

WELCOME TO THE 30TH ANNIVERSARY OF SHELL ECO-MARATHON EUROPE 2015

This year represents a very special anniversary for Shell. It's 30 years since the first Shell Eco-marathon Europe. In the years which have followed its launch, the event has evolved from a low-key, informal challenge between enthusiasts into a leading competition to promote energy efficiency. My colleagues and I are enormously proud of what those involved have achieved.

Shell Eco-marathon may be made up of a series of global events – this year being held in Manila, Detroit and Rotterdam – but Europe's contribution to its success has been very significant. The first European edition of Shell Eco-marathon took place in France in 1985. The event has also been held in Germany and, more recently, in the Netherlands, where it has resided since 2012. As a Dutchman, I'm delighted with the part my home country has played in the competition's history. I'm particularly grateful to the city of Rotterdam for providing the space to allow Shell Eco-marathon to grow.

The move to the Netherlands three years ago has seen the event embrace a number of exciting innovations—among them a dedicated street circuit on which the competing vehicles can race. Visitors to Shell Eco-marathon meanwhile, have been able to see 3-D printers constructing new cars in real-time, to examine close-up some of Europe's most fuel-efficient cars, and, with the help of Shell's Energy Lab, to learn through play about the astonishing past, present and future of energy. The result? An extravaganza attended by tens of thousands of visitors in which energy and education take centre stage together.

The benefits of an event like Shell Eco-marathon are many. But chief among them is the way the event enthuses young people about the almost limitless possibilities of technology and innovation. That's something we at Shell take very seriously. We know that the world's future – including how we meet the challenge of meeting rising energy demand responsibly and sustainably – relies to a great extent on the engineers of the future. It's also been a key discussion topic at the Powering Progress Together conferences Shell organises in parallel with Shell Eco-marathon, at which hundreds of prominent people from government, business and education debate solutions to today's energy challenge

Over the years, participants in Shell Eco-marathon have demonstrated the passion, dedication and pride which are essential to the energy innovation the world needs. There's no doubt in my mind that, in 2015, we'll once again witness students, teachers, and volunteers display those qualities in abundance.

It's in that spirit that I ask you all to make this 30th anniversary year – the last, for the time being, in which the Netherlands will host the competition – a special celebration. If you're attending to watch Shell Eco-marathon then get ready to be impressed. If you're competing in the event itself then be proud of what you're doing. Because Shell Eco-marathon represents one of those rare but dazzling moments when the present and future come together – when those of us living in 2015 get a glimpse of what the world could look like 20 or 30 years from now. In my view, that's worth celebrating.



WELCOME

Having economic growth and environmental sustainability work hand in hand is one of the biggest challenges of this century. This applies in particular to delta cities like Rotterdam. Our close proximity to water has brought our city much prosperity. But it also comes with challenges. The climate is changing, resulting in more extreme rainfall, higher groundwater levels, and rising sea levels. Doing nothing is not an option. That's why Rotterdam started with an extensive climate adaption program in 2008.

As a port city, we are currently dealing with an energy transition. As part of the program, we are committed to reducing our current yearly energy use by 20% in 2020. That's needed to battle climate change and reduce dependence on imported fossil fuels. Rotterdam is also working with heat and steam networks and technological innovations at companies and the city itself. The dedication of residents and companies to live and operate more sustainably is extremely important for this. Therefore, Shell Eco-marathon is such an inspiration to Rotterdam and its residents.

This year, it's a special edition. It marks the last Shell Eco-marathon in Rotterdam and the first where CNG (compressed natural gas) is used by students who will develop smart, energy efficient vehicles. And this year, public transport travellers and other interested people will also get a sneak preview of the big Shell Energy Lab at Rotterdam Central Station, from of May 1.

All in all, we are working towards a sustainable future. We do that in the typical Rotterdam way; rolling up our sleeves and learning by doing. At the same time we are developing knowledge together with our partners, knowledge institutes and businesses that we apply in this city. Rotterdam as a living showcase. Shell Eco-marathon is a beautiful example of this.

Ahmed Aboutaleb, Mayor of Rotterdam





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PRACTICAL INFORMATION

SAFETY FIRST!

Safety is our chief priority always at Ahoy Rotterdam. We request your cooperation not only in respecting all health and safety regulations, but also in ensuring that these regulations are respected by others. You should pay particular attention to the following safety practices and considerations.

THE GOLDEN RULE

If you are uncertain about ANY aspect of safety on-site, no matter how small, you MUST contact a member of the Shell Safety team. This is an event with unique safety requirements. The instructions of safety officials must be followed.

ANY QUESTIONS?

We have two Safety offices:

- 1. Safety office at The Energy Lab
- 2. Safety office (paddock) Information point
- 3. Camping site security point at entrance
 For emergency situations, ask for the Meldkamer
 (Centrale Post) Ahoy (central desk) or contact
 +31 10 293 3176



In case of alarm (siren, loudspeaker), evacuate the area; go to the nearest exit of the paddocks, stands or circuit. Make yourself familiar with possible defined escape route. Follow instructions of Safety or Security staff. Please do not return until it is announced that it is safe to do so.



The medical centre is open 24 hours from 18-24 May at the campsite. In case of incident or accident, get in touch with the safety staff or call the external emergency services on 112. Give your name, incident location and reason for calling. A first aid post is available in the central corridor in the main building. This opens during normal operating hours, usually 8-19h.



Never walk on the circuit, around the edge of the circuit, on safety roads or in areas that are restricted to the public. To cross the circuit, use ONLY the footbridge.



Smoking is only allowed in designated, signed areas.



Beware of ALL moving vehicles (Prototypes, UrbanConcepts, bicycles, forklift engines, service vehicles etc.)



Pay attention to pedestrians at all times when moving or driving vehicles.



Always hold the handrail when going up or down staircases.



A FOUR DAY PROGRAMME

THURSDAY 21 MAY

08.00	Media Centre opens
08.00 - 18.00	Technical Inspection in paddocks
09.00 - 15.00	Powering Progress Together
09.30 - 09.45	Opening Shell Energy Lab
09.00 - 11.30	Practice runs for UrbanConcept
	vehicles
12.00 - 15.30	Practice runs for Prototype vehicles
16.30 - 18.00	Practice runs for UrbanConcept
	vehicles
18.00	Shell Energy Lab closes
18.30	Media Centre closes

FRIDAY 22 MAY

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08.00	Media Centre opens
09.00	Shell Energy Lab opens
09.00 - 11.30	Practice runs for Prototype vehicles
12.00 - 13.00	Practice runs for UrbanConcept
	vehicles
12.00 - 13.00	Shell Eco-marathon Explained
	(guided tour)
13.00 - 14.30	Media Challenge (both categories
15.00 - 15.30	Opening Ceremony Shell Eco-
	marathon Europe 2015
15.30 - 19.00	Competition for Prototype vehicles
16:00 - 16:30	Shell Eco-marathon Explained
	(guided tour)

SATURDAY 23 MAY

09.00	Shell Energy Lab opens
09.00 - 11.30	Competition for UrbanConcept
	vehicles
09.00 - 11.30	Media Challenge (UrbanConcept
	only)
10.00 - 11.00	Shell Eco-marathon Explained
	(guided tour)
12.30 - 16.30	Competition for Prototype vehicles
17.00 – 19.00	Competition for UrbanConcept
	vehicles
17.00 – 19.00	Media Challenge (UrbanConcept
	only)
18.00	Shell Energy Lab closes
18.30	Media Centre closes

SUNDAY 24 MAY

06.30	Media Ceriire opens
09.00	Shell Energy Lab opens
09.00 - 12.30	Competition for Prototype vehicles
13.00 - 15.00	Competition for UrbanConcept
	vehicles
16.30 - 17.00	Award Ceremony
18.00	Shell Energy Lab closes
18.30	Media Centre closes

- One-to-one interviews will be scheduled based on speakers' availability.
- Light refreshment will be provided in the Media Centre during the event.

Please note that this programme is subject to change: the organisers will share the latest information in the Media Centre on a daily basis.

MEDIA FACILITIES

MEDIA CENTRE

This is a dedicated area in Ahoy close to the street circuit for accredited journalists. The Media Centre is equipped with internet access, lockers, and access to the latest competition results, daily newsflashes, photo and video materials. The opening hours vary slightly by day but are approximately 08:00 – 18:30.

HIGHLIGHTS

A continuous flow of information on the latest team results, interesting background stories about the teams and other event highlights is available, presented via screens in the Media Centre.

IMAGES

Copyrightfree images will be available on Shell Eco-marathon's Flickr channel: www.flickr.com/shell-eco-marathon, Associated Press (AP) will offer a daily selection of images and a range of team and general images will be posted on Shell-com/ecomarathon/Europe during the event days. More

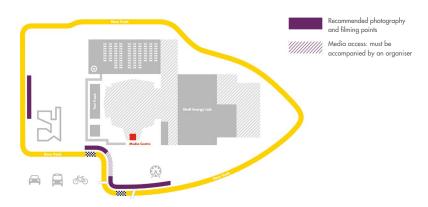
specific images can be requested by entering a photo request via the Media Desk at the Media Centre. Each request will be handled individually. Special locations for taking photos of the race have been created (marked on the image below).

VIDEO FOOTAGE

An overall video news release will be available after the Award Ceremony on Sunday. Throughout the event short social media videos will be shared on Shell.com/ecomarathon/Europe and via Shell's social media channels. Special video footage can be requested via the Media Desk at the Media Centre

VIDEO CAR

A Video Car is available for accredited photo and video crews. The Video Car drives on the circuit during the competition (except on Sunday) and allows crews to take unique footage of the cars. To make use of this service, please make a reservation via the Media Desk in the Media Centre.



SHELL ECO-MARATHON **EXPLAINED: GUIDED TOUR**

Shell Eco-marathon Explained provides a perfect learning experience and a fun introduction to the competition. During this (approx.) 30 minute tour through the Paddock, participants are immersed in an interactive master class that covers the essence of the competition, how the competition works and what makes the vehicles unique. The tour will be hosted by an official Shell Eco-marathon spokesperson who will go through the different topics while walking through the Paddock. During the tour you will visit Technical Inspection and the technical team will highlight some of the participating teams with unique vehicle solutions. In this session, the experts will address items such as:

- The rich history of the competition (celebrating the 30th anniversary)
- How students use telemetry
- Insights in the different categories and fuel types
- What materials are used for the body and how they are produced
- Which parts of the vehicle students build themselves
- Which elements on the track influence the results

For more information and registering for a Shell Eco-marathon Explained session, please go to the Media Desk at the Media Centre on site



SHELL ECO-MARATHON LIVE RESULTS

Shell Eco-marathon will also provide visitors the opportunity to follow competition like never before. In partnership with HP, we will be testing a data visualization area with live results from the track and provide selected visitors and student teams with the possibility to try the beta version of the Shell Eco-marathon app*.

* Note: Image is an example only.



THE MEDIA CHALLENGE

WHICH JOURNALIST IS THE MOST FUEL EFFICIENT?

Do you want to experience how drivers of UrbanConcept and Prototype vehicles really feel and see how fuel-efficient your driving style is? Sign up for the Shell Eco-marathon Europe Media Challenge and compete against other journalists from across Europe by test-driving a Prototype or UrbanConcept vehicle yourself. The winning journalists in both categories (UrbanConcept and Prototype) will be announced after the event.

Please find below the timetable for the Media Challenge. For more information and booking visit the Media Desk in the Media Centre.

		UrbanConcept	Prototype
Thursday	May 21	Not available	Not available
Friday	May 22	13.00 - 14.30	13.00 - 14.30
Saturday	May 23	9.00 - 11.30	Not available
		17.00 - 19.00	
Sunday	May 24	Not available	Not available

OPENING AND AWARD CEREMONY





OPENING CEREMONY

To celebrate the competition and to highlight the international character of the event, an official flag ceremony will be organized on May 22 from 15.00 till 15.30. Multiple student teams with their Shell Eco-marathon vehicles will officially open the competition in a festive way. The ceremony will be held on the track at the start/finish area and offers a number of appealing photo and video opportunities.

AWARD CEREMONY

After three days of competing and pushing the boundaries of energy efficiency, all results will be measured and compared to decide which teams can call themselves European Champions of fuel-efficiency. The winners will be honoured at an Award Ceremony on Sunday, May 24 at 16.30. Additionally, a professional Shell Eco-marathon Europe jury will hand over six Off-track Awards. These prizes will reward creativity and outstanding performance in safety, technological innovations, design, communication and more.



30TH ANNIVERSARY

What began in 1985 with 25 wooden vehicles on the grid in France, is now a competition that hosts this year over 3,000 participants from 30 countries across the continent and beyond. The event also attracted previous years over 40,000 visitors interested in learning more about the future of energy, innovation and mobility.

The competition has seen tremendous growth over the past three decades, however what remains consistent is the shared passion for technique, efficiency, teamwork, perseverance, determination, ingenuity and creativity.

In 2012, when the competition relocated to the Netherlands, the event increased in scale, involving the general public in the experience, introducing the Shell Energy Lab. Shell Energy Lab invites spectators to join an interactive journey into the future of innovation, energy and mobility.

Since its inception, the competition has encouraged student teams from high schools and universities (aged 16-25) to further develop their interest in Science, Technology, Engineering and Mathematics (STEM). The objective is to showcase the potential of energy efficiency on the road, by way of deploying new technologies and innovation.

Shell Eco-marathon inspires young engineers to shape the future of mobility, an endeavour that Shell has committed itself to over the last 30 years and will continue doing in the years to come.

Visit the Shell Eco-marathon Europe History album on the **Shell Eco-marathon Flickr channel**

for historical imagery of the competition:

www.flickr.com/shell_eco-marathon.





COMPETITION PRINCIPLES

Students compete in two main categories – with Prototype and UrbanConcept vehicles. For both the Prototype and UrbanConcept category the amount of fuel consumed is precisely measured at the finish line and the distance that would have been covered on the energy equivalent of one litre of fuel is extrapolated. For vehicles in the E-mobility class, we calculate the distance they would have travelled on the energy of 1 kWh.

PROTOTYPE VEHICLES



These are futuristic, streamlined vehicles, where the primary design consideration is to reduce friction and maximise efficiency. Teams must complete ten laps in a maximum time of 39 minutes with an average speed of approximately 25 km/h. The total distance to cover is 16,117 km (10 laps of 1,626 km). Each team will be limited to four official attempts: the best result will be retained for the final classification.

URBANCONCEPT VEHICLES



These are more conventional concept vehicles, designed and built to roadworthy specifications suited to the needs of today's drivers. Teams must complete ten laps in a maximum time of 39 minutes with an average speed of approximately 25 km/h. The total distance to cover is 16,117 km (10 laps of 1,626 km). The driver must make one stop each lap, simulating everyday driving. Each team will be limited to four official attempts. The best result will be retained for the final classification. The point where to stop will be specified by a panel under the control of track marshals.





ENERGY LAB

One of the star attractions at Shell Eco-marathon Europe is Shell Energy Lab, a spectacular experience centre for students, scholars and families. Shell Energy Lab invites spectators to explore the future of energy by taking them on an interactive journey into the world of tomorrow. It features a lively mix of physical and digital exhibits and installations encouraging everyone to get involved and experience what Shell Energy Lab is all about: 'explore, make and learn'.

The event offers free access to the range of exciting attractions. The Energy Theatre will again be one of the main features in Energetic Minds, a hall dedicated to learning which acts as a showcase for a number of local partners including museums and an opportunity to explore the Summer Exhibition piece at Nemo. Other attractions include a Mini Shell Eco-marathon and a kinetic dance floor where dancers provide the power for sound and lighting.

By visiting the website visitors can register and request free tickets to the event and get a glimpse of what to expect via: www.shellenergylab.com





POWERING PROGRESS TOGETHER THE TECH FACTOR

On May 21, 2015, the Powering Progress Together (PPT) forum will be held in the Netherlands for the fourth time, at the Ahoy venue in Rotterdam. The focus of the previous editions of PPT was the energy issue surrounding the substantial interdependence between water, food and energy. Technology and innovation are indispensable to resolve these global challenges, which makes it important that a future generation of technicians is prepared to work on that essential technology and innovation.

For that reason this year's PPT forum in Rotterdam will be dedicated entirely to the vital importance of technical (STEM) education and an improved match between education and the labour market.

During PPT the Tech Factor (Dutch: de Techniekfactor), the various decision moments of young people to choose for, learn about and work in technology are central: primary, secondary and higher education and the labour market. Prominent stakeholders from the education sector, the business world and the government, but also young people themselves, will highlight the requirements and the possibilities for defining the vital importance of technical education when facing the challenges of the future. An information market with inspiring examples will generate new energy and ideas.

Among the inspiring speakers are Jet Bussemaker (Dutch Minister of Education), Doekle Terpstra (Technologypact), Gert Bravenboer (Siemens), Marjolein ten Hoonte (Randstad) and Dick Benschop (Shell Netherlands).

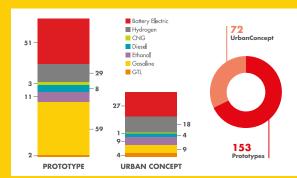
The interactive programme for PPT Rotterdam 2015 is formulated by Shell, in conjunction with the Dutch Technologypact (and partners Ministry of Economic Affairs, Jet-Net, Platform Bèta Techniek and TechniekTalent.nu), the Municipality of Rotterdam and Rotterdam Partners.

KEY FACTS AND FIGURES

30 EXECUTE YEARS 1985-2015

SHELL ECO-MARATHON

■ Shell Eco-marathon is an annual event held in three regions throughout the world: Asia, the Americas and Europe (in calendar order).



- There are two vehicle categories Prototypes and UrbanConcept.
- There are seven different energy types:
 - Internal combustion fuels, including petrol, diesel, ethanol, Gas to Liquid (GTL) and Compressed Natural Gas (CNG).
 - Electric energy ('e-mobility'), including hydrogen fuel cell and battery electric.

In comparison to last year, the biodiesel (FAME) energy category has been removed, CNG (Compressed Natural Gas) has been included and Ethanol and GTL will be ranked together as "Alternative fuel".

30 YEARS OF SHELL ECO-MARATHON EUROPE

- Shell Eco-marathon 2015 celebrates its 30th anniversary.
- What began in 1985 with 25 wooden vehicles on the grid in France, is now a competition that hosts this year over

- 200 teams from Europe and beyond, consisting of over 3,000 students from 30 countries across the continent. The event also attracted last years over 40,000 visitors interested in learning more about the future of energy, innovation and mobility.
- The competition in Europe began in 1985 at the Paul Ricard Motor Circuit at Le Castellet, France. From 2000, it took place on the Paul Armagnac Circuit in Nogaro, France. The competition then moved in 2009 to the EuroSpeedway in Lausitz, Germany, before relocating to Rotterdam, the Netherlands, in 2012.
- Together with the city of Rotterdam, Shell brought the competition for the first time in its history to the streets.

 The urban setting of the street circuit underscores how new technology in regards to energy efficiency can find a place in the heart of real cities given realistic situations like braking, accelerating and cornering have a significant impact on the results.
- In that same year that the competition relocated to the Netherlands, the event increased in scale by involving the general public in the experience and introducing the Shell Energy Lab. Shell Energy Lab invites spectators to join an interactive journey into the future of innovation, energy and mobility.
- Since its inception, the competition has encouraged student teams from high schools and universities (aged 16-25) to further develop their interest in Science, Technology, Engineering and Mathematics (STEM). The objective is to showcase the potential of energy efficiency on the roads, by way of deploying new technologies and innovation.

- The competition has seen tremendous growth over the past three decades, however what remains consistent is the shared passion for technique, efficiency, teamwork, perseverance, determination, ingenuity and creativity.
- Shell Eco-marathon inspires young engineers to shape the future of mobility, an endeavour that Shell has committed itself to over the last 30 years and will continue to do in the years to come.

30 EDITIONS OF INNOVATION

- In 1985, Team Henry from Switzerland won the competition in their Prototype vehicle with an astonishing result of 680 kilometres on 1 litre of gasoline. In 2013, team Microjoule La Joliverie from France won the same category with an even more astounding result of 2,980 kilometres on 1 litre of gasoline.
- As the competition evolved, teams grew from an informal group with two to five members, to a multi-disciplinary group involving from eight to 20 members. Teams now approach their projects with a lot more professionalism. They develop project plans and seek sponsors, even initiate media outreach themselves.
- The Remmi-team from Finland is the only team who has been competing in all Shell Eco-marathon editions since 1985.
- The cars in the first Shell Eco-marathon editions were made from wood and fibreglass based on metallic chassis.
 Nowadays most bodies are made from carbon fibre with integrated chassis creating significant weight benefits and allowing revolutionary design.

KEY FACTS AND FIGURES

30 ~ YEARS

- In the early editions, spare parts for the drive train used to be made of iron. Later teams started using aluminium or carbon. Nowadays, teams such as Zuyd Euregiorunners (NL) and Team Aalborg (DNK) have begun using 3D-printing for polymer parts, making the most of this innovative technology.
- During the first years at Shell Eco-marathon Europe, vehicles drove only Prototypes with internal combustion engines fuelled by gasoline. Nowadays students compete with seven different fuel types in two vehicle categories.
- In 2003, Shell introduced the UrbanConcept category. These are more conventional concept cars with practical designs for the road.
- Nowadays, students may compete with seven different fuel types in two vehicle categories: Prototype and UrbanConcept. Over the years, the introduction of electronics and computers has made a significant impact on fuel efficiency.

- The introduction of electronics and computers has made a significant impact on fuel efficiency. The progress of electronics during the last few years helped the teams create better control of engine condition, electronic control for injection and ignition.
- Electronics are the necessary part for fuel cell management.
- Battery Electrics vehicles need electronics to manage battery, electrical motor and using electrical regeneration during braking action.
- Most teams are able now to track real-time the fuel consumption and calculate for example the most efficient driving strategy.
- To improve aerodynamics of the vehicle, many teams now make use of wind tunnel tests, sometimes with scale models and sometimes with the actual vehicle.
- Nowadays teams also work with new technologies such as 3D printing for the body parts and dashboard of the vehicles.

■ This year, the teams can choose to participate with a new energy type, CNG (Compressed Natural Gas). This is a lower carbon transport fuel that can be used as an alternative to petrol and diesel. This reflects the team interests and is in line with market development.





INTRODUCING SOME TEAMS















CUSTOMIZE YOUR RIDE

Last year the Dutch team TU/ecomotive (723) managed to get a licence plate for their UrbanConcept vehicle to go on the public roads, making it the most sustainable car on the Dutch roads. To show the relevance of the competition for everyday mobility, they drove from Eindhoven to Rotterdam. This year, they raised the bar by building and competing in a modular car. By being able to change, take out, or add certain components to the car, it can be adjusted to the changing needs of the driver. The team aspires to get their new car licensed for the public roads that will give them another first: the first Dutch modular car.

FIRST EUROPEAN TEAMS ON CNG

This year, Shell introduced CNG (Compressed Natural Gas) fuel to the competition. With the introduction of this new fuel, Shell keeps the competition future proof and challenges students to push the boundaries of fuel efficiency with the fuel type available on the market. The Technical University Varna from Bulgaria (551), the Slovakian University of Technology Bratislava (104), and Lycee Marcel Callo (102) and Lycee Saint-Joseph La Joliverie from France (101) provide the first four European teams that will compete within this new fuel category.

30 YEARS OF INNOVATION

The Tampere University of Technology from Finland (4) has a long track record of competing in Shell Eco-marathon Europe. In fact, they are the only team that has been competing since the very first edition of the competition in 1985. They have placed themselves in the top ten at every event. In 1986, their car had the shape of a duck face. Over the years their vehicle evolved into a cigar shape which helped the team win third place last year. This year, the team developed a new vehicle, the Remmi VIII, which they hope will bring them to victory.

ROTTERDAM STREET CIRCUIT

Shell Eco-marathon is all about innovation and adapting to new challenges around energy and technology. In 2012, Shell Eco-marathon Europe brought the track to a street circuit in Rotterdam, the Netherlands. The city circuit drawn in the area of Ahoy Rotterdam makes the competition more interesting for everyone involved. A street circuit reflects the objective to work better collectively on future technologies and energy and making mobility smarter for everyday use. The circuit encourages the students to rethink their driving strategy and vehicle setup. Since then, teams have relied more on their driving skills with braking, accelerating and cornering.

In 2014, two years after competing on the same track, a new challenge was introduced to the competition: the new

clockwise race direction, which impacts energy consumption and makes teams rethink their driving strategy. For 2015, no changes have been made with regards to the track.

The location is also more accessible for all participants and visitors throughout Europe. The track is an opportunity for students to demonstrate their abilities and their competences, not only in building a car but also in terms of strategy and driver's skills.

There is only one circuit for both UrbanConcept and Prototype categories. The time on the circuit must be split between both categories. Each category (Prototype and UrbanConcept) will have different time schedules for practice runs and the competition.

TRACK FACTS

- One lap: 1,626 m
- Five turns per lap at 90°, all the partial distance are between each turn
- The track is flat, no incline
- A run: 10 laps 16,117 m in 39 mins, +/-
- Prototype and UrbanConcept are NOT on track at the same time
- Both are permitted the same distance and time to calculate average speed
- UrbanConcept to make one stop each lap
- Direction: clockwise





SHELL ECO-MARATHON EUROPE 2014 RESULTS

Category	Winner	Result				
PROTOTYPE	PROTOTYPE					
Shell FuelSave Gasoline Prize	Shell FuelSave Gasoline Prize La Joliverie – Lycee Saint-Joseph La Joliverie (FR)					
Shell FuelSave Diesel Prize	IUT GMP Valenciennes – I.U.T Valenciennes (SPA)	1,300.1 km/l				
Hydrogen Fuel Cell Prize	H2A – Hogeschool Van Amsterdam (NL)	428.5 km/kWh				
Battery-electric Prize	TERA TU Graz – T.U. Graz (AUT)	1,091.6 km/kWh				
Alternative Fuel Prize (E100 + GTL)	SA de Toulouse – Universite Paul Sabatier Toulouse (FR)	2,757.2 km/l				
URBANCONCEPT						
Shell FuelSave Gasoline Prize	Lycee Louis Delage – Lycee Louis Delage (FR)	468.8 km/l				
Shell FuelSave Diesel Prize	Schluckspecht – University Of Applied Sciences Offenberg (GR)	389.0 km/l				
Hydrogen Fuel Cell Prize	La Joliverie Polytech Nantes – Polytech Nantes (FR)	150.5 km/kWh				
Battery-electric Prize	Electricar Solution — Lycee Des Metriers De L Energie Arles (FR)	312.1 km/kWh				
Alternative Fuel Prize (E100 + GTL)	DTU Roadrunners – Technical University Of Denmark (DN)	599.0 km/l				

PRIZES AND AWARDS

Although for a large number of teams participating in Shell Eco-marathon Europe is already enough of a reward, Shell and its partners recognise the hard work and achievements of the participating teams through a series of prizes and awards, on top of those awarded for best fuel efficiency. These Off-track Awards recognise creativity and performance in other key areas such as design, safety, technological innovations, communications and more All prizes are awarded by a professional jury specific to each award which is made up of experts, journalists and industry members including Shell and partner representatives.

ON-TRACK AWARDS 2015 FOR BEST FUEL EFFICIENCY

Energy type	Prototype	UrbanConcept
Shell FuelSave Gasoline	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate
Shell FuelSave Diesel	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate
Alternative Fuel (E100+GTL)	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate
CNG	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate
Battery-electric	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate
Hydrogen Fuel Cell	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate	Winner: € 1500 + Trophy 2nd prize: € 750 + Certificate 3rd prize: € 375 + Certificate

Only the winners will be called on stage at the Award Ceremony to receive their price and trophy.



OFF-TRACK AWARDS 2015

There are in total six Off-track Awards that reward creativity and outstanding performance. Participating teams may choose to compete for a maximum of two Off-track Awards; or three if the application for the Safety Award is included. Teams can only receive any of the Off-track Awards in case they have one valid attempt during the competition, except for the Perseverance and Spirit of the Event Award.

Award		Prize
Communications Award		
Shell Helix Tribology Award	The Shell Helix Tribology Award is an off-track award that recognises student teams that demonstrate the use of lubrication engineering principles to improve the fuel efficiency result of their vehicles. Lubricants create – as well as remove friction from an engine – hence they contribute directly to fuel consumption. This award encourages students to consider, in a structured way lubricants as key components in the fuel efficiency equation.	€1500 & Trophy
Vehicle Design Award	This prize recognises innovative design research and execution and will be awarded to the team which presents the most original and coherent vehicle in terms of ergonomics, aesthetics, choice of materials, technical feasibility and eco-friendliness. Each of these five criteria will be weighted equally in the jury's decision.	€1500 & Trophy
Technical Innovation Award	This award is presented to the team which demonstrates outstanding technical ingenuity along with optimal use of new materials, components and inventions in their drive train, chassis, body, instrumentation and tires.	€1500 & Trophy
Safety Award	This award aims to highlight the importance of structural, process and behavioural safety in the Shell Eco-marathon programme and encourages all participating teams to actively consider and implement safe practices in their daily work. It challenges all teams to review established practices, inspect tools and equipment, as well review their procedures in order to implement changes which lead to higher safety standards.	€1500 & Trophy
Perseverance and Spirit of the Event Award	This award is presented to the Team which, in the opinion of the organisers, symbolises best the spirit and values of this event through their actions which could include: Overcoming large obstacles in order to attend the Shell Eco-marathon; mastering exceptional challenges while participating in the Shell Eco-marathon, Supporting other participants to help them overcome significant challenges or obstacles, Keeping high spirits, showing outstanding resilience, resolve and resourcefulness.	€1500 & Trophy
	Teams cannot apply for this award.	

HISTORY & EVOLUTION OF THE COMPETITION

FIRST EDITION OF SHELL MILEAGE MARATHON

Best performance: 21.14 km/l Winner: R.J. Greenshields Location: United States

> First diesel vehicle to enter Shell Eco-marathon Europe.

- Alternative energy sources introduced
- UrbanConcept category introduced

1985 1990 2003 1939 1998 2004 2006

FIRST SHELL ECO-MARATHON EUROPE

Best performance: 680 km/l Winner: Team Henry (Switzerland)

Circuit: Paul Ricard Motor Circuit at Le Castellet

Country: France

First use of Michelin radial tyres.



Shell Eco-marathon, France, 1998

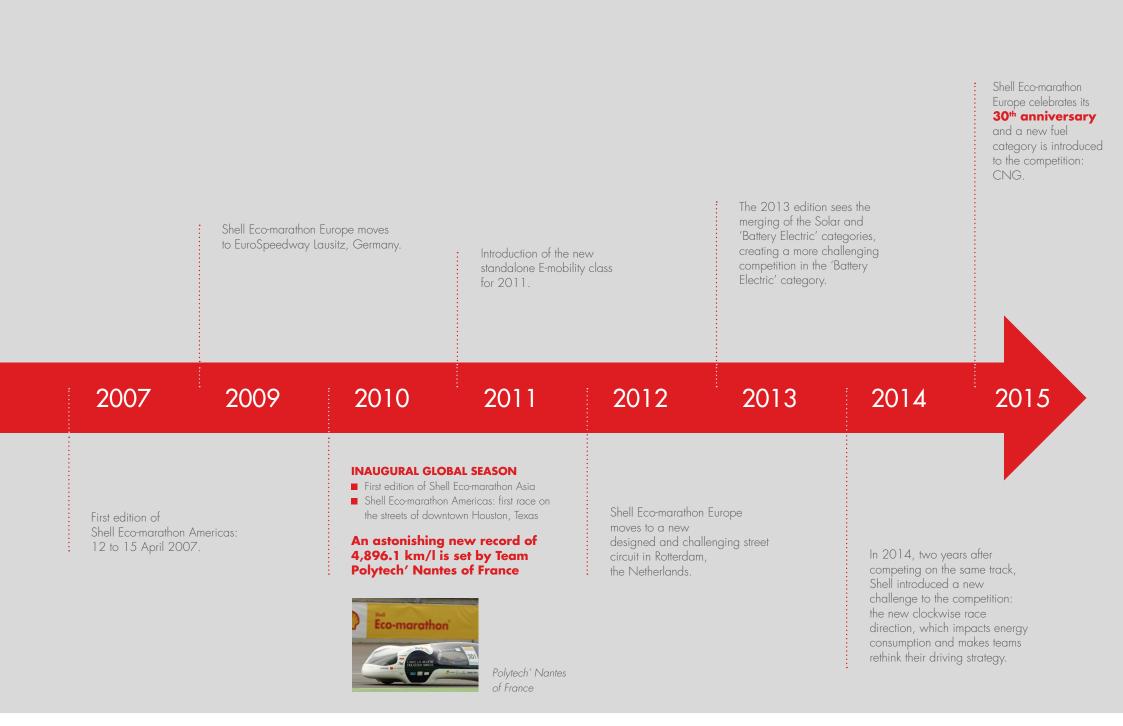
First EU patron: Loyola de Palacio European Commissioner for Transport

First biofuel

vehicle wins

combustion engine Grand Prize.

and Energy.



HISTORY & EVOLUTION OF THE COMPETITION

ORIGINS

Shell Eco-marathon began in 1939 at a Shell research laboratory in the US following a friendly wager between scientists about ultimate fuel economy: who could travel the most miles per gallon.

Shell Eco-marathon Europe began in 1985 in France, with 25 teams participating from four different countries. This first event was held at the Paul Ricard Motor Circuit at Le Castellet in the south of France, where it remained until 1999. In 2000, the competition moved to the Paul Armagnac Circuit in Nogaro, south-west France. The competition then moved in 2009 to the EuroSpeedway in Lausitz, Germany. Shell Eco-marathon Europe moved to the Netherlands in 2012, and is now staged on a street circuit at the Ahoy in Rotterdam.

GROWTH

Over the years, the competition has grown into a truly global event attracting thousands of students from all over the world.

In 2007, the first Shell Eco-marathon Americas took place at the California Speedway in Fontana, California with 20 participating teams. In March 2010, Shell Eco-marathon Americas was held for the first time on the streets of downtown Houston, USA. 2010 was also the first edition of Shell Eco-marathon Asia held in Kuala Lumpur, Malaysia.



DID YOU KNOW?

- The vehicles in the first editions of the competition were made from wood and fiberglass based on a metallic chassis. Nowadays, most bodies are made from carbon fibre with integrated chassis. This offers significant weight benefits and allows for more revolutionary designs.
- The teams themselves have also evolved over the past years. Growing from an informal collection of two to five members to a multi-disciplinary group involving eight to 20 young engineers.
- The UrbanConcept category was introduced in 2003. These days some UrbanConcept vehicles not only meets the official Shell Eco-marathon rules and requirements, but also can comply with the official legislations to obtain a licence plate that permits them to drive on public roads.











4 SHELL AND MOBILITY

Mobility – the movement of people and goods – is the lifeblood of the global economy. Whether driving to work, visiting friends and family or using products shipped from another country we depend on transport to go about our daily lives. But with populations growing and becoming more urban, roads, ports and airports are busier than ever – and environmental pressures are increasing. At Shell, we are constantly finding innovative ways to address these challenges and help move more people and goods safely, cost-effectively and with reduced impact on the environment. Our approach, called smarter mobility, focuses on products, use and infrastructure.

- Smarter Products: with the world's population rising rapidly and demand for transport fuels and lubricants growing, we are finding innovative, socially and environmentally responsible ways to fuel the cars, trucks, planes and ships we all rely on. Our approach includes developing advanced fuels and lubricants, producing biofuels, and using natural gas to help keep the world moving.
- Smarter Infrastructure: rapid urban growth will heighten the challenge to keep traffic moving while limiting CO₂ emissions. We are working with partners to study these changes and consider ways to make transport networks more efficient.
- Smarter Use: offering drivers tips and training on how to change their behaviour to help save fuel and reduce their emissions, while staying safe on the road.

Shell Eco-marathon is one of the ways in which Shell brings together people who are passionate about mobility and the future of energy to discuss and work together on sustainable solutions for future energy challenges. The science and engineering students participating in Shell Eco-marathon bring this into practice by searching for solutions to make transportation more efficient while reducing environmental impact. More information about smarter use of mobility is available via: www.shell.com/smartermobility or by meeting Wolfgang Warnecke, Shell Chief Scientist Mobility on-site in the Media Centre during the event.

MEET THE PARTNERS

SHELL ECO-MARATHON PARTNERS

HP HP strives for a more sustainable world by helping to improve the environmental performance of our customers, our supply chain and our own operations. We are a proud partner of the Shell Eco-marathon, providing IT consultancy and solutions to ensure we achieve the most energy-efficient event from the Paddock and the track to Shell Energy Lab.



Linde At every Shell Eco-marathon event, Linde delivers hydrogen cylinder filling

expertise and technical support to the teams free-of-charge. Linde also supports tomorrow's engineers finding innovative answers to today's mobility and energy challenges. The fascinating world of gases is shown through the interactive and dynamic activities located in the Shell Energy Lab.



Michelin Michelin has been supplying teams at

Shell Eco-marathon with energy efficient tyres since 1984. Today Michelin engineers are also providing technical know-how and guidance onsite and also during 'tire week' a new online support programme designed exclusively for the students. This special collaboration helps the participants, whilst championing sustainable mobility.



Southwest Research Institute

SOUTHWEST RESEARCH INSTITUTE (SWRI) SWRI provides research,

development and testing to the automotive, fuels and lubricants industries, SwRI is located in San Antonio, Texas, USA and occupies more than 1,200 acres, providing more than 2 million square feet of laboratories, test facilities, workshops and offices for nearly 3,000 employees.

SHELL ENERGY LAB PARTNERS

BMW i

BMW BMW offers people to step into the world of tomorrow. With their new BMW I they showcase production options of the future. The cars are manufactured in a factory that is powered by wind and hydrogen energy.



SKILLSMASTER Skills Juniors is an exciting competition for students in grades 7 and 8 of primary school.

The students need to complete a course with 'technical activities' in contest shape. These are playful first experiences on promising professions, such as health care and technology.



NEMO NEMO is the largest science centre in The Netherlands. As a partner of Shell Energy Lab they bring their popular exhibition 'Wonders or Science' to the event. This

exhibition was first displayed in Shell Energy Lab 2014 in Rotterdam and returns by popular demand. Visit this popular exhibition and enter a world where nothing is quite what it seems





Museum Boerhaave this year's exhibition is about light, sight and colour. With different

games and tests, visitors can discover the secrets behind light. In association with Pandemonia, Boerhaave Museum also organizes the show 'Einstein' in the Energy Theatre.



GeoFort GeoFort is an exciting fortress island that's all about finding out where you are. Step into a new elevator in the Energy Lab that bores straight through the

earth's surface. The deeper you get, the hotter it gets. Along the way, you'll see many layers of the earth: salt, sand, gas, pit coal, diamond and magma. Will you be able to pierce through to the iron core of the earth, a depth of more than 6,000 kilometers?



Youtech The YouTech magazine and website are crammed with

exciting interviews, fun experiments and news on games, films and gadgets. This way you can discover how it would be to be an American paper boy in the virtual city at Shell Energy Lab or how to move a giant iron dog with just one hand.



ACE Want to find out what Dutch courses can teach you and what you

can learn to do in terms of designing, inventing and building

cars? Then visit ACE. From how a modern engine functions and the system that prevents tires from blocking when you hit the brake, to cars that drive without a driver and a 3D printer that produces car parts - you'll find this and more.



Port of Rotterdam All kinds of things are transported through the port of Rotterdam every day. Have someone take a picture of you in a cool setting at 'De Haven In' (into the port) during

Shell Energy Lab, stand next to the harbour master of Rotterdam, lift a block of concrete from 'Maasvlakte 2' with only one finger, or dance between the containers like a giant. Share your excitement with your friends through your own Facebook page!

maxon motor driven by precision

Maxon Motor maxon motor is a worldwide leading supplier of

components and systems in the precision drive technology sector. maxon motor provides consultancy, engineering and production services in the area of motion solutions. From concept development, through basic design to detailed engineering and production. At the maxon motor booth you receive a demonstration and explanation of the functioning of electric motors.



ANWB Safety is of utmost importance during the Shell Eco-marathon. The cars are tested

extensively by the ANWB, but safety on the road is essential. ANWB employees keep an eye on road safety.

CITY PARTNER



Gemeente Rotterdam

City of Rotterdam We are proud to present this European event in our city and would like to have all Rotterdam students get acquainted with science, technology and sustainability. After all, choosing to study technology means choosing a future with excellent career prospects.













6 SPOKESPEOPLE



WOLFGANG WARNECKE (1)

CHIEF SCIENTIST FOR MOBILITY

Dr. Wolfgang Warnecke was appointed as Shell's Chief Scientist for Mobility in May 2011. The role sees Wolfgang advising on technology strategy, championing science, R&D and innovation and enhancing Shell's technical reputation in the fast-changing area of mobility.

In addition to his Chief Scientist role, Wolfgang is Senior Technology Manager for Fuels Innovation in Shell. Since 1988, he has been Managing Director of Shell Technology Centre Hamburg, which specialises in fuels and lubricants development and engine and vehicle technology.

Wolfgang was born in 1956 in Hamburg, Germany. After studying Mechanical Engineering at the Technical University of Hannover (specialising in automotive combustion engines), he gained a PhD in Automotive Engineering from Hamburg Tech. University in 1987.

Joining Shell in 1987, Wolfgang started his career as a scientist in the field of lubricant development and engine testing in Hamburg. He then moved to work as a senior scientist for Shell in the UK before returning to Hamburg to head up lubricants development and engine bench testing. Subsequent assignments included Lubricants Technical Services for the Deutsche Shell business and in Fuels Marketing in London. He went on to lead both Automotive Fuels and Lubricants development in Hamburg and then wider R&D in Hamburg before global management roles in Lubricants and, more recently, Retail and Automotive Fuels Development.

Wolfgang's expertise in engine technology and automotive products has earned him extensive recognition across the automotive industry as well as by academia. He has made close to 100 publications, and owns a wide global network across the global automotive industry, including the motorsport industry.

In 2005, Wolfgang, together with Dr Wolfgang Steiger of Volkswagen were awarded the 'Professor Ferdinand Porsche Prize', considered by many to be the world's most prestigious award for automotive engineers, for their work on synthetic fuels development.

NORMAN KOCH (2)

TECHNICAL DIRECTOR SHELL ECO-MARATHON

Norman has been passionately involved in the Shell Eco-marathon programme for over 10 years and today works as Global Technology and Student Liaison Manager for the Shell Eco-marathon. In this role he is responsible for establishing the technical framework of the event and for ensuring it is both challenging for the participants as well as relevant to address in view of the global Energy Challenge. Furthermore, he is working with academic institutions to ensure the purpose of the Shell Eco-marathon in view of this global Energy Challenge is better understood.

Norman Koch graduated from the University of Technology, Dresden, Germany and holds a Masters Degree in Electrical Engineering and Precision Engineering. He joined Shell in 1995 as Project Engineer for Fuels Technology, studying Fuel Mixture Preparation strategies in Direct Injected Gasoline engines. During assignments in Germany, the US and the

UK he worked as a Manager for Automotive R&D, being involved in the development and performance evaluation of Fuel and Lubricant products like Shell V-Power or the Shell Helix range.

MIKE EVANS (3)

FORMULA ONE FUELS PROJECT LEADER FOR SHELL

Mike Evans is Shell's Formula One™; Fuels Project Leader. He has worked for Shell for over 30 years – initially in a variety of laboratories, where he continued studying chemistry at the same time. In his time with Shell, Evans has worked with coal, alternative fuels, and diesel and gasoline fuels. He has combined laboratory work with engine and vehicle testing, both in the field and using engine test beds and chassis dynamometers (rolling roads). His work has included testing vehicles in northern Scandinavia during the winter, in temperatures down to -40 °C.

Evans has led the Shell Formula One™ fuel development activity for several years, working with colleagues in Shell Global Solutions and the engineers in Maranello. He has also taken part in circuit racing for over 30 years, culminating in becoming National Supersports champion in 1994, 1995 and 1996. Mike Evans is part of Shell Eco-marathon technical team for many years and he is in charge of the energy measurements of the best performing teams in the competition.

Please check the spokesperson's availability and get a comprehensive list of spokespersons in the Media Centre.







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ONLINE & SOCIAL MEDIA CHANNELS



Shell.com/ecomarathon hosts all relevant and the most updated information about the competition from the team registration site, team stories, to the results, rules and documents. For more information, visit: www.shell.com/semeurope.



On the Shell Facebook page, you'll be able to learn more about Shell Eco-marathon, and the events in all three locations. On Facebook: www.facebook.com/Shell.

You can also join the Shell Eco-marathon Europe Facebook event for live updates from Rotterdam.



Follow <u>@Shell Ecomar</u> on Twitter to get short and snappy updates about the competition. Tag <u>@Shell_Ecomar</u> and tag <u>#SEM2015</u> in all your tweets to join the conversation. On Twitter: www.twitter.com/shell_ecomar.



The Shell YouTube channel offers exclusive videos about the competition and all the "Tech Tips". Tune in and watch the teams in action!

On YouTube: www.youtube.com/
Shell.



Shell Eco-marathon Flickr hosts the official photos of the competition throughout the years. Visit the profile and see all the greatest shots!

On Flickr: www.flickr.com/shell-eco-marathon.



Follow <u>Shell on Instagram</u> to see the outstanding photos from Shell Ecomarathon in all three regions. Tag it #SEM2015 and join the photo buzz. On Instagram: <u>www.instagram.com/Shell</u>.

PARTICIPATING TEAMS

RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
AUSTR	IA				
311	elena	Fachhochschule Vorarlberg	Elena	Prototype	Battery Electric
<i>7</i> 11	HTL Salzburg Racing Team	Htbluva Salzburg	Scorpion	UrbanConcept	Battery Electric
BELGIL	JM				
11	ECAM.be	Ecam Bruxelles	Gerbille	Prototype	Gasoline
12	TM Eco Drive	Thomas More De Nayer	TM Eco Car	Prototype	Gasoline
120	EcoMOTION	Haute Ecole De La Province De Liege	EcoMOTION 5	Prototype	Ethanol
507	UMONSTER TEAM	Faculté polytechnique de l'UMons	UMONSTE	UrbanConcept	Gasoline
511	Vives EcoTeam	Katholieke Hogeschool Zuid-West-Vlaanderen	The Red Rocket	UrbanConcept	Gasoline
712	ULg Eco Team	Universite De Liege	Umicore-Electra ULg	UrbanConcept	Battery Electric
714	Thomas More Eco Drive Team	Thomas More De Nayer	TMUC1	UrbanConcept	Battery Electric
BULGA	RIA				
312	blue-ev	Professional High School Of Agriculture And Forestry N.Vaptsarov	STORM-BG	Prototype	Battery Electric
314	Avtomobilist	Univerity of Ruse	DTT	Prototype	Battery Electric
551	Angel's angels	Technical University Varna	Kvazi	UrbanConcept	CNG (Compressed Natural Gas)
610	TUS Team	Technical University Of Sofia	Eco X	UrbanConcept	Hydrogen
CZECH	REPUBLIC				
611	VSB-TUO	VSB - Technical University of Ostrava	Hydrogenix (Hyix)	UrbanConcept	Hydrogen
DENM	ARK				
501	DTU Roadrunners	Technical University Of Denmark	DTU Dynamo	UrbanConcept	Ethanol
602	Team Aalborg Energy	Aalborg University	Cimbrer	UrbanConcept	Hydrogen
FINLA	ND				
4	Remmi-Team	Tampere University Of Technology	Remmi 8	Prototype	Gasoline







RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
FRANC					
2	IFMA eco-challenge	IFMA Clermont Ferrand	Lutèce VII	Prototype	Gasoline
5	PV3E	Estaca Levallois-Perret	Blobee	Prototype	Gasoline
6	TED	AIRBUS HELICOPTERS Centre de Formation Technique	TED 6	Prototype	Gasoline
8	Association Marathon Shell IUT Aix en Provence	Universite Aix-Marseille	Calisson II	Prototype	Gasoline
9	Proto Insa Club	Insa Lyon	Epic	Prototype	Gasoline
14	Zenith	Ufr Physique Et Ingenierie Strasbourg	ZE02+	Prototype	Gasoline
15	ITII en course	ITII Evreux	Green motion	Prototype	Gasoline
16	ASECOM	IUT Evry	La Comète	Prototype	Gasoline
17	P3G	Lycee Professionnel Industriel P.G. De Gennes	Le Colibri	Prototype	Gasoline
18	EIGSI EcoDrive	Eigsi La Rochelle	McFly	Prototype	Gasoline
19	Team Joland	Groupe scolaire Les 2 Rives	Evolution 2.1	Prototype	Gasoline
20	Ben-Hur concept 1148	CFA SUD FORMATION NIMES	CARBON 14	Prototype	Gasoline
21	MASH Metz	Arts et Métiers ParisTech Metz	Raqu'AM	Prototype	Gasoline
22	STI2D Chaptal	Lycee Chaptal	Chaptalissimo	Prototype	Gasoline
23	ENISE Shell Project	Enise Saint Etienne	XC15i	Prototype	Gasoline
24	ISAT Eco Marathon	Isat Nevers	Mona	Prototype	Gasoline
25	ISAC	Insa Strasbourg	IOTA	Prototype	Gasoline
27	Eco-Marathon Supaero	Isae Toulouse	Athena II evo	Prototype	Gasoline
28	Valmev	ENSIAME Valenciennes	Dynalpie 2	Prototype	Gasoline
29	Team ENSTA Bretagne	Ensta Bretagne	YETI CAR	Prototype	Gasoline
101	Microjoule-La Joliverie	Lycee Saint-Joseph La Joliverie	Microjoule	Prototype	CNG (Compressed Natural Gas)
102	Team Callo	Lycee Marcel Callo	Helios CNG	Prototype	CNG (Compressed Natural Gas)
121	WESTEAM	I.U.T Brest	BREIZH STORMING	Prototype	GTL







RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
122	team UTeCia	Université de Technologie de Compiegne	UTeCia	Prototype	Ethanol
151	Marci	Lycée André Citroën	Paillettes	Prototype	Diesel
161	IUT GMP Valenciennes	I.U.T. Valenciennes	Autonomie 3	Prototype	Diesel
209	ECAM Shell Eco- Marathon	Ecam Lyon	Hydro Art	Prototype	Hydrogen
211	PV3e Laval	Estaca Laval	Tsé-Tsé	Prototype	Hydrogen
302	Electricar Solution	Lycee Louis Pasquet	PEM I	Prototype	Battery Electric
310	Eco Motion Team by ESSTIN	ESSTIN Nancy	Vir'Volt	Prototype	Battery Electric
315	Mash Angers	Arts Et Metiers Paristech Angers	zaroule	Prototype	Battery Electric
316	VINCI ECO'DRIVE	Pôle Universitaire Léonard de Vinci	E-PULV	Prototype	Battery Electric
317	Riquet Eco Car	Lycée Pierre Paul Riquet	REC 2	Prototype	Battery Electric
318	Team Eco'Momes 31	College Marcel Doret	Minilitre	Prototype	Battery Electric
319	Limotion	Universite De Limoges	E-volution	Prototype	Battery Electric
320	Augustine	Lycée Léonard de Vinci	Augustine 4	Prototype	Battery Electric
321	MECA ELEC CONCEPT	Lycee Polyvalent D'Artagnan	Helios IV	Prototype	Battery Electric
322	X Eco Marathon	Ecole Polytechnique Palaiseau	X-Wing	Prototype	Battery Electric
323	Team Bayle Eco Mobile	College Pierre BAYLE	Bayle Mobile	Prototype	Battery Electric
324	Vector Ecoteam	MINES ParisTech & Lycées Louis Armand	ARROW	Prototype	Battery Electric
325	Mash Bordeaux	Ensam Bordeaux	EVAM	Prototype	Battery Electric
326	PSTVA	PST Université Paris Ouest	EcoCar8E	Prototype	Battery Electric
502	Lycee Louis Delage	Lycee Louis Delage	Roul' Cagouille	UrbanConcept	Gasoline
510	THE ACTIVE MEMBERS	Lycee Des Metiers Gustave Eiffel	THE DROPLET	UrbanConcept	Gasoline
512	AFORP Eco-marathon	Aforp Drancy	Drancy-Défi	UrbanConcept	Gasoline
514	CATI Toulouse	I.U.T Gmp Toulouse	CATI 2	UrbanConcept	Diesel
515	Toulouse Ingénierie Multidisciplinaire	INSA de Toulouse - Université Paul Sabatier Toulouse III	TIM07	UrbanConcept	Ethanol







RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
601	La joliverie Polytech Nantes	Polytech Nantes	La Joliverie Polytech Nantes	UrbanConcept	Hydrogen
605	ENSEM Eco Marathon	Ensem Vandoeuvre-Les-Nancy	Urban Two	UrbanConcept	Hydrogen
710	NIEPCE	Lycee Nicephore Niepce	CARBONZERO	UrbanConcept	Battery Electric
715	SEMAC	Ecole des Mines d Albi	Eucl'hyd II	UrbanConcept	Battery Electric
716	ENS Rennes	ENS Rennes	ENS cars	UrbanConcept	Battery Electric
717	ENSIL Team	ENSI Limoges	Simplicity	UrbanConcept	Battery Electric
718	NidaEco	Universite Aix-Marseille	EcoMia	UrbanConcept	Battery Electric
719	ISEN Toulon / SCS	ISEN Toulon	YLONA 2	UrbanConcept	Battery Electric
GERMA	ANY				
30	THM Motorsport-Team Efficiency	Technische Hochschule Mittelhessen	Streamliner_V3.3	Prototype	Gasoline
31	High-Efficiency-Karlsruhe	Hochschule Karlsruhe	WiM 2	Prototype	Gasoline
33	Hanseatic Racing Organisation	Universtaet Rostock	SharkByonX ³	Prototype	Gasoline
205	Hydro2Motion	Munich University Of Applied Science	H2M.2_HOMER	Prototype	Hydrogen
206	ThaiGer-H2-Racing Stralsund	Fachhochschule Stralsund	ThaiGer	Prototype	Hydrogen
208	Team NAOB	Nicolaus August Otto Berufskolleg	NAOB Runner H2	Prototype	Hydrogen
212	Lausitz Dynamics	BTU Cottbus- Senftenberg (Campus Senftenberg)	LaDy 2.1	Prototype	Hydrogen
304	Ruppin-Jet	Oberstufenzentrum Ostprignitz Ruppin	g-eco Jet	Prototype	Battery Electric
309	Schluckspecht 3	University Of Applied Sciences Offenburg	Schluckspecht 3	Prototype	Battery Electric
327	TUfast Eco Team	Technische Universitaet Muenchen	eLi15	Prototype	Battery Electric
503	Schluckspecht 5	University Of Applied Sciences Offenburg	Schluckspecht 5D	UrbanConcept	Diesel
506	eta-nol	Technische Hochschule Ingolstadt	INcredible 02	UrbanConcept	Ethanol
516	mobileo	Leo Sympher Berufskolleg	leopart 2.2	UrbanConcept	Diesel
612	Fortis Saxonia	Chemnitz University Of Technology	Umicore EcoBee	UrbanConcept	Hydrogen
702	Team proTRon	Hochschule Trier	AERIS III	UrbanConcept	Battery Electric







RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
707 GREEC	Evi Neuruppin	Evangelische Schule Neuruppin	E-fish	UrbanConcept	Battery Electric
GREEC 328	Prometheus	National Technical University Of Athens	Pyrforos	Prototype	Battery Electric
329	Poseidon	Piraeus University of Applied Sciences (T.E.I. of Piraeus)	Trireme	Prototype	Battery Electric
604	TUC ECO RACING	Technical University Of Crete	ECO RACER 15	UrbanConcept	Hydrogen
HUNG	ARY				
34	Obuda University	Obuda University	Shelly	Prototype	Gasoline
152	GSZK Shark Team	Budapest University of Technology and Economics	Mr Shark	Prototype	Diesel
330	Kandó Electric	Kalman Kando Secondary Technical And Vocational School	K-Car	Prototype	Battery Electric
331	Árpád Eco Team	Arpad Fejedelem Gimnazium	E-Orca	Prototype	Battery Electric
332	STECO	University of Szeged	Zeus	Prototype	Battery Electric
704	SZEnergy Team	Szechenyi Istvan University	SZElectriCity	UrbanConcept	Battery Electric
720	Paradicsom	Budapest University of Technology and Economics	Thorus	UrbanConcept	Battery Electric
IRELAN	ID				
333	National University of Ireland Galway	National University of Ireland, Galway	the Geec	Prototype	Battery Electric
ITALY					
36	UNIBAS RACING TEAM	Universita Degli Studi Della Basilicata	POTENTIA	Prototype	Gasoline
37	Rossi di sera	ITIS Alessandro ROSSI	Herbie 3.5	Prototype	Gasoline
154	FAENZAnaftaRACING	ITIP L. Bucci	FaBI-Sparkless	Prototype	Diesel
204	H2politO - molecole da corsa	Politecnico Di Torino	IDRA	Prototype	Hydrogen
308	Team Zero C	Itis Leonardo Da Vinci	Escorpio Evo	Prototype	Battery Electric
505	FAENZAitiRACING	ITIP L. Bucci	+39D	UrbanConcept	GTL
51 <i>7</i>	Team H2politO - Molecules going hybrid	Politecnico Di Torino	XAM	UrbanConcept	Ethanol
721	mecc-H2	Politecnico Di Milano	Daphne 2.0	UrbanConcept	Battery Electric







RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE

	MD O LIDO				
35	MBOURG LTAM	Lycee Technique Des Arts Et Metiers Luxembourg	Ecotöff 2	Prototype	Gasoline
MORG	occo	7		7 7	
38	UNIVERSIAPOLIS CREATEURS	Ecole Polytechnique Agadir	MINIMIZA 2.0	Prototype	Gasoline
40	EMI team	Ecole Mohammadia D'Ingenieurs Rabat	EMIcar 7	Prototype	Gasoline
41	ENIM LEADERS	Enim Rabat	ENIMISTE	Prototype	Gasoline
42	EMEC Team	ENSA Safi	EMECar	Prototype	Gasoline
43	OFPPT TEAM	Institut Specialise De Technologie Appliquee Tanger	GHABALI GOF	Prototype	Gasoline
44	AZWOU	Ecole Nationale Des Sciences Appliquees Tetouan	PALOMA	Prototype	Gasoline
157	EnsiTanger	Ensi Tanger	EnsitCarV2	Prototype	Diesel
334	EMSI-INNOV	Ecole Marocaine des Sciences de l'Ingénieur de Casablanca	Smart-Car	Prototype	Battery Electric
722	ENSA CAR	Ecole Nationale Des Sciences Appliquees Agadir	ABCHIR 2	UrbanConcept	Battery Electric
NETH	ERLANDS				
45	Future Force	Hofstad Lyceum	Forward Motion	Prototype	Gasoline
46	Silverbacks Engineering	The International School Of The Hague	Molly	Prototype	Gasoline
123	Team Apollo Delft	Inholland University Of Applied Sciences	Apollo III	Prototype	Ethanol
124	ROSES-4-ECO	Getrudiscollege	Proxima	Prototype	GTL
158	M.A.C. Eco Team	Summa College Eindhoven	Ecomobile	Prototype	Diesel
201	Team H2A	Hogeschool Van Amsterdam	H2A	Prototype	Hydrogen
202	Eco-Runner Team Delft	Delft University Of Technology	Ecorunner 5	Prototype	Hydrogen
210	Triple-X	Damstede Amsterdam	Amsterdammertje VI	Prototype	Hydrogen
214	Phidippides triga	Hogeschool Rotterdam	Triga II	Prototype	Hydrogen
335	TeamSGH	Stedelijk Gymnasium Haarlem	De Groene Mug	Prototype	Battery Electric
336	The Leekburners	The Lindenborg	LP3	Prototype	Battery Electric
519	Aureus Beta	Stedelijk Gymnasium Schiedam	Aureus One	UrbanConcept	GTL







RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
603	HAN Hydromotive	Hogeschool Van Arnhem En Nijmegen	Arval Inspire II	UrbanConcept	Hydrogen
614	Green Team Twente	University Of Twente	H2Zero	UrbanConcept	Hydrogen
615	Blue Racing Windesheim	Windesheim University of Applied Sciences	BRW 1	UrbanConcept	Hydrogen
623	Team EVA	Hogeschool Van Amsterdam	EVA	UrbanConcept	Hydrogen
723	TU/ecomotive	Technische Universiteit Eindhoven	EM-03	UrbanConcept	Battery Electric
724	Green Team Young	Bonhoeffer College	Green Team Young	UrbanConcept	Battery Electric
725	Euregiorunners	Zuyd Hogeschool	ZuydEcoRunner	UrbanConcept	Battery Electric
726	Phidippides Quadriga	Hogeschool Rotterdam	Quadriga II	UrbanConcept	Battery Electric
NIGER	IA .				
47	team uniben	University of Benin	Eco Cruise	Prototype	Gasoline
337	TEAM UNILAG	UNIVERSITY OF LAGOS	Autonov III	Prototype	Battery Electric
520	University of Benin	University of Benin	Tuketuke	UrbanConcept	Diesel
521	Team ABU	Ahmadu Bello University	GAMJI-ABUFENG	UrbanConcept	Gasoline
NORW	AY				
522	ØUC SHELL ECO	Østfold University College	Sustain	UrbanConcept	Ethanol
616	DNV GL Fuel Fighter 2	Norwegian University Of Science And Technology	-	Prototype	Battery Electric
624	DNV GL Fuel Fighter	Norwegian University Of Science And Technology	-	UrbanConcept	Hydrogen
POLAN	ID				
48	Iron Warriors	Lodz University Of Technology	EcoArrow II	Prototype	Gasoline
49	Simr Team	Warsaw University Of Technology	Hussar	Prototype	Gasoline
125	SKAP	Warsaw University Of Technology	Kropelka 2015	Prototype	Ethanol
215	Hydrogen CarPG	Gdansk University Of Technology	Eco CarPG 15	Prototype	Hydrogen
338	Smart Power	Silesian University Of Technology	MuSHELLka	Prototype	Battery Electric
339	ELVIC TEAM	Lublin University Of Technology	ELVIC 3 epsilon	Prototype	Battery Electric
340	WAT ECO TEAM	Military University of Technology Warsaw	WAT GREEN 2	Prototype	Battery Electric
504	SKAP 2	Warsaw University Of Technology	PAKS+	UrbanConcept	Gasoline







RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
622	Smart Power Urban	Silesian University Of Technology	Bytel	UrbanConcept	Hydrogen
727	KNKP Racing	Gdansk University Of Technology	Sagitta	UrbanConcept	Battery Electric
728	Green Arrow	Warsaw University Of Technology	Green Arrow	UrbanConcept	Battery Electric
PORTU	IGAL				
50	ESAF-Mec	Agrupamento De Escolas Alcaides De Faria Barcelos	O Alcaide	Prototype	Gasoline
51	BebUMlitro	Universidade Do Minho	EconomicUM	Prototype	Gasoline
52	Shell Eco EST	Instituto Politecnico De Setubal	Eco EST Mk1	Prototype	Gasoline
53	AM-UTAD Team	Universidade De Tras Os Montes E Alto Douro	AM-15	Prototype	Gasoline
341	AERO@UBI	Universidade Da Beira Interior	AERO@UBI01	Prototype	Battery Electric
508	UBICAR	Universidade Da Beira Interior	UBIAN15	UrbanConcept	Gasoline
729	Os Alcaides	Agrupamento De Escolas Alcaides De Faria Barcelos	Fase 03	UrbanConcept	Battery Electric
QATAR	(EU)				
523	Yalla Maroon	Texas A&M University at Qatar (EU)	Wa7sh	UrbanConcept	GTL
RUSSIA	4				
54	SCB-MADI	Madi	MADleco-3	Prototype	Gasoline
SLOVA	KIA				
55	S¡F TUKE	Technical University of Kosice	BaS 3	Prototype	Gasoline
104	FME RACING TEAM	Slovak University Of Technology Bratislava	Bahyl	Prototype	CNG (Compressed Natural Gas)
SOUTH	I AFRICA (EU)				
126	AlterGEn	University of Johannesburg	AlterGEn 1	Prototype	Ethanol
342	Voltronics	University of Johannesburg	Black Knight	Prototype	Battery Electric
343	Team SUN	Stellenbosch University	Inkonjane I	Prototype	Battery Electric
SPAIN					
56	ECO-JANDULA	I.E.S. Jandula	LINCE 3.0	Prototype	Gasoline
57	Salesianos-Elche	I.E.S Salesianos San José Artesano	Picudo	Prototype	Gasoline







RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
127	IDF ECO-MARATHON	UPV CAMPUS DE ALCOY-INSTITUTO DE DISENO Y FABRICACION	IDF-15	Prototype	Ethanol
128	ECO DA VINCI	I.E.S Leonardo Da Vinci	VINCI 2.1	Prototype	Ethanol
129	Equip UMH	Unversitat Miguel Hernandez D'Elx	Dàtil 15	Prototype	Ethanol
130	Canastell	Cipfp Canastell	cachalote	Prototype	Ethanol
131	ecologico-marxadella	I.E.S. La Marxadella	eco-M5	Prototype	Ethanol
159	IES ALTO NALON	I.E.S Alto Nalon	PR15	Prototype	Diesel
160	DonBosco-Tknika	I.E.F.P.S. Don Bosco-Tknika	Jaizkibel	Prototype	Diesel
344	ECO-DIMONI	I.E.S Cotes Baixes	DIMONI 2.4-FV	Prototype	Battery Electric
345	Solar-GT	C.I.P.F.P. Benicarló	eco-M4	Prototype	Battery Electric
346	UPCT SOLAR TEAM	Universidad Politécnica de Cartagena - UPCT	ANIBAL	Prototype	Battery Electric
347	UCAM RACING TEAM	Universidad Catolica San Antonio	SUN RIDER 2	Prototype	Battery Electric
348	GREENWHEEL	IES FRANCISCO DE GOYA	MAXWELL	Prototype	Battery Electric
349	Fem Pinya!!! Eleco Team	I.E.S Pere Martell	Eleco	Prototype	Battery Electric
524	Barredos Automoción	I.E.S Alto Nalon	UC15	UrbanConcept	GTL
617	GORBEA	I.E.F.P.S. Mendizabala	STORM	UrbanConcept	Hydrogen
732	GALLANDA	lurreta Institutua	URKIOLA	UrbanConcept	Battery Electric
SWEDI	N				
58	HiGtech	University Of Gavle	SuperNova	Prototype	Gasoline
59	Chalmers Vera Team	Chalmers University Of Technology	Vera III	Prototype	Gasoline
216	Team Sleipner	KTH Royal Institute Of Technology	Sleipner V	Prototype	Hydrogen
525	Chalmers EcoSmarter	Chalmers University Of Technology	Smarter	UrbanConcept	Ethanol
526	ElBa	KTH Royal Institute Of Technology	ElBa3	UrbanConcept	Gasoline
SWITZ	ERLAND				
7	ARC Team Proto	HE-Arc Ingenierie	Consomini Evolll	Prototype	Gasoline
509	Arc Team	HE-Arc Ingenierie	Consomini Urban	UrbanConcept	Ethanol







RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
TUNES	IA				
60	AUTOCLUB ENIG	National Engineering School of Gabes	ProtoENIG'1	Prototype	Gasoline
61	ENIT ECO CAR	École nationale d'ingénieurs de Tunis (ENIT)	ENIT ECO CAR	Prototype	Gasoline
TURKE	Υ				
62	Facilis Electric Vehicle Group	Istanbul Technical University	Facilis Macaw	Prototype	Gasoline
63	G-Tech	Gediz University	Gediz HEV	Prototype	Gasoline
218	Pithana	Hitit University	Sarissa	Prototype	Hydrogen
219	Hidroana	Anadolu University	GLADIUS	Prototype	Hydrogen
220	Hydro Marmara	Marmara University	Hydrop V2	Prototype	Hydrogen
221	HidroKale	Kırıkkale University	HydroCastle	Prototype	Hydrogen
350	Ankara University High- Tech Community	Ankara University	ANKA-Felix	Prototype	Battery Electric
351	Hitit Gunesi	Ankara University	Helianthus	Prototype	Battery Electric
352	HIDROKET JR	Kalaba High School	JR 3	Prototype	Battery Electric
353	AE2 PROJECT TEAM	Yildiz Technical University	ISTANBUL	Prototype	Battery Electric
354	BuAlert	Bogazici University	Electrotype I	Prototype	Battery Electric
355	temiz ve yenile	Erciyes Univetsity	mobydick	Prototype	Battery Electric
527	SSAL Mechanic Team	Besiktas Sakip Sabanci Anadolu Lisesi	Devrim	UrbanConcept	Gasoline
528	EcoMagnesia	Celal Bayar University	ATLAS	UrbanConcept	Ethanol
618	Hidroket	Ankara University	Pars U1	UrbanConcept	Hydrogen
619	HidroSafir	Suleyman Demirel University	HidRose	UrbanConcept	Hydrogen

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709

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HIDROIST

Team TERAKKI

YUEMT

G Tech

Istanbul University

Yeditepe University

Gediz University

Terakki Vakfi Ozel Sisli Terakki Fen Lisesi







Hydro1453

FLUXUS

Gediz EV

UrbanConcept

UrbanConcept

UrbanConcept

Terakki Electric 2015 UrbanConcept

Hydrogen

Battery Electric
Battery Electric

Battery Electric

RACE	TEAM NAME	SCHOOL NAME	VEHICLE NAME	CATEGORY	ENERGY SOURCE
UKRA	INE				
64	LSA KHADI AIS	Kharkiv National Automobile And Highway University	KHADI 34	Prototype	Gasoline
UNITE	D KINGDOM				
32	Pinto	The College of West Anglia	Pinto 2	Prototype	Gasoline
65	University of Central Lancashire	University Of Central Lancashire	Uclan eco	Prototype	Gasoline
132	Brooklands	Brooklands College	Ethel	Prototype	Ethanol
222	Team Hydrone	University College London	Hydrone AB2	Prototype	Hydrogen
223	CUC Racing	Combined Universities Cornwall	Spyrys	Prototype	Hydrogen
356	Pteron	Colchester Institute	Pteron 2 Zero-GE	Prototype	Battery Electric
621	Aston University	Aston University	GiGi	UrbanConcept	Hydrogen
737	Mechanical Derby 2013	University Of Derby	Derby Mechanical Blue 3	UrbanConcept	Battery Electric

























