

We are proud to invite you to the

EVS Viking Rally

11-13 May 2009



In conjunction with the 24th Electric, Fuel Cell and Hybrid Vehicle Symposium and Exhibition, we are proud to invite you to participate in the EVS Viking Rally, a race for battery electric, plug-in hybrid and hydrogen vehicles.

The route goes from Oslo to Stavanger along Norway's scenic southern and western coast, through varied landscapes perfectly suited for testing and demonstrating the real-life practical use of renewable energy vehicles.

With this rally we aim to show the public and decision makers that hydrogen, plug-in hybrid and battery electric cars are roadworthy alternatives, and to inspire manufacturers, researchers, students and others to further improvement of the technology.

The rally will test the performance of the vehicles and the skills of the teams through several special stages along the route, testing manoeuvrability, fuel consumption, acceleration and other vital attributes. The rally is open to all road legal hydrogen, plug-in hybrid and battery electric cars.



The Event

A 570 km rally starting in Oslo the May 11 2009 and arriving two days later in Stavanger at the opening day of the 24th Electric, Fuel Cell and Hybrid Vehicle Symposium and Exhibition.

www.Evs24.org

The rally is also the official opening of the Hynor – The hydrogen road of Norway.

www.hynor.no

Along the Route the teams will participate in events and special stages. The rally is arranged under supervision of the FIA representative Norges Bilspportforbund.

The Route

The rally runs from Oslo to Stavanger. An optionally shorter mini rally runs from Egersund to Stavanger.

Tentative program

Date	Time	Place	
May 11			
	11:00	H2 station, Oslo	Official start of the Rally Departure
		H2 station, Drammen Lindum	Opening of the station Auto slalom
		Porsgrunn	Refuelling and charging
		Porsgrunn/Skien	Eco driving (*) H2 cars only H2 Refuelling Public event
		Badeparken Hotel, Langesund	Accommodations Charging
May 12			
	09:00	Langesund Landgangen Kristiansand	Departure Hillclimb "Korketrekkeren" Refuelling and charging Acceleration test
		Flekkefjord	Accommodation s Refuelling/charging
13.May			
	10:00	Flekkefjord	Departure Regularity test
		Egersund	Teaming up with the Mini rally
	16:00	Stavanger	Arrival
	18:00		Opening of the 24th EVS

() For the EVs, the total energy consumption for the whole rally will be measured (plug to wheel) and used for the Eco driving special stage. For the Hydrogen cars a special stage in Porsgrunn will be used (TTW). This is because we will need to use two mobile refuelling stations for the hydrogen vehicles on the route that lack accurate measuring equipment.*

Distances:

From	To	km
Oslo	Drammen	45
Drammen	Porsgrunn	100
Porsgrunn	Kristiansand	164
Kristiansand	Flekkefjord	123
Flekkefjord	Stavanger	135
Egersund	Stavanger	77

The actual distances between the hydrogen filling stations on the Porsgrunn - Kristiansand and Flekkefjord - Stavanger routes

may differ somewhat from the distances shown above.

The road from Oslo to Porsgrunn is mainly highway and mostly flat terrain. From Porsgrunn to Kristiansand the terrain is more varied. Some stretches have hilly parts but are not very demanding. The last part of the rally is more challenging with mountains and valleys. The upper speed limit in Norway is 100 km/h. The speed limit on this route is between 70-100 km/h. The most common limit on this route is 70 or 80 km/h.

Practical information

Special stages

Special stage	Criteria	Remarks
Auto slalom	Time	
Eco driving	Fuel consumption	The teams must follow ordinary traffic flow
Hill climb	Time	
Acceleration	Time	From standstill to 201 meter
Regularity	Regularity	

The special stages with exception for the eco driving and the regularity test will be held at closed areas.

Rules

The winner of the rally in each category is the combined winner of the special stages.

A co-driver is mandatory. The co-driver must stay onboard the vehicle during all legs and special stages of the rally.

A handbook with detailed rules and practical information will be made available to the teams. A winner in each category will be announced at the EVS-24.

Vehicles

All road legal hydrogen, plug-in hybrid and

battery electric cars are eligible. Unfortunately we can not accept larger vehicles like buses and trucks at this time.

A special rally category for experimental non road legal vehicles will be considered at the Mini rally route. These vehicles will have to pass a on-site basic safety inspection in order to get a temporary license for the rally.

Teams

This is an open event. However due to logistics and refuelling capacity we reserve the right to restrict the number of teams on a first come basis. Book your place today!

Fee/Sponsors

The rally event is subsidised by sponsors. The teams must reserve some space on their vehicle for the official rally Sponsor ads and the rally number plates. The teams are free to use the remaining part of the vehicle for team sponsors. However according to Norwegian law alcohol and tobacco ads are prohibited. For teams that do not want the official sponsors logos on their vehicle a non-sponsor fee applies.

The participation fee for the full rally is 1000 NOK,. The no-sponsor fee is 10 000 NOK. The mini rally is free of charge.

Fees do not include accommodation or meals.

Accommodations

We strongly recommend the participants to book hotels as early as possible. We also recommend you to participate in EVS24. By registering as delegate to EVS you can also book hotel rooms. See www.evs24.org.

Logistics

Please contact the organizers for advice on logistics .

The hydrogen stations

Hydrogen at 350 and 700 bar will be available at all the permanent stations (Oslo, Drammen, Porsgrunn and Stavanger). At the

temporary stations (Kristiansand and Flekkefjord) hydrogen at 350 bar will be available.

Hydrogen quality will be according to SAE J2719 (fuel cell quality) and will be supplied by StatoilHydro.

EV charging

Standard EV charging points 16 A 220 volt (+/- 10 %) will be provided for the teams at the places indicated in the distance table. If you have any special requirements please discuss this with the organizers.

Organizers

Norges Bilsportforbund (NBF)
Kongelig Norsk Automobilklub (KNA)
The EVS-24 Organizing Committee
Hynor- The Hydrogen road of Norway
Norstart -The Norwegian Electric Vehicle Association

Contacts

For more information on the rally:

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or visit vikingrally.no.

Registration

Register at vikingrally.no

www.vikingrally.no