

# Lawn and Landscaping

Landscaping equipment is the primary source of direct GHG emissions in the lawn and landscaping sector. Landscaping equipment traditionally uses gasoline fuel and releases emissions based on the amount of fuel combusted and emission factor of the engine. Equipment emissions can be reduced by requiring use of zero-emission landscaping equipment (including battery-powered and corded electric equipment) over conventional gasoline-fueled counterparts. The exclusive use of grid electricity to power the equipment eliminates onsite gasoline emissions but increases indirect emissions from electricity generation. However, grid-based emissions are typically less than the emissions from the gasoline-fueled equipment (depending on the source of grid power).



Emissions reductions achieved by zero-emission equipment are determined by finding the difference in emissions between those generated by the replacement power source and those generated by conventional gasoline engines. Emissions for the mitigated scenario may consist of direct emissions from combustion fuel use, and/or indirect emissions from grid electricity. Resources and methods to quantify emissions reductions from a measure requiring zero-emission landscaping equipment are described in this section.

Additional measures that can be undertaken to reduce emissions within the lawn and landscaping sector include ensuring electric yard equipment compatibility and implementing a yard equipment exchange program. Electric yard equipment compatibility is a supporting action for successful implementation of a measure that restricts gasoline landscaping equipment in favor of zero-emission equipment. A yard equipment exchange program would help facilitate community-scale equipment turnover and engine replacement. Please refer to the *Supporting or Non-Quantified GHG Reduction Measures* section at the end of Chapter 3 for additional information.

