

EDUCATIONAL EXPERIENCES EMPOWERING
PEOPLE TO CREATE A SUSTAINABLE WORLD

The Highest Wind Turbine in the World

WindAid and the community of Catac have broken a Guinness world record, having installed the highest altitude wind turbine in the world! Officially certified this month by Guinness, the turbine provides electricity to the community beside the shrinking Peruvian glacier of Pasto Ruri at 4,877m (16,000ft) above sea level. The remarkable project saw all involved put to the test fabricating and installing the 2,500W turbine and circuitry to provide light and power to the people of Pasto Ruri, and is growing into long-term sustainability projects for the Catac community in the Peruvian Andes.



WindAid volunteers assembling the turbine in the majestic Andes!

The village survives on income from selling local crafts, drinks and meals to tourists who come to hike up one of the few remaining and most accessible glaciers in Peru. The glacier has receded over 22% since the 1980s, putting the residents of Pasto Ruri in a tough spot. As the glacier has retreated, so to the number of visitors has dropped to a third of the number that they received in the 1990s, as only some tourists are interested in viewing the effects of climate change up close. As a result, villagers have been struggling to make ends meet, and as the village is too far from the national electricity network to have a connection, it was

without any alternative but to power their businesses and homes with expensive gasoline powered generators – if at all.

More than 50 wind turbines have been built and installed by the international WindAid team of volunteers. Usually WindAid donates the generators to off-grid rural communities for use in schools and town halls so that all neighboring farmers and families can access and benefit from the power. Electricity can ultimately change the lives of and offer new opportunities to the residents of impoverished and isolated villages in Peru. Heaters and lighting are used for studying or crafting at night, refrigerators to preserve food, and electrical outlets to plug in radios and cellular telephones to hear the news from and connect to the rest of the country.

The WindAid crew knew the contribution they were making for the people of Pasto Ruri, but it took a deep personal struggle to deliver in such extreme conditions. Three weeks of production in WindAid's Trujillo based



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workshop on the northern coast of Peru saw them learning to, and then soldering, wiring, molding, sanding, finishing and painting all parts of the wind turbine. They also assembled and tested the generator and other components to make sure they were ready for use. Then all the components were driven to and finally carried up the 4,877 meters to the installation site, 300 m higher than the previous altitude record in the Himalayas. The installation was a true battle against the elements, the cold, snow flurries and the effects of the rarified air added to the technical and logistical challenges of lifting the heavy parts of the generator, assembling them correctly and testing the turbine for working functionality. But the volunteers faced these with heart and the belief that they were building a part of the solution, in the 3rd most vulnerable country in the world to climate change.

That climate change has left this community with incredible need for access to clean, reliable energy to help them live better in this austerely beautiful part of the world. The harsh reality they face every day, and the interaction with the turbine has empowered Catac to expand into a variety of sustainably focused projects. This includes programs on educating people about the

dramatic effects of climate change through a dedicated museum, and improving the lives of those in the region with no access to conventional electricity through further installations with WindAid, just like those in Pasto Ruri.

As the wind turbine at Pasto Ruri was raised and began to turn, founder of WindAid, Kevin Michael VerKamp, spoke to the gathered villagers, officials, volunteers and press, "We began designing these wind generators on the roof of my house, now we're installing them on the roof."

now we're installing them on the roof of the world."



The community will live in the glow of clean energy!

For more information and to see other projects visit www.WindAid.org, where you can volunteer to light up a life by building and installing an off grid turbine for a rural community in Peru.