Why Waste The Wind? A Look into Small Scale Wind Energy

Works Cited

[1] Alexander, Lisa V. "Summary for Policy Makers."*Www.climatechange2013.org*. N.p., n.d. Web. 19 Apr. 2014.

[2] "U.S. Energy Information Administration - EIA - Independent Statistics and Analysis." *International Energy Outlook 2013*. N.p., n.d. Web. 18 Apr. 2014.

[3] CHP Tour

[4] Small, Ezra. "Climate Action Plan 2.0." *Www.umass.edu*. University of Massachusetts, n.d. Web. 19 Apr. 2014.

[5] School Colors: Green and Greener [Internet]. New York: The New York Times; c2009 [cited 2014 3/12]. Available from: http://www.quinnipiac.edu/Prebuilt/PDF/About/NYTimes_green_1109.pdf

[6] "Mechanical Components." *Windpower Engineering Development*. N.p., n.d. Web. 13 Mar. 2014.

[7] Bahaj AS, Myers L, James PAB. Urban energy generation: Influence of micro-wind turbine output on electricity consumption in buildings. Energy Build 2007 2;39(2):154-65

[8] "Energy.gov." *How Do Wind Turbines Work?* N.p., n.d. Web. 11 Mar. 2014.

[9] "Anatomy of a Wind Turbine." *Anatomy of a Wind Turbine*. N.p., n.d. Web. 13 Mar. 2014.

[10] Wind Energy Handbook: 1. Wind Turbine Blade Aerodynamics [Internet]: Gurit [cited 2014 3/12]. Available from: http://www.gurit.com/files/documents/2aerodynamicspdf.pdf

[11] "Wind Turbine Tip Speed Ratio." - *Wind*. N.p., n.d. Web. 13 Mar. 2014

[12] Scheurich F and Brown RE. 2013. Modelling the aerodynamics of vertical-axis wind turbines in unsteady wind conditions. Wind Energy 16(1):91-107.

[13] Visionair Specifications (2014) Urban Green Energy. <http://www.urbangreenenergy.com/products/visionair/specifications>. Accessed 29 March 2014.

[14] Kingspan Wind 6kW Turbine (2011) Kingspan Wind. <http://www.kingspanwind.com/products/kw6.aspx>. Accessed 29 March 2014.

[15] The Bergey Excel 6 Wind Turbine (2012) Bergey Windpower. <http://bergey.com/products/wind-turbines/6kw-bergey-excel>. Accessed 30 March 2014.

[16] The World's Most Robust Small Scale Wind Turbine (2012) Kingspan Wind. <http://www.kingspanwind.com/pdf/6%20page%20brochure.pdf>. Accessed 30 March 2014.

[17] CHP Electrical Totals 2012 University of Massachusetts Amherst Excel Spreadsheet

[18] "Benefits of Renewable Energy Use." Union of Concerned Scientists. Web. 30 Mar. 2014.

[19] "Economic Benefits, Carbon Dioxide (CO2) Emissions Reductions, and Water Conservation Benefits from 1,000 Megawatts (MW) of New Wind Power in Massachusetts."www.windpoweringamerica.gov. Mar. 2009. Web

[20] Greening, Benjamin, and Adisa Azapagic. "Environmental Impacts of Micro-Wind Turbines and their Potential to contribute to UK Climate Change Targets." Energy 59.0 (2013): 454-66. Print.

[21] "Environmental Impacts of Wind Power." Union of Concerned Scientists. Web. 30 Mar. 2014.

[22] "Wind Turbines." *: Bornay 6000*. N.p., n.d. Web. 28 Apr. 2014.

[23] FY 2012 CHP Electrical Totals

[24] "Just How Loud Is a Wind Turbine?" Just How Loud Is a Wind Turbine? Web. 30 Mar. 2014.

[25] "One of the Quietest Turbines of Its Size Thanks to a Constant Speed Blade Rotation."Wind Energy| Small Wind Turbine| Community Wind Turbine| Gaia-Wind. Gaia-Wind Limited, Web. 31 Mar. 2014.

[26] "Acceptable Noise - DBA - Levels." Acceptable Noise - DBA - Levels. Engineering Toolbox, Web. 31 Mar. 2014.

[27] Archer, C.L.; Caldeira, K. Global Assessment of High-Altitude Wind Power. *Energies* **2009**, *2*, 307-319.

[28] High Altitude Wind [Internet]: Altaeros Energies [cited 2014 4/7]. Available from: http://www.altaerosenergies.com/wind.html .

[29] Erin, Baerwald F., D'Amours H. Genevieve, Klug J. Brandon, and Barclay M.R. Robert. "Barotrauma Is a Significant Cause of Bat Fatalities at Wind Turbines." University of Calgary, n.d. Web. 7 Apr. 2014.

[30] "Wind." *Institute for Energy Research*. N.p., n.d. Web. 14 Apr. 2014.

[31] "Altaeros Energies - Press Release." *Altaeros Energies - Press Release*. N.p., 21 Mar. 2014. Web. 14 Apr. 2014.

[32] "US Congress Acts to Avert Helium Shortage." *US Congress Acts to Avert Helium Shortage*. N.p., n.d. Web. 14 Apr. 2014.

[33] "Makani â Google." *Makani â Google*. N.p., n.d. Web. 14 Apr. 2014.

[34]"Altaeros Energies - Frequently Asked Questions." *Altaeros Energies - Frequently Asked Questions*. N.p., n.d. Web. 14 Apr. 2014.

[35] "How Much Do Wind Turbines Cost?" *Welcome to Windustry*. N.p., n.d. Web. 14 Apr. 2014.

[36] "Inflatable Wind Turbine to Float on Alaskan Skies : DNews." *DNews*. N.p., n.d. Web. 15 Apr. 2014.

Image Sources

Figure 1:

http://www.enviroprosolutions.ca/images/eddyGT.png

Figure 2:

http://www.realityunknown.com/wp-content/uploads/2011/06/electrical-generator.jpg

Figure 3:

http://static.ddmcdn.com/gif/wind-power-wind-flow.gif

Figure 4:

http://www.greenenergyreporter.com/wp-content/uploads/2012/06/Savonius-3-Blade-Wind-Turbine.jpg

Figure 5:

http://sync.nl/wp-content/postpics/f_479.jpg

Figure 6:

http://img.tfd.com/mk/D/X2604-D-04.png

Figure 7: Alteros Energy (2014) The Buoyant Airborne Turbine.

http://www.altaerosenergies.com/bat.html

Figure 8: High Altitude Wind Energy (2006) Omnidea
http://www.omnidea.net/hawe/project_motivation.html