

# The Time is Now

Climate Change Newsletter

March 2010 - Issue 3

## Energy

### Greenhouse Effect...

### Can We Change the Climate?



It may seem hard to believe that people can actually change the Earth's climate. But scientists think that the things people do that send greenhouse gases into the air are making our planet warmer.

Once, all climate changes occurred naturally. However, during the Industrial Revolution, we began altering our climate and environment through agricultural and industrial practices. The Industrial Revolution was a time when people began using machines to make life easier. It started more than 200 years ago and changed the way humans live. Before the Industrial Revolution, human activity released very few gases into the atmosphere, but now through population growth, fossil fuel burning, and deforestation, we are affecting the mixture of gases in the atmosphere.

Since the Industrial Revolution, the need for energy to run machines has steadily increased. Some energy, like the energy you need to do your homework, comes from the food you eat. But other energy, like the energy that makes cars run and much of the energy used to light and heat/cool our homes, comes from fuels like coal and oil – fossil fuels. Burning these fuels releases greenhouse gases.

### When Do You Send Greenhouse Gases into the Air?

*Whenever you ...*

- Watch TV
- Use the air conditioner
- Turn on a light
- Use a hair dryer
- Ride in a car
- Play a video game
- Listen to a stereo
- Wash or dry clothes
- Use a dish washer
- Microwave a meal

*... you are sending greenhouse gas into the air.*



HSBC  
The world's local bank



To perform many of these functions, you need to use electricity. Electricity comes from power stations. Most power stations use coal and oil to make electricity. Malta has two power stations, an old one at Marsa and a relatively new one at Delimara. Both power stations run on imported fossil fuels, namely diesel and fuel oil.

### We CAN Make a Difference!



Climate change may be a big problem, but there are many little things we can do to make a difference. If we try, most of us can do our part to reduce the amount of greenhouse gases that we put into the atmosphere. Many greenhouse gases come from things we do every day. As we have learned, these greenhouse gases trap energy in the atmosphere and make the Earth warmer.

Driving a car or using electricity is not wrong. We just have to be smart about it. Some people use less energy by carpooling. For example, four people can ride together in one car instead of driving four cars to work. Here are some additional ways you can help make the planet a better place!

### Read

Learning about the environment is very important. There are many good books that will help you learn. To get started, ask a teacher or a librarian for some suggestions. You also can look at the internet to find good web sites with information about the environment and climate change

### Save Electricity

By turning off lights, the television, and the computer when you are through with them, you can reduce your use of electricity and the amount of greenhouse gases released in the air

### Bike, Bus, and Walk

You can save energy by sometimes taking the bus, riding a bike, or walking.

### Talk to Your Family and Friends

Talk with your family and friends about climate change. Let them know what you've learned.



*One thing I can do...*

*Shut down the computer when you're not using it - a typical PC left on all the time produces 0.8 tonnes of carbon dioxide emissions annually.*

*You can help the environment if you buy recyclable products instead of non-recyclable ones? Look for the recycle mark - three arrows that make a circle - on the package.*

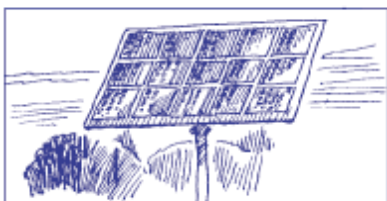


Cars, stereos, and VCRs can be "energy smart"



The "recycle" symbol.

The "ENERGY STAR" symbol



Solar Panels such as these can provide electricity to buildings

## Plant Trees



Planting trees is fun and a great way to reduce greenhouse gases. Trees absorb carbon dioxide, a greenhouse gas, from the air.

## Recycle

Recycle cans, bottles, plastic bags, and newspapers. When you recycle, you send less trash to the landfill and you help save natural resources, like trees, oil, and elements such as aluminum.

## When You Buy, Buy Cool Stuff

There are lots of ways we can improve the environment. One of the ways to reduce the amount of greenhouse gases that we put into the air is to buy products that don't use as much energy. By conserving energy, we help reduce climate change and make the Earth a better place. Some products – like certain cars and stereos – are made specially to save energy.

## Some Things to Think About

Did you know that you can help the environment if you buy recyclable products instead of non-recyclable ones? Look for the recycle mark – three arrows that make a circle – on the package. Recyclable products are usually made out of things that already have been used. It usually takes less energy to make recycled products than to make new ones. The less energy we use, the better

## Solar Energy

Imagine that it's a hot summer day. You put a scoop of ice cream on the sidewalk, and it melts. Why? Well, you probably know that the sun causes the ice cream to melt. But you may not know that the sun produces solar energy ... a fancy way of saying "energy that comes from the sun." Solar energy can be used to heat homes, buildings, water, and to make electricity.

## Cars

Cars are an important part of life for most people. But cars also cause pollution and release a lot of greenhouse gases into the air. Fortunately, there are some cars that are better for the environment. These cars can travel longer on a smaller amount of fuel. They don't pollute as much, either. Using these kinds of cars can help reduce the amount of greenhouse gases in the air.

## ENERGY STAR®

Many things, like computers, TVs, stereos, and VCRs, have special labels on them. The label says

"Energy" and has a picture of a star. Products with the ENERGY STAR® label are made to save energy. Buying products with ENERGY STAR® labels will help protect the environment.

## Energy Efficiency

Wasting energy is the same as wasting money. You've probably heard the grown-ups in your house say "Turn off the light!" or "Close the refrigerator door!" Have you ever wondered why? Energy is there whenever we need it – so it's easy to forget where it comes from, or how much it costs. It all adds up. Every year, we use more energy than we did the year before. All of that energy adds up, and much of it is wasted by using too much or not using it wisely. Energy isn't free. The grown-ups in your house pay for all the electricity you use. So wasting energy is the same as wasting money – and we know that's not a good idea! Wasting energy isn't good for the environment either. Most of the energy sources we depend on, like oil, coal and natural gas, can't be replaced – once we use them up, they're gone forever. Another problem is that most forms of energy can cause pollution.

## Free Energy Saving Light Bulbs

In June 2009, the Maltese government started distributing free energy-saving light bulbs to every household in a bid to cut down on hefty electricity prices. A total of 1.2 million bulbs of different shapes and sizes were distributed at a cost to the government of about €4 million. The bulbs reduce a family's lighting bill by 70 per cent and last 10 times longer than conventional bulbs.

Malta's move preempts an EU initiative to gradually phase out all incandescent light bulbs and inefficient halogens by 2012. At that time the government unveiled plans to link up its power grid to Sicily and opt for alternative energy sources.

## Related links

<https://opm.gov.mt/switch>

<http://www.enemalta.com.mt/page.asp?p=968>

[http://www.enemalta.com.mt/filebank/documents/education\\_electricity.pdf](http://www.enemalta.com.mt/filebank/documents/education_electricity.pdf)

<http://www.energyfocusmalta.com/report.htm>