

## **About Me**

- -7th generation lowa farmer
- -Founded Continuum in 2015
- -Family has used no-till since 1978 and cover crop since 2013
- -2021 Forbes Under 30
- -2020 AgGrad 30 Under 30

Personal mission: To be a visionary for a better world and a shepherd of God's creation.



@continuum\_ag







and protect my profits?

equipment effectively &

not screw up my yields?

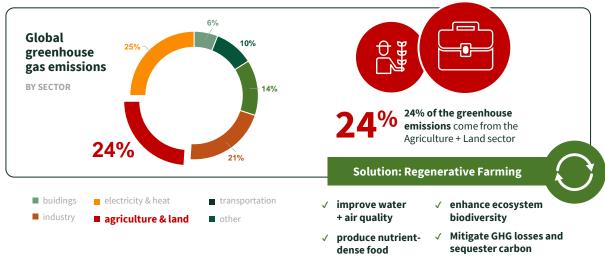


regenerative practices

correctly for my context?

#### **FUTURE:**

#### Regenerative Farming: Carbon Solution For the Agriculture Sector





5



Regen Roadmap: Data management and Regen Ag recommendations

RightWay: Haney Soil Health recommendations

Carbon: Carbon soil sampling and

market access

Carbon Intensity: The future!

Start organizing your management data now

Soil Health data intelligence platform: https://topsoil.ag



#### **Soil Health Principles**

- 1) Minimize soil chemical and physical disturbance
- 2) Maximize soil armor
- 3) Maintain living roots throughout the year
- 4) Foster diversity of species
- 5) Integrate livestock
- 6) Context as the principles are implemented



•

#### Principle

#### **Minimize Disturbance**

- · Maintain the home for the microbes
- · Don't over-apply fertilizer or pesticides
- · Enable soil structure
- · Foster air and water flow
- Reduce/eliminate tillage

Over 8 billion microbes in 1T of healthy soil

















## Maintain living roots

- 1) Feed the microbial system
- 2) Cycle nutrients
- 3) Stabilize left over nutrients
- 4) Avoid pollution
- 5) Sequester carbon
- 6) Build organic matter





15



















#### **Foster diversity**

- 1) Emulate the native prairie
- 2) Diverse plants feed diverse microbes
- 3) Diverse microbes do diverse functions
- 4) Create synergies
- 5) Avoid disease/pest cycles
- 6) Expand revenue streams





























## Integrate Livestock

- 1) Mimic the prairie system
- 2) Add nutrients back to the system
- 3) Stimulate biological and plant growth4) Monetize cover crops
- 5) Diversify revenue streams6) Expand the food web



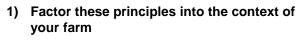
37







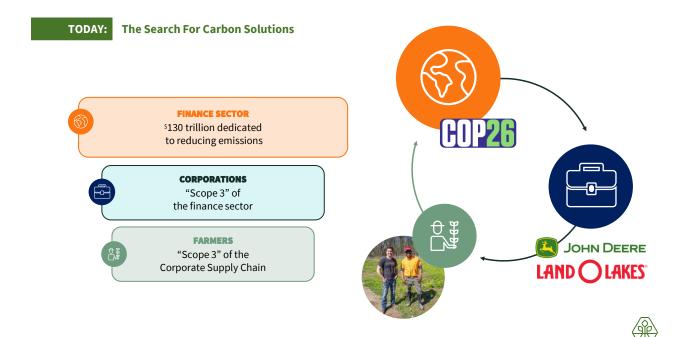
## Mind your context



- Soil types
- Geography
- Climate
- Equipment
- Labor
- Market access
- Baseline



41





ContinuumAg

We improve:

Soil Health

Family Farm Profits

Environmental Outcomes

Regen Ag Tools from Farmers, for farmers



Regenerative Farming + Soil Health intelligence made accessible

The for Farmers by Farmers **Solution** 



#### **SERVICES**

Soil data intelligence processes



#### **MEASUREMENT**

The first soil health data software



#### REPORTING

Easy farmer data & reports



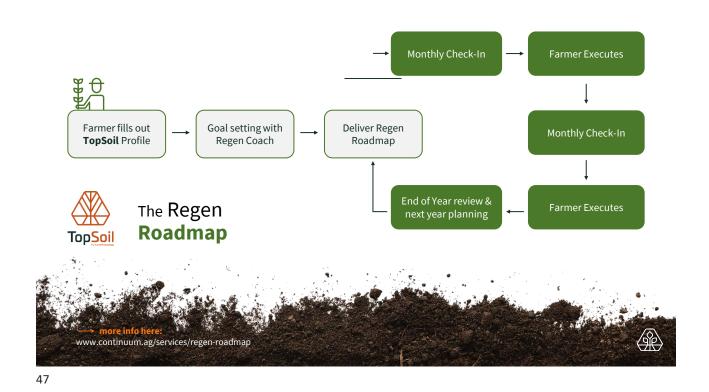
#### **VERIFICATION**

One-stop shop for sustainability data

45

\$ / Acre: **The Continuum Model** 





Making Farmers \$

**Better Soil** 

COST/ACRE	TRADITIONAL	REGEN	SAVINGS/ COST WITH REGEN
Fertilizer	\$297.74	\$219.46	\$78.28
Till Pass	\$9.00	\$-	\$9.00
Cover Crop	\$-	\$18.50	\$(18.50)
Soal Sampling	\$4.50	\$10.00	\$(5.50)
Regen Roadmap		\$5.00	\$(5.00)
Total	\$311.24	\$252.96	\$58 <b>.</b> 28
	before	after	Caving



Making Farmers \$

**Better Soil + Carbon Sequestration** 

COST/ACRE	TRADITIONAL	REGEN	SAVINGS/ COST WITH REGEN
Fertilizer	\$297.74	\$219.46	\$78.28
Till Pass	\$9.00	\$-	\$9.00
Cover Crop	\$-	\$18.50	\$(18.50)
State Cost Share	\$ <b>-</b>	\$(35.00)	\$35.00
Carbon Program	\$ <b>-</b>	\$(35.00)	\$35.00
Soal Sampling	\$4.50	\$10.00	\$(5.50)
Regen Roadmap		\$5.00	\$(5.00)
Total	\$311.24	\$182.96	\$128.28

# 2x value for Farmers





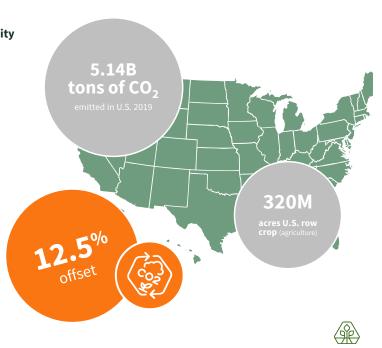




We can sequester
640M tons CO2/year
(2 per acre)

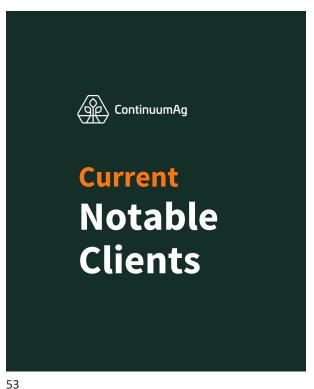
= offset 12.5% of U.S. carbon

+ lessen erosion
+ increase food security
+ decrease water usage
+ improve human health



51



























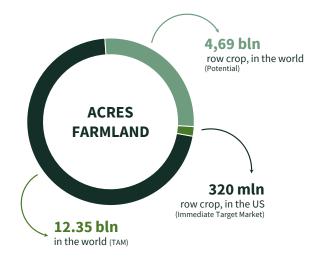




**Opportunity:** 

**Addressable Market** 

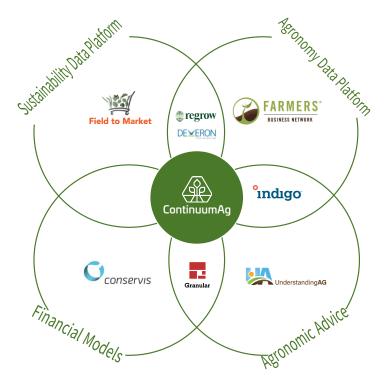
Our goal is to achieve **3.8 million** acres of paid customers by 2024 (1.18% of target market)





55

## Competition





# Soil health principles

Regen ag: A continual improvement upon implementation of the principles of soil health

Maintain soil armor Minimize disturbance Living roots always Foster diversity Integrate livestock Context

57



# **Relay soybeans**

- Harvest corn
- Drill cereal rye at 1bu/ac
- Drill soybeans into standing rye (1 maturity group longer than normal) at 160K/ac
- Harvest rye over the top of the soybeans. Rye yielded 30bu/ac in 2021
- Soybeans yielded 68bu/ac
- Soybean check yielded 69bu/ac









# **Economic Returns- Expenses**

• Rye seed: \$13/ac

• Rye planting: \$18/ac

• Fertilizer: \$36/ac

• Soybean seed: \$26/ac

• Soybean planting: \$18/ac

• Harvest rye: \$32/ac

• Herbicide: \$18/ac

• Harvest soybeans: \$32/ac

• Land expense: \$430/ac

• TOTAL EXPENSES: \$702/ac

63

## **Economic Returns-Income**

• Rye: 20 bu/ac at \$12/bu = \$240/ac

• Soybeans: 70 bu/ac at \$13/bu = \$910/ac

• TOTAL REVENUE: \$1,150/ac

• TOTAL PROFIT: \$448/ac

# **Soil Health Data**

## Quantifies:

- · Biological activity
- · Microbe food
- Microbe available nitrogen to eat the food
- · Eating efficiencies
- Soil organic nitrogen and phosphorous
- · And all the normal stuff
  - Nitrate, ammonium, P205, K20, Ca, Mg, pH, OM, micros, and so on

