Challenge Day 1 – Maybe not a good start but still a good result!

Finally it’s the day the actual challenge starts, the day this whole team has been working towards for the past year and a half. At 8.30h Darwin time on Sunday morning all Solar Cars gathered in downtown Darwin to set off in the order that was determined by their time trial. Stella Era was 20th in line and as planned started with 4 people when bad luck struck, a red traffic light! Usually not a problem of course but this time it was uphill and all Momentum was lost. It was too much for her (too much used to the flat countryside of the Netherlands I guess?). Quickly the passengers stepped out of the car exactly according to the safety protocol and off she went.

At the start in Darwin

The rest of the convoy waited further down the Stuart Highway, along with some jolly people with seats, kids, parasols and coffee – who were waving at all solar cars. It really felt as if we were in a parade and if we were winners already!

The first 300km stint is a bloodbath (not literally luckily), teams overtaking each other trying to get ahead before the dual lane turns into single lane. With pride we saw both Twente and TopDutch driving past and that is still showing on the scoreboard. Results will be published online, including their energy efficiency but that doesn’t show until tomorrow morning. For the strategy guys this is very important information just like the weather conditions and who is driving with how many passengers. The more passengers (up to 3) the more points can be scored.

This highway is quite special for more than one reason, it is mostly single lane, which proves to be a challenge on its own as overtaking other convoys is not easy due to the oncoming road trains that go really fast. Often the speed limit is even 130km/h which doesn’t always help. Another special thing are the surroundings, a beautiful but harsh scenery, surprisingly fresh greens and the intense red
Most if not all trees are scorched at the bottom with green leaves on top due to the many roadside fires apparently. In between the many trees there are funny looking red sculptures which turn out to be termite hills, sometimes wearing a t-shirt or even a bikini which looks really funny.

Weird termite sculptures

Scorched but living trees

After about 300km in temperatures of 40 degrees we reached the first Control Stop. As soon as the car is parked the driver has to get out fast and sprints to the officials to start the time. Nobody is allowed to touch the car for 30 minutes after which the new driver and freshies can enter the car and drive off as soon as possible. We bought a lovely parasol with pink flamingos to keep those guys and the observer a bit cooler than burning hot.

Control Stop 2, just in time!

And off we were again, for another 300km from Katherine to Daly Waters to hopefully get there on time for Control Stop 2 which we did, just in time at 16:55:43. This means that tomorrow we are not allowed to start at 8am but 25:43 minutes later so we still stood still for the mandatory 30 minutes.
Twente and TopDutch doing great! We’ve also made good progress!

At the Control Stop at Daly Waters are camping grounds, which means a patch of land behind the gas station and some toilets and showers. In no time the whole camp was set up with tents, a work shop tent for Stella Era, a cooking tent, chairs, stretchers and lights. We prepared a red sauce pasta with loads and loads of courgette, onions, carrots, aubergines and tomato sauce. Then it’s time for the briefing of the team and all the tasks for that evening and morning. Washing up, typing this and then off to bed as soon as possible.

Camping ground before
Tomorrow is a somewhat shorter day as we have to stop at Tennant Creek at 14.00h (or before of course) to recharge the cars. I somewhat as we have to get up at 5.30am so goodnight!!
Challenge Day 2 Long hard road to Tennant Creek

After just 5 or 6 hours of sleep on our stretchers on a campsite which sounded like a car workshop it was time to get up and prepare ourselves for a long stretch to Tennant Creek of 500km in one go. The static charging team got up an hour earlier to make sure Stella Era would get a good spot in the morning sun to soak up as much energy as possible.

Static charging before the start of the day

At the gas station bar a long queue was forming to get a much needed coffee before setting off. As we were waiting to be allowed to leave, other teams who camped further up north started to come in with the usual chaos, running and shouting people. One driver sat in his car talking in his radio while he should have gotten out quickly to start the 30 minutes stopping time, until a team member started to shout at him to get out. Some teams first parked in the shadow and had to move their car before stopping the time. It was quite the spectacle!

Today the vastness of Australia really sunk in, hundreds of kilometers of the more or less same countryside, not many people on the road apart from all the convoys of course. This trip really tested the sturdiness of the car, as well as the power of the battery.

**Stella Era did absolutely great today, we are now the first Cruiser car and 9th of all solar cars.** Three other teams were not so lucky, their cars arrived on a trailer for various reasons we don’t know yet. Did their battery die, electrical problems or did something else break down? I guess we’ll find out later on but we can imagine they must feel quite depressed.
Meanwhile in the camper we get explanations of electric batteries, charging times, efficiencies, updates on other teams but luckily also compliments from people who also have a radio and complement us how lovely the car looks with the Australian outback backdrop.

Well done guys!
Arriving in Tennant Creek was such a great moment as there was a big sense of relief that we made a good time. Sheltering under our tent from the scorching sun we felt we’re in a good flow and are really working well together as a team. During the evening briefing this also became clear when five people were selected to give positive feedback. Professor Ton Backx finished with another motivational speech to give the team another boost because two hard days lie ahead with lots of kilometers to cover.

Another good thing in Tennant Creek: a pool!

But so far, so good!
Challenge Day 3-4: Blown away!

When I started writing this in Alice Springs yesterday, I thought of the corny title ‘Towards a town called Alice (Springs)’ but after what happened today it can only be called Blown away!

Last night we thought the many, many, MANY flies was the worst thing this evening but no.. Right after dinner an enormous hot gust of wind struck us, nearly knocking over our workshop tent that protects Stella Era. At least ten guys jumped up to hold it down and all was good. So we thought. Ten minutes later the wind struck us again and an emergency clearing of the campsite took place. Within no time people were shouting for hammers, pegs, lights and a line was formed automatically to dump all chairs, tables, washing up, pans, cookers, well, basically everything apart from the tents in the truck to keep it from blowing away.

We knew that on Wednesday there would be lots of wind but it came much earlier than expected. Things got even worse the next day as our fellow Dutch team from Twente literally were blown off the road! We feel bad for them that their challenge is now over and the same goes for the team from Aachen (although on Twitter they say to be driving again, hurray!). All other teams were on a 80km/h restriction so no more accidents could happen. We are very grateful that nobody got hurt!

Meanwhile we had to keep going for a 350km stretch with headwinds of 40km/h with gusts from the side as well. Our camper took several hits which wasn’t nice so we really feared for our beloved Stella Era but she made it just fine!

On challenge day 3 there were 2 Control Stops, one in Barrow Creek and one in Alice Springs, which meant we were halfway the trip to Adelaide. After Alice Springs we stopped by the side of the road to do some actual outback camping, well, next to the highway that is. I was told the millions of stars are amazing, such a shame there was a near full moon that took away the view of the Milky Way not to mention the ominous clouds..

We also had a flat tire with the camper but that seems so trivial after what happened today. Our truck guys Wouter and Mathijs managed to get us back on the road within ten minutes! Thank you guys!
Luckily it was us and not Stella Era with a flat tire!

Challenge day 4 took us to Coober Pedy, known for its opal mines (very precious stones). At the first Control Stop the news about Twente and Aachen left us all in shock!

The trip itself was mostly very long and tiring because of the strong winds (Mia’s arms were hurting from grasping the steering wheel). We had to occupy ourselves with trivia bingo (stupid questions that come to mind when feeling a bit bored, questions like ‘how cold is it in space (answer: zero Kelvin)). Next bingo question was, are there any wild horses in Coober Pedy because there was a horse that jumped on the road right in front of us (luckily we missed it) and moreover, the horse missed Stella Era.

Now we are on a campsite again and we are cold, for the first time in uh, a long time anyway! It is going to be only 9 degrees tonight so jumpers on everybody!

**Big question for everybody is of course, how are we doing?**

On the BWSC tracker app (iPhone only) or this [page](#) the position of all teams can literally be tracked. However, that is not telling you everything. Several teams have to trailer their car due to various reasons which means they seem ahead of us which in a literal sense is true of course. However, all Cruisers that are still driving are in Coober Pedy tonight.

These teams have trailered their solar car: Onda Solare, Lodz Solar Team, ATN Solar Car and even Bochum we heard (but unconfirmed).

We are now no longer in the Northern Territory but in South Australia with a different timezone, but the challenge stays in Darwin time. Note to self: get up on time in Darwin time!

2 more days to go, doesn’t seem long but we still have 850km to go..
Some happy campers unaware of the day ahead!

Our team Media, on ladders, mountains or cars, everything for a good shot! This is near Coober Pedy.
Like driving on Mars.
Challenge Day 5: More drama!

Today was another unbelievable day as the solar car of TU Delft completely burnt down! What an unbelievable and awful moment that must have been, just like it was for Team Twente when their car was blown over.
We were in total shock especially when seeing the pictures and reading what had happened.

*Picture from Vattenfall Solar Team on Twitter*

Before all this we were totally focused on reaching Port Augusta as it wasn’t an easy start this morning as we had several technical problems in the first 10km and pulled over 3-4 times, allowing other teams to overtake us..

*No time to lose!*  Photo by Bart van Overbeeke
It was another very long stretch with one Control Stop in the middle at Glendambo. Obviously people with a good sense of humor judging by this sign.

![Image of a sign welcoming to Glendambo with various statistics]

After all was resolved it was a long 480km to Port Augusta, the final Control Stop and involved a lot of overtaking. We managed to overtake IVE just before the end of day stop. This means that only SunSwift is ahead of us and tomorrow we only have another 197km of the 3000km left to go!

The other good news is that we are finally out of the dark zone, there should be internet available all the time so now we can keep you posted of our progress much better and mostly much quicker.

Official update by the BWSC organization today:

**CRUISER CLASS SCORES UPDATE**

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<tr>
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Official Judging is still to come on Saturday!

It is quite amazing to see how this team can stay focused for so many days with so little sleep. Every evening a team briefing and all the work that has to be done before catching some sleep. For instance on day 2 we had to pass a traffic light that is green for 30 seconds before turning red for five minutes! With the cars in front calling it on the radio we managed to pass the green light without having to slow down, some teamwork!

![Image of a team preparing the car for the next day]

*Getting Stella Era ready for the next day  Photo by Bart van Overbeeke*
Never knew one could be so thirsty, even after drinking at least two liters of water a day, your mouth and lips burn. Today’s hot curry was quite the surprise, making you even thirstier but it did warm us up a bit as the temperature dropped dramatically to just 9 degrees tonight. Big difference with the 28 degrees of two nights ago.

Tomorrow is the last day of the efficiency challenge and Saturday is the last day of the challenge with the award ceremony on Sunday evening (Sunday at noon in Dutch time) when the winner will be announced. Very exciting days ahead! #cantwait
Challenge Day 6: Finish day!

This was so exhilarating, what a fantastic feeling to see Stella Era and the whole team pass the finish line at Victoria Square in Adelaide! Words cannot really describe what a great feeling this was.

The video team captured it very well though, see it here!

We got up today thinking, today we finish, no matter what happens! It is only another 197km and compared to what we have driven, totally peanuts! Of course it was not as simple as that.. We started on time, the convoy was doing just fine when the CB radio started with stuff you just don’t want to hear after almost 3000km; the car was losing power and had to be restarted, several times and we all started sweating despite the cold weather (9 degrees last night, #ilovecampinglol).

After a while a BWSC safety happened to pass by and asked how we were doing and that is when the convoy heard all was OK again, what a RELIEF!

Overtaking another convoy earlier on  

(Camper got a warning to use the indicator (oops, so worried about what was going on)).

That was not the end of the ordeal though, as traffic was getting really heavy and Adelaide is hilly.. We all remember Darwin when Stella Era could not make it up the hill from a standstill position and Adelaide has several hills with a traffic light at the bottom. It was therefore extremely important to keep Stella Era moving, even at a slow speed to make sure the lights were green when she passed. This was once again one of those moments that you could see what a great team this is, how Stella Era was sheltered and cared for, making sure she would take those hills and get to the finish line, especially now that we were so close!

Meanwhile the convoy had to go to the support vehicles parking lot where a shuttle bus took us to the finish line so we could join all parents, alumni and other supporters of our team.

Without the alumni – their knowledge, dedication and help - and the support of family and friends we could not be as successful as we are and have made it to the finish.
We certainly have the best supporters!  

Photo by Bart van Overbeeke

We were all totally hyped, probably scared the bus driver with our singing and cheering and got to the finish line where Stella Era and all 4 passengers would arrive. And we waited and waited until it was announced she was in a traffic jam! Luckily we already passed the time control stop so no worries here.

As soon as the team spotted Stella Era the singing and cheering started again, climaxing by covering her in champagne as she was escorted to the final finish line. The excitement, relief, joy and happiness was truly heartwarming and an experience never to forget. For a moment it already felt as if we won, which of course is not the case, not yet anyway..

Because tomorrow, it is judgement day! The other 50% of the final score will depend on our presentation of the solar car and all of her features to the jury. It is only then that we also find out exactly what all other teams have to offer.

All we can do now is celebrate that we made it to the finish and hope all goes well tomorrow!
The traditional fountain celebration!  Photo by Bart van Overbeeke

Cheering on the team from Aachen for their dip in the fountain!  Photo by Bart van Overbeeke
Challenge Day 7: Judgement Day

This day is just as important as the past 6 days as it determines 50% of our final score! Today the team will present the car, her interior and features to a professional jury with representatives from industry such as Tesla and Lightyear.

We are ready to pitch!

This morning we found out we were first in line, no easy task but the team was totally ready for it. Just before our pitch time the beautiful banner was presented, showing Stella Era’s mean features. After that Stella Era was pushed into the tent where the judges and the audience was ready for us. It all felt so real, so professional as if we were presenting our business plans to the Lion’s Den (do you know that program?) which in a way it is of course. Are our features like the autonomous solar parking, being able to share energy and the well-designed interior with Wi-Fi and intuitive controls.

Each time had 3 minutes time for their pitch (strictly timed) and 5 minutes to show the interior to the judges. All Cruiser Class teams presented their cars which was really nice to see.
After that all we can do is wait. Well, apart from cleaning absolutely everything; the rental cars of the convoy – we already returned the camper yesterday after spending 1,5h getting the stickers off it – the camping gear, distribute all the food, wash clothes, pack all the technical gear and loads more. Pack it so it could either go into storage until the next challenge or be shipped back home along with Stella Era. There was also lots of social media sharing to do, talk to partners, sponsors and family and maybe get some rest. This afternoon there was also the Smart Grid event where we also presented our story on how to contribute to a more sustainable world.

Tonight it is time for a lovely pizza and salad dinner with the whole Solar Team and their family and supporters. Afterwards it is on to drinks with the other Dutch teams and the Belgian team so that should be really fun!

Tomorrow the big wait really starts as we only find out who has won the World Solar Challenge in the evening. Will of course keep you posted!

Watch this space!
Blog: Challenge day 8: Award ceremony day

WE WON, WE WON, WE WON!!

YES, all the hard work of the past year has paid off, not to mention the extremely hard work of this past week. You cannot imagine what a fantastic, exhilarating and amazing feeling this is. To sit at the award ceremony when the number 3 of the Cruiser Class is announced (IVE from Hong Kong) and still not daring to hope that we actually would win again. When number 2 was announced (SunSwift from Australia) the team got a bit quiet, shifting in their seats, did we really, did we really?

And then yes, to see that Solar Team Eindhoven is the winner of the Cruiser Class of the World Solar Challenge 2019 was just great. The cheers from other teams was really heartwarming as well as they marched to the stage to get their well-deserved Cup. With a final score of 104 (SunSwift 39 and IVE 28 points) it was a generous win.

Of the 17 Cruiser Class cars, 13 actually started but only 3 reached the finish line, all others had to be trailered to Adelaide, including Onda Solare, who we thought would be a fierce competitor as they also could drive with four people.

The results are:

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<th>Pos</th>
<th>Car</th>
<th>Team</th>
<th>Travelled</th>
<th>Road Position</th>
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<th>Person KM</th>
<th>External kWh</th>
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After celebrating the win well we went to the Belgian beer café where other teams would join us as well. However, the communication team was still extremely busy in updating social media, websites and talking to the press for at least two more hours before they could join the celebrations!

Main reason for it taking so much time was the speed of the internet. Uploading pictures and videos literally took 40 minutes or more. Which was rather excruciating as the Dutch news network NOS was waiting for our footage but we made it to the 6 o’clock news of Sunday October 20!

The team also received a call from Robert-Jan Smits, the president of our university to congratulate the team with this great achievement.
And last but certainly not least, the Dutch prime minister, Mark Rutte, called to congratulate the team!
On Hart van Nederland, late edition of Sunday October 20.

If you want to see more pictures and videos of the Solar Team Eindhoven make sure to check out their Flickr page and their Youtube channel that includes daily updates and videos.

The winner of the Cruiser Class of the 2019 World Solar Challenge: Solar Team Eindhoven

This is the end of my blog for now! Thanks for reading and take care!

Sacha