



Climate Change Action Town Hall

Hamilton, Ontario

March 3, 2011 – 1 to 5pm

Liuna Station (360 James Street North)



FACT SHEET: FOOD

Discussion Points

- ◆ What do you think we, as a community, could do to deal with food and climate change?
- ◆ What is happening in Hamilton on food and climate change?
- ◆ How should we move forward and what do we need to have in place?

Facts

- Food security is defined by the (FAO) Food and Agriculture Organization of the United Nations as, “when all people at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary and food preferences for an active and friendly life,” (FAO 1996).
- The four aspects of security are availability, food accessibility, food use, and food system sustainability.
- The years 2007/2008 saw dramatic increases in world food prices due to unseasonable droughts in grain producing nations and rising oil prices. As a result, rising oil prices lead to an increase in the cost of fertilizers, food transport, and industrial agriculture.
- Hamilton’s core and East Hamilton are the most vulnerable areas when it comes to the effects of climate change due to the high rate of poverty
- Climate change exacerbates economic problems because in many cases it has become necessary to travel further to obtain sufficient food for remote areas.
- Hamilton’s economy contains an estimated \$1 billion a year agricultural industry. The rural areas of Hamilton are home to an agricultural/agri-business industry, which generates significant tax revenues while utilizing few municipal services. Closely related to the agriculture/agri-business sector is the food and beverage processing industry.
- The provision of food system includes all emissions from the electric power, transportation, industrial, and agricultural sectors associated with growing, processing, transporting, and disposing of food. The systems view is helpful for framing opportunities to reduce GHG emissions through prevention - oriented mitigation strategies that act across an entire system.
- How food travels is just as important as how far food travels = “food mile”
- Food processing, packaging, storing and preparation account for most of the energy costs of food.

- A local vegetable grown out of season in a heated greenhouse usually uses considerably more energy than its imported field – equivalent, trucked or shipped from afar.
- Over the past 30 years, North American farms have been reducing their energy intensity while increased kitchen appliances – fridges, freezers, dishwashers, electric kettles, food processors, etc. have demanded more energy.
- Studies have shown that, for many crop species, elevated ozone (O₃) concentrations result in a substantial reduction in yield (IPCC, 2001). Emissions of ozone precursors, ie. volatile organic compounds (VOCs) and nitrogen oxides (NO_x), are often reduced through GHG emission reduction strategies. According to the US Environmental Protection Agency, elevated levels of tropospheric (ground-level) O₃ are damaging to vegetation and can have significant impacts on the agricultural industry.

Figure 1: Potential impacts of climate change on agricultural crops in Canada

