

ARTICLE 16: Acton Town Meeting



Resolution to Phase Out the Use of Gas-Powered Leaf Blowers

(Binding Resolution)

May 7, 2024

Endorsed By:



Summary

In Acton and elsewhere, the use of gas-powered leaf blowers by landscapers has increased dramatically in recent years.

The implications are significant because....

Gas-powered leaf blowers (GLBs) produce large amounts of:

- Harmful Noise
- Toxic Fumes
- Greenhouse gas



Battery-powered leaf blowers (BLBs), now professional grade, are:

- Quiet
- Clean
- Green



As a result, many cities and regions have acted to phase out GLBs.

We propose that Acton do the same!

Many Communities Have Begun Phasing Out GLBs



WASHINGTON DC
2022



CALIFORNIA
2024: All Lawn Equip.



MIAMI BEACH
2023

Local Communities Are Getting On Board As Well



LEXINGTON
2025/2026



ARLINGTON
2025/2026



BELMONT
2026/2026



CAMBRIDGE
2026/2025



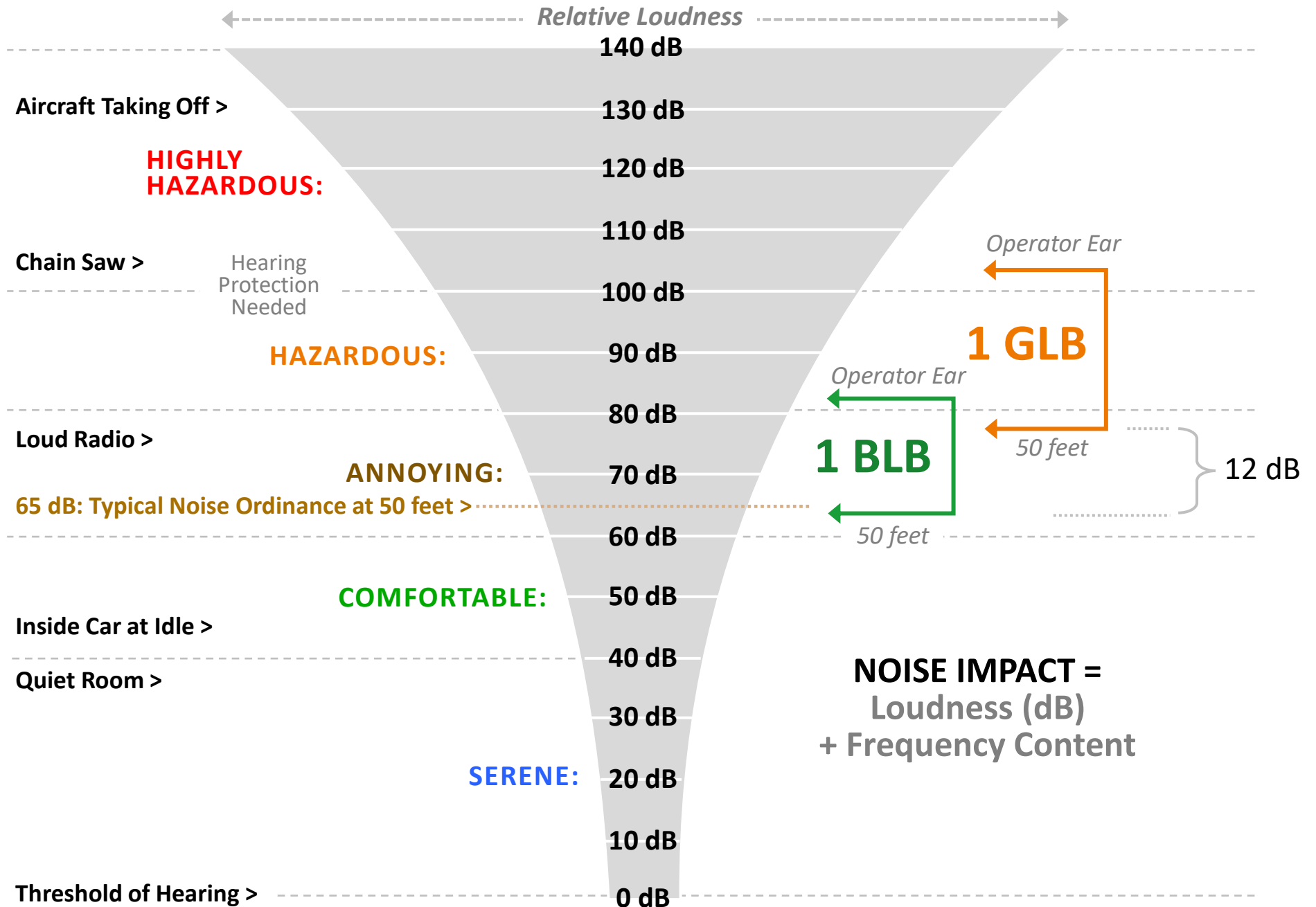
ACTON (proposed)
2026/2027

Commercial Ban / Residential Ban

1. HEALTH

- **Harmful Noise**
- **Toxic Fumes**
- **Greenhouse Gas**

GLBs Emit HARMFUL Amounts of NOISE



GLBs Produce STAGGERING Amounts of TOXIC FUMES



3 HP GLB:
25 lbs



450HP Gas Ford Raptor:
5,757 lbs

HARMFUL/SMOG FORMING POLLUTANTS:

1. Non methane hydrocarbons	1.495 gr/min	300X more than	0.005 gr/min
2. Oxides of Nitrogen	0.010 gr/min	2X more than	0.005 gr/min
3. Carbon Monoxide	6.445 gr/min	23X more than	0.276 gr/min

CARCINOGENS:

4. Benzene
5. Butadiene
6. Formaldehyde
7. Acetaldehyde



4 of "Top 10"
carcinogens

AIRBORNE PARTICULATES:

8. PM 2.5

Penetrate deep
into the lungs

Using a GLB for 1 hour produces as much smog forming pollution as driving a car 1,100 miles, the distance from Boston to St. Louis MO.

GLBs Produce DAMAGING Amounts of GREENHOUSE GAS

GLBs produce **600,000 lbs.** of preventable CO2 per year in Acton



Hourly CO2e Production:

12 lbs/hour

0.6 lbs/hour

0 lbs/hour

Yearly CO2e Production:

7,440 lbs/year

372 lbs/year

0 lbs/year

From 1 GLB

Charged with typical grid power mix

Charged with Renewable Energy (RE)



600,000 lbs. of CO2 negates the air cleansing effect of 12,500 mature trees.

HARM Caused by GLBs Is Overwhelming - *Like this Slide!*

NOISE:

- Permanent hearing loss and increased risk of dementia
- Physical and psychological stress and irritation
- Feeling of being under attack
- Interference with concentration and productivity for those working at home

TOXIC FUMES:

- Respiratory infections
- Lung and other cancers
- Heart diseases
- Neurological disorders
- Kidney & liver diseases
- Asthma, bronchitis, COPD
- Adverse birth outcomes



With a “yes” vote, you can significantly reduce these harms for 24,000 Actonians!

VIBRATION



Landscapers receive the greatest health benefits from phasing out GLBs!

GREENHOUSE GAS:

600,000 lbs. per year from Acton GLBs

- Extreme weather, winds, flooding
- Extreme heat, fires
- Drought, famine
- Rising oceans, loss of coastline
- Dying forests, wildlife
- Collapsing ecosystems
- Migration, refugees
- Political unrest



Children are particularly vulnerable to air pollution as they are active, breathe deeply and have immature immune systems.

2. PRODUCT CHECKLIST

Do BLBs Make the Grade??

- ✓ **Availability**
- ✓ **Performance**
- ✓ **Weight**
- ✓ **Cost**
- ✓ **Charging**
- ✓ **Recycling**

✓ **BLB PRODUCT AVAILABILITY:**
Good and Getting Better

*Accelerated by California banning
the sale of GLBs Jan. 1, 2024*



GREENWORKS 755



EGO LBPX8004-2



Toro 66100



Ryobi RY404170



Stihl BGA 300



Husqvarna 550iBTX



Makita CBU02Z



Kress KC500.9

*8-minute
charge time!*



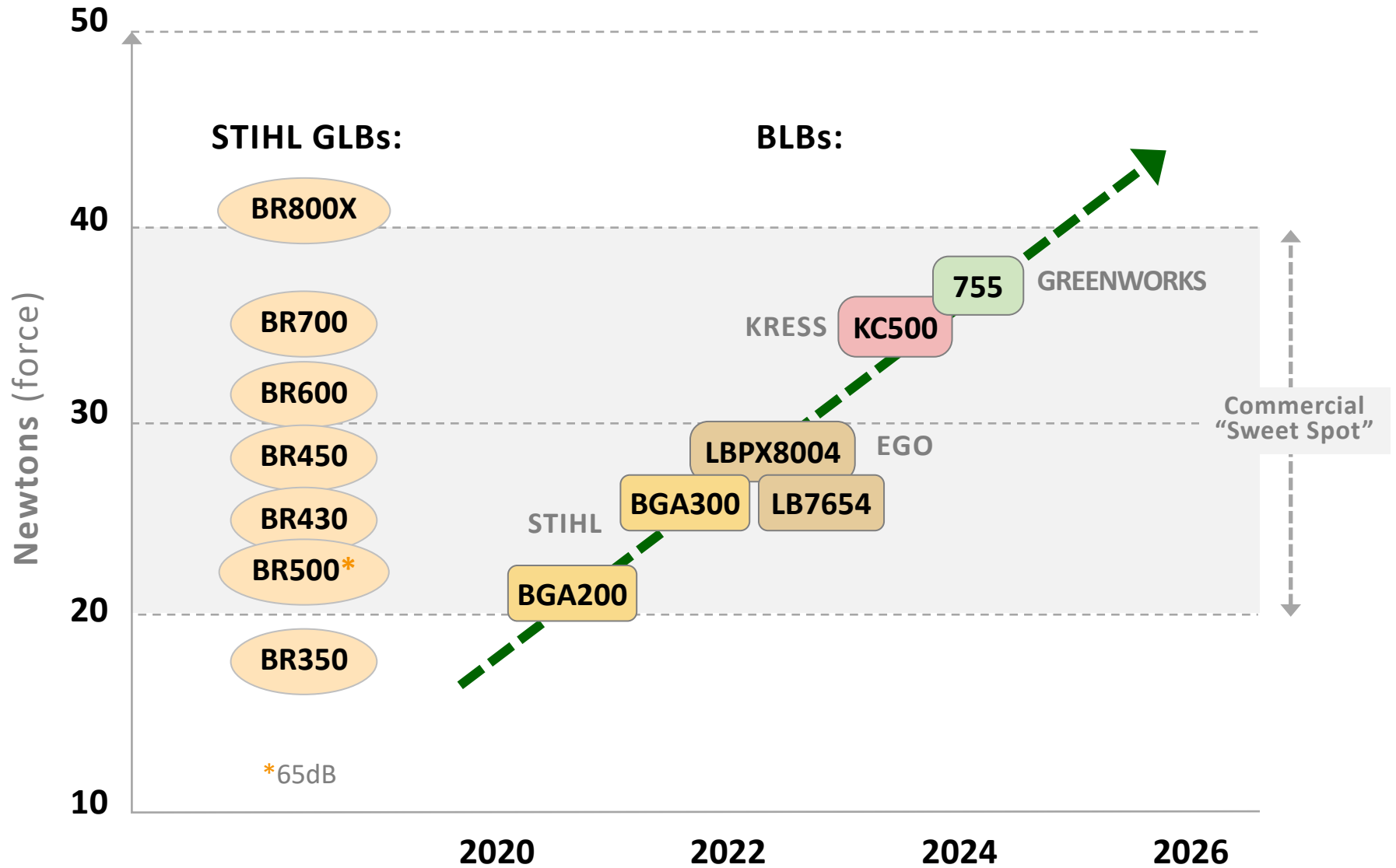
Milwaukee M18 FUEL



Echo DPB-5800T

✓ BLB PERFORMANCE: Now Professional Grade

BLB performance is no longer an obstacle to commercial use



✓ BLB WEIGHT VS. RUNTIME: You Choose

- BLB weight is primarily a function of battery capacity
- Some BLBs have single large batteries (monolithic)
- Others are modular (2-4 batteries)



14 lbs.

EGO LB7654

- 1 x 5Ah battery
- **9.7 lbs.** handheld



23 lbs.

Echo DPB-5800T

- 2 x 5Ah batteries
- Modular



26 lbs.

TYPICAL GLB



32 lbs.

Milwaukee M18 FUEL

- 2 x 8Ah batteries
- Modular



32 lbs.

Kress KC500.9

- 11Ah battery
- Monolithic

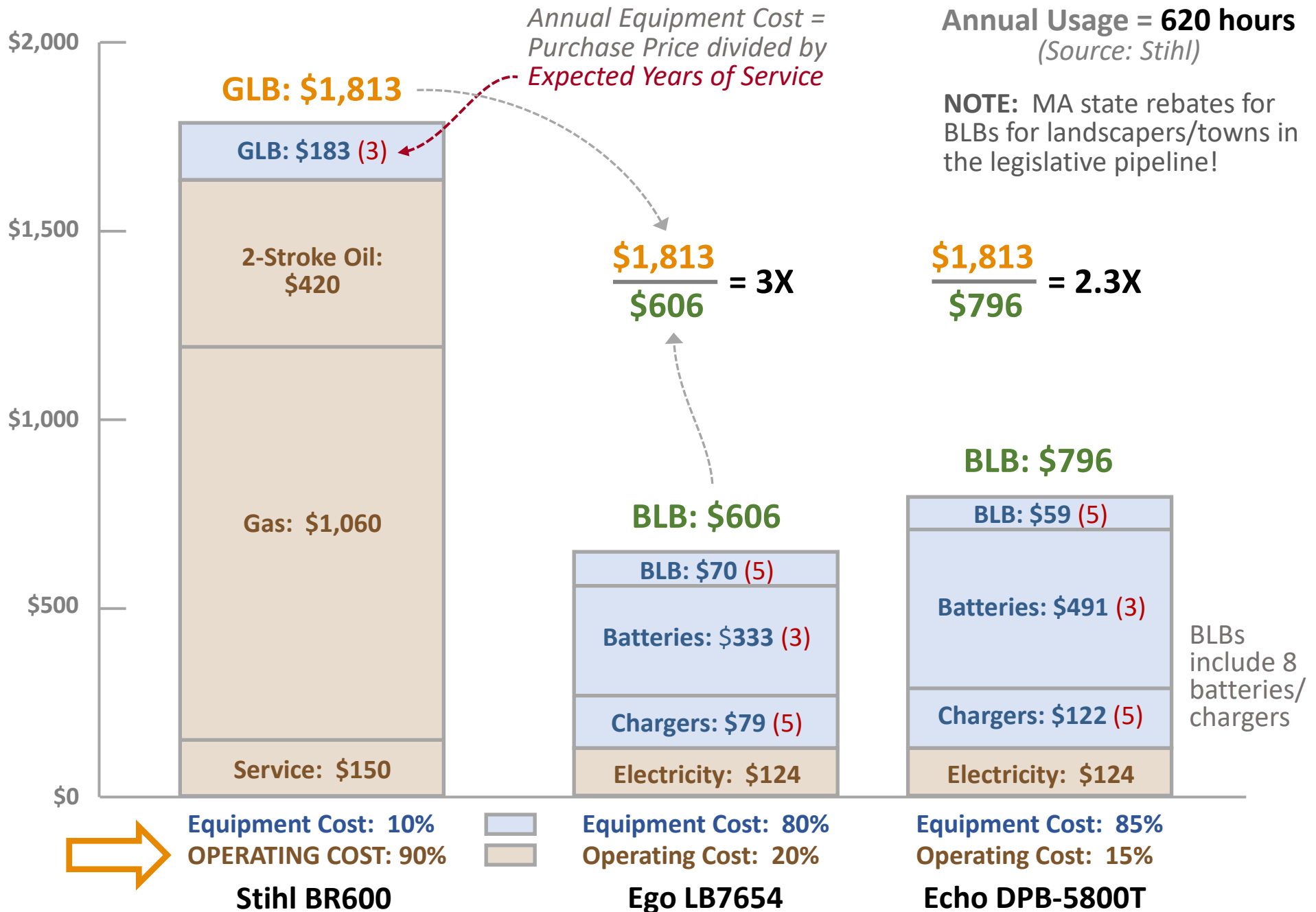


33-38 lbs.

Stihl BGA 300

- **33 lbs.** w/27Ah battery
- **38 lbs.** w/41Ah battery
- Monolithic

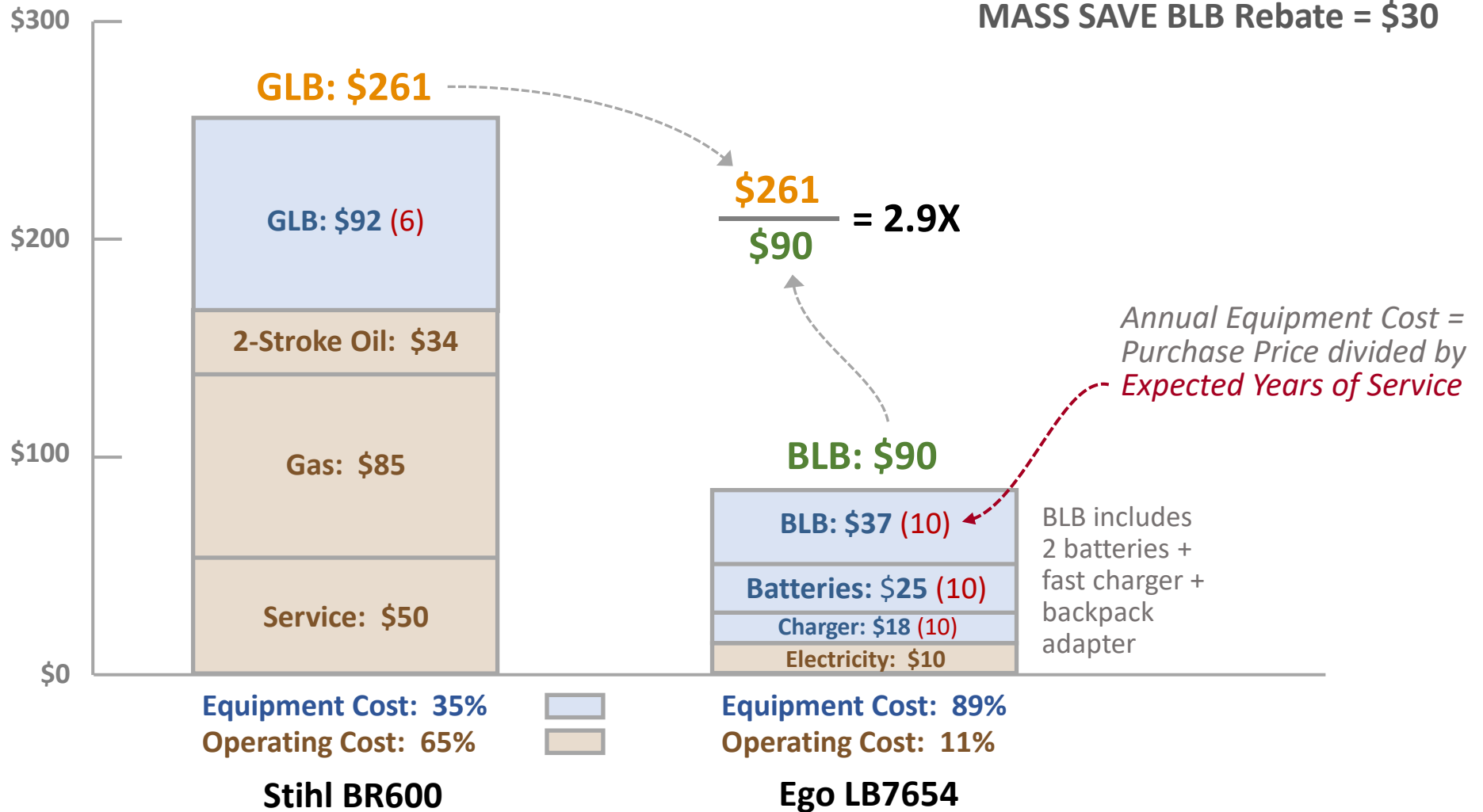
✓ ANNUAL COST FOR LANDSCAPERS: BLBs Save \$\$\$



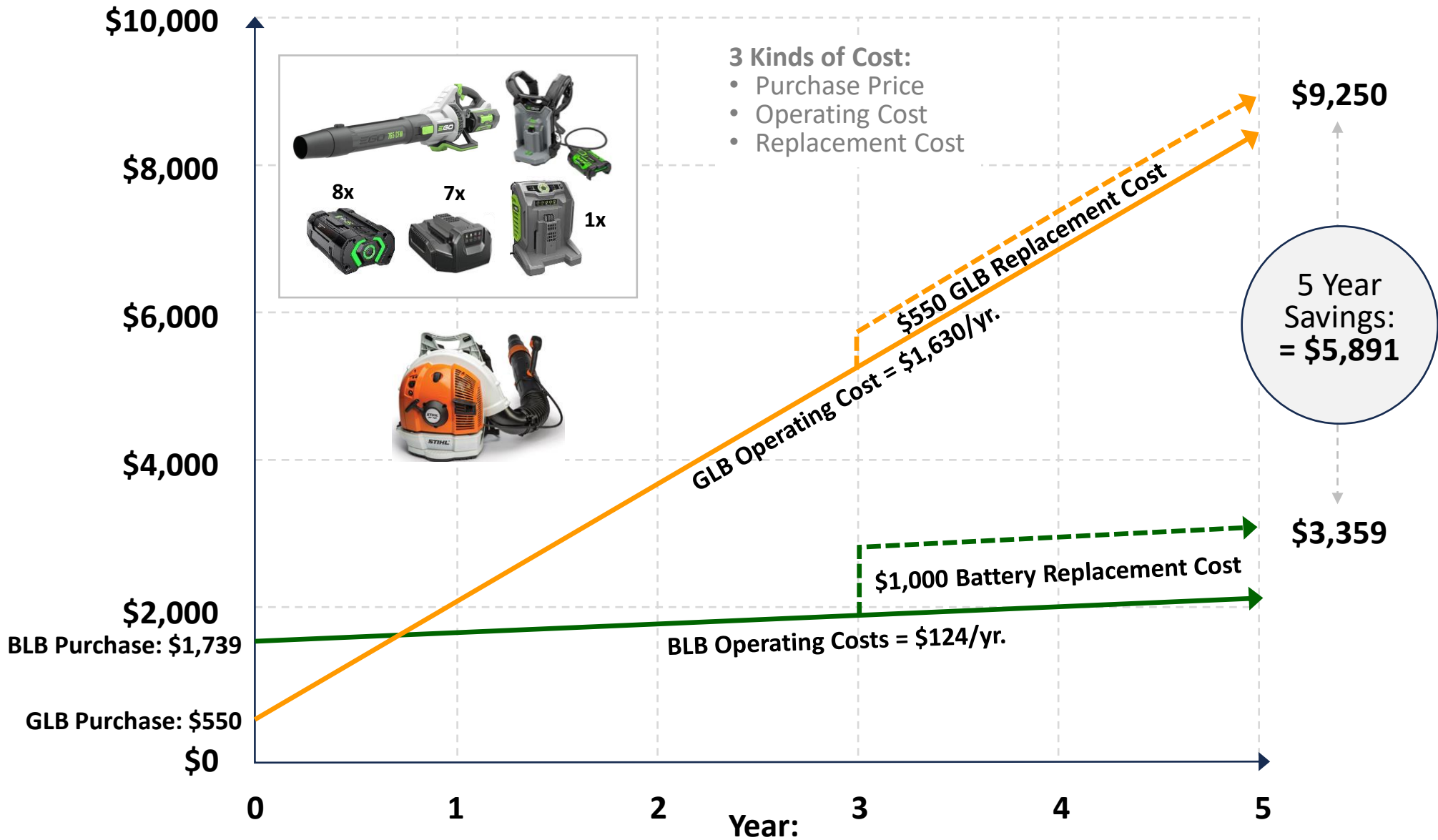
✓ ANNUAL COST FOR RESIDENTS: BLBs Save \$\$\$

Annual Usage = 50 hours

MASS SAVE BLB Rebate = \$30



✓ 5 YEAR LANDSCAPER COST: GLB vs. BLB



✓ BATTERY CHARGING: 4 Options



Run 24x7
with 2
Batteries,
Fast Charger,
110V Outlet

Battery management knowledge and discipline are essential to the effective use of BLBs!



Don't always have access to an outlet?



✓ LEAFBLOWER BATTERIES: Fully Recyclable

Home Depot Dropoff:

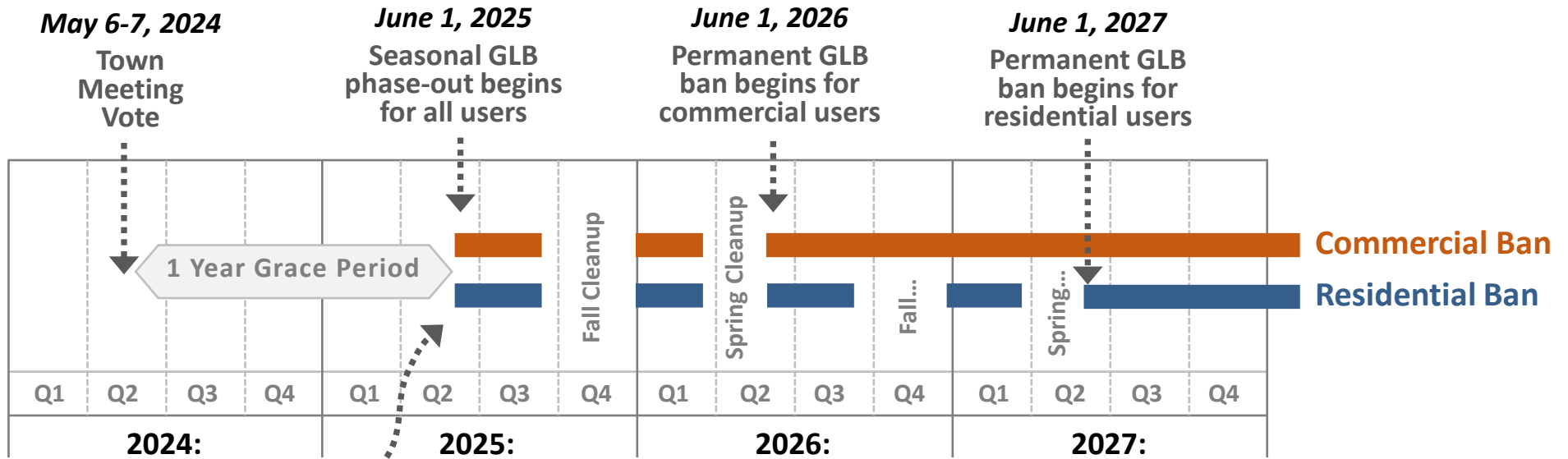
- Rechargeable Batteries
- Compact Fluorescent Bulbs
- Plastic Shopping Bags



TESLA on Lithium-Ion Battery Recycling

“Batteries...can be recycled to recover their valuable materials for reuse over and over again. None of our scrapped lithium-ion batteries go to landfilling, and 100% are recycled.”

Proposed Acton Leafblower Bylaw Summary



Seasonal Phase-out Schedule:

GLB use allowed:

Spring Cleanup:
Mar 15-May 31

Fall Cleanup:
Sep 15-Dec 31

Exemption: The use of Wheeled Gas-powered Leaf Blowers powered by 4-stroke engines will be allowed on lots larger than 1 acre during the Spring and Fall cleanup periods.

Enforcement: By Department of Health or designee assisted by DPW and Police.

Liability: Both property owners/managers and commercial GLB operators are liable for compliance.

Fines: Up to \$300 per incident.

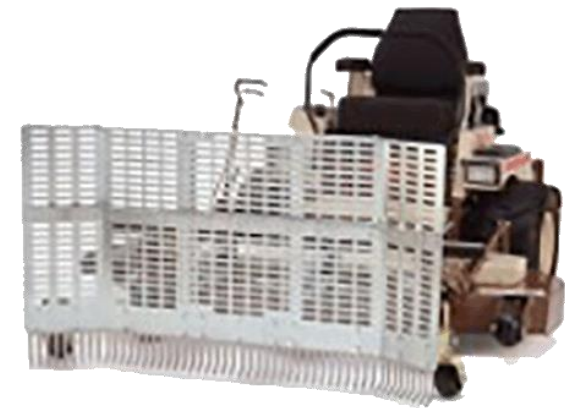
Addendum:

✓ **WANT MORE PRODUCTIVITY?** Get a Leaf Plow

"I bought a JRCO leaf plow last year after hearing so many praises. All I can say is I should have bought one 10 years ago. The plow has reduced my time by 50% on some properties. Best \$500.00 I have ever spent!"

Landscaper on LawnSite

Leaf Plow:



**JRCO Leaf
Plow: \$590**

Final Point:

Q: Will “market forces” phase out GLBs without regulation?

A: Market forces didn’t work for buffalo, Starmet or WR Grace



Market forces don’t work in “Tragedy of the Commons” situations where public resources are - WITHOUT CHARGE - depleted or polluted to make or save money:

- **Depletion Examples:** Overfishing, buffalo herd slaughter from 8,000,000 to 200 in the 1870-90s
- **Pollution Examples:** Local Superfund Sites **WR Grace** and **Nuclear Metals (Starmet)**. Also, **leaky natural gas pipes** and **GLBs**.
- *The only municipalities where commercial leaf blower operators have moved from GLBs to BLBs is where regulations have been enacted.*
- Some homeowners are moving to BLBs voluntarily, but they are a small percentage of usage

Leafblower Bylaw: Page 1

Section 1. Purpose and Intent

The purpose of this bylaw is the reduction of noise pollution, air pollution, greenhouse gas emission, harm to wildlife, soil, and plants, and general negative public health outcomes from the use of gas-powered leaf blowers.

Section 2. Definitions

“Gas-powered Leaf Blower” -- Any handheld, backpack, or wheeled leaf blower that is powered by a petroleum-based engine and used in any landscape maintenance, construction, or property maintenance activity.

“Portable Gas-powered Leaf Blower” -- Any handheld or backpack style leaf blower that is powered by a petroleum-based engine and used in any landscape maintenance, construction, or property maintenance activity. Excluded from this definition are Wheeled Gas-powered Leaf Blowers.

“Wheeled Gas-powered Leaf Blower” -- Any wheeled or walk-behind style leaf blower that is powered by a petroleum-based engine and used in any landscape maintenance, construction, or property maintenance activity. Excluded from this definition are Portable Gas-powered Leaf Blowers.

“Commercial Leaf Blower Operator” -- Any entity, organization, or multi-parcel owner that receives income, remuneration, or compensation of any kind, whether as a fee, a charge, a salary, wages, or otherwise, for operating a leaf blower.

"Property Owner" shall mean the legal owner of record of real property as listed by the tax assessor's records.

"Property Manager" shall mean any tenant in possession or person or entity in control of real property, including, but not limited to, a condominium association.

"Town" shall mean the Town of Acton, Massachusetts.

Section 3. Regulations

3.1 Seasonal restrictions on Gas-powered Leaf Blowers will begin June 1, 2025. Gas-powered Leaf Blower use by any user is limited to the following designated Spring and Fall cleanup periods:

Spring Cleanup Period: March 15 to May 31.

Fall Cleanup Period: September 15 to December 31.

3.2 The use of Gas-powered Leaf Blowers will be phased out:

Effective June 1, 2026, the use of Gas-powered Leaf Blowers by Commercial Leaf Blower Operators will be prohibited.

Effective June 1, 2027, the use of Gas-powered Leaf Blowers by any user, including Town Residents and Property Managers, will be prohibited.

3.3 The Director of the Department of Public Works shall have the authority to temporarily waive any of the limitations on the use of Gas-powered Leaf Blowers set forth in this Bylaw in order to aid in emergency operations or clean-up associated with storms.

Section 4. Exemptions

The use of Wheeled Gas-powered Leaf Blowers powered by 4-stroke engines and leaf blowers attached to tractors or mowers will be allowed on lots larger than 1 acre during the Spring and Fall cleanup periods.

Leafblower Bylaw: Page 3

Section 5. Enforcement

5.1 The Department of Health or designee is responsible for the enforcement of this bylaw with assistance from the Department of Public Works and Police Department.

This bylaw may be enforced by any lawful means in law or equity including, but not limited to, a non-criminal disposition as provided in the M.G.L. Ch. 40, §21D and appropriate chapter of the General Bylaws of the Town of Acton. If non-criminal disposition is elected, then any Commercial Leaf Blower Operator, Property Owner, or Property Manager that violates any provision of this bylaw may be subject to the penalties in subsection 5.2.

5.2 Violators of the regulation may be fined up to \$300 per incident.

Section 6. Severability

Each section of this bylaw shall be construed as separate to the end that if any section, sentence, clause or phrase thereof shall be invalid for any reason, the remainder of this bylaw shall continue in force.

Section 7. Effective Date

This bylaw shall take effect January 1, 2025.