



**Increase Your *Corn to Fuel Conversion Efficiency* With  
GS CleanTech's Veridium™ Brand Ethanol Technologies**



**gsCLEANTECH**

### **Who We Are:**

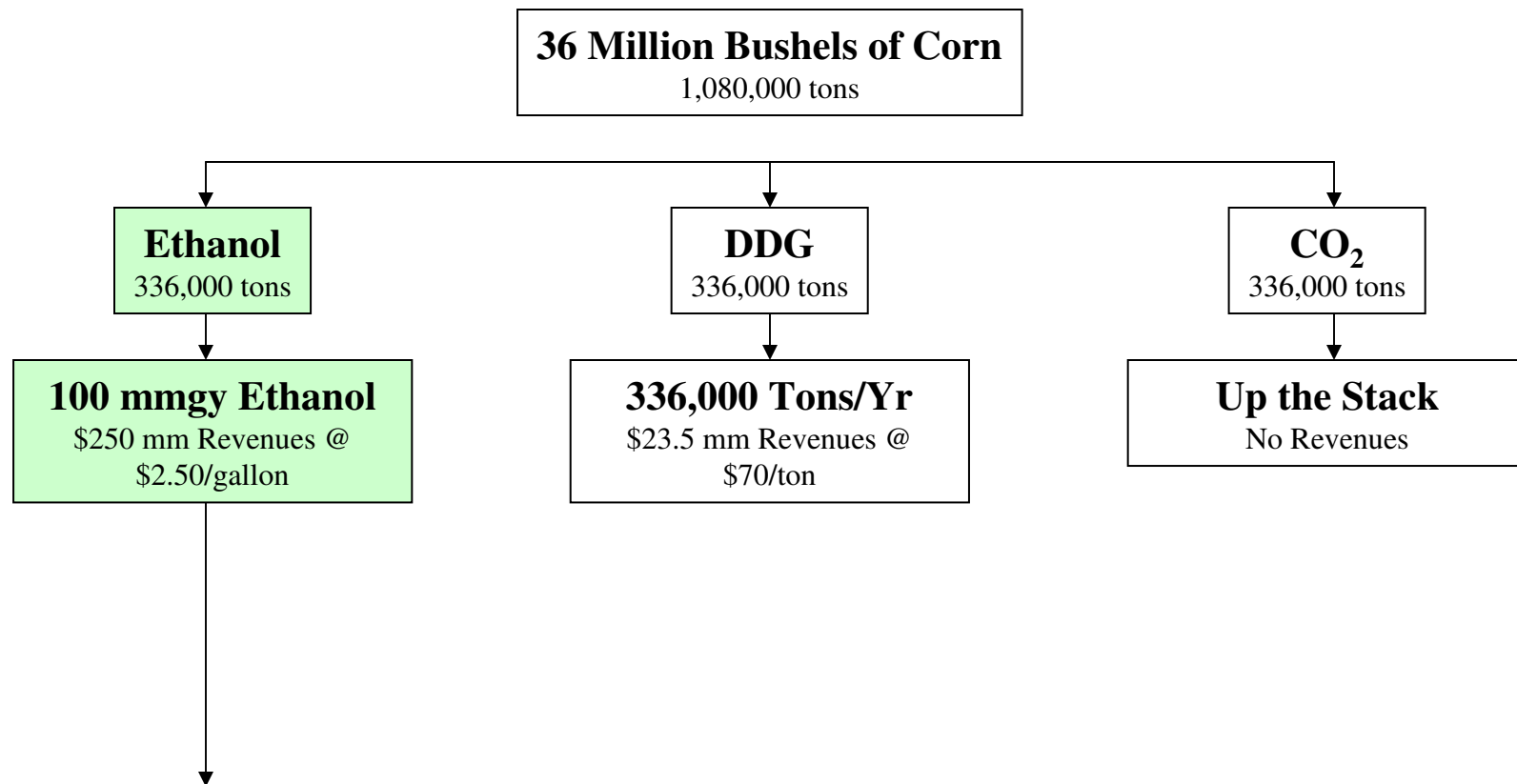
- GS CleanTech provides applied engineering and clean technology transfer services that can enhance your bottom line by making it **cost-effective** and **easy** for you to recycle and reuse resources.
- Our team is focused on delivering technologies and process innovations to the **Ethanol Production Industry** – our ambition is to **maximize the fuel yield** out of your **existing crop**.

### **How We Do It:**

- We **install our turn-key Corn Oil Extraction System (COES)** in your plant ...
- ... that we use to **extract crude corn oil** from your distillers dried grains ...
- ... that we buy from you at a **premium** ...
- ... and convert into **biodiesel** ...
- ... which is either sold back to you at a **discount** or sold to third parties, in which case you receive **a percentage of the biodiesel sales**.



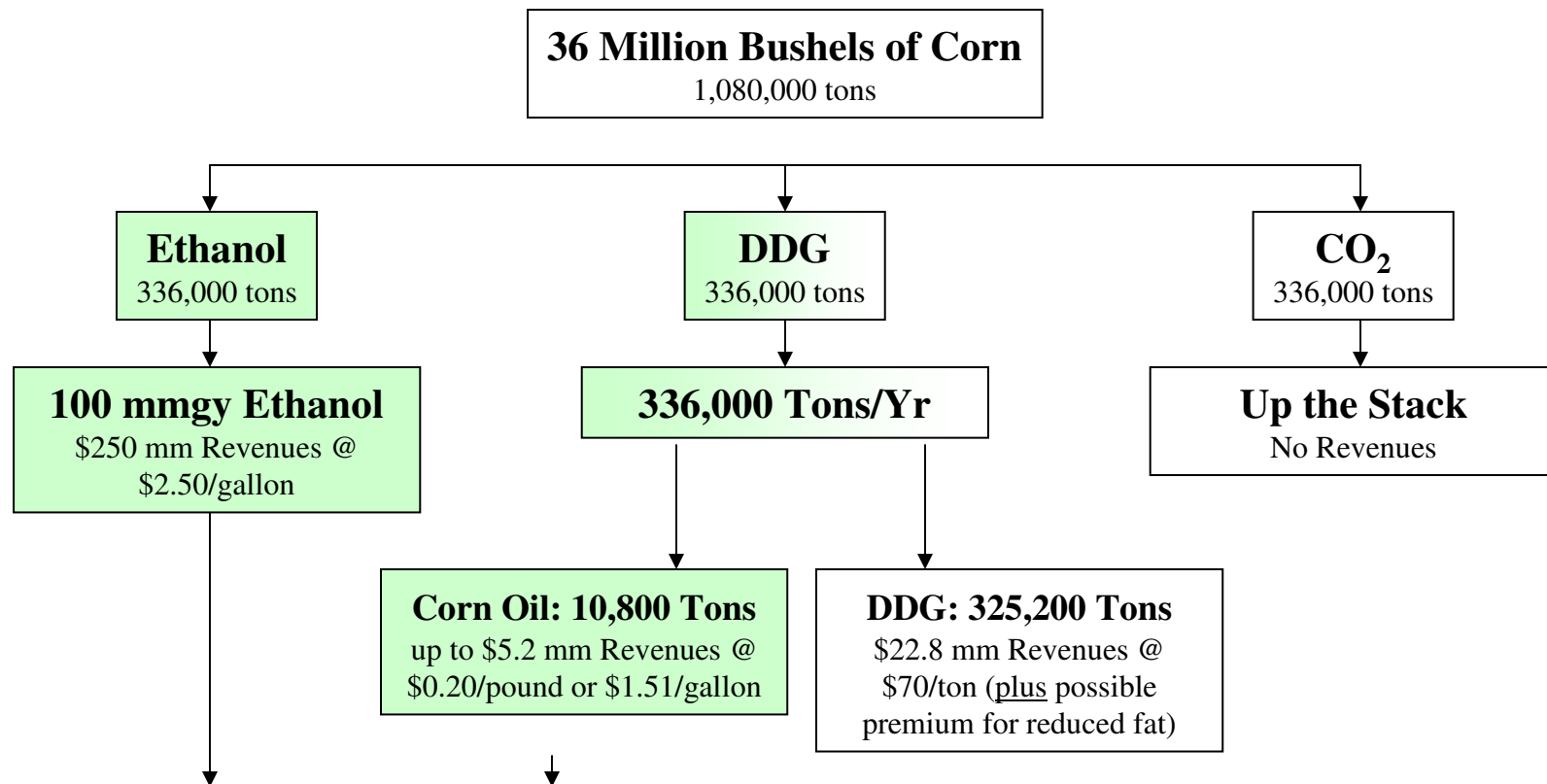
**Current Corn to Fuel Conversion Efficiency (“CFE”) (100 mmgy plant):**



- Current CFE = (100 mmgy ethanol) / (36 mm bushels corn) = **2.77 gal/bushel**
- Estimated Current Plant Revenues: \$273.5 mm



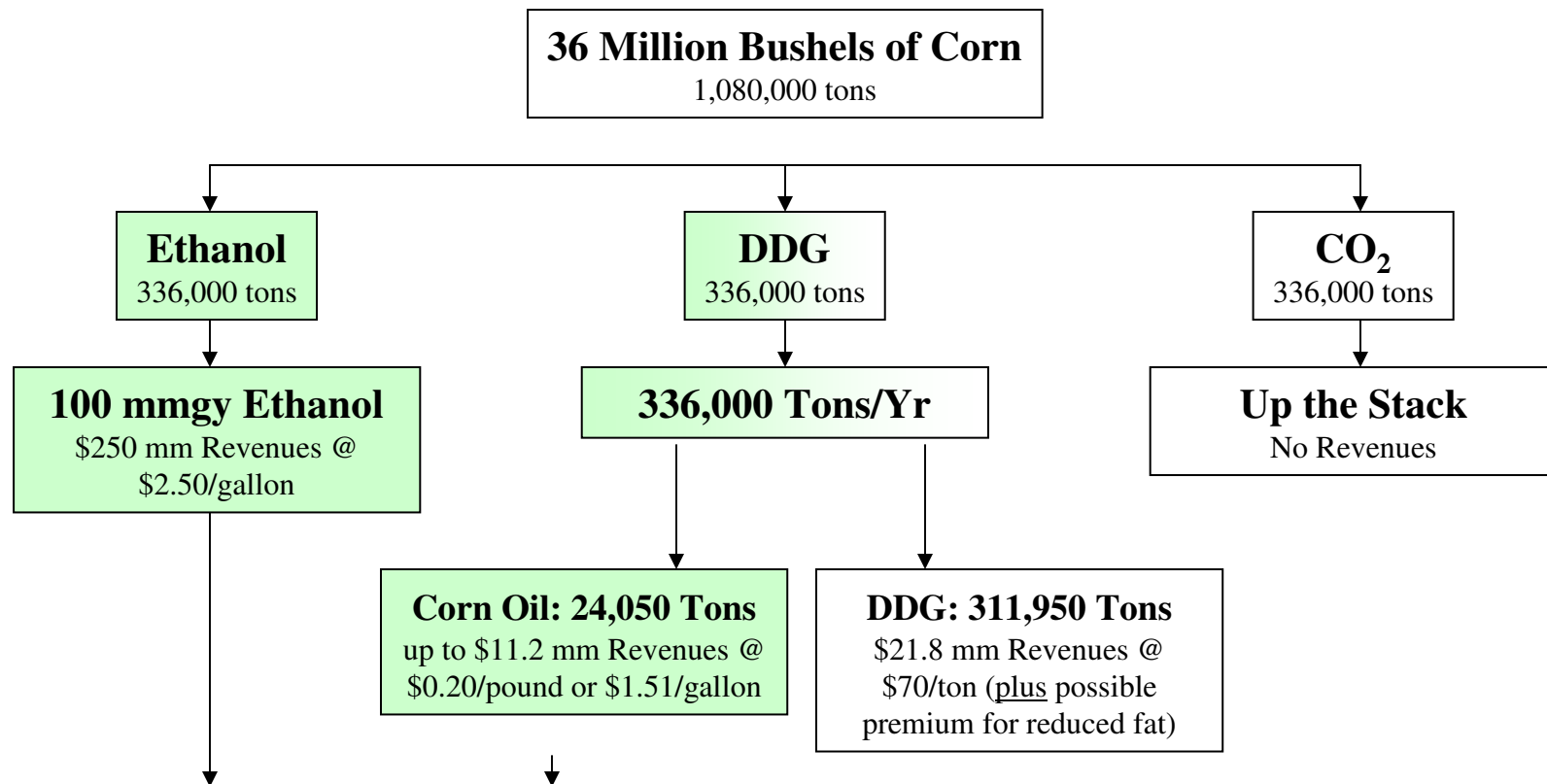
**CFE After Installation of GS CleanTech’s COES (100 mmgy plant) – Extraction Method #1**



- Post-COES = ((100 mmgy ethanol) + (3 mmgy biodiesel)) / (36 mm bushel corn) = **2.85 gal/bushel**
- Estimated Post-COES Total Plant Revenues: \$278.0 mm ... **up to ~ 1.6% increase in revenues**



**CFE After Installation of GS CleanTech’s COES (100 mmgy plant) – Extraction Method #2**



- Post-COES = ((100 mmgy ethanol) + (6.5 mmgy biodiesel)) / (36 mm bushel corn) = **2.94 gal/bushel**
- Estimated Post-COES Total Plant Revenues: \$283.0 mm ... **up to ~ 3.5% increase in revenues**



**gs** *CLEANTECH*

### **Our Rental Program:**

- We install our turn-key COES at your facility for **no up front cost** ...
- We buy crude corn oil from you at **53% of Diesel Spot**, or about **\$0.15 per pound** ...  
*(we guarantee a minimum purchase price of \$0.10 per pound for so long as the tax credit is unchanged)*

### **Our Purchase Program:**

- We install our turn-key COES at your facility for **about \$11 million (100 mmgy plant)** ...
- We buy crude corn oil from you at **70% of Diesel Spot**, or about **\$0.21 per pound** ...  
*(we guarantee a minimum purchase price of \$0.10 per pound for so long as the tax credit is unchanged)*



**gsCLEANTECH**

### **Other Features and Benefits of Corn Oil Extraction:**

- **Increased inclusion rates** - Corn oil removal can improve DDG marketability and inclusion rates by reducing fat content.
- **Reduced operating costs and emissions** - Corn oil removal can improve drying efficiency by up to 20% with reduced natural gas or coal needs & reduced emissions (NO<sub>x</sub>, SO<sub>x</sub>, CO<sub>2</sub> and VOCs).
- **Risk diversification** - Corn oil sales hedge your facility against declining DDG prices in the future.
- **No downside on corn oil sales** - you are protected from downside fluctuation in crude corn oil prices with our guaranteed minimum purchase price of \$0.10 per pound for so long as the biodiesel tax credit remains unchanged.
- **Upside on corn oil sales** - you facility benefits from any increase in crude corn oil prices since our program ties your corn oil sales to diesel and biodiesel.
- **Full service process support** - GS CleanTech's process engineers and technical support staff are available to resolve your needs.



**gsCLEANTECH**

### **Co-Location of Biodiesel Facility:**

- GS CleanTech's sister company, **GS AgriFuels**, proposes to lease property adjacent to your ethanol facility.
- GS AgriFuels would immediately commence development of a **10 mmgy biodiesel facility** ...
- GS AgriFuels would purchase utilities (e.g., steam, rail) and provide process waters ...
- Our biodiesel process technology is **easily scalable** to accommodate additional expansion ...
- Proximity **improves operating economics** for all parties.
- Production of **second clean fuel** at the clean fuels campus **stimulates regional economy** and is good for **the local community**.



**gsAGRIFUELS**



**gs**CLEANTECH

## **We Are Eager to Earn Your Business - How Do We Get Started?**

- Timing for path forward:
  - Contract editing and execution
  - Deployment schedule
  - Planning for future expansion



**gsCLEANTECH**

### **GS CleanTech's Technology Development Plans:**

- We intend to remain relentlessly focused on **increasing the fuel yield** out of your **existing crop** – our other areas of technology development:
  - **Corn Stover**
  - **Defatted DDGs**
  - **CO<sub>2</sub>**

### **Contact Information:**

#### **David Winsness, President & CEO**

12600 Deerfield Parkway, Suite 100  
Alpharetta, GA 30004

Office: (678)-566-3588

Mobile: (410)-916-1800

Fax: (443)-346-0226

Email: [dwinsness@greenshift.com](mailto:dwinsness@greenshift.com)

#### **Greg Barlage, COO**

12600 Deerfield Parkway, Suite 100  
Alpharetta, GA 30004

Office: (678)-566-3588

Mobile: (804)-519-3276

Fax: (866)-244-9515

Email: [gbarlage@greenshift.com](mailto:gbarlage@greenshift.com)