

Shining Hostels – Brazil

SUMMARY

Project Description: This project consist in implementation of solar panels to use Brazilian's natural resource, the Sun. It also includes an educational part to show and teach our schools kid the importance of sustainability.

Project Type: Sun and Education in Sustainability
National Association: Hostelling International Brazil
Project Location: HI Arraial d'ajuda and HI Lua Cheia
Estimation of number of reduced tonnes of CO2:

The new solar panel system will save at least **6 tonnes** of CO2-e per year.

Total Funds Requested: £ 20,740
Total Project Cost: £ 21,040

Annual £ saves and ROI (return of investment): £ 915,6 with 8 years ROI

Contribution of the project activity to sustainable development: The hostels participating on this project are going to be sustainable multipliers in the country, so they will help other hostels on other project, and so we will be able to create a fast spread and develop sustainability in Brazil.



This project will give a very high motivation for all hostels in Brazil to use more their natural resources.



The main purpose of the project is to support the development of sustainable activities in Hostels in Brazil. There are three main objectives in this project:

- 1. Use natural resources to make hostels more sustainable
- 2. Make hostels more conscientious of the return they can have with sustainable projects
- 3. Make chosen hostels national models of sustainability and multipliers agents of sustainability.

Brazil is a very big country with a lot of natural attractions, such as green areas or beaches that attract millions of tourists every year. And although we have a good sustainable spirit, many hostels develop only basic sustainable action. They do not make major project or more actions due to financial resources. This project will help encourage Brazilian hostels to continue making sustainable projects, by showing that it is possible and how much they can have as a return regarding financial, environmental and marketing areas.





Monitoring Plan

To monitor this project Hostels will send National Association monthly feedback report containing the follow information:

- Kw/hour consumed
- Amount paid for energy
- Number of guests
- Sustainable actions of the month

Contribution of the Project to Sustainable Development

Both Arraial d'Ajuda Hostel and Lua Cheia Hostel will use this Project to complement the actions they already make in the Hostel and in their community, creating a big sustainable Project in each hostel.

Regarding environmental actions the installations of solar hot water will help reduce the amount of electric energy consumed as well as use a natural resource with no environmental impact. Arraial d'Ajuda hostels has the most pure and drinkable water well, so they give free water to all community, specially the public local school that is very close to the hostel.

Social actions are the one with more impact in Brazil, due to the fact that the population is big and still not much conscious about the environment. Both hostels have a very big commitment to the community, employing local people, and receiving school groups to teach the kids about sustainable actions.

With the reduction on energy costs, the hostels will be able to make other sustainable projects as well as reinvest the saved money in the maintenance and renovations. It will help for example, Lua Cheia Hostels, that is a castle and all renovation done need to have a very strict control that costs a significative amount of revenue and Arraial d'Ajuda that need to have a strict control of their water and this has an impacting cost on the hostel finance

Environmental Impacts

As Brazil is a country with a very big and important environment, this project, as a helper to reduce hostels impact will have a positive impact. Brazilian nature attracts many tourists that visit the country in order to see and experience the natural resources. Both Arraial d'Ajuda and Natal, city where Lua Cheia Hostel is located, are famous for their beaches and idyllic landscape.

Natal, is best known in Brazil as "the city of Sun", due to the fact that in a year there is more than 300 sunny days in the City. So using Solar Systems a green and clean energy, that generates minimal impact, we will be reducing the impact generates by both hostels

Save Funds and ROI

The return of investment will be of around 8 years for the Solar System. If we take into count how much sun we have in the hostels region, how the saved money will be reinvested in the hostels,



and how the marketing and publicity will bring guests to the hostels, we can affirm that the investment will be paid off .

The average amount of energy used per month in the hostel is 3,089.3 kW/h, and the amount generated is 2kW/h, so the project will reduce almost 2/3.

Estimations of emissions Reductions

The estimative of reduction is about 3 Ton per year, per hostel in this Project. This calculation was gives by the company that provides the Solar System, below.



João Pessoa, 11.03.2013.

Prezada Sra. Heloisa Coutinho,

os preços dos sistemas solares fotovoltaicos baixaram. Um sistema solar fotovoltaico para o

telhado (25 anos de vida útil e 10 anos de garantia) de <u>2 kWp por R\$ 20.000,00</u>. O presente sistema para geração de energia elétrica através do sol tem a seguinte descrição:

8 Paineis solares fotovoltaicos monocristalinos YL250C-30b 250Watts YINGLI PANDA SOLAR; (produção por painel mínima 40 kWh média) cada. Área totai: 14 m² Peso cada painei: 19,5 kg_1,nversor monofásico Sunny Boy SMA Solar Technology AG SB 2000HF-30 com display touch screen (Peso de cada 31kg);Suportes,Ganchos e Parafusos Inoxidáveis ILZOSURF E CABOS para conjunto de 8 Módulos; Impostos e taxas e Transporte.

DEMANDA: 2 kWp

CONSUMO anual: 3,400 kWh 1

Economia aproximada anual: R\$ 1,700.00 TEMPO DE AMORTIZAÇÃO MÁXIMO: 7.9 anos

MITIGAÇÃO DE GÁS CARBÔNICO: 3 Ton. a.a.

Prazo de entrega máximo: 70 dias Prazo de instalação: 1 semana

Fico à sua disposição para qualquer dúvida e aguardo seu retorno para realização de estudos de viabilidade técnica, minuta com simulações de financiamento, elaboração dos contratos de importação e instalação-assistência técnica.



RUTH PESSOA GONDIM Diretora



Click here to **VOTE** for this project