ENERGY EFFICIENCY
CONTRIBUTION OF URBAN RAIL SYSTEMS
DID YOU KNOW THAT IN EUROPE...

There are 41 metro networks, totaling 141 lines, 2,528 stops and 2,588 km of tracks. 70% are underground.

There are 177 light rail and tram networks, totaling 1,074 lines, 23,500 stops and 14,116 km of tracks. 0.10% are underground.

The total urban rail energy consumption is ~11,000 GWh per year, which is comparable to the residential energy consumption of the Brussels region (approximately 1 million people).

Expressed in kWh per passenger-kilometer, the energy consumption of urban rail is 0.12. This is 7x less than an average car in urban context.

The figures cover the European Union (28), Norway and Switzerland for the year 2013.
TO FULLY REAP THE BENEFITS FROM URBAN RAIL SYSTEMS...

> SET STRONG MODAL SHIFT AMBITIONS

This includes supply and demand measures to develop an attractive mobility service as part of the urban lifestyle. Customers expect mobility solutions that are quick, safe and secure, convenient, reliable, with clear information, clean, comfortable and affordable.

For public transport to become citizens’ mode of choice, it has to become the mode of choice of decision-makers. Integrated urban policies must be implemented to optimise the benefits of public transport as well as supportive mobility management to steer demand.

> SUPPORT SECTOR INITIATIVES TO FURTHER REDUCE ENERGY CONSUMPTION

In buildings such as depots, workshops and stations:
- Optimising ventilation, heating and cooling
- Replacing old lighting equipment and lighting control
- Improving energy efficiency of equipment such as escalators, power transformers, ...
- Designing eco-friendly buildings...

In vehicles:
- Using eco-friendly driving rail and bus vehicles
- Uncoupling metro cars
- Recovering braking energy...

In energy production systems:
- Geothermal energy for heating/cooling system of buildings
- Wind energy with the installation of turbines at stations
- Solar energy on the roofs of tram/bus depots...
UITP is the international association representing public transport stakeholders worldwide. In the European Union, UITP brings together more than 400 urban, suburban and regional public transport operators and authorities from all member states and is consequently recognized as a key interlocutor for the European institutions and other bodies. It closely follows, advises on and participates in the elaboration of the European policies and initiatives that have an impact on urban, suburban and regional public passenger transport.