How Ressolar reliably delivers thousands of EV recharges throughout Italy with EMnify.

With a history in the energy sector that dated back to 1952, Ressolar is an Italian expert in developing and constructing renewable energy production plants using alternative sources including photovoltaic, hydroelectric, geothermal, and solar thermal energy.

Amidst the global paradigm shift towards electric vehicles and zero-emission transport, Ressolar set out to deliver a network of smart charging infrastructure that contributes to the sustainable mobility movement.

As the first charge point operator (CPO) in the province of Bergamo and the third in Lombardy, Ressolar knew from the outset that stable and uninterrupted charge point communication is the linchpin of efficient and seamless user service. To connect its fast-growing charging network throughout Italy, the company relies on EMnify.

“I recommend EMnify to any company that needs to manage a large number of SIM connections at a competitive cost and with a requirement to never lose connection.”

LORENZO MONTI
WROOM Project Manager, Ressolar

About:
- Headquartered in Bergamo, Italy
- Industry: Energy & EV charging

Goal:
Simplifying the way to travel for all EV drivers.

Solution:
A smart charging network for electric cars together with charging management software and mobile app (WROOM).

EMnify’s products in use:

Connect:
- Multi-Network IoT SIM: Robust charge point communications for maximum service uptime.

Operate:
- Web Portal: Simple and transparent SIM management.
- Network Control: Proactive switch to a new network to troubleshoot charge point connections.

Online with 4 operators in Italy
(Vodafone, Telecom Italia, Wind Tre, Iliad)

1200 public concessions for charge point installation

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Increasing the use of electric vehicles with a simplified and digitized charging experience

Working with public bodies and municipalities, as well as private businesses who own and manage EV chargers on their parking premises, Ressolar provides a complete range of charging stations that serve the needs of diverse customers.

Cellular communication is the natural choice for Ressolar to operate and control its distributed network of chargers.

“We use 4G routers to connect all our charge points with the backend for remote monitoring and management, and delivering charging service via our WROOM mobile app,” said Lorenzo Monti, WROOM Project Manager at Ressolar.

“The speed and stability of cellular connections are among the prerequisites for our solution. We cannot afford connection losses that would create service disruption to our users who need to recharge. Fast and seamless charging experience is central to our business,” he added.

Besides activating and communicating every charging session without delays, reliable connectivity allows Ressolar to gather vital data on the charge points to perform diagnostics and maintenance - timely and efficiently.

The WROOM App lets EV drivers easily locate the closest chargers available, reserve their preferred outlet, and get notified once the recharge is over.
A trusted cellular IoT partner for growth

Before EMnify, Ressolar used the SIM cards of an Italian mobile network operator.

“The data rate was too expensive, and it was difficult to manage SIM connections remotely. Also, the network quality was not up to our needs as they are not roaming with other operators, and we didn’t have the level of customer support we wanted,” explained Monti.

After looking into a list of multi-network providers, Ressolar saw that none could meet their requirements like EMnify. Competitive and flexible pricing attracted the team, but it wasn’t the only deciding factor.

“We decided to switch to EMnify for the easy and convenient management of the connectivity and because we had seen how reliable and steady the connectivity was during the evaluation period,” he added.

What’s more, having a cellular IoT expert team that could assist Ressolar with quickly and efficiently resolving any problems was another precondition.

"Always present and well-prepared customer support is fundamental to us, and we have experienced that firsthand with EMnify."

– Lorenzo Monti
Project Manager, Ressolar
Powerful tools for scalable operations

Today, Ressolar has garnered 1200 public concessions to install their EV charging stations across Italy. Through the WROOM app, the company has exceeded 25,000 recharges while delivering over 350 MWh.

In addition to easy activation of SIM cards and complete visibility into data usage and cost, the EMnify Portal gives Ressolar’s technician team control over device connectivity for fast and proactive troubleshooting.

“We sporadically use the network blacklisting function to switch to a new network and reestablish the connectivity in areas where some operators create connection problems,” explained Monti.

On top of that, customizable pricing and data pooling in line with the consumption needs of the charging stations have helped Ressolar reduce operational costs.

In the coming months, the company is also looking into EMnify’s deep, automated cloud integration features that will allow the team to connect the EMnify platform with their backend application and efficiently control device connections right from their AWS interface.