

## CWSF 2011 - Toronto, Ontario



### Evan Andersen

#### GigaGreen

**Challenge:** Energy

**Category:** Senior

**Region:** Simcoe County

**City:** Meaford, ON

**School:** Pretty River Academy

**Abstract:** GigaGreen studied the effect different cooling methods and overclocking had on the power consumption of a computer CPU. Results showed water cooling reduced power consumption by 24%. Applying water cooling and overclocking to a server farm of 10,000 computers could see a drop in power consumption by 50%, which would save 2.5 million kg of CO<sub>2</sub> every year.

#### Biography

I am a grade 12 student at Pretty River Academy and I enjoy physics, math and computers. I have competed in the Waterloo Math contest many times and won multiple awards. Last year I won a silver medal at CWSF, with my project on RFIDs. In my free time I like to tinker with LEDs, program and work on my computer case mods. I am a moderator on the online forum overclock.net, where I frequently post in the water cooling section. In the winter I work as a ski instructor and I love to spend time on the hill. In the summer I enjoy playing soccer and riding my bike. In September I plan on studying Computer Engineering at the University of Toronto.