

How genetics helps make cows more profitable and environmentally friendly

[J. P.] Brouwer, along with his father and two brothers at [Sunalta Farms](#) in central Alberta, runs the first commercial dairy farm contributing data to the [Genome Canada](#) project. One part of the project aims to increase feed efficiency—growing cows as big as possible with as little food as possible—and reduce emissions of methane, a greenhouse gas that traps 30 times more heat per molecule than carbon dioxide. Eight years after scientists from the National Institutes of Health and the US Department of Agriculture sequenced the first cow genome, this project is trying to turn that information into more profitable, environmentally friendly cattle. They'll be like Number 1995, but better.

Bovine livestock are responsible for about 9.5 percent of global greenhouse gas output, according to the [Food and Agriculture Organization](#) of the United Nations. ... Some scientists at Pennsylvania State University are even [genetically modifying the bacteria](#) in cow guts.

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But scientists are also tweaking the cows themselves. The Genome Canada project ... harnesses labs in the US, UK, Denmark, Australia, and Switzerland to help identify cows that produce fewer greenhouse gases, with the ultimate goal of distributing the responsible genes—conveniently transported in the form of bull semen—to areas that don't have the resources to develop their own greener cows.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Canada is using genetics to make cows less gassy](#)