Leaf Blower Testimony 6.18.2019

Thank you Chairman Helm and members of the committee for allowing me to testify today in support of HB3350.

My name is Brian Stewart, I am a resident of Portland Oregon and a member of QuietClean PDX.

I would like to address the issue of alternative tools to replace highly polluting gas powered leaf blowers.

With the steady improvement and cost reduction in battery technology, the latest generation of battery powered leaf blowers rival the power of even the largest and noisiest gasoline powered devices. Nearly every manufacturer of gasoline powered blowers also makes electric options, and many new brands have chosen to focus exclusively on battery powered lawn and garden products.

The typical excuse given for the need to stick with the noisy and highly polluting gasoline powered blowers has been that the electric models are too expensive, not powerful enough or that they have insufficient run time. This may have been true several years ago, but is no longer the case.

For a home owner it is impossible to argue that driving to the gas station to fill up the gas can, finding and adding the 2 cycle oil mixture, pouring that into the blower, replacing the clogged air filters and fuel filters and spark plugs, then hoping that the device actually starts when you pull the cord is at all worth it when there are multiple low cost battery electric models to choose from that supply plenty of power and run time to clean up even a large suburban yard and which reliably start every time you turn the switch to the on position. It is not a coincidence that at Home Depot and Lowes, the battery electric models far outnumber the gas powered products on the shelves. The battery electric options are simply superior products.

Consumer Reports has tested and reviewed hand held leaf blowers on sweeping and loosening power, ease of use, and noise. The four highest rated models in their tests were battery electric models. These models out perform even the top end gas powered hand held blowers in every test category[2].

Regarding noise, none of the 17 gas powered hand held blowers recieved a good rating for both noise measured at the ear and at 50 feet. However, 10 of the 15 battery electric models recieved at least good ratings for both tests and many were rated very good or excellent regarding noise.

Handheld battery electric models are comparably priced to the gasoline powered models, ranging from under $50 to $300.
However, gas powered blowers cost 10 times more to operate than the battery models. A full charge for the very largest battery blowers will cost less than 5 cents and deliver an hour of operation compared to over 60 cents for an hour of

gas blower operation. And that does not include parts like fuel filters and air filters and spark plugs which should be replaced annually for the gas blower.

And, the battery powered models emit none of the smog forming, toxic and carcinogenic emissions and fine particulates that the gasoline powered models produce in large quantities, nor do they produce solid waste like air filters and fuel filters which are routinely sent to pollute our land fills.

Professional Lawn and Garden workers commonly express concerns that battery electric blowers lack sufficient power and run time and are too expensive for their business needs. This is also no longer the case.

Back pack style blowers typically used by professionals are capable of creating air speeds of 100 to 200 MPH and a volume of air movement that ranges from 400 to over 600 CFM.[4]

The latest battery electric back pack style blowers deliver comparable air speeds and air volumes to the best gas models, with many options delivering over 150MPH and over 600 CFM[4].

The back pack style battery electric models can be configured with multiple batteries to enable run times of over two hours of continuous use and additional battery packs can be swapped out instantly to extend run times even further.

The battery powered blowers are often less expensive than the gas blowers, but when you add in the additional batteries required for a full day of operation the total cost can be well over one thousand dollars compared to $300 to $500 for a typical pro model gas blower. However, the professional maintenance operator will spend $900 to $1,500 per year in fuel costs[5], making the total cost of the gas blower between $1,000 and $2,000. This means that even with several spare batteries, the battery electric models end up comparable in price over one year of operation. In subsequent years, the operator will save 90 percent of their fuel costs which translates to $800 - $1,350 per year, making the electric option more profitable.

So, the bottom line is that battery electric leaf blowers are cost effective and sufficiently powerful for both homeowners and professionals. They are lighter weight, require virtually no maintenance and produce zero toxic emissions or toxic solid waste. They are typically 5 to 10 decibels quieter than the gas blowers which equates to roughly half the percieved noise. They are safer for the operators and for the public and produce no greenhouse gas emissions.

There is no reason to continue to use dangerous gas powered leaf blowers when such excellent alternatives are readily available. Please support this bill to phase out the sale and use of gas powered blowers.

Thank you.

Electric Battery Operating Cost:
50V X 5AH = 250 WH = .25 KWh
@12cents/KWh = 3 cents

Gasoline Operating Cost:
1 gal @ $3.00 plus $3.00 for engine oil.
13 oz tank provides 1 hour of operation. (from blogs on leaf blower use)
13oz/128 oz per gal X $6.00 = 60 cents per hour

Air Filter $12.00
Spark Plugs $6.00
Fuel Filter $5.00

1. Bloomberg New Energy Finance, Lithium-ion Battery Costs and Market, July 5, 2017

2. Consumer Reports, Leaf Blower Ratings

3. Information from Home Depot and Lowes and Stark Street Lawn and Garden

4. Information from Home Depot

5. AGZA, Oil and Gas usage data