this webinar is powered by

Virto Solar

pv magazine webinars

Precision on every roof: Connecting data, design, and delivery for C&I solar

12 November 2025

9:00 am – 10:00 am | EST, New York City
3:00 pm – 4:00 pm | CET, Berlin, Paris

Matthew Lynas
editor
pv magazine

Kim Eyckmans
CEO
Virto Solar

Joris Hias
Head of Transformation
Virto Solar

Welcome!

pv magazine webinars

Do you have any questions? ❓ 🙋

Send them in via the Q&A tab. 👉 We aim to answer as many as we can today!

You can also let us know of any tech problems there.

We are recording this webinar today. 📹

We‘ll let you know by email where to find it and the slide deck, so you can re-watch it at your convenience. 👀 💡

Precision on Every Roof:

Connecting Data, Design & Delivery for C&I Solar

Kim Eyckmans

Founder & CEO at Virto Solar

- **Autodesk Certified Engineer** with over 15 years of experience
- Engineered **1,000+ rooftop and ground-mount systems** ranging from 100 kW to 100 MW
- Delivered solar projects across **Belgium, the Netherlands, Germany, the UK, Italy, France, and Portugal**
- Recognized expert in **large-scale solar engineering and project delivery**

Joris Hias

Product Manager & Strategist at Virto Solar

- Product leader at Virto Solar
- Focused on tools that help solar professionals **design and deliver large-scale PV projects**
- Background in IT consulting for the **public services, logistics, and retail sector**
- Advocate of **user-centric design**, balancing business, technology, and user needs in real-world challenges

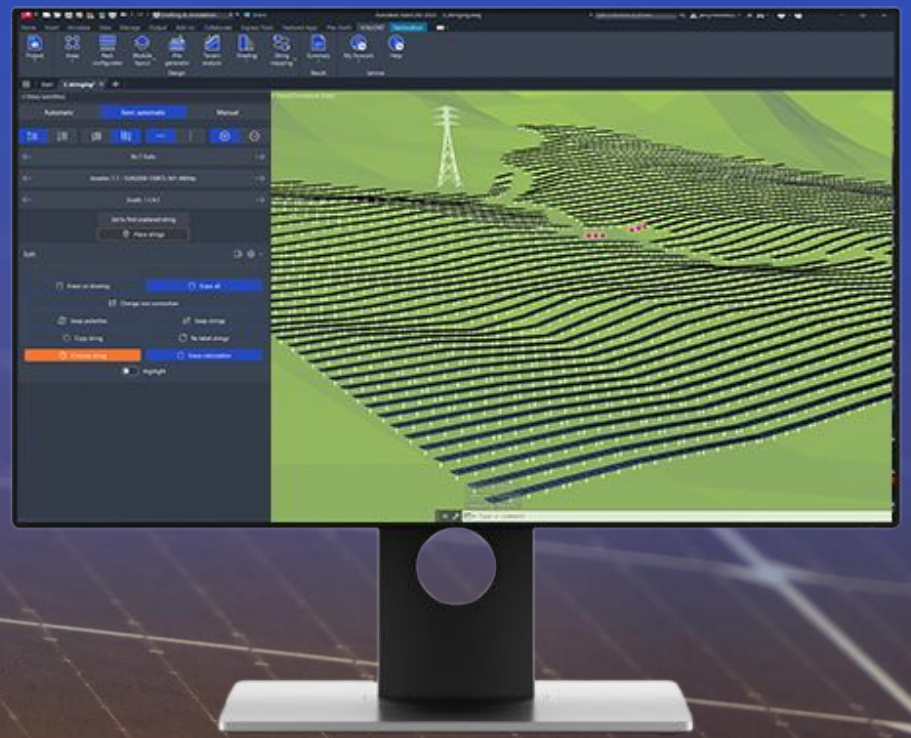
OVERVIEW

1. Company Introduction
2. Pain Points in Solar Design
3. From Challenges to Solutions
4. Interactive Q&A

About Virto Solar

Accelerate the global **energy transition** by making the design of large-scale solar projects faster, smarter, and more reliable.

- 🌍 Our roots
- 💡 Our journey
- 🚀 Who we are today
- 🔧 What makes us different



The Smartest Way to Design Solar

Today

- ⚡ Faster time-to-project
- 🎯 Bankable precision
- 🛠️ End-to-end workflow
- 💡 Collaboration-ready
- 🔒 Reliable results

Ready to Launch

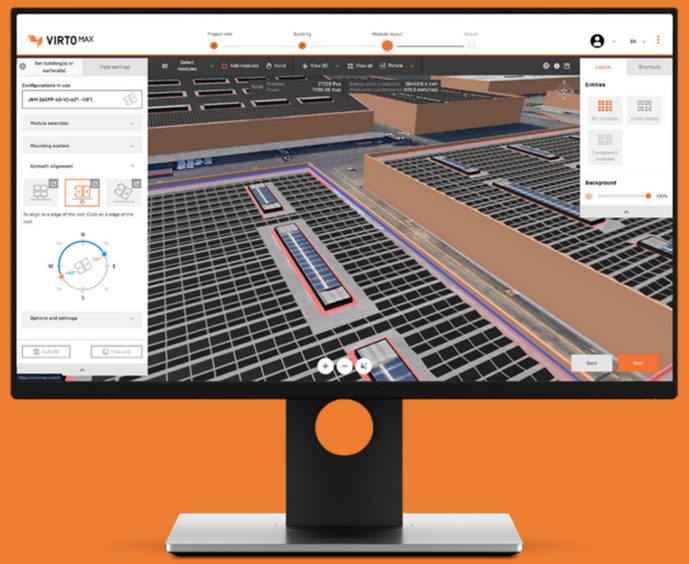
- 📡 Drone & LiDAR conversion

Tomorrow

- 🤖 AI-powered design

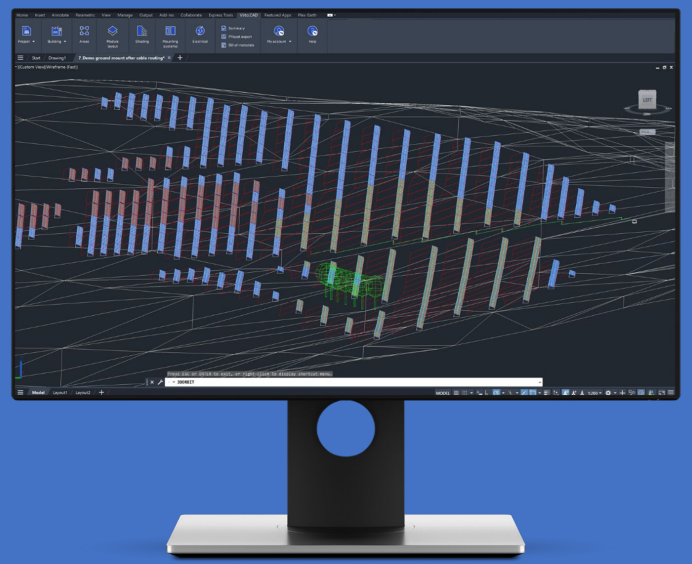
VIRTO MAX

Shaping The Future With Conceptual PV Design



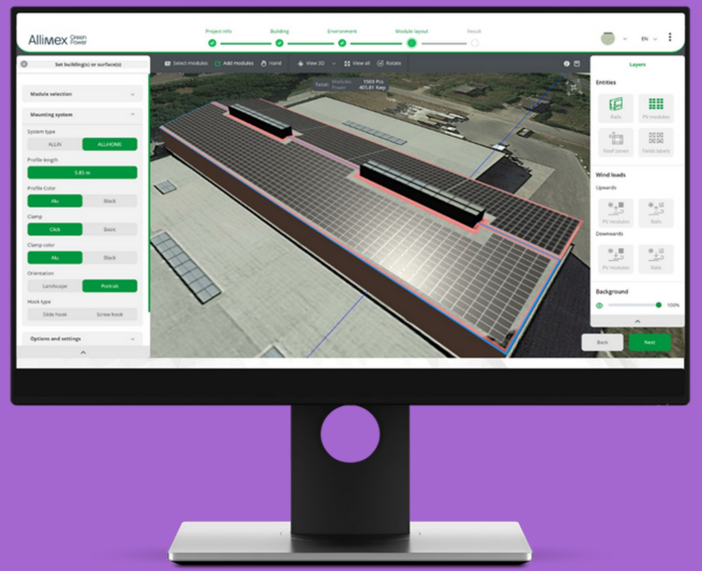
VIRTO CAD

The CAD Standard for Large-Scale Solar Engineering



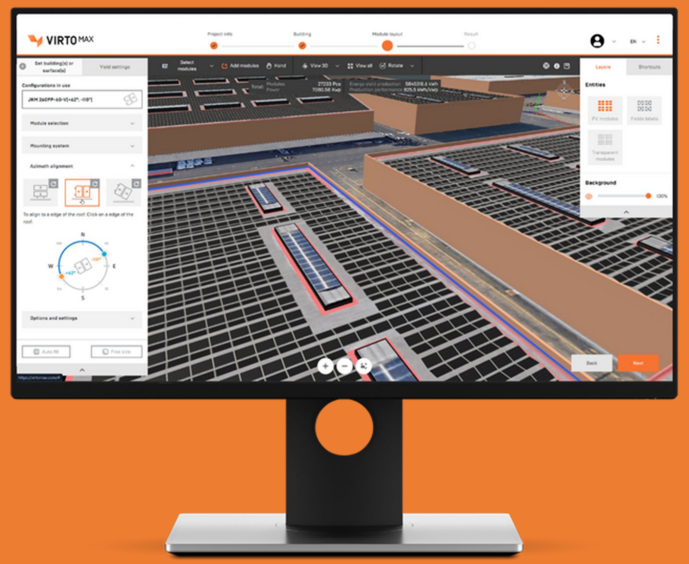
VIRTO CORE

Automating Structural Analysis for Speed and Precision



VIRTO MAX

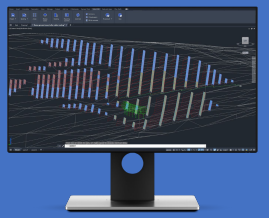
Shaping The Future With Conceptual PV Design



- ➔ Web app that maximize solar potential with rapid conceptual design, automated layouts and seamless workflows.
- ➔ Used by sales engineers & projects developers
- ➔ C&I rooftop & carport projects
- ➔ Continue with VIRTO CAD

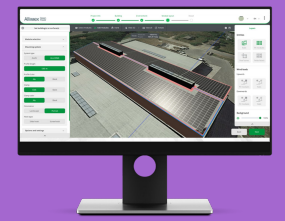
VIRTO CAD

The CAD Standard For Large-Scale Solar Engineering



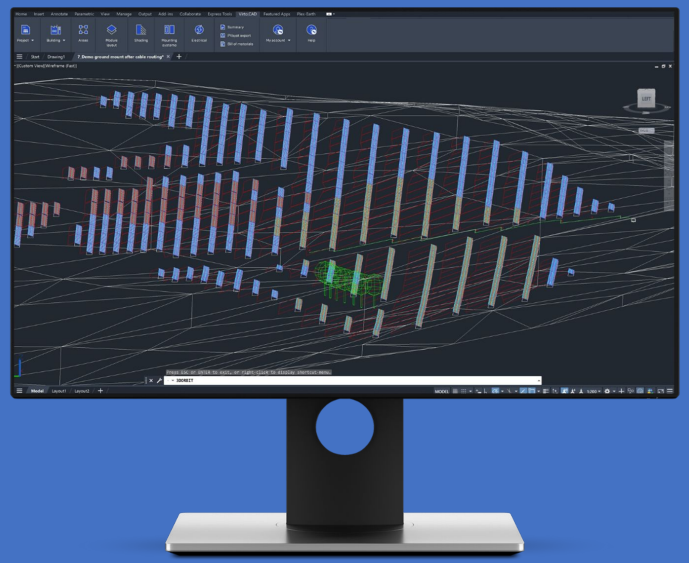
VIRTO CORE

Automating Structural Analysis for Speed and Precision



VIRTO CAD

The CAD Standard For Large-Scale Solar Engineering



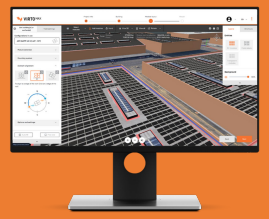
- AutoCAD/BricsCAD plugin
- Precise drawings and accurate calculations for C&I and Utility-Scale PV projects.
- Construction-ready bill of materials
- For EPCs and engineering firms
- Proceed from VIRTO MAX

New in 2.0

- New User Interface
- Improved workflows
- Enhanced and new features

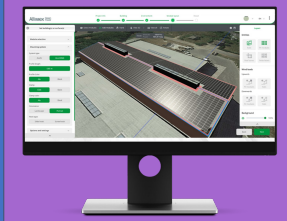
VIRTO MAX

Shaping The Future With Conceptual PV Design



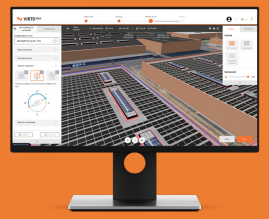
VIRTO CORE

Automating Structural Analysis for Speed and Precision



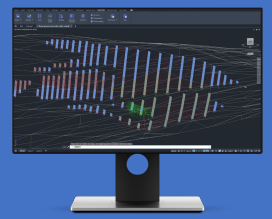
VIRTO MAX

Shaping The Future With Conceptual PV Design

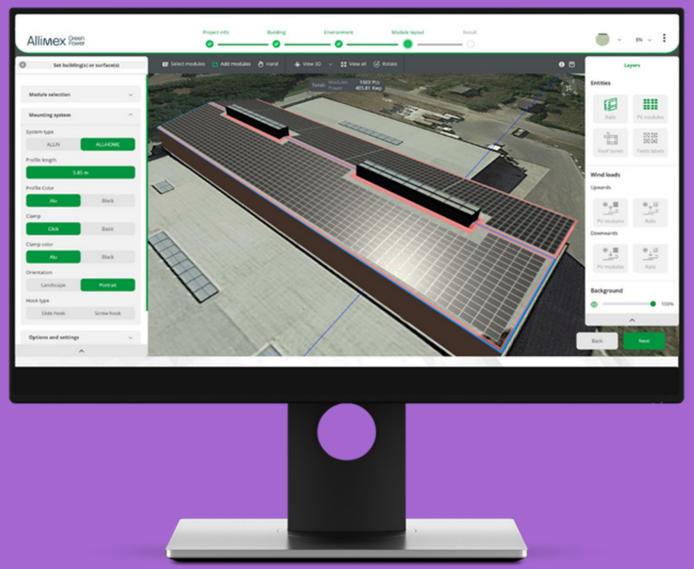


VIRTO CAD

The CAD Standard For Large-Scale Solar Engineering



VIRTO CORE



Automating Structural Analysis for Speed and Precision

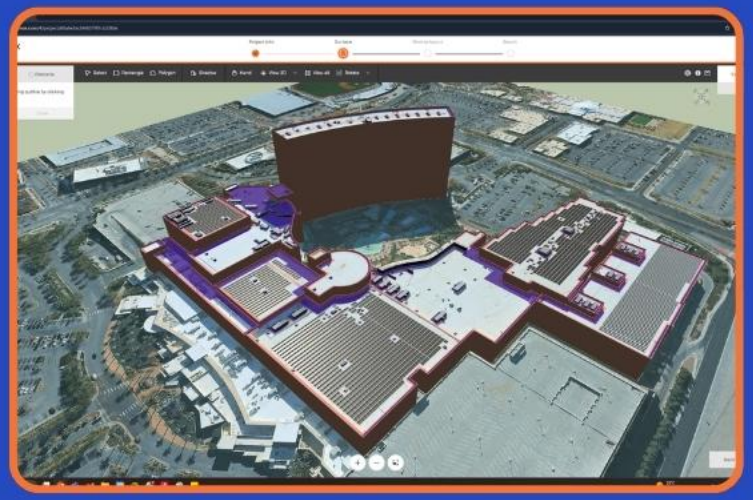
- ➔ Custom configurator for mounting/racking manufacturers
- ➔ Automates mounting system calculations of ballast, anchors and hooks on flat and pitched roofs
- ➔ Boost sales, speed and precision
- ➔ Increases brand awareness and loyalty

“Solar projects struggle not because of people,
but because processes aren’t connected.”

⚡Key frictions in Solar Design

- Experienced the **same frustrations** again and again:
  - Incomplete or outdated site data
  - Endless redesigns and coordination issues
  - Material delays and last-minute on-site surprises
- Founded **Virto Solar** to solve these challenges — end to end

Data Capturing



Pre-sales Design

Detailed Engineering

Logistics & Construction

Data Capturing

The foundation of every project

- Projects often start with **inaccurate or incomplete data**
- **Outdated** imagery or **manual** measurements miss key details
- **Limited roof access** and **safety risks** make on-site data collection difficult
- Early data errors cause **wrong layouts and costly redesigns** later
- **Accurate digital site data** ensures every next step starts right

Pre-Sales Design

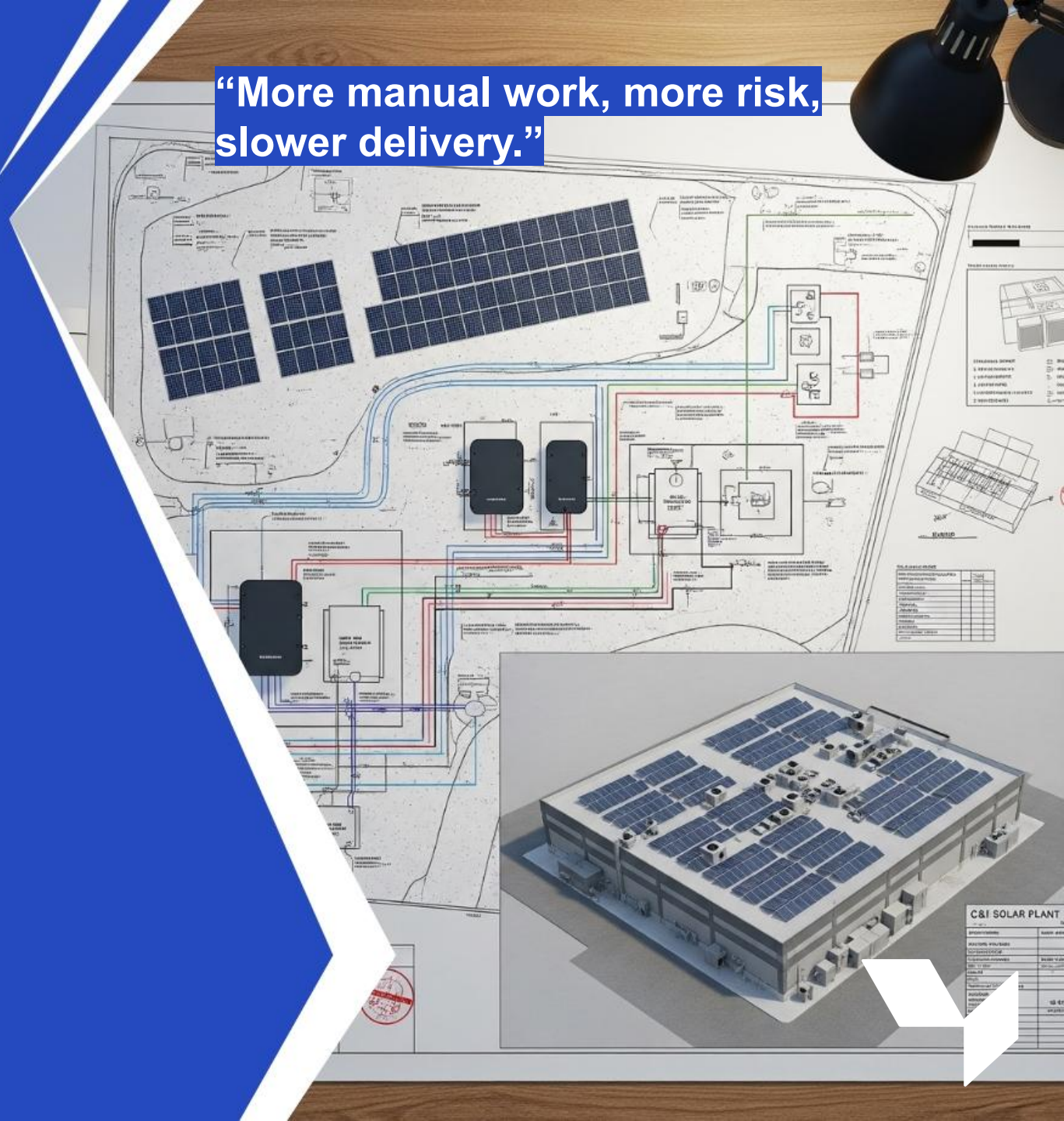
The Race Begins

- Pre-sales teams must design **quickly, often with partial data**
- **Knowing the loads on the roof** is **crucial**, even in the **preliminary phase**
- Assumptions made early lead to **rework and revisions** later
- **Module changes** before construction = complete redesign
- Early alignment between sales and engineering avoids friction downstream

Detailed Engineering

Precision Under Pressure

- Engineers often have to **rebuild the same layout** in third-party tools without syncing back and forth.
- Each manual step adds **risk of inconsistency and error**
- **Overlooked details** (thermal breaks, cable trays, shading) cause rework
- **Cable lengths and trays** are still calculated in spreadsheets, a **slow, error-prone task** without a full 3D view



Logistics & Construction

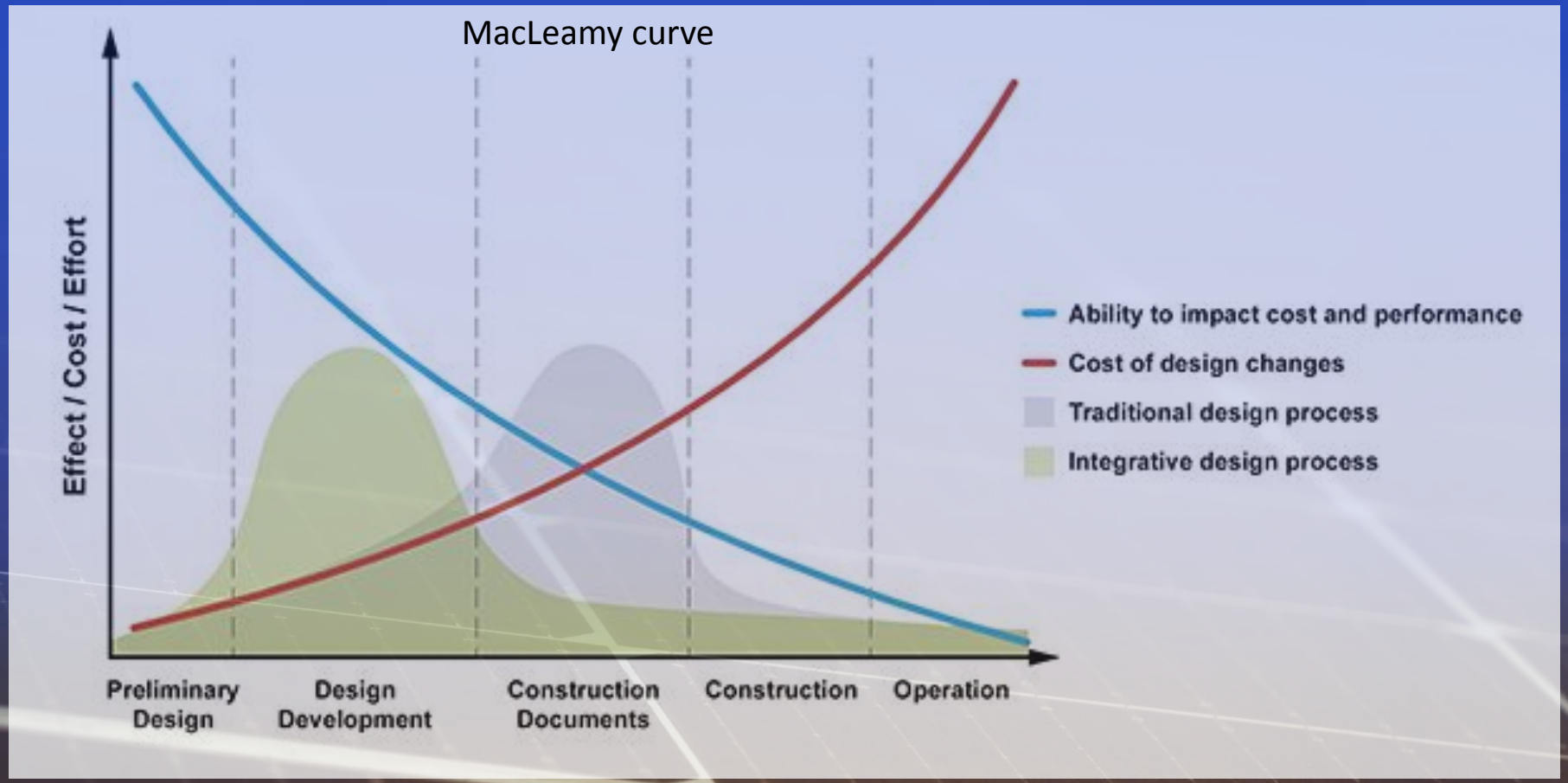
Turning Plans into Reality

- Logistics issues often appear **before construction even starts**
- Materials arrive **too early or too late**, causing site chaos or idle time
- **No clear link** between design and delivery planning, crews waste time sorting parts
- **Design changes** due to unforeseen circumstances lead to:
  - **Incorrect installations**, or
  - **Massive delays** waiting for engineering revisions

“Disconnected logistics and last-minute changes can derail even the best-designed projects.”

When every phase is connected — from data to construction solar projects become predictable, efficient, and scalable.

MacLeamy curve



From Challenges to Solutions:

Turning PV Pain Points into Opportunities

Precision Starts with Data

Start with high-quality data. End with a flawless design.

- Upload **high resolution data**:
  - Drone imagery
  - LiDAR data
  - Digital elevation models
  - Building information models (BIM)
- **Virto.RISE** automatically generates buildings and obstacles
- **Save hours of rework** and guarantee design accuracy from the start

Smart Automation, Full Control

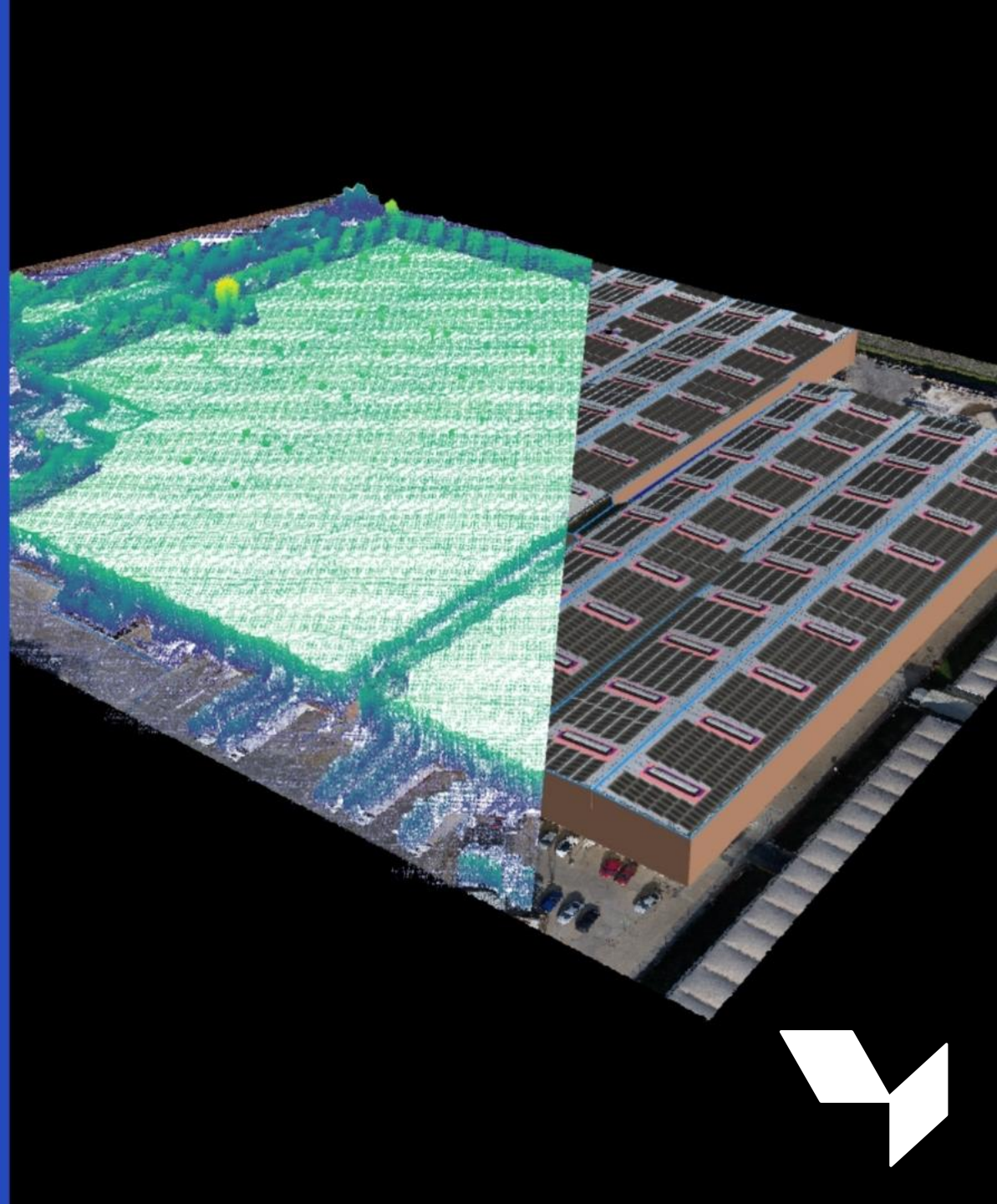
Automated — but never rigid.

- Keep **full control** over the final model and design
- Easily adjust parameters of buildings, roof planes, or obstacles
- Automation **accelerates your work**

The Power of a Digital Twin

From model to reality and back!

- **Realistic 3D model** of the building site
  - Easily place and adjust PV fields directly in 3D space
  - Enforce & manage thermal breaks
  - Calculate realistic shadows which lead to precise yield estimates
- Designs are **buildable**, not just theoretical



From 3D Model to Smart System Design

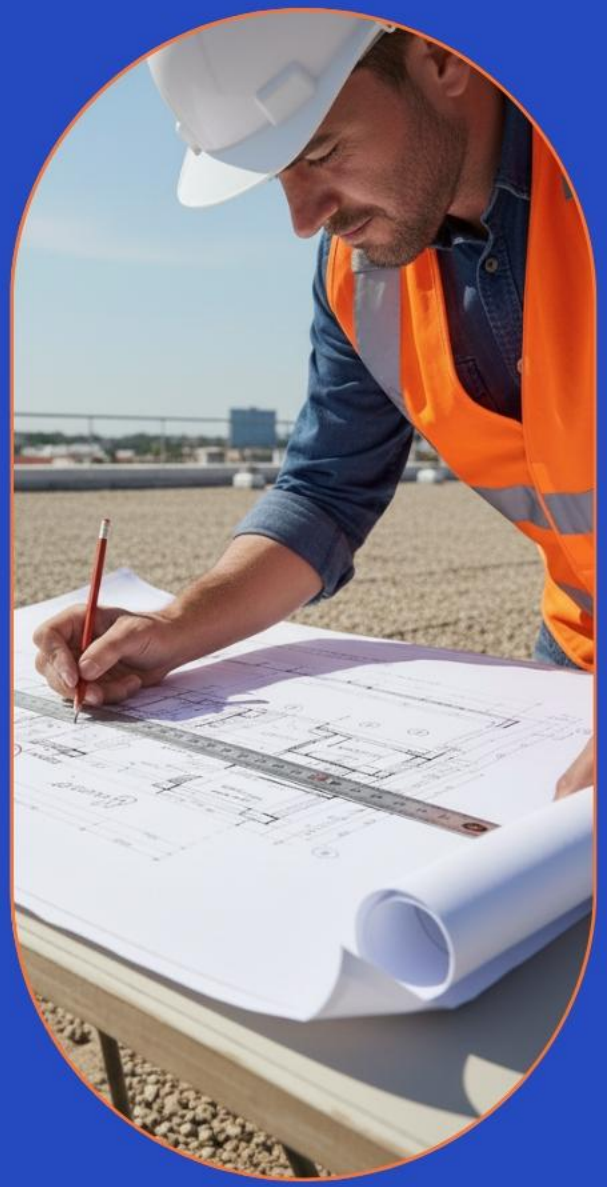
All the details, automatically in one place.

- With our digital twin, you can easily convert your model into a **working PV system** by
  - Configuring inverters and defining inverter zones
  - Calculating cable lengths and cross-sections
  - Evaluating system efficiency and performance
  - Run accurate yield simulations directly in the model
- **Eliminate switching costs**

Connected Workflows. Seamless Collaboration.

Integrated from the start!

- Export and share with colleagues, departments, or external partners
- Direct integrations with key ecosystem software
- Ensure consistent handoffs and save time, reduce errors, and keep every stakeholder aligned



Stay Agile, Stay Accurate

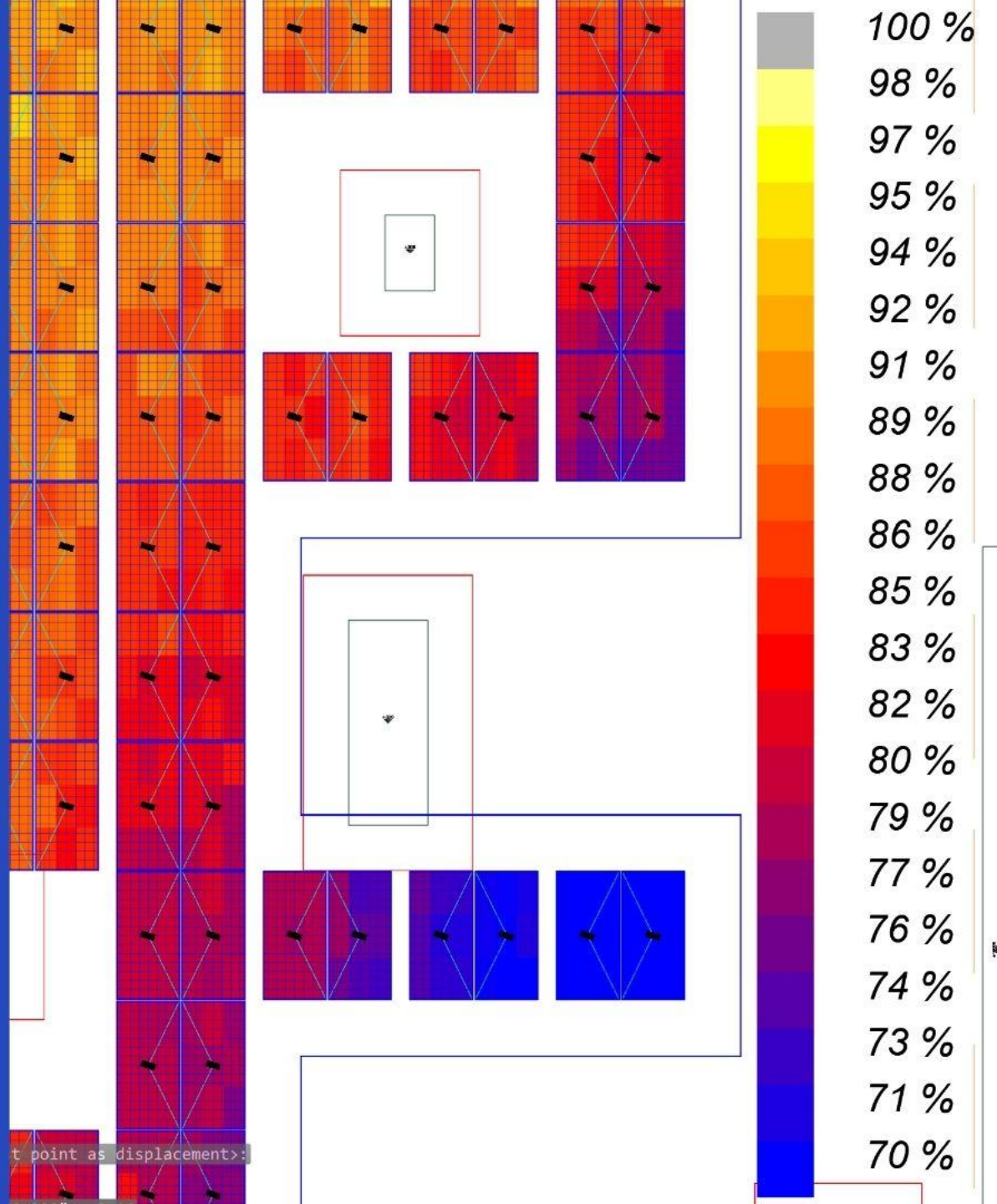
When projects change, you just go with the flow!

- Designed for **real-world change**
- Effortlessly update designs when conditions evolve
  - Add obstacles
  - Adjust layouts
  - Add new obstacles
  - …
- Embrace the change and **avoid hours of rework**

Simulate & Optimize in 3D

See the sun. Understand the impact.

- Combine physical accuracy with electrical intelligence for optimal performance
  - Run detailed irradiance simulations directly in 3D
  - Automatically identify and remove shaded or underperforming panels
  - Map electrical strings efficiently across the layout
  - Plan tray and cable routing for real-world buildability



Safety by Design

Automation that strengthens your design

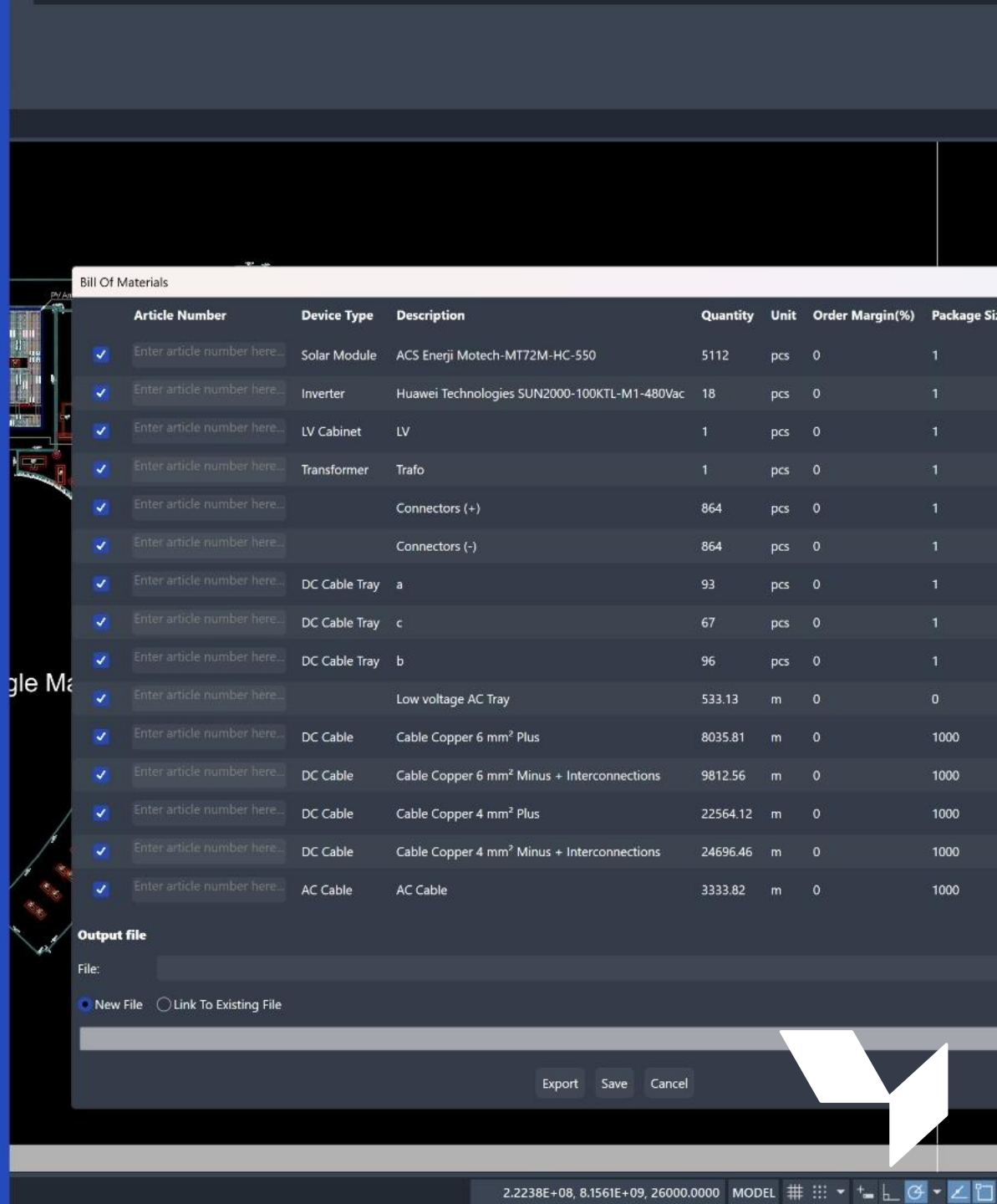
— literally.

- A safe & sound design
  - Automated ballast and anchor calculations ensure structural safety
  - Considers roof load and point load for accurate validation
  - Built on country-specific standards
- Ensures **reliable and safe designs**. Every single time!

From Design to Deliverables

Everything you need and more!

- **Move** your project **forward** with
  - A detailed Bill of Materials (BOM) to simplify logistics and procurement
  - Exports for bankable yield simulation to convince investors
  - Construction ready plans to align engineers, clients & installers
- Standardized outputs ensure **alignment** between stakeholders and **consistent communication** & interpretation across teams



Smarter, Flexible, Connected

The first blow, is half the battle.

Smarter, Flexible, Connected

Automation is nice, but flexibility crucial

Smarter, Flexible, Connected

Together is better

We RISE it
We MAXIMIZE it
We DESIGN it

Are you ready to RISE above?

https://info.virto.solar/virto.rise-join-the-beta

this webinar is powered by

Virto Solar

pv magazine webinars

Precision on every roof: Connecting data, design, and delivery for C&I solar Q&A

12 November 2025

9:00 am – 10:00 am | EST, New York City
3:00 pm – 4:00 pm | CET, Berlin, Paris

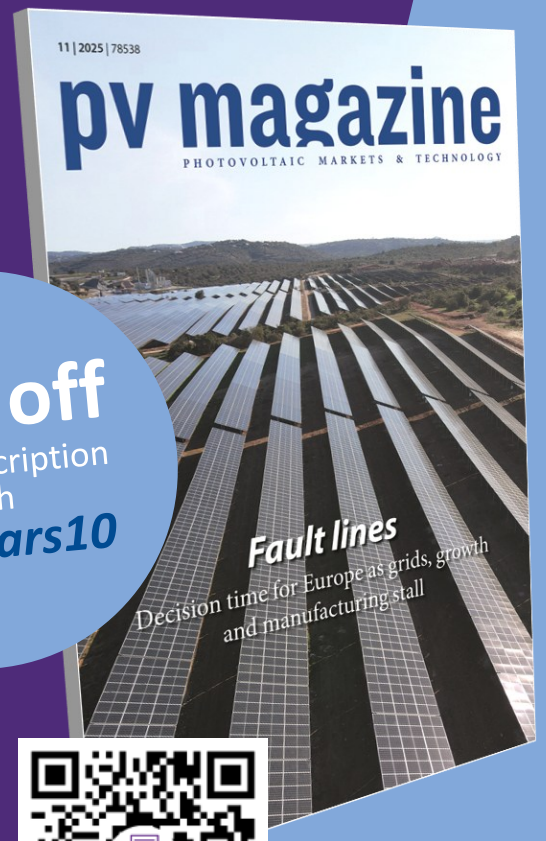
Matthew Lynas
editor
pv magazine

Kim Eyckmans
CEO
Virto Solar

Joris Hias
Head of Transformation
Virto Solar

pv magazine webinars

The latest news | print & online



10% off your subscription with **Webinars10**

Most-read online!

UK solar capacity hits 20 GW

by Matthew Lynas

Italy limits solar tax break to EU-made HJT and tandem modules

by Sergio Matalucci

pv magazine webinars

Coming up next...

Wednesday, 19 November 2025
8:00 am – 9:00 am CET, Berlin
6:00 pm – 7:00 pm AEDT, Sydney

Turning customer insights into advantages in Australia's booming battery market

Friday, 21 November 2025
9:00 am – 10:00 am PST, New York City
3:00 pm – 4:00 pm CET, Berlin, Paris, Madrid

Optimized for LCOS Success: 750+ Ah cells in 10-foot containers, the next generation of scalable storage

Many more to come!

In the next weeks, we will continuously add further webinars with innovative partners and the latest topics.

Check out our pv magazine Webinar program at:

www.pv-magazine.com/webinars

Registration, downloads & recordings are also be found there.

Week Europe

Registration is now open! Join us at pv magazine Week Europe from December 1 to 4, 2025, for exclusive insights into Europe's changing energy landscape—from flexible market design and bankable PV project strategies to groundbreaking technologies and the future of energy storage.

pv magazine webinars

this webinar is powered by Virto Solar

pv magazine webinars

Matthew Lynas
Editor
pv magazine

Thank you for joining today!