Tecnology

Posted by: niccosan
Posted on : 2009/1/22 1:00:00

In recent decades, the rapid growth of road transport in the European Region, while supporting economic development and integration, has harmed health and the environment through congestion, road traffic crashes, air and noise pollution, and contributing to sedentary lifestyles and emissions of greenhouse gases. The health and environmental consequences of transport affect most of the population, not just transport users.

Growing concern and commitment to strengthening the integration of environment and health issues into transport policies in European countries led to the establishment of a series of policy frameworks to help them pursue more sustainable and healthy transport. In 2002, these converged in the Transport, Health and Environment Pan-European Programme (THE PEP), jointly managed by the WHO Regional Office for Europe and the United Nations Economic Commission for Europe (UNECE).

Over the past 10 years, many countries have developed strategies and programmes to improve environmental and health protection in the transport sector, especially in the western part of the Region. Policy reform has been slower in some low- and middle-income countries, which gave the need for economic revival priority over environmental objectives. In general, trends show that innovative solutions are required to address the challenges of creating sustainable, accessible and liveable cities.

Transport growth
Extensive building of new roads and motorways has taken place across the European Region. In the 25 Member States belonging to the European Union as of 1 May 2004 (EU-25), the overall length of motorways grew by 38% on average between 1990 and 2003, and the volume of passenger and freight transport has doubled over the last 25 years. In eastern Europe, the Caucasus and central Asia and in south-eastern Europe, the length of newly constructed motorways grew even more remarkably: by 144% and 157%, respectively.

Effects on the environment and health: a decade of facts and figures
• Traffic accidents kill around 100 000 people per year in the European Region, and cause some 2.4 million injuries. People under 25 years of age suffer a third of these deaths.

• Air pollution is estimated to have claimed an average of 8.6 months from the life of every person in the EU-25, and emissions from road traffic account for a significant share of this burden.
• About 120 million people in the 15 EU Member States before May 2004 (EU-15) – over 30% of the total population – are exposed to levels of road-traffic noise exceeding the standard: 55 Ldn dB.
• Physical inactivity is associated with 600 000 annual deaths in the European Region, where about 20–30% of adults are estimated to be obese.
• Greenhouse-gas emissions from the transport sector increased from 16.6% of the total in 1990 to 23.8% in 2006 in the 27 current EU Member States, and continue to grow. Road transport accounts

for more than 70% of these emissions.
• Transport is 95% dependent on oil and accounts for 60% of world oil consumption; this dependence increasingly exposes the sector to shocks related to oil supply and price instability.
• Today, the road network occupies 93% of the total area of land used in the EU for transport; rail occupies only 4% and uses about 3.5 times less space per passenger-kilometre than cars.

Areas of intervention for sustainable urban transport in the framework of THE PEP
As to air pollution, some technical and legal measures implemented since 1990 have led to a reduction of some vehicle-exhaust emissions in the European Region. The most significant is that, since January 2002, all petrol sold in the EU has been unleaded. In 2007, the European Commission proposed new standards for transport fuels that will further reduce their contribution to air pollution and climate change.

One important legal instrument for reducing emissions into air, including those from transport, is the UNECE Convention on Long-range Transboundary Air Pollution. Each Party to the Convention must reduce emissions and develop effective strategies, policies and measures to abate air pollution.

In 2006, WHO issued new air quality guidelines, challenging countries around the world to improve air quality in their cities in order to protect people's health. Reducing levels of fine particulate matter (called PM10) was estimated to reduce deaths in polluted cities by as much as 15% every year.

Most western European countries have made progress in reducing road traffic injury: the number of road fatalities declined by 21% in the EU in 2000–2005, despite the considerable increase in traffic. In contrast, an increase in road traffic injuries accompanied the growth in motorization in the eastern part of the European Region. To reduce the death toll on the roads, many countries have set ambitious road-safety targets and are monitoring their progress. For example, EU countries have committed themselves to halving the number of deaths by 2010, compared to 2000 levels. The most effective preventive measures include better enforcement of speed and alcohol-consumption limits, as well as the use of seatbelts.

Exposure to noise has decreased in the EU since the 1980s and in eastern countries since the 1990s. Nevertheless, the expected growth in traffic, with motor vehicles and aircrafts being the most important contributors, is likely to offset some of these achievements. Road-transport regulation has only relatively recently included a focus on noise, most notably through the 2002 EU directive on environmental noise. The WHO Regional Office for Europe is developing guidelines for night-time noise through a project
implemented in partnership with the European Commission and several countries. A holistic, integrated approach to reducing human exposure to noise, however, is lacking at the international level.

Many countries have favoured motorized transport and contributed to decrease opportunities for cycling and walking. There is some indication, however, that transport professionals are increasingly working with health professionals to improve conditions for walking and cycling and to help to make physical activity part of daily life. A shift towards these two active modes of transport is becoming an important part of several countries' national and city strategies to reduce not only emissions of greenhouse gases and air pollutants but also congestion. The potential for walking and cycling to have a bigger share of total transport still remains largely untapped in many countries.

The overall levels of carbon dioxide (CO_2) emissions continued to rise steadily over the last 10

years. In the European Region, energy and transport are the biggest sources of these emissions. During 1990–2000, transport's contribution to greenhouse-gas emissions increased by 4% in central and eastern Europe and by 19% in the 15 countries in the EU. Transport emissions are projected to rise by about 50% from 2000 levels by 2030.

Further information is available from the web sites of THE PEP (www.thepep.org/en/welcome.htm), the WHO Regional Office for Europe (http://www.euro.who.int/transport) and UNECE (http://www.unece.org/trans/welcome.html).