

# ARDINGLY IFIELD SOLAR

WELCOME TO THE SECOND EDITION OF THE NEW ARDINGLY IFIELD SOLAR NEWSLETTER. WE HOPE YOU WILL FIND IT BOTH INTERESTING AND INFORMATIVE!

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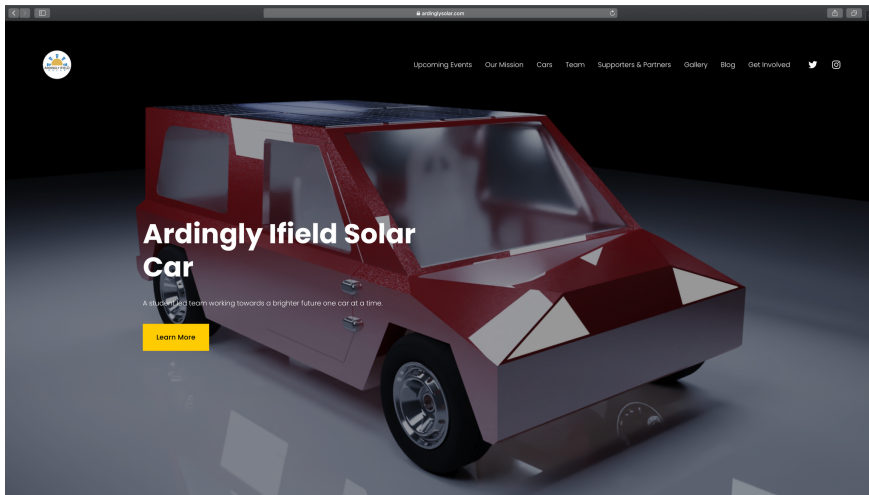
## WHAT'S IN THIS ISSUE:

*Launch of the New website  
and logo*

*Working with covid-19*

*Flat pack design  
parameters*

*Up and coming Events*



## NEW WEBSITE AND LOGO

During the lockdown, we have had a complete brand overhaul!

We personally thought our website looked outdated, both with the appearance and the content of the website. Therefore, given that we were restricted to working online rather than getting hands-on with the car, we decided it was the perfect time to give the website a new look. Bibaswan, our head of electronics, led the way by designing the website and delegating tasks, such as writing blog posts, to fill the website. Every meeting, Bib gave us a progress update and we all contributed any ideas we had, to finally make the website that resonates with all of us.

The new website aims to give a better insight into what we do, with more frequent blog posts and website updates, to engage more with our sponsors. To compliment the website we decided we needed a new logo. We wanted the logo to reflect the partnership between Ardingly and Ifield, as our previous logo did not incorporate Ifield's name into the design. Thus, many of us decided to submit a logo design anonymously, from which we took a vote on. The winning logo made use of vibrant colours and had solar panels embodying the rays of the sun, which we thought epitomised what our project is about.

To conclude, the new website and accompanied with our new logo has built upon our fantastic framework and reflects the professionalism of our student-led team.



# MAJOR FORTHCOMING EVENTS

As our team continues to progress within the Ardingly Solar project, more and more opportunities have come our way.

Because of all the hard work that has been put in by our whole team from beginning all through quarantine, which hasn't been the easiest to the present moment, we have managed to find ways to really get out there and get invited to events of high recognition.

One of the events that we will be taking part in is Cars and Christmas taking place on the 5-6th of December. It will be taking place in Farnborough. This will include 8,000 visitors being present as well as getting national media coverage. Another great event that we cannot wait for is Climate change which the BBC has kindly invited us to take part in. The presentation will be taking place at the Manchester Science Museum between the dates of 12th and 21st of February 2021. This is a great opportunity for us to get ourselves more talked about as approximately 20,000 visitors will be present and we will get coverage by the BBC.

The next, most important event that we have been looking forward to for the past few months but had to sadly move up by a year because of the recent COVID-19 situation, is the John O'Groats to Brighton trip with the Institute of the Motor Industry. This will be our longest and most impactful opportunity that we have got out of the four. It will be a really great occasion to get the team back working all together and just really have an amazing time on a nice car trip in the summer holidays. The plan is to leave on the 1st of August and be back in Brighton by the 10th of August. We will be stopping at set locations where we have been asked to join a range of different people. These include Holyrood, The National Space Centre, IMI HQ and the Palace of Westminster. It will involve getting coverage by the national and local radio, media and newspapers. And our last destination so far is the British motor show taking place in Farnborough again, soon after the John O'Groats trip, from the 19th to the 22nd of August. As well as the other events, approximately 80,000 visitors will be present and we will be getting national coverage.

I think we can proudly say that the future is looking bright!

Event	Date	Location	Coverage
Cars & Christmas	28-29 November 2020	Farnborough	8,000 visitors and national coverage
Climate Change invited by the BBC	12-21 <sup>st</sup> Feb 2021	Manchester Science Museum	20,000 visitors and BBC coverage.
John O'Groats to Brighton trip with the Institute of the Motor Industry	1-10 <sup>th</sup> August 2021	Holyrood  National Space Centre  IMI HQ  Palace of Westminster	National and local Radio, TV and newspapers.
British Motor Show	19-22 <sup>nd</sup> August 2021	Farnborough	National Coverage with 80,000 visitors

# IMI PRESS REPORT AND SPECIAL THANKS

## *IMI looks to the future as it lends support to Student Solar Car Project*

@The IMI looks to the future as it lends support to Student Solar Car Project @ArdinglySolar Automotive industry professional body provides technical expertise for innovative project with ambitious road trip planned for 2021. Ardingly Solar is a collaborative project between two science renowned schools: Ardingly College and Ifield Community College. Long before COVID-19, students from both schools worked together during evenings and weekends to create solar powered vehicles that have raced around the world. From crossing Australia in the Bridgestone World Challenge, to racing around France and Belgium in Solar endurance races, the Ardingly Solar car illustrated the rising talent which matched and often exceeded the expertise of multi-million pound companies and world leading universities. Under the guidance of Dr Andrew Spiers MBE, Ardingly Solar Car Project Manager, and with the help of volunteer companies, teachers and individuals including IMI regional member representatives, Douglas Wragg and Mike Reed, the students from Ardingly College and Ifield Community College had already made a name for themselves in the world of automotive innovation. The arrival of COVID-19 has taken that to a whole new level. Since the lockdown the students have been working remotely – but together – on an exciting new project: the Flat Pack Car. And the IMI regional representatives have continued to provide vital support.

Using the wealth of knowledge gathered since the first solar car was built in 2015, the students decided to create a new project that reflects some of the concerns they have in the modern world, while being both educational and addressing real world issues. “We want to make something that anyone can build, that’s versatile, robust and affordable”, explained Josh Skeggs (Year 10) Ifield Community College. The idea is to deliver a solar powered vehicle that can be flat packed to site and assembled easily. It should be modular and simple in design with the ability to use local resources and can be used as an off grid power source for remote areas.

The students have been meeting up virtually twice a week to analyse and compare ideas. They have been learning to design and realise the project, using research online and programs such as Fusion 360, with every aspect of the vehicle mapped out and created, from the hub motors to the solar panels, dashboard, pedals, steering and chassis. All details are being designed to fit within the given criteria to make sure they fit and work well together while being simple to assemble and robust enough to work off road in remote environments. “Despite being in quarantine, we have continued our work, through video calls and emails and are currently working bit by bit on building a car purely through design and conversation” said Marley Gaule, (Year 10) Ifield Community College. “During this time of COVID where the whole country has come to a standstill, to be part of something that is moving so quickly is super exciting”, added William Price, (Year 13) Ardingly College. And having something to do, like designing a car is pretty awesome! “Refusing to be held back by COVID-19, the students are also planning an ambitious road trip for 2021 in the original Solar Car. Next July, in partnership with the IMI and on behalf of BEN, the automotive industry charity, the students will drive the Solar car from John O’Groats to Brighton, stopping at sites of interest and those that have played a part in the manufacture and creation of this amazing and innovative car. Mike Reed, AAE, MIMI, concluded: “Douglas Wragg and I have found working with everyone on the Solar Car projects immensely uplifting. We easily get more from the project than may be realised and to be mixing with such intelligent and focussed participants gives us an insight into the character of this country’s future engineers and confidence that our industry will be in good hands going forward.”

## **G.W & G BRIDGES LTD - SCRAP CAR RECYCLING & VEHICLE SPARES**

A huge thanks to G.W. & G Bridges Ltd and a thank you to Russel for supplying Peugeot 206 parts namely the rear and front axels (with steering, suspension and brakes). We are now confident in using these parts in the Flat pack solar car build. A huge step forward!



## WORKING DURING COVID

For two Saturdays, some of our team gladly spent their mornings at Mike Reed's farm learning about the basics of some mechanical parts and the skills required to maintain, repair, or even build electrical or mechanical components. On the first Saturday the team dismantled the disk brake system on the rear axle with the help and teaching of Mike Reed, taking it in turns moving around a circle to do one job at a time so that we could maintain social distancing. On the second Saturday, Mike taught the team how to solder. Using both an electric and a gas-powered solder iron, the students soldered wires together that would have no resistance to the current. On that same day Mike gave each member a chance to use a small pneumatic crane to lift and lower a land rover engine into the base of an old land rover frame.

We as a team are very grateful for Mike letting us into his residence and teaching us the important basics to cars, and look forward to everything else he has to teach us. Thanks Mike!

## WANT TO GET INVOLVED?

We are always looking for more support. If you are interested in getting involved, get in contact.



[www.ardinglysolar.com](http://www.ardinglysolar.com)

