



IATL

Thanks to the University of Warwick IATL, The Green Wheels team has been able to achieve its goal: cycling 18,000km across 32 countries in 365 days to promote green energy through microfinance.

WHAT IS “THE GREEN WHEELS”

The Green Wheels is a social business aiming to promote renewable energy in developing countries. To do so, Roland, Maxence and Louis are cycling around the world and will cross more than 30 countries over the course of one year. In each country they visit, they are trying to meet a maximum of green energy actors. The ultimate objective is to lend 30,000 euros to entrepreneurs willing to meet their energy needs thanks to clean and small infrastructures.

365 days around the world
32 countries
17,787 kilometres cycled
12 projects



OUR ADVENTURE

We have been cycling around the world for a year! By cycling through four different continents we went through every kind of landscape, fought against the wind, the rain the snow and the sun, we spent days climbing hills, but what never changed is that we all believe that cycling is the best way to travel.

1. ANOTHER WAY TO TRAVEL

Although cycling on daily basis can sometimes be challenging, we are convinced that is an extraordinary means of transport to discover the greatness of the world! It is much easier to realise how mind blowing landscapes are. Moreover, bicycles also mean freedom! They grant us access to places which would not be accessible by car. Being forced to take small roads we ended up cycling through highly remote areas where locals had never seen European.



2. MEETING GENEROUS PEOPLE

Through the various countries we have visited, we were struck by the generosity of local communities. Almost everyday, locals have invited us to share a meal or sleep a night at their home. We all have been extremely surprised by this spontaneous generosity, for example when we were cycling across Iran locals invited us so often that we had to decline invitation every day. We believe there are several explanations to such generosity: first of all, the recent political history of certain of these countries. For instance, countries like Colombia, El Salvador and Honduras suffer from a long-standing negative reputation caused by a supposed lack of safety. In these countries, we observed locals giving their best to display a positive image. Secondly, cycling itself gives a positive image. Locals do not perceive us as 'tourists'. As they appreciate biking might be difficult, they are a lot friendlier with us! Here is a small anecdote that illustrates their kindness. We were in Colombian mountains suffering from strong heat. We stopped at a local store to buy water but unfortunately we did not have enough cash at hand to pay. An old woman who had witnessed the unfortunate occurring did not hesitate to offer us three fresh bottles, as she probably felt like helping three thirsty cyclists. This is a souvenir we will never forget.



3. ACHIEVING A PHYSICAL CHALLENGE

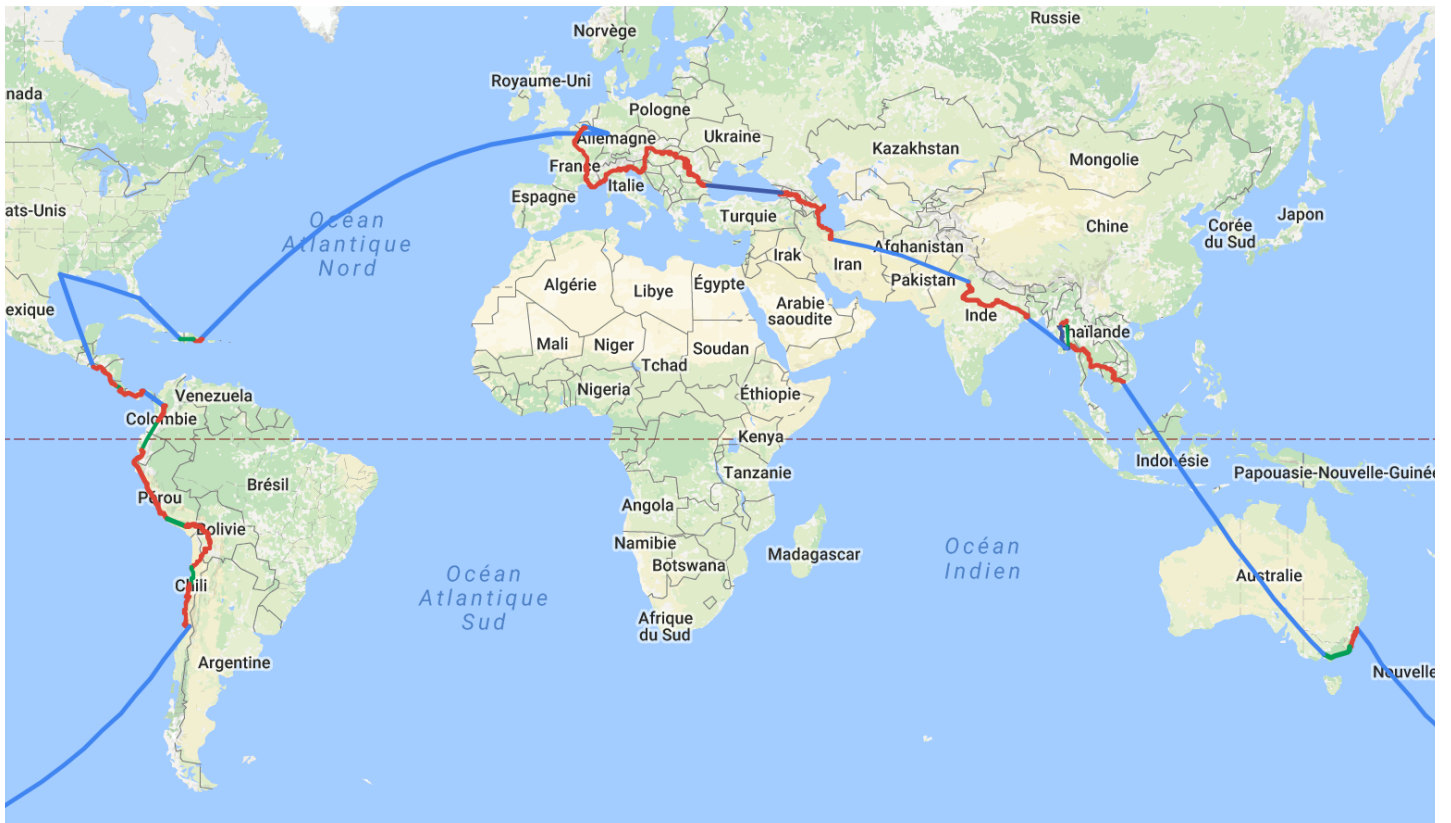


Cycling around the world was with no doubt the most difficult challenge of our lives. We had to overpass ourselves on a daily basis. Cycling around 80km a day required us to adopt a routine and to have a really strong team spirit. During this year we cycled against the wind, under the snow, we crossed snow storm and cycled when it was 49°C in Rajasthan, we had many time we were about to give up. The biggest challenge of the year was in Peru when we went up to 4350 meters. Apart from the below 0°C temperatures what exhausted us the most was the lack of oxygen and the absence of people living up there, however during this long way up the Andes we have been blown away by the landscape we have seen. Crossing Uyuni Salt Lake at 3,900 meters high in Bolivia was extraordinary.



THE ITINERARY

We planned our itinerary considering the projects we wanted to visit, the weather, and finally the geopolitical and geographical environment. We crossed a total of 32 countries and 4 different continents.



WHAT'S NEXT?

We truly believe that we have been really lucky to do this adventure. We would like to continue the Green Wheels project to help other young people to achieve the same kind of initiatives. During this year we realized the impact we had on local populations and on the people following our project. We are now working hard to find long-term partnership with our sponsors in order to secure some funds for a potential future adventure. Our final objective is to send other people visiting the projects we have financed but as well as financing new projects in order to expand our impact.



ADDRESSING ENERGY POVERTY

What can we achieve by addressing energy poverty?

Muhammad Yunus highlighted that the potential to prosper is inherent in us all. People living in energy poverty simply lack access to the basic stepping stones that will allow them to break the cycle of poverty.

All over the world, humans rely on constant access to modern energy to light their homes, cook their food, and communicate with one another. They rely on access to credit in order to invest and extend their wealth. They rely on markets to create profitable ways of delivering these basic needs and continue to service them, as customers, into the future.

It has been shown time and again that people living in poverty are no different. By providing access to modern energy through clean energy technology, lines of credit, and effective supply, they have the means to overcome energy poverty.





25 000€



Haiti
9950€
540 solar lamps
1507 stoves



Cambodia
6500€
352 solar lamps
985 stoves




Inde-Calcutta
745€
15 families financed in one community



Inde-Bangalore
2700€
30 families financed in 3 communities



Kenya
1770€
3 families and microentrepreneurs financed



Pérou
3180€
4 families and microentrepreneurs financed

During the year we have allocated 25,000€ to the projects we visited, here are a quick summary of some of the projects we financed.

The project we admired the most: Palmis Energy

Entrepreneurs du Monde, one of our two partners, launched in 2012 the Palmis Energy program. This later aims at proposing green tools to the Haitian population.

7,431 solar lamps and stoves sold
70 sellers
554 micro-loans granted to buy these products
A reduction of 13,500 tons in CO2 emissions

In Haiti, 72% of the population does not have access to energy. Most of it relies on coal and kerosene to meet the most basic needs. These resources are harmful both for the environment and health. Every year, thousands of people (especially women) are injured and die due to toxic vapors.

Palmis Energy aims at solving this problem by selling small solar lamps and stoves at an affordable price (each product ranges from 10 to 30 USD). It becomes safe, cheap and clean to produce energy and cook.

PE, created three years ago, is a good illustration of the new inclination towards green microfinance. It surely comes from the global awareness that poor countries will be the first to suffer from environmental degradation. The very essential goal is to enable people to save money and protect their inner circle while preserving the environment.





How does PE work?

PE selects trustable retailers in HaiC, who ensure an efficient distribution and promotion of the products. These products can be directly purchased or acquired through very small loans by PALMIS Mikwofinans Sosial. Every year, PE is giving the 'award of the best seller' to the most motivated actors. It is a good way to create a genuine emulation among actors.

Positive aspects

- Favors local employment (stoves are produced in the country)
- Enhances job formations (marketing, communication, management)
- Raise people awareness about sustainability and climate change
- Offers two years warranty
- 30% savings in energy for cooking and lighting
- Competitive price (\$12 per stove and \$30 per solar lamps)

We had the chance to meet and dialogue with several sellers, and realised that very small amounts of money can truly improve people's living conditions.

In brief, the visit to Palmis Energy made us realise the extent to which developing countries are deeply affected by environmental issues. We also learnt that the answers to climate change in developing countries will come from local initiatives, hand in hand with governmental ones.

- **Cambodia**

Entrepreneurs du Monde created Chamroeun (“*Progress, development*”) in 2006, in order to allow female small-scale market traders to access savings accounts, loans, training courses and health insurance. The programme has developed very well and has become an independent Cambodian microfinance institution which is financially self-sufficient.

Chamroeun is making efforts on its extensions to the province, towards populations for whom microfinance is even more out of reach.



- **India**

Globally there are over 1.3 billion people without access to electricity, of which, over 300 million are in India alone. Despite rapid economic development and ongoing energy access programs, this still represents a staggering 25% of India’s population

Pollinate Energy was founded in 2012 and is providing solar lamps and other green products to urban communities living below the poverty line. These communities do not have access to energy and water. Operating in Bangalore Hyderabad and Kolkata, this social business enabled 15,000 households to buy solar lamps in order to move away from energy poverty.

When allocating funds to these microfinance projects we were actually directly financing families or micro entrepreneurs who need a clean access to energy to satisfy their needs. Here are examples of micro entrepreneurs we supported.

- Peru

Two examples of people we met on the field and financially supported:

Francisca is 68 years old and lives in the rural village of Chuquibamba with her husband. She runs a hotel and asked for a micro loan to buy a solar water heater. To acquire such equipment for her business will provide better service without additional expenses as would be the case with a conventional water heater. In the future, Francisca wants to develop her business.

Beatriz is 37 years old and she lives with her son in the rural village of Pausa. She runs a shop where she sells clothes. She is extremely environmentally conscious and asked for a microcredit to buy a solar water heater. The solar water heater can reduce CO2 emissions and save electricity. In the future, she wants to improve her business, buy more goods and improve her living conditions.



- Kenya

One example of a family we supported:

Charity is married and has 2 children. This family is living in the village of Mitunguu. Charity, who runs a shop, is a member of Wema Mitunguu, a group of 13 other members. With 9 of these members they seek a microcredit to buy an improved oven (a solution to cook food in half the time, reducing CO2 emissions and 60% of coal consumption). In the future they hope to save energy with the use of these ovens.

**THANK YOU WARWICK IATL FOR BEING PART OF
THIS AMAZING ADVENTURE !!**

