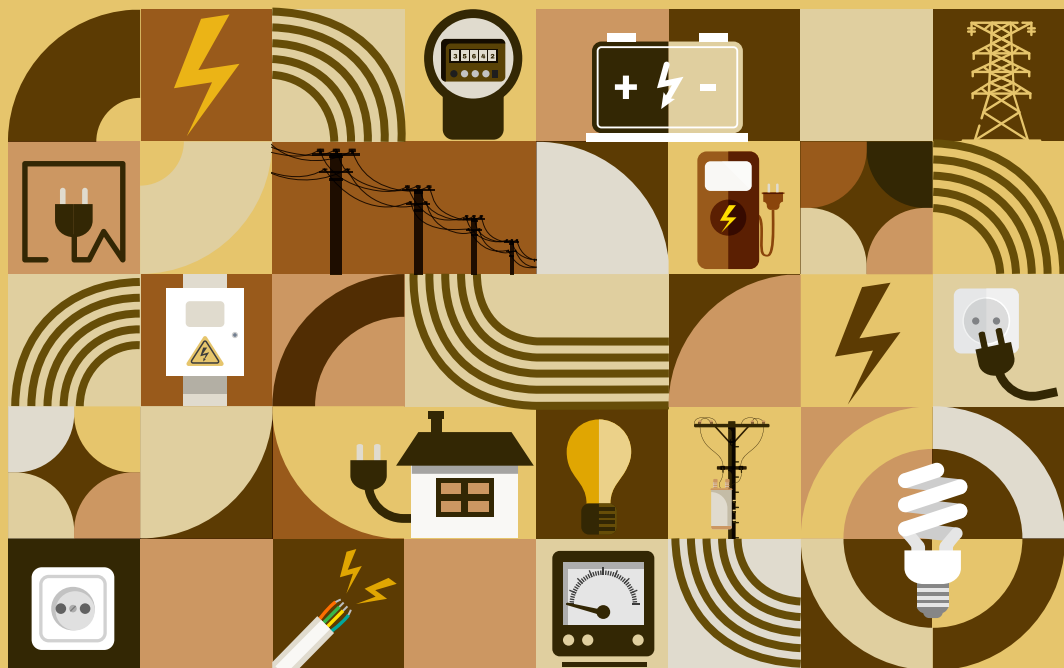
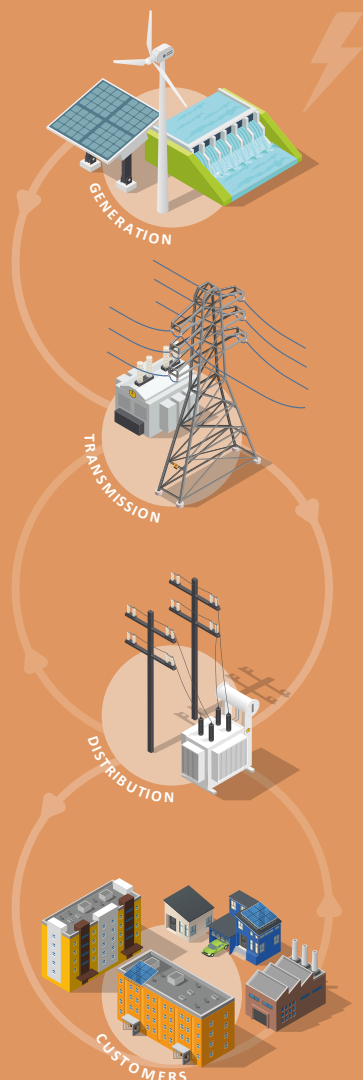


ELECTRICITY

Technical Quality of Service Report 2025



ELECTRICITY VALUE CHAIN



NATIONAL TRANSMISSION NETWORK

89
delivery points

9 895 km
of EHV network



98.30%

Availability of main elements of the transmission network

► Average number of long interruptions



1.00

interruption/delivery point

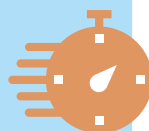
0.01 interruption/delivery point in 2024

► Average duration of long interruptions

736.13

minutes/delivery point

0.04 minutes/delivery point in 2024





DISTRIBUTION NETWORKS

MAINLAND PORTUGAL



9 780 km of HV network
75 853 km of MV network
152 906 km of LV network

AUTONOMOUS REGION OF THE AZORES



1 889 km of MV network
3 019 km of LV network

AUTONOMOUS REGION OF MADEIRA



1 271 km of MV network
3 369 km of LV network



6 595 634 LV customers

133 406 LV customers

149 665 LV customers



Average number of long interruptions affecting LV customers

3.07

interruptions/customer

1.56 interruptions/customer in 2024

3.96

interruptions/customer

3.29 interruptions/customer in 2024

0.84

interruptions/customer

0.63 interruptions/customer in 2024



Average duration of long interruptions affecting LV customers

751.93

minutes/customer

95.55 minutes/customer in 2024

152.62

minutes/customer

104.46 minutes/customer in 2024

52.92

minutes/customer

36.92 minutes/customer in 2024



Compensations paid to LV customers

1 934 119 €

820 019 € in 2024

61 €

56 € in 2024

5 221 €

1330 € in 2024

TECHNICAL QUALITY OF SERVICE

Energy Services Regulatory Authority (ERSE), responsible for regulating the electricity sector, assesses the quality of electricity supply perceived by customers and the performance levels of electricity network operators, in accordance with the provisions of the **Quality of Service Code**. This ERSExplica focuses only on the low-voltage distribution network, i.e., the network that carries electricity to the consumer.

What is Technical Quality of Service?

The quality of the electricity supply provided to customers by the network operator is measured using a set of indicators, such as the number and duration of interruptions. In the Technical Quality of Service Report, ERSE assesses whether the quality of electricity supply provided to customers by transmission and distribution network operators complies with established quality standards. If network operators fail to meet the expected quality standards, affected customers are automatically compensated.

Main Findings of the Report

In 2025, all the general standards set for continuity of supply indicators – relating to the number and duration of long interruptions in the low-voltage level – were met by network operators in mainland Portugal and the Autonomous Region of Madeira. In the Autonomous Region of the Azores, there was one non-compliance, relating to the SAIFI LV indicator in zone A of the island of Faial.

Also noteworthy was the Iberian blackout on 28 April 2025, which originated in the Spanish electricity network and interrupted the supply of electricity to all low-voltage customers in mainland Portugal.

SAIFI LV - Average number of long interruptions per customer in the low-voltage distribution network.





ELECTRICITY NETWORK OPERATORS

Electricity produced by dams, wind and solar farms, or other technologies reaches consumers' facilities through transmission and distribution networks. The transmission network carries electricity at extra high voltage (EHV) from power plants to substations that deliver it to the distribution network. Distribution networks carry energy to consumers over shorter distances at different voltage levels: high voltage (HV), medium voltage (MV) and low voltage (LV).

In **mainland Portugal**, the electricity networks are operated:

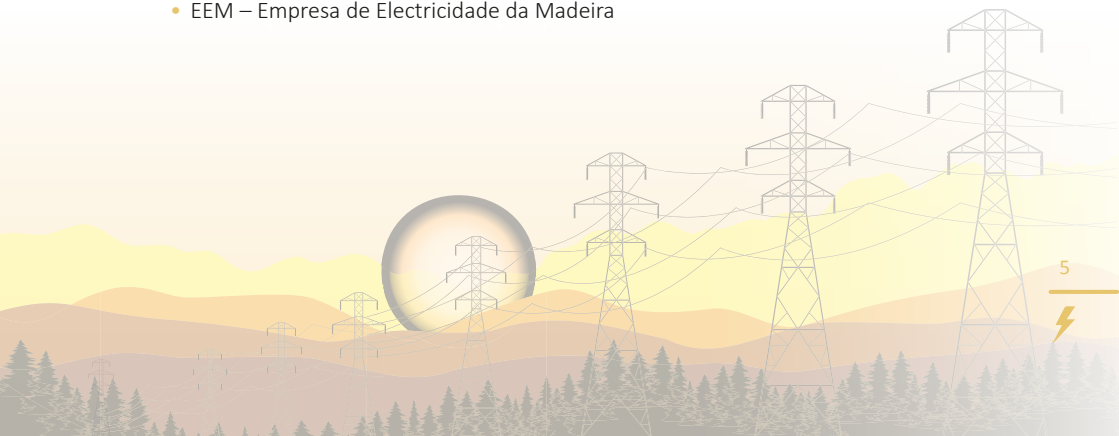
- At EHV, by REN- Rede Eléctrica Nacional
- At HV, MV and LV, by E-REDES- Distribuição de Eletricidade
- Exclusively at LV:
 - A Celer- Cooperativa Electrificação de Rebordosa
 - A Eléctrica de Moreira de Cónegos
 - Casa do Povo de Valongo do Vouga
 - CEL- Cooperativa Eléctrica de Loureiro
 - CEVE- Cooperativa Eléctrica de Vale D'Este
 - Cooperativa Eléctrica de Vilarinho
 - CESSN- Cooperativa Eléctrica S. Simão de Novais
 - Cooperativa de Electrificação A Lord
 - Cooproriz- Cooperativa de Abastecimento de Energia Eléctrica
 - Junta de Freguesia de Cortes do Meio

In the **Autonomous Region of the Azores**, the electricity networks are operated by:

- EDA – Electricidade dos Açores

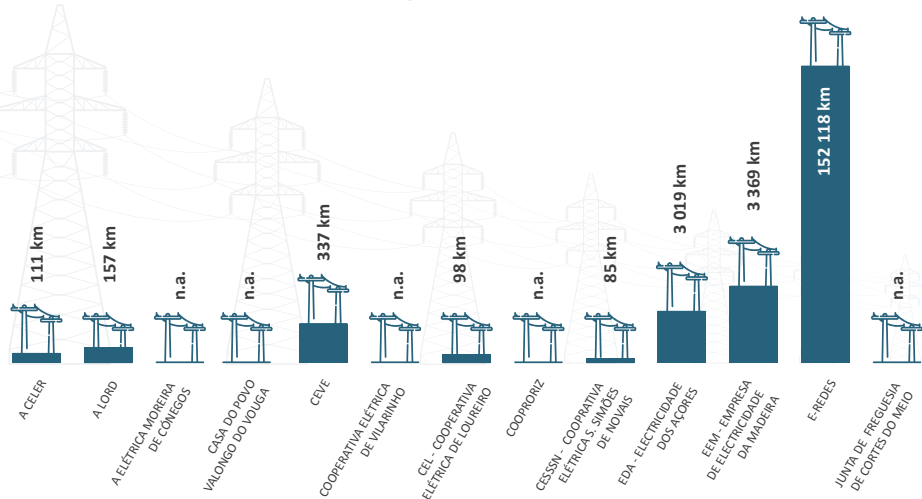
In the **Autonomous Region of Madeira**, the electricity networks are operated by:

- EEM – Empresa de Electricidade da Madeira



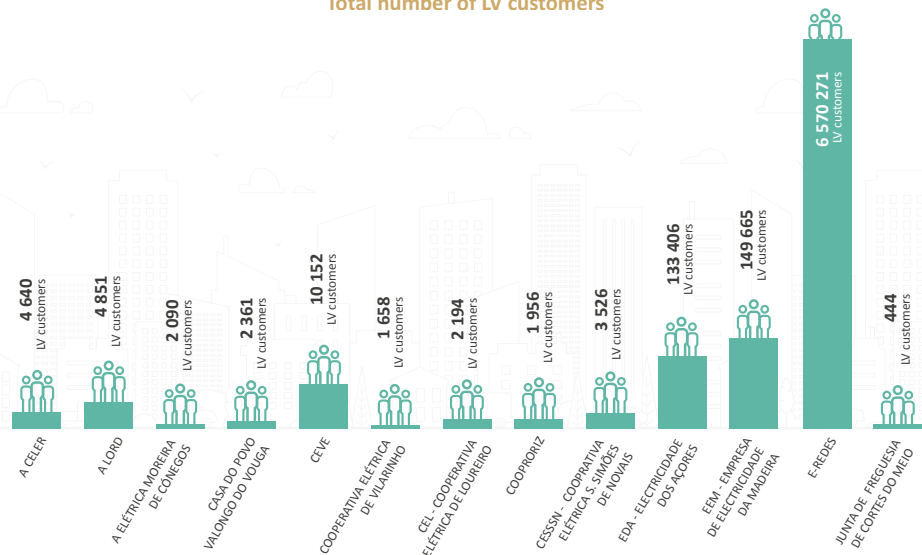
CARACTERIZATION OF THE LOW VOLTAGE DISTRIBUTION NETWORK

Length of LV circuits



n.a. - not available

Total number of LV customers



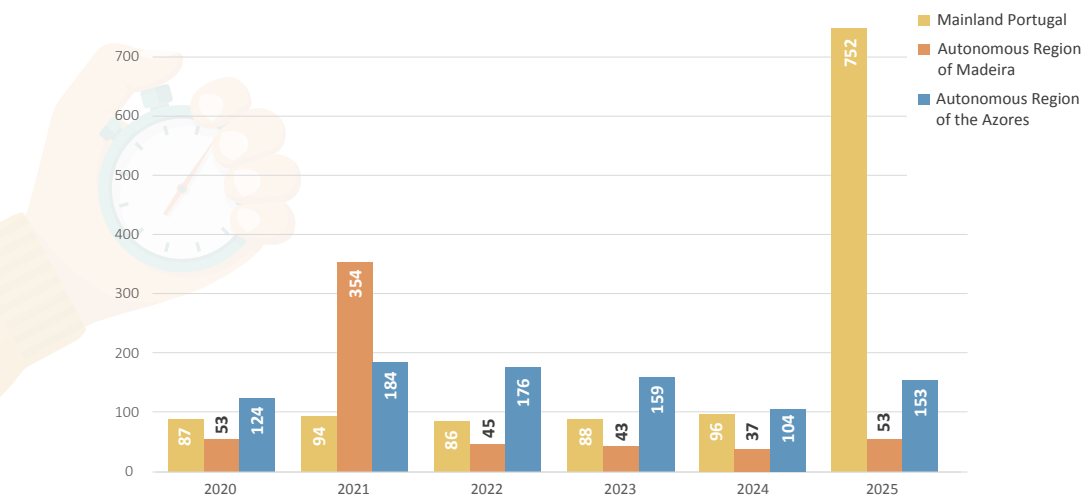


LOW VOLTAGE DISTRIBUTION NETWORKS

SAIDI LV (minutes/customer)

Average interruption duration per customer

The SAIDI LV indicator represents the average amount of time that customers experience long interruptions – more than 3 minutes – in a given year.



In **mainland Portugal**, the SAIDI LV indicator deteriorated compared with previous years, mainly due to seven major impact events — storms, wildfires and an Iberian blackout — which affected large areas of the distribution networks. One of the most significant was the Iberian blackout of 28 April 2025, which lasted around 36.4 hours and affected all customers connected at different voltage levels.

In the **Autonomous Region of Madeira**, the SAIDI LV indicator deteriorated, reflecting mainly the increase in unplanned interruptions arising from networks and the occurrence of a major-impact event related to extreme weather conditions caused by Storm Emília on 12 December 2025, which affected the electricity networks on the island of Madeira.

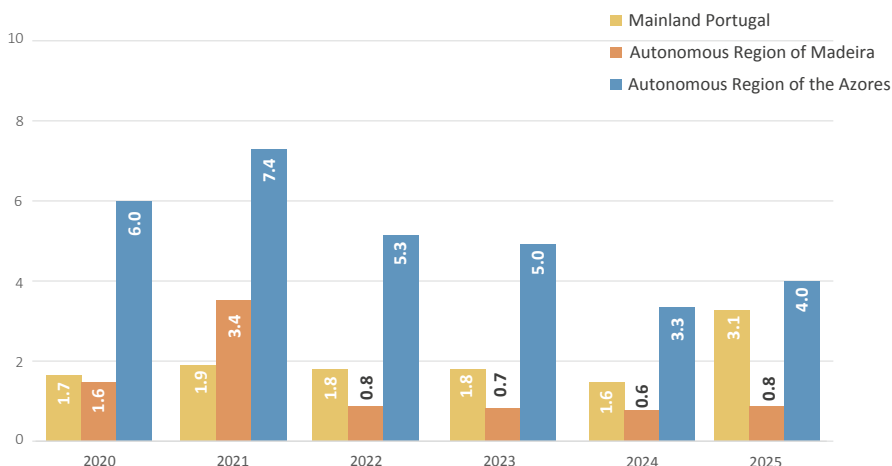
In the **Autonomous Region of the Azores**, the SAIDI LV indicator deteriorated compared with 2024, mainly due to an increase in unplanned interruptions arising from production and networks.



SAIFI LV (interruption/customer)

Average number of interruptions per customer

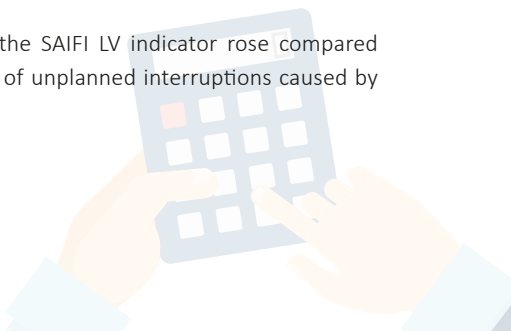
The SAIFI LV indicator represents the average number of long interruptions that the average LV customer experiences in a year.



In **mainland Portugal**, the SAIFI LV indicator showed a significant increase in 2025, breaking the trend observed in the previous year. This result was mainly influenced by the exceptional events that occurred throughout the year.

In the **Autonomous Region of Madeira**, the SAIFI LV indicator rose in 2025, reflecting the higher number of unplanned interruptions originating from networks and the exceptional event related to Storm Emília, which affected 11 507 LV customers on the island of Madeira.

In the **Autonomous Region of the Azores**, the SAIFI LV indicator rose compared with 2024, mainly due to the higher number of unplanned interruptions caused by production and networks.

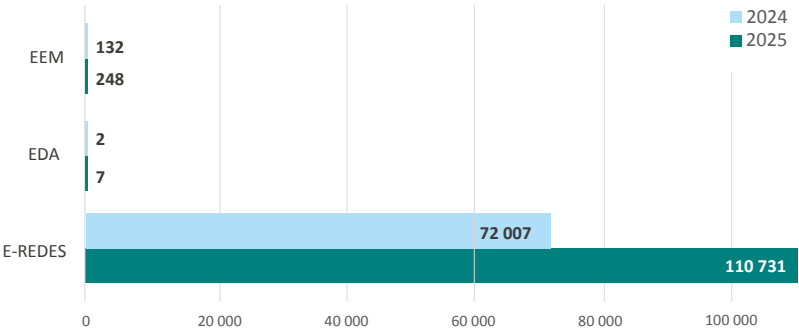




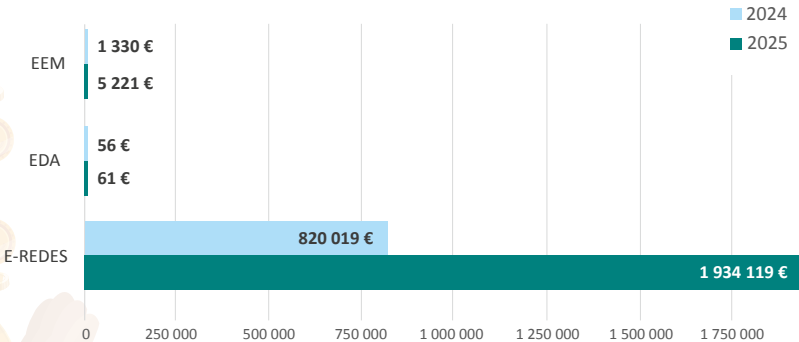
COMPENSATION PAID TO LOW VOLTAGE CUSTOMERS

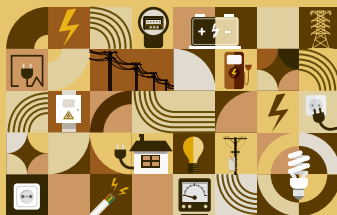
When the distribution network operator fails to meet individual continuity of supply standards (number and duration of long interruptions), affected customers are automatically compensated. In 2025, network operators paid approximately 1.94 million euros to LV customers.

Non-compliances with the number and duration of interruptions for LV customers



Compensations paid to LV customers for non-compliances with the number and duration of interruptions





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