

Idea Paper: To Convince Hotels in Vancouver BC to use Solar Panels

Bonnie Cheung

Student Number: 000300417

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Sally Gibson

### Abstract

Did you know that hotels pollute our planet by releasing tonnes of carbon dioxide into the atmosphere? In this research paper I am trying to convince Vancouver, BC hotels to install solar panels on their rooftop to help the environment and in return let them know that if they do that they can have a substantial savings in a significant amount of time. Also I will reach out to the local governments and the local solar panel companies to see their viewpoints on having this system in place, and see if they will support the technology and help the hotels to install it.

### **Developing an Interest or Topic**

For more than ten years, global concerns about environmental issues have escalated. In the hospitality industry, specifically hotels, environmental sustainability presents challenges as it required meeting industry standards. The hospitality industry is an organization and planning not only for the individual hotel but also to teach models to others. One technology that we can use to be environmentally sustainable will be the use of solar panels. Solar panels are made up of multiple photovoltaic cells. The cells are semi-conductors on the panels which converts the energy from the sun directly into electricity and a heating system (How do solar panels work? n.d). The city of Vancouver proposed an action plan to be the greenest city by 2020 (Greenest City Action Plan, 2015); Vancouver is known as a tourist destination. If all hotels invest in the solar panels, the use of fossil fuels will be reduced, also reducing greenhouse emissions. In the article by the Vancouver Sun: “small and medium sized enterprise business account for about 20% of BC’s greenhouse gases emissions” (Simpson, 2013). For example, if we operate a full serviced hotel the 20% of greenhouse emission can be nearly doubled if we don’t do anything about it.

Many hotels have implemented green initiatives into their business plans and or have developed an annual sustainability report on how their hotel is on focusing on becoming green. They might not have spent a lot of money on their green initiative program nor want to spend money on a new environmental system because of the cost. However what if the solar panels can help save the hotel money and have a return on their investment faster, would then then the hotels reconsider installing a new environmental system such as the solar panels? For example the Listel Hotel in Vancouver BC was the first to install solar panels on their roof top. They installed 20 solar panels with a customized system that collects heat and also store it for seasonal

heating. The customized system is connected to their hot water system as well, in which the solar panel and the customized system helped them lower their energy cost (Listel Hotel, n.d). By installing the new system and the solar panels on the roof top the Listel Hotel was able to save \$55,000 a year in natural gas expense (Simpson, 2013). The initial cost of the solar panel project for the Listel Hotel was under \$30,000 and they estimated the payback time (amortization period) will be less than six years (Listel Hotel, n.d). Another hotel that installed the solar panels is the Hotel Grand Pacific in Victoria BC. The solar panels helped the Hotel Grand Pacific saved an “estimated 16,625 kilowatt hours, the equivalent of heating the water for three homes for a year”, and the captured solar energy from the rooftop panel supplied 2,700 litres hot water and pool heating (Duffy, 2014). The hotels from above took the initiative on investing money to the solar panels which in return helped them reduce the energy cost and greenhouse emissions, why can't other hotels do the same?

### **Advisory Committee**

The research of trying to convince hotels to use solar panels I would use and an advisory committee that can guide, support and coach me throughout the research from start to finish. One teacher that I have in mind is Brian Rohl. He was our sustainable environment teacher, which he is also part of the climate reality project of Canada, and he also work from Coast hotel as the Director of Operations. I believe with his knowledge of environment sustainability and his knowledge of hotels, he can guide me to the right direction with my research. I will also try to reach out to the hotels that have install solar panels, and talk to representatives from Vancouver City Hall and BC Hydro on their thought and advice on the research. I will also ask other instructors for pointers on who I should interview or ask for their opinions, or topics that can help me on the research.

**Supervisor Endorsement**

I believe that Brian Rohl can be a potential candidate of endorsing this project. He is the Director of Operations in Coast hotel and also part of the climate reality project.

**Second Reader**

In writing the research paper I will ask colleagues, friends and family to help me with revising my paper. Once those is finished I will revise what they have suggested and then take it to the learning center and schedule an appointment for them to look over the revise paper. After taken in their suggestion on revising the paper, I will revise again and make another appointment to see one of the advisory committee from them to have a look as well.

**Purpose Statement**

The purpose of this research is to influence people in the hospitality and other industries know that we need to stop depleting our natural resource and put in a system that can help us becoming a greener city. The use of solar panels can help reduce air pollution, greenhouse gases and return help hotels get a good solid rate of return on their capital investment.

**Methodology**

In doing my research I will try to reach out to companies such as the Vancouver renewable energy group, Terratek Energy Solutions, and Webster solar and others to gather information, and their thoughts on the proposal of having a solar panel system in most or all hotels in Vancouver, BC. Also I will reach out to hotels who have already installed the solar panels for their guidance and feedback. Another crucial component to the project is trying to get the local government involvement. I will try to schedule appointment with them for an interview to see if they will be supportive of using solar panel, and also ask if they will implement an incentive program for hotels that will install the technology. In gathering the information from

above, I will use the qualitative research method. Their data will be the primary data source such as documents, interviews with the professionals, statistics that they discover when testing out their theories on solar panels. The qualitative research method and the primary data will help me understand their view on solar panels and the research given to help me develop my research to convince the hotels to install the solar panels on their roofs. The primary research methods that I will be using is the qualitative method, however I will use some quantitative methods to look at other opinions on the solar panel research. In the survey we can determine their opinions and their attitude to the research on the solar panels.

### **Positionality**

I am always curious on how the environment we live in and how the world works. The environment that we live in is forever changing, and I always wonder how we adapt to it. One of the quotes from Charles Darwin is: “In the struggle for survival, the fittest win out at the expense of their rivals because they succeed in adapting themselves best to their environment” (Darwin, n.d). It makes me wonder what if one day we use up our natural resources we can adapt to the new change. Or is there a technology that can help use less of our resources. I am for the use of solar panels; why not use the sun as a free energy source to convert it to a heating source to commercial buildings, homes and business. The solar panels are not as expensive as the geothermal technology and if we can install those panels in each hotel and build upon the solar panel technology we can help our future generations and sustain our environment.

### **Timeline**

January – April 2016: Draft research (6+ months), research committee meeting, revised/ refine proposal, approval of research.

May –August 2016: Data collection and research committee meeting

September- December 2016: research preparation, research committee meetings,  
writing

January – April 2017: charting data, research committee meeting

May – August 2017: Drafting paper, research committee meeting, revising

September 2017: Presentations

### **Reflection**

In exploring into the topic of the solar panel there might be many obstacles that I might encounter in doing this research. I fear that people might not be in favour of the technology because of the cost and many may not understand what solar panels can do to help them and the environment. The fear of the surveys that people do might not be done correctly or they are against the research, or hotel properties reject the research and find other means of protecting the environment. In doing the research I will reach out to environmental groups or companies that support the solar panel system in return, I hope that they will not ignore me or return my calls/emails in a mannerly time. I will reach out to the government or BC hydro for any incentive program that they can offer, so that the hotels can see the cost and fit it into their budget. In researching out to the environmental groups, business and the governments, I hope there will not be any tension between them; the ultimate goal is to have an agreement from all parties in favour for putting the solar panels on the roofs of the hotels.

Word count 201

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