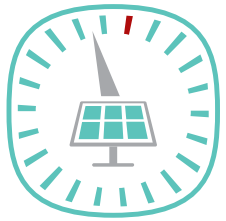
USE CASES optiMOON

MOON
Driven by energy.

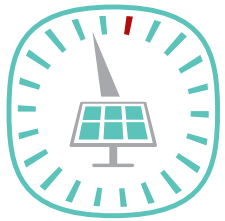
MEASUREMENT AND MANAGEMENT OF GENERATED ELECTRICITY FROM SOLAR POWER PLANTS



ENERGY
MANAGEMENT
SYSTEM

WITH THE optiMOON CONTROLLER, ENSURE THE DISPLAY OF ALL GREEN TRANSITION SOURCES IN THE optiMOON CLOUD PLATFORM

MOON
Driven by energy.



Modbus

DLMS®

optiMOON
CONTROLLER

MQTT

THIRD SYSTEMS

WEB SOCKET

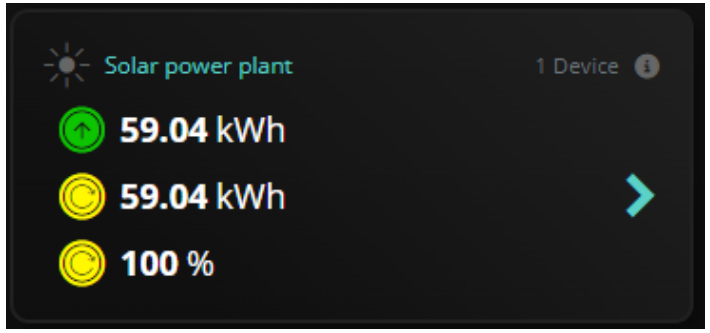
optiMOON CLOUD

Take Control. Use Reduxi.

ENERGY
MANAGEMENT
SYSTEM

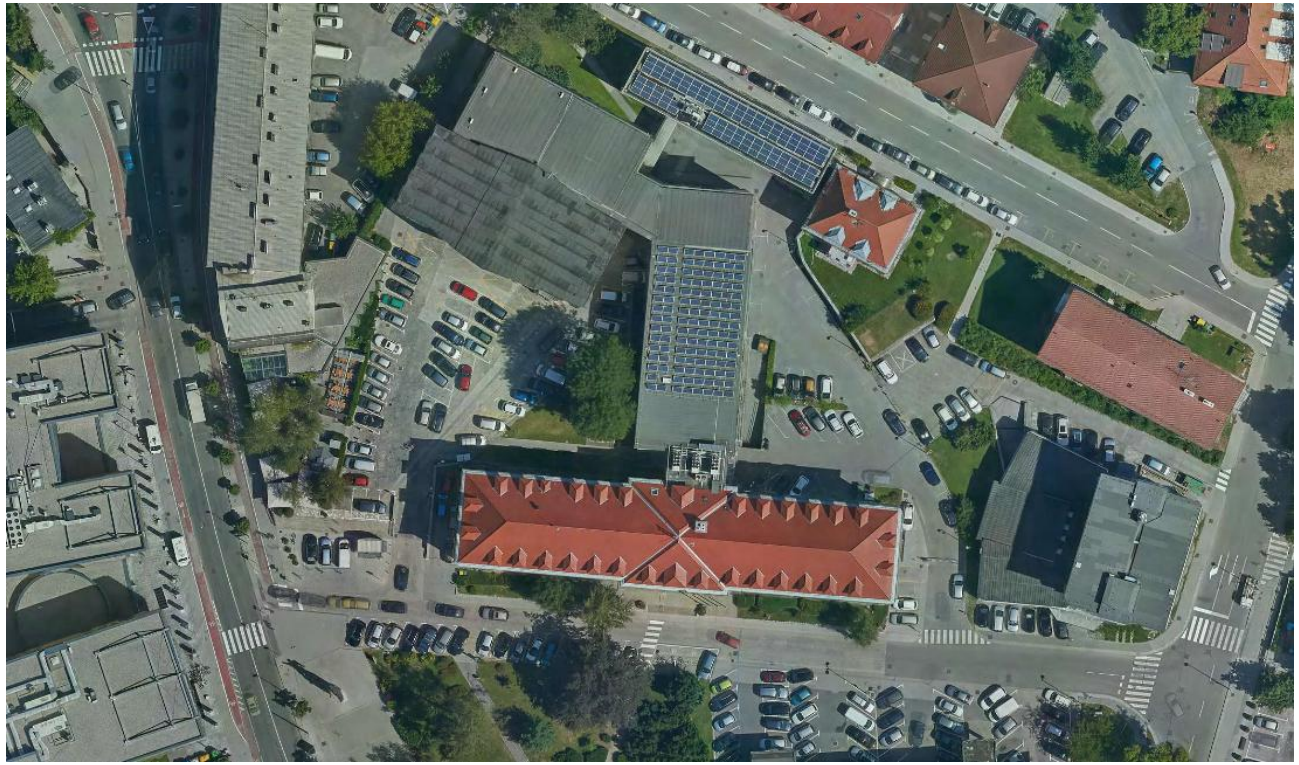
TRACK THE ELECTRICITY PRODUCTION OF SOLAR POWER PLANTS AND THE CARBON FOOTPRINT INDICATOR IN ONE PLACE

MOON
Driven by energy.



In addition to monitoring electricity production, track and control solar power plant production, the amount of instantaneous energy consumption, and the percentage of self-sufficiency.

In the event of feed-in limitations, you can adjust the power production of the power plant.



ENERGY
MANAGEMENT
SYSTEM

ZERO-EXPORT LIMIT AND CONTROL OF SOLAR POWER PLANT PRODUCTION IN TERMS OF PERMITTED GRID FEED-IN

In the case of an **industrial user connected to the medium-voltage level (MV)**, optiMOON can ensure that the solar power plant operates even when the facility does not have permission for grid feed-in. optiMOON ensures coverage of the facility's consumption with solar power and limits production to a value equal to the current own consumption of the facility.

ENERGY MANAGEMENT SYSTEM

THE ADVANTAGES OF THE END-USER optiMOON SYSTEM BRING THE HIGHEST SELF-SUFFICIENCY AND LOWER ELECTRICITY COSTS

MOON
Driven by energy.

In the case of a **small business location,** we can observe the operation of the optiMOON Controller at the minute level, which began charging the energy storage when solar production exceeded 15 kW. At the moment when solar production was unable to cover its consumption, the storage started supplying energy, thus ensuring 100% self-sufficiency.

ENERGY MANAGEMENT SYSTEM

THE ADVANTAGES OF THE END-USER optiMOON SYSTEM BRING THE HIGHEST SELF-SUFFICIENCY AND LOWER ELECTRICITY COSTS

MOON
Driven by energy.

In the second case of a **household user**, we can observe the operation of the optiMOON Controller at the minute level, which began charging the energy storage when solar production exceeded 1 kW. When the storage was full, and there was no own consumption in the facility, the optiMOON controller limited the solar energy production to the permitted grid feed-in, which in this case is 4 kW. It then increased the solar energy production by the difference, covering the facility's own consumption

ENERGY MANAGEMENT SYSTEM

USE CASES

MOON
Driven by energy.

MEASUREMENT AND MANAGEMENT OF ELECTRIC ENERGY FOR CHARGING ELECTRIC VEHICLES

ENERGY
MANAGEMENT
SYSTEM

THE ADVANTAGES OF THE END-USER optiMOON SYSTEM BRING DYNAMIC ADJUSTMENT OF CHARGING BASED ON GRID CONDITIONS OR ELECTRICITY PRICES

MOON
Driven by energy.

Connect various charging station providers into one system

Monitor and manage peak loads to reduce electricity costs

Prevent overload to avoid being without electricity

Dynamic adjustment of consumption based on predefined fixed prices of prices set for the day ahead

Smart charging of your electric vehicles at the most favorable time for you

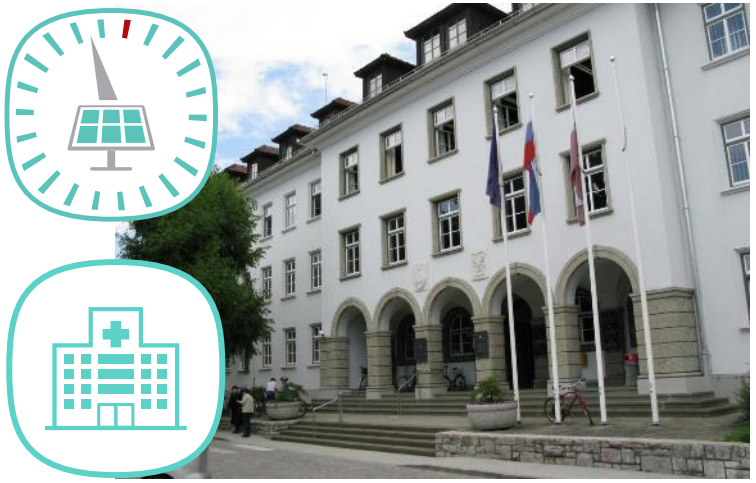
ENERGY MANAGEMENT SYSTEM

WITH optiMOON CONTROLLER, ENSURE THE DISPLAY OF ALL GREEN TRANSITION SOURCES IN THE optiMOON CLOUD PLATFORM

MOON
Driven by energy.

optiMOON CONTROLLER

SOLAR POWER PLANTS



COMMERCIAL BUILDINGS

optiMOON CLOUD

ELECTRIC VEHICLE CHARGING STATIONS

ENERGY MANAGEMENT SYSTEM

WITH optiMOON CONTROLLER, ENSURE THE DISPLAY OF ALL GREEN TRANSITION SOURCES IN THE optiMOON CLOUD PLATFORM

MOON
Driven by energy.

Modbus

OCPP

optiMOON
CONTROLLER

MQTT

THIRD SYSTEMS

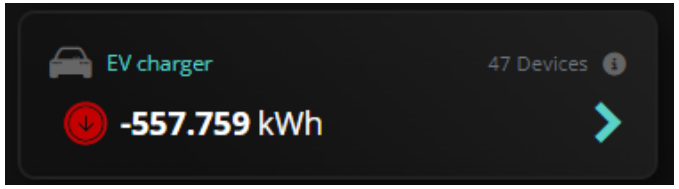
WEB SOCKET

optiMOON CLOUD

Take Control. Use Reduxi.

ENERGY
MANAGEMENT
SYSTEM

MONITOR ELECTRIC VEHICLE CHARGING ENERGY CONSUMPTION AND CARBON FOOTPRINT INDICATOR IN ONE PLACE



In addition to monitoring electricity consumption, also monitor and control peak demand. Charge electric buses during a cheaper time block or tariff.

Track the consumption of the entire facility and check the percentage that represents the charging of electric buses.

optiMOON CLOUD

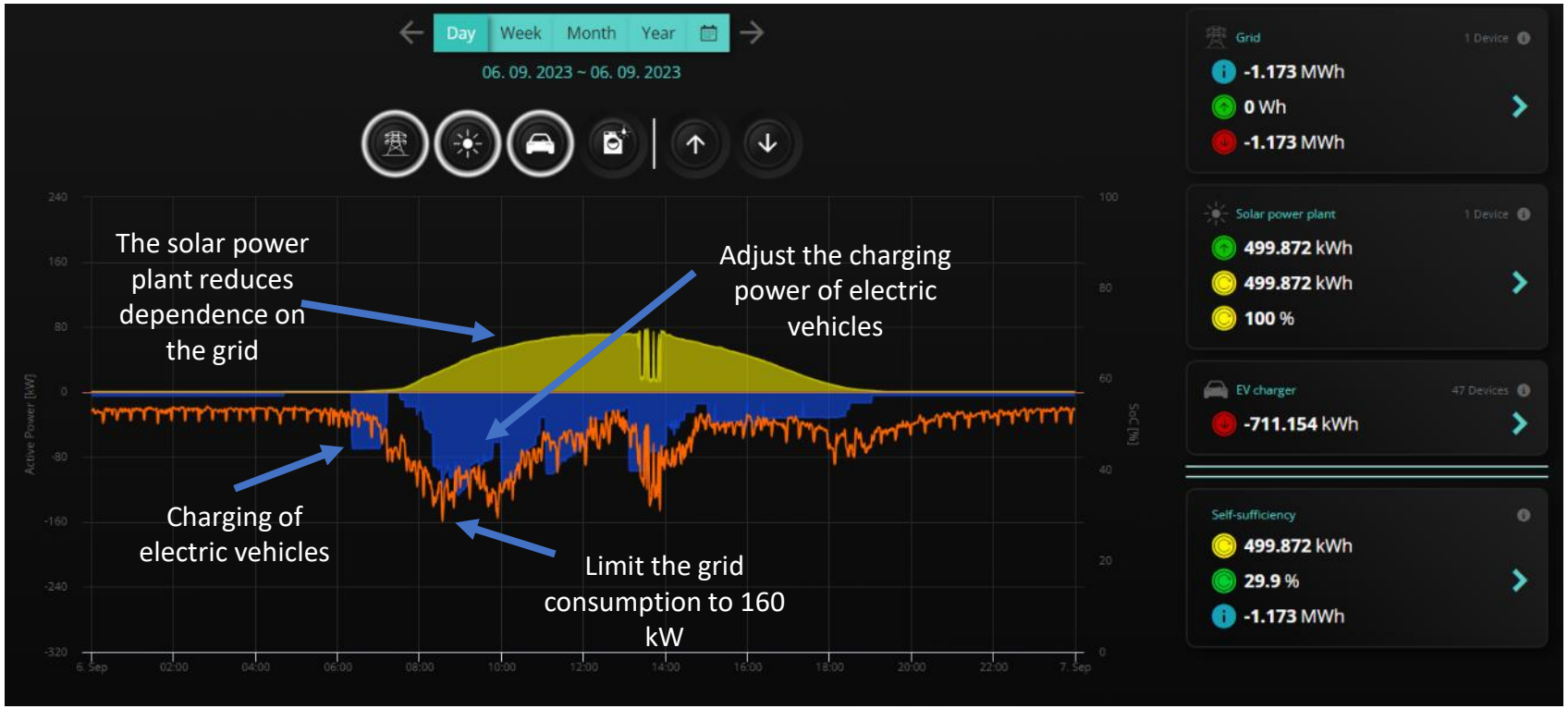
ENERGY MANAGEMENT SYSTEM

THE ADVANTAGES OF THE END-USER optiMOON SYSTEM BRING DYNAMIC ADJUSTMENT OF CHARGING BASED ON GRID CONDITIONS OR ELECTRICITY PRICES

MOON
Driven by energy.

In the case of a **vehicle provider's location**, we can, in real-time on a second and minute level, observe the operation of the optiMOON Controller. At the moment when the power consumption increased on the main billing meter to 160 kW, it ensured the adjustment of the charging power of electric vehicle charging stations.

This prevented the facility from exceeding the limit and simultaneously reduced the cost of electricity by 7 EUR/Kw.

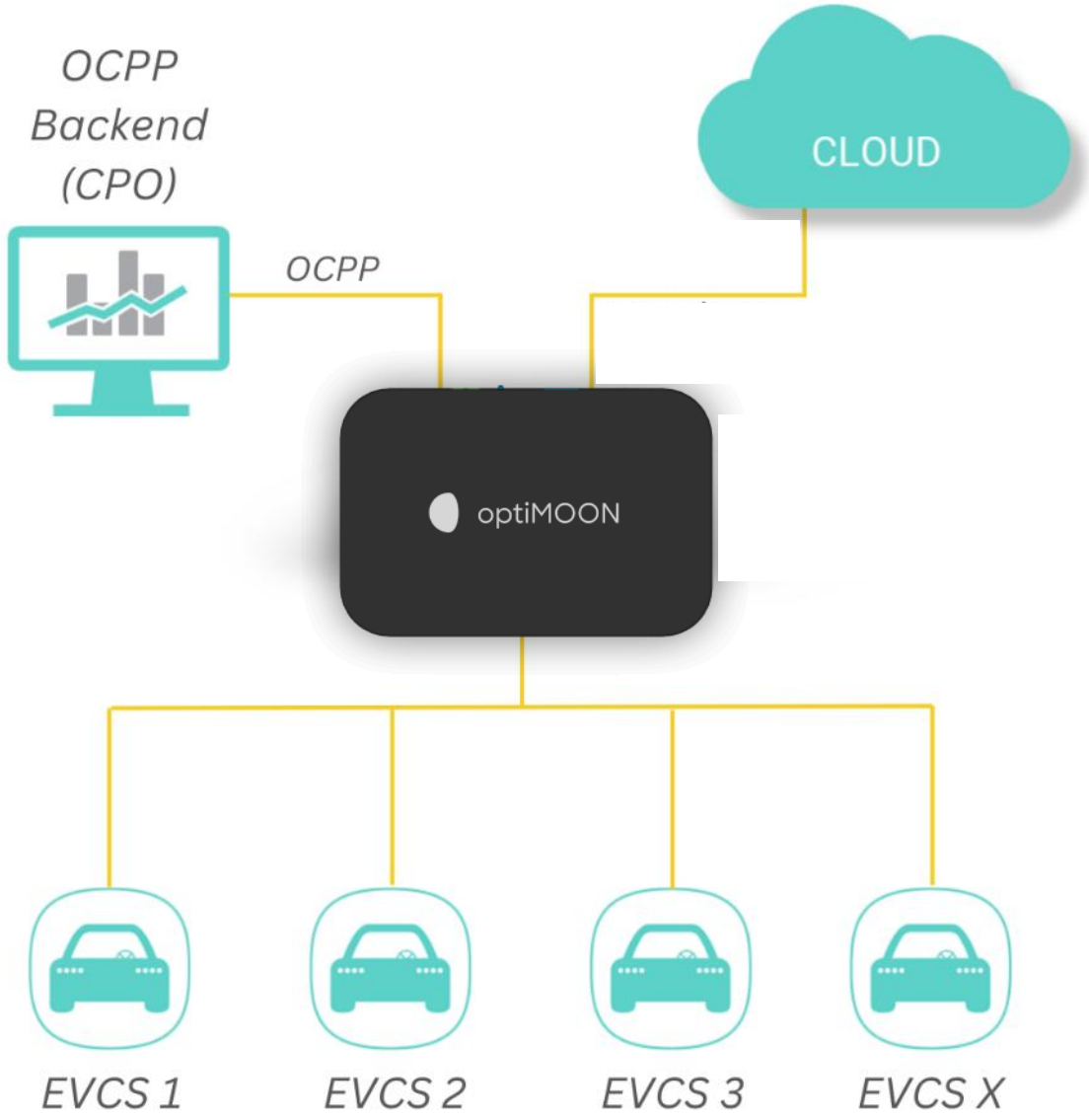


ENERGY MANAGEMENT SYSTEM

THE ADVANTAGES OF THE END-USER optiMOON SYSTEM BRING DYNAMIC ADJUSTMENT OF CHARGING BASED ON GRID CONDITIONS OR ELECTRICITY PRICES

MOON
Driven by energy.

Utilize the standardized OCPP communication protocol to ensure the adjustment of consumption **independently** of the underlying payment system.



ENERGY MANAGEMENT SYSTEM

optiMOON CONTROLLER FUNCTIONALITY – display of minute-level data

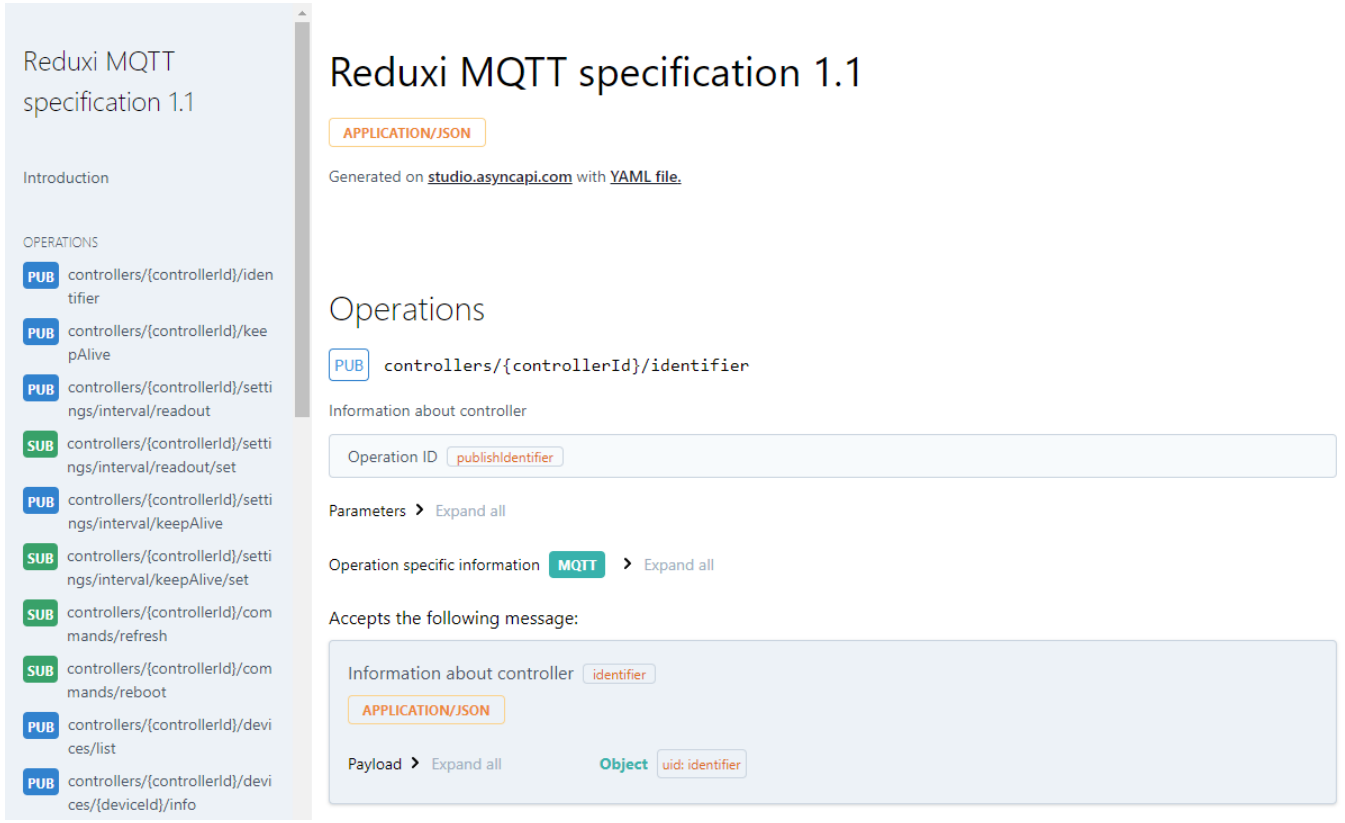
Through the use of the optiMOON Cloud, the **MANAGER** gains access to:

- **Aggregated** 1-minute data from all connected locations
- Potential **flexibility** and energy in both positive and negative directions
- Remote **management** of connected devices
- Real-time status display at the **second level.**

FULL CONTROL VIA REST API OR MQTT API

Through the use of the optiMOON system, the **MANAGER** controls devices via the MQTT API, obtaining:

- Access to **all data** from all connected devices
- **Management** (on/off, setting desired values for charging/discharging energy storage, power production of solar power plants, charging power of electric vehicles, or operating parameters of strategies)
- Editing of **rights, access, authorization, and authentication**
- Management of **individual devices** or through a unified point for a **group of devices.**



ENERGY MANAGEMENT SYSTEM