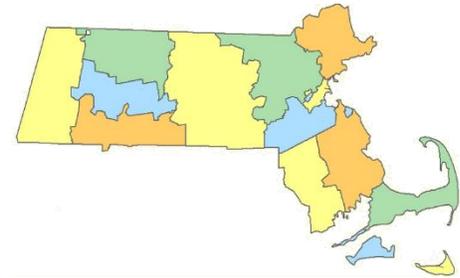




Make Massachusetts a leader 

March 22, 2021

Secretary Kathleen A. Theoharides
Executive Office of Energy & Environmental Affairs
100 Cambridge St., Suite 900
Boston, MA 02114



Dear Secretary Theoharides:

We are writing to ask the Administration to develop a program (such as [HD 3466](#)), being proposed by Representative Michelle Ciccolo) to incentivize cities and towns in transitioning away from using landscape maintenance equipment powered with internal combustion engines. Advances in battery electric technology for landscape equipment is following in the path of electric vehicles. Today, all routine maintenance can be performed with battery electric-, robotic-, and people-powered equipment. As for electric vehicles, incentives are essential to accelerate adoption and scale-up use.

Land care today depends heavily on gas-powered equipment powered by 2-stroke engines (blowers, trimmers, chainsaws, etc) and 4-stroke mowers, including large industrial mowers. These are used routinely and frequently around neighborhoods, schools, parks, and other spaces. Many workers are Hispanic/Latino who are exposed day in and day out to harmful noise and pollution.

- Noise from gas-powered commercial land care equipment is **literally deafening**, exceeding occupational and public safety levels established by OSHA, the EPA, and the World Health Organization. Workers are at particularly high risk for hearing loss and non-hearing health problems, like cardiovascular disease. [A strong low frequency component](#) characteristic of many gas-powered engines, allows harmful levels of sound to carry over long distances and penetrate into homes and buildings.
- [An analysis of the national emission inventory database](#) shows that lawn and garden equipment emit large volumes of toxic and carcinogenic exhaust, including **ozone-forming chemicals and fine particulate exhaust**. This exhaust is produced at ground level and easily inhaled by workers and passers-by.
 - A state-specific sub-analysis shows that lawn and garden equipment in MA accounts for nearly 10,000 tons per year of ozone-forming exhaust; 500 tons per year of fine particulate matter, 120,000 tons of carbon monoxide, and 0.6 million tons of carbon dioxide.
- Workers are chronically affected by equipment vibration and exposure to toxic chemical solvents related to equipment refueling and maintenance.
- Spillage of fuel from re-fueling mowers alone was estimated (in the 1990s) at more than 17 million gallons annually – contaminating soil and water.
- Non-recyclable toxic and solid waste from maintaining gas equipment is dumped into landfills.

A sustained transition requires not only incentives but education and training in new technologies, infrastructure, and operational parameters. Municipal, public lands, university, and public school district models exist across the country. Here in Massachusetts, Eco-Quiet Lawn Care in Concord, MA is a local business success story (see [video](#)). The Town of Lexington, Walden Pond, Turners Falls Airport, and the University of Massachusetts (Amherst, Lowell) are also in the process of transitioning. [Robotics](#) are emerging to augment manpower shortages and are replacing low skill jobs with higher paid, tech-focused jobs. Today, hundreds of landscaping companies operate without fossil fuel-powered equipment and the sector is growing.

[Quiet Communities, Inc.](#) (QCi; Lincoln, MA) is a national 501c3 organization dedicated to helping communities improve health and reduce environmental harm from noise and pollution. Our organization consists of medical, scientific, and



legal professionals who take an evidence-based approach to solving problems of noise and related pollution with innovative, forward-thinking solutions. Through our [Quiet Outdoors](#) program, we work with municipalities, parks, state agencies, and schools in MA and across the nation. Together with our collaborator, [AGZA](#) (American Green Zone Alliance), we worked with MA's Operational Services Division on the nation's first technical specification for commercial battery electric land care equipment, organized state workshops, and provided technical assistance to the Town of Lexington, Walden Pond, and the Department of Transportation – see [Final Report](#).

This is an opportunity for the Commonwealth to strengthen its leadership position in clean, sustainable land care and benefit from a quintuple win:

1. Improving worker health;
2. Improving health and quality of life for the public;
3. Diminishing damage to ecosystems and biodiversity;
4. Building a clean, green jobs economy; and,
5. Contributing to carbon reduction goals.

The required investment is small. The benefits and optics are large.

With a relatively small investment, we are certain the Commonwealth can create a successful program and establish itself as a regional and national leader.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jamie L. Banks', is written over a solid black horizontal line.

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