SINGAPORE'S EFFORTS TO ADDRESS CLIMATE CHANGE

Climate change is a global issue affecting every country. Despite our small size, Singapore is committed to playing a part in battling this global challenge. Find out about Singapore's roadmap to becoming more carbon-efficient!

START

Our Emissions Intensity in 2005: 0.176 kg CO_2e/GDP S$

What does this figure mean?
CO_2e is the short form for carbon dioxide equivalent. This is an international measurement unit for the amount of greenhouse gases emitted by countries.

GDP stands for Gross Domestic Product. It represents the total dollar value of our economy. By tracking the amount of CO_2e we produce per dollar of our economy, we can tell if we are carbon-efficient in producing goods and services.

Unscramble! ❶
Hint: A key source of Singapore's carbon emissions.

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TAP ON THE SUN!

Funds and initiatives are rolled out to encourage more solar energy research and test-bedding.

Solar energy is one of the most promising sources of clean renewable energy for Singapore. We experience about 50% more solar radiation than temperate countries, at an annual average of solar irradiance of 1,150 kWh/m^2.

Unscramble! ❸
Hint: An unconventional place where Singapore is planning to install solar panels.

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CHOOSE LOW-CARBON EMISSION CARS

Owners who purchase low-carbon emission cars are now eligible for rebates between $5000 and $20,000.

All cars with carbon emissions of less than or equal to 135 g CO_2/km will qualify for rebates. Cars with high carbon emissions of more than 186 g CO_2/km will need to pay a surcharge.

Unscramble! ❺
Hint: Name of this scheme.

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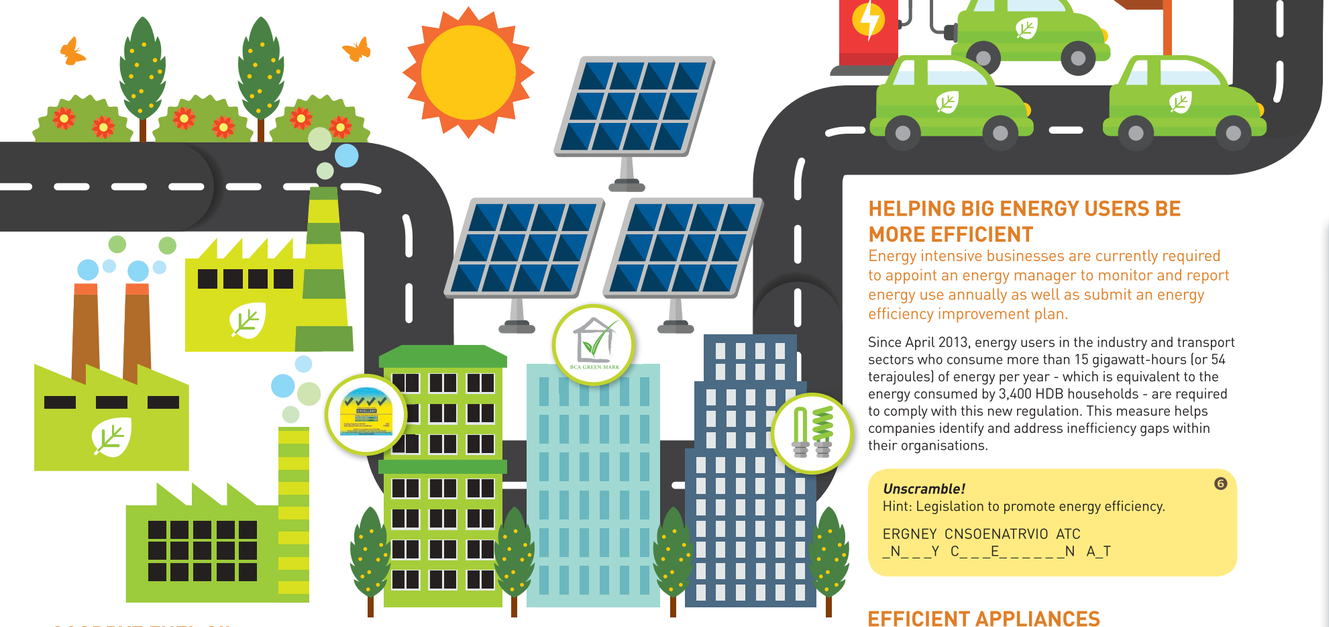

HELPING BIG ENERGY USERS BE MORE EFFICIENT

Energy intensive businesses are currently required to appoint an energy manager to monitor and report energy use annually as well as submit an energy efficiency improvement plan.

Since April 2013, energy users in the industry and transport sectors who consume more than 15 gigawatt-hours (or 54 terajoules) of energy per year - which is equivalent to the energy consumed by 3,400 HDB households - are required to comply with this new regulation. This measure helps companies identify and address inefficiency gaps within their organisations.

Unscramble! ❻
Hint: Legislation to promote energy efficiency.

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GOODBYE FUEL OIL, HELLO NATURAL GAS!

Instead of depending on fuel oil to power our energy plants, Singapore has been progressively moving to natural gas. Today, about 95% of our electricity is generated by natural gas.

Natural gas is the cleanest form of fossil fuels available. By switching to natural gas, we are reducing the amount of greenhouse gases produced in the course of generating electricity.

Unscramble! ❷
Hint: The cleanest form of fossil fuels.

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GREEN BUILDINGS

New buildings in Singapore will be required to attain Green Mark certification. This ensures that the buildings are environmentally friendly.

The Green Mark certification was launched in 2005 by the Building and Construction Authority to promote the construction of more environmentally-friendly buildings in Singapore. The benefits of Green Mark certified buildings include reduction in water and energy bills and a better indoor environmental quality for a healthier workplace.

Unscramble! ❹
Hint: Singapore's target for Green Mark Certified Buildings.

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EFFICIENT APPLIANCES

Since 2013, energy performance standards for air-conditioners and refrigerators have been tightened. Such Minimum Energy Performance Standards (MEPS) will be applied to more household appliances in the future.

Some household appliances consume a lot of energy and contribute to Singapore's carbon emissions. By using more energy-efficient home appliances we can help reduce our carbon footprint.

Unscramble! ❼
Hint: The scheme that helps consumers identify energy efficient home appliances.

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Answers:
1. Industry 2. Natural gas 3. Reservoirs 4. 80% of buildings by 2030 5. Carbon Emissions-based Vehicle Scheme 6. Energy Conservation Act 7. Mandatory Energy Labelling Scheme 8. Mass Rapid Transit 9. Park Connector Network 10. Reduce, Reuse, Recycle

SHARE JOURNEYS!

The government is expanding and improving our public transport network, with the aim of increasing public transport share to 75% by 2030.

Taking public transport is much more climate-friendly than private transport. Did you know that Singapore has a total rail network length of around 200 km? By 2030, Singapore aims to increase the rail network to more than 350 km. By then, around 80% of households in Singapore would live within 10 minutes of a railway station.

MOBILE NATION

Through campaigns and public infrastructure projects such as building more sheltered walkways, the government is encouraging more people to walk or cycle.

Transport is one of the largest sources of greenhouse gas emissions. Singapore is a pedestrian-friendly and compact nation. Walking or cycling is not only good for the environment; it is good for our health too!

Unscramble! ❾
Hint: Where you can cycle from park to park.

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Unscramble! ❽
Hint: Name of our railway system.

MSSA RPIAD TANITRS
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GOAL: REDUCE EMISSIONS INTENSITY BY 36%

Target Emissions Intensity in 2030: 0.113 kg CO_2e/GDP S$

What is our role in this?
We may have a roadmap to reducing our carbon emissions, but for it to succeed, all of us have to play our part. What do you think your role is in helping Singapore to achieve its goal?

Unscramble! ❿
Hint: What you can do to help Singapore reduce its carbon footprint.

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HEAR IT FROM A YOUNG OFFICER COMBATING CLIMATE CHANGE!

Denise Chew, 25, joined the National Climate Change Secretariat in 2015. Together with her team, she works behind the scenes to develop policies and plans to help Singapore address climate change.

What led you to join the National Climate Change Secretariat?
I have always been concerned about environmental degradation and destruction. When I was in school, I had often wondered how individuals, organisations and governments could surmount a global issue like climate change. Working here allows me to learn how Singapore contributes to global mitigation efforts and work on an issue I care about.

What is a day's work like for you?
Much of my work involves engaging stakeholders such as other government agencies, businesses and individuals on possible solutions to reduce our greenhouse gas emissions. A typical day would include meetings with these stakeholders, for instance, engaging businesses to find out new clean technology projects. I would also brainstorm with my colleagues on new policy proposals to make Singapore more climate-friendly.

What do you find most meaningful in your work?
Most people are preoccupied with short-term challenges, so climate change does not often feature as a top priority. However, the impact of climate change is significant and requires serious attention.

It is reassuring that Singapore has an agency dedicated to this cause. Being able to witness the work behind the scenes and contribute to our domestic policies has been very rewarding and motivating.

What would you say is the most challenging climate change issue for Singapore? What can we do about it?
The lack of urgency. Many people acknowledge that climate change is a problem, but fail to internalise the problem. As a society, there are many things we can do. Organisations could track their energy consumption, look at ways to improve their energy efficiency, and invest in low carbon innovations and technologies. Individuals like us could use more energy-efficient (go for more ticks!) appliances, reduce energy consumption, and recycle waste. This would go a long way to help Singapore reduce its carbon emissions!

Read more about Singapore's Climate Action Plan at www.nccs.gov.sg

Brought to you by National Climate Change Secretariat

THE CHALLENGES WE FACE

In addition to reducing our Emissions Intensity, Singapore has also pledged to stabilise its greenhouse emissions with the aim of peaking around 2030. This is an ambitious goal given the challenges we face.

LIMITED RENEWABLE ENERGY OPTIONS

We have limited options for renewable energy due to our geography. Singapore does not have large river systems to produce hydroelectricity or strong winds to power wind turbines.

SMALL LAND AREA

With only 719 km^2 in land area, we have to accommodate all kinds of land uses from housing and commercial buildings to power stations and industries. We need to strike a balance between economic development and preserving green spaces.

HIGH POPULATION DENSITY

Singapore has one of the highest population densities in the world, which also means that we need to cater for the energy needs of every resident within our limited land area.

WHERE WE STAND

Even though we face serious challenges in reducing our carbon footprint, Singapore has performed relatively well when compared to other nations.

Singapore accounts for around 0.11% of global emissions

Our Emissions Intensity places us in the top 20% of countries in terms of low carbon emissions

We rank 123 out of 141 countries in Emissions Intensity*, making us one of the most climate-friendly countries in the world.
(*based on 2013 data)