

CLIMATE ADAPTATION TOOLKIT

SECTOR CASE STUDY: FOOD MANUFACTURING

While it is not possible to differentiate the size and scale of the various forms of manufacturing in the region, there are over 3,300 total manufacturing operations (including food) throughout the councils participating in the South East Councils Climate Change Alliance (SECCCA). The total sector was valued in 2021-22 at more than \$7.5 billion to the SECCCA region.

Food manufacturers are located in all nine councils in the region. The businesses in this sector are often clustered into areas near services, storage, or light industrial zones.

Food manufacturing businesses can have more than one site, including production and warehousing.

Depending on the scale of the business, production may be in an area attached to another building, such as a shopfront or residence, or it may be standalone.



ADAPTATION PLANNING

Adaptation planning for the food manufacturing sector involves making the following climate resilient:

- production site(s)
- warehouse site(s) (if different to the production site)
- access to stock from suppliers
- access to, and for, customers.

The small business climate resilience process can guide adaptation (see Figure 1).

Based on interviews with businesses across different sectors in the SECCA region, the food manufacturing sector's climate adaptation goals are to stay operational during extreme weather events, and plan to keep operating in a future, changed climate.

Options for adapting food manufacturing businesses include:

- renovating buildings to improve ability to operate in floods (e.g. raising machinery) or heatwaves (e.g. improving insulation)
- continue customers' ability to purchase through multiple pathways (e.g. other locations, online)
- review supply chains and the impacts of climate change on these: change the suppliers of key ingredients if they are (or soon will be) unable to grow or supply products at the right cost or quality
- work with the sector and councils to consider building regional operations and distribution hubs (similar to emergency centres) so small businesses can be more resilient to extreme weather impacts.

For more information, please see the [Small business climate adaptation toolkit](#).



Figure 1: The small business climate resilience process.

RELEVANT CLIMATE VULNERABILITIES

Climate projections for Greater Melbourne show:

- average temperatures will continue to increase
- there will be more frequent and longer heatwaves
- bushfire severity and duration will increase
- air pollution will become worse
- there will be fewer frosts
- rainfall will decline
- sea levels will continue rising, resulting in an increased risk of coastal erosion and flooding
- there will be more extreme weather events, including bushfires, severe storms, storm surges and heavy rainfall.

Some of these impacts (see Figure 2) will occur by 2030 to 2040. The impacts will get stronger over the proceeding decades.

For more information on climate impacts in your area, please visit the [Greater Melbourne Regional Climate Projections](#). Or there are [five other regional climate projections for Victoria](#).



Continuing rising daily temperatures



More frequent and longer heatwaves



Rising sea levels with increased risk of coastal erosion and inundation



Extreme rainfall events expected to become more intense



Rainfall expected to continue to decline in winter and spring



The fire season is longer and number of very high fire danger days in spring is increasing

Figure 2: Summary of climate impacts for Melbourne

THE RELATIVE COSTS

In the absence of cost projections, businesses in this sector suggested the relative investment in buildings and equipment as a metric. That is, if the building or equipment cost was high, it made sense to consider spending up to that value again to ensure business continuity and survival through extreme events. Businesses discussed a likely 10-year timeframe for adaptation of a building, with capital investment spread over that time. Businesses also discussed the expense of changing a supplier. However, given a 30 per cent drop in turnover due to a drop in quality of ingredients, the change was valuable.

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