Disastrous energy poverty
56% of Haitian households live in energy poverty, with serious consequences for their own health and budget as well as for the environment. With no access to gas, they use expensive charcoal for cooking, which causes tiredness, noxious fumes, and dramatic deforestation (there is 2% forest cover in the country today, compared with 20% in 1978). Access to electricity is also a major problem: even for the rare houses actually connected to the electricity grid, the power supply is intermittent.

Access to energy for households in the greatest poverty
Entrepreneurs du Monde created PALMIS Enéji in 2012 for these people living in energy poverty. It helps them to obtain efficient, economic and modern cooking and lighting equipment, bringing tangible benefits for their health and budget as well as the environment. The lighting kits on offer are powered by renewable solar energy.

A distribution network to the last kilometre
PALMIS Enéji has created a brand and a network of micro-franchised resellers to distribute adapted, innovative and efficient equipment (solar lighting kits, gas heaters and improved wood/charcoal stoves) with accessible prices and payment conditions. Its activity includes community awareness-raising and capacity building.

A project that has become a limited company
PALMIS Enéji became a limited company under Haitian law in 2014, and is funding its development through an innovative mixture of shares, loans, and subscriptions. In 2019, several socio-political problems slowed PALMIS Enéji’s growth (31% instead of the planned 43%), and reduced its operational self-sufficiency to 71%. But Entrepreneurs du Monde will continue to support this young social enterprise even through the difficult periods, until it becomes fully autonomous.
61% of the population is not connected to the national electricity grid. The situation is even more critical in the remotest areas of the country where 44% of families live. Far from metalled roads, they have no access to modern, efficient cooking and lighting equipment and have to pay a high price for less efficient stoves and lamps. The lamps, which are not very robust, do not last long and have to be replaced regularly.

In 2019, PALMIS Enéji developed its distribution network in the isolated villages of two landlocked rural departments: Centre and Grande Anse, at the south-eastern extremity of the country. To reduce transport costs the team distributes its products to micro-franchised resellers, who sell them in the surrounding villages. It takes several hours to reach some of these resellers, but they are in close proximity to the communities who need the lamps and stoves.

The products in greatest demand are the simplest and most robust ones: a solar lamp guaranteed for 2 years costs €10 and an improved charcoal stove costs less than €8. PALMIS Enéji trains the resellers in how to use and maintain these products. Promotional events are also organised in the villages to raise awareness and train the users directly.

### Establishment of an after-sales service

In 2019 the team sold more than 8,000 pieces of cooking equipment and more than 4,000 pieces of lighting equipment. They ensure that the equipment is delivered to the last kilometre. The after-sales service was also strengthened in 2019, to ensure that a stove maintenance and repair service is provided. The customers have a direct line to request help from PALMIS Enéji. Their complaints are recorded and a technician is sent to repair stoves free of charge throughout the west.

### Carbon Finance: one more step towards autonomy

10,000 tonnes of CO2 emissions per year are avoided as a result of PALMIS Enéji’s work, enabling them to sell carbon credits. It has reached the ceiling authorised by the certifying authority, the Gold Standard. The team are preparing for a change of scale: they are going to register the project in a higher category so that they can record up to 60,000 tonnes of CO2 avoided each year. This carbon finance will contribute to the viability of PALMIS Enéji and allow it to strengthen the different types of support offered to its users.

### A national service

The PALMIS Enéji team has a clear goal: to have a sales point for solar lamps and clean stoves in every village, to make this equipment available to all. It is therefore constantly recruiting new micro-entrepreneurs and training them, especially in raising awareness within their own community. There are currently 116 such resellers and there will be at least 300 by the end of 2020. PALMIS Enéji also wants to install solar panels in villages and peri-urban districts.

### Facilitating access to gas refills

More and more families want to cook with gas rather than charcoal. However, it is still difficult to access this fuel. In some settlements there is no refill facility and the nearest one is tens of kilometres away. To overcome this hurdle, PALMIS Enéji is going to build a network to transport bottles to the last kilometre.

### OUTLOOK

#### Savings achieved by the families

<table>
<thead>
<tr>
<th>Year</th>
<th>No of products sold</th>
<th>No of families equipped</th>
<th>No of new indirect beneficiaries</th>
<th>Sales generated (€)</th>
<th>Savings of CO2 (t)</th>
<th>Wood (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>13,800</td>
<td>2,200</td>
<td>44,200</td>
<td>383 RE</td>
<td>1,054 ME</td>
<td>44,241 ME</td>
</tr>
<tr>
<td>2019</td>
<td>12,468</td>
<td>9,974</td>
<td>39,986</td>
<td>460 RE</td>
<td>910,000 €</td>
<td>40,507 €</td>
</tr>
<tr>
<td>Objectives</td>
<td>12,520</td>
<td>10,016</td>
<td>40,064</td>
<td>560 RE</td>
<td>983,000 €</td>
<td>47,717 €</td>
</tr>
</tbody>
</table>

#### Key figures

- 70% of beneficiaries live in rural areas
- 61% of the population is not connected to the national electricity grid
- 44% of families live in the remotest areas of the country

#### Highlights

- Carbon Finance: one more step towards autonomy
- Establishment of an after-sales service
- A national service
- Facilitating access to gas refills

#### Partners

- AFD
- Fondation Michelham de Hilly
- Fondation RAJA
- kiva
- MORE INFOS

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