Renewable energies

SustainableSolutionsMatch

Welcome!

Welcome & Introduction

Who's moderating?

James Snelgrove

Business West
Bristol, United Kingdom

Justus Schünemann

NRW.BANK
Düsseldorf, Germany

Sabrina Wodrich

ZENIT Center for Innovation and Technology in NRW
Mühlheim, Germany

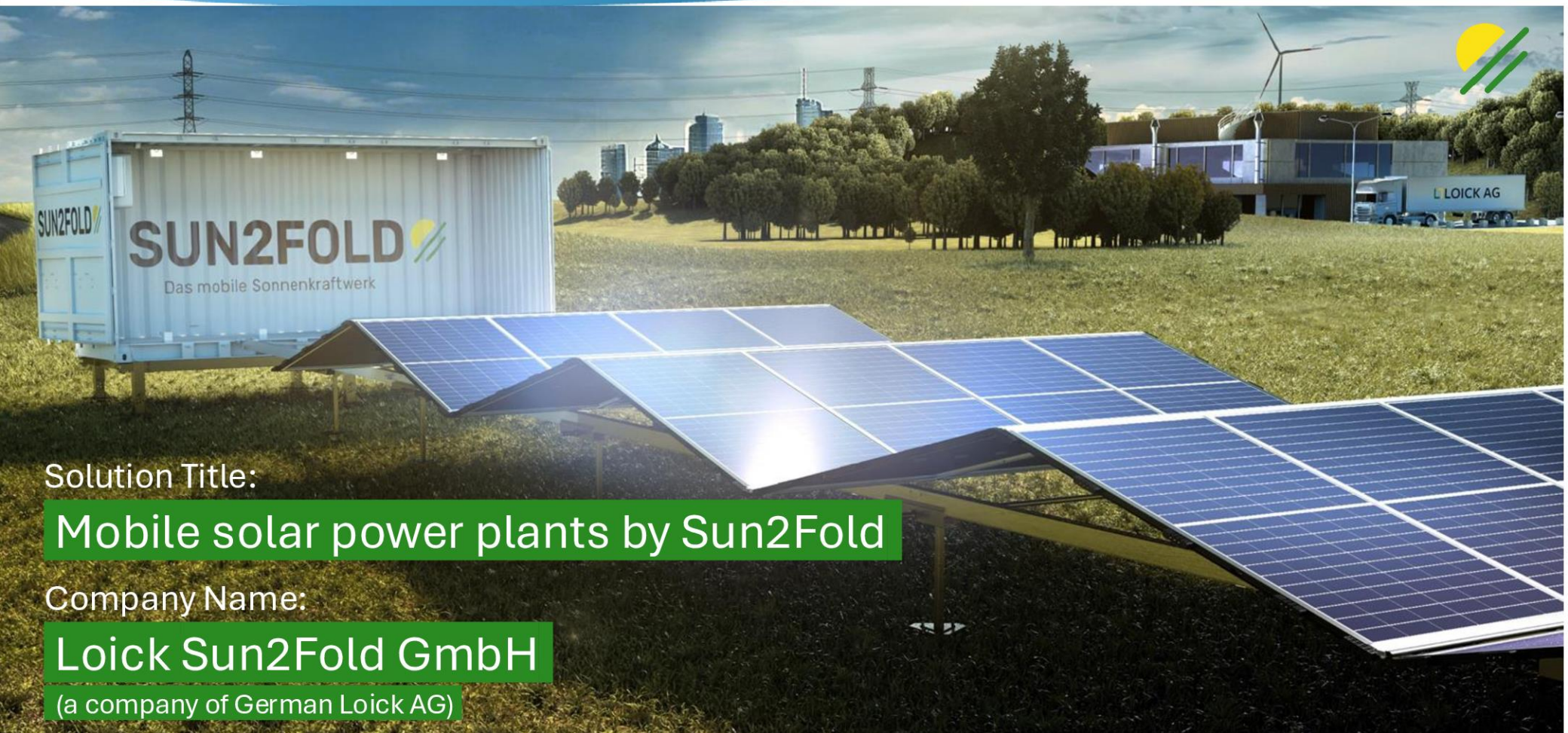
Welcome & Introduction

Let’s play by the rules: smooth sailing for our session!

- **Mute Policy:** Please remain muted unless speaking to avoid background noise.
- **Q&A Time:** After each pitch, there will be 1–2 minutes for questions. Please use the chat to ask questions.
- **Session Recording:** This session will be recorded.
- **Time management**: Pitchers, please keep track of your time. We will inform you if 5 minutes have passed.
- **Technical Issues:** If you encounter issues, use the chat to notify the host.

Session Agenda

- Welcome & Introduction
- Sustainability in the energy sector
- Pitch Presentations:
  - Pitch 1: Sun2Fold (Germany)
  - Pitch 2: Grid Imp (UK)
  - Pitch 3: Scan the Sun (Poland)
  - Pitch 4: Sollhyd (Belgium)
  - Pitch 5: WeSmart (Belgium)
  - Pitch 6: HyKinetics (Italy)
  - Pitch 7: DHP Technology AG (Switzerland)
- Closing Remarks



Solution Title:

Mobile solar power plants by Sun2Fold

Company Name:

Loick Sun2Fold GmbH

(a company of German Loick AG)

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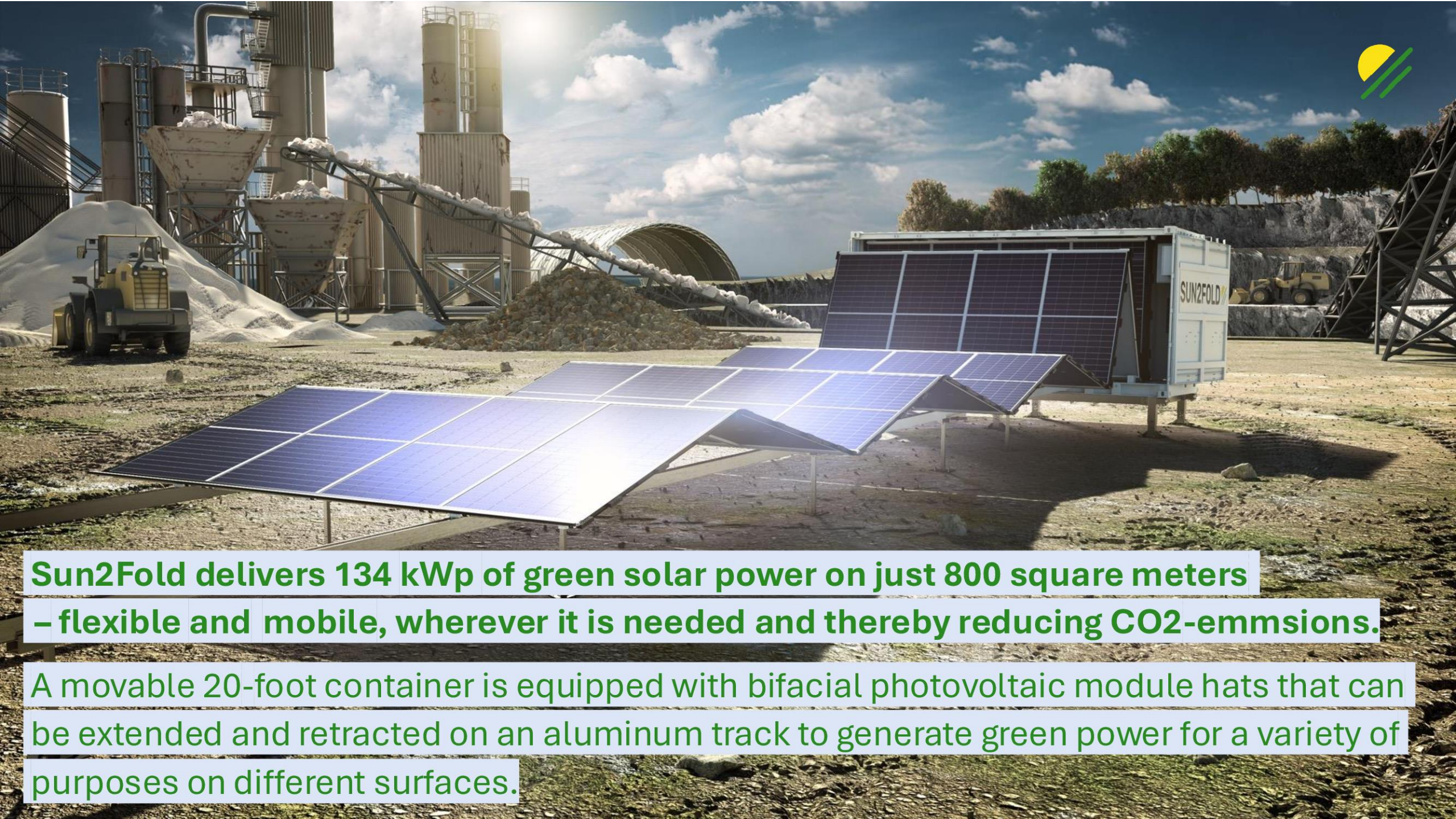


Sun2Fold delivers 134 kWp of green solar power on just 800 square meters – flexible and mobile, wherever it is needed and thereby reducing CO2-emmsions.

A movable 20-foot container is equipped with bifacial photovoltaic module hats that can be extended and retracted on an aluminum track to generate green power for a variety of purposes on different surfaces.

Three model types for your individual needs.

PRO

Output: **134 kWp**
Size: L 130m*W 6,1m*H 2,9m
Weigth: ca. 14t
Quantity of modules: 200 Stück

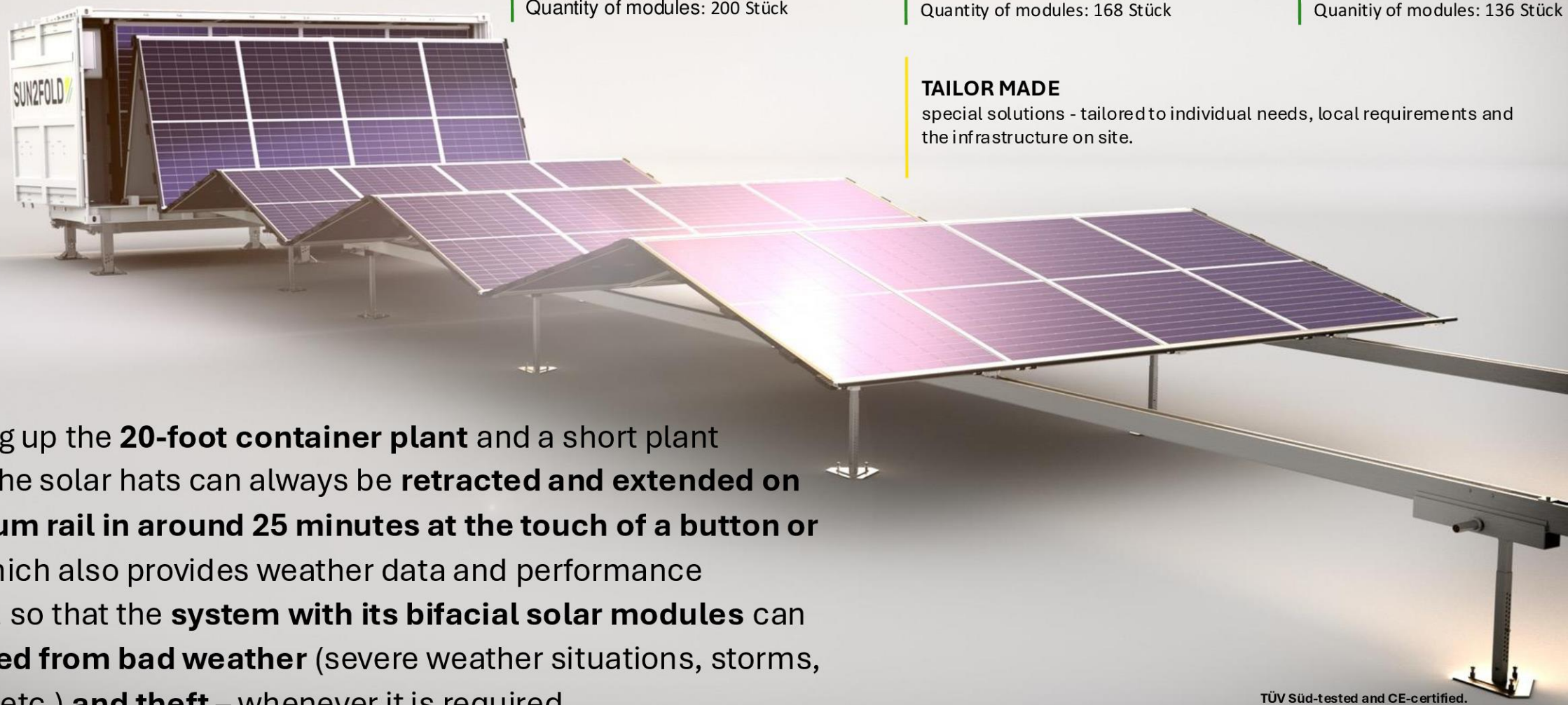
COMPACT

Output: **112,56 kWp**
Size: L 110m*B 6,1m*H 2,9m
Weight: ca. 13t
Quantity of modules: 168 Stück

SMART

Output: **91,12 kWp**
Size: L 90m*B 6,1m*H 2,9m
Weightt: ca. 11,5t
Quanitiy of modules: 136 Stück

TAILOR MADE
special solutions - tailored to individual needs, local requirements and the infrastructure on site.



After setting up the **20-foot container plant** and a short plant assembly the solar hats can always be **retracted and extended on an aluminum rail in around 25 minutes at the touch of a button or via app** (which also provides weather data and performance indicators), so that the **system with its bifacial solar modules** can be **protected from bad weather** (severe weather situations, storms, hail, snow, etc.) **and theft** – whenever it is required.

TÜV Süd-tested and CE-certified.
Designed in accordance with the highest European mechanical engineering guidelines


/// Sun2Fold produces **green power from renewable energy resources directly on site – exactly where the power is needed.**

/// Mobile and flexible, even **for temporary use**. Wherever areas are too small for ground-mounted photovoltaic systems and roof-mounted photovoltaic systems are not an option – and the operator attaches importance to being able to protect the solar modules by simply and quickly retracting the solar system.

/// Sun2Fold generates energy not only for your own supply, it also **creates additional revenue streams – through the sale of surplus electricity – and ancillary revenue** (e.g. through CO2 certificates and GHG quotas).

Sun2Fold offers an ideal solution for **flexible and self-sufficient power generation** from green energy resources for a variety of different purposes – such as:

/// **Mining & opencast mining**
/// **Agriculture & farming**
/// **Construction industry**
/// **Sport events & live entertainment**
/// **Commercial warehouses & logistics properties**
/// **Industrial manufacturing & production**
/// **Wind turbines & wind farms**
/// **Civil protection & development aid**
/// **Support for regional infrastructure and local energy supplies**

The system **can be operated both on-grid and off-grid**, which ensures complete self-sufficiency – **supplemented by suitable energy storage solutions if required**, so that electricity can also be supplied during periods of darkness.

Which partner are we looking for?

In addition to customers, we are currently looking for **sales partners** and partners for the development and expansion of **international sales structures**.

Book a meeting with:

Loick Sun2Fold GmbH

Nils Rottsahl

Heide 26
46286 Dorsten
Germany

Telefon: +49(0)2369 9898 20
E-Mail: nils.rottsahl@sun2fold.com

www.sun2fold.com

Geschäftsführung:
Hubertus Loick, Stefan Kirner

een.ec.europa.eu

Up2Circ

enterprise europe network

Energy Flexibility Services Platform

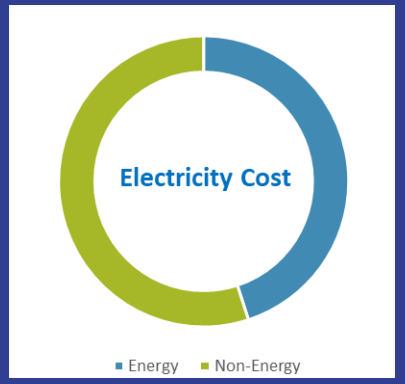
Gridimp

Richard Ryan
Commercial Director

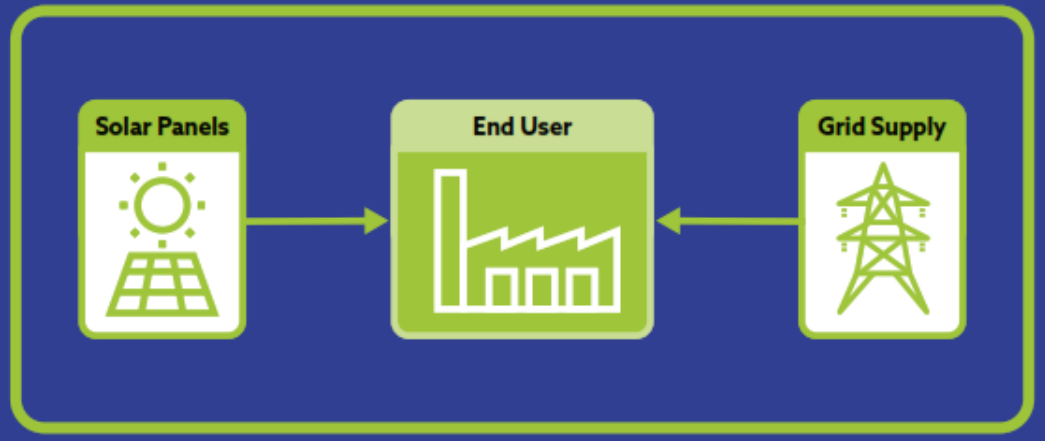
gridimp

Turning business energy users into **smart, flexible, low carbon** consumers.

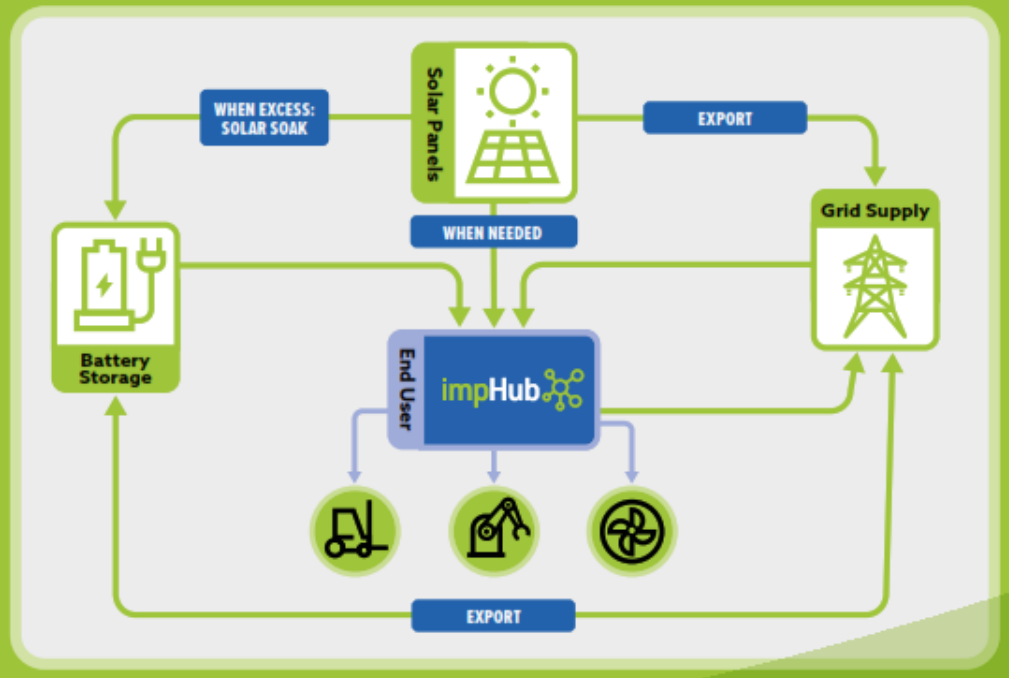
The Energy Relationship of the Future.



Passive approach: The old model...

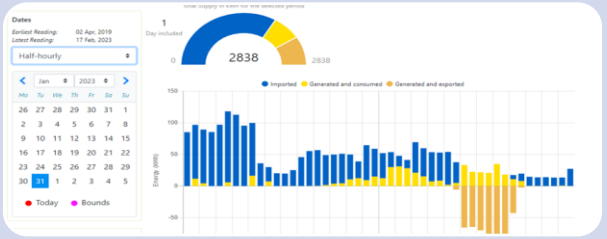


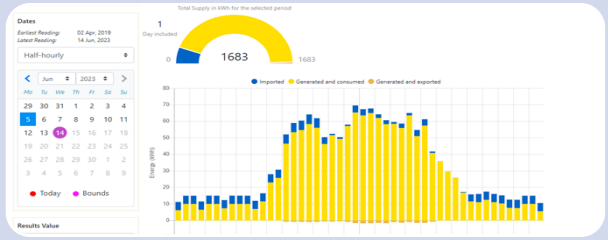
The Future:
Interactive Flexible Energy Relationship...



gridimp

Client Example demand 1.5MWh/day





Investment

Confidence to invest over £400k, clean generation & storage with Sub 4-year payback

Winter Response

Flex trading delivered stacked revenue paid for actions > £400 per workday

Summer profile

≥ 90% energy independence

> 50% reduction in energy spend

How the Gridimp Flexibility Platform works

You get platform access to the impCloud. Here you can access meter data, manage clients and perform remote analytics.

The impCloud is a powerful software platform that runs machine learning programs and supports multiple integrations to flexibility markets & data flows. This allows it to deliver market leading advanced energy data services

impCloud

impHub

Automated control requires and impHub to be installed at a client site. The impHub is Machine learning enabled and performs control and analytics on site.

The impHub is connected to EV chargers, HVAC, process load, Generation & Batteries, which it controls to benefit the client.

The impHub learns onsite needs and responds in real-time to minimise price & carbon

gridimp

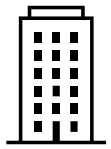
Smart Microgrids and Automated Flexibility Trading

T: +44 (0)1749 372198 | E: info@gridimp.com | W: www.gridimp.com

Platform Services: Who we sell to

Direct Sales

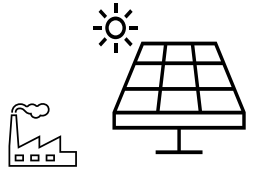
Referral Partners / Sales Channels



Client referrals

Energy Companies
Flexibility Platform Services

Distributer led
Capex funded



Green Technology Installers & OEMs
Battery ,Solar, ASHP etc.

M&E design engineers
Optimisation & Smart Microgrids

Primary Gateway to signing up new Gridimp Clients

Direct

End Client / User of Gridimp Services & Products

Partner Benefits:

Referral Partners / Sales Channels

Energy Companies

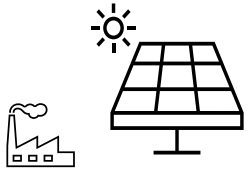
Innovation

1. Identify & forecast Solar Generation
2. administer flexibility programs
3. Innovate supply contracts

Distributer led

Distribution

1. Increase yield form Capex funding
2. Cope with unstable grid supply
3. Enable peer to peer trading



Green Technology Installers & OEMs

Sales

1. Size solutions correctly
2. Quantify benefits & add value
3. Speed up sales cycle

M&E design engineers

Value addition

1. Run ML driven simulations
2. Deliver complex solutions
3. Innovate energy decarbonisation

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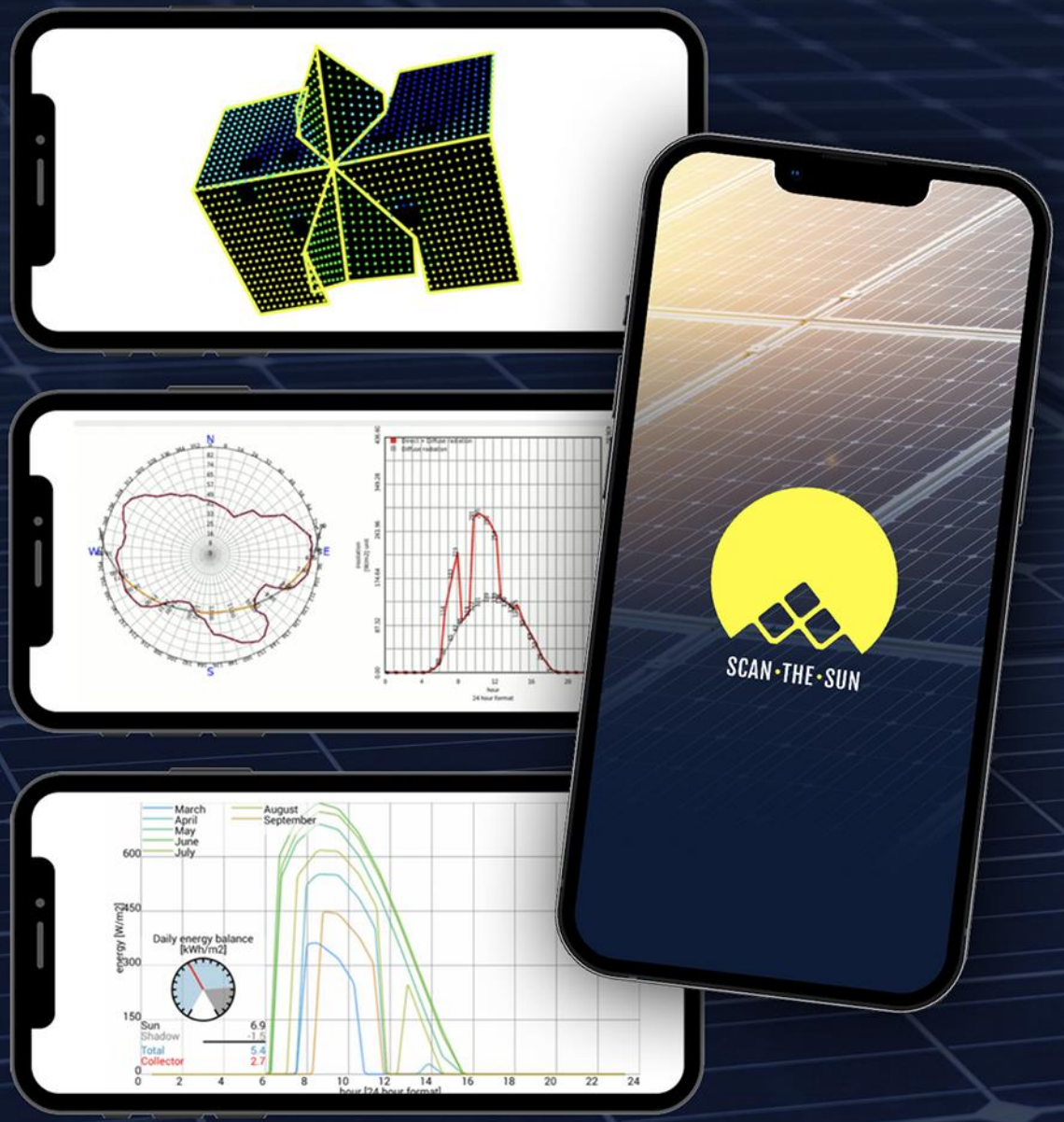
Book a meeting with: Company name

Richard Ryan
Commercial Director
Gridimp
richard.ryan@gridimp.com

een.ec.europa.eu

Up2Circ

enterprise europe network



SCAN·THE·SUN

Gain up to 38% more Energy from Solar PV

Design Solar PV in 1 minute !!!

Fully automated App !!!

As easy as 1,2,3

VALUE PROPOSITION: Fully automated PV designing App

- ✓ in 1 minute precise design & proposal
- ✓ As easy as 1,2,3
- ✓ Up to 38% more energy yield
- ✓ On-site and/or remotely
- ✓ no need to climb on the roof
- ✓ Even for non-specialist

Supported by 20,000 + users in 175 countries !!!

SCAN·THE·SUN

Challenge:

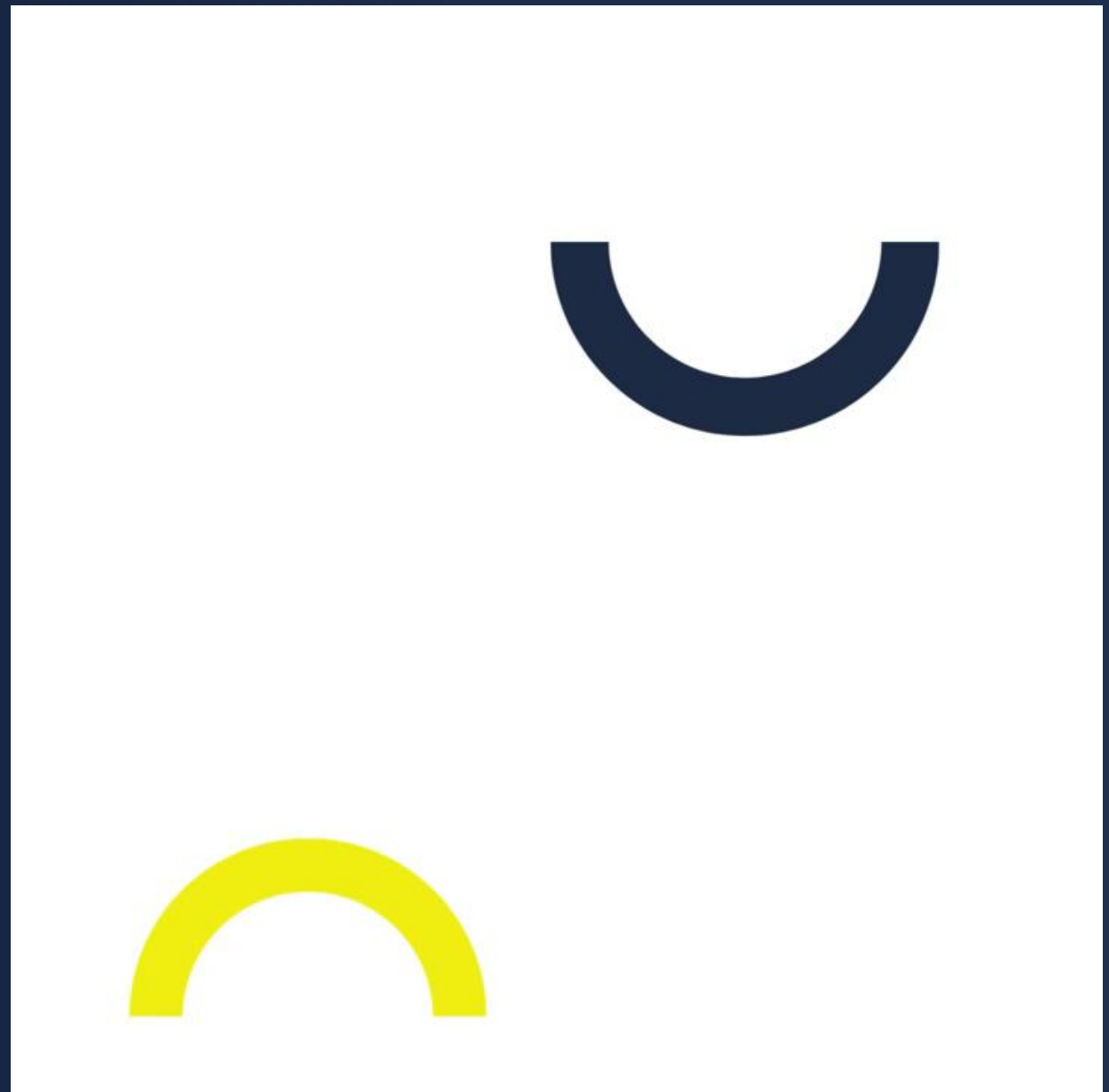
There is no tool on the market **to effectively** speed up Solar PV adoption

B2C: Individual consumers ask:

How do I know Solar PV makes sense for me

B2B: PV professionals ask:

„How to guide clients from the initial search for information to the final decision "



SCAN·THE·SUN

MARKET - AUDIENCE

ENTERPRISE

Utility companies

1 stop „on-spot" offer

Customized with hardware models & pricing

Remote 1st draft capability

Master License: Unlimited sublicenses

B2B SME

Solar PV installers

A quick tool to guide clients

Sales & designing tool

Competitive SaaS license per user

B2C

Individuals

Individuals get objective information

Simplified B2C version

1 time small fee

Cooperation partners:

Green Energy solution providers

Energy companies – Solar PV installers

Communities – want to save with Solar PV

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Book a meeting with: Company name

Jacob Leja
MD
ScanTheSun
jakub@scanthesun.com

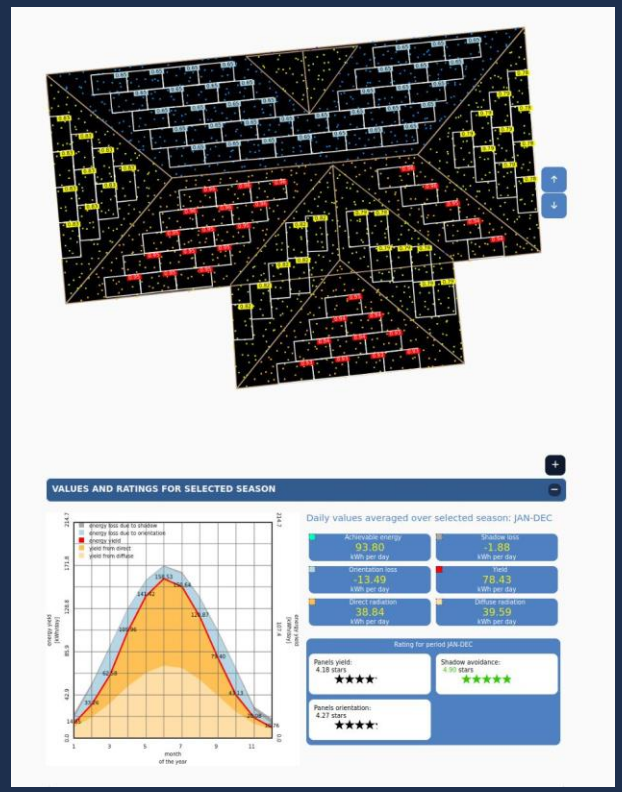
een.ec.europa.eu

APPENDIX 1: HOW THE APP GETS UP TO 38% SOLAR PV EFFICENCY ?

ALL THE USERS DOES IS TO TAP ON THE PHONE'S INTUITIVE SCREEN

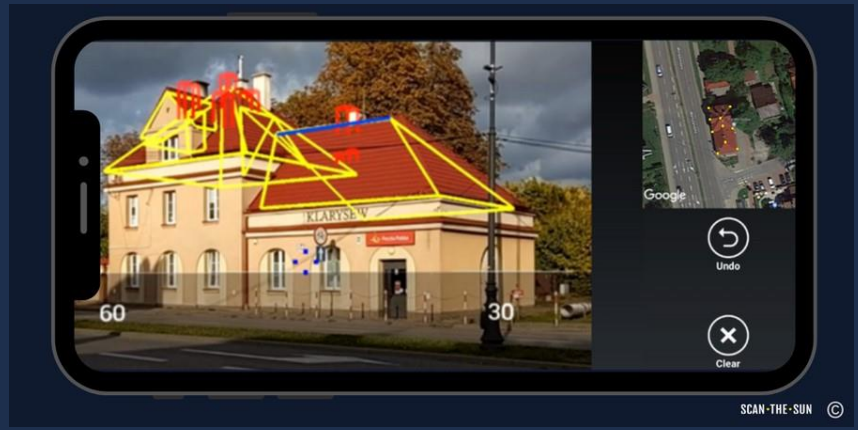
& RECEIVES COMPLETE PROJECT IN 1 MINUTE !!!

SIMILAR TO SMARTPHONE CAMERA USAGE or MS PAINT



Roof geometry measured with AR module. Each surface has its tilt and direction data.
Surrounding trees/building are measured with AR to avoid shading.
All geometry of the installation site is known.
Optimization calculates the best direction and tilt (to roof Surface) considering:

1. Roof geometry and roof self-shadowing
2. Geometry of all obstacles around and their shadowing
3. Direct and diffuse solar Energy streams distribution reaching the panels between obstacles/roof
4. Weather satellite data for actual location
5. Panels optics (how the panels see the sunlight)



THE BEST TILT & PANELS SPACING IS CALCULATED FOR EACH ROOF SURFACE BASED ON THE ABOVE DATA & SMILULATIOSN

SCAN·THE·SUN

APPENDIX 2: NEW WAY vs OLD WAY

Real-life tests multi - unit housing

- **Time to decision is LESS**
- **Installation time & cost is LESS**
- **Energy effectiveness is UP**
- **Sales & installers effectiveness is UP**

Effective installation project (NEW):
-> Number of panels: 175

VS.

Standard installation project (OLD):
-> Number of panels: 240

Solution title

The smartest way to go from solar to hydrogen

Solhyd

Wim Vandebroek
Business Development

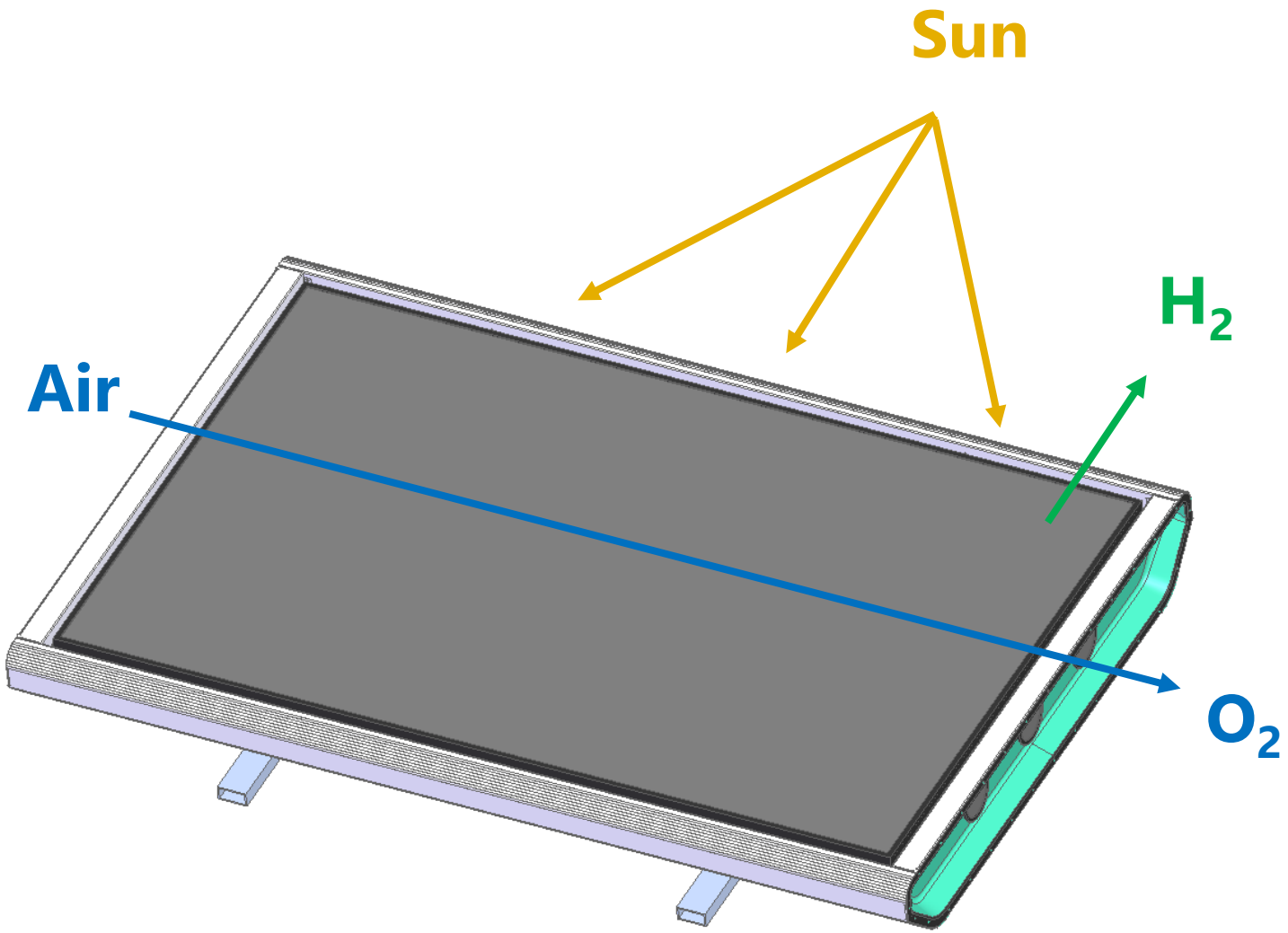
SustainableSolutionsMatch

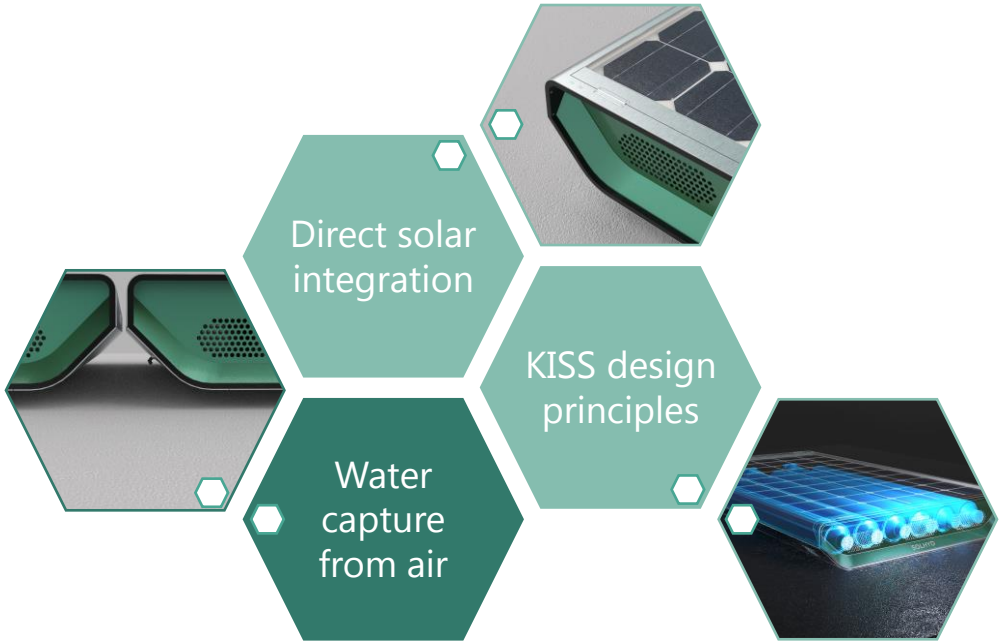
Solhyd
HYDROGEN PANELS

Green Hydrogen accessible to everyone

SustainableSolutions

Technology

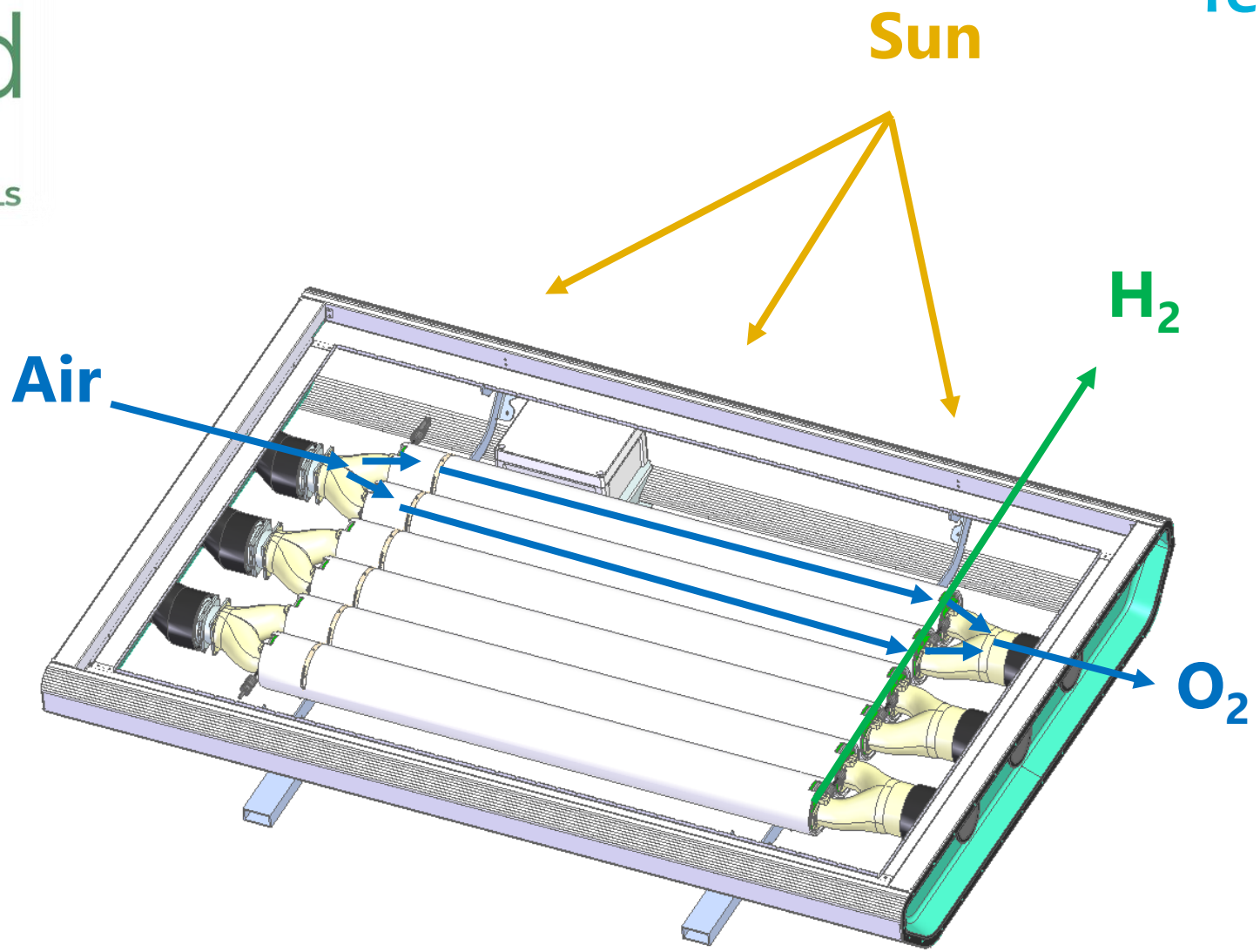




Hydrogen production simplified by direct solar integration and water captured from the air

Solhyd
HYDROGEN PANELS

Technology



Patented hydrogen panels operate autonomously at the pace of the sun (optional additional electricity source)

Hydrogen Simplyfied - Technology benefits

PERFECT MATCHING WITH SOLAR
No degradation issues, no minimal load, low OPEX

MODULAR
No lock-in, no scaling limits, low CAPEX

NO WATER
No pumps, no purification, no contaminants, no frost, low OPEX

NO GRID DEPENDENCY
No copper, no rectifier, no additionality issues, low OPEX

ZERO NOBLE METALS
No expensive materials, no supply chain issues, low CAPEX

AUTONOMOUS OPERATION
No energy management, no maintenance, low OPEX

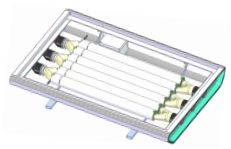
Lower CAPEX - Less OPEX - Less Management – Scalable

SOLHYD APPLICATIONS: 0,5 to 20 MW

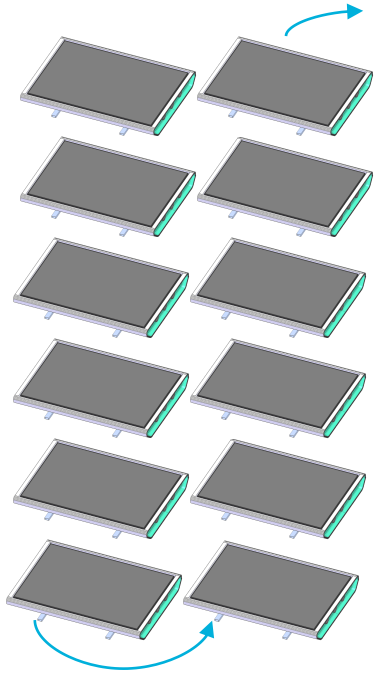
- Solar Plant Energy optimisation
- Heavy Duty Mobility, Shipping
- Industrial Feedstock for Industrial processes
- Process Gass – Metal, glass, Semiconductor, …
- Low pressure direct consumption, distribution
- Specialty applications, labs, … starting from 5kW

From Panel to Plant (0,5 to 20MW)

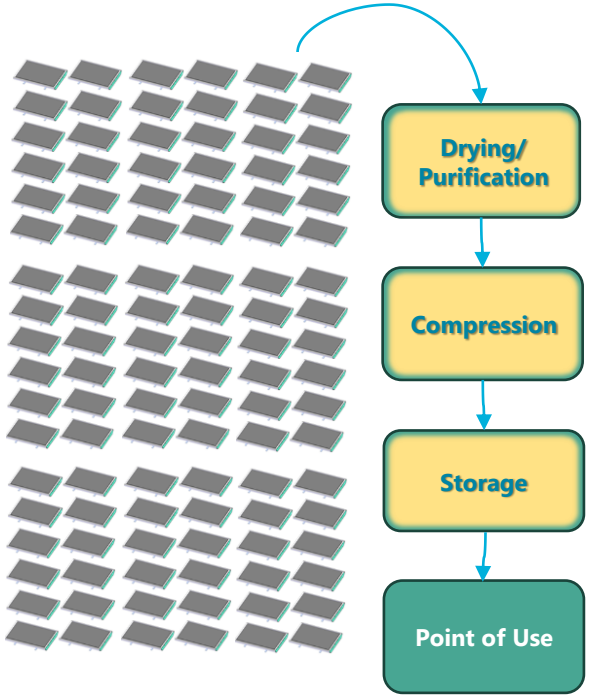
Core/Panel



Modular Panels



Hydrogen System



Unit/Plant

Monitoring

Permit and regulation

Maintenance

Secure, flat area/terrain

Electricity connection

OEM

EPC contractor

Owner/Operator

Partner opportunities with EPC's/System Integrators

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Book a meeting with: Solhyd

Wim Vandebroek
Business Development Director
www.Solhyd.eu

wim.vandebroek@solhyd.eu

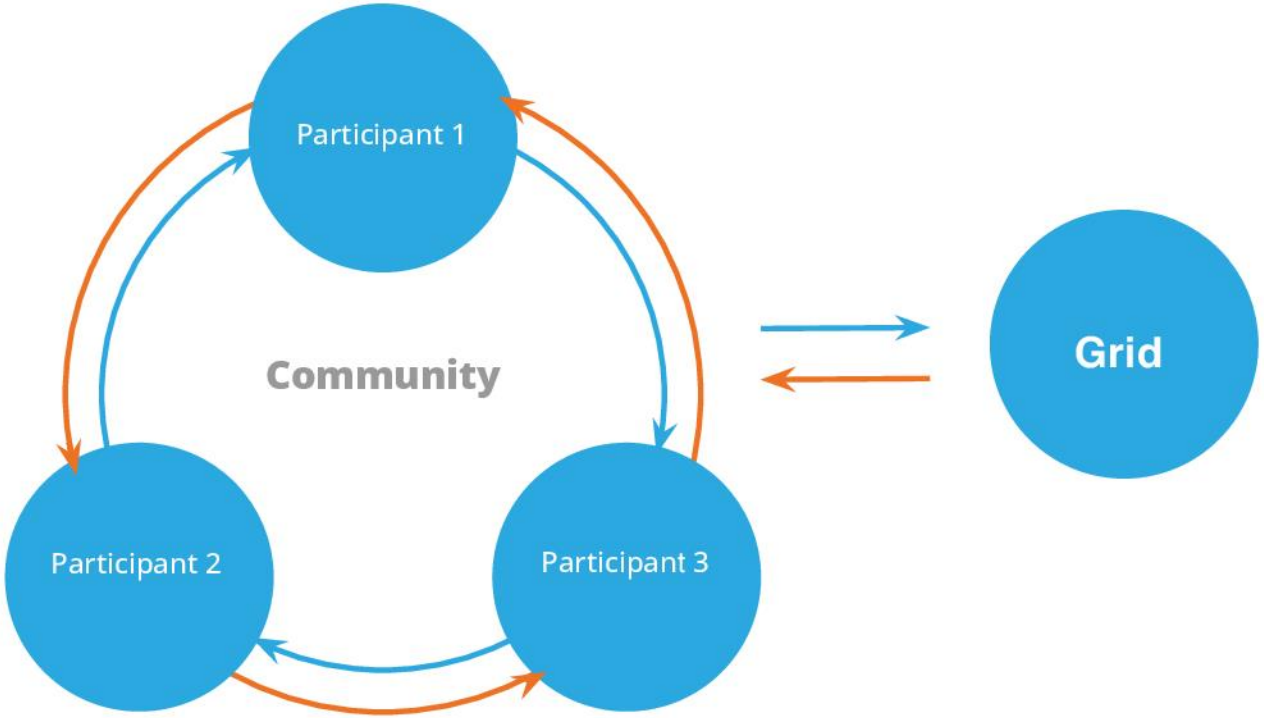
info@solhyd.eu

een.ec.europa.eu


Energy for Communities
wesmart
thepowerofwe

Energy communities: the next Energy Revolution

The European Union Renewable Energy Directive RED II entered into force in December 2018, **Clean Energy for all Europeans Package**. The RED II and RED III directives define **Renewable Energy Communities (RECs)**, introduces a governance model for them and the possibility of energy sharing within the REC.

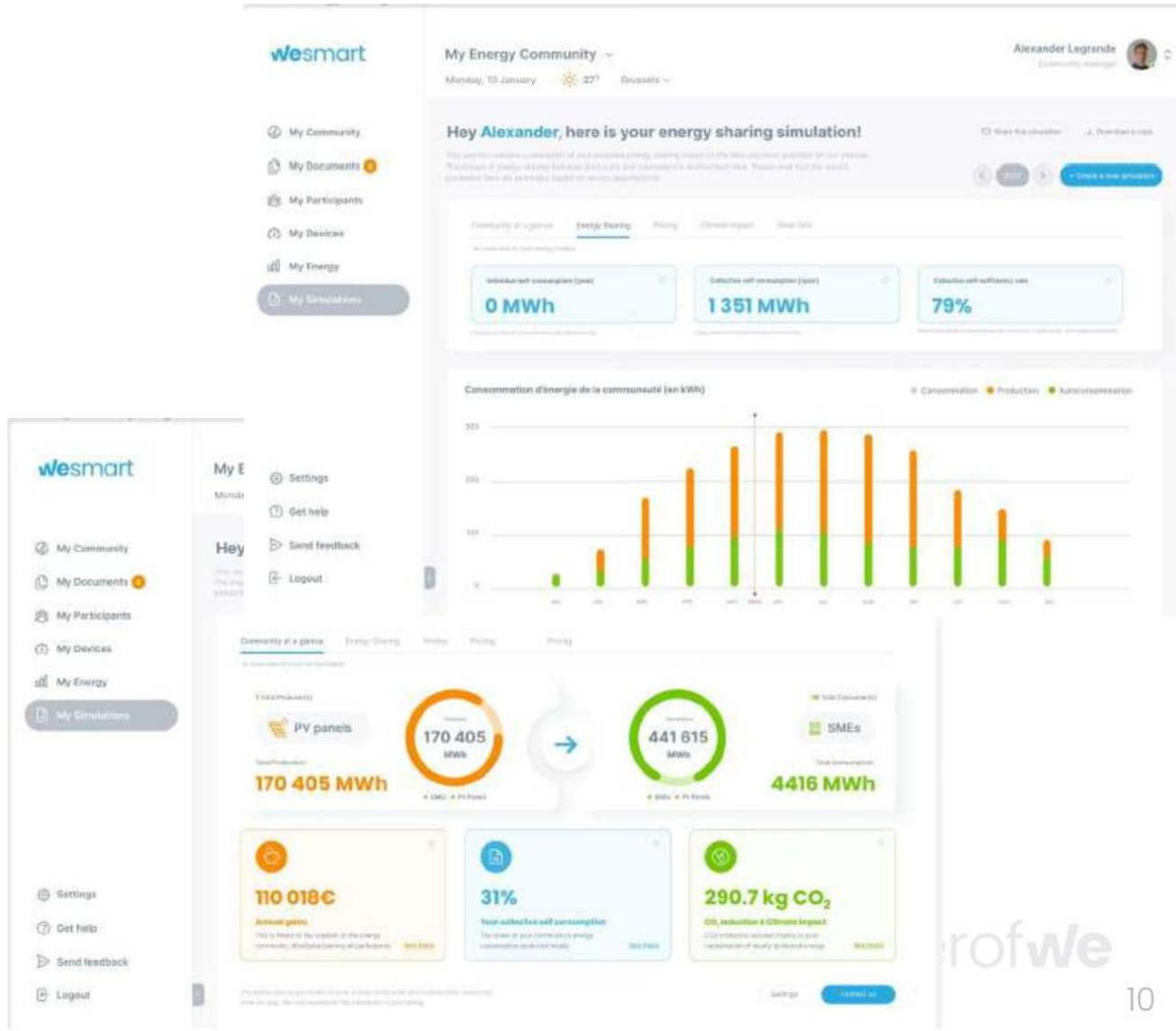


WeSmart digital platform for energy communities

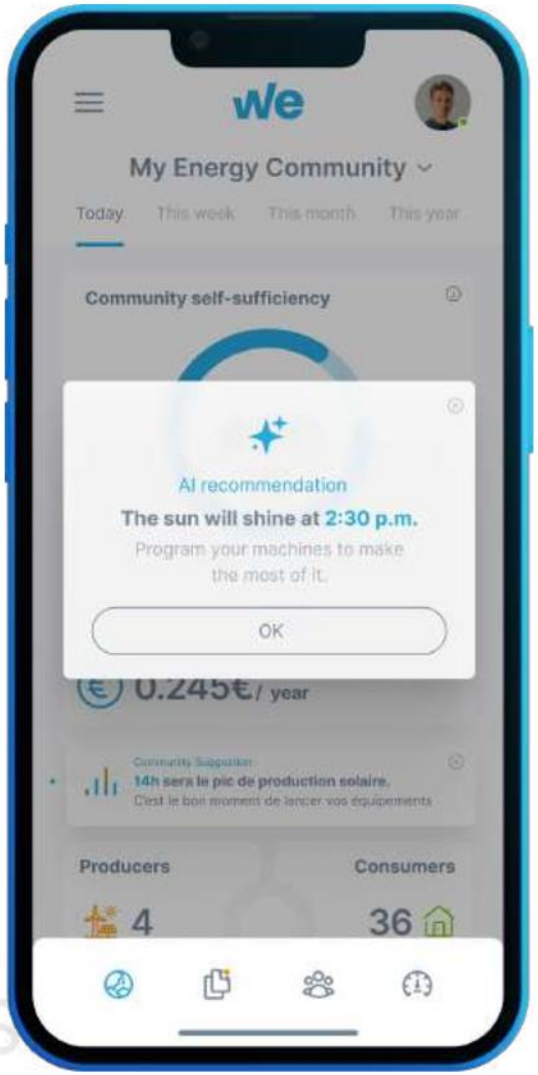
- Quick installation
- Participant management
- Equipment management
- Flow management and distribution
- Billing of participants
- Optimisation and recommendations
- Creating and sharing reports

Our simulator

- Enter your data
- Define and test hypotheses
- Estimate of the energetic and economic benefits in a tailored report
- Define practical steps to set an energy community



Our latest innovation



- **AI recommendations for consumption**
- **Linked to weather forecast and consumer profiles**
- **Encourages behavioural change**

Client benefits

Savings

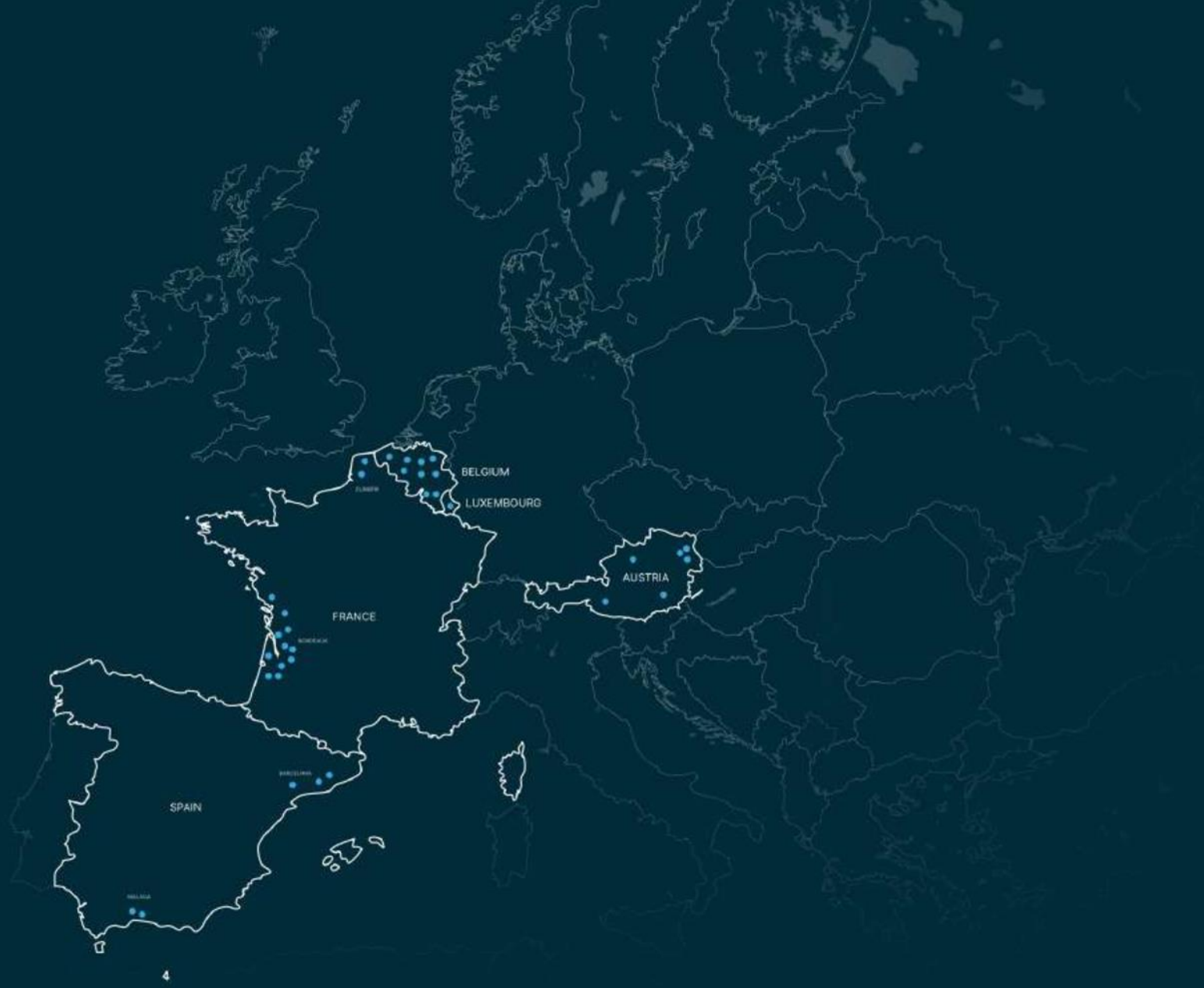
Care for the environment

Community sense

Better image

Our customers

- **Municipalities**
- **Real estate owners**
- **Renewable developers**

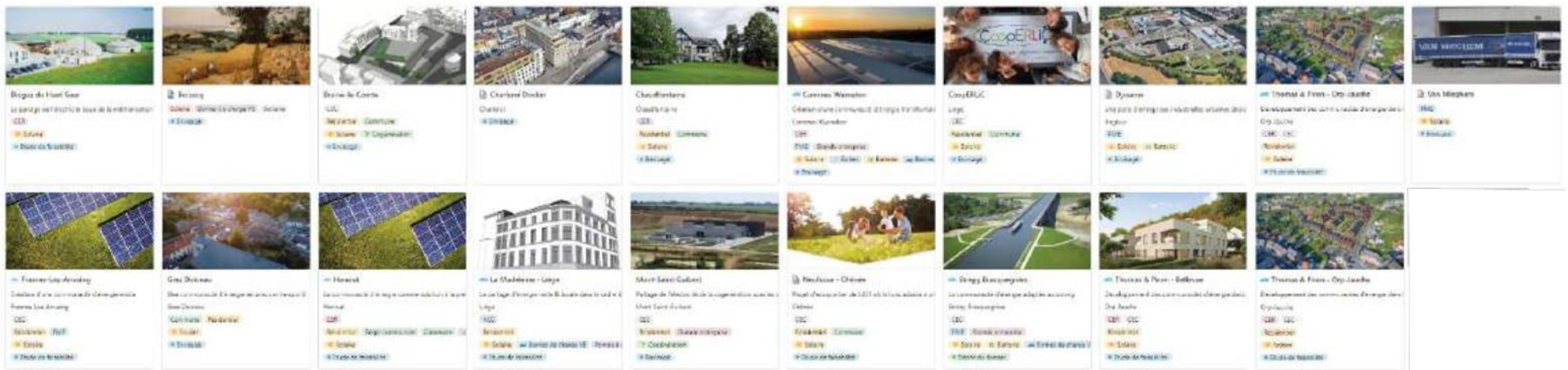


Over 100 communities in the pipeline

Brussels

Flandre

Wallonie



No Region

Potential partners:
Solar developers
Solution providers
Research centres

wesmart

Thank you

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Caroline Kamm, Communications

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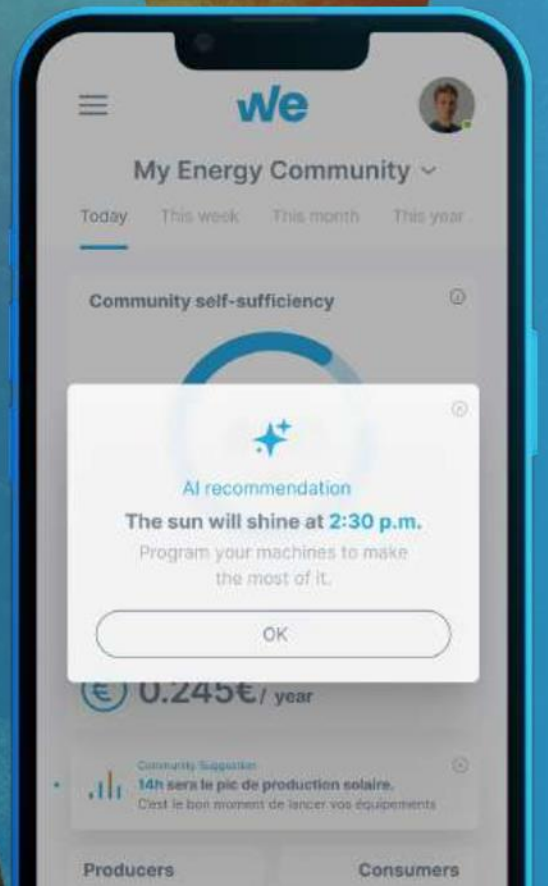

HyKinetics
flowing energy

An innovative hydro micro-turbine to turn the power of water into a green, cheap and reliable source of energy with near zero environmental impact.

COS.B.I. – A Rebecchi Group Company

Rossella Rebecchi

CEO of COS.B.I., part of Rebecchi Group

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The solution

Rebecchi Group, within its innovation activities, is engaged in several projects related to energy transition, including the **design and construction of SHP-sized hydroelectric plants** for green electricity production.

Thanks to the research activities carried out in collaboration with the **University of Padua**, Rebecchi Group has developed HyKinetics, a microturbine whose innovative features led HyKinetics technology to be **patented**.

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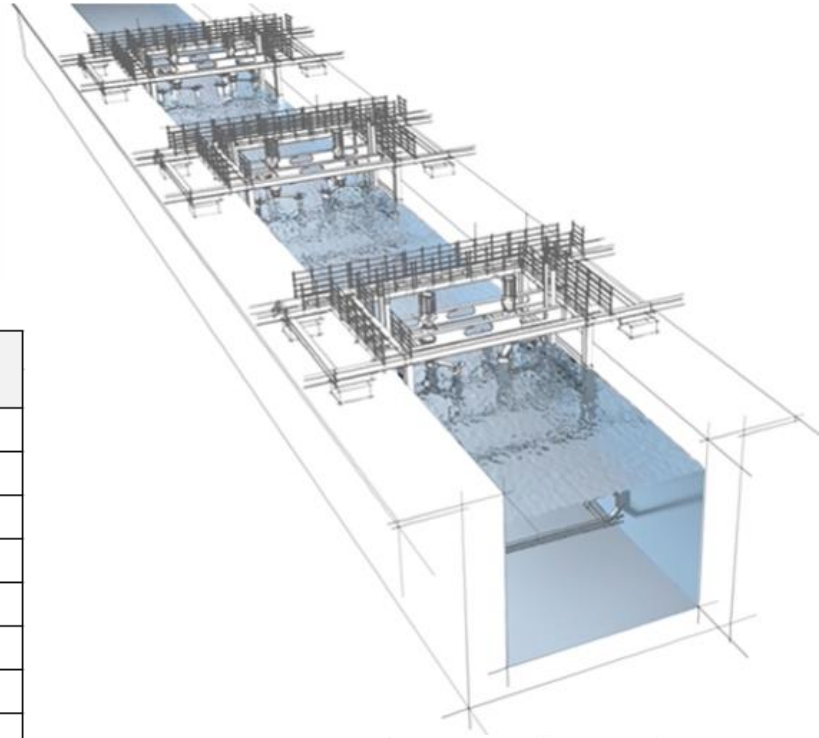
Technology details

Types of HyKinetics Plants

Main Characteristics		Minimum	Maximum
Plant Output (kWp)		1	200
Grid connection system		On-grid / Off-grid	
Number of turbine per plant (No.)		1	10
Number of modules per turbine (No.)		1	4
Turbine control systems (No.)		1	10
Rotation axis (description)		Horizontal / Vertical	
Turbine rotational speed (rpm)		10	100
Turbine module size (mm)	Variable length	1.000	3.000
	Variable diameter	1.000	6.000
Min. power output waterway speed (m/s)		1	
Max. power output waterway speed (m/s)		4	
Working operating conditions (description)		Submerged	
Recycle factor by weight (%)		92	96
Maximum noise level recorded for current installations (L_{95} dB(A)) *)		43,0 +/- 1.6	



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Differential value and sustainable impact

Near zero environmental impact

No civil works; no noise as turbines work under water; near full recyclability of materials and components.

Adaptability

The technology allows the development of hydro-plants adaptable to almost all watercourses in their different shapes and sizes.

Producibility

HyKinetics plants are designed to maximize the available energy from the water flow while ensuring cost-effectiveness for a fast pay-off.

Reliability and safety

Reliability and safety are ensured by an accurate implementation from design, engineering, manufacturing, testing, delivery to site up to operation.

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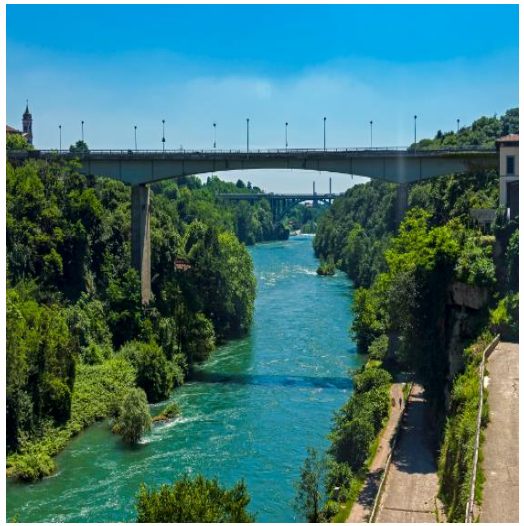
Market/Target audience

- Large and Small Hydro Power Companies
- Utilities
- Water Management Consortia
- Local Communities and Municipalities



Rivers

Canals

Gutters

SustainableSolutionsMatch

Partners we would like to connect with

The market in Europe has been evaluated based on an **analysis of the opportunities present in various countries**.

The partners we are seeking in the European market are private companies that have **industrial relationships** with potential clients, with **procurement and construction capabilities**, and ordinary and extraordinary **maintenance services** to ensure the operational continuity of the plants, including emergency interventions.

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Book a meeting with: COS.B.I.- Rebecchi Group

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HyKinetics
flowing energy

HyKinetics is a project by COS.B.I. S.R.L.

REBECCHI GROUP

Up2Circ

enterprise europe network

enterprise europe network

dhp Solarfaltdach HORIZON

Up2Circ

Solar foldable roof HORIZON by dhp technology AG

Janick Staub
Head of Sales

SustainableSolutionsMatch

enterprise europe network

dhp Solarfaltdach HORIZON

Up2Circ

dhp is the leading and fast-growing supplier of PV for dual-use infrastructure in Europe

SustainableSolutionsMatch

enterprise europe network

dhp Solarfaltdach HORIZON

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Free access for maintenance on waste water treatment plants

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Maximum energy production, maximum clearance

The solar folding roof enables large-scale decentralised electricity production for e-mobility

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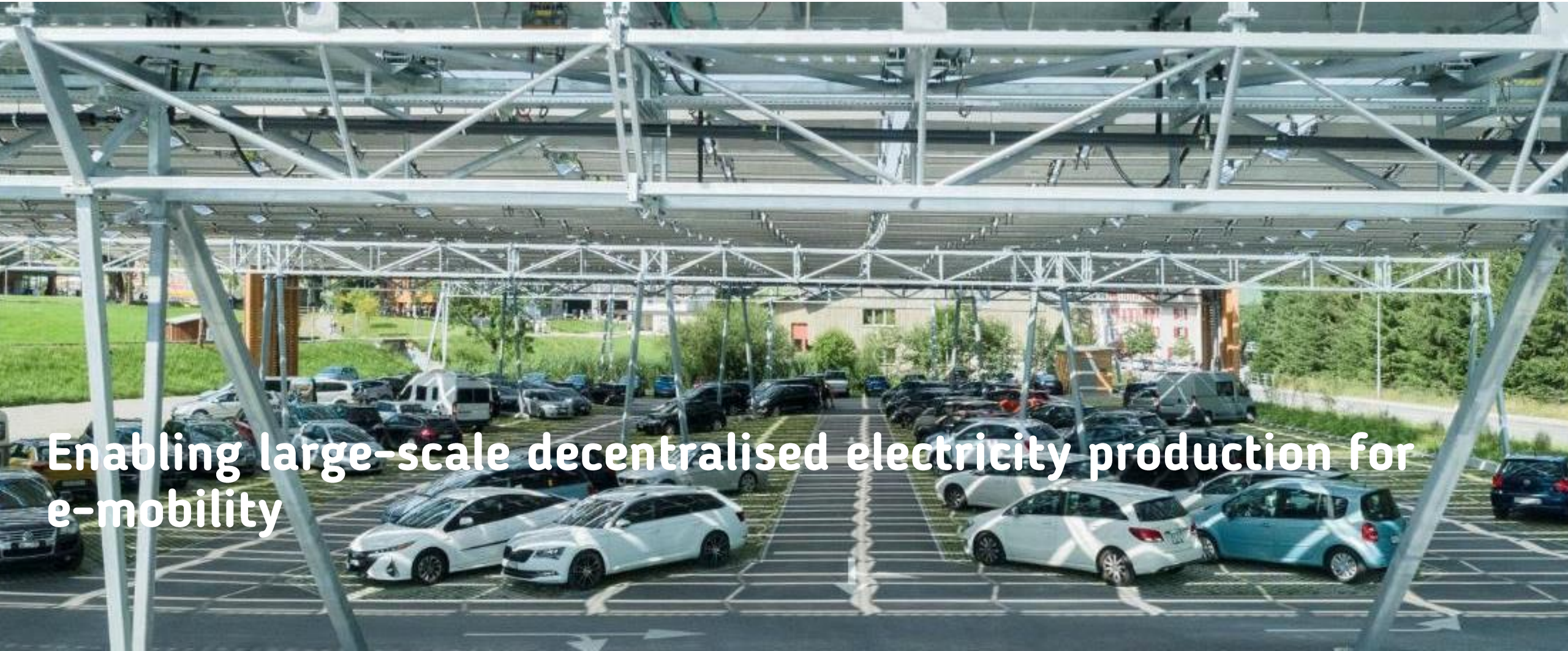

Enabling large-scale decentralised electricity production for e-mobility

enterprise europe network

dhp Solarfaltdach HORIZON

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You've got 1'500m² ? Unlock your solar potential & maximize your use of space.

#EENCanHelp

dhp Solarfaltdach HORIZON

Thank you and let's connect:

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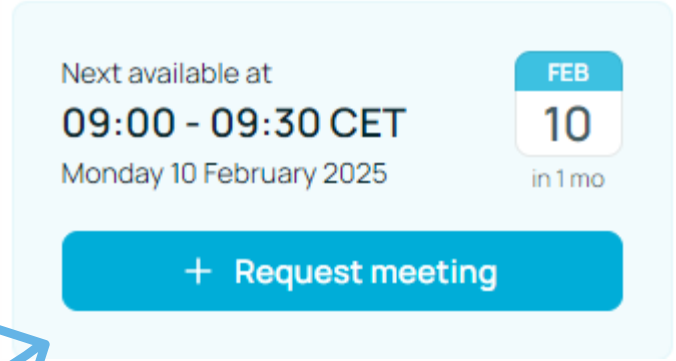
Closing Remarks

A big thank you to all pitchers and attendees!
We appreciate your participation today.

If you'd like to connect with any of the pitching companies, please use the matchmaking tool to **book a meeting**!



Need support? **Enterprise Europe Network is here to help!**

Reach out to your local Network partner:

https://een.ec.europa.eu/local-contact-points

#EENCanHelp

Thank you!

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