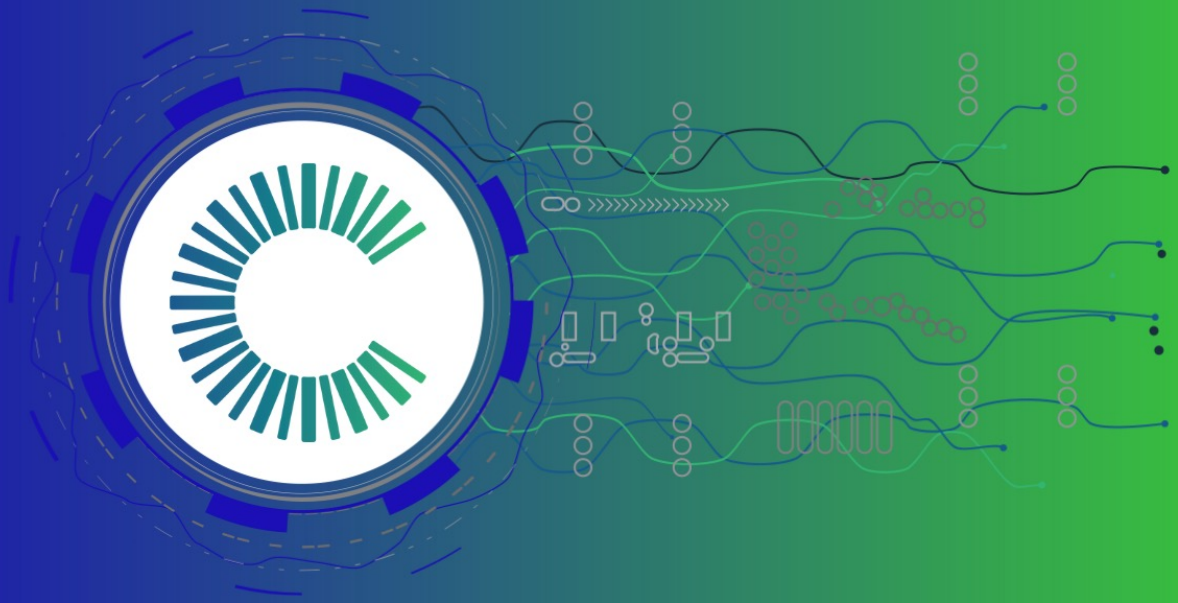
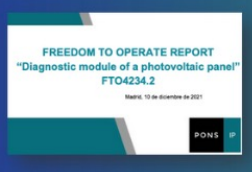


Clever solar devices

About Us

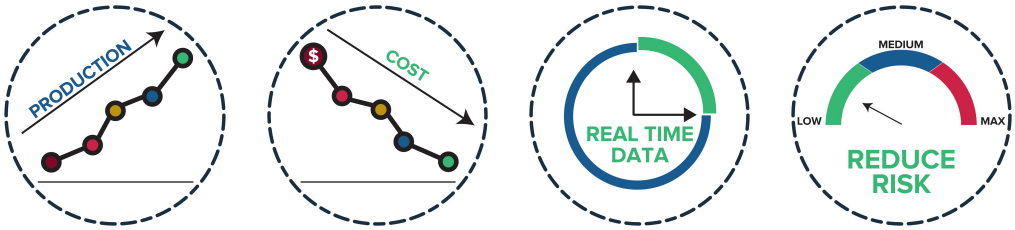
INNOVATIVE SME

Valid until Feb 16th 2024



cleversd.com
info@clevesd.com
+34.644.677.311

INCREASE up to 12% PRODUCTION and REDUCE up to 70% COSTS



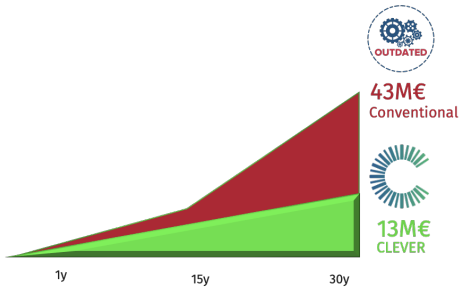
Remote monitoring allows **increasing production by 12%** and **reducing costs by 70%**. This represents in a 280MW standard utility plant an incremental of 100M$ and cost reduction of 30M$ during the life of the installation.

Utility plant model:

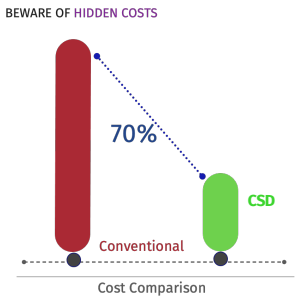
70%

O&M COST REDUCTION

CUMULATIVE COST by years



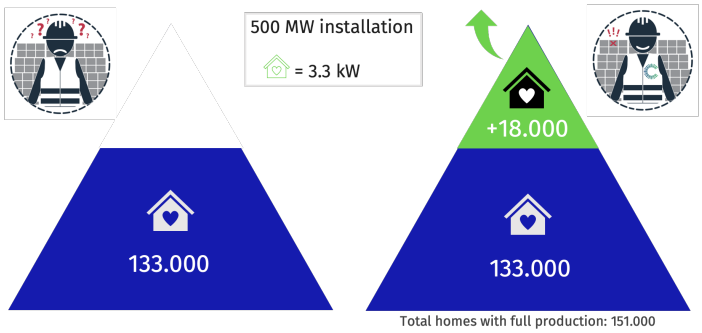
O&M cost evolution cumulative (30 years)



O&M cost per unit/per year

12%

PRODUCTION IMPROVEMENT In 30 years



Total homes with full production: 151.000

With **+12%, full production of the plant** can be reached and therefore bring power to +10.200 more homes, **reduce greenhouse gas emissions**, and utility owners can get a **better ROI**.

Reference plant = 280 MW
Average house power = 3.3 KW280K/3.3 = 85K at 100% capacity

The obtained metrics (12% production increase) demonstrate the gap between analog maintenance methodology and the digital from real data from our current Pilot Plant in Ojuel (Soria) by comparing the results obtained with our platform and the current conventional procedure that is performed.
700000 modules x 400 w/module x 2000 hours/year x 30 years x 50€/MWh = 840 M€ at 12% = 100M€-

Interested in further details behind the data?

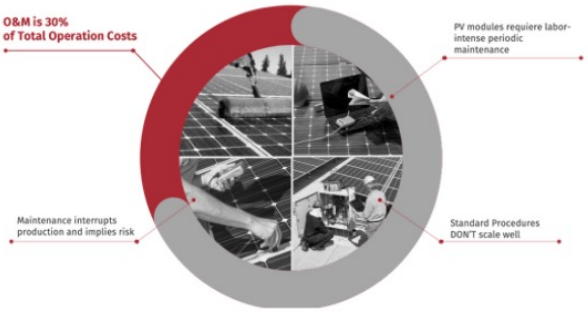
Clever by the Numbers: DOWNLOAD

You could see Pilot Power Plant performance using the trial access https://demo.cleversd.com/register.php

Clever solar devices | info@cleversd.com | +34 644 677 311

The PROBLEM: Analog

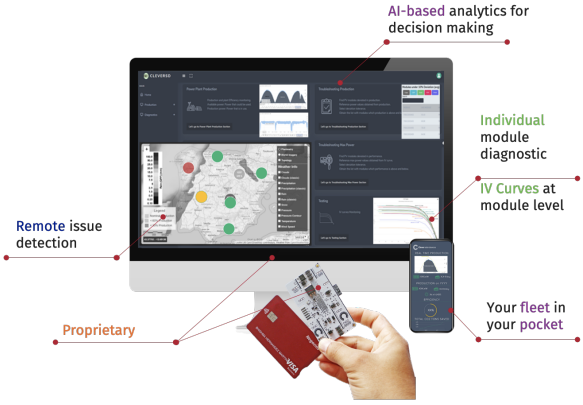
Nowadays, the operation and maintenance of photovoltaic solar power plants are done **manually** or with the help of **thermography solutions**, which is **inefficient**, **costly**, and **difficult to scale**.



The SOLUTION: CleverDX

Clever Dx is an analytics, **AI-driven platform to support operational decisions**. The data is extracted from every module with compact hardware that communicates via WIFI to a central AI-based platform. Module-level measurements help simplify O&M tasks and r<educe costs by up to 70% while increasing production by up to 12%.

- **Individual PV module diagnostics**:
  - Instant module troubleshooting
  - Remote issue detection.
- **AI-based analysis for decision making**
  - Fully scalable
  - Propriety



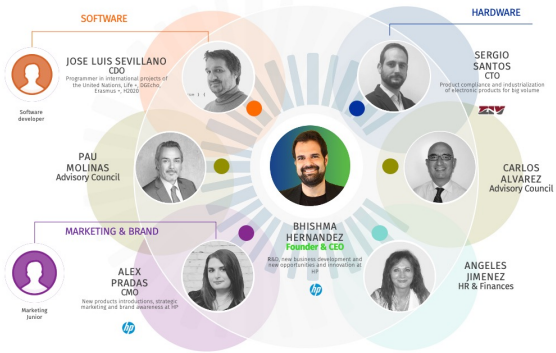
We **diagnose 100% of failures and degradation in real-time** of **each one of the PV modules** and their possible efficiency problems. The measurement process **does not require production interruptions** at any time.

The Platform is composed of **high-performance technologies** (AI, IoT, HW, SW) to **digitalize maintenance procedures** and **boost production efficiency** in solar PV plants of all types.

The TEAM:

Together more than 150 years in tech companies

Clever's power lays on its high-performance, diverse team, who, together, shelters more than 150 years of professional experience.



Our MISSION, VISION and VALUES

OUR MISSION

Create and handle Deep Data to enhance and improve PV production plants. Enrich WW renewable energy management thru Artificial Intelligence.

OUR VISION

Be the most valuable and innovative AI platform for Solar PV plants.
Create technology make life easier and green energy more accessible to everyone.

QUALITY
Always provide the most valuable and flawless products

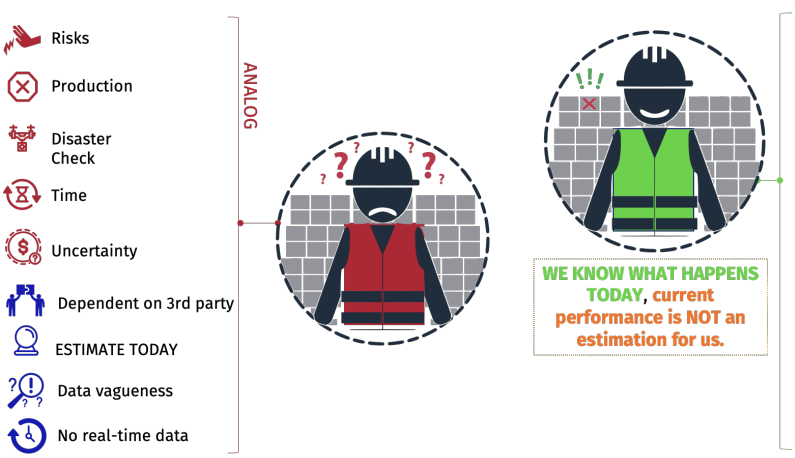
ETHICS
Treat everybody with integrity, diversity and inclusion

EXCELLENCE
Focus on being an outstanding company at all levels (people, product, strategies)

ENVIRONMENTAL CARE
Protection and sustainability of natural ressources thru renewall energy

Vs. COMPETITION:

Nowadays, the maintenance of a plant is done primarily manually or through **indirect monitoring** (eg, drones) which is **inefficient** and potentially **dangerous**.



We are NOT a **Dataloggers** that **ONLY** measures production voltage and current or **monitoring platforms** that takes information from 3rd parties HW.

We provide **IV curves of each of the modules**, which for the first time are made available in **real-time**, allow us to improve the understanding of possible failures and make it easier to make the most of the **guarantees of the components**.

PARTNERS & ACCOMPLISHMENTS

Partners:

Accomplishments:

Clever solar devices

info@cleversd.com | +34 644 677 311