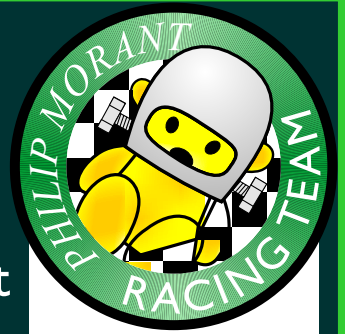
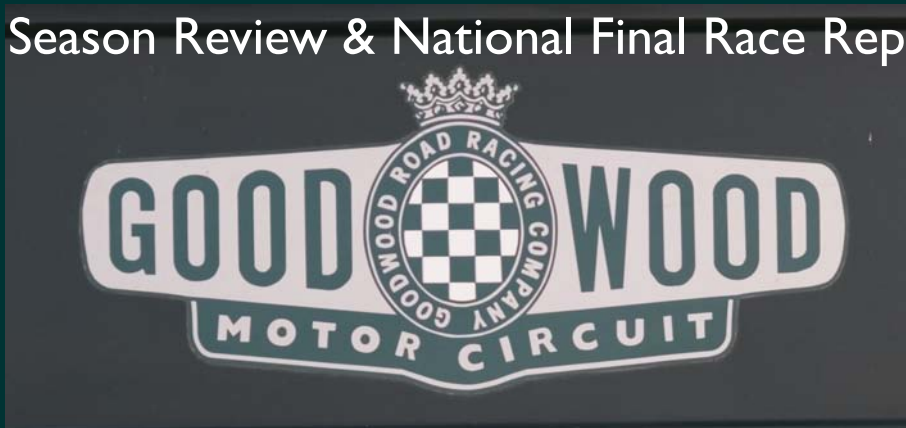


www.pmgreenpower.org.uk

# PHILIP MORANT Greenpower



## 2007 Season Review & National Final Race Report



“Goodwood National Final Race Report” wow! At the beginning of last season, when we didn’t even have a car to race, I’d have been very surprised that I’d be typing those words. Last year’s season turned out to be our most successful ever - 3 heats, 3 awards, 1 final and 219 miles of racing. The week leading to the October National Final at Goodwood was certainly memorable. While the team were being fitted for new helmets at Colchester Motorecycles our school minibus was broken into and the student's bags taken. The disruption caused by the theft left us with less preparation time than we'd planned for, so the last couple of days were much more fraught than usual, even by our standards!

### What is Greenpower?

Greenpower is a national electric car racing project for schools and colleges around the UK.

Each team must build an electric vehicle around a standardised 250 Watt 24 volt electric motor and a set of 4 12 volt lead/acid batteries. A strict set of regulations ensures safe and close racing. Cars are designed and built within the schools with the help of teachers, co-opted outside engineers, parents and sponsoring companies. They then compete in a number of Greenpower run marathon and sprint events throughout the country, using well known motor racing circuits.

The trip to Goodwood demanded a 5 o'clock start from school so we left in the foggy darkness Sussex bound. The day dawned brightly as we reached Goodwood and our allocated paddock. The team quickly organised themselves and joined the lengthy and growing queue for scrutineering. Franc N. received his all important sticker without any problems and we prepared for practice. Before we'd left we knew we had problems with a massive voltage drop between the solar panels and our motor cooling fans - the first job was to replace the cable with a heavier gauge lead which solved the problem but took up some of the allocated practice time. About to go out, we found Franc was suffering from a puncture! A very quick wheel change later (well practised now after the tyre troubles in Kent), we reached the circuit...just in time for practice to finish, without turning a wheel in anger.



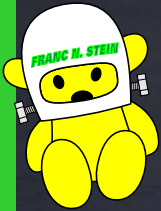
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**Sponsorship.** The Greenpower team welcomes support from business - help with parts, manufacturing, materials or funding. In recognition, sponsors logos can be carried on the car and team racewear. Please contact Mr. Stuart McCain at the school or email [sponsorship@pmgreenpower.org.uk](mailto:sponsorship@pmgreenpower.org.uk)



Before the race all of the teams take part in the driver (and car) parade along the main straight. The team looked splendid in new overalls, helmets and with a banner printed for us by Curtissigns.com of Colchester. Franc N, with Josh at the wheel lined up on the 75 car grid ready for Lord March to start the four hour race. Only 1 lap into the race, Franc started to have problems with his main fuse blowing - a quick change to a lighter driver did not help the problem. Recovering to the paddock, the problem was quickly traced to a loose connection in

the main power circuit. Suddenly the lack of practice had cost us 27 minutes of racing. Connection fixed, Franc was back out and began to lap the lengthy Goodwood circuit in a respectable and consistent 6 and a half minutes. With Franc running reliably and driver and battery changes going smoothly we began to climb up the standings from dead last at the end of the first hour through to an overall tied 60th place. One more lap would have jumped us up to 53rd! But for the time lost at the start we should

have been within the top 50. We still managed to outperform our qualifying position by 3 places, and but for our early stoppage, were on target for a record milage.

After the race we were very pleased to be awarded the Environment Agency Greenest Car Award. An extremely prestigious title amongst Greenpower competitors.



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## New Season Progress

Plans for the new season are under way with the building of a second car to run alongside Franc N. Stein. Mr. Stein has been reliable and our most successful car to date, but we have wrenched all the performance we can from his basic chassis. Mr. Stein will still be racing, form a great training car for new drivers and a platform for experimental work - for example improving on the datalogging we ran for the first time at Goodwood. The team is still in need of support for the new car, newly named "Fireblade". Thank you to all our new sponsors who are listed overleaf. We are currently working on the design for the new car with input from South Bank University and the RAF. Thanks in particular go to Nigel Burgess of South Bank and Alasdair Gilbert of the RAF for their time and energy



Mad Dog

spent on the project with us. Perhaps the recycle theme has bitten hard since Nigel Burgess generously donated 'Mad Dog', Britain's first successful finisher in the 3,650km World Solar Challenge Darwin to Adelaide race in Oz. This historic car, once British record holder but quietly rotting in a lock-up, contained many useful and serviceable parts which are being refurbished and mounted into Fireblade. It cannot

be said that Fireblade doesn't have a great pedigree. We currently have a plywood mock up of the new chassis built, in which Mr. Hodge is pictured. The ply mockup is to be built up into a rolling, functioning chassis before being remade in a fibreglass/honeycomb composite material usually used for structural components in planes and helicopters.



Mr. Hodge tries our ply mock chassis for size.

# Fireblade

