



McMaster Solar Car Project



SAVING THE WORLD ONE RACE AT A TIME

Hello, and welcome to the McMaster Solar Car Project. We appreciate the interest to support our team as we build our next solar car. The McMaster Solar Car Project would not be where it is today without the generous help from its sponsors, and we cannot thank you enough.

As we look to the future, there are many exciting competitions and events that we wish to participate in the future racing seasons.

We have acquired new members, finished the design phase last year to enhance our chances further to place higher in the upcoming race year.

The team comprises hard-working and committed students dedicated to making a more environmentally friendly car by continuously learning.

Our car is powered by 100% solar energy and can reach the speeds of a regular gas-powered engine. This remarkable feat that our team builds takes many months to plan and create. It costs around \$120,000 to build the solar car, and many different parties make it all happen.

As a sponsor of the McMaster Solar Car Project, you will be heavily involved and recognized as an integral part of our team.

Our passion is what drives us to dedicate thousands of hours to a project we all care about and want to become successful. Please feel free to contact us if you support our team's vision.

Sincerely,

McMaster Solar Car Project



MEET THE TEAM



The McMaster Solar Car Project is determined to make a positive difference by racing solar cars globally. Each member of the team is passionate about solar energy and the fight against climate change.

Through racing solar cars at competitions around the world, the team has an opportunity to raise awareness and support climate change initiatives.

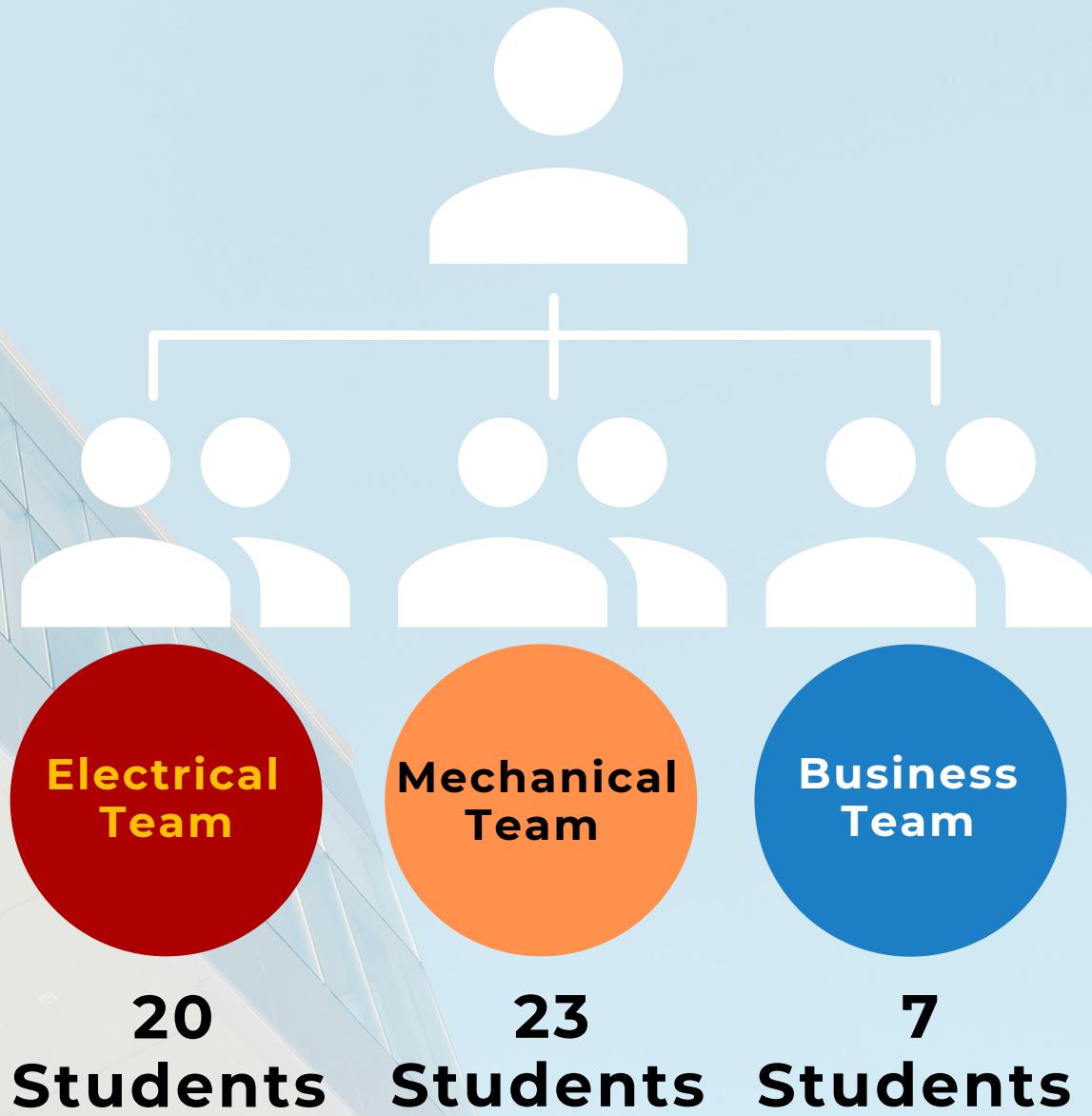
We are committed to a brighter future and share our passion for renewable energy everywhere we go.

A TEAM OF PROFESSIONALS

Our team consists of 50 undergraduate students who are dedicated to making an impact on the future. Team members come from all faculties and program levels.

Our drive for learning transcends the classroom boundaries and into an experiential environment where we can push the boundaries of what a car can do.

Project Manager & Advisors



OUR ACHIEVEMENTS

Our team has participated in multiple cross-country competitions spanning over 3,000km, racing against top university teams worldwide.

Our newest vehicle, the Origin, is currently in development and is competing in the American 2024 Solar Car Challenge.

Our Racing Achievements

Phoenix

- 2005 North American Solar Challenge

Fireball II

- 2008 American Solar Challenge
- 2009 World Solar Challenge

Spitfire

- 2015 & 2016 Formula Sun Grand Prix

The Origin

- To be expected - American Solar Challenge 2024.

Spitfire



Spitfire was MSCP's previous vehicle that was completed in 2014. In the 2015 Formula Sun Grand Prix, MSCP was the top-ranked Canadian team, coming in at 8th place. In the 2016 Formula Sun Grand Prix, MSCP and the University of Toronto were the only two Canadian universities among the top 13.

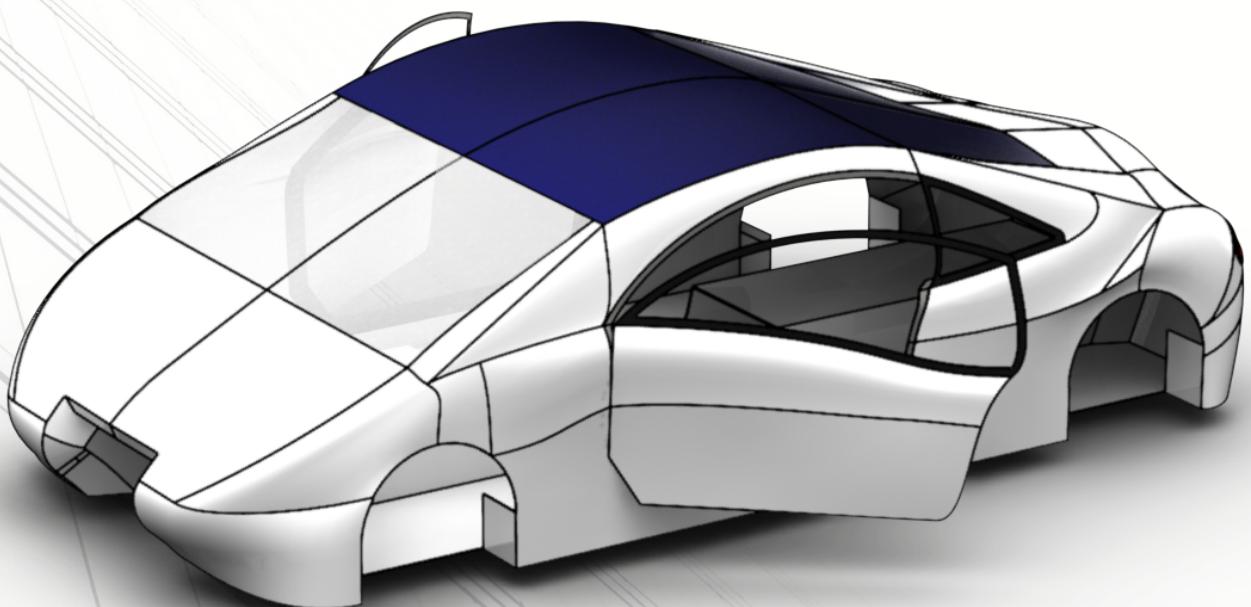


OUR ACHIEVEMENTS

Our Technical Achievements

CHASSIS & ERGONOMICS

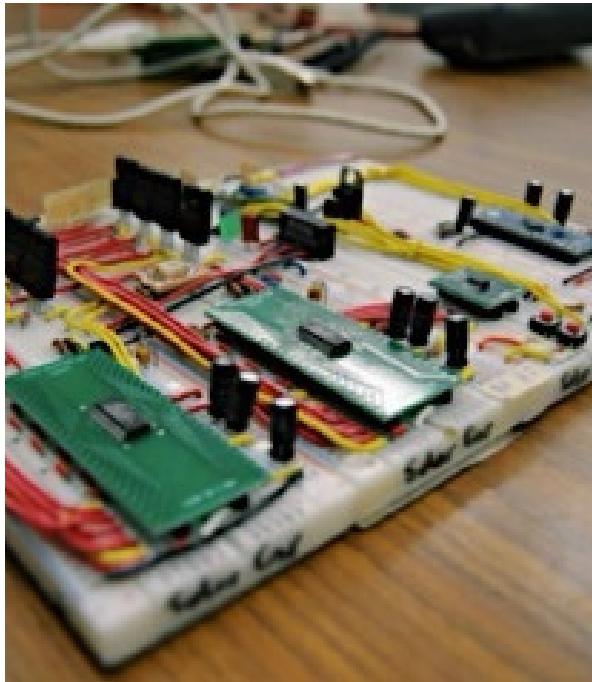
- The Origin is McMaster's first multi-passenger solar powered vehicle.
- Weighing around 100 kg and made entirely of 4130 steel, the vehicle chassis is designed to provide comparable strength at a fraction of the weight.
- Rigorous structural analysis was performed on the chassis to ensure the safety of the drivers.



OUR ACHIEVEMENTS

Our Technical Achievements

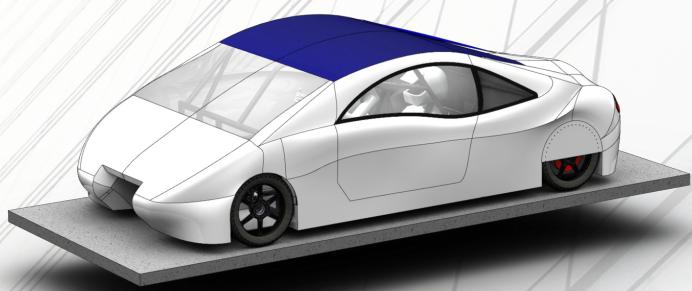
ELECTRICAL



- The Origin's electrical system incorporates the innovativeness of solar cell technology with the modernity of contemporary electric vehicle architecture.
- Lithium-ion 18650 batteries are utilized for their exceptional charging and discharge rates.
- SunPower (TM) C60 solar cells are integrated with maximum power point tracking technology to draw maximal solar power at any given time.

AERODYNAMICS

- Influenced by the streamlined shape of an airfoil, the refined design of the Origin was obtained through testing simulations in advanced analytical software.
- The Origin is designed to achieve the record for lowest drag resistance in market production, with a drag coefficient projection of 0.15.
- The Origin features a catamaran-inspired body that optimizes the anterior surface area.



ESTIMATED EXPENSE PROJECTION



Updated on March, 2022

\$51,040

Mechanical

- Suspension \$15,000
- Chassis \$12,400
- Aeroshell \$7,000
- Wheels \$4,000
- Brakes \$3,000
- Steering \$2,000
- Misc Tools/Equipment \$2,000
- Misc Fittings \$1,000
- Contingency* \$4,640

\$67,100

Electrical

- Motor/Motor Controller \$35,000
- Solar Cells/Encapsulation \$10,000
- Electrical Components \$5,000
- Battery/Battery Box \$4,000
- Misc Tools/Items \$2,000
- MPPT \$5,000
- Contingency* \$6,100

\$13,173

Competition

- 2024 American Solar Challenge Entry Fee *** \$12,500
- Insurance** \$2,000
- Contingency* \$1,198

\$131,313

All expenses are presented in Canadian dollars.

* Contingency is calculated to be 10% of the total expenses of each category.

** Pricing will be finalized and updated at a later date.

*** 2024 American Solar Challenge Entry Fee is calculated with a 5% increase based on the 2022 ASC Entry Fee of \$9,500 and converted to CAD with the exchange rate of 1.2523 USD: 1 CAD. ([Source](#))

SPONSORSHIP OPPORTUNITIES



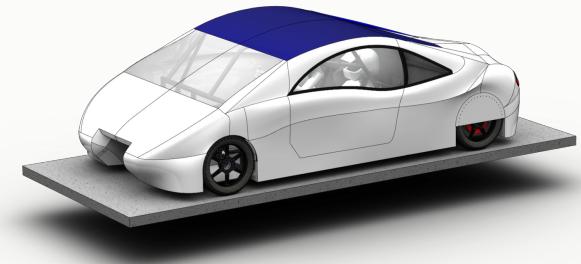
OPPORTUNITIES	COST	COMPANY FEATURE	INTERACTION	TALENT ACQUISITION
STANDARD	\$2000	- MSCP'S Website - T-Shirt - Social Media - Logo included on rear and side of car*	Invitation to attend car unveiling	Receives a copy of team resumes
ADVANCED	\$5000	- Promotional banner - Logo included on side of car*	Invitation to speak at car unveiling	Attend a networking event with MacSSCP team
PREMIUM	\$8000	- Premium feature on MSCP website - Logo included on front, side and rear of car*		

Note: **Advanced** Package includes all features from **standard**
Premium package includes all features from **advanced** and **standard**
*Please see next page for additional details

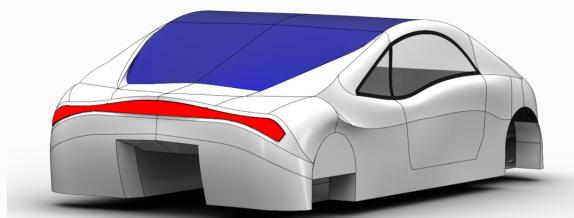
SPONSORSHIP OPPORTUNITIES

Logo Placement

We value and appreciate your generosity; thus, we would like to present your organization's logos on Origin's exterior to showcase our appreciation of your support.



Front



Back

Your organization's logo will be placed in different areas based on the sponsor amount, as the graphs below illustrate our plan for logo placement on Origin's exterior. There are two parts for **Premium** sponsors, three parts for **Advanced** Sponsors and two parts for **Standard** sponsors. Your organization's logo will be presented to the public as Origin drives from one competition to the next.

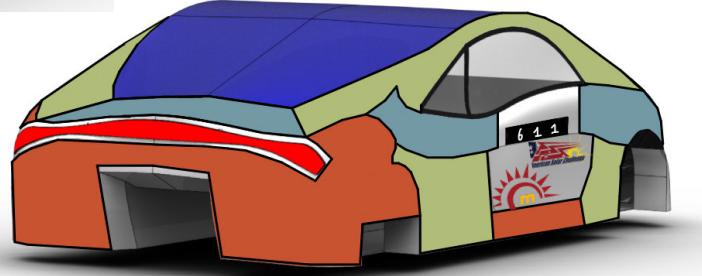
- Premium

- Advanced

- Standard



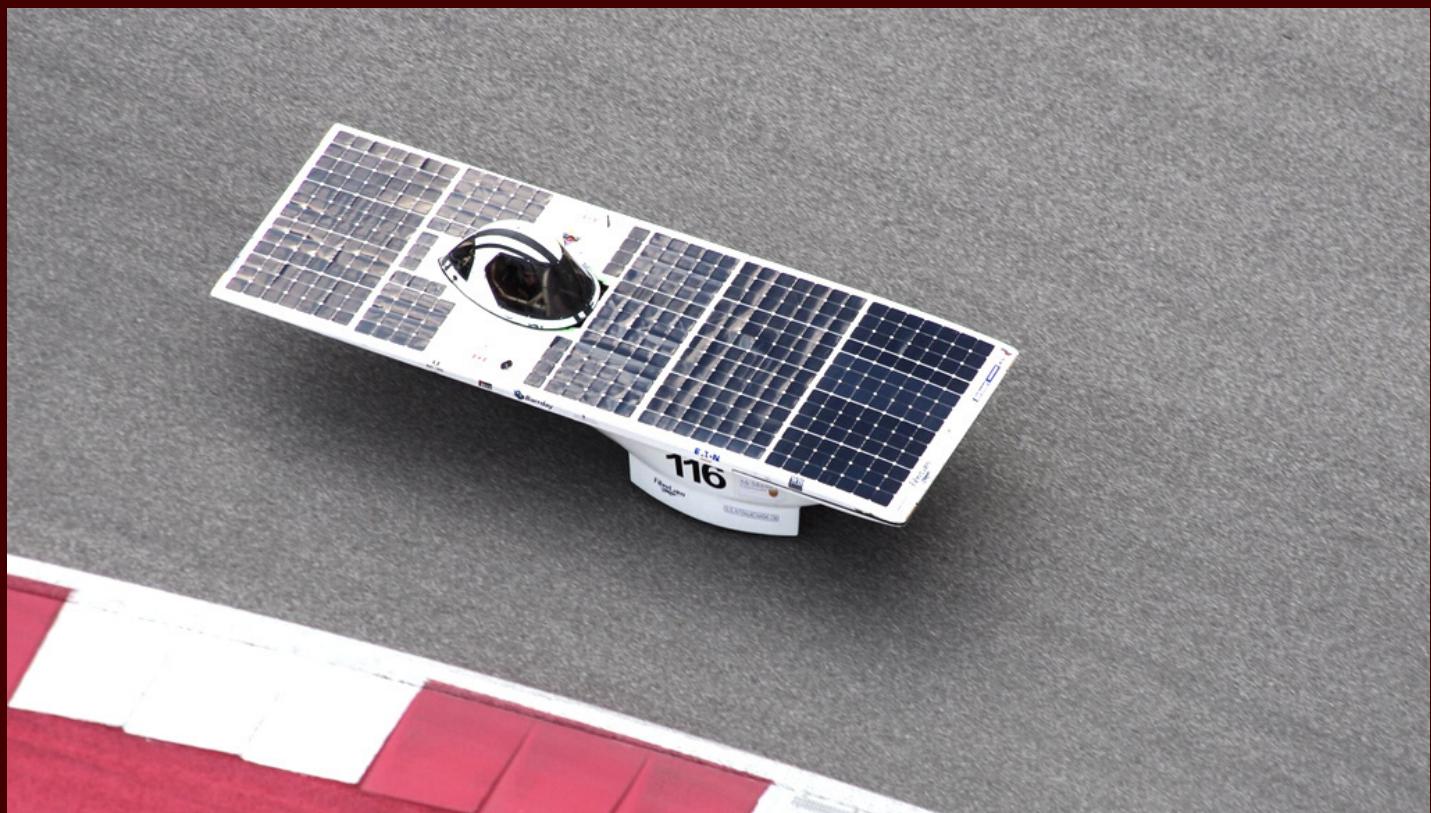
Front



Back



RACE ON OVER



Contact Us

If you are interested in becoming a partner please contact us at:

-  macsolarcar@gmail.com
-  www.mcmastersolarcar.com
-  <https://www.instagram.com/macsolarcar/>
-  <https://ca.linkedin.com/company/mcmaster-solar-car-project>

The McMaster Solar Car Project is thankful for any support from sponsors willing to donate. We genuinely appreciate all contributions received from companies that shares our vision: to help our planet prosper in the present and the future.

Without the support from our generous sponsors, our team would not be able to build the perfect solar car or be able to race competitively around the world. We strive for our best to make both McMaster University and our sponsors proud.

We are truly grateful for your help. Thank you.