Climate change is already presenting significant challenges globally and local impacts will increase in severity in coming years. Australia is the world’s highest per capita emitter of greenhouse gases. As a result of considerable investment in renewable energy in South Australia, our electricity supply is cleaner than other mainland states. We need to seize the opportunity for positive change and transition into a low carbon future, for example, one in five South Australian households have rooftop solar installed.

There are two main ways of dealing with the threats posed by global climate change, and we need to be actively doing both. They are mitigation and adaptation.

**Some things that we can do in response to climate change...**

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Emissions per capita (excludes land use change).
MITIGATION: Reduce greenhouse gas emissions

Mitigation refers to actions we can individually and collectively take to reduce the future magnitude and rate of climate change. This means drastically reducing our emissions of greenhouse gases, especially carbon dioxide and methane. As Australians are currently amongst the world’s highest per capita emitters of greenhouse gases, mitigation is the globally and locally responsible thing to do and provides us with a great way to lead the change.

- Use less energy, install energy efficient light bulbs, turn off lights, turn off electronic devices at the wall, insulate your home.
- Buy local to reduce transport miles.
- Use renewable energy, install solar panels and a solar hot water heater, use wind and other sources of power.
- Drive a more fuel efficient car or a hybrid car, ride a bicycle or walk.
- Conserve water, install dual-flush toilets and water-saving shower-heads, capture rainwater, recycle grey-water.
- Invest with banks that don’t invest in fossil fuels and change your superannuation to one that invests responsibly to mitigate climate change. Visit http://gofossilfree.org.au/
- Have at least one meat-free day a week as meat production has a very large energy and ecological footprint.
- Plant more trees and seagrass.
- Reduce consumption, reduce packaging, avoid disposable products, recycle, fix it!
- Reduce air travel.

ADAPTATION: Prepare for climate change impacts

Adaptation refers to measures we can take as a community to prepare for climate change impacts. The impacts of climate change on the economy, society and environment will vary across South Australia. Locally relevant adaptation responses will take into account knowledge of local communities and differing circumstances and impacts within each region.

- **Be proactive**, plan for change and don’t limit future options
- Increase biosecurity measures to prevent new pest and disease incursions that are likely to increase with climate change
- **Upgrade** culverts, sewers and coastal infrastructure to cope with increased flooding, rising sea levels and increased storm surge
- Improve early warnings and boost emergency services to respond to extreme weather events such as floods, heatwaves and fires
- Improve insulation in buildings to cope with heat and plant trees for shade
- Investigate alternative crops, pastures and agricultural systems, diversify
- Relocate infrastructure and buildings away from low-lying coastal zones
- Maintain and build connectivity between areas of natural bushland to enable native species to better move through the landscape in response to climate stress
- Make sure health services are prepared for dealing with an increase in heat-related conditions, especially amongst the old and infirm
- Make sure our water supply is capable of coping with rainfall extremes, especially an expected reduction in average annual rainfall and increased drought
- Make sure people are provided with accurate information to enable them to make good decisions in response to a changing climate
- Reduce pressure on the environment to improve its ability to adapt to the impacts of climate change.

Above: A young girl from Tuvalu, a small Pacific nation consisting of atolls between 2–4.6 m above sea level. Tuvalu President Mr Sopoaga says “There are no boundaries to the effects of climate change. We are dealing with saving human lives — and therefore saving Tuvalu is also saving the world.”

ABC 16 August 2014.