

EMPOWERING COMMUNITIES WITH SMARTER ENERGY SOLUTIONS

In Láchar, Granada, we're making electricity smarter and more efficient by connecting energy providers with local communities.

Our demonstration sites test new energy management strategies, helping residents participate in flexibility markets while improving grid stability.

Cuerva is also developing technology to detect unusual electricity use in vulnerable individuals, enhancing safety and peace of mind.



Our Challenges



Improving Coordination

Current energy systems struggle with coordination between transport operators, distribution networks, and consumers, leading to inefficiencies.



Reducing Energy Costs

Consumers often face high energy bills due to inefficient systems and limited access to flexibility markets.



Decentralizing Energy

Traditional energy grids are centralized and inflexible, making them vulnerable to shortages.



Smart Technology Adoption

Energy systems may not be equipped to fully support AI and digital tools.



Energy Poverty

Rural communities face high energy costs, limited access to affordable power. Vulnerable individuals, like the elderly, also lack proper monitoring and emergency response systems based on energy use.

INNOVATIVE SOLUTIONS FOR A SMARTER, MORE AFFORDABLE ENERGY FUTURE

- **Better Coordination:**
Improves coordination between energy operators and consumers for a flexible, real-time energy system.
- **Lower Energy Costs:**
Reduces electricity bills through flexibility markets and dynamic pricing.
- **Local Energy Generation:**
Empowers consumers to generate and store their own energy, reducing reliance on centralized grids.
- **Smart Technology:**
Uses AI, digital tools, and automation to optimize energy use and improve grid resilience.
- **Supporting Vulnerable Consumers:**
Creates affordable energy communities and ensures safety with energy monitoring tools.
- **Scalable Solutions:**
The project's solutions can expand to other communities, sectors, and regions.
- **Policy Evolution:**
Encourages regulatory changes for smart grids, energy flexibility, and market liberalization.
- **Sustainability:**
Promotes renewable energy adoption and reduces dependence on fossil fuels.



The Local Impact

Cost Savings: Reduces energy costs for consumers and businesses through smarter energy use, dynamic pricing, and optimized systems.

Sustainability: Promotes local energy generation, reduces consumption, and supports renewable energy adoption, making grids more sustainable.

Community Empowerment: Engages consumers in energy markets, fostering local energy communities and improving energy equity, especially for underserved areas.

Safety & Efficiency: Uses smart tools and AI to enhance safety, optimize energy use, and improve grid efficiency.

Education & Awareness: Increases awareness about energy rights, sustainable practices, and the role of consumers in energy systems.