

## ... Now it is time for Z.E.V.<sup>i</sup>

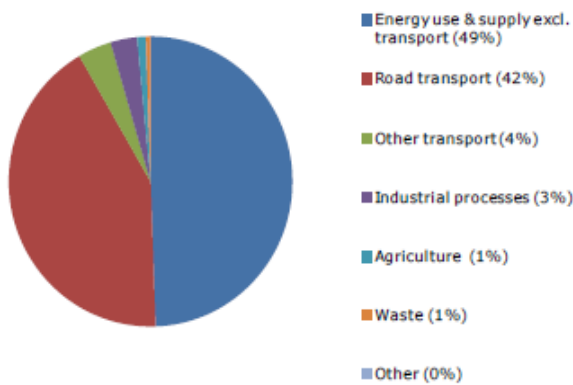
*Manuel Rosas Libano Monteiro  
Director at Exacto, Estudos e Planeamento, Lda.  
Portuguese Coordinator of the Ele.C.Tra Project*

“Houston, we have a problem” is a phrase of the Apollo 13 crew, when reporting to Houston a problem in the spacecraft. Likewise we can say “Lisbon, we have a problem” and the problem is also associated to space ... space that is occupied by vehicles and by the pollution they produce.



In some areas in Lisbon, the devices monitoring the air quality report air pollutant concentrations above the maximum EU ceilings for some pollutants (e.g. PM<sub>10</sub>, NO<sub>x</sub>, CO<sub>2</sub>, CO), which require the acquisition of pollution rights.

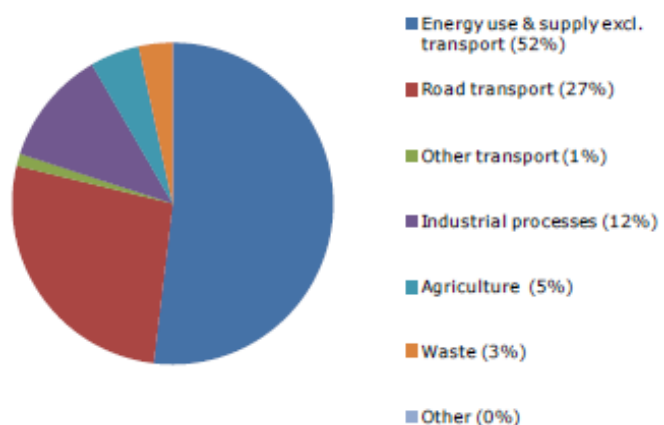
**Emissions of Nitrogen Oxides (NOx), by Sector,**



In addition to this aspect, which we do not perceive directly, but contributes to increase the public deficit, there is another issue we all agree with: pollution is not good for our health. And it smells badly. And it is harmful to the atmosphere that protects us all but it is signalling that is getting tired! That is why we all love the country air... nevertheless most of us persist in living in cities.

We have therefore a dilemma. How can we solve it? The Z.E.V.s say their time has arrived. Time for Zero-Emissions Vehicles. The electric vehicles! I am not talking about the famous electric tramway 28, taking us from Prazeres to Graça, in Lisbon, which is since long part of our daily experience of electric mobility.

**Emissions of Carbon Monoxide (CO), by Sector, Portugal, 2011**



I am talking about the new electric vehicles, which are getting more and more fashionable. If we look into some European countries, namely Norway and Netherlands, it is possible to conclude that the option for electric vehicles is rather significant, considering that in

some months the sales of electric vehicles overpass the sales of conventional vehicles.



Have you ever thought how your life could be if you bought an electric vehicle? Where would you charge it? Near home, or near your job? Surveys carried by several organisations addressing issues related to

electric vehicles allow us to conclude that there is a lack of information, combined with misinformation. According to Jorge Vasconcelos, the Chairman of the Portuguese Association of Electric Vehicles (APVE), a survey recently conducted by the Association disclosed that only 7 per cent of the persons interviewed were familiarised with the subject, while a large majority (70 per cent) only heard about electric vehicles or had little information on the matter.



The **Ele.C.Tra project** will contribute to disseminate information, raise awareness on the electric mobility and to promote the adoption of electric vehicles, helping to clarify their benefits and the way possible problems can be solved.

Ele.C.Tra was launched in last July, in Genoa and will be concluded in December 2015, with a closing seminar to be held in Lisbon, with the participation of all the European partners of the project.

The project aims at the implementation of sharing systems of electric scooters in the pilot cities of Genoa, Florence and Barcelona, involving also other eight European cities (including Lisbon), which will follow up the pilot sharing systems, developing all the required studies for the future adoption of similar electric scooters sharing solutions.



*Exacto Estudos e Planeamento* is the Portuguese partner of the project and will contribute with his experience in transport planning and modelling for the



conduction of the process, developing a feasibility study for the electric scooters sharing system in the city of Lisbon.



The current restrictions to the electric mobility, such as (high) initial investment costs, (limited) range, parking difficulties and the (long) time for charging the batteries are all minimised when considering the use of scooters. In fact, the initial investment cost for a scooter is much lower than for a car and it is non-existent if a sharing system is considered. The range is not a problem, taking into consideration that the

electric scooters available in the market fulfil the requirements of the urban travels envisaged when using a scooter. Parking areas for scooters are not (so far) difficult to find and the time for charging batteries is much shorter than for an electric car (and it will be not a direct concern for the user, in a scooter sharing system).



What is therefore necessary to advance electric mobility is to promote a better interaction among the (potential) users, the general public and the suppliers of electric vehicles, taking advantage of the existing nation-wide network of infrastructures for charging electric vehicles (MOBIE system), which is

currently underutilised.

In the scope of Ele.C.Tra, in addition to the bi-annual meetings with the European partners of the project, at local/regional level, regular meetings with the project stakeholders and promotion events addressed to the general public are envisaged, which will be timely promoted to reach large audiences as much as possible.

The silent experience of driving an electric car was the inspiration for the first promotional initiative of electric mobility: **“let’s listen to music, while driving silently”**. Finally the music lovers and musicians can listen to music while driving, can calmly talk with the passengers or even deal with mobile phone calls hands-free, without disturbing noises. The sound conditions comparatively to a conventional vehicle are abyssal.



The creation of eco-concerts was the next step. In these concerts, e-parking free places will be available for electric cars and the first 5 electric vehicles to arrive will win 2 free tickets for the concert. The musicians will benefit from a test-drive of an electric vehicle before the concert and will travel in an electric car sponsored by a supplier, to the concert. At the end of the concert, the owners and passengers of electric vehicles will be entitled to an exclusive autograph session with the players, taking also this opportunity to exchange e-experiences about the silent and green driving of an electric vehicle.

The [Auditório da Senhora da Boa Nova](#) in Estoril and [Nissan](#) are partners in this first action, with one eco-concert per month scheduled for the next 7 months.

---

<sup>i</sup> Z.E.V.: Zero-Emissions Vehicles