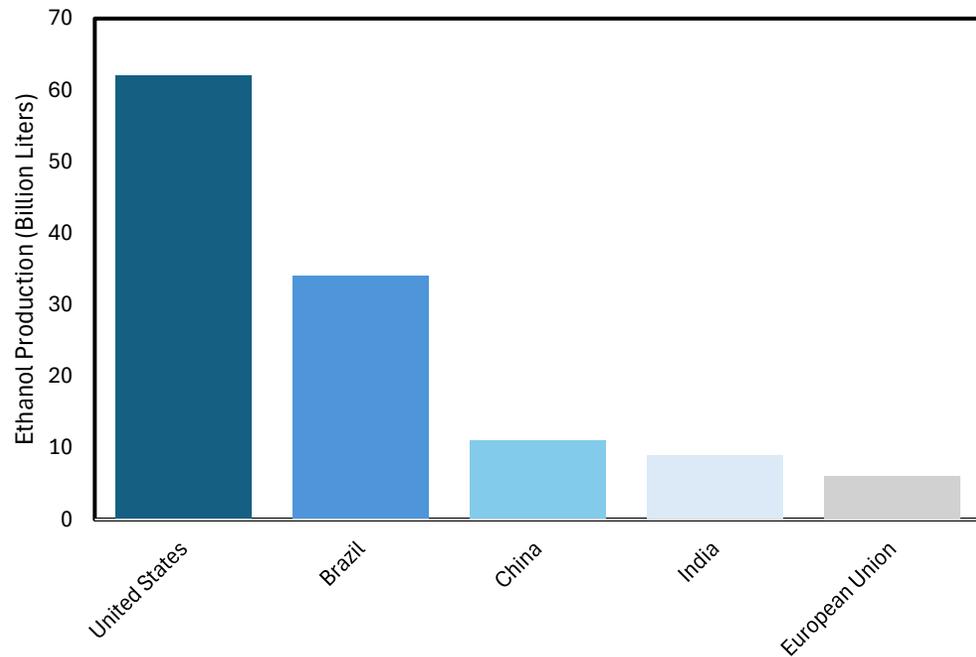


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## 123 Billion Liters Available Today

Ethanol Production By Region

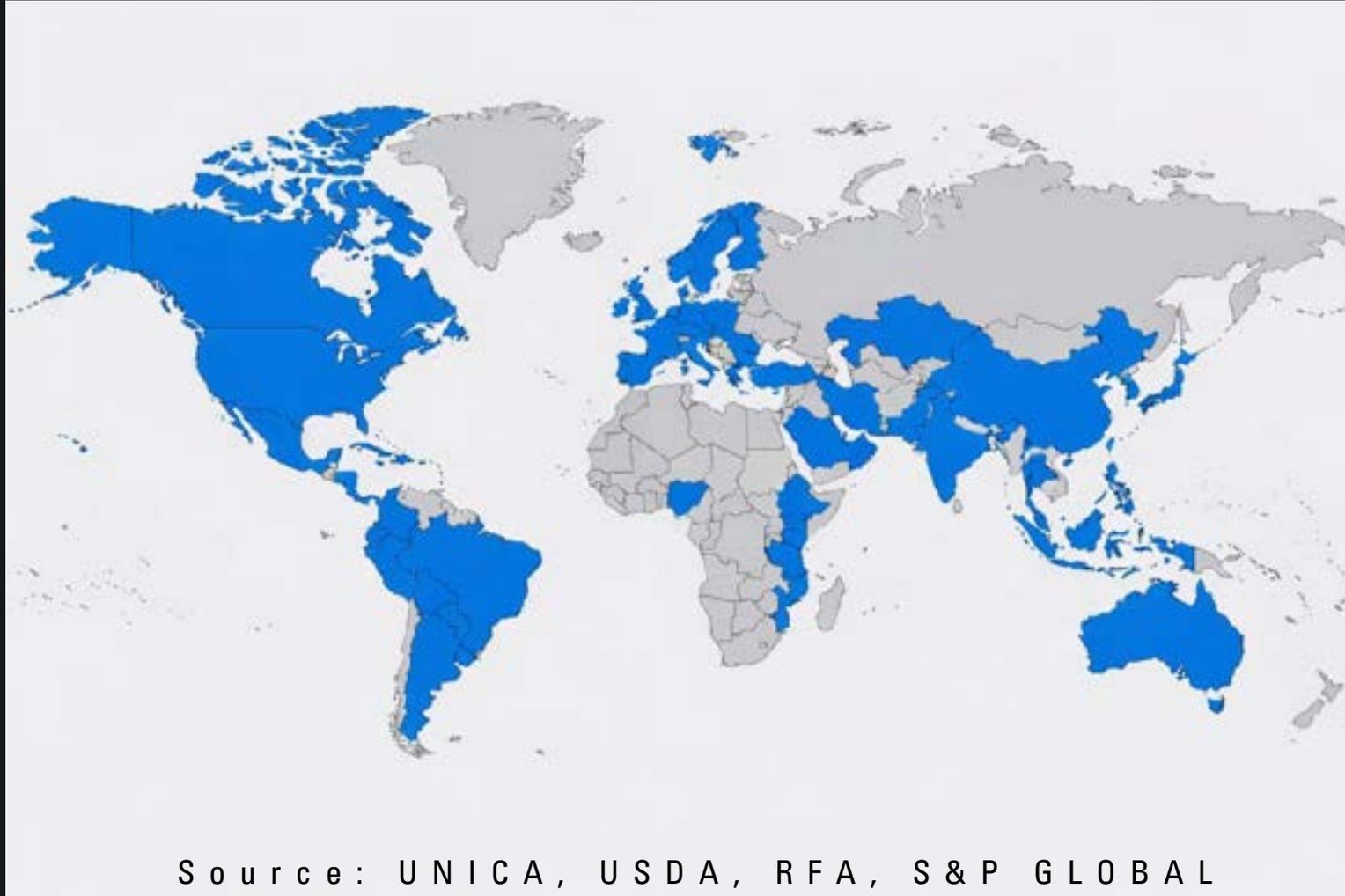


## 20 Billion Liters Growth Available

# ETHANOL IS READY TODAY.



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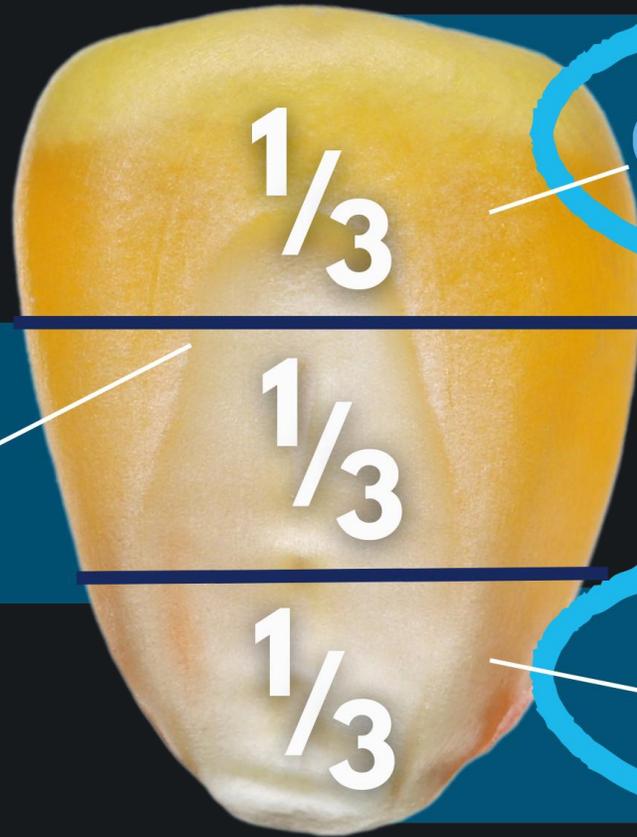


**ROOTED IN OUR COMMUNITY, WE INNOVATE TO CREATE A SUSTAINABLE WORLD FOR FUTURE GENERATIONS.**



# CORN:

WHAT DO WE GET OUT OF OUR CORN INPUTS?



 **CARBON DIOXIDE**  
(biogenic CO<sub>2</sub>)

(starch)

CC(O)O

**ETHANOL**

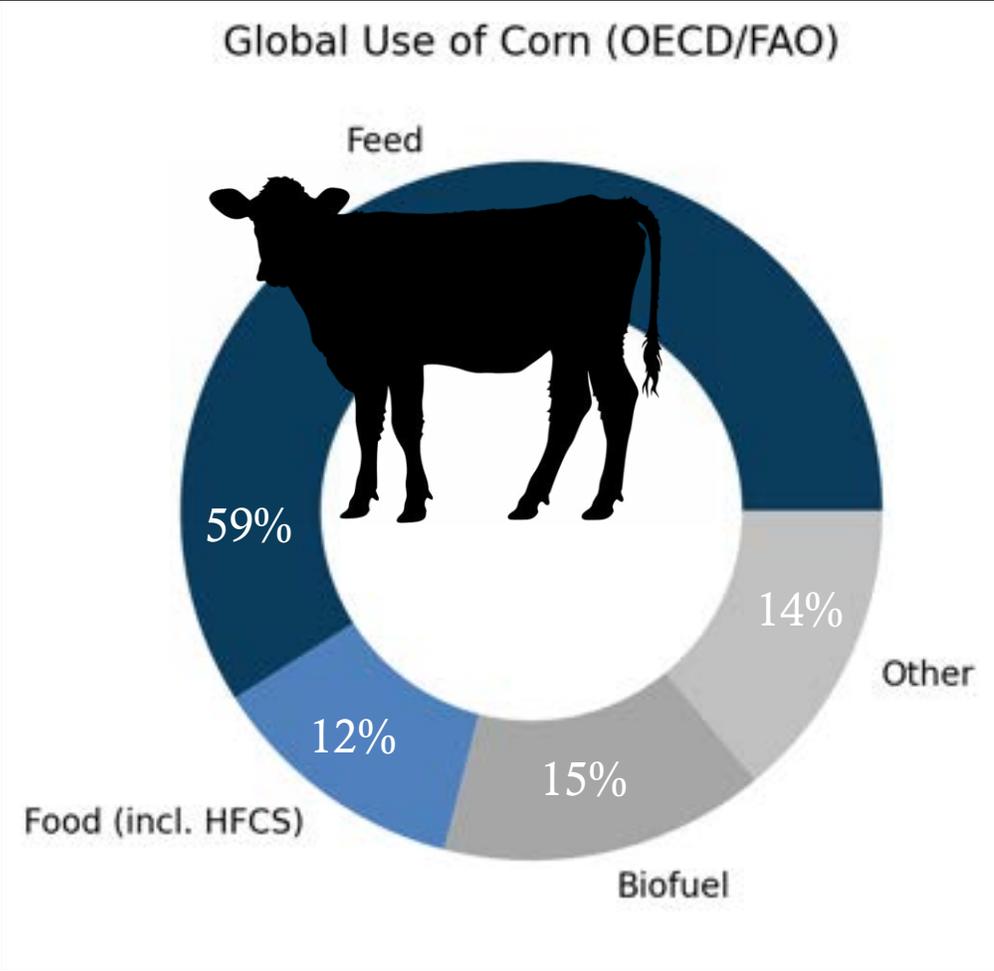
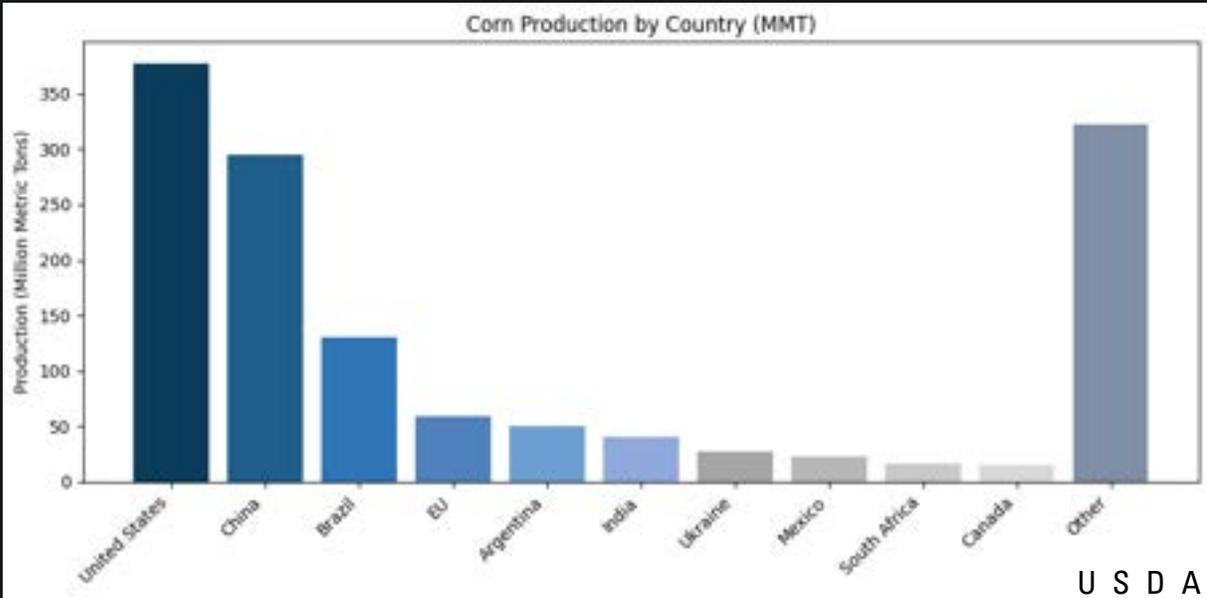
 (protein & fat)  
**ANIMAL FEED**

**FEED AND FUEL SOLUTION.**

1 BUSHEL (BU)  
CORN = 56 LBS

# Sustainable Fuel and Feed

1356 MMT





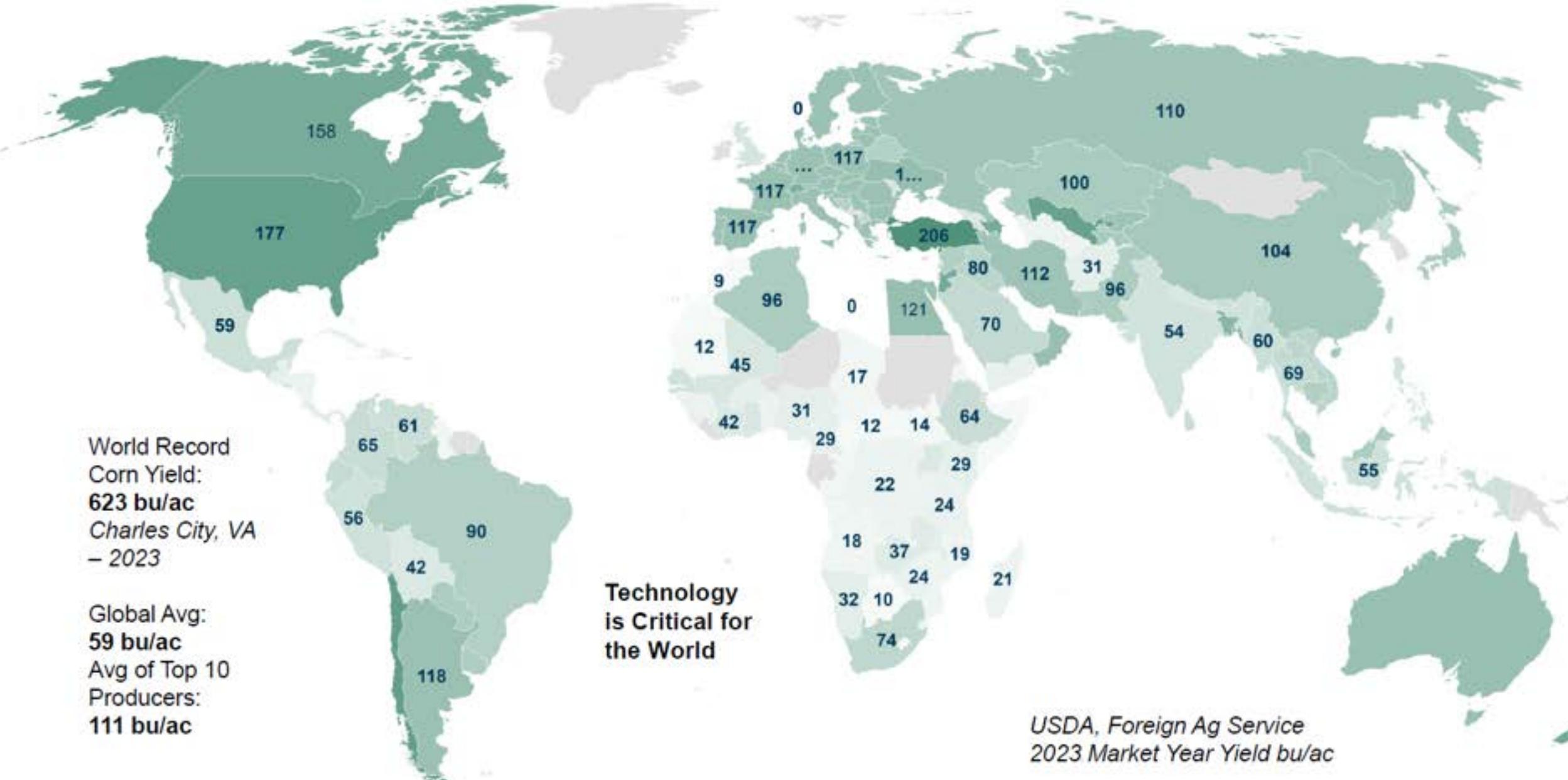
## **ISCC-Plus**

- Protection of Land
- Environmentally Responsible Production
- Safe Working Conditions
- Compliance with Human and Labor Rights
- Compliance with Land Rights, Law, and Treaties
- Good Management Practices and Continuous Improvement
- Farm –Level Traceability
- Deforestation Free Claim

## **ISCC- EU**

- Farm Level CI
- Compliance with REDIII

# Corn Yields-bu/ac



World Record  
Corn Yield:  
**623 bu/ac**  
Charles City, VA  
- 2023

Global Avg:  
**59 bu/ac**  
Avg of Top 10  
Producers:  
**111 bu/ac**

**Technology  
is Critical for  
the World**

USDA, Foreign Ag Service  
2023 Market Year Yield bu/ac

# Global Production Scenarios

## Scenario 1:

Utilize 25% of Abandoned Ag Land for Corn, with expected global average yield of 57 bu/ac

## Scenario 2:

Utilize 25% of Abandoned Ag Land for Corn, with expected US yield of 178.4 bu/ac

## Scenario 3:

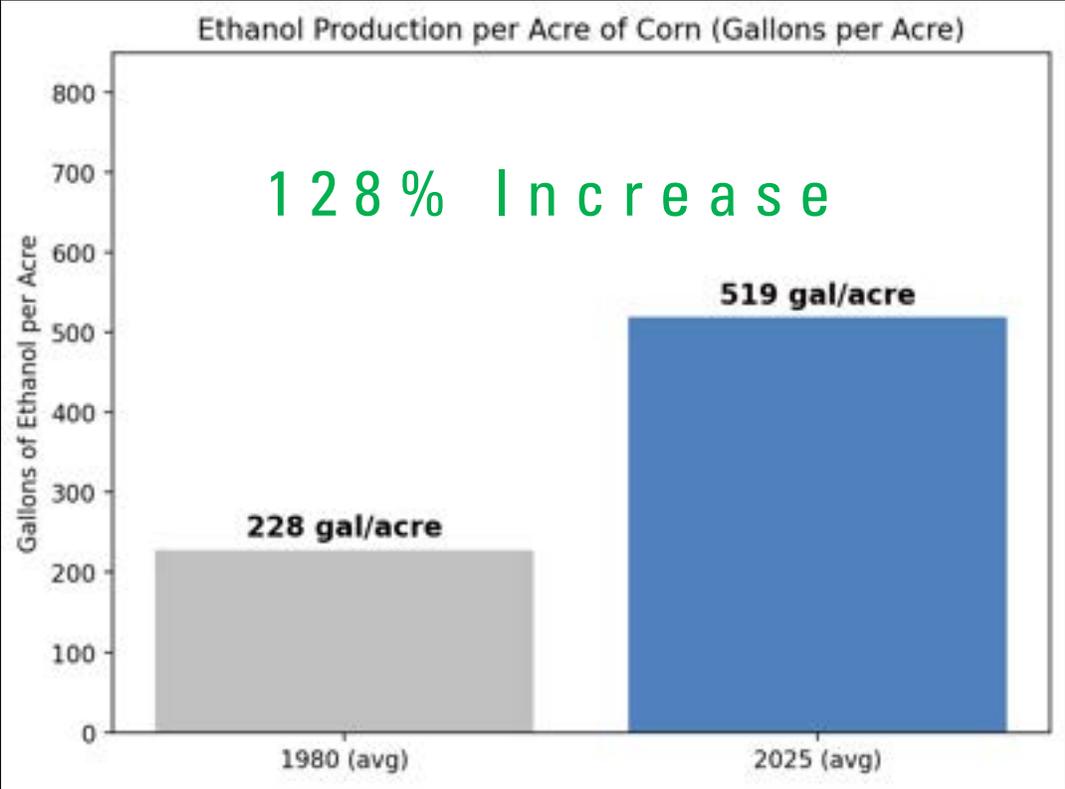
Utilize 25% of Abandoned Ag Land for Corn AND raise global average yield to US yield level of 178.4 bu/ac

Additional Production	Scenario 1	Scenario 2	Scenario 3
<b>Bushels of Corn - Billion</b>	<b>17.8</b>	<b>55.8</b>	<b>98.3</b>
Ethanol - Billion gal	51.3	160.6	283.2
Ethanol Emission Reduction - Million MT GHG	194.2	607.7	1,071.8
Corn Oil Produced - Billion lbs	16.7	52.4	92.4
Renewable Diesel - Billion gal	2.0	6.2	10.9
Renewable Diesel Emission Reduction - Million MT GHG	18.9	59.1	104.3
<b>Total Emission Reduction - Million MT GHG</b>	<b>213.1</b>	<b>666.8</b>	<b>1,176.0</b>
Same as cars removed - Million	46	145	255
DDG Produced - Million MT	109	341	602
Beef Produced - Million lbs, Grocery basis	9,619	30,105	53,094
Milk Produced - Million gal, Grocery basis	13,981	43,757	77,171
Poultry Produced - Million lbs, Grocery basis	6,441	20,160	35,554
Pork Produced - Million lbs, Grocery basis	9,894	30,965	54,611
<b>Annual Population Fed - Million People</b>	<b>331</b>	<b>1,035</b>	<b>1,825</b>

# Nitrogen Application



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# USDA Feedstock Carbon Intensity Calculator

### What does this mean in terms of CI?

	kg/mmBTU	Adoption (%)
No till -	8.00	20
Reduced till -	1.85	65
Cover crops -	8.67	6
Nitrification inhibitors -	1.91	70
Fertilizer timing: Split application -	2.62	15
Fertilizer timing: Spring application -	0.97	10



## Carbon Intensity Report



### 2025 Corn Crop Data

**Farm Operation #1**  
Walnut, IL

Operation Avg CI Score  
**15.81**  
kg/mmBTU

TOTAL ACRES:  
1,418

Farm Number	Acres	Yield	Bushels	CI Score	% Below National*
1	86	237	13272	16.78	82.60%
2	190	239	23896	18.78	82.20%
3	77	260	20020	26.83	27.75%
4	173	246	42556	26.83	27.75%

**Farm Operation #2**  
Mendota, IL

Operation Avg CI Score  
**25.44**  
kg/mmBTU

TOTAL ACRES:  
1,455

Farm Number	Acres	Yield	Bushels	CI Score	% Below National*
1	84	260	21840	26.83	27.75%
2	264	277	95288	26.98	6.41%
3	77	233	17941	26.98	6.41%
4	78	253	19228	26.98	6.41%

**Farm Operation #3**  
Winnebago, IL

Operation Avg CI Score  
**15.91**  
kg/mmBTU

TOTAL ACRES:  
1,082

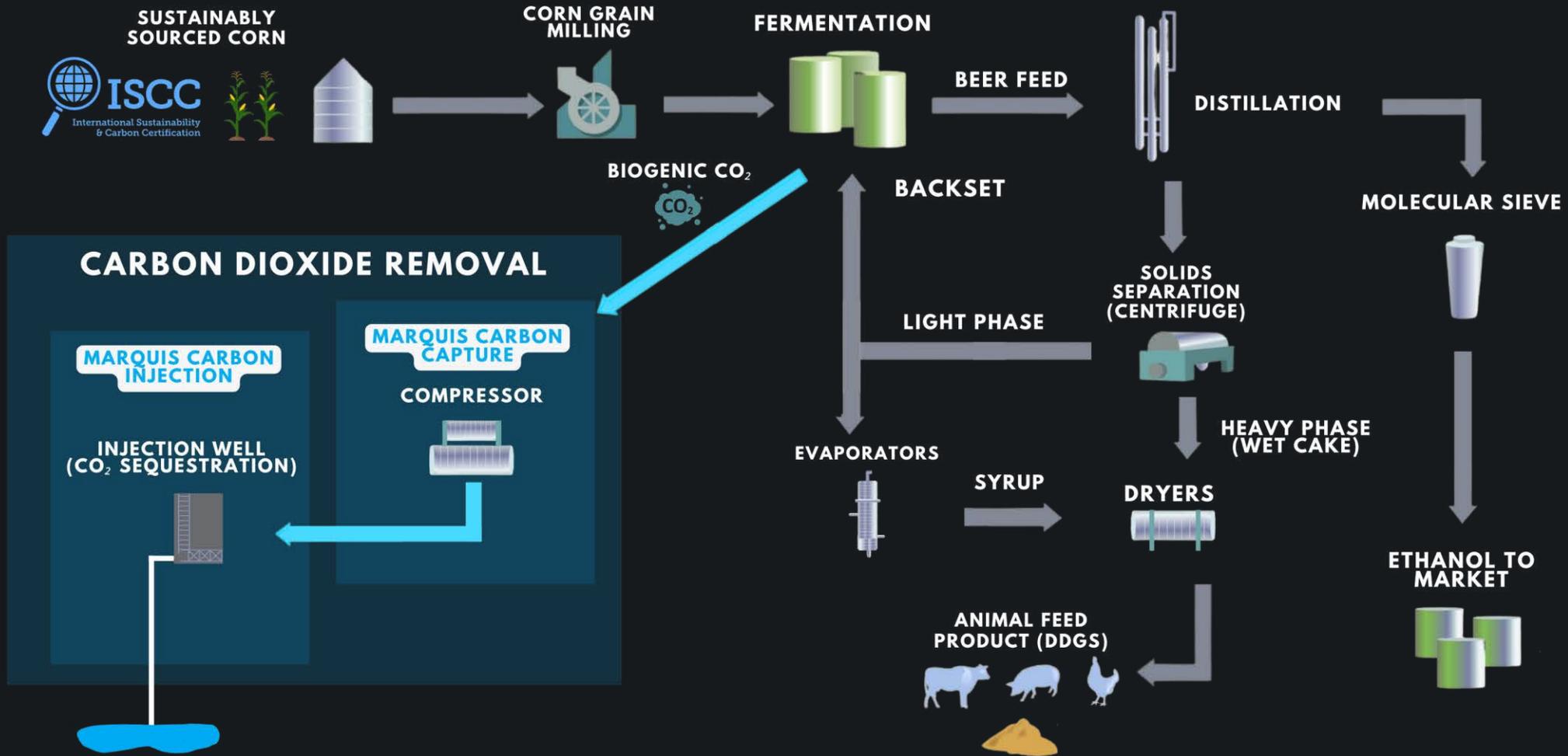
Farm Number	Acres	Yield	Bushels	CI Score	% Below National*
1	125	265	33198	18.66	27.75%
2	73.3	263	19278	18.66	27.75%
3	188	226	25233	14.27	27.75%
4	99	99	25428	17.66	27.75%

\*This percentage represents the reduction of a field's CI score compared to the national or baseline score. The baseline score assumes no Climate Smart Agriculture (CSA) practices.

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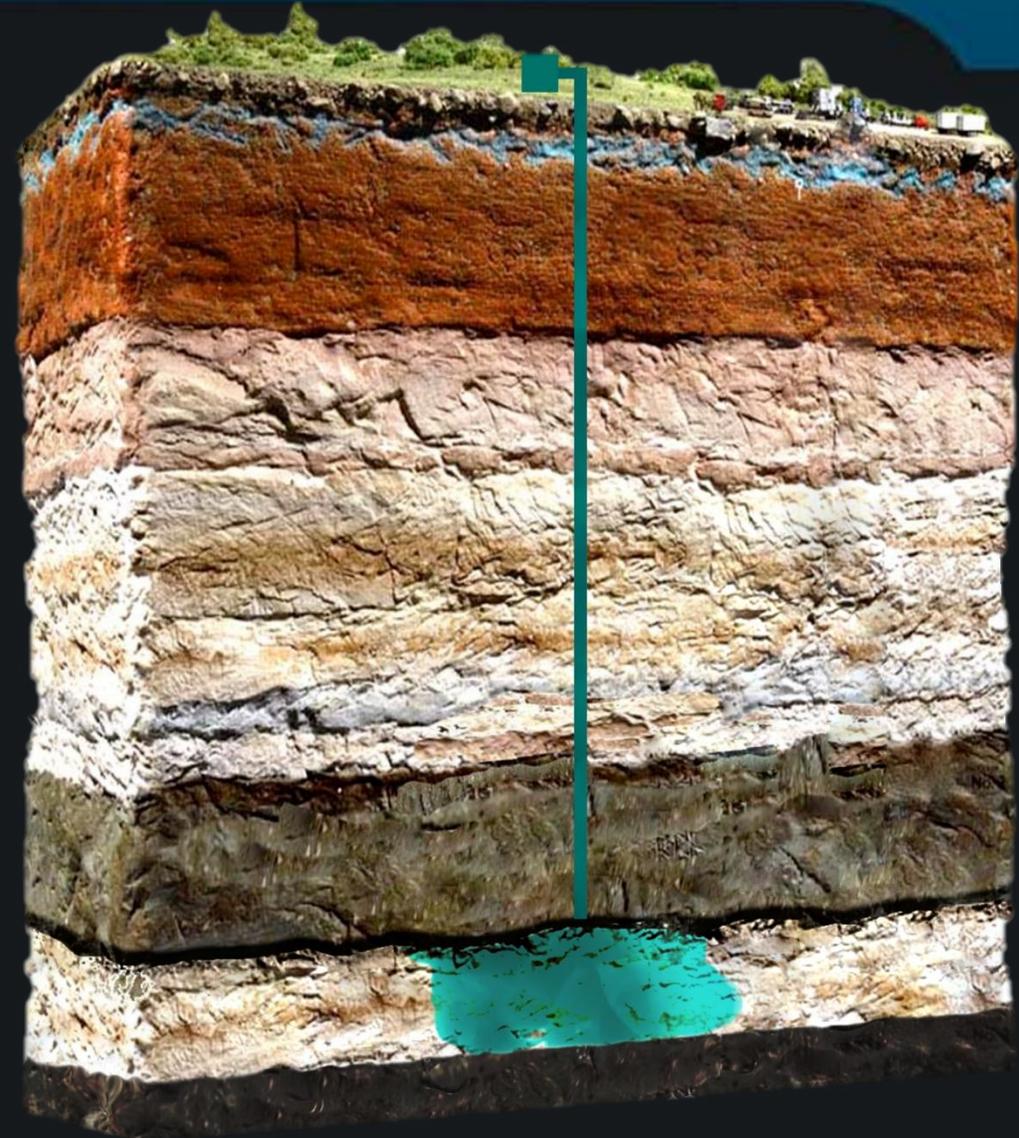


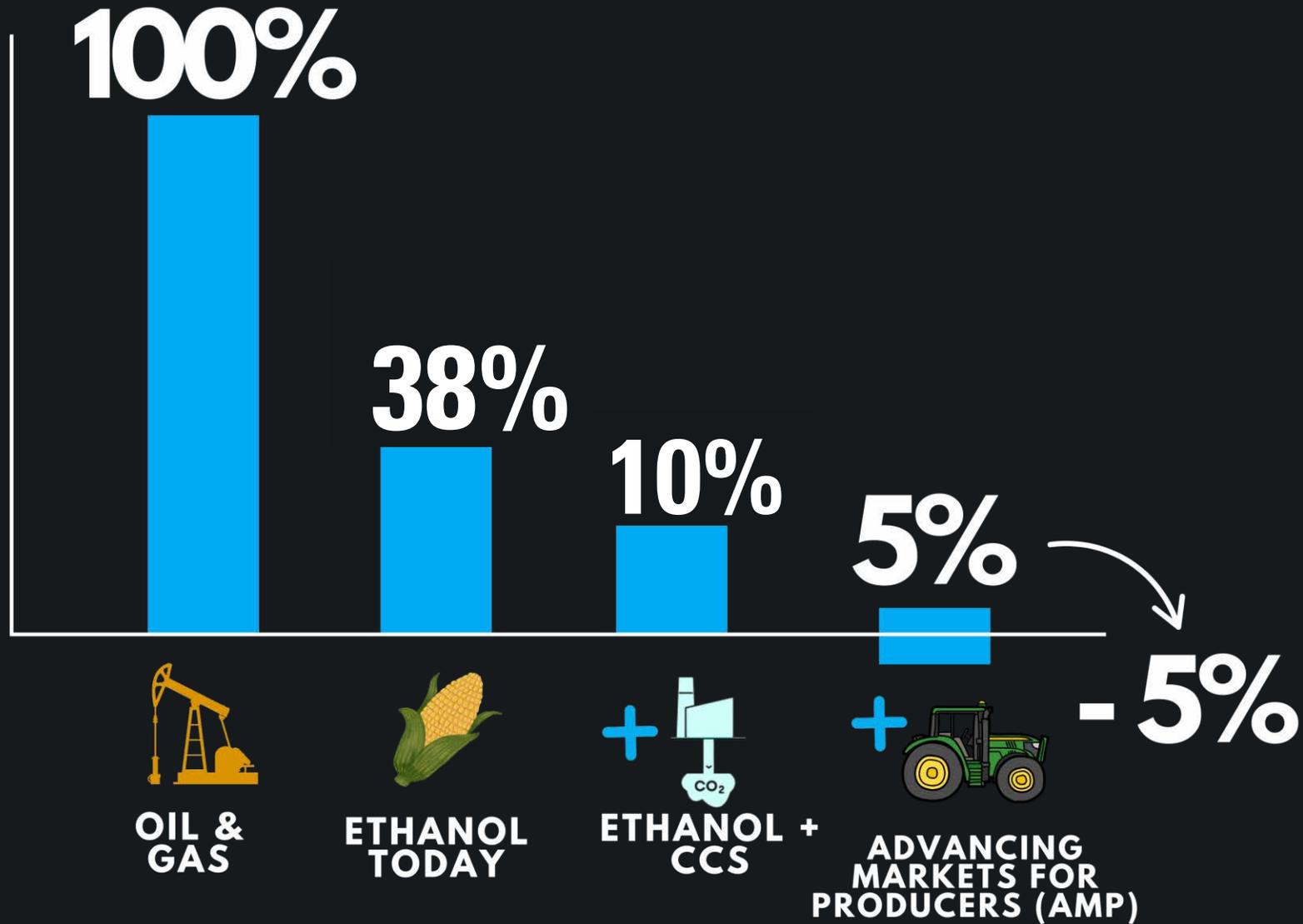


## Bio-Energy Carbon Capture and Storage



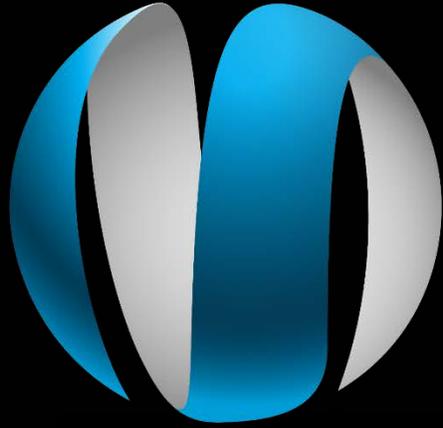
<https://co2public.er.usgs.gov/viewer/>





A stylized world map is shown in shades of blue and black. The continents are highlighted in a vibrant blue, while the oceans and some landmasses are in black. The map is centered on the Atlantic Ocean. Overlaid on the map is the text "GLOBAL REACH" in a white, sans-serif font. The text is positioned horizontally across the middle of the map, with each letter spaced out. A bright light flare is visible behind the letter 'G', and a faint, glowing trail extends from the right side of the text.

GLOBAL REACH



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