### Madonna University Student Senate Resolution

Senate Resolution: W17-R4 Date Adopted: February 24, 2017

# AUTHORED BY: Senator Globke SUPPORTED BY: President Martin and Vice President Papasoglu

**A RESOLUTION TO:** Advocate for the replacement of paper towel dispensers with electric hand dryers in all Madonna University bathrooms.

### THE MADONNA UNIVERSITY STUDENT SENATE ENACTS:

WHEREAS, focusing on further sustainability of Madonna University and having reverence for creation in the most cost effective manner should be of paramount importance and;

WHEREAS, the cost of supplying a medium usage bathroom with paper towel totals about \$75 a month while the cost of running an electric hand dryer at \$0.09 kilowatt-hour would cost approximately \$14.58 a month<sup>[1]</sup>, and;

WHEREAS, a study done by Environmental Research Management found that the carbon emissions associated with the use of hand dryers equated to a car traveling 3,169 miles while carbon emissions related to paper towel use is equivalent to the same car traveling 9,000 miles<sup>[2]</sup>, and;

WHEREAS, by reducing these carbon emissions, Madonna University would assisting in lowering the levels of global warming, acidification, eco-toxicity, human toxicity, ozone depletion and photochemical smog burdens<sup>[2]</sup> on this planet, and;

WHEREAS, the installation of electric hand dryers in all Madonna University bathrooms would reduce the overall cost associated with shipping, stocking, refilling, and disposing of paper towel waste, and;

WHEREAS, these funds can then be re-allocated to foster further growth around Madonna University's campus and increase student satisfaction in other areas,

<sup>1</sup><u>http://smallbusiness.chron.com/cost-benefit-paper-towels-vs-hand-dryers-41923.html</u>

<sup>&</sup>lt;sup>2</sup> <u>http://www.livestrong.com/article/158599-air-dryers-vs-paper-towels/</u>

**Therefore Let it Be Resolved** that the Madonna University Student Senate recommends that the administration and staff of Madonna University take the steps necessary to increase our sustainability and to live our Franciscan values by installing electric hand dryers to all bathrooms at Madonna University.

SENATE VOTE TOTALS: 13-2-2

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Thomas Martin PRESIDENT

Stefanie Papasoglu VICE PRESIDENT

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<sup>&</sup>lt;sup>2</sup> <u>http://www.livestrong.com/article/158599-air-dryers-vs-paper-towels/</u>

# Policy Proposal For *"Addition of Electric Hand dryers to all Bathrooms"*

#### A RESOLUTION TO:

Install electric hand dryers in all University bathrooms to replace paper towels.

## **RATIONALE:**

Recently, Madonna University has made a push to become more sustainable through the addition of solar panels and other means. While using the bathrooms around campus, I noticed that we rely solely on paper towel for the purpose of hand drying. The amount of energy and money needed to produce, ship, stock, refill, and dispose of used paper towels does not coincide with the University's goal of becoming more sustainable.

I propose that Madonna University install electric hand dryers in every bathroom in the Franciscan Center, the Main Administration Building, the Angelo DiPonio Building, the Maertans building, and the East and West Wings of the Residence Hall.

Installing electric hand dryers would lower Madonna's impact on the environment and any environmental effects that correspond with the production, transport, and disposal of paper towel waste. A study done by the consulting firm Environmental Research Management concluded that using air dryers resulted in lower global warming, acidification, eco-toxicity, human toxicity, ozone depletion and photochemical smog burdens<sup>[2]</sup>. The same study discussed carbon emissions associated with the production, transport, and the electricity usage of an electric hand dryer compared to paper towels. Over a five year period, the carbon emissions related to hand dryers equates to a car traveling 3,169 miles while paper towels usage over the same period of time is equivalent to a car traveling 9,000 miles, which is nearly three times greater<sup>[2]</sup>.

In 2012 a case of 12-250 paper towel packs cost about \$30 for a total of \$75 a month, if that bathroom only received a medium amount of usage <sup>[1]</sup>. A bathroom that experiences medium usage can be expected to go through at least one pack of paper towels a day. This cost only factors in if each person uses two towels per hand drying and excludes the cost associated with trash removal, increased bathroom cleaning, and dispenser refilling. From what I have observed, Madonna uses rolls of paper towel which can cost around \$61 per roll<sup>[3]</sup>. While an electric hand dryer costs more than a paper towel dispenser to install, it costs significantly less to operate. A typical hand dryer uses about 0.03 kilowatt-hour of energy per use. In the United States, the

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<sup>2</sup> <u>http://www.livestrong.com/article/158599-air-dryers-vs-paper-towels/</u>

- <sup>3</sup> <u>https://www.uline.com/Product/Detail/S-21210/Towels-and-Dispensers/Tork-H1-Kraft-Roll-Towels-77-x-700?pricode=WA272&gadtype=pla&id=S-21210&gclid=CjwKEAiAxKrFBRDm25f60OegtwwSJABgEC-</u>
- ZAYixvyMgbeT0Rvp-Bec5hBcnGALoDekoTKiRU6SrehoC9LPw\_wcB&gclsrc=aw.ds
- <sup>4</sup> https://www.prodryers.com/American-Dryer-s/1839.htm

average cost of a kilowatt-hour is \$0.09 which could mean the average monthly cost of an electric hand dryer would be about \$14.58<sup>[1]</sup>.

The company ProDryers, with a store located in Livonia, Michigan, sells American Dryer Hand Dryers for around \$400 to \$600 at most<sup>[4]</sup>. After researching different electric hand dryers, I believe that the American Dryer EXT7-SS Extreme Air Hand Dryer would be the best option. While it costs about \$525.00, it boast several LEED credits, a antimicrobial infused delivery system, a long lasting motor, and costs only \$0.18 per 1,000 hands dried<sup>[4]</sup>. While this may seem like a steep amount to install an electric hand dryer is every Madonna University bathroom, the long-term savings generated by replacing paper towels would offset the short-term costs.

The expense estimates above connected with the use of paper towels in University bathrooms and disposal of paper towel waste would be mitigated by the installation of electric hand dryers. While the short-term costs of installing electric hand dryers in Madonna University bathrooms is greater than that of paper towels, I believe that the long-term savings would offset these costs. These funds could then be re-allocated to foster further growth around Madonna University's campus and increase student satisfaction in other areas. The addition of electric hand dryers in Madonna University bathrooms would also reduce the various environmental effects that are associated with the production, transportation, and disposal of paper towels and complementary items such as plastic garbage bags. By lowering these effects on the planet, we as a University would be demonstrating great reverence for creation which coincides with our Franciscan values. The addition of these hand dryers could also increase the aesthetic appeal of the bathrooms and cut down on bathroom maintenance.

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Seth Globke Senator for the College of Social Sciences

**DATE:** February 24, 2017

<sup>&</sup>lt;sup>1</sup> <u>http://smallbusiness.chron.com/cost-benefit-paper-towels-vs-hand-dryers-41923.html</u>

<sup>&</sup>lt;sup>2</sup> http://www.livestrong.com/article/158599-air-dryers-vs-paper-towels/

<sup>&</sup>lt;sup>3</sup> <u>https://www.uline.com/Product/Detail/S-21210/Towels-and-Dispensers/Tork-H1-Kraft-Roll-Towels-77-x-700?pricode=WA272&gadtype=pla&id=S-21210&gclid=CjwKEAiAxKrFBRDm25f60OegtwwSJABgEC-ZAYixvyMgbeT0Rvp-Bec5hBcnGALoDekoTKiRU6SrehoC9LPw\_wcB&gclsrc=aw.ds</u>

<sup>&</sup>lt;sup>4</sup> https://www.prodryers.com/American-Dryer-s/1839.htm