# 4 Reasons to replace hand-held, petrol-powered tools

## Operator

The workplace health of the operators is at risk.

#### Harmful noise

Their workplace has unsafe levels of noise - as loud as a plane taking off.

#### **Toxic** gases

They work in a toxic cloud of burnt and unburnt fuel & oil.

# Neighbour

Airport-like noise penetrates the surrounding streets.

**Unacceptable noise levels** The level of noise is double that of most standards.

**Unreasonable intrusion** The strong, low frequency sound penetrates buildings.

# Community

The tools generate local pollution which harms health.

#### **Breathing** Breathing disorders are made worse and cancers are triggered.

**Health Emergency** Local air pollution increases hospitalisations, hastens death.

# Climate

The tools generate 22x more emissions per minute than a car.

#### **High GWP emissions** Methane & N<sup>2</sup>O are 30 and 300 times more warming than CO<sup>2</sup>.

**Long-lasting** Methane and nitrous oxide last in the atmosphere for 100 years.

## **Tool noise**

#### The operator is surrounded by harmful noise

Tool manufacturers report that hand-held, petrolpowered tools can generate noise above 110dB(A).

In workplace safety guidelines, noise above 85 dB(A) is categorised as 'unsafe'.

The maximum safeworking period for 100dB(A) noise is 15 minutes.

**We can** Electrify tools to eliminate OHS risk from noise.



## Toxic exhaust

The operator is enveloped in a cloud of toxic gases

Tool operators breathe nerve damaging and poisonous carbon monoxide; carcinogens such as benzo(a)pyrene, benzene and 1,3-butadiene, formaldehyde, acrolein; nitrogen oxides which can be harmful to the blood, immune, nerve and reproductive systems; and micro particles of soot which worsen conditions like heart disease, asthma and diabetes.

#### We can

Electrify tools to eliminate OHS risk from toxic gases.



### Local noise

The tools make neighbourhoods unnecessarily noisy

A blower can project 65– 80 dB(A) for 60m - more than double the daytime sound standards set by the World Health Organisation (55dB(A))

Noise above 55dbA from a petrol blower can be intrusive at 250m.

Blower noise easily penetrates windows which is rated as 'unacceptable' by the EPA.

**We can** Electrify tools to reduce neighbour noise.



## Local smog

Tool exhaust makes people sicker and can kill them

At times, small petrol motors contribute 10% of overall air pollution in Australian cities, 9% of man-made particulates and 20% of total man-made volatile organic compound emissions.

Tool pollutants worsen conditions like heart disease, asthma and diabetes and kill people before their time.

We can Electrify tools to reduce harmful local smog.



# Climate harm

The tool exhaust accelerates global warming

Small petrol motors are more harmful to the climate than car engines.

Operating a lawn mower for one hour emits as much pollution as driving a mid-size car from Melbourne to Mt Gambier.

Operating a leaf blower for one hour emits as much pollution as a car trip from Melbourne to Sydney and back again.

We can Electrify tools to reduce global warming gases.

