

## Formal Report Proposal

**To:** Erika Paterson  
**From:** Timothy Goh  
**Date:** January 28, 2016  
**Subject:** **Proposal for Determining the Feasibility of Implementing Hand Dryers at UBC washrooms**

### Introduction

With 80 percent of infectious diseases spread by hand-to-hand contact, it is clear that hand-washing is an important practice. Drying of hands is equally if not more important as washing them to prevent the spread of contagious diseases. Wet hands have been known to pick up contaminants more easily and could potentially cause skin irritation. There are a few methods of hand drying that is suitable for modern day life. The use of paper towels and hand dryers are among the most common methods.

### Statement of problem

The importance of washing hands is obvious; the benefits may be easily undone if not done properly. Paper towels have been overwhelmingly chosen as the preferred choice in most UBC's washroom, as is evident from the lack of hand dryers. As part of UBC's initiative to make the campus a little greener and more sustainable, there is a clear advantage of using hand dryers in terms of environmental sustainability. Hand dryers have shown to emit lower greenhouse gases and is more energy-efficient than paper towels. Aside from the environmental impacts, hand dryers make the process of cleaning the washroom easier. Many places that utilize paper towels complaint about the mess that paper towels create.

### Proposed solution

One proposed solution is to switch from using paper towels to hand dryers at UBC washrooms. UBC would be able to operate more energy-efficiently and would help make the maintenance of the washroom easier. Students just want to dry their hands quickly and completely without damaging the environment. Currently, technological advancements have created efficient and effective hand dryers that are available for purchase. The simplest solution is to replace paper towels with those hand dryers.

### Scope

To assess the feasibility of switching from using paper towels to hand dryers, I plan to pursue five areas of inquiry:

1. How much does it cost to operate a hand dryer versus paper towel?
2. How effective is hand drying by using a hand dryer compared to paper towels in terms of cleanliness?
3. What are the environmental impacts of switching from paper towels to hand dryers?
4. How difficult would it be to switch from paper towels to hand dryers? What are the major hurdles?
5. How would students react to this change?

**Methods**

My primary data sources will include consultation with the UBC's electric power and energy systems group alongside the UBC Alma Mater Society (AMS). The UBC AMS is in charge of developing and designing innovative projects that meets students' sustainability goals. I will also be in contact with representatives from Dyson AirBlades to discuss the feasibility and cost of implementing my plan across the entire UBC campus. I also hope to conduct a survey among UBC students to see how students would react to this change.

My secondary sources will include publications on the uses of hand dryers and any reviewed journals on this topic.

**My Qualifications**

I have been utilizing both a hand dryer and paper towels on a regular basis for many years. In May of this year, I will receive my B.S. in Biology. I am familiar with technical jargon and the many reasons behind most objections to the use of hand dryers which are mainly due to hygienic concern.

**Conclusion**

Clearly, action is needed to move UBC towards a greener and more sustainable future. By addressing the five areas of inquiry mentioned earlier, I can determine the feasibility of implementing hand dryers in UBC washrooms. With your approval I will begin research at once.