

How can urban mobility be made more efficient?



Inspiro. The new metro.
Inspiration Citylife

Answers for mobility.

SIEMENS



**Why can't my ride to school
become a fun ride?**

**Shouldn't we start
to concentrate on life again?**

**Can I take a break while still
rushing to my next meeting?**

**Shouldn't modern transportation
also be good for the environment?**

**Can I travel underground as
light and free as in daylight?**

How can we make life in the city more liveable?

Urban centres today and particularly in the future present us all with great challenges. We have to ask what kind of mobility people expect and what their hopes and aspirations are. Companies and authorities have to address these issues and provide sustainable answers to the key questions of the twenty-first century.

Advancing urbanisation and population growth have led to increasing demand for mobility and transport throughout the world. More and more people live in large cities. As private vehicles continue to come up against infrastructural and environmental barriers, the quality and competitiveness of cities will depend to an ever larger extent on rapid and reliable public transport. This makes sustainable mobility a key issue for the twenty-first century.

The challenges of the future are clear: We have to improve traffic flows in urban centres, intelligently network transportation systems and reduce carbon dioxide emissions. This calls for new concepts for individual mobility and optimised transport systems.

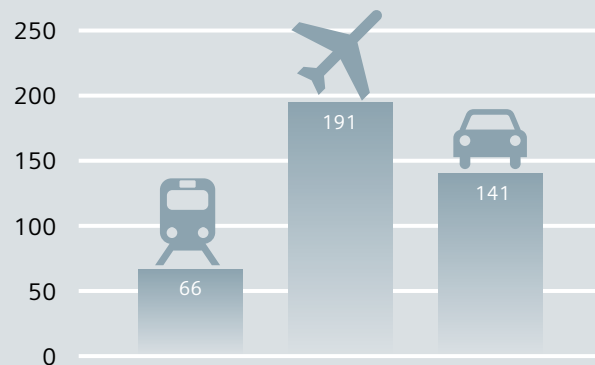
Source:
Institut für Energie- und Umweltforschung,
data base environment & traffic, 2006

What's your
inspiration
for tomorrow's
mobility?

www.siemens.com/mobility/inspiro

CO₂ emissions in passenger traffic

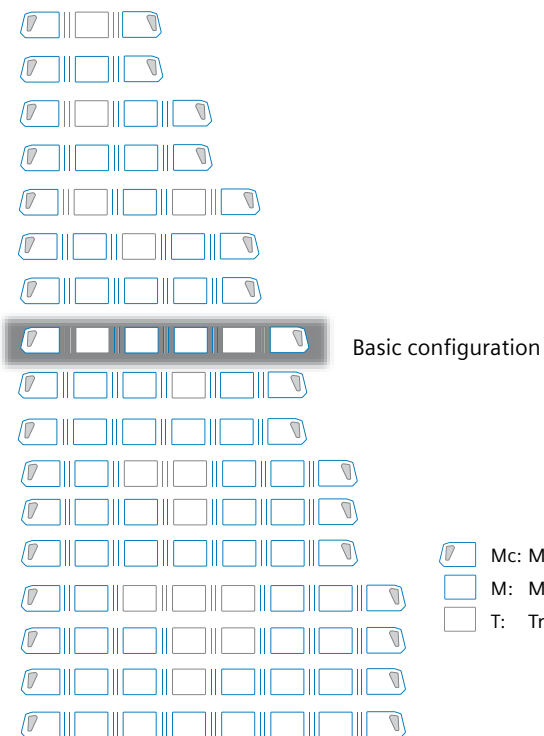
■ CO₂ in g/Pkm





Inspiro. The answer from Siemens.

In order to meet the diverse demands of tomorrow's urban public transport, we have developed a metro that sets new standards in its class. Inspiro is the new metro from Siemens bringing maximum utility through high transport capacities and low operating costs combined with the Siemens environmental benefit: energy efficiency and environmental friendliness at all stages from manufacture and daily operation to almost complete recyclability. The full integration of the Inspiro in the Siemens "Complete mobility" concept is also unique.



Flexible and reliable

The basic vehicle in the Inspiro platform is a six-car unit. Configurations with three to eight cars with variable degrees of motorisation and features are also possible. The interior can be fitted with side seats, rows or mixed seating. The vehicle concept was developed in accordance with the latest crash and fire protection standards and the car body has increased compressive strength. Ultramodern interior video monitoring and fire protection systems can be installed. A derailment detection system and highly sensitive door monitoring can also be provided to maximise passenger safety.



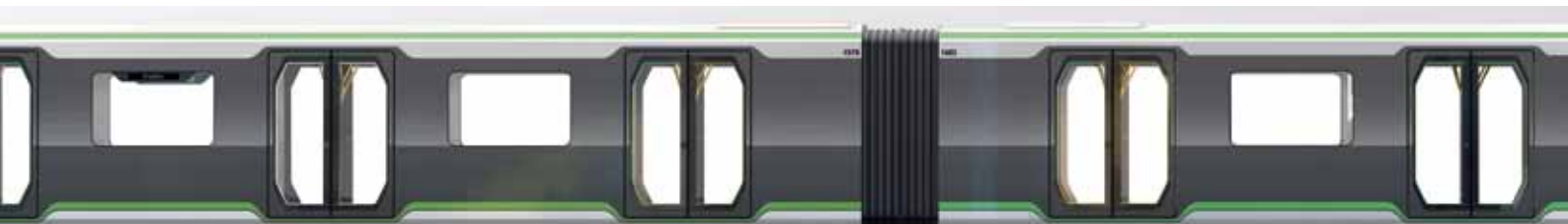


Tried and tested

The Inspiro platform is a product of Siemens' wide-ranging experience in underground railways. Siemens metros have proved their capabilities all over the world. The new Inspiro modular vehicle concept is based on tried and tested components. Every vehicle is checked before delivery at Siemens' own Wegberg-Wildenrath test and validation centre. Particular attention was paid during development to the easy replacement of wear and spare parts. Maintenance activities can be further facilitated through the optional use of remote diagnosis, thereby increasing the availability of metro train 'sets for passenger transport.

Cost-effective and environmentally sound

The low operating and maintenance costs, reduced energy consumption and the use of natural and recyclable materials offer benefits for operators and the environment alike. The experience gained with the Oslo metro project, which has a certified 94.5% recycling rate, is an integral component of the platform concept. The lightweight aluminium car structure, the new demand-controlled air conditioning and the weight-optimised chassis reduce energy consumption. The electrodynamic braking system slows the vehicle to a standstill, thus reducing noise emissions. The optional driver assistance system and the possibility of driverless operation, as a unique feature also in combination with conventional operation, guarantee the highest level of energy efficiency.





Inspiro.

Travel time is quality time.

The new Inspiro meets the demand for higher quality of life. Passengers can travel in a pleasant and stress-free atmosphere thanks to the bright interior, attractive lighting and draught-free air conditioning. The natural materials and warm colour schemes enhance the relaxing and refreshing feeling experienced when travelling in the Inspiro metro.



Extraordinary and efficient

The modern and distinctive vehicle design by the internationally award-winning Siemens partner DesignworksUSA, a subsidiary of the BMW Group, makes an immediate impression. The exterior with its dynamic front end and large windows is striking and elegant, putting a stamp on the image of the city. The Inspiro has large entrance doors and thoughtfully designed interior fittings with wide passageways that give a generous feeling of space. The innovative interior lighting system with carefully located lighting groups creates a pleasant atmosphere hitherto unseen in metro systems. Attractive appearance on its own is not sufficient, however. As an added bonus, there are no electrical or appliance cabinets in the passenger area, creating more space for travellers and enabling the operators to optimise passenger capacities. The wide entrances, optionally with outside sliding or swing plug doors, make it easier for passengers to get in and out and thus reduce the time spent by the trains at stations. More rapid transport is not only of benefit for passengers but also increases the efficiency of the vehicle fleet.

Innovative and practical

Instead of the usual poles and rails, Inspiro offers innovative and distinctive supports in the form of a stylised branched tree, called Lighttree, which several passengers can hold on to while maintaining a comfortable distance. The Lighttree also symbolises the environmental concept behind the Inspiro design, from the completely recyclable aluminium car body to the hard-wearing interior materials.

The supports provided for passengers to hold on to also have large displays providing information at convenient places in the car. Known as the "Virtual Conductor", it not only improves the quality of passenger information, it also enhances the passenger's sense of security. This increases public acceptance, especially among elderly persons and those with reduced mobility. These displays can also be used for advertising or entertainment. Inspiro passengers not only travel safely and comfortably, but also have the feeling that they are being well looked after. Travelling with Inspiro becomes a pleasure in its own right! Fresh off the tram but already looking forward to the next ride. That's what passengers in Warsaw will feel, for that's where the very first Inspiro units will enter service.



Siemens AG
Industry Sektor
Mobility Division
P.O. Box 3240
91050 Erlangen
Germany

mobility@siemens.com
www.siemens.com/mobility/inspiro

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The information in this document contains general
descriptions of the technical options available, which
do not always have to be present in individual cases.
The required features should therefore be specified in
each individual case at the time of closing the contract.

Train exterior and interior design by
BMW Group DesignworksUSA.

