

PRESS RELEASE

[Picture of sensor in home in City of Valencia]



City of Valencia Invests in IoT Project Powered by the Helium Network to Combat Energy Poverty

- Damal Redes Successfully Deploy Sensors to Monitor Real-Time Living Conditions in Urban Housing
- Smart City Technology to be Featured Alongside the LoRa Alliance® at Smart City Expo World Congress Conference in Barcelona, Spain, November 7-9, 2023

Valencia, Spain – November 8, 2023 – [Damal Redes](#) and [Valencia's Fundació Clima i Energia](#), relying on the [Helium](#) Network's [LoRaWAN®](#) ecosystem, are leveraging the Internet of Things (IoT) and decentralized wireless networks technology to gather real-time data about the wellbeing of its most vulnerable citizens. Under the leadership and installation efforts of Valencia's Fundació Clima i Energia, more than 130 air quality sensors using LoRaWAN® have

been deployed throughout the city in technological collaboration with Damal Redes, with more deployments expected in 2024.

Spain's third-largest city is facing the formidable challenge of energy poverty – a lack of adequate, affordable, and reliable environmentally sound energy services, which affects 23% of its households. European welfare systems are burdened by the inequalities resulting from living conditions in urban contexts, causing direct and detrimental impacts on health and wellbeing. Health complications resulting from energy poverty include respiratory diseases, heart attacks, stroke, mental disorders, and acute health issues such as hypothermia, injury, or flu. Energy poverty increases the risk of respiratory illnesses, which is why Valencia's Fundació Clima i Energia has chosen to adopt low-cost, high-impact air quality sensor deployments for citizens, ultimately benefiting the welfare of the entire area.

"Damal Redes, a renowned Valencia-based company established in March 2007, specializes in Information and Communications Technologies (ICT). Valencia's Fundació Clima i Energia leads and supervises the Wellbased and Ebento projects, with Damal Redes serving as their trusted technological collaborator. Wellbased has distributed 130 sensors throughout the city of Valencia to address energy poverty. On the other hand, Ebento is focused on enhancing energy efficiency in buildings and plans to deploy 52 sensors across two buildings in the city. These projects utilize atmospheric sensors that measure dry temperature, relative humidity, and CO2 concentration, offering insights into the environmental conditions within the participants' homes.

"By leveraging the Helium Network, we've realized an astounding 98% success rate in installing sensors in low-income residences and construction sites. This allows us to continuously monitor CO2 levels, weather patterns, and other crucial data. No other technology can match this capability," said Jose Antonio Hernández, IoT Technical Lead at Damal Redes.

Valencia advanced its mission by integrating the Helium Network, the world's largest people-powered IoT Network. The Helium ecosystem seamlessly integrates with LoRaWAN® technology, which is optimized for battery-operated, low-power devices, making it ideal for an expansive IoT infrastructure.

"We have the technology to address an equality issue that affects many of the world's urban centers and deprives residents of fundamental energy needs," said Abhay Kumar, CEO of the Helium Foundation. "With Helium's decentralized, peer-to-peer wireless network, we can gain insights that are impossible to access with a centralized system. It's gratifying to work alongside Damal Redes and LoRa Alliance® member companies to deploy on the Helium Network in Valencia, allowing for real-time environmental data that can result in meaningful change."

With Valencia's commitment to reducing greenhouse gas (GHG) emissions by 40% by 2030 under the Covenant of Mayors initiative, its trust in Damal Redes for its projects becomes evident. Damal Redes' partnership with Helium is a move towards making real-world change. As

a part of a larger movement against energy poverty, this collaboration emerges as a fundamental piece of Valencia's broader energy strategy.

The [Wellbased](#) and [Ebento](#) projects are backed by the European Union. Damal Redes, Helium, and the esteemed LoRa Alliance® collectively represent a step forward in addressing energy poverty. The collaboration is a testament to a shared vision of adopting low-cost, high-impact innovative technology deployments, as they can benefit both the public and private welfare of cities.

The Helium Network, Damal Redes, and Valencia's Fundació Clima i Energia's collective progress will be showcased this year at the [Smart City](#) event in Barcelona, Spain, November 7-9, 2023, in partnership with the LoRa Alliance®, the global association of companies backing the open LoRaWAN® standard for the Internet of Things (IoT) low-power wide-area networks (LPWANs). A press conference is taking place on November 8, 2023, from 11:00-12:30 in the Media Briefing Room outside the press center.

About The Helium Foundation

The Helium Foundation is a 501(c)(6) not-for-profit dedicated to the proliferation of secure, cost-effective wireless coverage around the globe. As the steward of the Helium Network, the world's largest decentralized wireless network, the Helium Foundation exists to benefit the wireless industry and its stakeholders, implementing network governance, ecosystem development, and public education. For more information, please visit helium.foundation, subscribe to our [blog](#), or follow us on [Twitter](#) and [Discord](#).

About Damal Redes:

Damal Redes, based in Valencia, is a specialized integrator in wireless technologies and industrial sensorization, leading the way in innovative solutions for the region.

<https://www.damal.es/>

LoRa Alliance® and LoRaWAN® are marks used under license from the LoRa Alliance®.

Media Contact:

The Helium Foundation

Brandyn Bissinger / press@helium.foundation

Aarti Utwani / aarti@helium.foundation