

# From Waste to Resource, The Circular Economy

# “Pride Goeth Before the Fall”

- We are the only species on the planet who believes in the concept of waste
- Every other species lives within the balance provided by Mother Nature, whereby there is no waste
- In a fight between our species and Mother Nature, who do you think will win??



It's all about cycles, or..

What we learned in Grade 5

- Carbon Cycle
- Nitrogen Cycle
- Water Cycle
- Plus...

**Photosynthesis uses Solar Energy to convert atmospheric carbon dioxide into the stored carbon energy of all green living things, plus oxygen.**

## What is driving Climate Change?

We are extracting fossilized carbon from below ground, oxidizing it and pouring 100 megatonnes of carbon dioxide into the atmosphere, every day.

**This is unsustainable.**



**In the bioeconomy, we cycle “above  
ground” carbon endlessly.  
Food, fuel, fibers, chemicals.  
Repeat as often as needed.**

**FROM:**

**Below Ground**

**Fossilized**

**Oil & Gas & Coal**

**Waste**

**TO:**

**Above Ground**

**Organic**

**Agriculture & Forestry**

**Resource**

# Who is GreenField Specialty Alcohols Inc.?





**In Canada:**

**#1 Producer of ethanol**

**In North America:**

**20% Market share of Pharmaceutical Grade Alcohol**

**Globally:**

**Major supplier of industrial alcohol to over 60 countries**



**In Ontario & Quebec we are:**

**#1 Purchaser of Corn**

**#1 Supplier of DDGS**

**#6 Consumer of Natural Gas**



**We are a large GHG emitter captured under Cap & Trade in Ontario & Quebec.**

**So what's a nice bio-based company doing paying for fossilized carbon?**



**We deliberately decided  
to look for opportunities to  
offset our new  
Cap & Trade costs**



# Sustainability:

- **Economic, plus**
- **Environmental, plus**
- **Social**
- **Our vision: <350**



# Three Quick Circular examples of what we are doing as a Company:



**SEMECS joint venture in Varennes, Quebec**

**Collaboration with Truly Green in Chatham,  
Ontario**

**Exciting new research breakthroughs, TSE >  
AD2 > GTL > Drop in Jet Fuel**



## **Takeaways:**

**Humanity is fighting against Mother Nature and she will win, she always does. So don't bet on Trump.**

**The world needs above ground carbon, to break our addiction to below ground carbon. That's our future.**

**We need the very best of you to meet this challenge.**

