

photo: Dylan Garcia/Still pictures



Pedal power

Cyclists in Vienna can hop on any of the city's 1,500 public bikes any time of the day or night free of charge, thanks to the municipal 'Viennabikes' programme launched in 2002. The pink and blue bikes – weighing about 17 kilos each to deter theft – can be picked up and dropped off at any one of 235 terminals throughout the central districts. Users insert a small deposit of 2 euros (\$2.60), refunded on return, and tourists are invited to take free maps of the city with them.



photo: <http://www.wien.gv.at>

Think traffic, think jams. Cars in Washington DC spend the equivalent of almost three days a year stuck in traffic; vehicles in Bangkok, an astounding six weeks. So we can add wasted time (costing trillions of dollars), to air and noise pollution, and injuries and deaths from accidents – in assessing the price of city life.

And it's going to get worse as cities grow – and grow more prosperous. Car ownership rises as fortunes improve: on average, wealthy households make twice as many trips daily as lower income ones. Are there any answers?

High performance

Bogotá, Colombia – one of the world's highest capitals – has made extraordinary progress in switching from cars to public transport. It has set up a remarkably successful rapid transit bus system – the TransMilenio – which now carries more than a million people a day and is estimated to save each of them an average of 300 hours in commuting time every year. By 2020, 85 per cent of the city's 9 million people will live within 500 metres of a station. Meanwhile the city bans 40 per cent of its cars during rush hours, closes 120 kilometres of roads to traffic every Sunday, and has scrapped planned new highways and replaced them with cycle routes.

JAMS

photo: Peter Danielsson



photo: C. Garroni Parisi/Still Pictures



photo: E. Hebenner, Flexcar

Pooled cars

Tens of thousands of people in Seattle, San Diego, Chicago and Boston enjoy the convenience of cars without the hassles of ownership by joining 'mobility clubs'. These operate fleets of shared vehicles for members, who pick them up at designated spots within walking distance of their homes and return them when they are finished, at a cost generally ranging, depending on the car, from \$8.50 to \$12.50 per hour.

For another example of cutting jams – and air pollution – see London's congestion charge in the 7 City Wonders on page 22.

TOMORROW?

Cleaner buses

Four years ago India's Supreme Court ordered the conversion of Delhi's public transport from diesel to compressed natural gas (CNG), citing the city's abysmal record on air pollution. During the 20 (sometimes chaotic) months that followed some 7,200 buses, 400 minibuses and 55,000 auto-rickshaws switched to cleaner fuel. Delhi's present fleet of 75,000 CNG vehicles is much the world's largest, with runners-up Beijing and Seoul operating 1,600 and 1,000 natural-gas-powered buses respectively. The city has also passed laws to discourage diesel vehicles, and requires all new private cars to meet European Union emissions standards.



photos: Wolfgang Schmidt/Still Pictures

TUNZA test drive

photo: Associated Press



Leonardo DiCaprio at the wheel of his Prius.

Tunza drove into the future when it visited Toyota's Tsutsumi factory in Toyota City, Japan, home of the Prius, the leader in a new age of hybrid vehicles.

The Prius is a hybrid between a petrol and an electric car – running on a combination of conventional fossil-fuel-based energy and battery power. It is self-charging as the car's motion is used to power the battery. It produces less than half the emissions of a normal car – helping create cleaner cities and combat global warming.

Of course, no one would want to drive around in something that feels like a child's toy or mad scientist's experiment. But owner surveys in the United States – where more than 50,000 Prius cars were sold last year – report over 90 per cent customer satisfaction.

And at this year's Oscars in Los Angeles, more than 20 stars – including Leonardo DiCaprio, Charlize Theron, Scarlett Johansson and Orlando Bloom – made their entrances in chauffeur-driven Prius cars rather than the traditional stretch limo.

What is it like? We tried one out under the helpful eye of 26-year-old Toyota employee Tomoko Imai. 'You won't find a key to start it,' she told us. 'Just press the power button on the dash.'

As befits a hybrid, the Prius combines the familiar and the strange. Apart from a few futuristic touches, such as intelligent hands-off parking, it feels like a normal car. But when it's at a standstill – for example in a traffic jam – it switches off. Instead of consuming fuel and polluting the city, it just sits and waits. Then, when you want to go, it goes – with a healthy acceleration of 0-100 km/hr in under 11 seconds and a top speed of 170 km/hr, above many national speed limits.

But it really shines in fuel economy and green credentials. It starts by using battery power and runs on that until the energy demand increases, when the petrol engine kicks in. So it's actually cheaper to run in heavy city traffic than on the open road, the opposite of conventional cars.

Nor is that its only green feature, as Tomoko pointed out. Its mats are made from recycled sugar cane waste and the soundproofing is made of shredder residue – minute particles of resin, fibre, glass and rubber. And, at the end of its life cycle, the Prius's battery can be returned to any Toyota outlet where it will be sent for recycling.

Toyota now sells 90 per cent of the world's hybrid vehicles. And rather than jealously guarding its green technology, it is licensing it to rival car manufacturers, starting with industry giants Nissan and Ford.

Fujio Cho, Toyota's President and Chairman of its Environment Committee, explains that the company wants to contribute to the sustainable development of society and the planet. 'Toyota places great importance on the idea of "good faith"... acting with sincerity and without betraying the confidence and expectations of others,' he says.