

## Our experience

### Tanzania Improved Cookstoves (TICS) Programme | Tanzania | 2013 – 2018 | €3.4 million

This project builds upon the positive dynamics of existing local stove supply chains and supports the production, distribution and sales of stoves. This has been realized through the development with local artisans of the 'Jiko Matawi' – a multi-purpose stove convertible for firewood and charcoal. Main donors and partners: Energizing Development (EnDev), GIZ. 27,500 rural Tanzanian households now enjoy improved cooking.



### Market Acceleration of Advanced Clean Cookstoves in the Greater Mekong Sub-region 2015 – 2019 | multi-country | €3.8 million

In Cambodia, Laos and Vietnam, over 65 million people still cook on traditional biomass stoves that contribute to local forest degradation, generate greenhouse gas emissions and pose multiple health risks. Advanced cookstoves are cleaner, safer and more energy efficient. The project is implemented by GIZ and SNV under the global multi-donor Energizing Development (EnDev) partnership. It is developing a viable market for clean smokeless cookstoves by supporting the sales of 120,000 devices in the target countries. The project employs a results-based finance facility to strengthen the nascent market of advanced clean cookstoves. In 2017, the project sold more than 12,000 clean cookstoves.

### Improved Cooking Stoves Market Acceleration Project | Kenya | 2014 – 2018 | €1.9 million

The improved cookstoves sector in Kenya has been growing over the last 30 years. Between 1.5 million and 3.1 million stoves have been sold. Advanced cookstoves with improved efficiency ratios, reduced negative health risks and longer lifespans are emerging in the market. The project is funded by DFID through the Energizing Development (EnDev) programme and managed by SNV. Using a results-based financing mechanism, the project reduces entry and market development barriers by subsidising the sales of these advanced clean cook stove devices. The sale of cookstoves with project support started in 2016 and to date more than 11,800 cookstoves have been sold.



### Improved Cookstoves with Carbon Finance | Nepal | 2012 - 2017 | € 2.3 million

This 5-year project started in the poorest region of Nepal in 2012. It focuses on sustainable market development, by moving away from the traditional aid-based approach and by working towards a private sector-led distributor/retailer setup, aiming to reach 150,000 households. Main donors: DGIS, OFID, Eneco. Achievements: By the end of 2014, 40,000 improved cookstoves have found their way through the market and a Clean Development Mechanism Programme of Activities has been registered.



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Visit for more detailed information [www.snv.org](http://www.snv.org) or contact:

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SNV

Capability statement -  
Clean Cooking and Heating



### The challenge

It is estimated that around 3 billion people rely on polluting fuels (biomass, coal, kerosene) for cooking. Using solid fuel for this purpose can lead to highly negative economic, social and health impacts for low income households.

According to the World Health Organization, air pollution is the single most important environmental health risk worldwide, with around 4 million premature deaths annually due to household air pollution. Women and children suffer most from the adverse impacts of energy poverty as they spend a significant proportion of their time in the home and are responsible for cooking and gathering wood. Also, fuel inefficient cookstoves expose women and children to injuries and respiratory illnesses due to smoke inhalation.

It is clear that we need to do more. As recently highlighted in the "Accelerating SDG 7 achievement policy briefs" developed in view of the UN High-Level Political Forum, it was clearly stated that if we are to be successful in reaching the goals of SDG 7 - clean-cooking solutions must be a top political priority.

### The opportunity

To address these problems, clean, fuel-efficient stoves and bio digesters have been developed, with promising results in terms of reduced wood-fuel use and smoke emissions.

Through SNV's market based programmes, these stoves and digesters are made available to those who need them, facilitating health, financial, and social benefits. Families are healthier and wealthier, and local improved cookstoves businesses are flourishing.

### The benefits

- Women and children are less exposed to harmful emissions
- Families save costs on fuel expenses
- Women spend less time cooking and collecting firewood
- Local businesses emerge in the improved cookstove and fuel sector
- Climate impacts are reduced due to lower greenhouse gas emissions and less forest destruction

### SNV approach

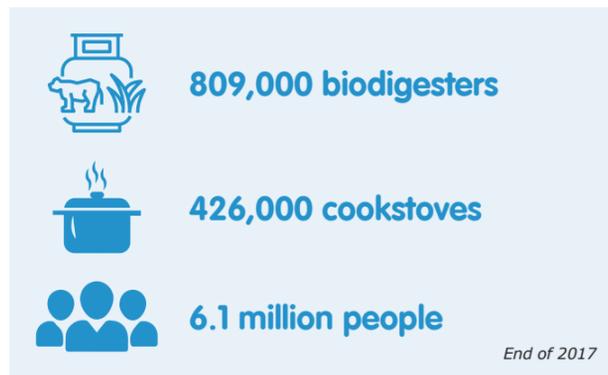
With the right mix of approaches, solutions and technologies, we work with public and private partners to empower rural and peri-urban markets. By ensuring energy access and facilitating progress in market creation, gender equality, security, health, education and climate change mitigation, our projects have improved the lives of millions of people around the world.

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## Results

In 2017 alone 200,000 people gained access to clean cooking, 70,000 to a bio-digester and emissions were reduced by 280,000 tons.

SNV has two flagship biogas projects - the National Biogas Scale Up Project (NBPE+) Ethiopia and the Vietnam Biogas Programme. Both programmes aim to create a commercially viable, domestic biogas sector in their respective countries and in 2017, a combined number of almost 44,000 people gained access to a bio-digesters. In Ethiopia alone, under the programme, 9,300 job opportunities were created.



## Accelerating markets for clean, affordable cooking solutions

### Sustainable markets

Market acceleration is critical in our work, so we support small and established companies to bring functional stove and fuel combinations to end-users. We deploy innovative mechanisms like results-based finance and verification systems to monitor market development and create new business opportunities.

### Challenging gender norms

From the household through to the marketplace, we are balancing benefits between women and men in an effort to build equal income and business opportunities. A transformative gender approach is applied across all our work, integrating food and nutrition security, and climate resilience approaches. It explicitly aims to change gender norms and relations in order to promote more equitable relationships between men and women, and a more socially enabling environment.

### Climate and health

In our work to accelerate markets for clean and improved cooking solutions, SNV has helped to bring about a reduction of over one million GHG emissions through its Gold Standard projects for cookstoves and biogas across Asia and Africa. We also contribute to climate action programmes such as NAMAs and NDCs. Our clean cookstoves and biogas dissemination programmes positively impact health by reducing the emission of smoke. These programmes form part of innovative impact investments aimed at averting ill-health, disability or premature death.

A digester on average reduces 6 tonnes of CO<sub>2</sub>-eq, resulting in a combined one million carbon credits being issued each year under Gold Standard. In kitchens cooking solely on biogas, the PM 2.5 concentration levels drop from 172 to 35 µg/m<sup>3</sup>, resulting in significant health improvements.

### Quality assurance

One driver of success is our internal standard operational procedure, under which every cookstove project has to be supported by evidence from IWA Water Boiling Test, Controlled Cooking Tests and field surveys on stoves usage. Monitoring data is gathered through digital data collection tools that feed into cloud-based dashboards and maps, accessible to stakeholders and our clients.

### Who we work with

- Our 70+ experts work in collaboration with a wide range of private sector partners, knowledge institutes, NGOs and donors.
- Donors: AFD, DFID, DGIS, EnDev/GIZ, EU, GEF, MasterCard Foundation, OFID, World Bank and more.
- Business partners: Local biogas construction enterprises, cookstove manufacturers.
- Non-commercial partners: EnDev/GIZ, SE4All, World Bank and more.

### Urban and refugee settlements

SNV is making strides to engage with low income groups in urban areas and refugee settlements in Africa and Asia to improve livelihoods for those who need it most, and to spur market development in these underserved areas. Pilots in Kenya, Nairobi and Kibera underline the relevance of clean cooking solutions for those who are exposed to smoke from kerosene, wood and charcoal. Through smart intervention strategies, SNV strongly believes we can ignite change and actively seek partners to scale up and replicate best practises.



“Nowadays I can cook in the main house on the gas stove and I don’t have to inhale the thick, damaging smoke from the open fire as often. Also, I am able to cook breakfast quickly for my school going child, saving lots time in the morning.” Amman Family, Ethiopia.

### Developing no deforestation fuelwood value chains in DRC

In the DRC, SNV strives to make the fuelwood value chain more sustainable. Interventions include: participatory development of a sustainable charcoal standard, support to charcoal producers to abide by the standards, sustainable charcoal and Improved Cookstoves (ICS) retail network creation, development of a national standard for ICS and the development of fiscal measures to encourage compliance with the charcoal and ICS standards. Main donors and partners: DGIS, Provincial Authorities and ISTA, a local technical university. Achievements: A national knowledge and testing centre has been set up, over 300 charcoal makers are producing sustainable charcoal, a national ICS and fuel alliance have been created and several quality ICS brands are available on the market.