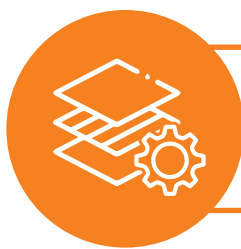


# Ensuring Zero Export of excess solar production to Grid with **ENVISION**

Through Envision's Monitoring & Control solution, zero export of excess solar production to the grid is ensured by actively monitoring the power consumption and smartly controlling the power output of the inverters.



## Benefits at a glance



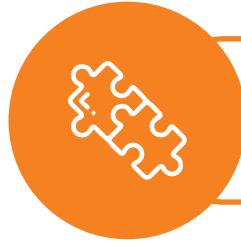
Premium industrial-grade hardware designed for grueling environmental conditions with reliable device software built on ARM chip architecture.



Applications accessible via online platforms.



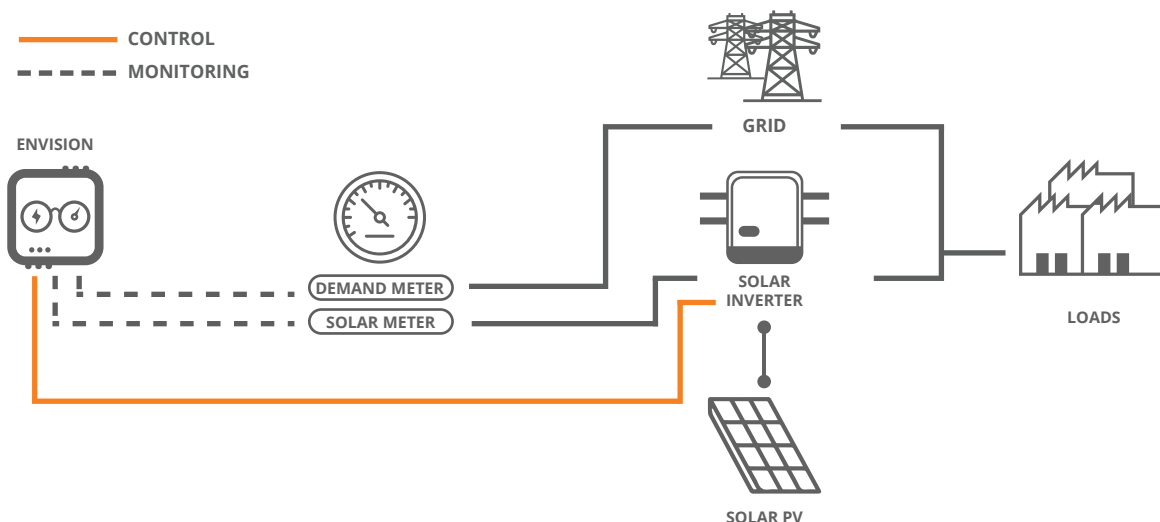
Tried and tested with global brand partners for inverters.



Can also be compatible with devices that support modbus RTU/TCP protocol.

## How does Envision work for this Zero Export Solution?

### Configuration Scheme



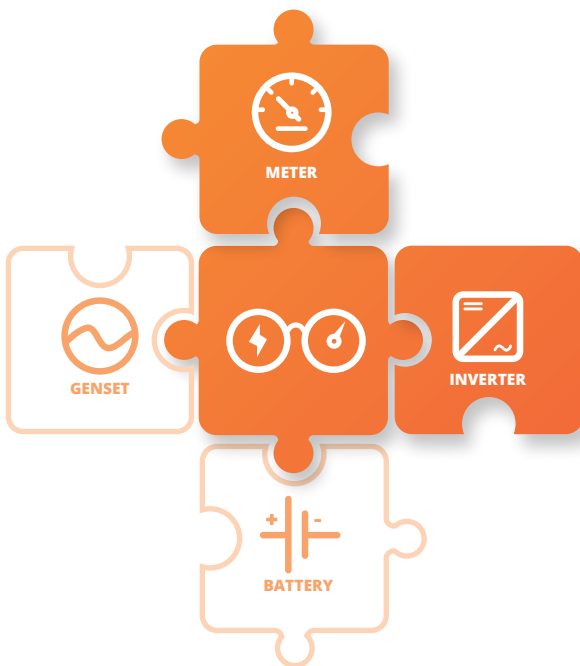


# EN-ABLED FOR ZERO EXPORT

Our EN-CORE can be installed and connected near the demand and generation meters for collection and upload of energy data + alarms.

All data is expected to be sent and retrieved using the Modbus protocol over RTU or TCP. Other protocols can be integrated upon request.

Either via a dedicated or existing LAN, the EN-CORE device can monitor and control your inverters. Curtailment is orchestrated in real time, with millisecond response.



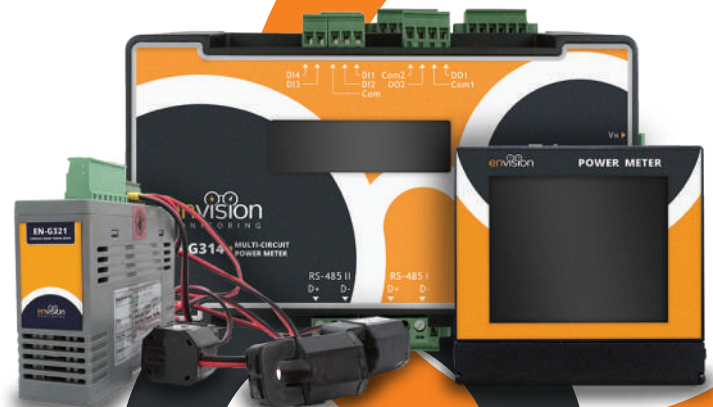
## Zero export through Curtailment

With the addition of on-site solar power, ENVISION monitors the demand and controls the power output of the inverters, ensuring zero export of energy to the grid. Thus, reverse feed is avoided and solar power is being generated at an optimum rate as site demand requires

## EN-GAUGE

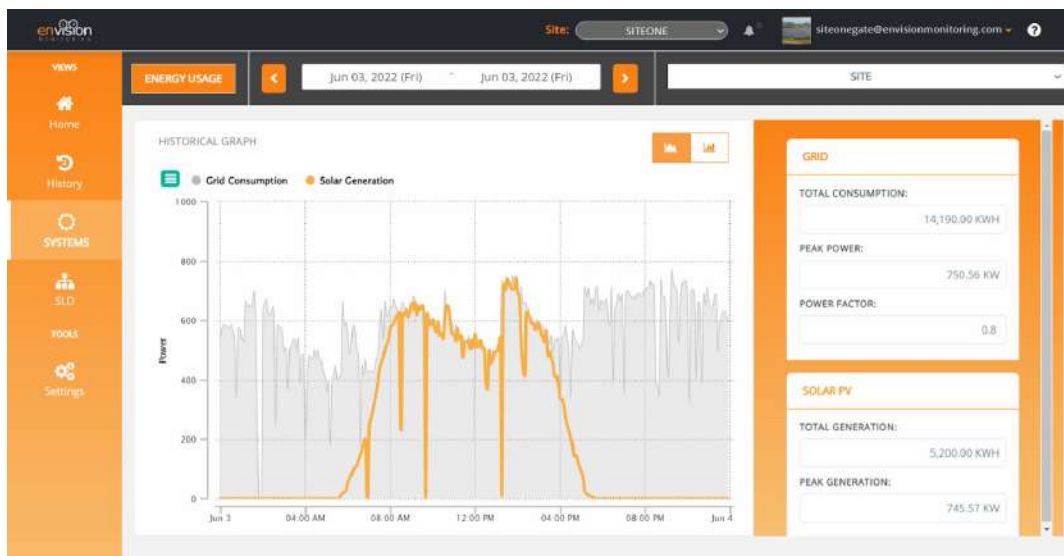
**Moving to analog to digital metering**

For legacy sites, not yet using digital meters, Envision offers the EN-GAUGE range, our own set of energy meters. But we're not limited to monitoring via meters only. We can also work with sensors, weather stations and other measurable devices as long as it's accessible with an open protocol.



# Visualizing Solar Curtailment

All energy data uploaded by the **EN-CORE** can be seen instantly through the **Envision Web** application. Through its Systems view, the client can see how curtailment works and can easily visualize how the solar production curve follows the grid consumption. This indicates how the excess solar production is being reduced to prevent exporting power back to the grid.



## What is needed to implement this Integration?

ITEMS	DETAILS
ENVISION Controller	EN-CORE 522 (See guide for installation)
ENVISION Meters	EN-GAUGE (Varies depending on whether single-phase or three-phase) Measures energy consumption and generation Could interface with non-Envision meters as long as supported (See List)
Cabling for ENCORE to meters, inverter, and genset controller	Data communication cable (CAT 5 or higher) Power cable - Thermoplastic Fixture (TF) Wire (Preferably 600 Volts, 60 °C, Stranded)
Network Connection	Local Area Network (Ethernet)

