

# POWERING UP: A GUIDE FOR CONVERSION OF ASSETS FROM NATURAL GAS TO ELECTRIC IN COUNCIL BUILDINGS: OVERVIEW



## BACKGROUND

Natural gas releases greenhouse gases when burned, and significantly more when it leaks. There is currently no renewable equivalent to natural gas, whereas electricity can be sourced from renewable energy facilities such as solar, wind and hydro.

In the past, gas appliances have been much cheaper to operate, however electrical heating and hot water are becoming more and more efficient, leading to cost savings as well as easily being sourced from renewable electricity. Removing gas from a Council site also reduces costs from service and supply charges, typically \$300-500 per year.

Gas appliances typically fall under space heating, hot water and cooking. The cost effectiveness of switching from gas to electric will depend on the type of building, efficiency of appliances, usage profile and gas and electricity rates.

A recent survey conducted with SECCCA councils indicates there is a need for further guidelines and evidence-base in gas to electric conversions, for specific appliances and building types.

This project will provide member Councils with a guide to help identify opportunities to replace gas appliances with electric in Council buildings, as well as estimate costs and savings, build business cases, and provide data to meet Council targets. This project will provide support and capacity building to member Councils through collaboration to identify cost savings and emission reduction opportunities.

This is a 4-month project, scheduled for completion by January 2023.

## PROJECT OBJECTIVES

The overarching objective is to provide a guide for Councils to easily make the business case to convert Council buildings to fully electric. The specific objectives are to include:

- Approximate usage and maintenance cost comparison for electric and gas use broken down by:
  - common appliance (e.g. hot water systems, heating/cooling systems, kitchen appliances)
  - building type (e.g. community centres, sporting pavilions, office buildings)
- Approximate replacement costs, broken down by appliance type;
- Switchboard considerations for additional electrical load;
- Approximate service charge savings due to turning off gas supply;
- Approximate GHG reductions and environmental effects; and,
- Data that can be used to align projects to Council plans and objectives.

## SUPPORTED BY

The project is supported by all nine SECCCA member councils.

## PROJECT ADMINISTRATION AND GOVERNANCE

SECCCA is managing the project, with of all nine SECCCA member councils providing advice and supporting project delivery.

## PROJECT ACTIVITIES

A SECCCA Project Officer will undergo a desktop review of existing material available in the categories noted in project objectives and compile into a comprehensive guide for SECCCA councils.

Council officers may be required to provide information on Council buildings, specifically asset data, and review the draft document once developed.