

# the power of engagement

2019 Annual Report



green empowerment

Village Solutions for Global Change since 1997

# Dear Friends,

As the global pandemic forces us to shelter in place, my mind travels to the remote communities across the globe where Green Empowerment works and to my trip to Bolivia in May 2019.

Did you know that in the remote highlands of Santiago de Machaca, Bolivia the primary llama shepherds are women? These communities use a number of ancestral techniques to survive their harsh environment, from raising drought-resistant livestock to digging rainwater reservoirs. Unfortunately, climate change has had a significant impact on families living off these marginal lands. Extensive drought in the summer of 2016 overwhelmed the region, killing 40% of local alpacas and llamas and destroying the livelihoods of over 360 local families in Santiago de Machaca. In this picture from that trip to Bolivia, I am showing examples of solar water pumping technology in other countries and photos of llamas in Oregon! This led to a fascinating discussion emphasizing our shared connections and I learned how their community was managing the integration of modern technology into their ancestral practices.

Through our integrated approach of providing water access and livestock management training, we reduced the deaths of infant alpacas and llamas by 75% in this first pilot community. As a result, 23 families increased their primary income by 30%! This project demonstrates the holistic approach we take to developing solutions with partners, in this case: clean water access for the community, water irrigation for the livestock, and support from local agriculture experts to improve the animal husbandry and integrate the community into the local supply chain. Our success was due in large part to the engagement of community members across all aspects of the project and the inclusion of women as leaders. In fact, 40% of local leadership roles in community organizations formed through our projects are held by women - like the llama shepherds I met in Santiago de Machaca.

In Bolivia I saw first hand how the power of engagement is crucial to implementing effective, sustainable development projects. In the last three years, with the collaboration of committed community members, we were able to provide over 59,000 new individuals with access to critical infrastructure projects by working with 24 different local partner organizations across eight countries. This was all part of an exciting three-year strategic planning cycle - my first as Executive Director - which concluded in 2019.

As you read the stories in this Annual Report, I hope that they bring you joy and remind you that we are all connected. Your commitment to supporting the most vulnerable among us has better prepared all of humanity to face the future.

Thank you for being part of this,



Andrea Johnson, Executive Director



We envision an equitable and sustainable world where everyone has clean water, renewable energy and a healthy environment in which to grow and thrive.



Future water committee members test out the new potable water system in La Piedra (Ecuador)

## Our Approach

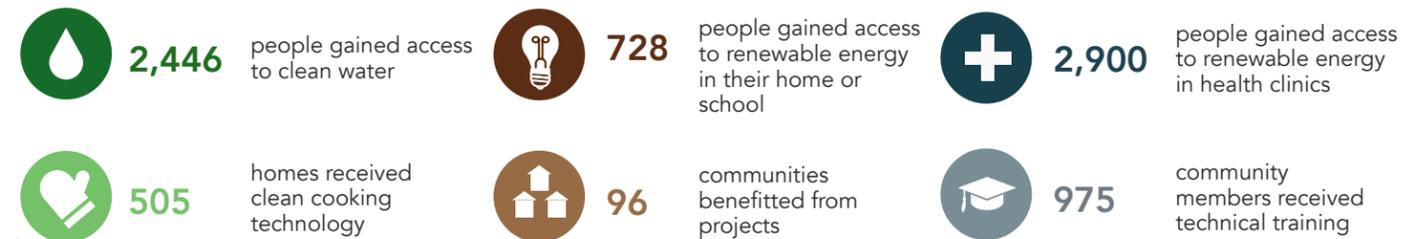
**Partnership** | We partner with in-country organizations to implement renewable energy, clean water and complementary sanitation, environmental and economic development projects.

**Engagement** | We engage communities from start to finish to build ownership and ensure long-term project viability.

**Capacity Building** | We provide technical expertise, training, funding and additional resources to build local capacity.

**Impact Expansion** | We amplify our impact through regional networks, technical trainings and service-learning programs.

## In 2019 alone



## Impact Over Time

In 2019 we completed a strategic planning cycle, expanding and deepening our impact over the last three years:



Since 1997, we have helped over 426,200 people pave a pathway to drive their own development.

# From Start to Finish, Communities Drive Our Projects

## Building Trust

MYANMAR

Many healthcare clinics that serve people of the Karen ethnic minority group, along the war-torn border of Thailand and Myanmar, have no access to electricity. To bring solar energy to these remote health clinics and train healthcare workers in systems maintenance, we partner with Border Green Energy Team (BGET), an organization with many staff who are Karen themselves and often share the refugees' lived experiences. In 2019, we laid the groundwork to bring solar energy systems and training to five more clinics.

**Community Leader: Mayuree Udomsrimongkol**

*"I like to travel to remote communities to work with the people there. I always think of how our work provides good things, such as electricity, for other people's lives."*

- Mayuree, BGET administrator, trainer, and Thai-to-Karen translator



Mayuree

Yadira

## Accepting an Invitation

NICARAGUA

Campeños (farmers) in drought-prone areas of northern Nicaragua had a dire need for potable water systems. In 2019 FEDICAMP, an association of campesino community groups, invited us to work with them on two pilot projects that will bring clean drinking water to 1,070 people.

**Community Leader: Yadira Muñoz Rizo**

*"I have to divide my time between my family and CAPS. When there are conflicts it is even more difficult, but we have been able to solve the problems and move forward. I will continue to fight together with my family, friends and neighbors to create positive change for our children, who are the future of our community."*

- Yadira, mother of three, President of "The Force", the local water and sanitation committee (CAPS)

## Activating Community Investment

BORNEO

The Long Tanid community in Malaysian Borneo wanted to curb their reliance on expensive in-home diesel generators and build an energy system for their entire community. In 2019 we supported members of each of the 54 households who are dedicating their time and physical labor to build an 11.6kW micro-hydroelectric system. The act of giving time, physical labor, and financial contribution has positioned the community members to be stakeholders in the same systems that they will eventually own and operate.

## Growing Capacity

ECUADOR

The isolated indigenous communities of the upper Río Cayapas basin, which include Afro-Ecuadorians and indigenous Chachi people, didn't have access to clean, reliable running water or the technical experts needed to build and maintain such systems. We partnered with Fundación ALTROPICO to provide extensive trainings for water committees and the greater community on both technical and administrative skills. Now local community members have the knowledge and skills needed to manage and maintain their own water systems.

**Community Leader: Marlon Caice**

Marlon Caice, community water technician, has kept the water running for his 70-family community despite a full-time job at a nearby palm oil plantation and his demands as a father, husband, and farmer. During 2019's especially extensive dry season, Marlon organized his community to dig and line an additional well and spearheaded the expansion of the their system as part of our 2019 Southern Esmeraldas Water Project.



Marlon

## Keeping Solutions Local

PERU

450 families in communities throughout Peru worked with Green Empowerment and Soluciones Prácticas Peru to install improved cookstoves in their homes. In the remote community of Quilahuani families needed a way to repair malfunctioning cookstoves without having to travel far or depend on an outside organization. We provided training for metalworkers at two local repair shops on how to manufacture and install replacement parts. This ensures local supply of stove components and keeps repair fees within the community.

**Community Leader: Ángela Quevedo**

*"I decided to open a restaurant in my house and offer room and board to the school teachers [and government workers] who aren't from this area, [which] provides me with a new source of income to support my family."*

- Ángela Quevedo Roque, an entrepreneur whose cookstove saved her so much time in not having to collect firewood, that she was able to start her own business.



Ángela

## Advocating for Ownership

BOLIVIA

Deep in the Amazon, 11 indigenous communities are assuming legal ownership of their water systems and planning for the future with community driven funding systems. We partnered with Soluciones Prácticas Bolivia to provide training to water committee members so they would learn how to calculate the long term costs, design tariff systems, and meter each house to encourage conservation and equity. The communities now hold the legal title to their water systems and are equipped with the skills needed to maintain the project for years to come.

## Facilitating Knowledge Exchange

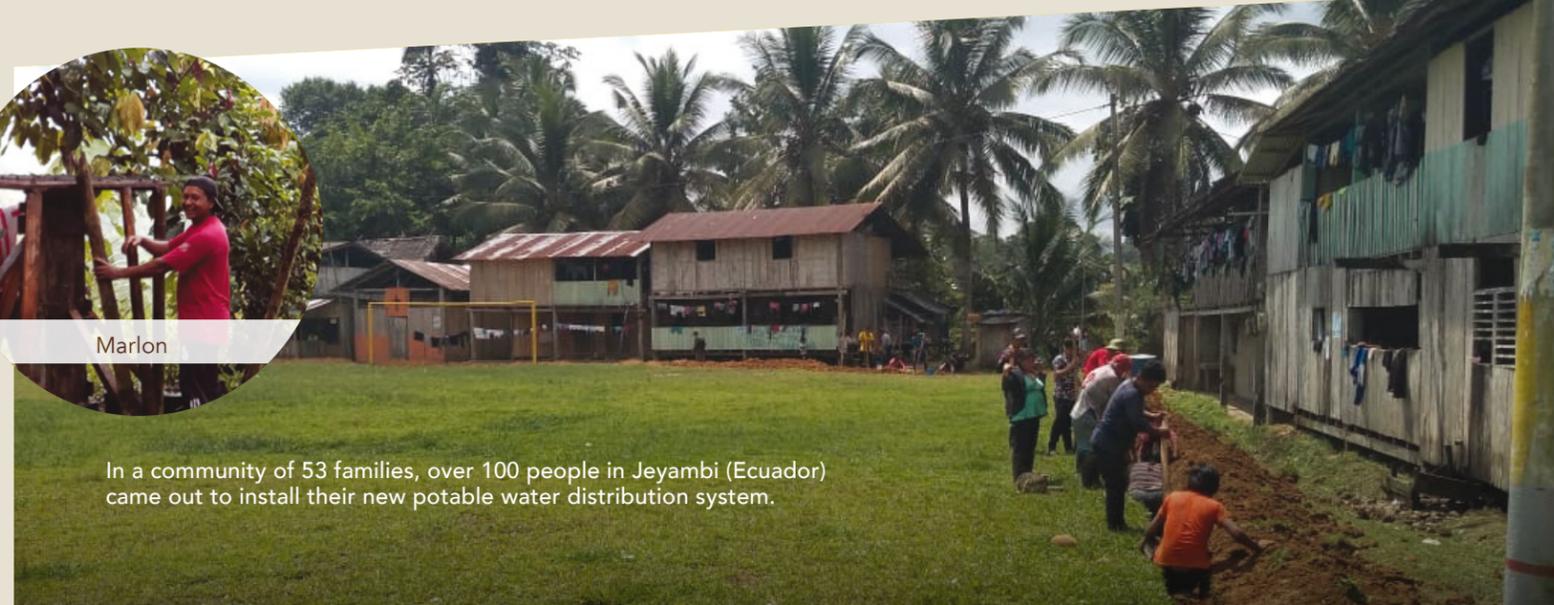
THE PHILIPPINES AND BEYOND

Many communities in the Philippines still lack reliable clean energy and few local actors have the skills to install community-based micro-hydroelectrical systems. To increase local knowledge, we facilitated a staff exchange between SIBAT in the Philippines and TONIBUNG in Malaysian Borneo, to transfer knowledge on system installation, community organization strategy, and turbine design. By growing local staff competency, we are building a world where local actors can implement development projects from inspiration to operation.

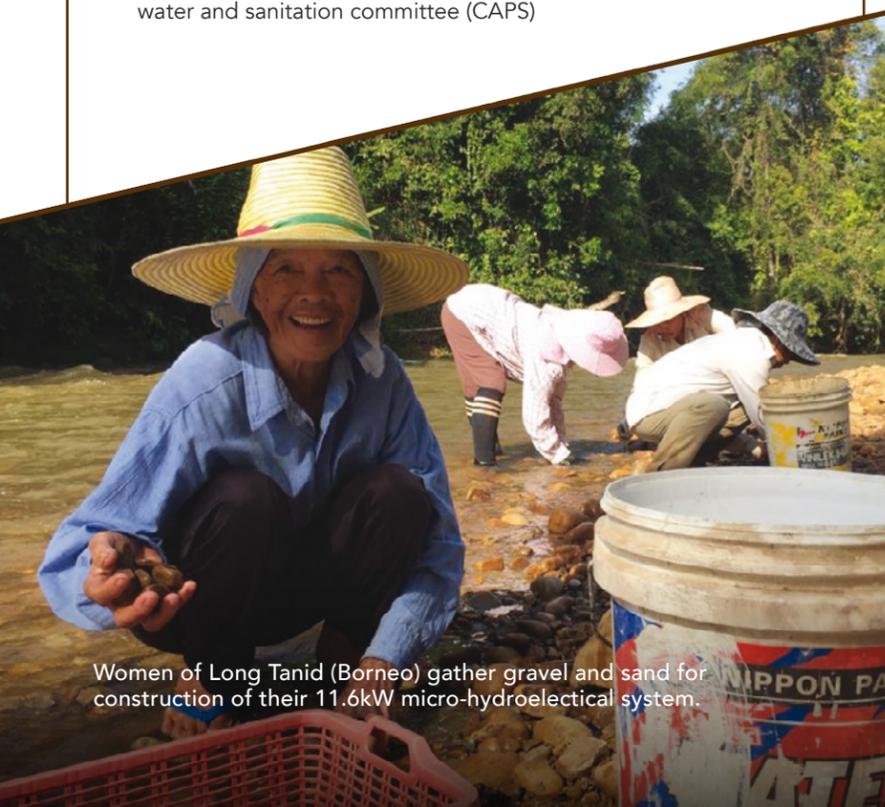
## Enhancing Economic Opportunities

COLOMBIA

While small-scale husbandry is traditional in rural communities spread throughout the mountainous Santander region, expanding their pig-raising operations is an economic risk most families are unable to take on their own. Building on economic activity that families are already engaged in, we partnered with El COMUN to install 27 biogas digesters and pig husbandry systems, motivating community members to adopt new technology while respecting their way of life.



In a community of 53 families, over 100 people in Jeyambi (Ecuador) came out to install their new potable water distribution system.



Women of Long Tanid (Borneo) gather gravel and sand for construction of their 11.6kW micro-hydroelectrical system.

# Collaboration Beyond Borders

## Micro-Hydro Empowerment Network (HPNET)

We work with HPNET to improve micro-hydro systems and train the practitioners who build them in South and Southeast Asia. Our projects take a grass-roots, collaborative approach, from facilitating technology exchange for turbine manufacturing practitioners to development and training on our open-source Electronic Load Controller (ELC). To date, local partner organizations Sibat and TONIBUNG have piloted the ELC in 7 communities with locally manufactured units providing considerable cost savings and building local technical capacity.

## Biodigester Network of Latin America and the Caribbean (RedBioLAC)

We are the fiscal sponsor and a primary organizer of RedBioLAC, which brings together researchers, implementers, and policy-makers focused on sustainable-scale biodigestion. In 2019, the Red's 11th Annual Event brought together 140+ stakeholders

from 17 countries to share best practices and recent innovations in the field. In addition the Network's steering committee (with representatives from eight countries) met in Peru to chart the impact of the organization over the next three years.

## Power Partnership

As a founding member, we work with the Power Partnership to support non-governmental and faith-based organizations to integrate renewable energy into their operations. Together we have created a set of assessment and analysis tools for bringing renewable energy into other development sectors that will be piloted in Uganda in 2020.

## GlobalPDX

We chair the Steering Committee of GlobalPDX, Oregon's hub for global changemakers. Well-regarded locally for their beloved "Development Drinks" and monthly workshops, their 2019 annual conference gathered nearly 200 students and professionals!

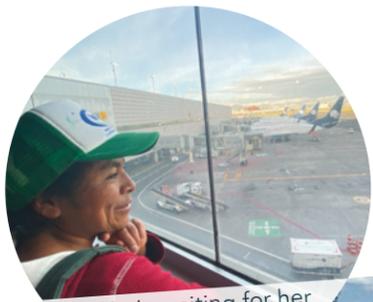
# Travel, Learn, Contribute

In 2019 we provided several opportunities for our supporters to experience the mission firsthand. Seven dynamic donors traveled with us to Bolivia on a **Project Tour** to observe projects, meet partners and hear communities' stories directly. In addition, we hosted two university **Service-Learning** trips to Borneo and Ecuador, where students gained hands-on experience advancing our projects while learning about sustainable international development.

We also deepened our commitment to **South-South Knowledge Exchange**, which provides opportunities for people from beneficiary communities and local partner staff to travel internationally, build their capacity, and bring back project ideas. With generous funding from the Vatheuer Foundation, a delegation of community members, program staff, and project funders from Oaxaca, Mexico spent ten days visiting our projects in Colombia, gaining hands-on experience and exposure to best practices.

### Community Leader: Maria Santiago Hernández

Maria is a community healthcare promoter who provides advice on illness prevention, home care, and when to seek professional help. As a single mother who also supports her family by making and selling apple pastries, Maria had never left Oaxaca until this training trip to Colombia. Though she would be away from her two (almost grown) children for two weeks, Maria joked - in her typical firecracker style - that they would have to fend for themselves, this opportunity was too important to pass up.



Maria waiting for her first flight ever

A delegation of community members, staff, and funders from Oaxaca, Mexico learn how to install a biogas digester with our partner El COMUN in Colombia!



Caitlyn (right) with colleagues Elise and Maria

# Ten Years of Service

## Caitlyn Peake

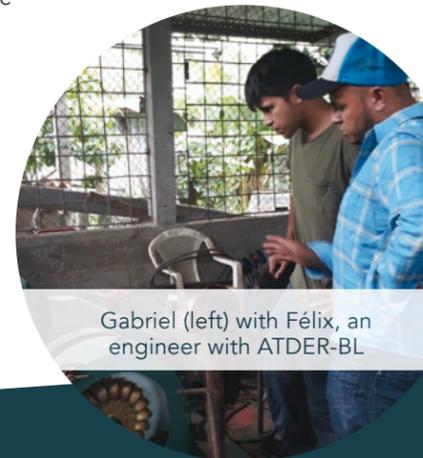
Caitlyn was studying Environmental Sciences & Management at Portland State University (PSU) when she learned of Green Empowerment. She began as an intern in our Portland headquarters, followed by 9 months in the field as a volunteer. Caitlyn then became a Royce Fellow, which led to 8 years managing projects in Latin America before returning to Portland to become the organization-wide Program Director in 2019. Caitlyn credits her longevity with Green Empowerment to being able to see the impact of the work directly and to building personal relationships with all stakeholders: community members, partners in the field, staff, and donors. "There are many layers and chains of compassion," Caitlyn says. "Being a bridge between communities and donors -- to show how much the world can care -- is very rewarding."

## Gabriel Sundoro Wynn

Originally from Indonesia, Gabriel attended Lewis & Clark College in Oregon where he discovered his passion for working at the intersection of people, technology, and the environment. His role as Green Empowerment's first field staff member in Malaysian Borneo allowed him to return to Southeast Asia to work alongside local partners in bringing renewable energy to indigenous communities. Now as the Southeast Asia Regional Advisor, Gabriel provides technical and strategic guidance on programs and identifies opportunities for new program activities, such as establishing the Center for Renewable Energy and Appropriate Technology (CREATE), a renewable energy training center and manufacturing site for micro-hydro turbines. Gabriel has helped develop over 50 decentralized clean energy systems that are integrated with watershed conservation, providing renewable energy to thousands of people.

# Partner Organizations

Association of Rural Development Workers – Benjamin Linder (ATDER-BL), AsoFenix, The Batu Puteh Community Ecotourism Co-operative (KOPEL), Border Green Energy Team (BGET), Colombian Biomass Energy Network (RedBioCol), El COMUN, Ecuadorian Biodigester Network (RedBioEc), Energy Environment & Sustainability (SA&E), Federation for the Integral Development between Campesinas and Campesinos (FEDICAMP), Forever Sabah, Foundation for the Development of Community Alternatives for the Conservation of the Tropics (ALTRÓPICO), Foundation for Sustainable Tropical Agricultural Production (UTA), El Gorrión Coffee Cooperative, IBEKA, Janathakshan, PACOS Trust, Soluciones Prácticas Bolivia, Soluciones Prácticas Peru, SIBAT, TONIBUNG, Water For People Peru, Yamog



Gabriel (left) with Félix, an engineer with ATDER-BL

# Our Team

### Staff

Abraham Ngu (Malaysia Program Coordinator), Amanda Morse (Financial Assistant), Andrea Johnson (Executive Director), Caitlyn Peake (Program Director), Dan Frydman (Electrical Design Engineer), Daniel Schollaert (Program Coordinator), Gabriel Sundoro Wynn (Asia Regional Advisor), Maria Espinoza (Nicaragua Program Coordinator), Mica Miro (Engagement Manager), Mohammad Pakravan (Technical Program Manager), Sam Schlesinger (Latin America Regional Program Manager)

### Board of Directors

David M Siegel (Chair), Eli Lamb, Erick Peterson (Treasurer), Harrison Pettit (Vice Chair), Joe Richards, Kathy Fry, Melanie Billings-Yun, Rebecca Eaton, Shiao Yen Chin-Dennis, Steve Gretzinger, Wendy Stickel (Secretary), Francie Royce (Emeritus)

### Associate Board

Ary Hashim, Caitlin Horsley (Founding Chair), Carly Vendegna, Ferman Mock, Gabriella Narvaez (Vice Chair), Kate Schoof,

Paul Hawkins (Chair), Slok Gyawali

### Technical Advisory Committee

Andy Szatkowski, Barbara Pizacani, Phd MPH, Chris Baker, Daniel M Kammen, Dexter Gauntlett, Elise Kittrell, Jeff Hammarlund, Jordan Weisman, Koto Kishida, Lisa Hall, Michel Maupoux

### Volunteers and Interns

Austin Bosworth, Eleanor Sandifer, Lee Hunt, Lisa Hall, Mavis Clapp, Miriam Zubizarreta Ostivar, Steve Meicke

# support the work



Karen

## How to Give

**Mail checks to "Green Empowerment" at:**  
140 SW Yamhill Street, Portland, OR 97204

**Visit our secure website or call us:**  
[www.greenempowerment.org/donate](http://www.greenempowerment.org/donate)  
503-284-5774

### Join the Reuss Legacy Circle.

Add Green Empowerment to your estate plan, retirement plan or life insurance plan and connect with other supporters who have made this profound commitment to our organization. Circle members make a lasting impact and receive exclusive benefits, including an invitation to our annual project tour, an annual Executive Director call and more.

### Give through your workplace.

Connect to Green Empowerment through workplace giving, event sponsorship or employee matching.

**Green Empowerment is a U.S. 501(c)(3) nonprofit organization founded in Portland, Oregon in 1997.**

## Twenty Years of Engagement

2019 marked **Karen Erde's** 20th anniversary as a Green Empowerment donor. A member of the Havurah Shalom community, Karen's social justice values are deeply aligned with Green Empowerment. As one of her first initiatives, she raised funds for a solar water pumping project that brought clean water to 230 people in the rural village of El Jocote in Nicaragua.

As a doctor, Karen has seen nonprofits come into a country, deliver two weeks of medicine, and then leave. "What is the community supposed to do the rest of the time?" she would wonder. Karen supports Green Empowerment's projects because they are installed, owned and operated by community members.



## Financials

**Green Empowerment's work is more vital now than ever.** As indicated below, 2019 was a strong year for Green Empowerment. With uncertainty forecasted for 2020, we are grateful for the family of supporters that help fuel our projects. Our audited financial statements are available on our website. Our audit was conducted by Richard Winkel, LLC.

