



View from Berlin

Volkswagen's visionaries

| by Stefan Nicola



At Volkswagen's "future research department" in Wolfsburg, they dream about the car of the future. Only it may not be a car at all.

Wolfgang Müller-Pietralla, the 48-year-old head of Volkswagen future research department, flicks through a large folder with images of cars that look like they're straight out of a science fiction movie. Some are small, others large, some drive on two, others on three or four wheels, some are powered by electricity, others by hydrogen or even the leg muscles of the person at the wheel. 'It's incredible how many fascinating vehicle and mobility concepts we get each year,' Müller-Pietralla says.

The folder contains images for the Interior Motives Design Award which Europe's largest carmaker has supported for the past five years. Students from all over the globe design vehicles to win prizes according to the yearly changing briefing themes. This is just one way in which the German car giant tries to get some insight into how its customers will behave down the road.

It is Müller-Pietralla's job to get some idea of what the future will look like – and he is convinced electric mobility has the future. 'Electric mobility will become a serious competitor for fuel and diesel engines. Not only because electric vehicles are sustainable, but also because their driveability is perfect. The torque is awesome, the car is silent, low in vibration – those are all characteristics that we have always wished for the fuel engine to have. And now we're going to get all of this. If the customers experience that, and the battery technology improves as well, then the acceptance for electric cars will rise exponentially, and the shift will come.'

But he points out that electric mobility is about more than just the vehicles. There is an entirely new infrastructure

needed, complete with charging stations and high-voltage sockets in public squares or parking lots, as well as a modern communication network to link the cars into an efficient mobility system. 'The Internet and wireless communication technologies will help us organize mobility more efficiently, for example with automatic break systems to avoid traffic jams', says Müller-Pietralla.

Volkswagen's future researcher believes that the trend in the megacities of the future will move toward city cars, 1-person-vehicles and micro-mobility. An example is the "Tokyo 2025", a 1-person car designed by Pforzheim University student Marko Pack that is steered by body movements and can be collapsed to the size of a suitcase. 'And there will be transition concepts that include parking your car at the periphery of the city and then driving into town with a Segway, for example.' A Segway is a two-wheeled electric vehicle which a person can stand on, rather like a skateboard.

But there is no one-size-fits-all solution', says Müller-Pietralla. 'It's not enough to say, "We need small cars," or, "let's rely on public transportation," if there is no infrastructure for either one, or if the driving pattern is different. Only a custom-made mobility concept can deliver sustainability, and we are striving to develop that.'

In other words, there is not one future for our private transportation system – there are many. ■