I Meetings started on Wednesday 25.5.2016. The colleagues and the students began Eco Racing with three e-car from Graz to Čakovec, one Tesla S model and two Renault Zoe. They have been driving an ordinary road, avoiding the highway for aproximately 140 kilometers, monitoring the consumption of cars for long distances without speeding. Due to the weak battery of Zoe models and greater distance of 100 kilometers, they had to stop at Radkesburg for battery recharging. Average consumption of the Zoe cars was 10.5 kW per hour and 14.8 kW per hour for Tesla S.

All participants came at the appointed time for the first workshop. During the first workshop, we determined previous project activities, potential problems, involment of the students and current knowledges. We presented the plan for tomorrow's race and gave related maps and forms.

At the end of the day there was the common dinner with friendly conversation.

II On Thursday, eco-race joined two e-cars: Nissan Leaf and Golf-e and one e-truck from German company Fuso, which is currently tested by city's waste treatement firm. The ride took place on the three sections of the Međimurje, where we monitored the consumption of e-cars at rural and curvie roads. The first section was from Čakovec to Prelog with total distance of 20 kilometers passing through Štefanec, Mala Subotica, Palovec, Donji Pustakovec, Sveti Juraj u Trnju and Čehovec. Citizens and visitors of the city of Prelog were able to see the cars on the main square, ask for cars characteristics, and they were even able to make a short test drive. Second section's goal was city of Mursko Središće, with total distance of 33 kilometers, passing through Donji Kraljevec, Hodošan, Donji Hrašćan, Turčišće, Domašinec, Dekanovec, Novakovec, Podturen, Ferketinec, Miklavec, Križovec and Peklenica. In Mursko Središće, the presentation of vehicles for citizens and visitors were at the promenade along the Mura. The last section of 17 kilometers through Štrukovec, Žiškovec, Slemenice, Mačkovec, and Šenkovec, ended on main square in Čakovec. Among many visitors there was also the City mayor of Čakovec who tried Tesla S. The event was recorded on TV-camera and aired on television. After lunch there was a friendly meeting in Accredo center, filled with sport activities for students.

III On Friday we visited to the company "Rimac cars" in Sveta Nedjelja, while monitoring the consumption of cars at speed highway Čakovec-Zagreb as a part of an eco-race in total distance of 256 kilometers.

In Rimac factory, the students was informed about the materials and the manual production of most parts of the super car, which are sold only 3 pieces in the world yet. The company Rimac is not engaged in serial production of vehicles, but exclusively the production after pre-order. A greater amount of vehicles are produced in the subcompany "Greyp Bikes". Those are electric bikes Greyp G12, with a maximum speed of 70km/h and a battery of 1,5kWh which allows great drive autonomy. The main activity of the "Rimac car" company is the production of new technology and it has even got its own department for assembling battery cells. Guests were able to see the speedboat on electric power which is produced in cooperation with the Slovenian company. Evidences of other cooperation with companies around the world were hidden from the eyes of visitors due to the signing of the trading secret documentation, which is common for this kind of cooperations.

After Rimac we took a brief tour of the city of Samobor and after lunch we visited the city of Zagreb, because of inevitable need to recharge the electric cars. Due to unreliable map of charging station in Croatia, there was a pleasant surprise when we found on the parking lot at Lisinski, charging station with fast charging DC outlet 50kW. We added location and characteristics of that charging station in verified chaging station map while the e-car battery was filled in less than 2 hours and for free (we didn't count the cost of parking space).

Later in the evening we made a tour of the city of Čakovec in the evening was a tour of the city with students as guides. We referenced to the company "Štromček", the ways and places you can rent electric bicycles in the city, which is similar to our project company.

IV On Saturday, 28.5. in the morning, there was a gathering of participants in school. It was "Open doors" day, when parents and elementary school students are visiting high schools. The visitors were able to see electric cars parked in front of the school.

Mr. Radek Nenad from SCAME company, lectured about the history of the electric car, standards and company wars for connectors and charging stations standardization in Europe, and the instructions and operating principle of charging stations for electric cars. After the lecture, we visited the charging station at the company ELCOP near the school, where we conected Tesla S model. Once again, we were surprised because the charging station after examining protocol by checking cable and car settings, aranged with the Tesla charging power of 22kW. We did not know the possibility of that charging power because it had filled only Nissan models with lower power. We added the charging station ,as it was not recorded, in our map.

Participants visited the school with a brief overview of specialized classrooms and laboratories where the Austrian colleagues concluded that the school is according to their standards sufficiently equipped.

After lunch, the students took part in a quiz related to participation in the project. Divided into groups they were answering the questions that reviewed experiences from the first students' meeting, words form Croatian-Slovenian-German-English vocabulary related to the project and questions of knowledge of the countries involved in the project. The team with the biggest score traditionally won a chocolate gift.

There was an analysis of Eco race. In the discussion students and teachers made the following conclusions:

1. Experienced drivers must take some time to get used to the electric car. Left leg has no usage but the habit is making it move, as well as right hand which is trying to shift gears that does not exist in e-car. The drivers that are accustomed to the sound of the engine can easily exceed the speed limits without noticing it. The need for limiting the speed or notification of overdrafts are certainly justified.

2. The highest consumption of battery was in all cars in the second day of the race due to the curves and settlements where there were a lot of braking. Although there is a mode in which the braking can charge the battery, this is not significantly sufficient because it is extending the battery power for several kilometers. Driving a car along the highway had consumed a little more energy than optimal, because of the possibilities of high speed driving experience. The most optimal battery consumption was on the first day, driving the fast and local roads.

3. Electric cars are displaying information of the percentage of battery charge and power consumed by the engine. Besides the engine, electrical power is also consumed on the heating / cooling, car computer, lights and other devices. If we consider only the consumption of the engine it would mean that the cars in the lower class (Golf, Nissan Leaf and Renault Zoe) could go up to 200 kilometers on full battery charge, so it is better to monitor the percentage of battery charge . From next year, all manufacturers of smaller cars (Tesla is the exception, and the price and characteristics) have announced a shift to 32kWh battery, which will allow travel to 200 km and certainly increase it's popularity.

4. The price of e-cars is high, and the cost-effectiveness is still questionable because of unknown battery durability. The batteries are usualy the part of the car, except in Renault Zoe who sell cars separately from the batteries, but that model can not be found on the Croatian market. About half of the participants decided that they would bought an electric car if they had the funds, while others still favored an internal combustion engine.

After the workshops, more sport events for students took place in the sports center Aton in Nedelišće.

V Sunday 29.5.2016. After breakfast, we concluded that the first Eco Race has been successfully completed, that colleagues from Weiz made ​​a working version of the application that tracks the location of the car and the amount energy stored in the battery - which is an important information for loan cars. Participants from the Technical School Čakovec will make an additional changes in a business plan for a virtual company and will soon move on to its realisation. Participants from Weiz will implement option of renting a car in the their existing virtual company at the begining of the next school year. The meeting in Celje was moved for justified reasons from september this year to the end of February next year. All participants weree satisfied with the activities carried out in the second gathering, and pladged to put all the materials into e - Twinning portal.

After the meeting, the participants return to their schools and homes.