

THE STORY OF ENERGY ACCESS

HOW ENERGIA AND HIVOS WORK WITH PARTNERS TO
EFFECT GLOBAL CHANGE BY FOCUSING ON LOCAL,
SUSTAINABLE SOLUTIONS



SUSTAINABLE ENERGY FOR ALL

When a single mother in Indonesia was struggling to make ends meet, she discovered the economic power of sustainable energy.

Thanks to training she received as part of Kopernik's Wonder Women initiative, she became an energy entrepreneur and used her earnings to build a home on Lembata Island, where she lives with her two children.

In Ghana, the introduction of improved cookstoves transformed the lives of the women working in the Tungteiya Shea Butter Association. With help from SNV, 475 women in 11 communities halved their use of fuelwood, increased their profits, and improved their quality of life.

In Guatemala, women like Matilia Cedillo transformed their lives and those of the people around them with solar power. Matilia started as a volunteer, and now, as a nonprofit employee, has helped villagers in 50 communities understand the benefits of adopting sustainable energy solutions, with support from ACCESE and Hivos.



SNV works globally in part to help expand access to clean, efficient cookstoves.

Globally, 1.3 billion people lack access to energy and 2.6 billion people rely on unhealthy biomass for cooking and heating.

Sustainable Energy for All (SE4All) was created in 2011 by the United Nations to help make sustainable energy accessible globally by 2030.



As part of the Wonder Women initiative, Kopernik is training women to become energy entrepreneurs in remote areas of Indonesia.

The projects in this booklet work every angle and across sectors to solve the issue of energy access. Ranging from off-grid "first mile" communities to government buildings in capital cities where energy legislation is passed, these projects empower female energy entrepreneurs, introduce technical innovation, and expand supply chains.

Access to sustainable energy leads to better health outcomes, higher profits, and happier people. These projects strengthen communities and benefit the environment. Many also integrate business strategies, providing economic opportunities to those whose options are few. In short, the investment is minimal and the outcome is massive.

With projects like these, ENERGIA, Hivos, and their civil society organisation (CSO) partners are working towards the goals of Sustainable Energy for All (SE4All) and the new Sustainable Development Goals (SDGs).

THE PROJECTS:

ACCESE (Alianza Centroamericana para la Sostenibilidad Energética)

A Regional Energy Network in Central America

Center for Rural Technology-Nepal (CRT/N)

Promoting Women-led Enterprises for Energy Access and Local Production

(ENERGIA WE Programme partner)

GVEP (Global Village Energy Project)

Energy Opportunities for Women in Senegal

(ENERGIA WE Programme partner)

Hivos' Sumba Iconic Island Project

a multi-actor programme

Kenya Bureau of Standards (KEBS)

(in partnership with Hivos East Africa)

Development of Biogas Standards

Kopernik

Scaling up Clean Energy Technology Through Women's Empowerment in Eastern Indonesia

(ENERGIA WE Programme partner)

Practical Action Eastern Africa

Women in Energy Enterprises in Kenya Project

(ENERGIA WE Programme partner)

SNV

Energy, Poverty, and Gender in Agro Processing (EPGAP) Project

Solar Sister

A Green Energy Revolution Powered by Women's Enterprise

(ENERGIA WE Programme partner)

ZERO

(in partnership with Hivos Southern Africa)

Influencing National Energy Policy



In Senegal, GVEP provides female entrepreneurs with access to improved cooking technologies, mentorship, and information on how to integrate sustainable energy technologies into their businesses. This support helps women grow their enterprises and strengthen their communities.

GLOBAL ENERGY ACCESS



How can a country truly develop when it lacks access to energy? This is a problem ENERGIA and Hivos are dedicated to solving.

It starts with empowerment. In 2014, ENERGIA launched the Women's Economic Empowerment (WE) Programme to enable 3,000 female entrepreneurs while bringing much needed energy technologies and products to 2 million consumers in communities without access to reliable energy. Throughout the next four years, ENERGIA partners will help develop and support microenterprises and small businesses led by women in Asia and Africa. In addition to helping women become change agents in the energy sector, WE Programme partners are engaged in national advocacy efforts to ensure that gender perspectives remain part of the global energy access conversation.

Training is only one part of the equation, however. That's why Hivos works with its CSO partners to tackle persistent obstacles blocking the adoption of renewable energy technologies, such as legislation, community perception, and the absence of real-world business models.

Globally, energy demand will rise 30% by 2030.

ACCESE helps teach communities in Central America about renewable energy technology. Once reliable power arrives, doors open to other technologies, like this information center in Guatemala.



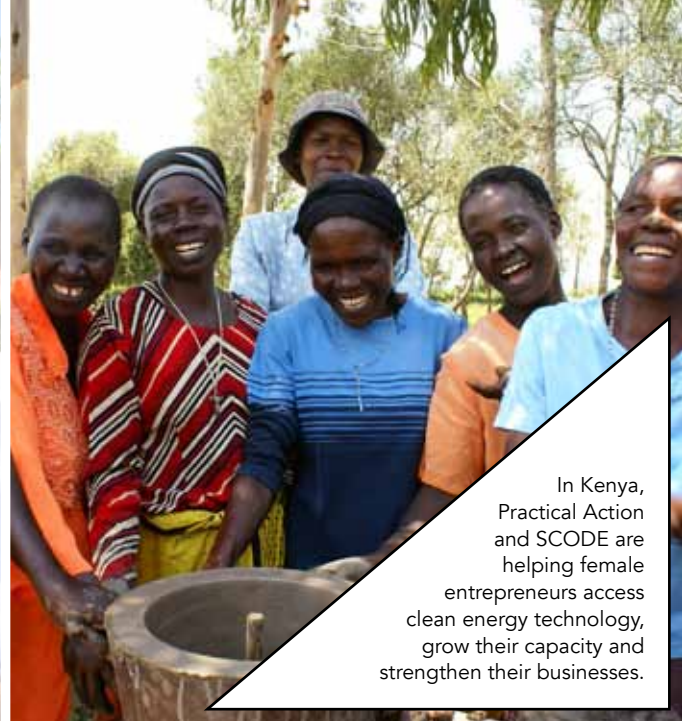
Hadija, a Solar Sister entrepreneur in Tanzania, takes notes on recent sales by the light of her solar lamp. Before she started selling solar products, Hadija's small farming village had little access to modern electricity technology and relied on kerosene and candles for illumination.

By creating and showcasing effective projects, Hivos seeks to inspire CSOs and involve relevant stakeholders in government, the private sector, and the media.

Lack of access to energy is a complex issue. Through advocacy, policy, innovation, entrepreneurship, and education, ENERGIA and Hivos are working to close the access gap and move towards the Sustainable Energy for All (SE4All) goal of universal energy access by 2030.

In four years time, ENERGIA's WE Programme partners will reach more than 2 million people with sustainable energy solutions.

ACCESE-trained staff of local CSOs build trust within local communities and help them adopt renewable energy technology that fits their needs.



In Kenya, Practical Action and SCODE are helping female entrepreneurs access clean energy technology, grow their capacity and strengthen their businesses.



On the Indonesian island of Sumba, the community is helping to decide what clean energy technologies work best for their lives. Hivos is working with local stakeholders on the island to achieve 100% reliance on clean energy by 2025.



Industry standards bring customer satisfaction and investment in the supply chain. That's why Hivos and the Kenya Bureau of Standards are working to establish the country's first-ever biogas standards.

There is no one-size-fits-all solution to energy access.

Hence the dependence on local CSOs that are diverse, nimble, and adaptable to geographic and societal differences within their regions.

The answers in one country, or within one community, do not necessarily translate to another. This is why working with local CSO partners that understand their communities at an intimate level is key. When CSOs share their local knowledge with the government and

private sector, all stakeholders can work in concert. In short, community engagement increases the probability of success and the likelihood of adoption. In the following projects, CSO partners are accountable decision-makers — they know the benefits of renewable energy for their incomes, their health, and their communities.

ENTREPRENEURSHIP



Projects carried out by Solar Sister in Tanzania, CRT/N in Nepal, and Kopernik in Indonesia provide opportunities for women to become energy entrepreneurs. Women start their own businesses and become leaders who improve their communities by bringing affordable lighting, cooking, and water purifying technologies. They help their neighbors save money in the long run and also reduce the detrimental health effects caused by inefficient cookstoves and lighting products.



Projects by Practical Action Eastern Africa in Kenya, SNV in Ghana, and GVEP in Senegal help equip existing female entrepreneurs with the energy, tools, and knowledge they need to grow their businesses. With this acceleration, women develop strong business skills and are able to have a greater impact on their communities.



While these projects focus on female entrepreneurs, Hivos and their partners support male entrepreneurs as well.



An estimated 4 million people die each year as a result of indoor air pollution. That's compared to 4 million global fatalities from HIV/AIDS, malaria and tuberculosis combined.

Top: The CRT/N staff has created a three level training program for female energy entrepreneurs. Their WEE-Nepal project has a goal of training 500 women over three years.

Second: In Senegal, GVEP hopes their work with female energy entrepreneurs will bring access to improved energy products to 400,000 people.

Third: Kopernik Wonder Women energy entrepreneurs in Indonesia bring clean energy products to their customers. In Indonesia, 80 million people are without access to modern energy.

Fourth: SNV's EPGAP project is working in Ghana to bring improved cookstove technology to women-led industries. The technologies cut detrimental health effects of traditional stoves and cut the fuel costs for women by as much as half.

Bottom: Solar Sister entrepreneurs are working to bring clean energy technology to people in Tanzania where the majority of the rural population lacks access to modern energy services.



CHANGING POLICY

While some organisations work at the community level, others focus on connecting the private and government sectors in order to get everyone on the same page. By rewriting laws and influencing policy decisions, the case can be made for governments to support renewable energy projects on a national scale. Once governments say yes to sustainable energy solutions, private sector investments often follow. For example, KEBS and Hivos are working closely to develop Kenya's first ever biogas standards. By establishing standards, the potential to build trust with consumers is great. And with quality control measures in place, more people are likely to adopt these goods and services.

To meet SE4All goals of improving sustainable technology, global investment will need to be tripled.



Above: The Hivos Sumba Iconic Island Project is transitioning an entire island community in Indonesia to 100% renewable energy. The project has inspired policy makers to try to replicate the model on other islands.

Above: Kenya currently has no renewable energy industry standards. Hivos is helping to change that by assisting in establishing national standards for the biogas industry.

ADVANCING TECHNOLOGY AND EXPANDING SUPPLY CHAINS



Above: Distrust of biogas technology has led to a lack of adoption. KEBS & HIVOS hope that establishing biogas standards will help increase customer trust and fuel an uptick in the use of biogas products.

Multiple projects around the world are putting technological advances to the test. In Indonesia, as part of the Sumba Iconic Island Project, Hivos is converting a remote, off-grid island to 100% reliance on renewable energy sources. In Nepal, CRT/N's work with improved cooking stoves (ICS) is creating a market for sustainable energy products.



Above: The CRT/N WE program in Nepal connects newly trained, improved cookstove entrepreneurs with manufacturers who can supply them directly with products. It is hoped that these connections will help create an established supply chain for ICS technology.

Creating market stability ensures consumers can access these new products and gives entrepreneurs a reliable pipeline of products to feed the demand. In Ghana, SNV is growing and harvesting sustainable fuel wood for female entrepreneurs so they can reduce the impact of harvesting native plants and create a supply chain that is both sustainable and affordable.

ENGAGING IN ADVOCACY



Matilia Cedillo works with Semillas del Sol in Guatemala helping to educate and inspire villages to adopt renewable energy technology. Semillas del Sol is part of the ACCESE Network.

In countries around the world, CSOs are working locally and nationally to raise awareness of sustainable energy. Some, like ACCESE in Central America, and ZERO with Hivos in Zimbabwe and South Africa, use a combination of research, education, and information sharing to keep journalists and nonprofits informed about the landscape of renewable energy — how it works, the benefits and barriers to adoption, legislation, and the power of existing fossil fuel parties. The hope is that community, government, and private sector projects will be more likely to incorporate sustainable energy into their action plans and that the media will champion the cause.

As part of their involvement in ENERGIA's WE programme, CRT/N, GVEP, Kopernik, Practical Action, and Solar Sister are working on national advocacy efforts in Nepal, Senegal, Indonesia, Kenya, and Tanzania respectively. This work includes producing multimedia awareness campaigns, attending national and international energy-related events, meeting with government officials, and influencing their respective SE4All country action agendas. In Africa and Asia, WE partners are influencing the understanding of energy access and women's roles in expanding sustainable energy at every level.

ENERGIA

Through the WE programme, ENERGIA's partners help women become change makers in their communities. And life is different when the sun goes down — students can study by solar light, improved cookstoves emit fewer fumes and lead to better health outcomes, families save money they would have spent on kerosene lanterns and time spent collecting fuelwood, and the environment gets a rest.

HIVOS

Hivos and their partners are changing minds on the street and in the legislature with their policy work. Through various education initiatives, they're helping the media and local CSOs be better informed. Examples like the Sumba Iconic Island Project illustrate that renewable energy isn't tomorrow's dream but today's reality.



HIVOS partnered with the community, local government, and the private sector on the Sumba Iconic Island project in Indonesia. This coalition ensures all shareholders are engaged as decision-makers in the plan to transform the island to rely on 100% renewable energy sources by 2025.

Civil Society Organisations have a solid understanding of what will and won't work in their communities, and they're able to witness the changes brought by these programs. By working with CSO partners on the ground, Hivos, ENERGIA and their global colleagues are working toward a more sustainable planet, where no one's life is hindered by lack of access to energy.

A BRIGHTER FUTURE FOR ALL



The purpose of these projects is to work toward the goals of SE4All and the vision of the SDGs' renewable energy goal announced in 2015, which aims to ensure access to affordable, reliable, sustainable, and modern energy for all. These projects are uniquely positioned to help pursue that agenda, yet they don't stop there. They help reduce poverty, improve health, empower women, provide productive employment, foster innovation, reduce inequality, create more sustainable communities, reduce consumption, combat climate change, and strengthen global partnerships, all in the pursuit of a more just and peaceful future for humanity. All of these outcomes are defined in the SDGs, and each is furthered by access to energy. Every organisation championed here knows that with increased access to sustainable energy, a door to a brighter future is opened.

Globally, more than 2.6 billion people live without access to modern energy services. Organisations like ACCESE are helping to educate these communities on clean energy solutions.



Collecting fuelwood can be time consuming and traditional cookstoves are inefficient. GVEP and others are helping expand access to improved cookstove technology, which will help families save time and income.



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