PARIS PROCESS ON MOBILITY AND CLIMATE

Urgency and Timeliness – We are Transport

Now is the time for taking action on transport -

Tomorrow is just one day too late

1. The urgency to address climate change has never been stronger. We are already at the end of 2015 and according to the IPCC we need to stabilize and start reducing GHG emissions by 2020 when the new climate agreement should be fully adopted. Transport accounts for about 60% of global oil consumption, 27% of all energy use, and around a quarter of energy related CO2 [1].
2. Transitional and transformative actions to reframe and rethink our transport networks and systems will be crucial to make progress towards low carbon economies and to speed up the global economic recovery. The world faces two urgent and interconnected challenges: eradicating poverty through economic development, and tackling climate change. Transport is crucial to both. With

[1] IEA World Energy Outlook 2015 www.iea.org

more than 1 billion people lacking access to roads and transport services it is a major barrier to social and economic advancement. Meanwhile, more than half of the world's population is concentrated in urban areas; the share is rising but often through widening urban sprawl, at unnecessary transport costs.

3. Time is running out and ambitious action in all areas of transport must be scaled and speeded up. The role of cities and non-state actors as well as national governments is key to this. The transport sector is ready to deliver on climate but COP 21 must deliver on transport.

Narrative

Over the past 10 years the world has seen many climate extremes and the devastating effects that unpredictable weather events have had on communities and transport infrastructure. Examples include Super storm Sandy, hurricanes and earthquakes

Providing sustainable transport for the seven to nine billion people at the lowest social cost possible is a major challenge. However low carbon transport visions and the implementation of integrated transport plans and programs also fosters economic growth, creates jobs and builds social inclusion. By 2050, there will be 2.7 billion additional urban dwellers and over 90% of them will live in developing countries cities. Long-term and comprehensive transport planning in these fast-growing cities can avoid energy wasteful urban development and avoid them locking themselves into fossil fuel based transport in the future. Rural communities need climate resilient all weather links to ensure that crops get to markets and that they also have access to education and health services.

Countries and non-state actors, cities and regions must all work together to create win-win opportunities that will deliver not only the desired economic development but also do this in a sustainable and environmentally and socially beneficial way. Using proven technologies, this is both a possibility and a choice for governments today as government policies will play a critical role in determining the most likely transport pathways into the future.

Demand for transport (passenger and freight) is growing and thus fuel demand globally for all transport modes is also likely to increase. But the choice is between making this eighty plus per cent increase or an increase of only twenty to thirty percent[2] so future generations can enjoy similar levels of mobility as many people enjoy today. Demand for transport fuel is expected to stagnate then fall by about 20 percent while demand from the developing world is expected to surpass that of the developed ones by the year 2025, if not earlier. Much of this demand will come from the developing countries (especially China, India and Africa) where it is expected that demand will grow by between two and three hundred per cent.

Increases will be mainly driven by demand from trucks, buses, trains, ships, and airplanes rather than from the private car. However, fossil fuels will still constitute the majority of our transport fuels by 2050 and the fuel mix will still depend heavily on gasoline, diesel, fuel oil and jet fuel.

[2] Global Transport Scenarios 2050 World Energy Council (2015)

- Demand for diesel and fuel oil is expected to grow by as much as 200% if we continue on a Business as Usual (BAU) pathway, mainly driven by increase demand for road and maritime based freight transport.
- Demand for jet fuel will grow by between 2- 300% as aviation traffic increases.
- Demand for gasoline is expected to slightly drop as alternatives and second and third generation (non-food related) biofuels from a variety of feed stocks, become more widely available but their production and use needs to increase four fold. Other fuels including electricity, hydrogen, and natural gas will increase six to seven fold.
- In 2050 it is likely that conventional gasoline and diesel internal combustion engines (ICEs) global market share will be between 25% and 75% depending on the national transport policies in place and the international commitment to support change to a low carbon transport future.
- The total number of cars globally is also expected to at least double increase but even if this translates into small increases in the developed world, this will mean increases of some 500 percent in some places.

These statistics reinforce the central role of policy and the increasingly urgent need to meet growing energy demand for transport while addressing related concerns for energy security, costs and energy-related environmental impacts. **Now** is the time for strong leadership from governments, non-state actors, cities, regions and the citizens if the transport sector is to make a positive contribution towards the well-being of future generations.

Evidence/data supporting those facts

It is clear that although change is needed we must do this in two ways: transitional and transformational.

Transitional means improving the efficiency of the transport networks and systems and transformational actions will allow us to leap frog to future transport without following current unsustainable trends. All countries need to do both at the same time but in different ways; and the transport sector is also able to provide many solutions to fit different needs and requirements. The 'We are Transport' campaign sets out 6 key areas of action. In addition the 14 Transport related initiatives under the Lima Paris Actions Agenda cover all modes and sectors of transport and demonstrate the commitment of the sector to make both transitional and transformational improvements.

Inland waterways, mass rapid transit and rail networks especially need urgent attention as the world becomes more urbanized. Public transport networks function best when they are dense and provide numerous choices for connections – as many developing world cities have unregulated and unplanned systems presently it is urgent to start to make this transition to better organized mass transit. In todays' world, this means connecting all the different intermodal options better, providing choice and increasing efficiency rather than just following a tradition modal approach of implementing metro, light or commuter rail and buses. Shifting more trips onto electrified rail (conventional and high speed) is also a key strategy to reduce emissions per tonne or passenger/km. Waterways are environmentally sustainable and can provide excellent transport links especially in Africa and Asia but investments need to start today. However these are

complex systems and efforts need to start now for them to properly deliver by 2020 or 2030

Examples and references

Regional Leadership and the role of cities

The European Commission and its 28 member states adopted a white paper on transport in 2011 that The European Commission adopted a roadmap of 40 concrete initiatives for the next decade to build a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment. At the same time, the proposals will dramatically reduce Europe's dependence on imported oil and cut carbon emissions in transport by 60% by 2050. Much of the action will need to take place in cities and regions.

By 2050, key goals of the white paper are:

- No more conventionally-fuelled cars in cities and access should be halved by 2030.
- 40% use of sustainable low carbon fuels in aviation; at least 40% cut in shipping emissions.
- A 50% shift of medium distance intercity passenger and freight journeys from road to rail and waterborne transport.

There are other key pieces of legislation that help guide national policy development such as the Renewable Energy Directive that lays down legally binding national renewable energy targets, the interim trajectory for each Member State, and requires them to take adequate national measures to ensure that these targets are met, so that **the EU as a whole can reach at least a 20% share of renewable energy in its overall energy consumption by 2020**. According to the 2014 world energy outlook from the IEA, these policies mean that Europe is still ahead of most other regions (e.g. China and the USA) in terms of its share of renewable electricity, or installed renewable power per capita.

In addition, in 2014 the 2030 Framework for Climate and Energy was adopted. It sets out predictable and certain energy and climate objectives for 2030. The renewable energy target is to reach at least 27% of renewable energy in overall energy consumption by 2030, with flexibility for Member States to set national objectives[3].

Phasing out fossil fuel subsidies

In 2013, the International Energy Agency (IEA) estimates that consumer subsidies for fossil fuels amounted to US$548 billion, while subsidies for renewable energy amounted to US$121 billion[4].

[3] http://ec.europa.eu/transport/themes/strategies/2011_white_paper_en.htm

http://europa.eu/rapid/press-release_MEMO-15-5181_en.htm

[4] Fossil fuel subsidies, Global Subsidies Initiative https://www.iisd.org/GSI/fossil-fuel-subsidies

The world's governments will spend USD $5.3 trillion (€4.8 trillion) subsidising the cost of oil, gas and coal this year, undermining efforts to combat global warming and wealth inequality and fund public health. A report[5] by the International Monetary Fund (IMF) into global energy subsidies describe the finding as 'one of the largest negative externalities ever estimated'. They say eliminating the subsidies would raise global government revenues by USD $2.9 trillion, cut global CO2 emissions by more than 20%, and halve the number of people killed prematurely by air pollution. The estimate of USD $5.3 trillion compares with a calculation by the IMF two years ago which put the global figure at USD $1.9 trillion. But now it includes environmental and health costs, which have now been added, with the result that the total underpayment has more than doubled. Even that has been described as conservative by the British economist Lord Nicholas Stern, who says the subsidies for fossil fuels are "*much bigger than even this report suggests*". There are three key findings from the study:

- Energy subsidies are 'dramatically higher' than previously estimated;
- The argument that removing subsidies would damage a country's competitiveness is flawed and countries would benefit from enacting energy subsidy reforms unilaterally;
- The potential fiscal, environmental and welfare impacts of energy subsidy reform are substantial and, if handled sensitively, could further improve welfare and economic growth. It also recommends higher prices for traditional motor fuels as the most effective and economical way of reducing traffic congestion[6].

Further information

A collection of examples of the use of technology, policy and partnerships in all modes of transport can be found on **http://ppmc-cop21.org/80dayscampaign/**

There are **major international initiatives on transport** (on public transport, rail, electric mobility, green freight, aviation and inland shipping) details available here http://ppmc-cop21.org/wp-content/uploads/2015/06/slocat-flyer-new-rev-9-28.pdf

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[5] May 2015

[6] http://www.transportenvironment.org/news/65-economic-output-spent-fossil-fuel-subsidies

http://www.imf.org/external/np/fad/subsidies/