



GREEN  
CLIMATE  
FUND

**GPIC  
2023**



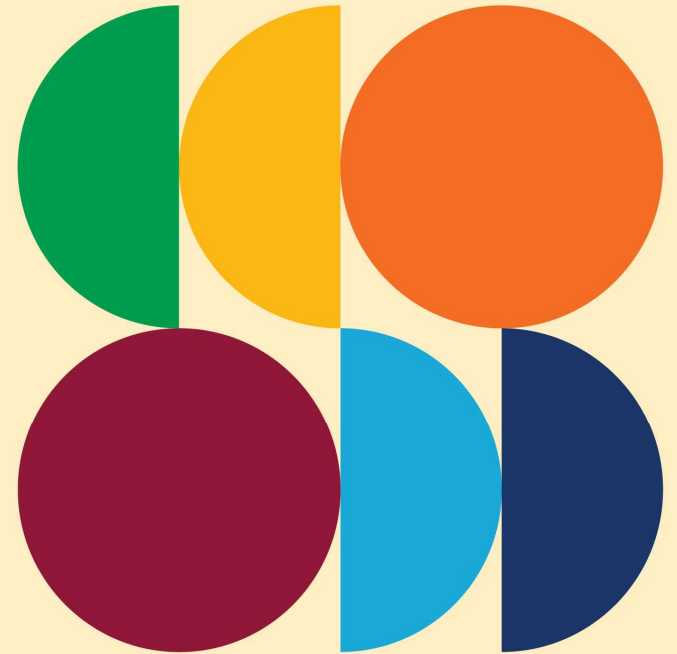
SOLINFTEC

# SOLINFTEC

## CASE STUDY

Laís Braido

Chief Financial Officer



**FROM INVESTMENT TO IMPACTS**  
4-5 SEPTEMBER 2023, NAIROBI, KENYA

# SOLINFTEC REIMAGINING FARMING OPERATIONS



## Company Overview

- Solinftec is digitizing and applying innovative tools in farming operations to make it more efficient and productive
- Real time data, software and robotics are driving operations to better yields, reduce inefficiencies (less chemicals/fertilizers, equipments, fuel, and others)
- Solinftec was founded in Brazil in 2007, expanded it's presence in 11 countries (South and North America) and it has over 31 million acres under management in row crops, sugarcane and perennials

## Financial Transaction with GCF

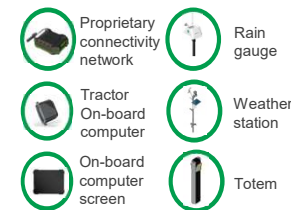
- In April 12, 2022, Lightsmith Group (CRAFT) led the company's Series C round with \$23 million in equity funding 
- Lightsmith focuses in climate adaptation and resilience technologies
- The funding allowed Solinftec to grow 44% in revenues after investment and to deploy Solix Robotics

## Solutions

### Farming Operational System



### On-Farm Sensors



### SOLIX Robotics



## Nature Positive Impact



**89,3%**  
Chemical  
reductions with  
Solix



**748,094,092**  
**Liters**  
of fossil fuel  
avoided



**95,381,988**  
**Kg**  
Fertilizers  
reductions



**2,031,898**  
**tCO2eq**  
GHG emissions  
avoided

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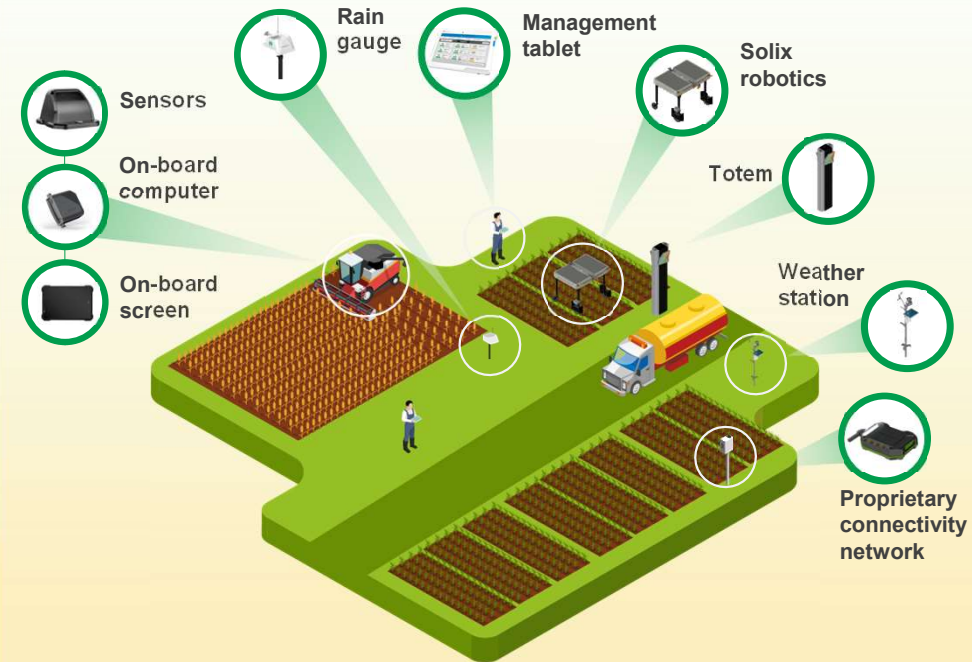
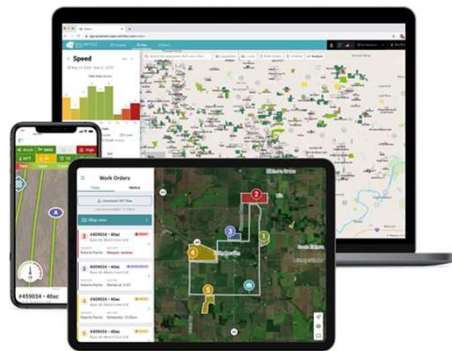


# WE STARTED OUR JOURNEY BEING THE FARMER'S OPERATIONAL SYSTEM

- 1) Solinftec delivers **sensors and a connectivity network** to capture **real-time field level data**; this data allows **AI and software** to **optimize on-farm operations**
- 2) **Cost-effective and timely actions** are key for large scale agriculture
- 3) “Living in the field”: **24/7 SENSING, DIAGNOSING and ACTING**

Farming Operational System

 ALICE AI



A controlled environment in open-air allows **responsiveness and adaptation** for the changing conditions in the field



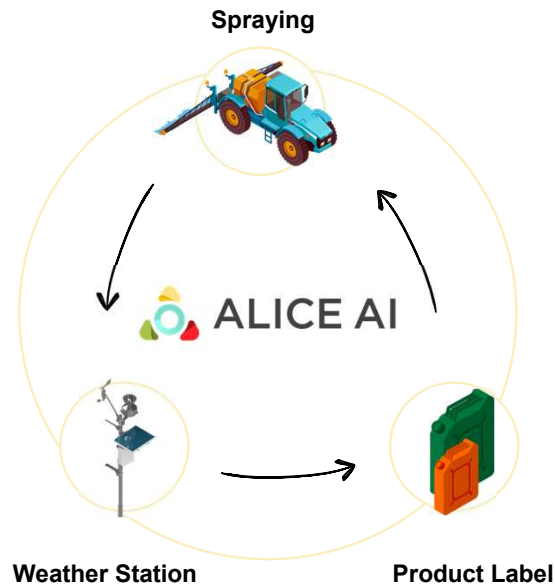
# HOW OUR SOFTWARES WORK?

## EXAMPLE OF USE



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**Base Solution:** Weather conditions monitoring connected with spraying operations



✓ Real-time weather conditions data (actual & forecast)

✓ Integrated with the farmer's operational plan, forecasting best conditions to apply a specific product

✓ Avoids misuse of the products, machine overlap and makes every application more efficiency, allowing the farmers to reduce the amount of input used



10-20% reduction in chemicals



Adaptation to climate conditions

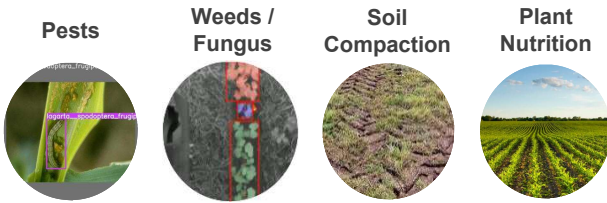


# WHAT'S NEXT? SOLIX PLATFORM

## ROBOTICS FOR AGRONOMY DECISIONS AND ACTIONS AT SCALE

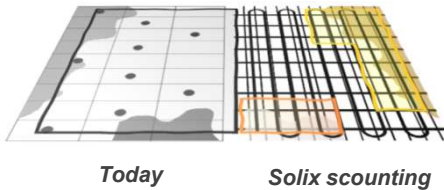
01

Early  
Identification of  
Agronomic  
Issues



02

Detailed  
Agronomic  
Heatmaps



Decisions  
driven by plant  
level scanning

THE NEED OF "LIVE IN THE FIELD"  
TO RE-BALANCE THE FARM ECOSYSTEM



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# SOLIX PLATFORM

**SOLAR POWERED AUTONOMOUS PLATFORM**  
RE-THINKING OPERATIONS IN AGRICULTURE



# SPRAYER | SOLIX PLATFORM “GARDENING AT SCALE”

SMART, LIGHT AND AFFORDABLE

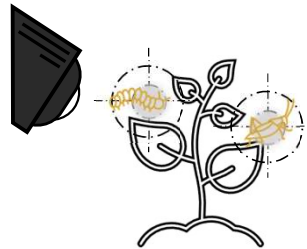


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SOLIX SPRAYER

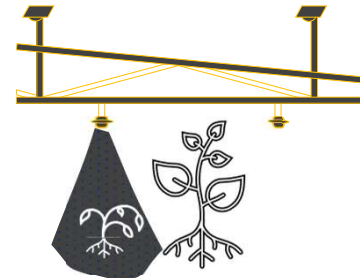
## FREQUENT PLANT-LEVEL DIAGNOSES



**FUNDAMENTAL CHANGE:**  
Plant-level identification in **every 7 days**. Frequent agronomy data sense and diagnose

Lower cost of operations  
allow frequent workflow in  
the field

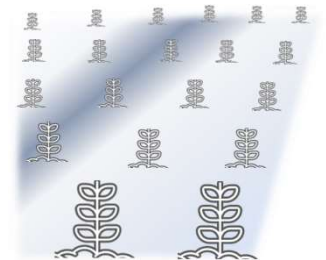
## PRECISE APPLICATION



**SPRAY WITH  
DRASTICALLY LESS  
CHEMICALS:** early and  
precise application. Direct  
spraying avoids chemical  
drifts

**REDUCES 89.3% of  
chemical vs. conventional  
sprayer**

## SUSTAINABLE LAND MANAGEMENT



**HEALTHIER SOIL:** reduced  
amounts in the soil and prevent  
run-off to water table and rivers.  
Also, lighter machines avoids  
soil compaction

**Better yields for the crop and  
regenerative agriculture**

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# SUMMARY ON POSITIVE NATURE IMPACT



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## Today's Overview

- **AGRICULTURE** occupies a **central position** when it comes to **nature and climate change**. It's both **vulnerable and dependant** to nature and weather, but also a **real contributor to positive impacts**
- **TODAY'S IMPACTS** due to excessive chemical/fertilizer spraying:
  - **Pollinators**: +75% of food production relies<sup>1</sup> on pollinators, but we see a **40% reduction**<sup>2</sup> on their populations in recent years
  - **Soil Health**: **20% loss on soil fertility**<sup>3</sup> of world's cropland due to agriculture practices
  - **Water pollution**: **run-off from excessive use of fertilizers and chemicals** into local streams and rivers and ultimately into seas and oceans

## Positive Impacts of our Solutions

- 1) **Software Platform** – Incremental change:
  - **10-20% reduction on chemicals and fertilizers** sprayed due to better efficiency on conventional operations
  - **Weather condition adaptation**
- 2) **Solix Robotics** – Transformative change :
  - **Up to 90% chemical reduction and reduced soil compaction**
  - Solutions on the roadmap - **variable rate fertilizer application and soil tillage**

### Future Vision: **Regenerative Agriculture**

By “living in the field” - Bring back the biodiversity and re-balance the farm ecosystem, protecting soils and water and increasing food productivity



Sources: 1. Winfree (2008) "Pollinator-Dependent Crops: an Increasing Risk Business", 2. Sanchez-Bayo and Wyckhuys (2019) "Worldwide Decline of Entomofauna", 3. Guardian (2017): "Third of Earth's soil is acutely degraded due to agriculture"

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# CRAFT TRANSACTION WITH SOLINFTEC



## Financial Transaction

- In April 12, 2022, **Lightsmith Group (CRAFT)** led the company's Series C round **with \$23 million equity funding**
- **Lightsmith** focuses in **climate adaptation and resilience** technologies
- **Climate change and weather affects directly farmers**; Solinftec has solutions to make farming more responsive to adapt to these effects



## Support to Company's Growth

- The funding allowed Solinftec to **grow 44% in contracted revenues** (today the company has **over US\$60 million ARR – Annualized Recurring Revenue**)
- **Deploy Solix and expand to new markets** – supported final stages of product development and facilitated connections with North America and Africa (markets to expand Solix Technologies)

## Benefits from the Investment

- **Board seat** – serving at Board with **strategic advices** and connections for **future fund raises** for the company
- **First investor outside Brazil** – supports the company with **global connections with financial institutions** (private equity firms, development banks, etc)
- Access to **Technical Assistance grants** funded by US State Government and Nordic Development Fund – facilitate investment to **increase the positive impacts** of the company

## What's Different from Other Investors?

- The **investment process** Solinftec went through with Lightsmith was pretty **similar to any other private equity firm**
- The only thing the company needed to adapt is the **reporting process on ESG metrics**, but this is something every company will need go through at some point. For this, they provided **support with experts on their team** to support Solinftec





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**THANK  
YOU**

