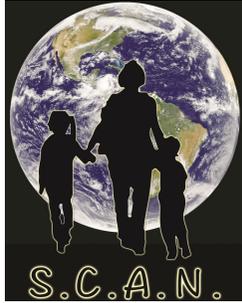


Seniors Climate Action Network (SCAN)

DUNEDIN / NEW ZEALAND



AIMS:

1. **Raising awareness** of climate change, among senior citizens, and working towards a low-carbon future.
2. **Encouraging** young people, to value resilience and to experience a low-carbon lifestyle, through spending time with them and organizing events.
3. **Taking action** (submissions, petitions), to put the planet and future generations ahead of profit.
4. **Changing lifestyles** to new patterns of living, to lower our own carbon footprint at household, community and national levels.
5. **Celebrating** and publicizing positive change that is already happening in the world.

We are a group of men and women of mature years who are concerned about climate change. We want to network with other individuals and groups based on the aims above. We live in and around Dunedin but would welcome other places setting up in their own area.

Many people are concerned about climate change but not sure what to do. The reality is that older people have much to give, especially values, skills and love of community.

When we were young, life was more simple. Do you remember taking a basket or shopping bag, walking to the grocer, butcher, and greengrocer; being thrifty but still generous; sharing vegetable garden produce with neighbours; baking and cooking from scratch? **These basic lifeskills and knowledge are what is required again, today.**

Of course, life was not Utopia, but community values we inherited included being satisfied with enough, sharing our abundance with others, being confident in our ability to feed and clothe our families with our own skills, being able to repair clothes and household items. We took part in and helped run community events and we had a love of nature, tramping in the bush; swimming in the rivers, lakes and oceans. As children we played outdoors in the summer and enjoyed indoor family games and library books when the nights drew in. These values and skills are needed for a low-carbon local economy today. Resilient, local, economies that celebrate community, as well as being open to creative new ideas and technology, are needed again in this new era of climate change. Would you like to be involved in a network that is engaged in building such a future?

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Facebook: Seniors Climate Action Network: www.facebook.com/groups/964056880274284/
Join us here (Any member may post on this page).

Signs of positive change which are already leading to a low carbon future:

- Divestment from fossil fuels and favour of clean energy options
- Better house insulation
- Double and triple glazing
- Energy efficient light bulbs
- Heat pumps
- Solar hot water
- More efficient whiteware
- Solar panels and wind turbines
- Smaller and more efficient cars
- Electric cars – becoming cheaper
- Public transport – increasing useage
- Increase in cycleways/walkways
- Electrified trains and buses
- Organized recycling
- Homegrown vegetables and fruit
- Backyard hens
- Food security: support of Farmers Markets and Community Gardens and Orchards
- Buying locally and in season
- Buying second-hand goods
- Increased conservation involvement
- Awareness of unnecessary plastic useage
- Social media: Sharing of community and technological ideas.
- Growing awareness of developing small resilient, self-sustaining, communities.
- UN Paris Climate Agreement
- NZ's *Our Climate Declaration*: www.ourclimatedeclaration.org.nz/

BE THE CHANGE YOU WISH TO SEE ...



What is climate change?

The sun's energy reaches Earth as light. As the light hits surfaces, rock, water, soil, living creatures . . . some of it is radiated as heat. Gases in Earth's atmosphere, like carbon dioxide (CO²) and methane, act like a duvet trapping that heat, hence the name greenhouse gases. Without them the planet would be very cold. However human activities over the last few hundred years, like deforestation and the burning of fossil fuels, have increased the concentration of CO² by about 40%, with more than half the increase occurring since 1970. Ice cores show that carbon dioxide levels in the atmosphere had remained between 180 and 300 parts per million for the past half-a-million years. In recent centuries, however, CO² levels have risen sharply and currently are about 400ppm.

Since 1900, the global average surface temperature has increased by about 0.8 °C at the same time the ocean has warmed causing a rise in sea level, a strong decline in Arctic sea ice, and many other severe weather events. Much of this warming has occurred in the last four decades.

www.newscientist.com/article/dn11638-climate-myths-human-co2-emissions-are-too-tiny-to-matter.html#.VQIBoYV7nPB

How can we be sure that human emissions are responsible for the rising CO² in the atmosphere?

The most convincing evidence comes from analyzing the proportion of carbon-14 in CO² in the atmosphere. The carbon in CO² is mostly in the stable form, C-12, but some of that carbon is

C-14, an unstable isotope with a half-life of 6000 years. At the time of its formation coal would have the same proportion of C-14 to C-12 as in the modern atmosphere. Over time the C-14 decays to C-12 until after millions of years very little C-14 is left.. When such fuel is burnt the CO² released has practically no C-14. So a falling concentration of C-14 in the atmosphere indicates that the increased CO² has come from the burning of fossil fuels. Studies of **tree rings** have shown that the proportion of carbon-14 in the atmosphere dropped by about 2% between 1850 and 1954. As nuclear bomb tests released large amounts of C-14 into the atmosphere, this method is no longer a reliable measurement.

What does climate change put at risk?

- Loss of life with severe damage from weather events – floods, cyclones, droughts, wildfires
- Biodiversity
- Availability of water
- Productivity of farms, forests and fisheries
- Geography of disease
- Changes in distribution of plant and animal species
- Loss of land from sea-level rise including cities, human cultural artifacts, engineered environments
- Good health (heatwaves new illnesses etc)

Evidence from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice and rising global average sea level **show that warming of the climate system is unequivocal.**



• **How sustainable is your lifestyle?**

• **What is your carbon footprint?**

• **How much do you know about climate change?**



Claire Browning in her blog <http://pundit.co.nz/content/carbon-footprint-whats-your-size> gives a good background to this difficult issue of carbon footprints. While all the calculations are imprecise the exercise is worth doing.

So here are two sites (one of which from the Claire Browning blog) that give a good overview. www.earthday.org/footprint-calculation and www.shrinkthatfootprint.com This last site has a lot of good information on climate change if you want to discuss it with a friend, neighbour or colleague.

Another source of good information is the *New Scientist*, eg: www.newscientist.com/article/dn11462-climate-change-a-guide-for-the-perplexed.html#.VS3toBxBpX8 lots of links in this one. www.astronomynotes.com/solarsys/s11b.htm debunks many myths put out by climate change skeptics.

BE THE CHANGE !

