

# Impact of Climate Change on Agriculture

#### **Yields/Quality**





**Running costs** 



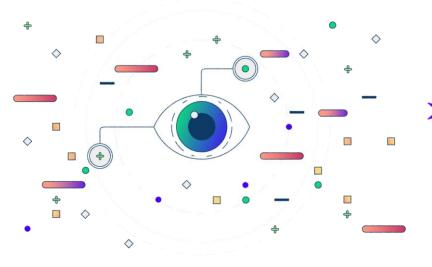
### Focus on Viticulture

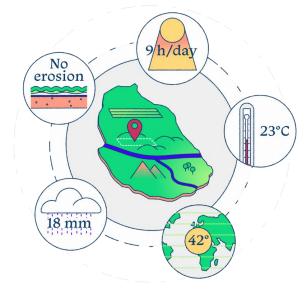
- Huge market
- High-valuable crop 
   very sensible to climatic shifts
- Geographic disruption
  - 70% of current wine regions is at risks becoming unsuitable by end of century\*



# Our approach

Adaptation strategy towards climate change





Viticulture planning through data intensive approach

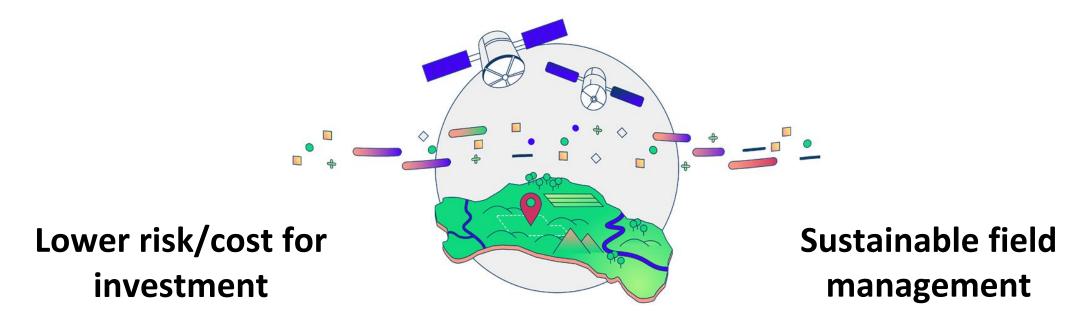
Safeguard traditional wine regions & support flourishing hubs in non-traditional regions





#### Our solution

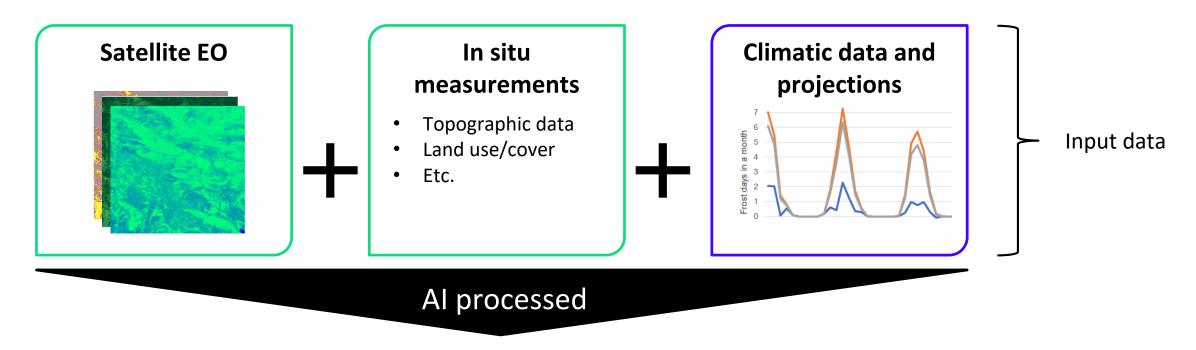
Detection of optimal unexploited/poorly performing planting sites & vineyard agronomic optimization using AI & EO<sup>1</sup> data



**Better wine quality** 



# **Our solution**







- Optimal planting site
- Matching terroir with vine variety

Output



### Our customer segments







#### **Our service**

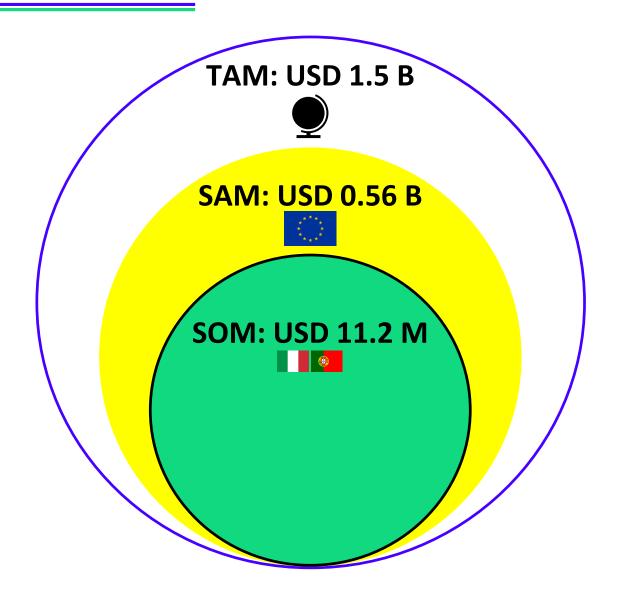
- Resilient vine selection & vineyard design 📵 🖺
- Vineyard monitoring <a> \omega</a>
- Carbon farming monitoring <a> \omega</a>

= interactive platform-based report





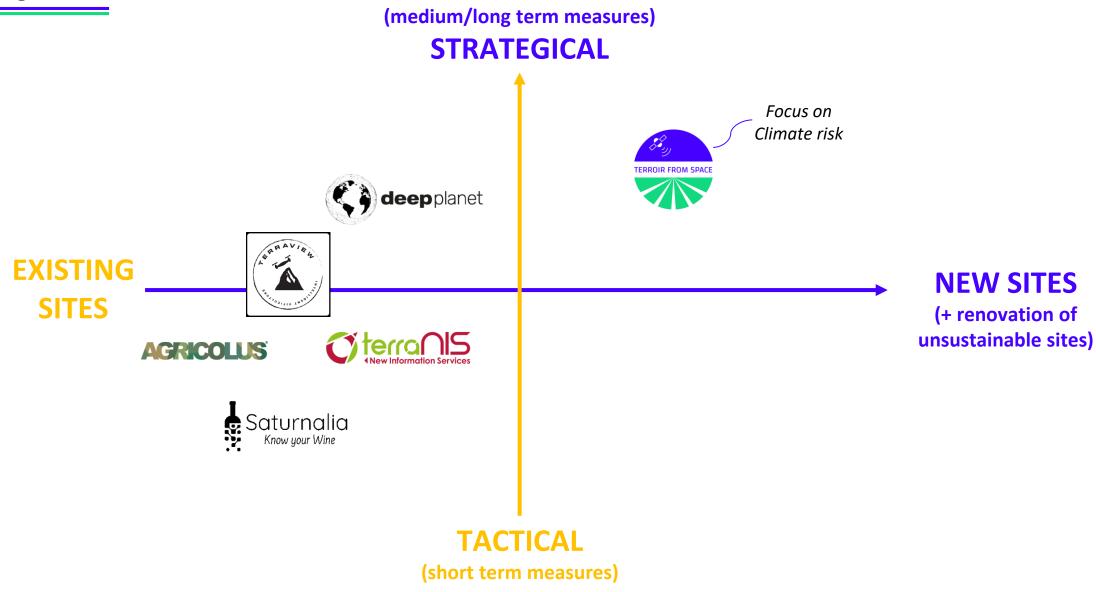
#### **Market: Precision Viticulture**



CAGR: 11% (period 2024-2033)



# Competitors





#### **Our Team**



Founder | CEO

#### **Alessandro Saetta**

(MSc. Space Engineering)



#### **Manuel Poêjo Torres**

(PhD. Political Science; Strategic Business Development)





Recruiting technical member





International





Different backgrounds/skills





Wine Lovers





#### **Support Entities & Partners**

Winemaking Strategic

**Partners** 



(Portuguese)

QUINTAESCUDIAL

(Italian)



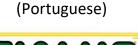
(Italian)



(Italian) (Portuguese)



Agri/Viticulture
Machine Industry
Partners





Membership of Agri-Tech International Organisations







Life Hub Monheim

Multinational **Supporting Entities** 













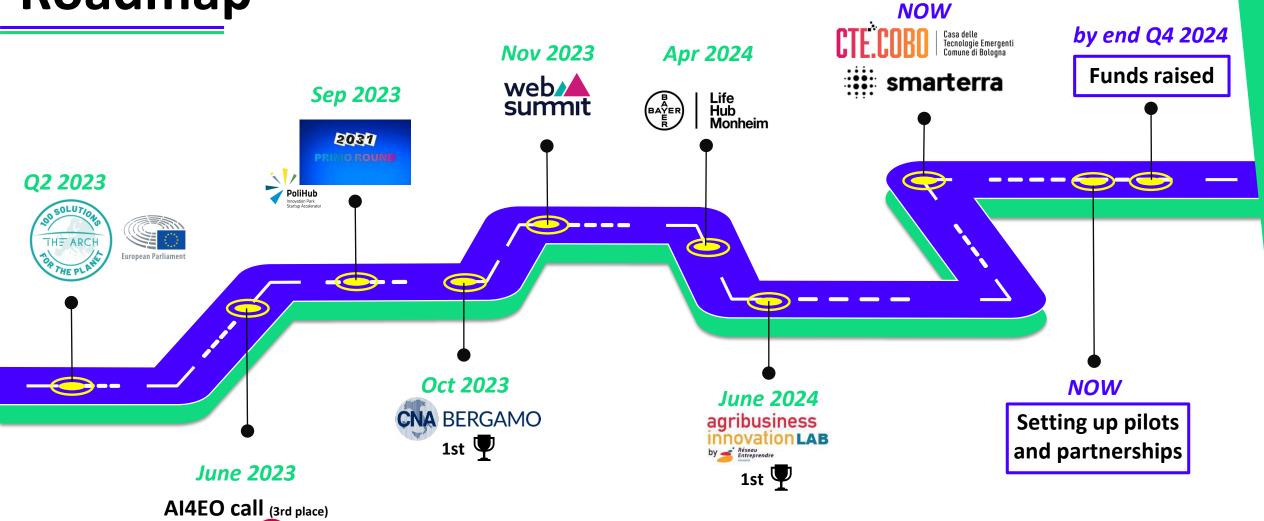








#### Roadmap

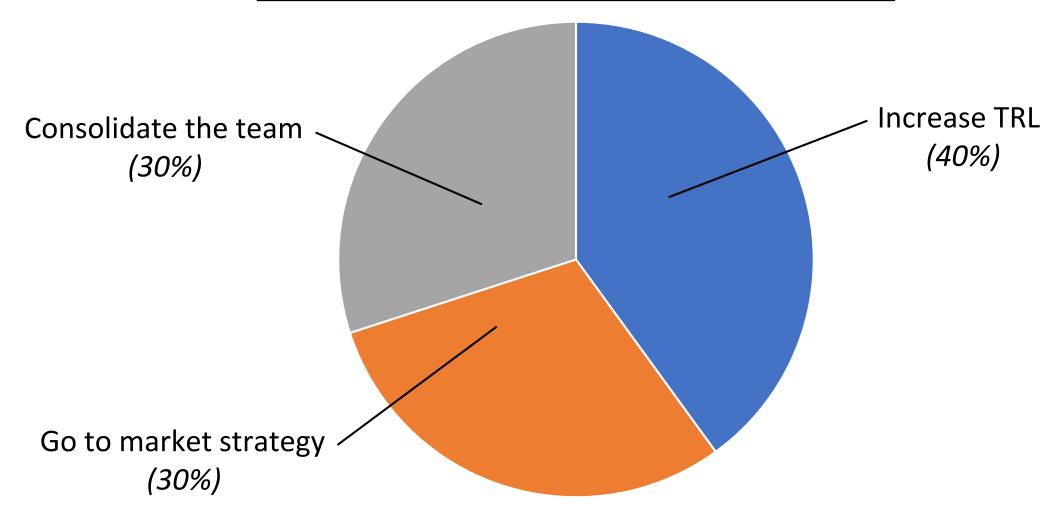




esa

### **Financials**

#### Funds needed for 15 months: 300K €





# Scaling strategy

#### Scaling on:

• Geography: serving both traditional and new wine growing regions

• **Crops:** extend the service to other high-valuable crops

• Customer segments: serve other segments such as insurance providers



#### TfS in the news

# The Washington Post

WEDNESDAY, MAY 17, 2023 · THE WASHINGTON POST

**E7** 

#### Source:

https://www.washingtonpost.com/food/2023 /05/11/satellites-help-wineries-climatefriendly-sites/



#### To combat climate change, wineries move uphill or look down from space



adapting to climate change in many ways. Some consider abandoning traditional grape varieties long associated with their regions for vines that may be

better suited to earlier and more variable growing seasons. Others look up - to more northerly latitudes or higher altitudes - in search of new vineyards.

Pio Boffa, a celebrated producer of barolo and barbaresco at Pio Cesare winery in Italy's Piedmonte, not only saw average temperatures rising but also a decline in the autumn rains and winter snows that nourished his vineyard soils with water. So in late 2018 he purchased land higher in the mountains of the Alta Langa with the idea of planting nebbiolo in an area where most vineyards grew chardonnay and pinot noir for sparkling wines.

Pio Boffa died in early 2021. and his daughter, Federica Boffa. planted the first parcel of nebbiolo vines at the new site later that spring. The idea, she told me in an email, was "to see if Barolo and Barbaresco might survive and thrive in high altitude vineyards that remain very close to the famous appellations." She will harvest the first grapes this year, and plans to vinify them using the same techniques her family has used for five generations. If the results are good, she will plant more vines next spring.

Boffa will label the new wine as Langhe Nebbiolo, because Italian regulations limit the boundaries for the pricier barolo and barbaresco wines. "For the moment" she adds. "Who knows for the future?"



Pio Cesare winery planted nebbiolo grapes in higher-altitude vineyards in the Alta Langa region of Piedmonte, an area known for pinot noir and chardonnay.

Manuel Poêio Torres, friends with a shared love of wine and science. (Saetta studied aerospace engineering at the Politecnico di Milano.) With

group of wineries sharing information and advocating for actions to counter climate

"There's an amazing amount

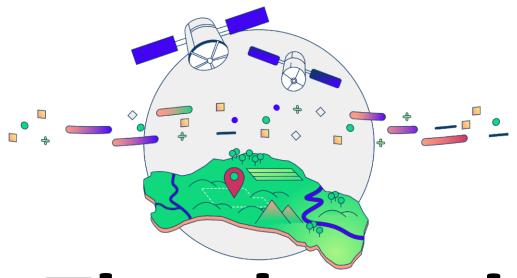
Space prompted him to keep looking.

"Our model projected there would be less rain but more severe storms in the area, so the

email (facilitated by Google Translate). In a business that takes years to yield results, Silva said the information generated by Terroir from Space could help

amounts of cabernet sauvignon or merlot. Finding favorable sites will be crucial, especially since the winery farms organically and cannot rely on chemicals to fight





# Thank you! For any question please write to:

info@terroirfromspace.com



