



acem The Motorcycle Industry in Europe

Powered Two-Wheelers the SMART Choice for Urban Mobility



PTWs: the SMART Choice For Urban Mobility

Europe's cities are main engines of economic growth, but today's urbanisation trends are generating increased congestion, greenhouse gas emissions, air pollution, noise, waste of energy and avoidable associated costs. Quality of life and prosperity in European cities rely on efficient and sustainable mobility while economic and individual development of citizens depend also on affordable and adaptable transport options.



// Innovative mobility should also be about creating a new culture of transport based on increasing the choice of available transport modes. Administrations, striving to find solutions compatible with stricter than ever budgetary constraints, should learn to exploit the advantages offered by PTWs in terms of making traffic more fluid and requiring less parking space, while citizens could benefit from their flexibility, convenience and affordability. //



The outlook for mobility in the EU

The European Commission adopted a roadmap for the next decade to build a competitive transport system that will increase mobility, remove major barriers in key areas and fuel growth and employment¹. The objective of these proposals is to dramatically reduce Europe's dependence on imported oil and cut carbon emissions in transport by 60% by 2050. One of the key goals reads: **No more conventionally-fuelled cars in cities.**

The European Commission has called for a “necessary transition from a primarily car based personal mobility in cities to a mobility based on walking and cycling, high quality public transport and less-used and cleaner passenger vehicles as the central strategic challenge for cities in the decades to come”. The White Paper on Transport argues that clean urban transport and commuting can be achieved also by using vehicles belonging to the motorcycle family encouraging “the use of smaller, lighter and more specialised road passenger vehicles”.

As urban populations in Europe are estimated to grow from today's 60% to 80% by 2020, mobility in cities will inevitably gain more attention from policymakers and citizens as well. An efficient integrated **urban transport toolbox** should support and encourage the development on an equal footing of different private and public transport modes, addressing citizens' needs².

Today's lifestyle calls for flexible individual mobility. Door to door trips and multi-destination journeys are essential components of a modern way of life. Only personal powered transport allows this kind of flexibility. One widely used form of transport, chosen by an increasing number of users, is the Powered Two Wheeler (PTW). The staggering growth of PTWs in cities in recent years proves that citizens are more and more finding the motorcycles and scooters as the solution for their daily mobility needs .



Relaxed riding position

Accessible price

Easy handling with
Continuous
Variable Transmission

Low running costs

Low emissions in
«real life» conditions

Protection from
wind and rain

Enhanced braking with
Advanced Braking Systems

Small size: avoid queue,
easy to park

What Are Powered Two Wheelers?

- The term 'Powered Two-Wheelers' (PTW) covers a wide range of vehicles from mopeds, scooters and other small capacity motorcycles, ideal for urban journeys, to large capacity custom, sports and touring models.
- These vehicles, since the early eighties, have experienced tremendous technical and design improvements. PTW manufacturers have developed and marketed safer, cheaper, more economical to run and more comfortable products. Riding a PTW has also become easier and today the range of available models can satisfy the most varied user needs.
- Tricycles, minicars, light commercial quadricycles are also part of the PTW family.

Motorcycling in a nutshell

- Motorcycling is popular: in the EU around 35 million users ride regularly.
- Riders contribute around 150 billion EURO per annum to the EU economy.
- Biking is big business: The motorcycle industry employs 150,000 people in 5,700 enterprises. 2,000,000 new bikes are sold each year (2010) in the EU.
- Motorcycles bring mobility: citizens take to PTW when and where traffic congestion and incomplete public transport make for inconvenient mobility.
- Motorcycling responds to practical needs: over 60% of journeys are for commuting, utility, practical purposes (especially important for job seekers and for those on low incomes).
- PTWs save time: cutting journey times by up to 48% in some surveys.
- PTWs use land more efficiently: up to 5 bikes can fit into one car parking space.
- Riders reduce traffic congestion: motorcycles and scooters are shorter and narrower and remain more mobile in traffic jams.
- PTWs create very little pollution: In real life conditions, for the same journey, PTWs emit 50% less CO₂ than automobiles³.
- On average risk of injury has fallen by 18% in the EU since 2001.

PTWs and the environment

- Manufacturers' commitment towards the environment and their innovation capacity ensure that emissions from all L-category vehicles (scooters, motorcycles, quadricycles, etc.) undergo continuous reductions, which are regulated at European level.
- Compared to other road surface transport modes (automobiles, freight transport) PTW contribute to only 2% of overall emissions.
- Motorcycles require far fewer resources during manufacture. Once a motorcycle has reached the end of its useful life over 75% of components can be reused on other machines, the remaining 25% can be recycled.



¹ COM (2011)144; Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system.

² Automobile Club d'Italia, Study on congestion times and costs performed in Rome, Milan, Turin, Genoa, 2009

³ Powered Two Wheelers compared with cars: Driving dynamics, fuel consumption and exhaust emissions in daily use Bertrand-Olivier DUCREUX, ADEME (French Environment and Energy Management Agency), 2008

Electric mobility and PTWs

Electric scooters combining low costs with eco-friendly mobility are making their appearance on the market with increasing expectations. Electric PTWs are light, small and specifically intended for urban use. Despite the great potential represented by EVs and fuelled by extensive media coverage, “range anxiety” and costs still represent a limitation for the take up of electric mobility.

Electric PTWs still account for only 0.3% of the market, however they experienced a 60% surge in purchases between 2009 and 2010, and a similar growth in 2011.

Electric cars will always be bound to size and mass constraints. PTWs however are best positioned to fully exploit the advantages of electric mobility in cities, which is based on limited ranges, shortage of parking spaces and trips through highly congested areas. PTWs are the likeliest transport mode shift to full electromobility provided that they are supported by public policies

Conclusions – Real Integration

PTWs over short distances are a great solution, especially when intended as part of a ‘multi-modal’ journey, in everyday travel in cities. ‘Joining up’ travel for longer journeys, meaning that PTWs can be used at the beginning and/or end of journeys where public transport cannot offer a complete door to door solution. This will require PTW facilities at public transport intersections. Furthermore PTWs are the most likely transport mode to shift to full electromobility.

In its comprehensive strategy to a single European transport system the European Commission encourages «the use of smaller, lighter and more specialised road passenger vehicles» leading to a «substantial contribution in reducing the carbon intensity of urban transport while providing a test bed for new technologies and opportunity for early market deployment».

Mopeds, scooters, motorcycles, tricycles and quadricycles, widen the transport offer in their own right and as part of a true co-modal approach to mobility. Policy makers looking to meet citizens’ expectations need to exploit every available tool. Smart individual mobility can contribute to change our transport paradigm, through innovation. Quality of life depends on our capacity of innovating our mobility.





Association des Constructeurs Européens de Motocycles



Avenue de la Joyeuse Entrée, 1

1040 Brussels

BELGIUM

Phone : +32 (0)2 230 97 32

Fax : +32 (0)2 230 16 83

Website : www.acem.eu