



Comparison of Lowell Turbine Operations to Metropolitan NYC Traffic

Supplement to Energize Vermont Testimony to House Committee on Natural Resources, Fish, and Wildlife Feb. 22. 2019

			Note
A.	How many miles are driven in Metro NYC each day?	295,464,664	2014 data from US Department of Transportation
B.	How much gasoline does a vehicle consume per mile?	20	Assumed MPG in fairly heavy traffic
C.	How many gallons of gasoline are used in a Metro NYC day?	14,773,233	Total miles divided by MPG. (A divided by B)
D.	How many lbs of carbon is released by burning a gallon of gasoline?	19.60	https://www.eia.gov/environment/emissions/co2_vol_mass.php
E.	How many lbs of carbon are released by Metro NYC in a day?	289,555,371	C times D
F.	Convert daily emissions from lbs to tons	144,778	E divided by 2000
G.	Calculate tons per hour from tons per day	6,032	F divided by 24
H.	Tons of CO2 displaced by GMP's Lowell Turbines in a year	75,000	Kingdom Community Wind Quick Facts for 2019
I.	How many hours of Metro NYC traffic emissions are offset by a year of Lowell?	12.4	H divided by G