Method for Reducing Carbon Emissions from Small Two-Stroke Engines

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Hand-held yard equipment such as trimmers, chainsaws, blowers, and lawn mowers expel around 30% of pollutants that go into the engine. They are barely regulated for their emissions which ultimately leads to poor working conditions for lawn care workers who cannot rely on battery powered equipment since they use the product all day. The most common power source for these is simple reliable two stroke motors, with their high power to weight ratio and ease of use. In addition to this while other equipment keeps exhaust from the user, small two stroke equipment typically does not, leaving longtime users such as lawn care workers fully exposed 500 to 1000 times the OSHA accepted concentrations in manufacturing plants. OSHA's current policy only states that employers "maintain a workplace free from recognized hazards that are causing or are likely to cause death or serious physical harm". This statement is toothless for it contains no actual numbers.

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