

# Hit the Green Golf Tournament & Conference

**Brainstorming Sessions** 

This document has been created from the brainstorming sessions held at the Hit the Green event organized by Altran and EVBox on June 14th, 2019. The companies that participated include: Engie, GIC, Airbus, Zeleros, Greentech, and ICEX.



# Hit the Green - Brainstorming

### The future of sustainable transport





## The Future of Sustainable Transport

The Paris Agreement focuses on mitigate global warming to avoid irreversible climate change effects. However, the trends show there is not much time left to find a way to reach net zero emissions. For that reason, some countries have already declared a climate emergency situation. According to this, it is clear that the future of transport will be sustainable. But how exactly will it be?

#### 1. Target travelers

Coming generations (such as Generation Z) are aware of the current environmental situation. They don't want to deprive themselves of travelling the world, but in order to reduce their carbon footprint they take measures such as flexitarianism or 'casual vegetarianism'. Thanks to the services on demand that they can ask from their smartphones, they have also changed the way they move. Nowadays, they don't feel the need of having a driving license, and this is in line with autonomous transport.

#### 2. A future without fossil fuels

Today the world economy depends on fossil fuels, which favors some countries against others. A future where these resources are replaced by electricity would allow equal competition. Besides, electric mobility avoids problems such as oil slick and acid rain. Hereupon, population should claim for a transformation from politically profitable energy economy to public legal right. But how we could replace fossil fuels? Renewable energies are a option, but nuclear fusion appears also as the possible future clean energy. Energy harnessing will also be in the picture, for example by means of intelligent tiles that generate electricity by stepping on them, or by using the braking energy of trains.

#### 3. Energy storage

Energy needs to be stored for example by reusing vehicle's batteries (more sustainable than recycling them). To avoid a global battle due to the battery materials, it is needed to find other ways of storing energy. Renewables can do this with biomass, hydroelectric, and the thermosolar storage with salts.

#### 4. New ways of transport

While we all wait for teletransport, new models emerge to improve the current transport network, such as hyperloop. It would be interesting to have a worldwide transport partnership that proposed a global map where different companies offered alternative possibilities mixing different ways of transport. Virtual Reality, on the other hand, will bring us a mind experience transportation and will reduce trips.

#### 5. Actions

Governments need to take the lead on this transition through a cleaner future and invest in technology and innovation. Educating the population is also necessary to change the global mindset. We need to realize that either we make a sacrifice by changing how we live today at any cost, or we accept that Planet Earth's destiny will not be very optimistic. As an example, there could be a carbon credit for each human at birth, and it would be easy to give credits to other in need so that we would balance and be aware of our impact.







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## The Electric Vehicle, a real challenge





## The Electric Vehicle, a real challenge

Southern European markets (Spanish, Italian and Portuguese) are still unmatured compared to many north European markets. Thus, this brainstorming aimed to provide an analysis of the situation and some possible solutions to solve it. It was very interesting to see how people working in different markets and having different backgrounds agreed on all of the points below.

#### 1. Why don't electric cars take off at a faster pace?

There are clearly some barriers that are stopping a quicker taking off of the electric car, together with the attendants we assessed which are those barriers:

- <u>High initial investment (EV + EV charging point)</u>: Nowadays it is very expensive to buy an electric car (without any financial aid from the government) and even more if you want to have a charging station at home, they believed that cheaper electric cars would help people's willingness to buy one.
- <u>Autonomy of the car</u>:
  - Cultural shift: People have to start changing their minds, they have to stop being afraid of running out of battery in the middle of nowhere. They need to be informed about the new technologies and the new range of battery (400-500 km), It is key to make people trust on Electric cars.
  - Too many necessary charging stations: The fact that there have to be many charging stations: at home, at the workplace, at the shopping centre, etc, may not be the best solution.
- <u>OMEs</u>: Car manufactures have to invest more and more and to put more effort on developing new technologies related to electric cars in order to enhance them. They are one of the most important players in the field, so the process of speeding it up depends a lot on their implication.

#### 2. What do public administrations have to do to speed it up?

- <u>Financial support</u>: Reducing VAT and other taxes would be an incentive for everyone who is thinking about buying an electric car, give free public charges would be another action to speed this process up.
- Increase the number of charging stations available for everyone:
  - Public: Governments have to install many public stations in order to provide solutions to cover people needs.
  - Private (financial aid/agreements). Governments have to deal with private companies to collaborate on installing public charging station by signing collaboration agreements. This will encourage private companies to install more and more charging stations.
- <u>Electrify government's fleet</u>: If Governments want to convince people to switch to electric mobility, they have to be the first ones and give example by changing all public fleets to electric soon. Once people in the streets see car, buses and bikes electric, they will be more and more interested on the idea of buying an electric car.

