

The Future of Transport

Going-Electric's contribution to the publication of the Commission's Communication in June 2009

Considering that Battery Electric Vehicles (BEVs) are the motorised road vehicles of the future and, therefore, represent a unique opportunity for Europe to create wealth and new jobs, Going-Electric recommends that proactive policies aiming to accelerate the production and commercialisation of BEVs and their parts in Europe be included when setting a vision for the Future of Transport.

Such policies should lead member states to provide incentives for cities, as well as BEV industry and buyers, such as:

- Subsidies for research on automotive battery technology
- Subsidies for investments in the production of BEVs and their parts
- 30% to 60% subsidies on BEV purchase
- Tax reduction for households owning at least one BEV
- Reduced VAT rates for BEV purchase
- Incentives to exchange a Fossil Fuels Vehicle for a BEV
- Increased tax for families owning more than one Fossil Fuel Car
- Exempting BEVs from registration fees and annual tax
- Allowing BEVs on bus lanes
- Exempting BEVs from tolls and congestion charges
- Parking places with a charging pole for BEV's exclusive use
- Free and unlimited parking on public spaces for BEVs
- Incentives for cities allowing only BEVs to circulate in city centers
- Incentives for cities installing charging poles
- Incentives to create awareness on the benefits of BEVs

Some of these incentives could be removed after a couple of years when BEVs become mass produced and, therefore, financially competitive against fossil fuel vehicles.

Introduction

Going-Electric, the European Association for Battery Electric Vehicles, is an association of businesses and business associations, environmental NGOs and individuals, promoting Battery Electric Vehicles (BEVs) in Europe as the most sustainable form of motorised road vehicles.

Because of the huge advantages of BEVs in terms of environmental protection and energy consumption, they are the motorised road vehicles of the future.

Europe must become a leader in their production and commercialisation to remain industrially and environmentally competitive in the automotive sector, to reduce its oil dependency, and to reach IPCC's 2050 targets for CO₂ emissions.

Our Mission is to be the voice of all BEV stakeholders towards a European legislative framework enabling a European leadership in BEV production and commercialisation.

Therefore, our objective is to ensure European policies and directives leading to the research subsidies and the incentives to producers and consumer that will enable Europe to become a leader in BEVs, both in terms of production of BEVs and parts and of their commercialisation.

This contribution contains:

1. Justification for promoting BEVs in the European Union.
2. Several claims we ask to be taken into consideration for the future legislative framework.
3. Separate attachment: Going-Electric's scientific study "Energy consumption, CO₂ emissions and other considerations related to Battery Electric Vehicles"

1) Justification

a) **Battery Electric Vehicles are undoubtedly the motorised road vehicles of the future.**

75 to 80% of the car traffic carries one person over distances shorter than 50km. This transportation need can conveniently be covered by small urban Battery Electric Vehicles (BEVs), which are now entering the market.

If all road vehicles worldwide were BEVs (or Series Plug-in Hybrid Electric Vehicles), the oil consumption would diminish by 20%, and the impact on the environment would be significant:

- Urban pollution: up to 50% reduction for some pollutants.
- Urban noise: drastic reduction of traffic noise in cities.
- Greenhouse gas emissions: about 3% reduction with the EU energy mix, and about 6% if batteries are charged using low GHG electricity sources such as renewable, nuclear and CCS plants.
- Oil dependency: significantly reduced.

BEVs are an instrument that is absolutely necessary for meeting EU's Kyoto targets as well as IPCC's 2050 targets for CO₂ emissions.

b) **Europe should move forward for the reduction of automotive CO₂ emissions**

As suggested in points 1.3.1, 2.4, 2.5, and 2.6 of the Opinion of the European Economic and Social Committee on the "Proposal for a Regulation of the European Parliament and of the Council setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles" (2009/C 77/01), in points 1.5, 1.7, and 4.10 of the Opinion of the European Economic and Social Committee on "Climate Change International Negotiations" (2009/C 77/19), and in points 1.9, and 2.5 of the Opinion of the European Economic and Social Committee on the Facing the oil challenges (TEN 368-CESE 46/2009), EU should have more ambitious objectives concerning the reduction of CO₂ emissions and the emissions of the automotive sector. **BEVs are one instrument towards meeting these objectives.**

c) As many states have their own initiatives, Europe should set common targets.

Many countries and cities throughout the EU including Ireland, France, UK, Austria, and the Nederland have already set objectives for the introduction of BEVs. They have accompanied these objectives with incentives for BEV buyers and drivers.

Going-Electric suggests the European Commission sets a common framework in order to involve every member state with similar incentives promoting BEVs.

2) Our claims for the Future of Transport

Financial and others incentives are badly needed to break the technology barrier and enable widespread BEV commercialisation. Otherwise, Europe may become a laggard in this technology of the future.

a) Incentives for industry

Battery technology must be developed. Batteries are the weak point of BEVs. They are expensive, bulky and heavy. The remainder of the technology used in BEVs is well advanced. ***Therefore, research subsidies must be granted in order to improve automotive battery technology and efficiency.***

In the USA, President Obama has launched a \$1 billion for research in automotive battery technology.

In point 1.14 of the Opinion of the European Economic and Social Committee on the “Proposal for a Regulation of the European Parliament and of the Council setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles” (2009/C 77/01), “the Committee” said “that establishing a dedicated Joint Technological Initiative (JTI) for the car industry could help mobilise the scientific community.”

In addition to research on batteries, industry needs incentives to invest in BEV production and commercialisation. Measures are to be temporary until mass production. Once batteries and electric vehicles are mass-produced, prices will drop, BEVs will become financially competitive, and some of these incentives won't be necessary anymore.

Therefore, financial incentives should be granted to car manufacturers who invest in plants dedicated to the production of BEVs and their parts in order to ensure mass-production.

b) Other incentives

Measures that would be instrumental to the development of BEVs production and commercialisation are essentially financial and other incentives for BEV buyers and drivers including:

- Financial consumer incentives:

- 30% to 60% subsidies for BEV purchase
- Tax reduction for households owning at least one BEV
- Reduced VAT rates on BEVs
- Incentives for exchanging Fossil Fuels Vehicle against BEV
- Increased tax for families owning more than one Fossil Fuel Car
- Exempting BEVs from registration fees and annual tax

- Other consumer incentives:

- Allowing BEVs on bus lanes
- Exempting BEVs from tolls and congestion charges
- Parking places with a charging pole for BEV's exclusive use
- Free and unlimited parking on public spaces

These measures should also concern Series Plug-in Hybrid Electric Vehicles that can run on battery over ranges covering most daily trips.

c) Incentives for cities

- Incentives for cities allowing only BEVs to circulate in city centers
- Incentives for cities installing charging poles

An infrastructure strategy should aim at settling a percentage of charging poles in every city as a function of the number of parking slots in the city. This percentage should increase together with the number of BEVs.

d) Incentives for communication

Communication towards the public is a key to success

As suggested in point 1.4 of the Opinion of the European Economic and Social Committee on the “Proposal for a Regulation of the European Parliament and of the Council setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO₂ emissions from light-duty vehicles” (2009/C 77/01), “Commission” should “propose and coordinate initiatives on motor vehicle advertising and marketing aimed at promoting more fuel-efficient vehicles.”

It is clear that Bev's development involves targeted and well-advised communication. Public must become aware of all the benefits and the capabilities of such vehicles.

It is also a matter of rethinking lifestyles. It implies rethinking mobility and, therefore, communicating new values.

Effective communication includes: TV commercials, press releases, consumer experience in test-drives, interviews of skilful opinion leaders, online videos, blogs and portals.

3) Separate attachment

Going-Electric's scientific study “Energy consumption, CO₂ emissions and other considerations related to Battery Electric Vehicles”.