

POWERING RURAL GUATEMALA'S DIGITAL FUTURE: **WOMEN-LED, SOLAR-POWERED**

NEW SUN ROAD's Energy Compact is transforming off-grid villages in Guatemala by combining clean power, internet connectivity, and women's leadership to unlock opportunity and resilience.

POWERING RURAL FUTURES WITH SOLAR & DIGITAL ACCESS

When a solar-powered Digital Community Center opened in Río Azul, Quiché, 21-year-old Elizabeth Ixim stepped up to manage the center, overcoming initial community skepticism. Despite limited resources, she embraced hands-on training and today, she teaches digital literacy, helps local families access online services, and co-manages small businesses.

These Digital Community Centers (DCCs) launched by New Sun Road provide decentralized, reliable energy and internet access to underserved rural communities, and are part of the organisation's Energy Compact commitment. Anchored in local leadership, the commitments deliver a scalable

model that addresses multiple SDGs — particularly SDG 7 (affordable and clean energy), SDG 5 (gender equality), and SDG 4 (quality education). By combining infrastructure deployment with skills training and local leadership, New Sun Road turns energy access into a platform for education, economic empowerment, and lasting community resilience.

"I want this space to grow so future generations of girls can also become leaders," says Elizabeth, showing how access to energy and inclusive training can unlock local leadership and advance gender equity in remote areas.



COMMUNITY-DRIVEN GROWTH FOR LASTING IMPACT

New Sun Road is scaling their model from 30 pilot Digital Community Centers. The organization works alongside local governments, NGOs, municipalities, and Indigenous leaders to ensure each center is rooted in community needs. Each DCC is equipped with New Sun Road's Stellar IS™ and Stellar Micro-grid OS™, providing resilient, remotely monitored energy systems that can adapt to local conditions.

ENERGY COMPACT GOALS

In the long term, New Sun Road aims to install 3,000 solar-powered Digital Community Centers (DCCs) which will provide access to clean energy in underserved communities, reaching over 1 million people with essential services and enabling internet access for 3.5 million individuals. This initiative will lead to increased digital education, economic opportunity, and climate resilience by empowering 75,000 women leaders and avoiding over 10,000 tonnes of CO₂ emissions annually—advancing multiple SDGs by 2030.

To maximize impact, the team prioritizes sites that serve as critical hubs such as schools and health clinics, so that energy access directly supports education, healthcare, and livelihoods. Crucially, every center is managed in partnership with women's leadership committees, ensuring local ownership while empowering women as decision-makers, entrepreneurs, and community leaders.

“We came across the Energy Compact initiative while implementing our Digital Community Centers (DCCs) in Guatemala and immediately recognized its potential to catalyze transformation, both locally and globally, through meaningful, action-oriented partnerships. Energy Compact offers a valuable platform to expand our reach, build strategic alliances, and accelerate impact”

ALEJANDRO ALVARADO

Country Director, New Sun Road Guatemala



IMPACT AT A GLANCE

- 30 Digital Community Centers (DCCs) installed across three regions in Guatemala.
- Each DCC is equipped with a 3 kW–5 kW solar PV system, battery storage, and satellite internet connectivity.
- 3,500+ women and girls trained in digital literacy, financial education, and entrepreneurship.
- 5,500+ community members reached through training programs delivered via the DCCs.
- Women who complete the digital literacy module demonstrate an average 80% improvement in digital proficiency.
- 400+ women trained and served as DCC managers and community leaders.
- Each DCC is estimated to avoid at least 3.6 tonnes of CO₂ emissions annually, contributing to climate mitigation goals.

This Energy Compact is unique in its integrated, gender-responsive approach to energy access. Rather than focusing solely on infrastructure, it invests in human capital, strengthens community resilience, and promotes local leadership. The vision is a future where every rural village in Guatemala is digitally connected, energy-secure, and guided by empowered local leaders—especially women—who are driving innovation, sustainability, and inclusive development within their communities.

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Subscribing to Energy Compacts and sharing our work through this platform aligns with our vision of a Guatemala where every rural village is connected, energy-secure, and led by empowered local leaders. It's also an opportunity to build partnerships, share what works, and accelerate just transitions across borders, reinforcing our belief that local innovation and inclusive leadership can drive global transformation.

ALEJANDRO ALVARADO

Country Director, New Sun Road Guatemala

