



The fight against

**climate
change**

begins with you

Yes, Weather Patterns are Changing.

The impact of climate change has been felt in recent years. It is sometimes warmer or colder than usual. Extreme weather events have also become more frequent and intense.



Did you know?

A small increase in global temperature can cause sea levels to rise, affecting a small, low-lying island like Singapore. It can also cause changes in weather patterns that will disrupt business activities, travel plans, animals and crops grown in other countries, and eventually our food supply.



We Have to Sit Up and Take Notice.

The Singapore Government takes climate change very seriously. The National Climate Change Secretariat (NCCS) was set up in 2010 under the Prime Minister's Office to more effectively address the challenges posed by climate change and prepare for its impact. Everyone in Singapore needs to be aware, chip in and work together.

Did you know?

Global warming is very likely (more than 90% probability) due to greenhouse gases resulting from human activities. This assessment was published in 2007 by the Intergovernmental Panel on Climate Change (IPCC), the leading international scientific body on climate change.



“Just How Vulnerable is Singapore to Climate Change?”

We are a low-lying, island city surrounded by water. The possible impact of changing weather patterns can include flooding, coastal land loss, shortage of water, heat-related stresses and health issues. Climate change will also affect biodiversity, our food supply and our greenery.

We cannot take chances. In tandem with global developments in climate science, we are studying the impact of climate change on Singapore, in areas such as coastal protection, water resources and drainage, public health, biodiversity and greenery, energy demand and urban infrastructure.



Did you know?

We have made plans to protect our coasts and improve our drainage. For instance, to cater to rising sea levels in the future, the minimum levels for new land reclamation projects have been raised by 1m since late 2011, in addition to the previous level of 1.25m above the highest recorded tide level.

Eco-Friendly Tips

We can start by using energy, water and other resources even more carefully, and minimise wastage.



Did you know?

If the world fails to take action to cut greenhouse gas emissions, these gases will build up in the atmosphere, absorb and trap heat. To limit the effects of climate change, every country and person needs to do their part, including you.

Small Changes, Big Differences

Making smart decisions at home or at work could mean lower energy use, lower emissions and a better world for everyone.

Use Air-Conditioning Sensibly

If you feel that the air-conditioning is too cold, raise the temperature setting. Better still, choose a fan instead of using an air-conditioner! You can save money by doing this.

Switch Off Appliances and Equipment When Not in Use

Your fan, television, computer and various electronic devices at home or at work also need a rest. Switch them off when you do not need them as they still consume energy on standby mode.



Public Transport Is There for You; Walk or Cycle if You Can

Going long distance? Why not try taking the bus or MRT instead of driving? Headed to a nearby location? Try walking or cycling. Consider these before you make any trip.

Buy Energy-Efficient Appliances

When buying a new appliance for home or work, choose the more energy-efficient model, to lower your energy use.

And when buying a new vehicle, you get to enjoy a rebate when you select one that emits less carbon.



Reduce, Reuse, and Recycle When You Can

If we use less, less will be thrown away. And for whatever we throw, we can channel materials such as paper, metal, plastic and glass for recycling. Using recycled products helps reduce carbon emissions simply because producing them uses much less energy.

Avoid using disposable utensils and cups, and plastic bags where possible. One way is to bring your own! And think of whether you really need the packaging or wrapping when you buy things.

“How Does Climate Change Affect Me?”

Rising sea levels, floods and droughts will affect our environment as well as our economy. It will also affect our lifestyles, food prices and biodiversity.

“I’m Just One Person. How Can I Make a Difference?”

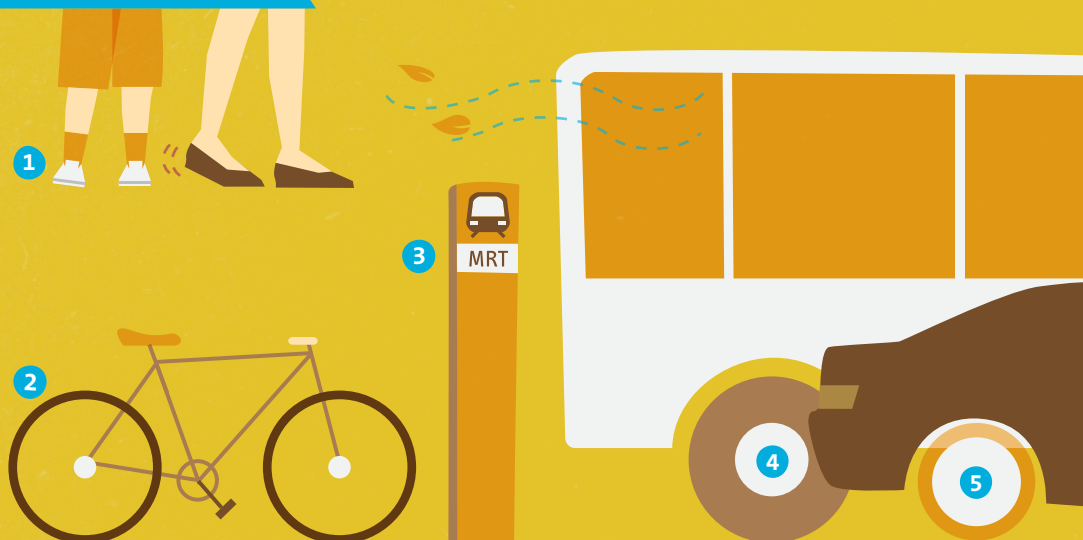
There are many ways we can help to curb the impact of climate change at home, school or work. It’s about making the decision to do something about it. Every little bit counts.

HOW IT ALL ADDS UP

AT HOME



TO WORK/SCHOOL



AT WORK



You can also download these two mobile apps – “NEA Energy Audit” and “Life Cycle Cost Calculator” – to help you track energy consumption and calculate the overall energy costs over an appliance’s lifespan.

FIGHTING FOR A BETTER CLIMATE COULD MEAN MORE CHANGE IN OUR POCKETS!
 OUR CHOICES MATTER. IF WE CAN UNDERSTAND THAT OUR DAILY DECISIONS MAKE AN IMPACT,
 WE CAN HELP REDUCE CARBON EMISSIONS AND ALSO SAVE A TIDY SUM OF MONEY.

SAVINGS PER YEAR* AT HOME WHEN YOU CONSERVE ENERGY...

1 Using a fan at night instead of the air-conditioner	\$790
2 Using a 4-tick (not 2) energy-efficient air-conditioner	\$205
3 Setting the temperature at about 25°C	\$25 for every degree raised
4 Choosing energy-efficient light bulbs (e.g. linear or circular fluorescent tubes, compact fluorescent lamps, LEDs)	\$20 per bulb for half-day use [if you use a compact fluorescent lamp (13W) instead of an incandescent bulb (60W)]
5 Switching off home appliances at the power socket	\$55 for switching off your set-top box (with recorder) when you are at work or asleep
6 Choosing energy-efficient appliances by using the tick rating system on the energy label	\$65 (if you buy a 4-tick instead of a 2-tick refrigerator)

*Based on average 2011 electricity tariff of \$0.2780 per kWh

HOW MUCH WILL YOU SAVE THIS YEAR?
 \$ _____

AVERAGE CARBON FOOTPRINT (FOR 10KM)

I am...

- 1 using my own two feet. 0
- 2 pedalling (a bicycle). 0
- 3 taking the MRT. 0.13KG*
- 4 taking the bus. 0.19KG*
- 5 driving my car. 1.87KG

* Assuming an average loading of 80 passengers per bus and 1,100 per train. Source: Land Transport Authority

IF MY ANNUAL MILEAGE IS 20,000KM,
 THIS MEANS 3740 KG OF EMISSIONS



ASK YOURSELF – DO YOU NEED TO DRIVE FOR ALL YOUR JOURNEYS? THINK ABOUT USING PUBLIC TRANSPORT, OR CARPOOLING WITH OTHERS HEADING THE SAME WAY.

SAVINGS PER YEAR* AT WORK WHEN YOU CONSERVE ENERGY...

1 Switching off the computer completely when you leave the office	\$15 per computer
2 Turning off the lights during lunch hour	\$63
3 Switching off the printer completely when not in use	\$134
4 Setting the split-unit air-conditioner(s) in the office at a temperature of 25°C	\$25 for every degree raised per air-conditioner

*Based on average 2011 electricity tariff of \$0.2780 per kWh

HOW MUCH WILL YOU SAVE THIS YEAR?
 \$ _____

ARE YOU THE GREEN EMPLOYEE OF THE YEAR?

SMALL CHANGES, BIG DIFFERENCES! YOU HAVE SEEN HOW MUCH MONEY YOU CAN SAVE BY ADOPTING THE ABOVE TIPS. WHY WAIT? START TODAY!



“What is Singapore Doing to Address Climate Change?”

Singapore started work on climate change even before it became a pressing global issue. Our reputation as a “Clean and Green” city reflects the priority placed on protecting the environment. Our country was planned to be sustainable and progressive, optimising use of land and energy resources efficiently.



You can go to www.nccs.gov.sg to download the National Climate Change Strategy (NCCS-2012) publication and learn more about Singapore’s plans to address climate change.

Our Game Plan Against Climate Change

While you do your part to fight climate change, the government is also working with you and investing in the future.

Building a Green City Intelligently

Our city and its suburbs have been built to reduce travelling time and developed around public transport to encourage its use. We are also greening our buildings to encourage efficient energy use.

Further Improving the Transport System

Buses and MRTs are great, speedy and efficient ways of travelling. Vehicle quotas and road pricing will continue to manage private transport demand. There is a new scheme to encourage drivers to choose cars that emit less carbon.

Using Natural Gas and Renewable Energy

Natural gas is the cleanest form of fossil fuel, for generating electricity. We have one of the highest proportions of natural gas usage in the world, at around 80%. Even in small Singapore, we are also exploring using clean renewable energy like solar power where possible.

Reducing, Reusing, Recycling

We are working with companies to reduce the amount of packaging for consumer products. We encourage reusing and recycling of resources to reduce emissions arising from waste incineration, and also to reduce the amount of waste going to our landfill.

Adopting Smart Energy Choices

Energy labels for home electrical appliances, and fuel economy labels for vehicles help consumers make informed choices. For companies and building owners, measures such as grants and financial assistance, as well as training, help them to make the switch to more energy-efficient practices.

If you have any good ideas, voice them in your workplace or community. It all starts with you!

Green City of the Future



Growing a Cleantech Hub and Green Opportunities

Singapore has been actively growing our Clean Energy industry since 2007. We have been actively researching cutting-edge and impactful clean energy technologies and solutions like solar power and electromobility. Furthermore, many companies have invested resources to grow Singapore as a CleanTech Hub!



Nurturing a “Living Lab” for Innovation

We encourage companies to test and develop new global energy solutions right here on our shores. We can benefit from mutual learning as well as the new technologies that are conceived. Examples of projects or testbeds include the CleanTech Park, Intelligent Energy Systems pilot, BCA's Zero Energy Building (*left*) and Punggol Eco-Town.

Did you know?

You can be part of the growing cleantech industry! Our local universities and polytechnics offer courses in Environmental Engineering and CleanTech fields.



A Vibrant and Active Community

Communities are the engines that will continue to motivate us to think about how we can help, and to take action. There are many activities that you can participate in.

Find out from your Community Development Council (CDC) about initiatives you can be involved in. Join the green club in your school. Or organise a recycling activity with like-minded neighbours. Get active, and spread the word too!



Did you know?

86% of Singapore residents surveyed felt a sense of responsibility in playing their part to address climate change! 3 in 4 respondents (75%) were motivated to adopt eco-friendly habits to preserve the environment for future generations.



Climate change is a global challenge. Singapore will do its part and the public sector is taking the lead in going green.

Did you know?

All government IT equipment have to meet the latest ENERGY STAR standards from 2009 onwards. Also, all new public sector buildings with more than 5,000m² of air-conditioned floor area will need to achieve Green Mark Platinum standards, and existing buildings with more than 10,000m² air-conditioned floor area will need to achieve Green Mark Gold^{Plus} standards respectively by 2020, to reduce energy usage and cut emissions.



More and more companies are also promoting green practices as it makes sense for the environment and their customers.

Did you know?

There are many companies who are proactive in the fight against climate change. City Developments Limited, Senoko Power Limited, STMicroelectronics Pte Ltd, Hitachi Global Storage Technologies Singapore Pte Ltd and SMRT Corporation Ltd are some who have been conferred the President's Award for the Environment for their efforts in recent years.

We Can All Take Action to Address Climate Change

We need to tackle this problem together, as a nation.

Whether it is active participation in Clean & Green Singapore, Earth Hour, the 10% Energy Challenge Programme, corporate and community eco-friendly activities or your decision to bring your own bag when you shop, recycle and buy energy-efficient appliances, every little bit counts. Get involved and do something today. Your actions may inspire others!



**Pass these messages on.
Pass this brochure on.**

IMAGES CONTRIBUTED BY:

Building and Construction Authority
City Developments Limited
National Environment Agency
National Parks Board
Nicholas Lai
REC
WWF Singapore



NCCS

NATIONAL CLIMATE CHANGE SECRETARIAT
PRIME MINISTER'S OFFICE SINGAPORE

Printed on FSC Certified Paper