

Sustainival

Field Trip Day
Fri, Sep 4, 2015



The **GREEN BEAST** Energy Literacy Challenge • Watt-hour
Bicycle Challenge • Canola & Biodiesel Pavilion
• KidWind Engineering Challenge • Carnival Ride Physics
• Electricity & Magnetism Demos • & Much More!



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Educational Attractions for Fri, Sep 4

Green Beast Energy Literacy Challenge: an 'amazing-race' style quiz that spans the entire midway. Ride as many carnival rides as you can while solving questions about energy & the environment.

Watt-hour Bicycle Challenge: compete in pairs to see how much energy you can produce by peddling all out 60 seconds. You will walk away with rubbery legs and a visceral understanding of energy density.

Canola & Biodiesel Pavilion: it takes about 2400L of biodiesel to run Sustainival for 4 days. It takes 7000L of Canola seed to produce that much oil. The pavilion showcases a 7000L canola seed silo; a 1/100 scale model of the crop area required to grow that much seed; a mobile biodiesel production demonstration lab; an oil pressing station; and models of the molecular transformations from photosynthesis to biofuel.

BagJump High Dive: ever wonder what it feels like to be stunt double? Gravity is your friend when you jump from great heights into a giant inflated stunt Bag.

KidWind Turbine Engineering Challenge: use the assorted components to fashion your own wind turbine and compete in the wind tunnel to see which designs produce the most power.

Electricity & Magnetism Demos: with our bike-powered Jacob's Ladder and Van der Graph machines, learn all of the basic principles of electricity and magnetism in a fun experimental context.

And Much More: other installations at the event include the carnival ride physics challenge, recycling and waste management demos; pneumatic energy storage demos; modelling with lego; Telus' science in motion; an interactive gardening station; and more.