

PEDAL POWERED MACHINES

NEW TENDENCIES FOR A SUSTAINABLE WORLD

Technologies for the Pedal Powered Machines construction now represent a trend of great interest around the world, to promote lifestyles that reduce dependence on traditional energy sources.

In the most industrialized countries, these technological solutions are specially created to promote a sustainable mobility, reducing pollution. Interesting examples can be found in [Low Tech Magazine](#) that features [articles of interest on velomobiles](#).

To give an idea of their success: in 2012, the European Commission started a three year campaign for Sustainable Urban Mobility, to battle the alarming level of congestion of cars in cities and towns across Europe. The campaign was inaugurated on the [Grand Place of Brussels with 30 Velomobile riders](#) coming from nine different countries. The two weeks tour started in Netherlands and travelled through Belgium, France, Luxembourg and Germany. Velomobiles, human powered vehicles, presents one of the emphasized actions in the European Commission's campaign.

Velomobiles cannot compete with common cars performance, but the modern aerodynamic design makes the machine requires three times less energy than riding a normal bicycle. A regular cyclist can easily maintain a cruising speed of 40 km/h. Today many European private companies, influenced by new ecological trends, produce these means of transport, such as the [Dutchbikes from Holland](#). This company also provides in its website manuals and instructions for the assembly.

In 2012 a new edition of the [Roll Over America](#), to which 50 North American and European velomobile riders participated in a 4-week tour and 5,000 kms throughout the States, leaving from Portland and reaching Washington DC. The tour is organized to promote the use of these eco-sustainable vehicles. Probably, like the timeless bike that is achieving resounding success, even velomobiles, still considered a hobby, will be attractive means of transport in the future for mobility in the city, in the surrounding area, for productive activities and leisure.



It is still in Holland, known in Europe as the land of bicycles (14 million out of 16 million inhabitants) where a futurist company such as [Tolkamp Metaalspecials](#) designed a bus for kids, to get to school biking. It is increasingly common that companies produce and citizens use vehicles that run on pedals, to pollute less, reduce costs and improve the level of health of the population.

Health benefits are quoted by the [Regional Office WHO in Europe](#) with the [Health Economic Assessment Tool HEAT](#). This tool estimates the economic savings resulting from reductions in diseases as a consequence of regular cycling: riding just three hours a week should cut the risk of heart disease and strokes by half.

Pedal energy is also re-launching for production and household purposes, recovering traditional technologies that date back to ancient times when fossil fuels and electricity were not available yet. [Low Tech Magazine](#) presents an historical overview about pedal powered machines use and in [No Tech Magazine](#) section you will find many examples of machines designed to recycle electronic waste or woollen clothes and for other households and productive uses.

In 2010 the [Guatemalan Association Mayapedal](#) won, with its bike-machines, the prestigious award [Curry Stone Design](#). Its plan to become a reference technology centre in the region, for the production of bicycle machines to support local productive activities and for the management of environmental resources, is part of international trends increasingly oriented to sustainable solutions.



To know more

[Eco Mobility World Festival 2013](#)

[Bicycle car in Wikipedia](#)

[North American Velomobilist Website](#)

[Mother Earth News](#)

[Article in Pedal-Power](#)

[Article in fastcoexist](#)

[Article in treehugger](#)

[Article in Pedal Power](#)

[Article in TDB](#)

[Article in Challenger Velomobile](#)

[Velomobiles Seminar](#)

[National Geographic](#)