



# talk about bioenergy

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## Renewable Fuels Standard

### What are renewable fuels?

Renewable fuels are made from biological sources, like grains, canola, corn, cellulose from plant fibres, switch grass and straw, and forestry and livestock waste products. Ethanol and biodiesel are two renewable fuels used in Alberta.

### What is a renewable fuels standard?

The standard is a government requirement to blend either ethanol or biodiesel into fuels that are sold to customers, like gasoline and diesel.

***Alberta's Renewable Fuels Standard (RFS) will require five per cent ethanol content in gasoline and two per cent renewable content in diesel.***

In Canada, four other provinces, British Columbia, Saskatchewan, Manitoba and Ontario, have a renewable fuels standard. The Government of Canada is in the process of implementing a federal renewable fuels standard: five per cent renewable content in gasoline by 2010 and two per cent renewable content in diesel and heating oil by 2012. In addition, Quebec has proposed five per cent ethanol content in gasoline by 2012. New Brunswick has five per cent renewable content in both gasoline and diesel with no time commitment.

### When does Alberta's RFS come into force?

Regulations will be required for the RFS. The expected implementation date is set for July of 2010.

### Why does Alberta need a renewable fuels standard?

The RFS will help Alberta meet its climate change targets and has a number of environmental advantages.

- The RFS will reduce carbon dioxide and monoxide emissions and smog-creating compounds.

- The use of renewable fuels in Alberta has the potential to reduce carbon dioxide emissions by about one million tonnes each year. That is equivalent to taking 260,000 vehicles off Alberta's roads each year.
- Renewable fuels are also biodegradable and non-toxic.
- The production of renewable fuels has its own set of environmental benefits including reduced water and energy use and improved technologies for the use of waste.
  - Alberta currently produces 20 million tonnes of waste each year. Emerging technologies have the potential to convert this waste to bioenergy products, including renewable fuels.

The RFS will also support Alberta's renewable fuels sector. A renewable fuels standard will encourage research and development of technologies, such as ethanol production from forestry biomass and waste-to-energy initiatives.

### Are food crops used to produce renewable fuels in Alberta?

In Alberta, 1.2 per cent of locally produced grains and oilseeds (such as canola) are used to make renewable fuels. During the past five years (2003-2008), Alberta has produced over 25 million tonnes of crops each year. Less than 200,000 tonnes of that is used each year for bioenergy products, such as renewable fuels. The majority of bioenergy products in Alberta are made from either waste or forestry biomass.

### Where can I get more information about bioenergy and renewable fuels?

Alberta Biodiesel Association

[www.albertabiodiesel.org](http://www.albertabiodiesel.org)

Biodiesel Association of Canada

[www.biodiesel-canada.org](http://www.biodiesel-canada.org)

Biofuels Quality Registry/Alberta Research Council

[www.biofuels.arc.ab.ca](http://www.biofuels.arc.ab.ca)

Canadian Renewable Fuels Association

[www.greenfuels.org](http://www.greenfuels.org)

www.energy.alberta.ca TOLL Free 310-0000