Palladium Challenge Fund



RURAL ENERGY REVOLUTION:

Energy Efficient Storage for Remote Communities





About Palladium

Palladium works with governments, businesses, and investors to solve the world's most pressing challenges. We have 60 years of experience creating strategies, building partnerships, mobilising capital, and implementing programs that transform societies, economies, and lives. In the last year alone, we've supported our clients to improve the lives of over 150 million people across the globe.

For over 20 years, Palladium has committed 1.5% of our profit before tax to funding humanitarian relief efforts, supporting community projects nominated by Palladium employees, and running an annual Challenge, through which we solicit and fund ideas to tackle a major global problem.

The **Palladium Challenge Fund** brings in ideas from our network in over 90 countries and partnership with over 1,600 organisations to source innovative responses to global challenges. Operating against a clear "problem statement", we fund organisations and initiatives that:

- Pilot new technologies and innovative approaches
- De-risk start-up ventures
- Deliver outcomes from innovative financial mechanisms
- Support the convening of innovation challenges



Rural Energy Revolution: Energy Efficient Storage for Remote Communities

In many parts of the world, remote communities face persistent energy instability. Unreliable grid connections, coupled with the intermittent nature of renewable sources, leave households and local businesses struggling to secure the power they need for daily life and economic development. With limited energy options available, these communities often endure high costs, unreliable services, and missed opportunities for sustainable growth.

This situation is compounded by a scarcity of effective storage solutions, which not only stifles development but also restricts access to critical services, deepening socio-economic disparities.

How can we transform the energy landscape in off-grid areas? The answer lies in deploying innovative, low-cost energy storage solutions that maximize the reliability and usability of renewable energy in these settings.

Helping remote areas achieve stable energy demands a fresh and pragmatic approach to energy storage. As Palladium CEO Sinéad Magill explains, "When we bring innovative energy storage to remote areas, we're opening doors to economic growth and community empowerment. It's not just about technology; it's about transforming lives and building a future where every community thrives."

Energy storage for remote communities requires thinking that is both fresh and practical.

Our vision is to:

- Reduce the financial burden of energy instability by offering affordable storage solutions that promote cost efficiency.
- Deliver reliable power that enables essential services and daily activities, ensuring consistent access to energy.
- Enhance the usability of renewable resources while minimizing environmental impact, thus advancing sustainability.
- Empower communities by building local capacity, equipping them with the skills and tools needed to manage, maintain, and scale these innovative solutions.

Through this challenge fund, we will unlock solutions that harness new technologies, forge dynamic partnerships, and deploy innovative approaches that ensure no community is left in the dark.

Palladium is driving action at the forefront of energy innovation and community development, working alongside governments, industry leaders, and local partners to bring sustainable solutions to those who need them most.

With global experience in energy access and renewable technologies, we understand that the path to sustainable development is paved with innovation, local empowerment, and resilient infrastructure.

Innovation thought starters:

- Repurposed Battery Systems: Develop modular energy storage units using repurposed lithium-ion batteries from electric vehicles or electronics, focusing on affordability and longevity for household or community use.
- Thermal Energy Storage: Create systems that capture and store excess solar or wind energy as heat for applications such as cooking, water heating, or small-scale industrial processes. These systems could utilize locally available materials like phase-change substances or insulated tanks.
- Compressed Air or Gravity Storage: Design simple, small-scale systems where
 excess renewable energy is stored either by compressing air or by lifting weights,
 with energy released on demand. These mechanical designs require minimal
 maintenance and are well-suited for remote environments.
- Battery Recycling and Local Assembly Programs: Establish community-based workshops focused on recycling battery components and locally assembling energy storage units. This approach not only reduces waste but also creates job opportunities and builds local technical expertise.

Solutions that transform:

Through this challenge fund, we are seeking proposals from organizations with groundbreaking ideas to revolutionize energy storage in remote communities. We invite you to share your innovative approaches that can:

- Pilot cost-effective and scalable energy storage solutions
- Enhance energy reliability and access in off-grid environments
- Foster local capacity and create sustainable economic opportunities
- Leverage partnerships across communities, governments, and the private sector

Get Involved.

To apply for funding up to AUD \$100,000.00 please go to <u>letsmakeitpossible.com</u>. Applications are due 13 June 2025.

Palladium's development experts will shortlist and select the winning applications. Selected organisations will benefit from funding and additional technical assistance from Palladium, including connections to Palladium's teams of advisers worldwide.

Join us in building a future where every community can thrive, powered by clean, reliable, and sustainable energy.



