# HPP Productive Units reducing emissions of greenhouse gases by installing and using

# carbon-neutral energy

**Practically all HPP Countries have at least some PUs with solar powered electricity. Angola has calculated that it is cheaper to install and power a DNS with solar electricity than to use generators – here DNS Caxito.**

**Frontliners making the final connections on their solar system in Zimbabwe. The aim is to have enough panels by the end of 2016 to get off the public grid.**

**Solar powered pumps have become cheaper and the investment can be paid back over some years. Here such a solar pump system providing water for a Garden Farm in Guinea Bissau.**

**ADPP Mozambique has given at least 20,000 people in Cabo Delgado province and around One World University access to solar lanterns and solar charging of mobile phones – here at a local health clinic.**

# Some of the many children in Mozambique benefitting from access to solar lanterns.

# A solar project by HPP in India also has brought rechargeable solar lanterns to 35,000 people.

**Fighting with the Poor students at One World University have trained 450 women to make firewood saving stoves, and each of them trained one more. The 900 families use their stoves and make new ones when needed.**

**These stoves cut the need for firewood in half, with the result that less time is spent on fetching firewood, and that less $CO_2$ is emitted to the atmosphere.**

**ADPP Mozambique started up production and sale of quality firewood saving stoves in 2012. This has since expanded with 24 people trained in Nampula.**
**They have produced and sold about 10,000 such stoves.**

# Many of the stoves were sold through ADPP Mozambique's preschools.

**245 primary schools in the Food for Knowledge Program in Maputo Province, Mozambique, have built these larger ‘‘rocket stoves’’ to cook the daily food for all children.**

**Other systems saving firewood are solar cookers, such as this one demonstrated by vocational students in Malawi.**

**This biogas dome under construction at a Productive Unit in India will through a fermentation process turn cowdung into a carbon neutral gas.**

**Cattle owners are investing in the biogas plants, because HPP India manages to demonstrate the benefits of having clean cooking gas and the good economy of the investment. Here, preparing the cow dung slurry.**

# The biogas has no smell when burned and can be used for cooking or to provide light.