the confidence of potential investors. To this end the AER will use its collective voice to lobby on a European level, with identification of a supportive Director General a key priority. The AER are keen that this crucial element in creating universality in use of charge points is not over looked, so will use its influence in an important and innovative way. Alongside this, the regions will undertake work on a local basis to increase electric vehicle usage in their own locality.

Sustainable Mobility, Rural Development and Territorial Cohesion

Patrice Collignon, Rurality-Environment-Development International Association

An international association set up in 1980, Rurality-Environment-Development (RED) develops, through its network of members and partners in Europe, continuous exchanges about rural policies and their implementation, with the double aim of better efficiency in ground use and a reinforced dialogue with the European institutions.

RED has several functions:

- R.E.D. animates a European rural development network and promotes a participatory approach of development integrating, in a specified area, the economic, social, cultural and environmental concepts into a territorial project.
- R.E.D. coordinates European platforms like the European Countryside Movement and gives support to members' activities at international level.
- R.E.D. animates the website www.ruraleurope.org, and publishes the newsletter Eurobrèves and thematic dossiers.

The proposed objectives for a future European rural development policy that have to be met by the EU are as follows:

 territorial cohesion of the EU by reducing disparities through a balance between rural and urban areas, by maintaining and improving public services and transport and communication infrastructures, including broadband access;

- consolidation of local economies through safeguarding and creating preferably local business and employment opportunities, to prevent depopulation, tackle structural unemployment and limit daily travel;
- improvement of living conditions and particularly in terms of mobility, accommodation and access to services;
- integration of rural territories into centres of competitiveness thanks to their internal potentialities;
- development of multi-player networks that bring together research, engineering and production in synergy with university offers and urban centres.
- development and reinforcement of networks devoted to knowledge exchange between rural regions;
- redeployment of a multi-functional agricultural sector in tune with society, with adequate financial compensation for services rendered;
- preservation of biodiversity, of the natural environment through sustainable development;
- focus on the diversity of rural cultural heritage;
- strengthening of citizen participation in future government policies and the development of capacity building by local organisations and populations.

RED pointed out that mobility management is an integrated discipline that should take into account the needs of rural areas and aim for territorial cohesion. Partnerships between regions, employers and employees should be put in place to mainstream sustainable mobility at the local level.

Sustainable Mobility in Rural Areas: a Challenge for Workers

Bénédicte Vellande, Confédération des Syndicats Chrétiens Belgique

Mobility has been defined as a source of inequality for the following reasons:

- Driving licence (28% of Belgians over 18 do not have a driving licence) requires work
 permit
- Mobility: rural / urban
- Mobility of women / men
- Mobility of youth / elderly
- Mobility of able people/ people with reduced mobility
- Cost of mobility (transport = 2nd or 3rd budget item for households, after housing)

However, promoting sustainable mobility tends to reduce social, economic and environmental inequalities.

A mobility unit has been set up within the Confédération des Syndicats Chrétiens in Belgium with the following tasks:

- to inform/raise awareness of workers and their representatives on the issues
- to train workers' representatives in order to improve social dialogue on sustainable mobility
- to encourage initiatives by providing technical support

The role of Trade Union organisations (mobility unit) in the EU should be as follows:

- link concerned workers / trade unions of the area
- link experiences of different mobility plans
- be a single contact for other players (design offices, regions, etc)
- develop awareness-raising tools
- support change: information meetings in companies, trade union trainings
- Continuous assessment of the adequacy of the measures in response to needs.

The EU Sustainable Mobility Week plays a key role in raising awareness.

Commuter travel plays a structural role and it is needed to reduce inequalities. However, a sustainable mobility plan without a regulatory dimension, making it mandatory, does not work.

DAY 2

SESSION 1 - Door to Door and Value Chain Mobility

Best Practices from the EU Trans-European Transport Network (TEN-T)

Gudrun Schulze, European Commission DG Mobility and Transport

Establishing an efficient trans-European transport network (TEN-T) is a key element in the relaunched Lisbon Strategy for competitiveness and employment in Europe and plays a central role for the Europe 2020 Strategy.

TEN-T policies and projects aim to:

- promote a genuine network approach as a basis for a sustainable transport policy;
- establish and develop key links and interconnections needed to eliminate existing bottlenecks to mobility;
- fill in missing sections and complete the main routes, especially their cross-border sections;
- cross natural barriers;
- improve inter-operability on major routes.

The Roadmap to a Single European Transport Area – towards a resource-efficient transport system (White Paper, 2011) aims to reduce CO_2 -emissions by 60% while meeting increasing mobility needs.

Currently there is new TEN-T legislation being prepared by the European Commission. Meanwhile, two EU Regulations were proposed in 2011:

- union guidelines for the development of the trans-European transport network, governing infrastructure planning and implementation until 2050
- the Connecting Europe Facility governing EU funding until 2020

The new TEN-T guidelines will include:

- a multi-modal network with binding infrastructure standards, based on EU law and international agreements;
- an increased emphasis on nodes, both urban nodes and transport nodes;
- a reinforced link between infrastructure functionality and infrastructure development;
- a framework for Intelligent Transport Services to boost efficient infrastructure use, technological innovation to enable low carbon solutions;
- the strategically most important part of the TEN-T the outcome of the first genuinely European transport network planning method;
- a multi-modal network approach in contrast to the current, uni-modal priority project approach;
- a forerunner of resource-efficient, intelligent and innovative infrastructure development in the entire EU;
- implementation priority (target 2030), with strong support from financial and nonfinancial EU instruments

The new TEN-T guidelines will include provisions for Urban Nodes. A majority of trips along TEN-T originate/end at urban nodes, resulting in challenges regarding capacity/quality:

- long-distance, regional and urban traffic overlap, stretching the limits of infrastructures;
- noise, toxic/carbon emissions affect citizens' quality of life;
- poorly integrated networks of different transport modes (e.g. rail and air or maritime) may render long-distance passenger or freight traffic inefficient and unattractive;
- poorly connected networks for long-distance and urban traffic generate time losses on the last mile for users.

To address challenges related to urban nodes, a specific article was introduced in the TEN-T guidelines' proposal. For the first time, respective actors are explicitly called upon by European legislation to take relevant action. Urban nodes play a key role in shaping the core network (the EU's major economic, cultural and scientific centres are mostly important origins or destinations). New TEN-T policy also promotes intelligent and innovative infrastructure and vehicles (advanced

traffic management systems for using scarce urban infrastructure efficiently and enhancing quality of service; innovative infrastructure – vehicle systems pioneering low carbon transport).

Implementation and financing instruments for promoting sustainable mobility include:

- TEN-T Guidelines and Corridors
- Connecting Europe Facility
- CIVITAS
- EU Cohesion and Regional Funds
- Seventh Framework Programme for Research and Technological Development
- Intelligent Energy Europe programme (STEER)

Best practices in implementing TEN-T in urban areas include:

- high-speed rail connection to Brussels Airport: Diabolo
- going underground to provide improved rail capacity: Malmö Citytunnel
- railway tunnel in Gothenburg: allowing through-travel
- Berlin transit hub: linking local, national and international transport
- Malpensa airport rail link: connecting terminals 2 to terminal 1 and the national rail network
- intermodal passenger and freight transport infrastructure at Cluj-Napoca International Airport/Romania

An Integrated Approach Combining Different Transport Modes

Peter Wolters, European Intermodal Association

The European Intermodal Association (EIA) is an international independent platform promoting sustainable intermodal mobility in Europe by combining innovative rail, waterway, road, air and maritime transport solutions.

Results from the 2009 World Economic Forum study provide evidence that:

- 24% of freight vehicles in the EU run empty.
- the average loading of the rest is 57%.
- overall efficiency is only 43%.
- There is an estimated recoverable loss for the EU of € 160 bn, which is equal to 1.2% of CO₂ emissions.

The 2011 European White Paper on Transport is aiming for a reduction of 60% of GHG in the transport sector by 2050. The freight transport sector is the major area where meeting climate protection goals is problematic. Companies need innovative freight and urban logistics solutions. Public authorities need arguments for their commitment to freight transport.

Consolidation and bundling of cargo is an important success formula as it increases load factors whilst reducing deliveries. New logistics collaboration and sharing data to optimise planning are often challenging. But the good news is that new collaboration models exist via the neutralisation of sensitive data exchange between players whilst respecting EU competition rules.

Urban freight transport (UFT) is at its most efficient (load factors, routing and deliveries) when there are economies of scale and bundling of larger operators/operations. Rail and water-borne large-scale freight distribution parks should be built on the outskirts of urban areas. There is a need for disseminating good practice in UFT throughout Europe through web portals and other means.

The project BESTFACT was presented as the first portal of freight transport best practices, contacts and policies. The objective of BESTFACT is to develop, disseminate and enhance the utilisation of best practices and innovation in freight transport that contribute to meeting European transport policy objectives with regard to competitiveness and environmental impact. It comprises:

- a comprehensive inventory of best practices and innovations in freight and urban logistics with proven sustainable efficiency;
- an open, neutral stakeholder platform offering easily exploitable and a continuously updated data compendium;

- the matching of competitive urban and freight logistics, innovative research and sustainable EU policy objectives;
- simplification, standardisation and streamlining of ICT processes and e-freight procedures by industrial stakeholders, administrations and researchers.

BESTFACT will develop a pool of best practice sustainable transport and logistics solutions, and their impact, and profitable green measures. The EIA and Polis will communicate results at EU level while promoting it to cities, regions and industries. The project will establish a much-needed neutral, robust and replicable methodology for collecting and processing best practices.

Promoting Sustainability Through Mobility Management

Bart Desmedt, Traject Management

Traject develops a global vision on traffic and mobility, introducing the user's point of view. This approach increases acceptance among citizens and other actors and therefore leads to more sustainable change. Its most typical fields of intervention are:

- mobility plans for specific destinations and target groups, corporate travel plans;
- change management in the field of mobility;
- development and follow-up of tailor-made transport systems, parking management;
- marketing and communication in mobility;
- daily management of mobility projects and services;

Mobility management represents the European version of "Transportation Demand Management" (TDM) which originated in the 1980s with the "Clean Air Act". Companies have been obliged to implement measures to decrease car use through company transportation plans and supply solutions like car- and van-pooling, bus services, teleworking etc. The term was imported into Europe in 1991: the programme "transportation management" in Holland is based on the US concept and was adopted in Belgium in 1992.

The essence of mobility management is integrating the demand side in transport planning through a bottom-up approach and working with target groups on tailor-made solutions. The new mobility management paradigm focuses on interactivity between supply and demand and above all between road authorities, legislators, individual transport users and site managers.

The national framework for commuter traffic in Belgium is as follows:

- Obligation for companies > 100 employees to deliver mobility data every three years
 - Since 1998: fiscal framework in favour of sustainable transport for commuters:
 - cycling reimbursement (commuting or business trip): tax free up to €0,22/km)
 - bike offered by the employer and investments in bicycle infrastructure: tax-free for workers, 120% deductible for employer
 - o public transport reimbursement: 100% tax free
 - o fiscal bonuses for car-poolers and company bus users
 - CO₂-dependant taxation of company cars

Belgium is now experiencing a multiplication of mobility management initiatives. In Brussels there is a compulsory commuter plan for companies with over 100 employees and assistance to companies with follow-up of plans. With regard to access to work, several specific actions have been implemented for:

- 20% of households without a car, with specific problems for recently-arrived people
- the training of people searching for work and employment workers
- orientation in the city / how to use public transport / out reach working

The case study of the Colruyt supermarket chain's "Bike to work" plan showed an increase in bike use from 8 to 14% in modal split and also allowed access to work for staff without a car. The project focusses on:

- free bicycles for commuters, combined with a km charge for cyclists
- a broader commitment to sustainability which also includes an active carpool policy and reduction of freight emissions

Mobility management has also been extended to other trips such as leisure (46% of all trips in Belgium). The number and distances of leisure-related trips are continuously increasing. More and more traffic intensity during the weekends reaches the level of working days. A specific mobility management approach can contribute to reducing the negative effects of the more irregular trips and at the same time increase the quality of leisure time. These trips:

- spread congestion outside peak hours;
- destinations lose their attractiveness because of the number of cars;
- mobility management decreases the impact on the environment;
- Integration in sustainable (urban) mobility plans:
 - o consultation and information/ working with companies, schools etc.
 - cycle and public transport infrastructure;
 - o parking management: from minimum to maximum requirements.
- Flanders:
 - Mobility contracts between regional authority and municipalities;
 - If the municipality designs a mobility plan according to certain standards of sustainability, it receives subsidies from the region;
 - \circ One of the topics for which subsidies are provided is "working with target groups".

SESSION 2 - Logistics and Sustainable Mobility

The Development of Green Corridors in the EU

Sergio Barbarino, Procter & Gamble

Sustainable innovation related to logistics operations is about considering the full life cycle from materials extraction to disposal. Decarbonising the supply chain is key for the EU to meet its CO_2 reduction targets where transport accounts for 40% of total emissions (45% by cars). P&G highlighted a better use of existing infrastructures and ways of changing consumer behaviour in achieving this goal.

The CAPIRE project is a Coordination Action within the framework of the European Green Cars Initiative and will prepare and support the realisation of a Public Private Partnership (PPP) sustaining and putting into practice the European Green Cars Initiative.

CAPIRE focuses on projects which could foster the competitiveness of the European Automotive Industry in the domain of Transport Electrification as well as in the development of technologies and services to reduce the European CO_2 footprint. CAPIRE activities will focus on two major fields: (i) a careful consideration of options for the aims, shape, and implementation paths of a PPP, and (ii) the identification of technology roadblocks and the respective research needs within FP7.

Major outcomes will be an appropriate and proven PPP implementation model and a dedicated roadmap based on an elaborated and deep analysis of R&D needs, respective milestones and supporting measures. The goal is to increase the competitiveness of a global European Automotive Industry in the domain of energy efficient, safe, non-polluting and CO₂-free vehicles.

To be broad enough, the strategy has to be based on the three following technology pillars.

- Passenger cars and LCV: to reduce local pollution, emission of green house gases, and noise by accelerating electrification of vehicles and provision of a dedicated infrastructure for the connection to CO₂-free energy sources;
- Lorries and Buses: to improve overall efficiency of passenger and freight transport by accelerating the improvement of ICE technologies and their potential partial electrification;
- Logistics: to increase the efficiency of goods transport by optimising the loading rate of trucks and mixing different energy saving transport vectors such as rail transport and road transport.

The results of CAPIRE will serve as a guideline for automotive R&D and European road transport 45 | P a g e

policy related to the topic of Green Cars. Their deployment will require strong cooperation between OEMs, automotive & technology suppliers, road and traffic operators, energy and service providers, universities and public authorities, to reach the ambitious medium- and long-term targets related to key technologies.

A new EU project entitled "Supporting EU's Freight Transport Logistics Action Plan on Green Corridors Issues" ("SuperGreen"), is a 3-year project, which is part of a Coordinated Action supported by the European Commission (DG-TREN) within the context of the 7th Framework Programme. The purpose of the project is to promote the development of European freight logistics in an environmentally friendly manner. Environmental factors play an increasing role in all transport modes, and holistic approaches are needed to identify 'win-win' solutions. SuperGreen will evaluate a series of 'green corridors' covering some representative regions and main transport routes throughout Europe. The objectives of the SuperGreen project concern supporting the development of sustainable transport networks by fulfilling requirements covering environmental, technical, economic, social and spatial planning aspects. This will be achieved by the:

- benchmarking of Green Corridors. Based on a total picture of relevant parameters (KPIs) like energy consumption and emissions, operational aspects and SCM issues, external costs (including social and spatial planning aspects), infrastructure costs and internal costs: areas and candidates for improvement (i.e. bottlenecks) will be identified.
- "Green technologies". Methods for improving these bottlenecks. Among the green technologies considered may be novel propulsion systems, alternative fuels, cargo handling technologies, new terminal technologies, cleaning technologies, heating and cooling technologies, or novel concepts of any kind relevant for the multimodal Green Corridors.
- "Smarter" utilisation of ICT-flows already available in the multimodal chain may improve the identified bottlenecks and make the Green Corridors even greener. The influence of issues like e-freight, supply chain management, smarter planning (vehicle navigation technologies), scheduling and track and trace need to be considered.
- Recommendations for R&D. Where the available "green technologies" and present knowledge about "smarter utilisation of ICT-flows" are not sufficient to improve the identified bottlenecks, recommendations for future calls for R&D proposals will be suggested.
- Policy Implications. The implications of related regulatory policies on the possible solutions proposed by the project will be examined, so as to provide assistance to the Commission in the formulation and harmonisation of policies on Green Corridors.
- Dissemination and Awareness-raising. The project is paying particular attention to the dissemination and visibility of its results. This would involve liaison with stakeholders involved in the topics addressed by SuperGreen (infrastructure managers, transport and terminal operators, shippers, logistics operators, national and local authorities, etc.). It would also include the development of a dissemination plan, promotional material, workshops and other events with stakeholder participation.

SESSION 3 - Curbing Transport Emissions and Creating Jobs

The International Labour Organization Perspective on Transition to a Greener Economy Daniel Samaan, International Labour Organization

Two of the most prominent roles of the ILO in the context of this laboratory are:

- creating a consensus on the double dividend of green and social agendas: the ILO Green Jobs Initiative; and
- research on complementarities between green and social policies

The transition to a green economy has welfare considerations. Even if there is zero or positive net employment there will be winners and losers and compensation will need to be determined. The current opportunities in the transition to a green economy can be summarised as follows:

- 1. income gains through lower import of resources (e.g. oil);
- 2. higher growth patterns (new technologies, new products);
- 3. higher and better employment (quantitatively probably small, qualitative improvements depend on policies);
- 4. better environment (clean air, food, water, lower health costs).

The three main challenges are as follows:

- the downsizing in employment in "brown" sectors (2-3% of total employment, e.g. coal mining, oil production) with sectoral labour reallocation (difficult for older workers, or when shock is regionally concentrated) and the taking into account of new training needs;
- adjustment of technology and skills within viable brown sectors (~40% of employment --e.g. transport sector, agriculture, construction sector) through social dialogue and skills upgrading with possible loss of competitiveness in the short-run but potential for better competitiveness later on.
- Some new green jobs: sectors producing green technology or directly reducing greenhouse gases (2-5% of employment in EU and US, only 1-2% in emerging countries -- e.g. wind energy, recycling, reforestation) with integrated industry-education strategy and enhanced backward linkages so as to boost employment and productivity opportunities.

The move to a green economy will not happen by itself. Market forces are not enough, so a policy-driven process is needed. This is because presently it is more profitable to produce with high CO₂ technology (different with IT). Individual enterprises cannot produce public goods such as public transport and markets are poor supporters of job transitions.

A green economy is necessary if sustainable development is to be realised. However, as the joint UNEP/ILO report "Working towards sustainable development: Opportunities for decent work and social inclusion in a green economy" emphasises, a green economy can also, if accompanied by the right policy mix, create more and better jobs, lift people out of poverty and promote social inclusion. In fact, the growth model of the past few decades has been inefficient, not only economically, but also from environmental, employment and social perspectives. It overuses natural resources, is environmentally unsustainable and has failed to meet the aspirations of a large proportion of society seeking productive, decent work and dignified lives.

A new development model – one which puts people, fairness and the planet at the core of policymaking – is urgently needed, and is eminently achievable. More fundamentally, the report demonstrates that employment and social inclusion must be integral parts of any sustainable development strategy and must be included in policies that address climate change and ensure the preservation of the environment. In particular, the report assesses the sectoral, employment and income implications of the transition to a green economy. It highlights the necessary conditions, policy prescriptions and good practices required to ensure that the green economy is characterised by gains in job quality, reduction in poverty and improvements in social inclusion.

These positive results have one thing in common: the recognition that environmental and socioeconomic challenges need to be addressed in a comprehensive and complementary manner.

- Firstly, this means promoting and implementing sustainable production processes at the level of the business itself, especially among small-and-medium-sized enterprises in the key sectors mentioned above.
- Secondly, an extension of social protection, income support and skills training measures is key to ensuring that workers are in a position to take advantage of these new opportunities.
- Thirdly, international labour standards and workers' rights can provide a legal and institutional framework, as well as practical guidance, for work in a greener and sustainable economy, especially when it comes to job quality and occupational safety and health.
- Finally, effective social dialogue involving employers and trade unions is central to the governance of sustainable development.

A Global Perspective on Greening the Transport Sector and Creating Jobs

Philipp Sayler, World Economic Forum

Even in the most optimistic scenarios, transportation is expected to be highly dependent on oil over the next two decades, therefore scaling-up existing sustainable transportation technologies can help the transportation sector and governments reach their sustainability and carbon emission reduction targets. However, it also holds great potential for job creation and long-term sustained economic growth.

In order to achieve this, Sustainable Transportation Ecosystem, a report released by the World Economic Forum, provides guiding principles for achieving environmental sustainability in transportation across five dimensions: policy, financing, energy, infrastructure and customers. The framework was developed through a collaborative process among stakeholders, including transportation service and equipment providers, policy-makers, energy providers and financial institutions. The report provides recommendations specific to each stakeholder group.

The transportation sector has responded to this challenge by actively seeking and implementing solutions to reduce its impact on the environment. Ambitious carbon emission reduction targets have been defined both by entire industrial sectors (such as the air and marine transport sectors) and individually by leading companies in the sector.

While this transformation of the transportation sector away from fossil fuels is an important step towards reducing carbon emissions and climate change, it also represents a broader opportunity to respond to policy-makers' and the public's calls for increased job creation in the current depressed economic climate.

Transitioning the sector to new sustainable transportation alternatives will require investments in R&D and infrastructure that can lay the foundation for immediate job creation today and sustained economic growth in the future. Due to the complex nature of the transportation sector, to achieve this transformation a fundamentally new approach to addressing environmental sustainability and carbon emission reductions will be required. The network of stakeholders that directly or indirectly influence the sector span a wide range of constituents that include stakeholders both within and outside the transportation sector. To successfully address the sector's environmental sustainability challenges, the perspectives of all stakeholders in the system must be considered and integrated.

Addressing sustainability from this integrated systems approach enables policy-makers and other stakeholders to better assess the complex challenges and multitude of opportunities available to the transportation sector to achieve its targets. It also allows for more effective policies to be implemented that assess the trade-offs between modes and technologies, and enable the whole sector to reach its emissions reduction targets rather than favouring a single mode. Finally, it also brings the potential for risk-sharing of investment into new technologies among stakeholders throughout value chains.

This report aims to support the process of establishing an integrated systems approach by providing a framework and recommendations for each stakeholder in the system on how to take action to achieve this goal.

As part of the framework, the report provides all stakeholders in the transportation system a common set of principles to guide alignment and coordinate actions related to carbon emission reductions in the sector. This alignment and coordination will allow the sector to realise its growth potential and positive economic impacts while achieving its environmental sustainability targets. These principles can be applied to develop action plans for specific sustainability levers in transportation.

Policy framework should:

- consider implications on other modes and sectors
- be transparent, predictable, coordinated
- provide appropriate support for sustainable technologies

Financing decisions should consider:

- long-term social, environmental, and governance factors
- · opportunities for collaborative de-risking
- · financial aid as opportunity for economic growth

Energy sources should be:

- cost effective and sustainable
- sustainable from environmental, social and economic perspectives
- · measured based on harmonised life-cycle environmental assessments

Infrastructure investments should consider:

- the ability to improve utilisation and integrate existing infrastructure
- · trade-offs between technologies and impacts on other modes
- impact on urban planning and programmes in other sectors

End customers need:

- access to sustainable transportation alternatives
- information on life-cycle environmental impacts and cost
- information that is granular, verifiable, available, comparable, and understandable

SESSION 4 - The Role of Trade Unions in Promoting Sustainable Mobility

Development of a European Trade Union Position

Judith Kirton-Darling, European Trade Union Confederation

Previous ETUC positions on the topic of the laboratory focused on the Sustainable Mobility Week. These included the following points below.

For participative, fair company mobility plans:

The ETUC encourages the drafting of company mobility plans, provided they offer an
opportunity for workers' representatives to be consulted and to participate in the drafting
of the plans. It is important for mobility problems to be raised democratically and the
solutions envisaged no less democratically. Mobility plans must not be the exclusive
preserve of the transport experts ('mobility managers') Provision must be made for the
participation of the workers' representatives according to the national laws instituting
transport plans in companies. In addition, such laws need to be adopted by all the
countries in the European Union.

For public investments in sustainable transport:

• The ETUC is calling for substantial public investment to be ploughed into alternatives to car transport, in particular public transport. In a joint manifesto with the environmental and social NGOs, it has tabled proposals for a European initiative in favour of sustainable investment and in particular, sustainable transport.

For innovative financing options:

 The ETUC considers it necessary for innovative methods to be developed in terms of financial incentives for sustainable employee mobility. It supports the campaign launched by all the Italian trade unions with the environmental and social NGOs in favour of the introduction of 'public transport vouchers'.

The ETUC has now realised the need to update its position on sustainable mobility as there have been major changes since the economic crisis and new EU policy developments such as the 2011 White Paper on transport and the SUMPs.

At the core of Trade Union concerns are:

- Employment (+/-)
- Working conditions
- Social dialogue
- Public services
- Social inequalities

The key ETUC demands on this topic can be summarised as follows.

At EU level

- Social and industrial concerns need to be better addressed
- Monitoring & sharing of information on: R&D, Standardisation, TEN-T
- Social dialogue on greening the economy and sectoral skills/training initiatives
- Social dialogue on SM strategies (inter-professional/sectoral) and alliance building
- Pressing for a framework on anticipation of change/restructuring

At Member State level

- Fair taxation incentives and labour law provisions (teleworking, flexible working time arrangements)
- Support for innovative public transport infrastructures
- National training programmes
- National bargaining and alliance building
- Improved working conditions for transport workers

At regional/local level

- Urban planning that better includes sustainable mobility
- Developing regional approaches in training
- Building and engagement in multi-stakeholder dialogue initiatives
- Setting up regional jobs observatories

At company level:

- Rights for workers to negotiate/consult on mobility plans
- Awareness-raising E-learning modules
- Worker engagement in mobility plans

• Improved I&C

The ETUC conference on Green Workplaces on 7th May: 'Workers for Sustainable Mobility' builds on 3 themes:

- Rights for workers to sustainable mobility
- Investment in mobility policies as a driver of economic recovery
- Just Transition in modal shift

The ETUC concept of a 'Just Transition' has five pillars:

- i) a regulatory framework that deals with the public good, access, the environment, investment and finance
- ii) innovation and industry policy
- iii) labour market and training
- iv) modal shifts
- v) participation and trade union engagement.

Development of a Manufacturing Worker's Position

Wolf Jäcklein, industriALL

Manufacturing has structuring importance for the whole of the economy and particularly transport equipment manufacturing which directly employs a total of ca. 7,5 million people in Europe (including the main supply chain) amongst whom 6 million are in the car manufacturing sector and 15 million in total. As production has this structural role there is competition between regions and production sites.

Sustainable urban mobility is market-driven. Rural mobility is facing problems of exclusion, lack of access because it is not financially attractive. This is detrimental to rural populations and potentially leads to social exclusion. So far individual mobility has priority over collective mobility.

Just Transition requires land use planning to be addressed (which generates mobility needs) as well as employment in terms of quantity, quality and location of workplace.

Currently, despite supporting the inclusion of a Just Transition clause in a global agreement, the only practical labour market response to the challenges of climate change from the Commission in the EU 2020 'vision' is the greater implementation of the EU's flexicurity agenda. A policy, which has thus far meant greater labour market flexibility without the accompanying security. A social change of the proportions implied by climate change, demands a strong European social and employment policy response. It is a transition which must be managed within a framework of interlocking employment and social policies, involving and negotiated by trade unions and employers at all levels. To this end, it is believed that climate policy must afford workers greater employment security through investment in employment creation and maintenance and new rights at work in relation to corporate governance, work-life balance and life-long learning.

A socially sustainable transition should aim to prevent collective redundancies, promote a smooth industrial conversion programme, based on collective agreements guaranteeing social security rights for workers (regardless of contract) and the preservation of purchasing power, income and high quality working conditions. Precarious work should not be a feature of the European social model of the future.

Training and education systems are at the heart of a just social transition to a low-carbon automotive industry. Many existing job profiles will be transformed alongside the new skills needed to address energy efficiency, new technologies or products, and new ways of work organisation. Required skill-sets for automotive workers will change. To prepare for this change, first of all, the training/education systems will have to be adapted: training the teachers, creating the teaching infrastructures, and developing the training schedules and content. The infrastructure must be ready prior to the arrival of new technology cars. This implies that energy distribution networks, the repair and maintenance sector, and possibly the fleet-testing facilities

(for pilot-series models) must be prepared rapidly. The experience of battery technology has shown that an early start with relatively simple models, but in mass-production, will provide efficient input for perfecting the technology. This must happen with the new car technologies in Europe and not elsewhere if the industry is to remain a strong motor for innovation. The New Skills for New Jobs agenda is heading in the right direction, but the sectoral studies undertaken by the European Centre for the Development of Vocational Training (Cedefop) and the Commission, have revealed little more than the future need for generic skills. This is of little practical help for industrial actors. To this end, we need to support the creation of European sectoral skills' councils, with social partner involvement.

Therefore, we need to support the development of a European 'green' industrial policy based on policies which reconcile economic, social and environmental objectives, promote technological development and contribute to resource efficiency as a driver for social and economic progress. What is needed is a policy mix of binding and incentive based initiatives offering carrots and sticks to producers and consumers, through:

- binding European energy efficiency standards on all products and services as a means of promoting innovation.
- the greater use of standardisation and the promotion of product policies which insist on continuous technological development throughout the value chain.

Europe will only be able to respond to intensified competition with emerging economies by implementing highly innovative systems, raising technological and production standards and extending them to all Member States. All manufacturing sectors and workers should be covered by transition programmes ensuring employment opportunities and security, and the creation of new greener jobs through increased investment and innovation.