The Environmental Management Authority (EMA) situated in Port of Spain, Republic of Trinidad and Tobago, is a statutory body established by the government of Trinidad and Tobago to address the country’s environmental problems.
The EMA was established in June 1995 under the Environmental Management Act, No. 3 of 1995.

Under the Environmental Management Act, the EMA is mandated to educate the public about the nation’s environmental issues through awareness programmes.
Our Environmental Education Goals

Trinidad and Tobago’s National Environmental Policy states that:

- If the ethic for sustainable development is to be widely adopted, people must re-examine their values and alter their behaviour.

- Information must be widely disseminated through formal and informal education sectors so that the required actions are widely understood.

- Environmental education for children and adults must be integrated into education at all levels.
The Republic of Trinidad and Tobago signed and ratified the UNFCCC in 1994 and is committed to play an integrated role in helping to achieve ... the ultimate objective of the Convention ...

(Initial National Communication of the Republic of T & T under the UNFCCC)
Lecture to the Salybia community which is situated on the north-east coast of Trinidad
An EMA official conducts a lecture on Climate Change to secondary school students.
Using games to communicate Climate Change to young children from a rural community.
Lecture series on Climate Change to commemorate World Environment Day, 2007
A student from Couva Government Secondary School records temperature readings.
A Stephenson Screen at Iere High School in south Trinidad.
Students testing water quality of the Couva River in Central Trinidad.
Distributing information on Wetlands and Climate Change in our sister isle, Tobago.
Effects of Global Climate Change on Wetlands

Global Climate Change may lead to changes in sea level, sea-surface temperatures, rainfall, and wind and ocean currents.

Increases in temperature, sea-level rise and changes in rainfall patterns can reduce the ability of wetlands to perform their vital functions of protecting reefs, coastal fisheries and providing for erosion control.

In addition, if wetlands are unable to effectively adapt to climate change, their productivity, upon which many other species depend, will be affected. All of these changes may have far reaching social, economic and ecological effects.

As part of the efforts to conserve wetlands, the Government of the Republic of Trinidad and Tobago’s National Wetland Policy promotes the protection, management and restoration of wetlands.

This will sustain and enhance the ecological and socio-economic values and functions of wetlands for the current and future generations.

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VULNERABILITY OF SMALL ISLAND DEVELOPING STATES TO CLIMATE CHANGE

Vulnerability may be defined as the extent to which climate change may damage or harm a system (a system can refer to a community or to a sector such as agriculture or tourism).

It depends not only on a system’s sensitivity but also on its ability to adapt to new climatic conditions.

Climate models predict that global temperature will rise by about 1.0 to 3.5°C and the mean sea level rise is expected to be between 15 and 95 cm.

It is accepted that Small Island Developing States (SIDS) such as the Caribbean Islands are vulnerable to the impacts of Global Climate Change due to:

- Small land area and position within the annual path of tropical cyclones and hurricanes,
- The concentration of economic activity and infrastructure in the coastal areas, making them highly vulnerable to storm events and sea-level rise,
- Direct and indirect dependence on natural resources such as forests and coral reefs for maintaining vital socio-economic sectors and services, including agriculture, tourism and fisheries,
- Limited technical, human and financial resources and limited capacity for natural resource management,
- Lack of relatively diversified economic bases due to limited human and natural resources and dependence on agriculture and tourism as primary industries through concessionary arrangements with other countries.
GLOBAL CLIMATE CHANGE

Global Climate Change could lead to changes in sea level, an increase in sea surface temperature and changes in rainfall, wind and ocean currents. Coping with these anticipated changes is known as adaptation.

It is possible that the effects of climate change such as less rainfall, hotter temperatures and the movement of sea water (which is salty) inland can affect our fresh water resources.

Increasing sea levels can result in the flooding and erosion of low-lying coastal areas.

Movement of sea water inland is known as salt water intrusion and may occur as a result of sea level rise.

Roads and bridges near the coast would be adversely affected by increases in sea level.

Climate Change can also have a negative impact on the agricultural and fisheries sectors.

NAME ____________________________
SCHOOL __________________________
CLASS ____________________________
SUBJECT __________________________
**GLOBAL CLIMATE CHANGE**

Here’s What We Can Do to Reduce The Effects of Global Warming

**CONSERVE ENERGY AT HOME**
- Reduce greenhouse gases as a way of life in T&T.
- An energy-efficient air conditioning unit and refrigerator can conserve one tonne each of CO₂ annually per household.
- Compact fluorescent, spiral bulbs are 75 percent more efficient than standard light bulbs.

**REDUCE GARBAGE**
- On average, a person throws away 10 times his/her bodyweight in waste per year.
- One kilogramme of debris sent to the landfill produces two kilograms of methane, a greenhouse gas.

**SAVE ENERGY ON THE ROADS**
- Walk, cycle, carpool or use public transportation to reduce vehicle emissions on the road.
- Keep your car engine well-maintained and change the oil to reduce emissions and save fuel.

**PROTECT OUR COASTS AND SEAS**
- Protect our coasts and seas by not destroying our swamps and coral reefs and by not littering in our rivers and streams.

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**CLIMATE CHANGE AND THE CARIBBEAN**

**Vulnerability to Climatic Risks**

Vulnerability may be defined as the extent to which climate change may damage or harm a system (a system can refer to a country or to a sector such as agriculture or tourism).

It depends not only on a system’s sensitivity, but also on its ability to adapt to new climatic conditions.

Carcin countries are primarily Small Island Developing States (SIDS), located in low-lying regions with fragile coastal eco-systems. Coastal areas which hold the vast majority of the population and economic activity are vital to the prosperity of these countries.

They are also the most productive areas, supporting a wealth of living marine resources and high biological diversity.

SIDS, such as the Caribbean islands, are vulnerable to the impacts of Global Climate Change due to:

- Small land area and position within the annual path of tropical cyclones and hurricanes.
- The concentration of economic activity and infrastructure in the coastal areas, making them highly vulnerable to storm events and sea-level rise.
- Direct and indirect dependence on natural resources such as forests and coral reefs for maintaining vital socio-economic sectors and services, including agriculture, tourism and fisheries.

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**CLIMATE CHANGE AND SEA LEVEL RISE**

Global warming has contributed significantly to the rise in average sea level, as well as the increase in ocean temperature.

Rising sea level, combined with more frequent storms, washes away vulnerable beaches and increases rates of erosion, making them less attractive for tourism areas. Salt-water intrusion, due to sea level rise, can also affect freshwater supplies, agriculture and human settlement.

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*Information and graphs courtesy: UNEP*
The Pointe-a-Pierre Wild Fowl Trust

- The Wild Fowl Trust, now in its 41st year, is a wildlife reserve, which encompasses two lakes and about 25 hectares of land within a major petrochemical complex (PETROTRIN).
Some of the work done at the Trust includes:

- Research, breeding and reintroduction programmes for locally endangered, wetland birds.

- Promoting and implementing the wise use of our natural resources.
Education and public awareness programmes on environmental issues including Climate Change
Lobbying for improved environmental policies
The Petroleum Company of Trinidad and Tobago Limited, PETROTRIN, is fully owned by the Government of the Republic of Trinidad and Tobago.
PETROTRIN’S Environmental Policy

- Ensure that its operations comply with all applicable environmental legislation, corporate, industry standards and where feasible, adopt corporate standards where appropriate legislation is, or may be inadequate.
PETROTRIN’S Environmental Policy

- Support research and work with industry, government and other public agencies to establish realistic environmental standards.

- Ensure appropriate and cost effective waste and emissions management programmes are implemented for the prevention of and control of pollution.
The Buccoo Reef Trust (BRT) is a non-profit organisation, registered in Trinidad and Tobago and the USA that was specifically created to assist in addressing the threats facing Tobago's marine environment and to explore opportunities for the sustainable development of marine tourism, fishing and aquaculture in the Caribbean region as a whole.
Thank you for your time.

Any questions?