

# Spotlight on Sustainability

## Your Green Team



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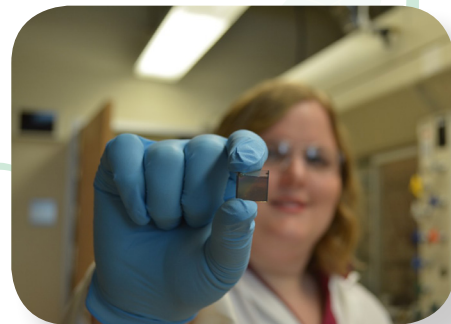


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## Shining a light on Solar Energy

Non-renewable resources continue to be most prominently used to heat our homes, power our electricity plants, and fuel our vehicles because they are more affordable and efficient compared to alternative energy sources.

Through the use of  $\text{CuInS}_2$  Nanocrystals in solar cells, PhD candidate Amy Tapley hopes to make solar energy a more cost-effective and environmentally friendly option that is competitive with the non-renewables market. Tapley has been implementing an eco-friendly material transformation process using low-cost, non-toxic solvents, including benzyl alcohol, to produce solar cells. By avoiding the use of highly toxic materials and high vacuum mainstream techniques, Amy aims to harness enough energy from the sun to meet current energy needs. With non-renewables having an impending expiration date and climate change events becoming more prevalent, Tapley's research will help pave the way to a more sustainable future.



Did you know that transportation accounts for almost 25% of total greenhouse gas emissions in Canada? Drive down your carbon emissions by using alternative transportation for your commute! By bussing, walking or cycling you can significantly reduce your carbon footprint.



## Recycle with Terracycle

This Spotlight on Sustainability is highlighting the Department of Physics & Astronomy's continuous efforts to go green at work. Not only does the department strive to reduce their paper usage, since March of 2016 they have been involved with Terracycle—a Nespresso Capsule Recycling Program—to improve their waste diversion! Through Terracycle, coffee grounds are composted and the aluminum capsule is recycled. To date, the department has collected and recycled 4000 capsules. Way to go!

