TAKE ACTION TODAY

FOR A CARBON-EFFICIENT SINGAPORE

Climate change is caused by rising levels of greenhouse gases (GHGs) in the earth's atmosphere due to human activities. All countries will be affected, including Singapore.

CLIMATE CHANGE AND SINGAPORE

Singapore is a low-lying, densely-populated tropical island city-state. We are vulnerable to the effects of climate change and variability.

Dry Spell

13 Jan to 8 Feb 2014: Singapore experienced a record 27-day dry spell. Our desalination and NEWater plants had to operate near full capacity to meet our water needs.

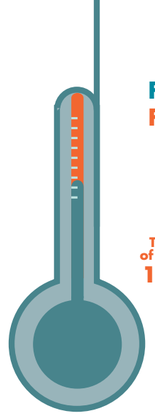
Plankton Bloom

2015: Hot weather caused a plankton bloom in the Johor Straits, resulting in mass fish deaths.

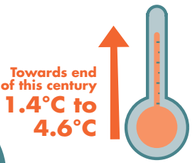
Heavy Rainfall

2010, 2011 and 2013: Heavy rainfall contributed to major flash flood events in these three years, resulting in significant damage.

While natural climate variability may have played a part in these events, extreme conditions are likely to become more intense and frequent due to climate change. It is therefore important for Singapore to prepare for climate change.



FUTURE PROJECTIONS FOR SINGAPORE

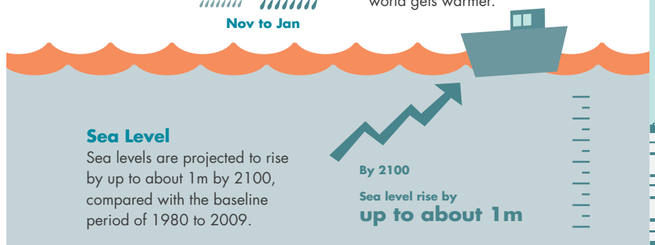


Daily Temperature

Daily mean temperatures are projected to increase by 1.4 to 4.6°C towards the end of this century (2070 to 2099), compared with the baseline period of 1980 to 2009.

Rainfall

The contrast between the wet months (Nov to Jan) and dry months (Feb and Jun to Sep) will likely become more pronounced. Increasing trends in both intensity and frequency of heavy rainfall events are expected as the world gets warmer.



Sea Level

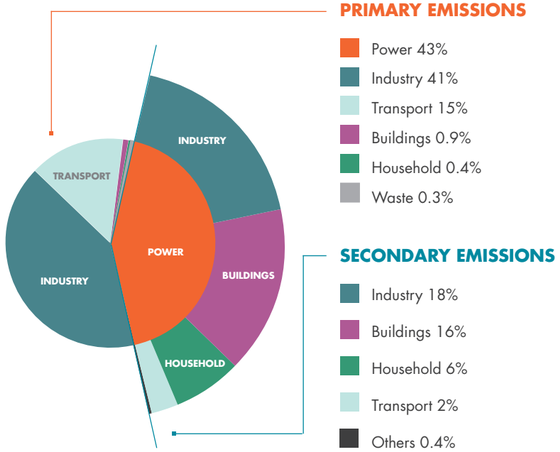
Sea levels are projected to rise by up to about 1m by 2100, compared with the baseline period of 1980 to 2009.

A CLIMATE-RESILIENT SINGAPORE

FOR A SUSTAINABLE FUTURE

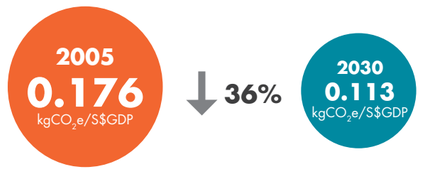
Singapore is contributing to global efforts to reduce GHG emissions. We are also taking steps to prepare for climate change.

In Singapore, the main sources of GHG emissions are our power, industry, transport and buildings sectors.



Singapore's GHG Emissions in 2012

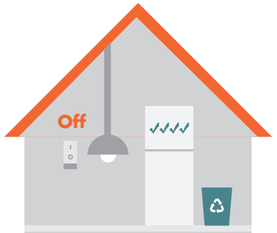
Singapore has pledged to reduce our Emissions Intensity (EI) by 36 per cent from 2005 levels by 2030, and stabilise emissions with the aim of peaking around 2030.



To reduce GHG emissions, we will improve energy and carbon efficiency and generate cleaner power. We will also develop and use low-carbon technology and encourage collective action.

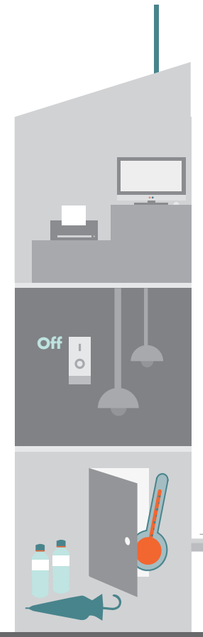
To adapt to the impacts of climate change, we have developed a range of adaptation measures, designed with the protection of Singapore and Singaporeans in mind. The measures aim to minimise the adverse effects that climate change could have on the community and economy, as well as our daily lives.

Everyone in Singapore can play a part in addressing climate change.



AT HOME

- Use energy-efficient appliances and switch them off when not in use.
- Reduce, reuse, and recycle. Avoid using disposable plastic packaging, bags, and utensils.
- Conserve water and choose water-efficient appliances.
- Use a fan or set the air-conditioner to 25°C.
- Do the 5-step Mozzie Wipeout to reduce risk of vector-borne diseases like dengue.



AT WORK

- Switch off the computer when leaving the office.
- Turn off the lights during lunch hours and after work.
- Wear loose-fitting clothes and drink more fluids when outdoors on hot and humid days to reduce risk of heat-induced illnesses.

WHILE COMMUTING

- Use public transport.
- Consider cycling or walking.

You can go to www.nccs.gov.sg/resources/publications to download this brochure and the Climate Action Plan.

BUILDING A CLIMATE-RESILIENT, CARBON-EFFICIENT SINGAPORE

PROTECTING SINGAPORE FROM THE IMPACTS OF CLIMATE CHANGE

01 Safeguarding Key Infrastructure
- Safeguard MRT stations, airports, sea ports, power stations, cellular towers and other key infrastructure against floods.
- Protect MRT tracks from elevated temperatures.

02 Protecting our Coasts
- Safeguard against coastal erosion and rising sea levels by building seawalls or using geo-bags along our coastlines.
- Raise selected roads near the coast.

03 Protecting Biodiversity and Greenery
- Replace storm-vulnerable trees.
- Restore and protect mangroves.
- Establish Sisters' Islands Marine Park.
- Increase connectivity between green areas.

04 Managing Stormwater
- Adopt holistic Source-Pathway-Receptor approach to cope with higher-intensity storms.

05 Protecting Public Health
- Manage vector-borne diseases like dengue.

06 Building up Climate Science
- Advance scientific understanding of climate change and its effects on Singapore.

07 Strengthening Food Security
- Diversify our overseas food sources.
- Promote innovative local farming solutions such as indoor farming.

08 Ensuring Water Sustainability
- Improve energy efficiency in desalination and used water treatment.
- Manage water demand from homes, businesses, and industries.
- Diversify our water sources and expand capacity.

09 Enhancing our Built Environment
- Green 80 per cent of our buildings by 2030.
- Improve energy efficiency of buildings.
- Inspect buildings regularly to ensure structural integrity.

10 Encouraging Collective Climate Action
- Build knowledge and awareness.
- Promote action on climate change.
- Support international cooperation.

REDUCING GREENHOUSE GAS EMISSIONS AND USING ENERGY MORE EFFICIENTLY

11 Increasing Industrial Energy and Carbon Efficiency
- Develop and enhance schemes to drive energy efficiency improvements.
- Reduce non-CO_2 GHGs from industrial processes.
- Adopt cleaner fuels.

12 Generating Cleaner Power
- Adopt more efficient power generation technologies.
- Increase deployment of solar photovoltaic systems.
- Increase efficiency of waste-to-energy plants.

13 Reducing Waste
- Achieve a national recycling rate of 70 per cent.
- Reduce incineration of plastic waste.

14 Encouraging Smart and Resource-Efficient Households
- Raise energy performance standards of appliances.
- Introduce smart home technology.
- Encourage use of energy-efficient appliances.

15 Moving to Clean, Car-lite Transport
- Achieve 75 per cent public transport use by 2030.
- Encourage cycling and walking.
- Improve vehicle fuel efficiency.
- Trial electric vehicles.

16 Developing and Deploying Low-Carbon Technology
- Develop R&D capabilities.
- Scale and deploy technology in test-beds and "living labs".