



**Better Place's Contribution to the European Commission's Consultation on the
Future of European Transport Policy
September 2009**

Who we are and what we do

Launched in 2007 with \$200 million of venture funding, Better Place of Palo Alto, California (US) is building the charging infrastructure and intelligent network to deliver a range of services to drivers, enable widespread adoption of electric vehicles (EVs), and optimize energy use.

The company's objective is to accelerate the transformation from the century-old automotive model of running on oil to a sustainable electric solution based on renewable energy. Indeed, the key is the mass adoption of electric transportation, charged through an open standard ubiquitous charging network, powered by energy from renewable resources.

Better Place is working with partners to build its first standards-based networks in Israel, Denmark, Australia, California and Hawaii. Better Place will activate networks on a country-by-country basis with initial deployments currently underway and mass market availability of electric cars in its first two countries, Israel and Denmark, in 2012.

The company works with all parts of the transportation ecosystem, including automakers, battery suppliers, energy companies, and the public sector, to create a compelling solution.

Future of transport policy: weaning Europe off its addiction to oil

Better Place welcomes the European Commission's initiative to open a consultation allowing interested parties to express their views on the challenges that the European transport sector will be faced with in the future.

We believe that in order to break the underlying Achilles Heel of the industrialized world - its addiction to oil - government and industry must think differently about how to solve these complex issues using a system-wide approach versus one-off economic and policy actions that sacrifice long-term gain for short-term quick fixes that do not fundamentally address the root problem.

As such, Better Place articulates a new approach that asserts that job growth and economic recovery can be hastened by investing in a blueprint that enhances national security and massively reduces global warming gas emissions. This blueprint is based on a scalable, market-driven approach and existing, proven technologies, not science experiments or one-off demonstrations.

The prospects for the worldwide electric car opportunity are for the moment dwarfed by our captivity to the gasoline-powered fleet, yet strong enough to establish and sustain a thriving electric vehicle market. With nearly 700 million gasoline e-powered cars worldwide today - even if growing at an anemic five percent annually - we can still expect to see one billion gasoline-powered vehicles by 2016, with oil demand outstripping supply. As the IEA states in its November 2008 report, "production continues to outstrip discoveries (despite some big recent finds, such as in deepwater offshore Brazil)".

Better Place is committed to going a step further and putting in place power purchasing agreements for carbon-free electricity that guarantees that driving vehicles in the Better Place network is truly a zero-carbon mode of driving. Indeed, our transportation solution creates long lasting green jobs, eliminates our dependence on foreign oil, substantially reduces our carbon emissions, and bolsters our national security, all while stimulating the economy and offering a collaborative hand to our friends across the oceans: Japan, Europe and China. The key is the mass adoption of electric transportation, charged through an open standard ubiquitous charging network, powered by energy from renewable resources.

In the same period of time, electrifying our transportation system will dramatically reduce urban air and noise pollution, with consumers increasingly more willing to switch to EVs.¹ Indeed, electric cars are forecast to rise from 100,000 cars in 2011, growing 100 times to 10 million electric cars in 2015. The industry is forecast to grow another 100 times from 2015 to 2020. In a September 2008 report, Credit Suisse predicted electric vehicle penetration will reach 10 percent globally by 2020 if the price of a barrel of oil is close to \$100 a barrel, and up to 25 percent if it rises to \$200. By 2020, the worldwide market for electric vehicles could be more than 100 million vehicles.

No other industry except for the Internet has been able to scale so quickly in such a short period of time. To scale successfully, there are other key strategic elements that must be present, and which government policy should encourage.

Better Place recommendations on the future of European transport policy

While upcoming policy initiatives should increasingly focus on ending oil dependence and reducing transport emissions, **Better Place strongly believes that the following immediate elements need to be taken into account and integrated as main pillars of future European transport policy.**

- **Renewables as the main source of electricity for the transport sector**

Achieving the EU's medium and long-term emission reduction objectives is only possible through a constant and steady increase in the use of renewable energy as the main source of

¹ Deloitte, [Study](#) on "A new era. Accelerating toward 2020 – An automotive industry transformed" (study), 16 September 2009

the electricity used in the transport sector. The transportation sector offers an advantageous position for renewable energy since it includes readily available storage, which is the barrier, currently standing in the way of wider adoption of renewable energy. The European Commission should thus strongly encourage putting an end to oil dependence by further promoting *inter alia* the use of renewable sources. To this end, and in order to help kickstart the market for EVs, the Commission should consider the possibility of setting a specific target for electric vehicles (powered by renewables) under a future revision of the recently -adopted Renewables Directive. Indeed, creating the appropriate regulatory framework is therefore essential for an efficient low carbon economy to thrive.

At the same time, promoting the expansion of renewable energy generation and transmission capacity in Europe requires speeding up long-term investments in grid infrastructure. While the infrastructure for electricity distribution is partly in place, additional incentives are needed for developing intelligent charging systems that would allow the vehicle to communicate with the grid.

- **Energy efficiency: a horizontal objective for EU transport policy**

Better Place is a strong supporter of a more integrated European policy agenda. Therefore, enhanced efforts are necessary at the EU level to improve energy efficiency in the transportation sector. These efforts should take into account that electric vehicles are more than three times more efficient at converting energy to motion than conventional internal combustion engines.²

In this respect, one of the key elements of effective energy efficiency targets is to make the energy efficiency of cars visible. This will allow consumers to compare vehicles irrespective of their engine type. We would therefore advocate the energy consumption of all cars to be expressed in kw/km (or in gas consumption equivalent) to empower consumers to make choices based on energy efficiency criteria.

- **Funding for electric vehicle infrastructure development and deployment**

The environmental performance of transport is heavily dependent on the deployment of new solutions and concepts. While the European Commission should ensure that technology neutrality is guaranteed and that the market should decide on the best options, additional funding is necessary for the most promising technologies and for those who are available today and can be mass scaled sooner.

Furthermore, in light of the beneficial impact of the mass adoption of electric vehicles, the Commission should prioritize medium and long -term funding for EV solutions, with a special

² James Boyd, Commissioner and Vice Chair, California Energy Commission. "California's Energy Future: Key Drivers and Issues in a Global Context". [Presentation](#) at the California Clean Energy Round Table. December 6-8, 2006

focus on the development and deployment of infrastructure. Large EU -scale demonstration projects should also be encouraged without delay.

- **Setting global standards for electric vehicles and the supporting infrastructure**

Better Place actively participates in the development of global standards that will accelerate the wide-spread adoption of EVs. Our goal is to establish a completely open network where all EV drivers can benefit from the Better Place charging infrastructure. The standardization of components such as electric plug connectors, communication protocols and battery modules are areas of focus. We are also driving performance standards for battery switch technology to ensure that drivers get the same quality of service regardless of where they go or which service provider they use.

With regards to the international dimension of the transport sector, Better Place strongly encourages the European Commission to become actively involved in the debate on establishing a global standard for a universal electric -vehicle charging system. Indeed, standardization is needed to accelerate the wide -spread adoption of electric vehicles, as this will both reduce costs and increase convenience for EVs owners who will be able to drive from one country to the next, without having to worry about their vehicle being compatible with the local charging infrastructure.

- **Encouraging a favourable taxation regime and other incentives to facilitate the use of electric vehicles**

Better Place strongly advocates effective coordination between the different levels of government so as to avoid fragmentation and inconsistent approaches. Since fiscal matters are decided at national level, the European Commission should seek to enhance its role through the adoption of coordination and harmonisation measures to allow for a favourable energy taxation framework at the EU level.

In addition, Member States should consider adopting preferential regimes for consumers that buy electric vehicles. By way of example, the Danish government launched in January 2009 a new green strategy for a tax model, and a tax exemption scheme for cars (including EVs) is expected before the end of the year.

Lastly, Member States should consider facilitating the mass adoption of electric vehicles. Some measures to this end could include: exempting EVs from road charging and congestion charging schemes; allowing EVs to use bus lanes; and free parking in city centres. Governments should also require some level of EV charging infrastructure in new constructions or when major renovations occurs.