NEW TRANSPORT SCENARIOS HIGHLIGHT ROLE OF CITIES IN COMBATTING CLIMATE CHANGE

On 4 December the International Transport Forum at OECD released projections for modal shares, and emissions at the Lima COP20 conference.

Transport in the urban centres of emerging economies is becoming a major battleground for combatting climate change.

Large cities in China, India and Latin America each with over 500,000 inhabitants will more than double their share of world passenger transport emissions by 2050 to 20% (2010: 9%), if current urban transport policies remain unchanged. It is understood that 38% of the total growth in world surface transport passenger emissions to 2050 will come from big cities in these three regions in such a business-as-usual scenario.

These new projections, released by the International Transport Forum (ITF) at the OECD during the COP20 climate change negotiations in Lima, Peru, highlighted a critical choice for policy makers: whether to pursue urbanisation based on public transport or on private transport with cars and two-wheelers.

Sustained policies that promote either private or public urban transport lead to very different mobility futures, as projections for modal shares in 2050 have been shown.

In India
- a private transport-oriented policy for cities would lead to two thirds (67%) of urban mobility being covered by car traffic, with motorised two- and three-wheelers (17%, 5%) and public transport (11%) accounting for only a third;
- with pro-public transport policies, the share of buses and other public transport forms could be almost four times as high and reach 39%: practically on par with car travel (40%). Two- and three-wheelers would cover 12% and 9% respectively.

In Latin America
- a public transport-oriented policy would result in a 50% share for public transport, 44% for cars, and 7% for two-wheelers in big cities.
- private transport-oriented policies would lead to an 82% share for cars, 11% for public transport, and 6% for two-wheelers.

In China
an urban policy with few new roads and stringent expansion in car ownership restrictions would lead to a 44% share for cars and a 34% for public transport; with two-wheelers taking 10%.

In absence of these measures, cars would account for 78% of urban mobility, with two-wheelers representing 13% and public transport only 9% of the modal split.

These alternative scenarios have profound impacts for the contribution of urban transport to global emissions, according to the ITF projections:

- **In India**, policies that favour car-use could increase emission growth by 47%. Policies that favour public transport could reduce it by 37%.

- **In Latin America**, policies that encourage private transport would add 35%, while public transport-driven urbanisation could reduce emissions growth by 31%.

- **In China**, emissions would grow by 19% above 2010 levels if cities were to support individual transport, but fall by 26% assuming a shift to public transport.

Understanding context, drivers, and effects of policies is crucial to achieving the desired results. For instance, if a ban on motorised three-wheelers in Indian cities reduced their number by 80% by 2050, this would lead to a mere 4% reduction in CO₂ emissions as people switch to two-wheelers. Reduced mobility for others would impose a social cost.

The ITF Urban Transport Model now allows testing policies that focus on avoiding unnecessary mobility and shifting mobility to modes that emit less (“avoid-shift”), rather than on the effects of improved technology for emissions mitigation.

Commented José Viegas, Secretary-General of the International Transport Forum at the OECD, “One of the biggest challenges for a global mitigation framework is to encompass a wide range of coherent transport interventions while moving towards better methodologies for measuring, reporting and verification. It is desirable that countries develop their mitigation actions as part of a wider urban sustainable policy strategy instead of expecting all other externalities to be automatically reduced as a co-benefit of CO₂ mitigation.”