

# From automobile to eco-mobility

A stake for the future, a collective challenge, an educational project:



"Cover 8 laps (10.6 miles) in a given time consuming as few energy as possible"

# A PROJECT, A TEAM, A RECOGNIZED EXPERTISE

### **ECO MOTION TEAM by ESSTIN**

ESSTIN, (Ecole Supérieure des Sciences et Technologies de l'Ingénieur de Nancy) is a french engineering school part of the University of Lorraine, which has been involved in the development of clean vehicles for 17 years. This year Eco Motion Team by ESSTIN is composed of 23 students helped by teachers, engineers and technicians. The whole team works out to build an innovative prototype which is both ecological and economical.

#### **OUR LATEST VEHICLE: Vir'Volt**



Vir'Volt will be our vehicle this year, it has been constantly improved since its creation in 2010-2011. Every year this prototype is studied by the new team before improvements to get better performance and results.

This vehicle is competing in the electric battery category, and two years ago, the team added solar panels allowing us to establish a new record!

This year, Eco Motion Team by ESSTIN will be in London from June  $30^{th}$  to July  $3^{rd}$  to take part to the Shell Eco-marathon Europe.

# RESULTS

#### **OUR PRIZE LIST:**

Year	Category - Vehicle	Performances	Track
2010	Prototype - <i>Hydrog</i> ESSTINe v4.4	5 <sup>th</sup> in Hydrogen category (2379 km/L)  3 <sup>rd</sup> Safety award	Shell Eco-marathon Lausitz (DE)
2011	Prototype - Vir'Volt	2 <sup>nd</sup> in Electric mobility category (532 km/kWh) 6 <sup>th</sup> in the overall standings	Shell Eco-marathon Lausitz (DE)
2012	Prototype - Vir'Volt	8 <sup>th</sup> in Electric mobility category (440.5 km/kWh) 1 <sup>st</sup> of french participants	Shell Eco-marathon Rotterdam (NL)
2013	Prototype - Vir'Volt	6 <sup>th</sup> in Electric battery and solar energy (638 km/kWh) 2 <sup>nd</sup> Safety award	Shell Eco-marathon Rotterdam (NL)
2014	Prototype - Vir'Volt	10 <sup>th</sup> in category Battery + Solar (533.6km/kWh) 1 <sup>st</sup> Price of Safety	Shell Eco-marathon Rotterdam (NL)
2015	Prototype - Vir'Volt	9 <sup>th</sup> in category Battery + Solar (495.8km/kWh)	Shell Eco-marathon Rotterdam (NL)

### **A VARIETY OF PROJECTS**

This year there are around ten sub-projects in the team, covering electronic, mechanic and communication, all this domains need to be studied and improved to realize a better performance than last years. This diversity allows students to discover new fields. Moreover, this helps keeping an open mind and constantly innovating with new solutions of clean energies. The students are also in touch with many companies which is important in order to find an internship and a future job...

The team also has for an objective since 2 years to develop the next vehicle. This conception is being made while team is improving Vir' Volt's performances. This is the reason the team is taking up two challenges in the same time.



## **OUR PARTNERS**

Many partners support the Eco Motion Team by ESSTIN:



### WANT TO CONTACT US?

Check out our blog: www.ecomotionteam.org/blog

**Eco Motion Team by ESSTIN** 

esstin-emt-communication@univ-lorraine.fr

2, rue Jean Lamour - 54519 Vandœuvre-lès-Nancy Cedex

Fax: +33 (0)383 685 001

Tel: +33 (0)383 685 000