

## CWSF 2018 - Ottawa, Ontario



### Natasha Burgert

#### The Solar EV: Applying high efficiency solar modules in sustainable transport

**Challenge:** Energy

**Category:** Senior

**Region:** South Fraser

**City:** White Rock, BC

**School:** Semiahmoo Secondary

**Abstract:** I have designed, built, and tested a 100% Solar Electric Vehicle that can ride indefinitely during sunny, daylight hours. This means that there is no need to ever pull over to charge or refuel. I have also applied this concept to a broader scale, to boats and trains, as a way to demonstrate the potential of modern solar modules in transportation.

#### Biography

I am Natasha Burgert, and I am a grade 11 student at Semiahmoo Secondary. I created a 100% solar electric vehicle, that can run indefinitely provided sunny, daylight conditions. I have participated in the South Fraser Regional Science Fair since grade 7, and Ottawa 2018 will be my second attendance at the CWSF. I am currently in the IB diploma program, and I have a passion for geography and many aspects of biology (however I enjoy most other areas in science as well). In the next few years I hope to figure out what specific area of science I would like to pursue, and I feel as though creating science fair projects is an excellent way to explore the many branches of science. The inspiration from my project came from me seeing solar module prices drop, and efficiencies steadily increase. My project has many areas to stem off of, such as creating different vehicle designs, or different sustainable transportation solutions. For students thinking about doing a project, I would recommend to find a topic that interests them, find a problem within that topic, and design a way to fix it!

#### Awards

#### Value

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| Excellence Award - Senior - Bronze Medal<br>Sponsor: Youth Science Canada   |         |
| Carleton University Entrance Award<br>Senior Bronze Medallist - \$1,000 Entrance Award<br>Sponsor: Carleton University              | \$1 000 |
| University of Ottawa Entrance Scholarship<br>Senior Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: University of Ottawa | \$1 000 |
| Western University Scholarship<br>Bronze Medallist - \$1000 Entrance Scholarship<br>Sponsor: Western University                     | \$1 000 |
| Total   | \$3 000 |