

HOW DO WE KNOW WHERE NELSON'S AIR POLLUTION COMES FROM?

Every few years Nelson City Council compiles what is known as an Emissions Inventory to tell the region about the sources of our air pollution.

The figures shown here are from the 2014 Emissions Inventory and the Emissions Inventory is being carried out again this year. The method used to compile the inventory is used in many regions around the country.

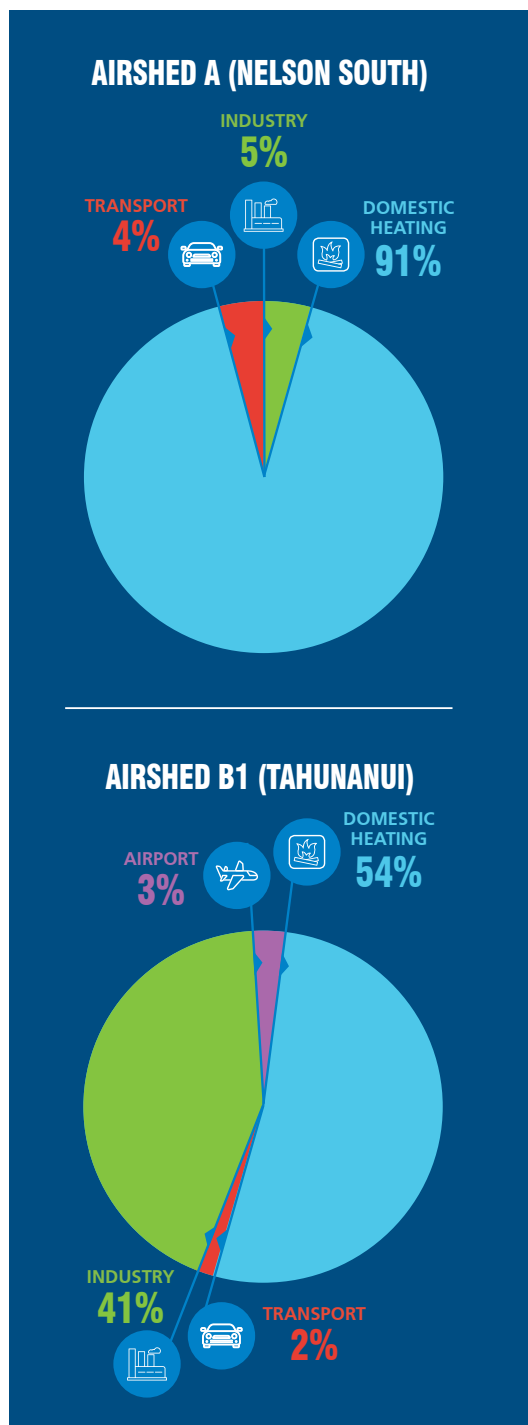
Previous emissions inventories have shown that the sources of Nelson's air pollution vary annually through the seasons. Traffic and industry are significant contributors year-round but in winter when our air quality is at its worst, domestic home heating is by far the biggest emitter of pollution.

The graphs opposite show where our PM₁₀ air pollution comes from over the winter months for two of our airsheds.

These figures are from 2014 and we are currently revising our emissions inventory to track improvements over the last five years.

WHAT IS AN AIRSHED?

Airsheds are areas of our city defined for air quality management purposes. Find out which airshed you are in at nelson.govt.nz/airsheds



FIRE NEEDS AIR!

If you're keeping your home warm using a wood burner, you can get a better result (more heat for less wood) if you make sure your fire has good air flow.

Shutting the fire damper down is like breathing through a straw – hard work! Getting the balance of air right is important. Aim for a good hot fire, and regulate the heat output by adjusting the amount of wood you put on rather than shutting the air flow off.

OTHER GREAT TIPS FOR YOUR WINTER BURNING

- Burn wood that is less than 110mm in diameter.
- Use the right wood at the right time – lighter wood (often called 'softwood') like pine is good for making kindling and getting a fire started. Once the fire is well established, denser wood (hardwood) will burn for longer and give more heat. If you can, use wood from plantation forests (for example pine and gum) rather than native woods like Mānuka.
- Keep the air setting high enough for a clean burn – too little air produces smoke rather than heat.
- Don't burn chemically treated or salt impregnated wood like driftwood – they can corrode your wood burner and flue, emit toxic gases and leave toxic residues in the ash and flue.

(Source – energywise.govt.nz)

Learn how to light a fire cleanly and efficiently with a helpful video from the New Zealand Home Heating Association at:

nelson.govt.nz/burn-smoke-free

WHY ARE ULTRA-LOW EMISSION BURNERS BETTER FOR AIR QUALITY?

Both laboratory and in-situ real-life testing has shown that Ultra-Low Emission Burners (ULEBs) produce less pollution per kilogram of wood burnt compared to 'low emission' wood burners.

All wood burners emit pollution when used, unfortunately no one has yet invented a 'zero-emission' solid fuel burner.

The availability of ULEBs meant that Council was able to make a change to Nelson's Air Quality Plan to allow more flexibility and choice in our less polluted airsheds.

Current recommended retail prices for ultra-low emission burners (ULEBs) start at \$2,799. A large percentage of ULEB models currently available sit in the \$3,000 to \$4,000 price range (including flue kits). A flue kit normally retails for \$800.



WHY DOES AIR POLLUTION MATTER?

Worldwide research shows conclusively that all forms of air pollution, including from wood burners, are dangerous to human health.

The World Health Organisation (WHO) issued this statement: *In 2019, air pollution is considered by WHO as the greatest environmental risk to health.*

Proposed amendments to the National Environmental Standards for Air Quality (NESAQ) are expected to be finalised soon, and will give Councils more certainty and direction on air quality regulation.