blueEnergy

2021 Global Report

working for a more equitable, sustainable world

Message from Our Chairman

In 2021 the blueEnergy team rose to the challenges posed by Covid and the socio-political contexts of Nicaragua and Ethiopia to deliver significant community impact – especially in the areas of food security, solar energy, and climate resilience. blueEnergy was founded on the premise that we could extend human energy beyond conventional limits, where perseverance and patience are as critical as technology. We have lived this model for 19 years, going where others won't, working with local communities to create lasting change.

Some of our biggest highlights in Nicaragua this year were the "food security with agro-ecology" initiative focused on producing healthy food in family gardens with a train the trainer approach leading to high community adoption; large solar energy installations at a municipal facility, a school, and a new indigenous community; and the launch of our "climate smart schools" initiative focused on equipping and training schools to adapt to climate change.

In Ethiopia we finalized a large solar water pumping project in the Harari Region that included major installations in 2020, that is serving over 70,000 beneficiaries. At the same time a new solar water pumping program was launched in the Oromia region to serve remote populations.

We were thrilled to welcome Madeleine Bouton as our new US Manager. Madeleine began her work with blueEnergy in Nicaragua in the summer of 2016, as a member of the Global Leadership Program Climate Change team, while a student studying climate ethics at Stanford University. In the fall of 2019, Madeleine joined the blueEnergy Board of Directors as Secretary, as well as assumed the role of Alumni Outreach Coordinator, all while completing her master's degree in environmental communication.

blueEnergy is able to do the amazing work it does because of its people and your support. I hope you will enjoy reading about the impact we created together in 2021 and consider supporting our next chapter.

Warmest wishes,

Mathias J. Craig, Chairman of the Board of Directors

Our Approach

Local Partnership We partner with in-country institutions, and solutions are designed, developed, and implemented in partnership with the population concerned and with the agreement and support of local institutions.

Capacity Building We then further train, within the community, people who relay and promote good practices and chosen solutions by providing skills and organizational strengthening with the aim of increasing autonomy and self-sufficiency so that people can lead their own development.

Women Empowerment We consider the central and dynamic role of women by focusing on women's needs and requests, empowering them to improve their lives.

Impact Expansion We scale our impact through sharing at the local, national, and international level through our Open Source Impact Model, designed by blueEnergy.

2021: Your Impact in Numbers

4,542
people with increased water, sanitation, and hygiene access

1,089
people with improved food and nutritional security

629
people with affordable, renewable electricity

6
Demonstration Centers strengthened in climate change resilience and disaster preparedness

Platinum Transparency 2022
Candid.

17 YEAR CUMULATIVE IMPACT

over 170,216 people reached since 2004

blueEnergy empowers families and communities through a holistic development model that leverages local knowledge and resources to achieve long term, sustainable impact. blueEnergy works across the three inter-related areas of: Water, Hygiene, and Sanitation (WASH); Renewable Energy; and Food Security within the context of a changing climate. By employing an ecosystem approach, emphasis is placed on relationships and the transfer of knowledge and skills to the people we serve to build long-term healthy ecosystems and secure livelihoods.

In the South Caribbean Coast of Nicaragua, more than 90% of the population does not have access to clean water. Since 2008, blueEnergy has been building and installing water filters, deep wells, latrines and other hygiene infrastructure to improve access to water and sanitation in the region through our WASH program.

In the South Caribbean Coast of Nicaragua, more than 75% of the population does not have access to energy, and without energy they are left isolated and literally in the dark. Since 2004, blueEnergy has installed solar micro-grids, home solar systems, and portable solar to increase energy access. In Ethiopia, blueEnergy has been installing solar-powered water pumping systems for rural communities since 2014 in partnership with MCMDO.

The South Caribbean Coast of Nicaragua is particularly affected by malnutrition due to poverty and lack of dietary diversity. Since 2014, blueEnergy has aimed to ensure that families have sufficient, varied, and good quality food by disseminating agroecology practices; including strengthening seed banks to share with beneficiaries, agroecology training, and accompanying beneficiaries in building food-producing home gardens,

Climate Change Resilience

The countries where blueEnergy works are extremely vulnerable to climate change due to the increase in frequency and intensity of extreme climate events, including hurricanes, floods, landslides, drought, and rising sea levels. Extreme weather events can exacerbate and increase poverty, gender-based violence, food insecurity, and the inability to access clean water, hygiene, and sanitation. Because climate change intersects with all of these different issues, blueEnergy's climate change resilience initiative in Nicaragua aims to address them through an intersectional, integrative lens. The initiative is transversal across all three programs of Food Security and Agroecology, WASH, and Renewable Energy.

WATER, SANITATION, & HYGIENE

4,542 people directly reached in 2021 through our WASH program

Healthy Communities

In 2021, blueEnergy recognized the importance of the Water, Sanitation and Hygiene (WASH) in strengthening the health of families, especially in the context of the COVID-19 pandemic. Hand washing stations and hygiene and cleaning kits were delivered to communities in Bluefields, Nicaragua. Eco-baños for improved hygiene and security were installed with grey water treatment systems to filter water into garden beds; family water filters were installed and community water wells were built and rehabilitated; drinking Water and Sanitation Committees were formed to strengthen integrated water management practices. Access to safe water is essential. For families and communities, solutions that guarantee hygiene and sanitation for the prevention of diseases, combined with increased access to potable water, is critical to a healthy life.

81 Water Filters installed
3 community wells established
63 Hygiene & Cleaning Kits delivered
60 New Handwashing Stations
2 Eco-Baños built
1 Gray Water Treatment System built

"It is a joy to have the possibility of drinking clean water...all the people in the community share this joy."
Cristina Espinoza, president of the Drinking Water and Sanitation Committee (CAPS) in the community of Rama Maneland, Rama Cay.

Water Filters & Community Wells In Rama Maneland

Access to safe water for families in the Rama Maneland/Rama Cay indigenous community has been strengthened with the delivery of water filters and the rehabilitation of the community well that supplies the water distribution system for the community.

New Community Well In Bluefields

A new well has also been built for more than 100 families in Colonia Rubén Darío, in the Santa Rosa neighborhood, increasing access to safe, drinkable water for the community. Beneficiary families now have access to affordable, drinkable water near their homes, reducing travel time and cost for filtered water.

Strengthened Schools and Community Centers

Students and teachers of the Divino Niño School in Sapoá, Cárdenas, Rivas, gained access to newly constructed and rehabilitated water wells, bathrooms, latrines, bio-gardens and hand-washing sinks. Hygiene and cleaning kits were provided to the Camino a Emaús Schools in Tipitapa, Managua and Colegio Divino Niño.

FOOD SECURITY & AGROECOLOGY

1,089 people directly reached in 2021 through our Food Security & Agroecology program

Resilient Communities

In 2021, blueEnergy prioritized food security in strengthening the resilience of families, organizations, and communties in the context of climate change and the increasing food insecurity crisis. Training packages on agroecology and biointensive farming were delivered, garden plans were established for home gardens, agricultural tool kits were created and delivered, and families have food-producing gardens in their homes. Small-scale living ecosystems were improved, and women leaders were trained in best practices to act as examples and promote agroecology in their own communities. This program aims to address food insecurity while building autonomy and self-sufficiency in beneficiary groups, all in the context of the climate crisis. Strengthening living systems to ensure quality, varied, and nutritious food while also aiming to restore the soil is crucial for a biodiverse, resilient community.

17 food-producing home gardens established
17 garden kits and agricultural inputs delivered
16 Workshops and trainings on food security best practices provided

"In training on the biointensive method, I learned how to sow, how to cultivate, how to create what they call "biointensive beds"... Now, with all that I have learned, I know that the soil is rich... It was hard at first, but I knew I had to take care of my body, my health. I eat vegetables, fruits, salads, onions, whatever vegetables we have. It's very clear now."
Dina Omier, member of the Association of Women with Disabilities (COMUDISC)

Inegration of New Beneficiary Partner Groups

An outstanding success is the integration of new target groups: members of the Committee of Women with Disabilities (COMUDISC), members of the Federation of Associations of People with Disabilities (FECONORI), people from the Association of the Elderly, who have been equipped with garden kits and have begun the implementation plan of family gardens in their homes.

Strengthened blueEnergy Noda Biointensive Agroecology Center

The blueEnergy technical team, with advice from the Bionica Network, prepared a plan for the improvement, development and operation of blueEnergy's NODA Center. One of the first actions was the conditioning of spaces for attention and access to people with disabilities, as well as the improvement of the seed bank to share with beneficiaries.

Certified Biointensive Teachers and Community-Wide Campaigns

blueEnergy and students of agroforestry engineering of the URACCAN University were in the process of certification as basic biointensive teachers throughout 2021, and thousands were reached through awareness-raising activities and exchange visits, and a virtual platform was put into development to disseminate the agroecology movement to the wider community.

RENEWABLE ENERGY

629 people directly reached in 2021 through our Renewable Energy program

Empowered Communities

In 2021, blueEnergy improved access to safe, and sustainable energy for coastal families with three new renewable energy systems: a mini solar renewable energy network and a solar water heating system at the municipal slaughterhouse in the city of Bluefields; a hybrid solar system at the Cristiano Verbo School; and a solar water pumping system in the indigenous community of Rama Maneland, a new extension of Rama Cay. These systems empower communities with affordable, clean energy - a critical component for community development. In the midst of increasing climate impacts, these systems strengthen resilience extreme weather. blueEnergy also delivered efficient cookstoves, reducing emissions of polluting gases harmful to both health and the environment.

1 Hybrid Solar System
1 Mini Solar Network
1 Solar Water Heating System
1 Solar Powered Water Pumping System
61 Efficient Cookstoves

"It is a great project for us as a Rama indigenous community. It is a new community that we are trying to create with visions of progress for a healthier community. I feel proud."
Vicente Ruíz, beneficiary and municipal councilman, representative of the Rama Cay indigenous community.

Installation of Renewable Energy Systems at bE Demonstration Centers

The municipal slaughterhouse is being transformed into a self-sustainable green enterprise, a space for awareness and inspiration that will serve as a model to be replicated in other municipalities. Improvements in 2021 reduced environmental pollution and public health problems caused by the illegal slaughter of pigs, and produced clean and sustainable energy for the slaughterhouse through solar energy.

Installation of Solar-Powered Water System for Rama Maneland

A new solar-powered water pumping system well has been built for the 19 families settling on Rama Maneland, an extension of Rama Cay aimed at addressing overcrowding and water contamination. The solar-powered water pump improves access and quality of water and hygiene conditions and promotes good health.

Delivery of Efficient Cookstoves to New Beneficiary Groups & Families

61 families have received efficient stoves for food preparation, which use renewable energy to save more than 50% of consumption and reducing emissions of polluting gases for health and the environment. Among the beneficiaries are model families, members of the Committee of Women with Disabilities, members of the Federation of Associations of Persons with Disabilities, the Association of the Elderly.

CLIMATE SMART SCHOOLS

blueEnergy's "**Climate Smart Schools**" program partnered with four schools in the region, which focuses on the integration of water, sanitation, hygiene, energy, and food security in both the Caribbean and Pacific side of Nicaragua in the face of extreme climatic events like hurricanes and tropical storms. In 2021, blueEnergy strengthened four Climate Smart Schools--Emaus and Divino Niño schools in the Pacific, and San Pedro School and Colegio Cristiano Verbo in Bluefields--in their community climate resilience, with students, teachers, and families near the Climate Smart Schools strengthening their capacities and knowledge of adaptation to climate change.

"We are seeing the transformation of the center to a sustainable and climate-prepared school. With the improvements made to the water wells, bathrooms, latrines and the building of new sinks, we strengthen the health of all students" - **Johny Zambrana,** director of Divino Niño Climate Smart School, Sapoá, Rivas

Students creating their school gardens at the Divino Niño and Camino a Emaús Climate Smart Schools, emphasizing growing foods that contribute to a complete, nutritious diet in a small space with benefits to the living environment.

Installation of a hybrid solar system at the Colegio Cristiano Verbo in the city of Bluefields. The mini solar network consists of 42 photovoltaic panels of 144 watts and 42 volts each. The battery bank is powered by renewable solar energy and by the commercial power grid (for charging on rainy days) guaranteeing permanent access to energy at the school.

"The entire school-day we have power without any interruption; we know that this system is renewable and that we are guaranteed power for learning a long time." **Minerva Soza**, director of Cristiano Verbo Climate Smart School, Bluefields.

Water wells, bathrooms, latrines, bio-gardens and sinks were constructed and/or rehabilitated at the Divino Niño School in the Pacific, which doubles as a model community center.

MCMDO LOCAL PARTNERSHIP

Beginning in 2014, blueEnergy entered into a long-term partnership with Ethiopian NGO **Mothers and Children Multisectoral Development Organization (MCMDO).** MCMDO is an indigenous, nongovernmental, nonprofit and humanitarian organization founded in 1997. blueEnergy and MCMDO partner to bring sustainable development solutions throughout the country of Ethiopia, enriching projects through incorporating renewable energy technologies such as solar water pumping, electrification of medical centers, and energy-based solutions for women-led cooperatives. All these activities are also aimed at building the capacity of MCMDO teams: setting up and increasing the skills of a local technical team in order to be autonomous for the implementation and maintenance of "renewable energy" projects.

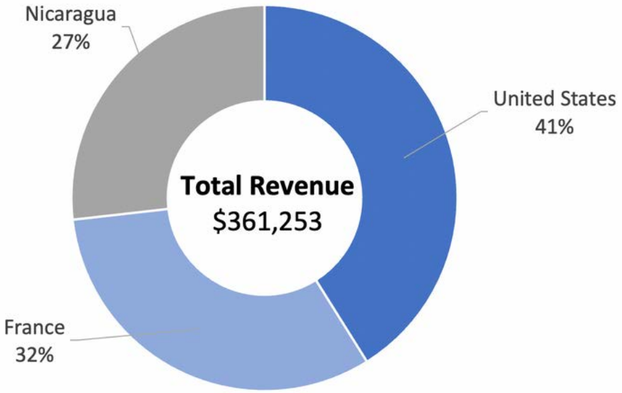
In the Harrari Region, following the installation of the 8 solar pumps that were put into service in 2020 to distribute drinking water in rural areas, MCMDO's teams have carried out several support missions (user training, performance measurements, provision of spare parts) that will contribute to the sustainability of the installations. A final evaluation of this project, with the analysis of the impacts on the beneficiary populations, was carried out in May 2021. Co-funded by several partners and the Regional Water Office, this project improves access to water for nearly 73,750 people in eight rural areas of the Harari region.

In the Oromia region, MCMDO and blueEnergy have started a multi-year solar pumping program in partnership with the Regional Water Office. Phase 1 of this program began in 2021 with the installation of 2 solar pumps that will improve access to safe drinking water for approximately 2,700 people.A phase 2 of the program, with several solar pumps in remote rural areas, is being studied with the Regional Water Office.

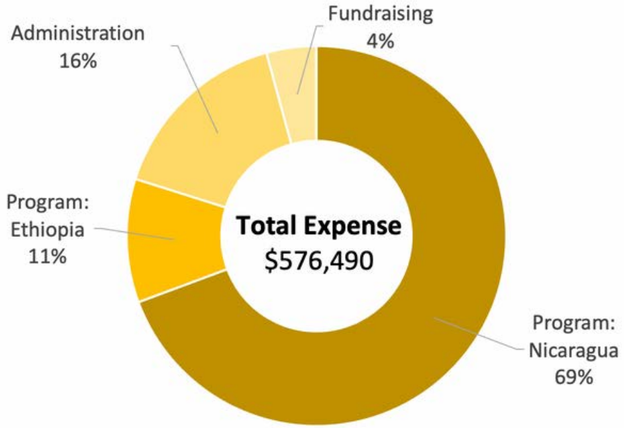
Drinking water distribution point in a village in the Harari region

FINANCE & KEY INSTITUTIONAL PARTNERS

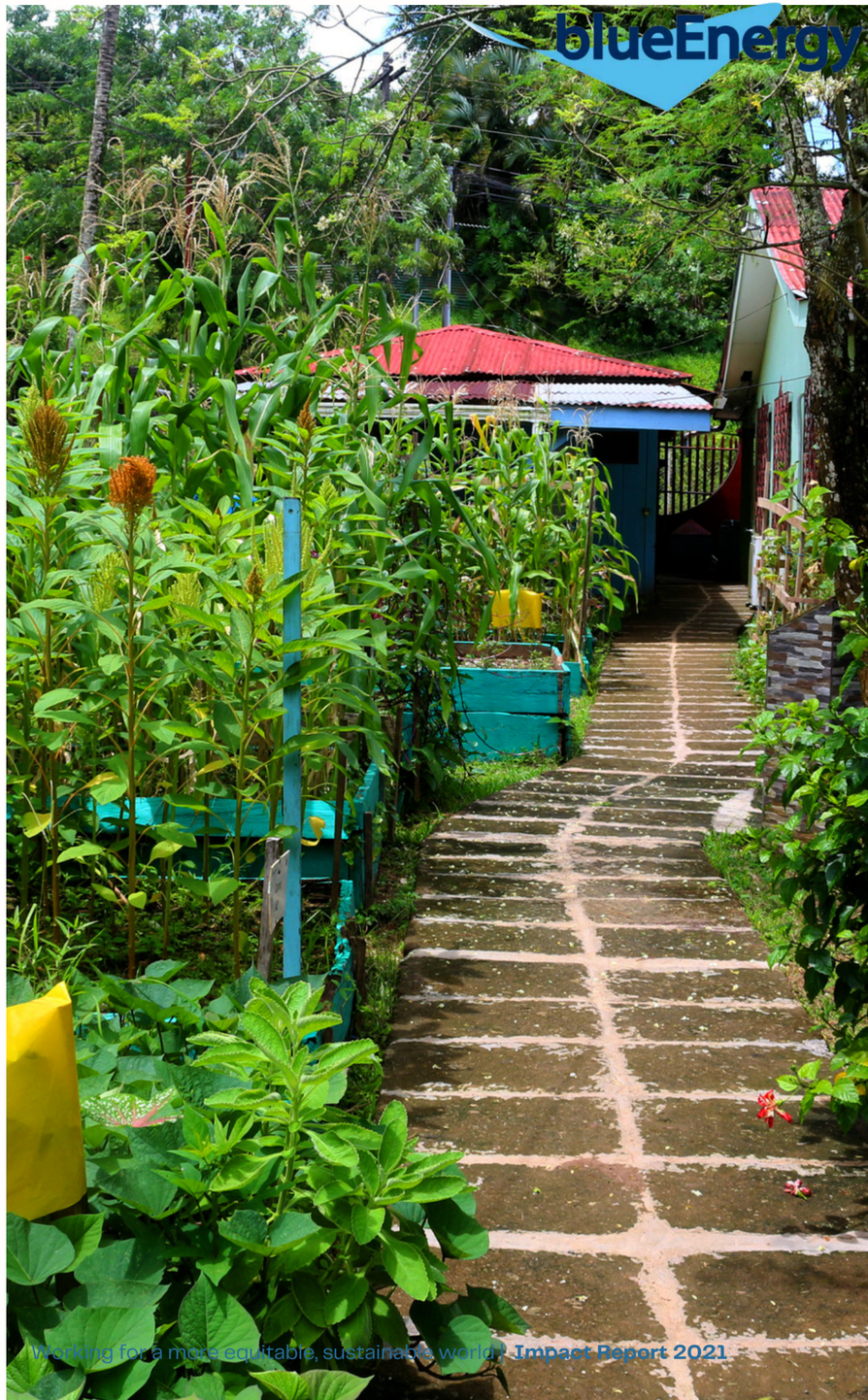
Revenue



Expense



** Financial figures presented in this report will vary from publicly available records in the United States, namely the IRS 990 form. This is due to the inclusion of cash revenue and cash expenses in France and Ethiopia, which are not included in government filings in the United States due to our legal structure. All revenue and expenses in France and Ethiopia are processed through blueEnergy France, a separate legal entity registered in France. As a result, these figures are not reported to the US government. However, global consolidated figures for blueEnergy presented here include cash figures from all segments of the organization and the percentage divisions are based on the consolidation of the two segments' financial reports.*



GOVERNANCE & LEADERSHIP

As part of blueEnergy's commitment to gender equality and our prioritization of a gender lens in our work, we are proud to announce that over half of our leadership roles are held by women. Globally, blueEnergy's operational team is over 70% women-led, and our Board of Directors is 50% women.

Board of Directors

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Co-Founder blueEnergy

Maricela Kauffmann
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Michèle Grégoire
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International Executive Director

Alicia Barotte
France Development and Communications Coordinator

Guillaume Craig
Senior Program Advisor
blueEnergy Co-Founder

Contact

Madeleine Bouton
blueEnergy United States Manager
+1 615 818 8998 (USA)
madeleine.bouton@blueenergygroup.org

Sandra Pavón
blueEnergy Nicaragua Country Director
+505 8917 0651 (Nicaragua)
sandra.pavon@blueenergygroup.org

Jacky Bauley
blueEnergy International Executive Director
blueEnergy France Country Director
+33 6 64 04 33 49 (France)
jacky.bauley@blueenergygroup.org

blueEnergy Group
1595 Walnut Street
Eugene, OR 97403
United States of America

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