

## **Crowdfunding campaign - UPS system**

### **SUMMARY**

In Peru, the unreliability of the national energy grid puts life-saving vaccines under constant threat. Medical centers in rural communities like Talara are particularly vulnerable to power outages, which leave vaccine refrigerators without electricity for several hours. The consequences of these blackouts are immense, both in terms of vaccine losses and financial costs. With the current global health crisis, there is now more than ever a necessity to improve the resilience of the local health facilities.

Ecoswell proposes to take advantage of the year-round solar radiation of the region to implement a UPS (Uninterruptible Power Supply) and Solar Panel system at the Medical Center of Talara. After successfully installing a similar system in the Lobitos Health Center, the EcoSwell team aims to replicate it in other medical centers and have a large-scale impact on the local healthcare system.

Our team has already secured 70% of the necessary funds. We now need your help to collect the remaining \$12,400 to launch the project!

### **CHALLENGE**

Vaccines provide a future for communities, the country and globally. Frequent blackouts, severe weather events (such as El Niño) and an unreliable energy grid have caused vaccines to be lost on several occasions, straining resources and putting the region at risk. This issue adds up to the country's already poor health system. Peru has the highest Covid death rate as a proportion of population in the world according to the EEAS (2021). The Piura region, more specifically, suffers from a strong lack of financial resources, low health literacy, and has one of the lowest densities of health care workers in the country.

The Talara medical center has been a low priority for the region, and vaccination rates of the area remain low. The population is particularly vulnerable to illnesses and disease outbreaks.

Moreover, the next medical facility for people to receive vaccinations is 84 kilometers away. The first step to make Talara a reliable and resilient health center is to ensure the reliability of its cold chain.

## **SOLUTION**

Talara is located in a coastal dry forest ecosystem that receives high levels of solar radiation. This project consists in the implementation of a UPS (Uninterruptible Power Supply) and Solar Panel system that will provide the Medical Post with over 72 hours of backup energy storage to mitigate the impact of most energy cuts. Besides the technical side, this project gives a great importance to building a trust relationship and guiding the local community towards sustainability on a long term basis.

## **LONG-TERM IMPACT**

This project will be directly contributing to the United Nations SDGs number 3 (Good health and well-being) and number 7 (Affordable and clean energy).

The efforts of installing UPS and Solar Panel Systems will contribute to making Talara a key vaccination center in the region. The financial benefits resulting from both energy savings and avoided losses of vaccines will enable the center to purchase equipment and undertake new projects. In the long run, this will contribute to the improvement of the healthcare system and increase the vaccination rate in Talara and neighboring districts.

The system also has a strong environmental impact. The solar panels reduce the center's consumption of regular electricity by around 40%. Installing solar panels also contributes to educating and bringing awareness for the local community about renewable energy, serving as a gateway to becoming a more sustainable and environmentally-friendly community.

Lastly, this project aims to make the local community responsible and accountable for the sustainability of the project through local capacity building, definition of roles, responsibilities,

and technical support. Eventually, the ownership of the system will be fully transferred to the Medical center.

## **ADDITIONAL**

EcoSwell has been well established within the Piura region since it was founded in 2013. The organization is heavily focused on designing and implementing small scale, high impact solutions to guide vulnerable communities through the path of sustainable development. Our holistic approach intends to impact the diverse basic services that are required to surpass the poverty status, both from a monetary and a quality-of-life perspective. This intent led us to four areas of expertise in our development work: ecosystem restoration, renewable energy, sustainable sanitation, and public health. aligned with 10 sustainable development goals. With over 19 completed projects, our extensive experience and respect within the area, alongside the already established 39 national and international partners (private companies, universities, public institutions, civil society organizations, amongst others). For our renewable energy projects, we work closely with private technical partners such as Enel Green Power and Waira.

When talking to Luisa Cosio, the Head of the Medical Post in Lobitos about the 2019 UPS project, she said: “For me, their (EcoSwell's) impact is tremendous; they are doing a lot for the Medical Post and conservation of the environment. I love working with EcoSwell because when they promise something, they follow through.”