

Investor Deck

An outline of Maana Electric as a company, its current business and the
future of the company

Maana Electric is a Deep Tech company specialized in In Situ Resource Utilisation (ISRU) technologies.

The company applies these technologies for the Energy Generation, Storage and Space markets.

Our goal is to Power Human Ambition on Earth and in the Solar System.

Origin Story

Maana is a combination of the words Maan which means Moon in Dutch and Mana which means Power in Polynesian languages (as well as being referenced in many other cultures). This perfectly describes our origin story as Maana was founded from the founders **dreams and research into In Situ Resource Utilization (ISRU) technologies for producing solar panels on the Moon**, Mars and beyond.

During their research the founders discovered that the technologies they were developing were **not only applicable in space, but also on Earth**, where it could be used as an **economically attractive, environmentally friendly and flexible alternative to solar panel manufacturing**.

What was only an idea in 2014, turned into a business in 2018 and has grown and flourished into a company with **50+ employees, 3 locations worldwide and a product ready for market**.



Our Master Plan

How we plan to conquer the solar system

Step 1



Build inexpensive solar capacity on Earth

Step 2



Build solar capacity on the Moon

Step 3



Build solar capacity on Mars and other celestial bodies

50+
Employees

Market
Leader
In ISRU*
Technologies

3
Offices
Lux, NL & UAE

€4-5M
In Revenues
In 2022

Maana In a Nutshell

Disrupting Supply Chains and the way in which we manufacture renewables.

Maana Electric uses its proprietary In Situ Resource Utilization (ISRU) technologies originally developed for the space industry to produce solar panels directly from desert sand, mining or construction waste streams. This is done with our mobile and containerized **TerraBox system**.

The Terrabox fits in standard sized shipping containers, and can be installed and removed from site, eliminating supply chains. In other words, the TerraBox is **a moveable solar panel factory, using locally available raw materials and electricity as its only inputs.**

Maana's current focus is on the commercialization & industrialisation of its TerraBox technologies for the terrestrial solar industry.

Let's Talk Solar

Problems in Solar



Supply Chain

Solar supply chain is fragile
>80% of solar panels are produced
in China & high purity silica
comes from only 5 mines



Emissions

Not so green as they seem
PV production process has
massive CO2 emissions & uses
toxic non recyclable chemicals.

Price

Are currently 40% higher
than in 2020
Due to energy prices &
regulations in China



Logistics

It takes 9 months to 1 year
from order to receipt
With 35-50% down payment
required



These issues lead to a global demand for changing how solar panels are produced

Yet, sand hold a massive potential



Solution: The TerraBox

A mobile containerized solar panel factory able to produce solar panels using only sand and electricity.



Turning Sand into Solar Panels

10MW of Solar panels produced per year per TerraBox
10 year lifetime = 100MW produced per TerraBox

Value Proposition

Why customers want our solar panels

Low Cost

30% less expensive than Conventional panels
On a €/Watt basis

Cleaner & Greener

The greenest production process on the market

- 6x less Co2 emissions
- No use of toxic chemicals
- No water waste

Locally Produced

200 panels per day with a clear supply chain

- No complicated logistics
- Meeting local product tender requirements
- Control your own supply chain

Flexibility

Production as a service

- Pay as you go vs. Advance orders
- Same day replacement of faulty panels
- Expand solar parks more rapidly



Competition



Target Market

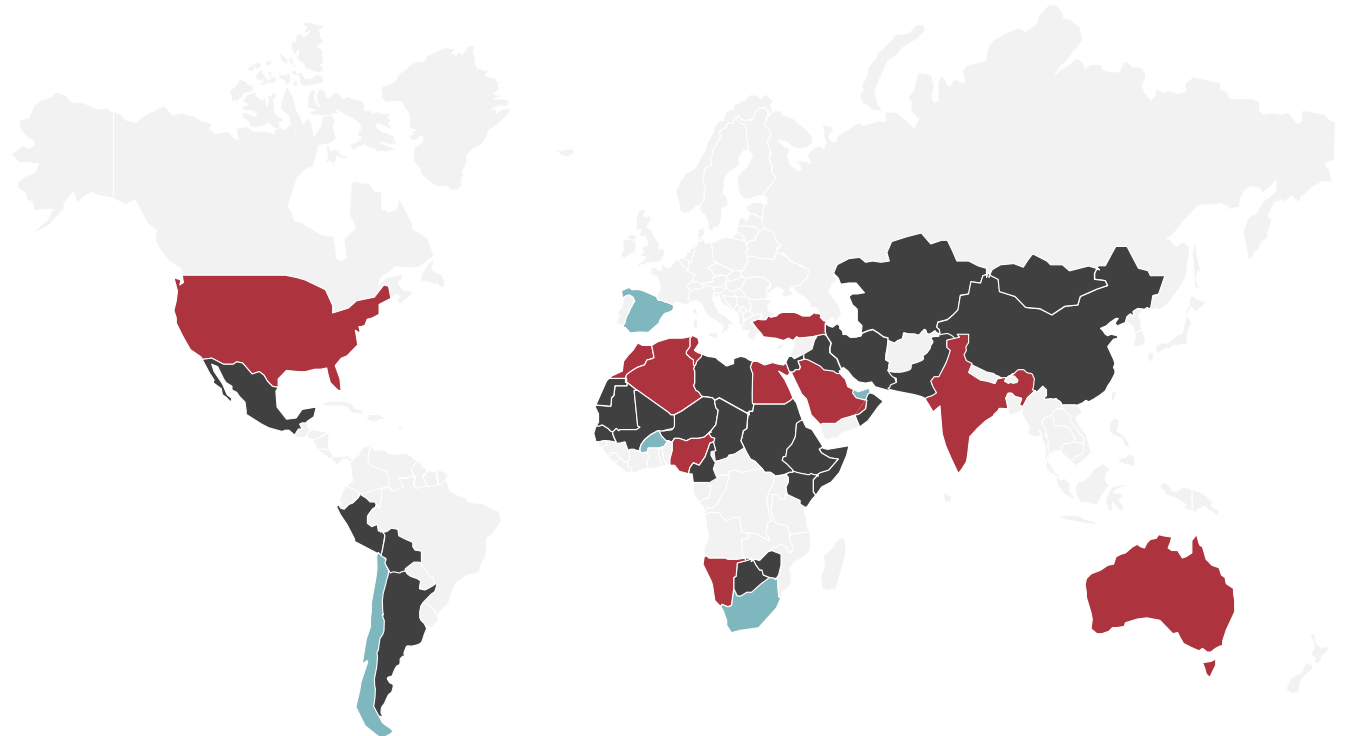
Maana's initial focus is on a few countries (UAE, Chile, Burkina Faso, South Africa and Spain) where pilot projects have been secured, allowing real world demonstration of the technology. Once in serial production, Maana intends to go global, with first focus on economically attractive markets.

- Beachhead Markets – with secured pilot projects
- Medium Term – with clear interest
- Long Term – with massive potential
- Opportunities for waste stream ISRU (mining/construction)

Desert Land 33%

1/3 of the landmass on Earth is desert, ideal for ISRU solar panel production.

Market

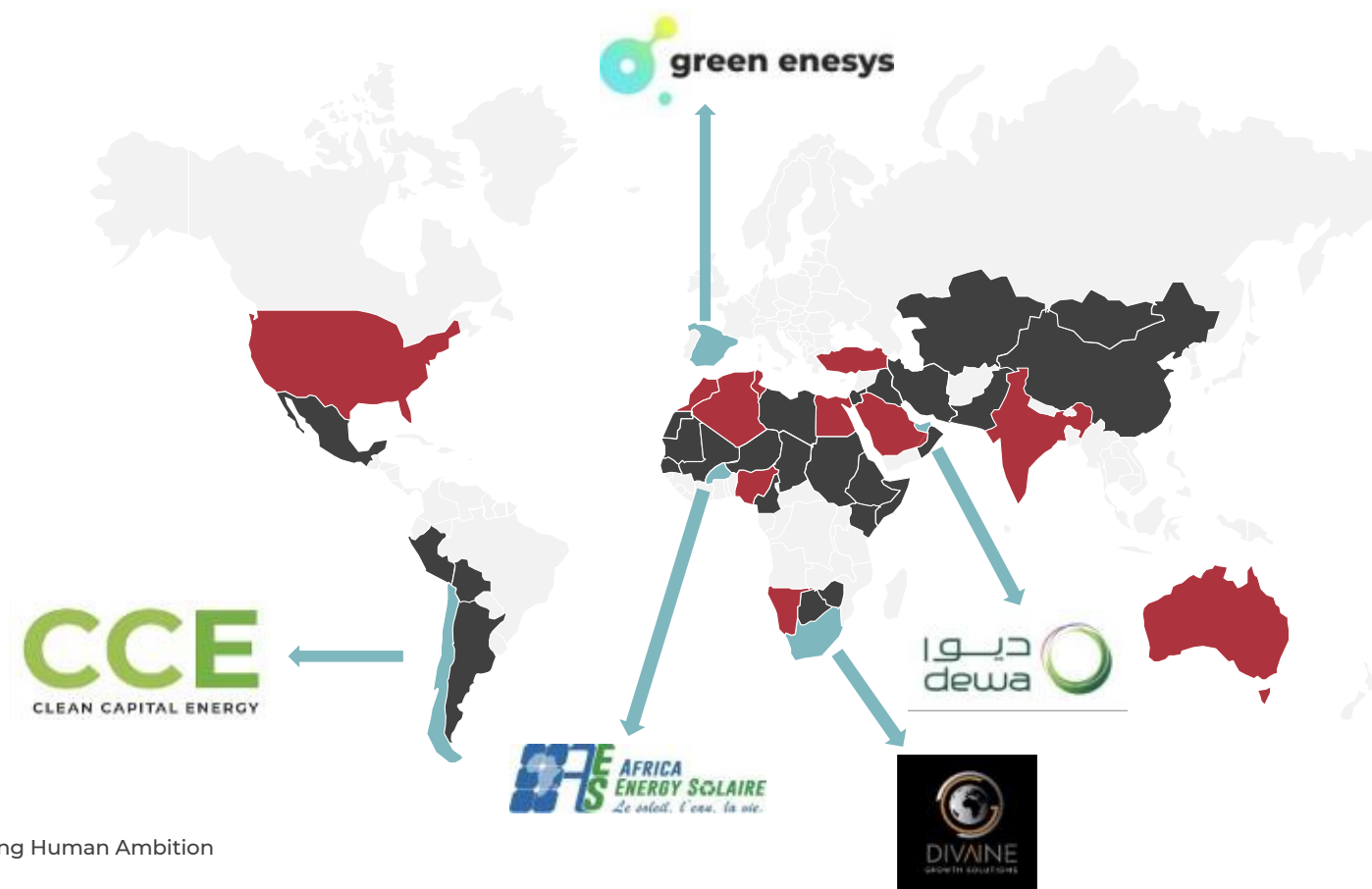


Total Addressable Market

The solar market is expected to be **€568 Billion in 2030 and €1,700 Billion in 2050** with **CAGR of 10%**. The most significant growth areas are expected to be in desert countries

Traction

Maana has secured **5+ pilot projects across 4 continents** for its TerraBox technologies, for **up to 5MW of solar panels to be installed**. These early commitments show **clear interest globally** for our technologies and offer the **ideal platform for testing the technology in different environmental conditions**.



Go To Market Strategy

How Maana intends to go from R&D (today) to securing our market and getting to serial production

2023

Execute

5+

Secured Pilot Projects

Using the 1MW Prototype TerraBox, Maana will show the world what our technologies are capable of. With 5 pilot projects secured today, the company aims to undertake first solar projects and leverage this for securing larger commercial contracts.

2023

Secure

€5M

Pre-payments for commercial projects

With significant interest and the execution on pilot projects, Maana aims to secure prepayment commitments for **100MW** of commercial solar projects around the world.

2024

Install

10MW

Using first commercial 10MW TerraBox

In 2024 we will complete the 1st 10MW TerraBox and aim for construction of first commercial solar parks.

2025

Produce

10

10MW TerraBoxes per month

In 2025 we aim to ramp up production of 10MW TerraBoxes in order to produce 10 TerraBoxes per month and serve global markets with our ISRU production capability.

Business Model

We Sell Solar panels, not TerraBoxes

Installation Cost

€100K

Per TerraBox

This is a non-refundable payment covering logistics and installation cost of a TerraBox on the solar park site. This also covers the regular maintenance costs required for a TerraBox.

Per Panel Price

€ 0.2-0.3

Per Watt

On average our panels are 30% more cost effective than conventional panels, offering the lowest LCOE on the market. Price is dependent on site, volume & region.

Pre-Payment

€50K

Per MW of panels

Due to high demand for Maana's TerraBoxes, we currently ask a €50K prepayment per MW PV planned installation in order to secure a slot in our pipeline. This amounts to a 25% advance payment.

Customers pay for an installation cost and a price per panel is agreed.
Due to demand a pre-payments on the to be delivered panels may be requested.

Maana has an average profit margin of 70% per watt panel sold.

Funding Roadmap

Closed (2018-2022)

R&D Contracts and Seed

€13M

2018

Proving the core technologies

2020

Breadboarding the key sub-systems

2021-2022

Selling the pilot projects

2022

Building the 1MW TerraBox Demonstrator

Closing Q4 2022

Series A

€15M

2023

- Testing in-house the 1MW TerraBox
- Starting the commercialization with the first pilots
- Designing the Commercial 10MW TerraBox
- Establishing the supply chain
- Defining the requirements for the TerraFactory
- Selling pre-commitments for the 10MW TerraBoxes

2024

- Building the first Commercial 10MW TerraBox
- Designing the TerraFactory

Closing Q2 2024

Series B

€50M

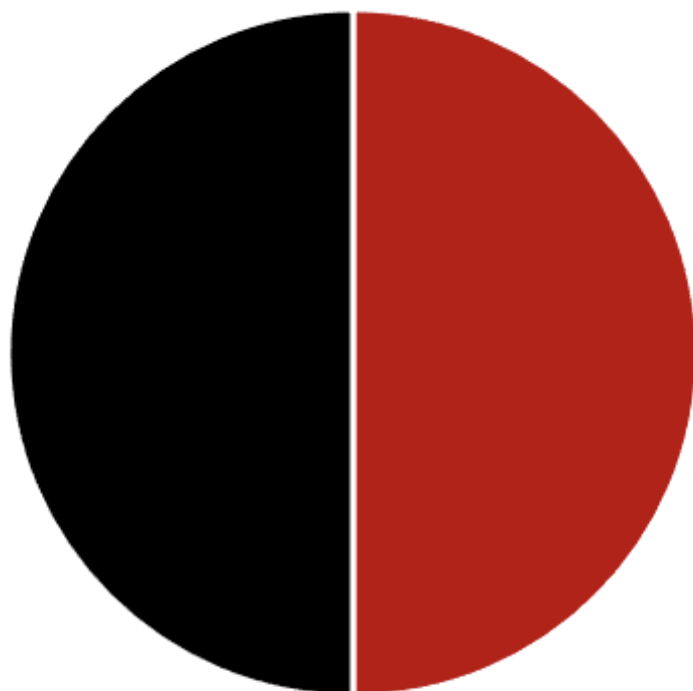
2024-2025

- Starting the commercialization for large-scale solar projects
- Building the TerraFactory to produce up to 10 TerraBoxes per month => 1.2GW per annum
- Worldwide operations with multiple support and production centers

Series A: Ask & Use of Funds

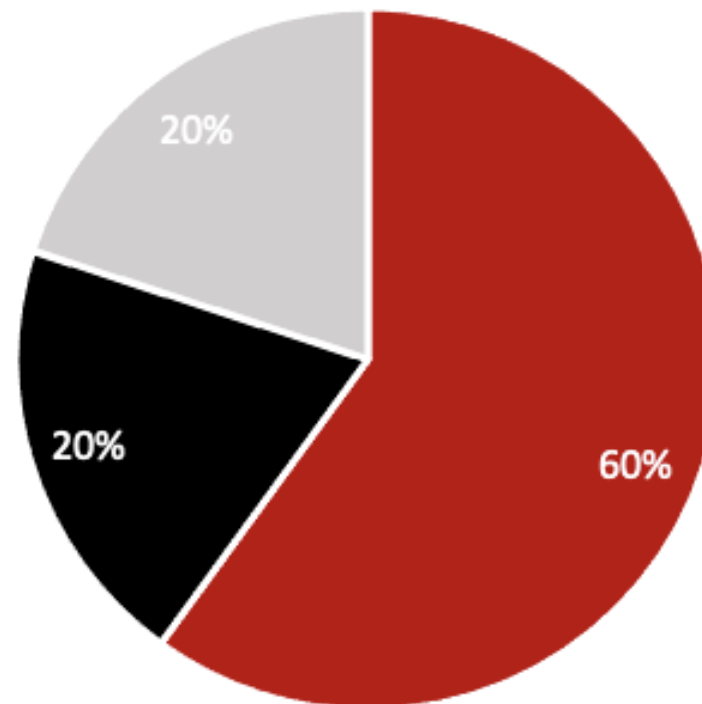
€15M Convertible note – Closing Q4 2022

Syndicate



■ Public/Institutional Investors ■ VC

Use of Funds



■ Industrialisation ■ Technology ■ Commercialisation



Founding Team



Jean Jacques Favier

CSO

Director CNES & Astronaut
3 PhDs (Physics, Metalurgy & Chemistry)
World renowned expert in field of silicon & metals



Pablo Calla

CTO

Engineering Manager
Electrical Engineer
Worked on Renewable & Space power systems



Joost van Oorschot

CEO

Serial Entrepreneur
Economics & Space Systems
Managed several Software & AI businesses,
Developed Maana Concept.



Luca Celiento

COO

Entrepreneur
Thermal, Space & Systems Engineer
Worked on all flying European Rockets



Fabrice Testa

CFO

Serial Entrepreneur
Aerospace Engineer & MBA
Successful exits from multiple companies
(>100M Euro rev. & 200FTEs)

WHAT PEOPLE SAY

They Support us, Why not you?

"With its clear and significant potential to positively impact the planet by reducing CO2 emissions, allowing more solar parks to be deployed and offering energy independence to some remote or isolated regions, Maana Electric sparked our immediate interest and attention. Noshag is happy to support them and anticipates the collaboration with its industrial ecosystem consisting of technology development (sensors & equipment) – manufacturing assembly lines – collaboration with R&D centers and universities"

Dimitri Lique

Investment Manager
Noshag, €700M Belgian Fund

"You tick all the boxes: an innovative startup, focused on green technologies that fits into our space initiative"

Franz Fayot

Minister of Economy Grand-Duchy of Luxembourg

"Ending dependencies, making renewables usable for less developed or secluded regions while simplifying technologies so much, that they can be used by anyone and anywhere with nothing more than electricity and the locally available material. Those are key factors for realising a clean and sustainable future, on earth and in outer space. I am convinced that Maana Electric has the finger on the pulse and we at CCE are happy to be part of it!"

Stefan Lindtner

CTO
CCE, solar developer in 7+ countries worldwide

Our Ambition

The reason Maana exists:



10 Million

Homes powered by Maana
by 2030.



1 Gigaton

Co2 Emissions Saved
By 2030



1st Lunabox

On the moon
By 2030



Let's together power human ambition and contribute to the net zero transition

Awards & Recognition



Joost van Oorschot

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