Climate Change Mitigation and Adaptation

Mitigation refers to efforts to cut or prevent the emission of greenhouse gases - limiting the magnitude of future warming. It may also encompass attempts to remove greenhouse gases from the atmosphere.

Adaptation- actions taken to manage the unavoidable impacts of climate change.

Enough solar energy reaches Earth every hour to meet the power needs of the entire world for a full year

Africa’s Energy Poverty

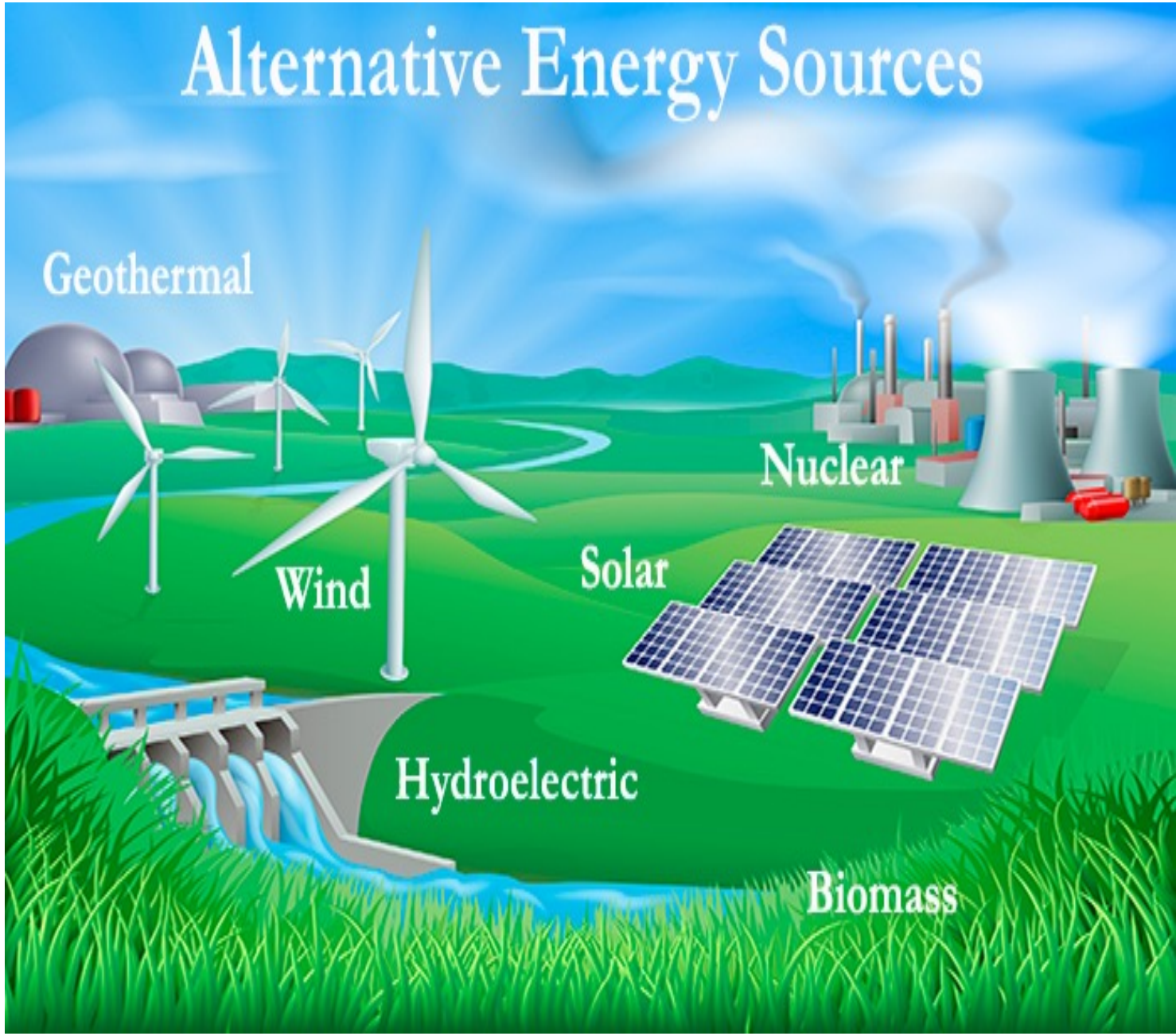
Currently, the total power capacity installed in Africa is at 147 GW. This is equivalent to total capacity installed in Belgium and to what China installs every one to two years.

Sources of Electricity in Uganda as of March 2022			
Rank	Source	Quantity (MW)	Percentage of Total
1	Hydroelectricity	1,072.9	79.7
2	Bagasse Co-generation	111.7	8.2
3	Heavy fuel oil	101.1	7.5
4	Solar power	60.9	4.6
5	Wind	0	0.0
6	Geothermal	0	0.0
7	Nuclear	0	0.0
8	Other	0	0.0
	Total	**1,346.6**	**100.0**

The Population of Uganda estimated to hit 160 Million by 2100

The opportunities

- Less Emissions
- Inexhaustible energy
- Decentralization
- Jobs
- use new technologies
- Stable prices
- Improved public health
- Research




URINE POWERED


22

Clean Cooking

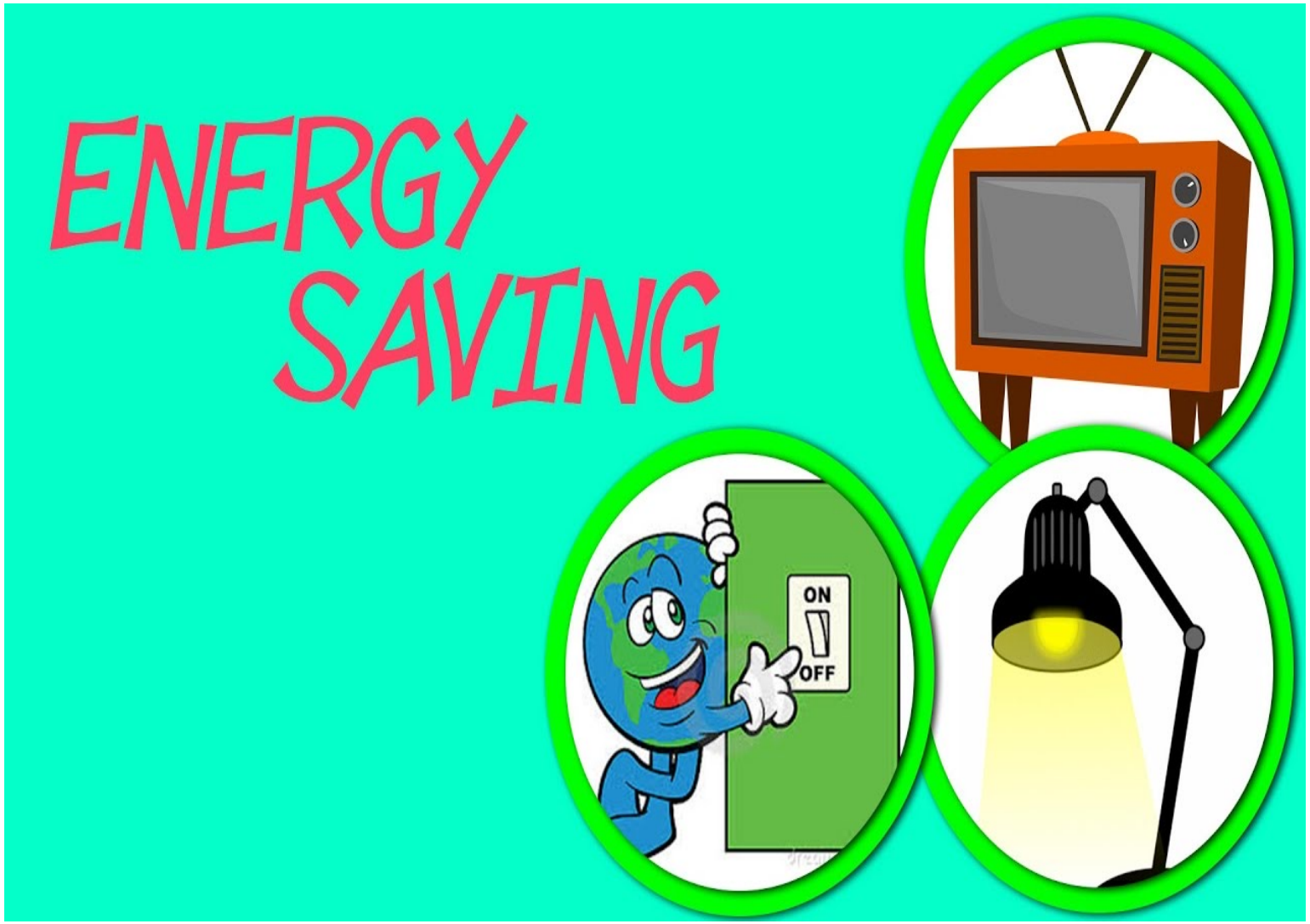
Efficient and Clean Mass Transportation

Energy Efficiency

The practice of using less energy to provide the same amount of useful output from a service (such as heating water, lighting, or cooling a fridge).

Benefits

- Good for the Climate
- Good for your pocket
- Risk Management



Nature-based solutions (NBS)

The term **Nature-based solutions** (**NBS**) refers to the sustainable management and use of natural features and processes to tackle socio-environmental challenges. These challenges include issues such as climate change, water security, water pollution, food security, human health, biodiversity loss, and disaster risk management

Plant a Tree and
Restore our Forest

- **Clean air and water,**
- **protect against erosion and landslides,**
- **help to regulate the climate by removing carbon from the atmosphere.**
- **act as significant carbon sinks, sequestering huge amounts of carbon in tree biomass and soils.**
- **Home to Wildlife and Biodiversity**
- **Tourism**

Mabira Forest

This shows the value of KEEPING trees, and plants living on our soil! As soon as we rip out all of the resources....we pollute our ground water...which becomes harder and harder to purify for us to then drink!!!

Climate Smart Agriculture

- Irrigation
- Agro-Forestry
- Composting/Organic Farming
- Aquaculture
- Hydroponics
- Use of improved Seedlings (Drought Resistant and Early Maturing Seeds).
- Reduce the Heavy use of Agro chemicals

Food Waste

40% of Food Produced in Africa go to Waste

1. **Ways to Avoid food Waste in Uganda?**
2. **What are the opportunities?**

(a)

(b)

(c)

(d)

Avoid Food Waste

Building greener cities and Towns

Urban development replaces forests and wetlands with buildings and nonporous infrastructure. When it rains heavily, stormwater that doesn't get absorbed can cause severe flooding. That runoff then washes into streams, lakes, or rivers, where it can increase sediments, pollute drinking water, or harm wildlife.

- **Green roofs, Windows, ventilation.**
- **rain gardens, or constructed wetlands can minimize damaging runoff by absorbing stormwater, reducing flood risks and safeguarding freshwater ecosystems.**
- **keep cities cooler**
- **support birds and other pollinators,**
- **and promote people's mental and physical health.**

Don't trash our future.

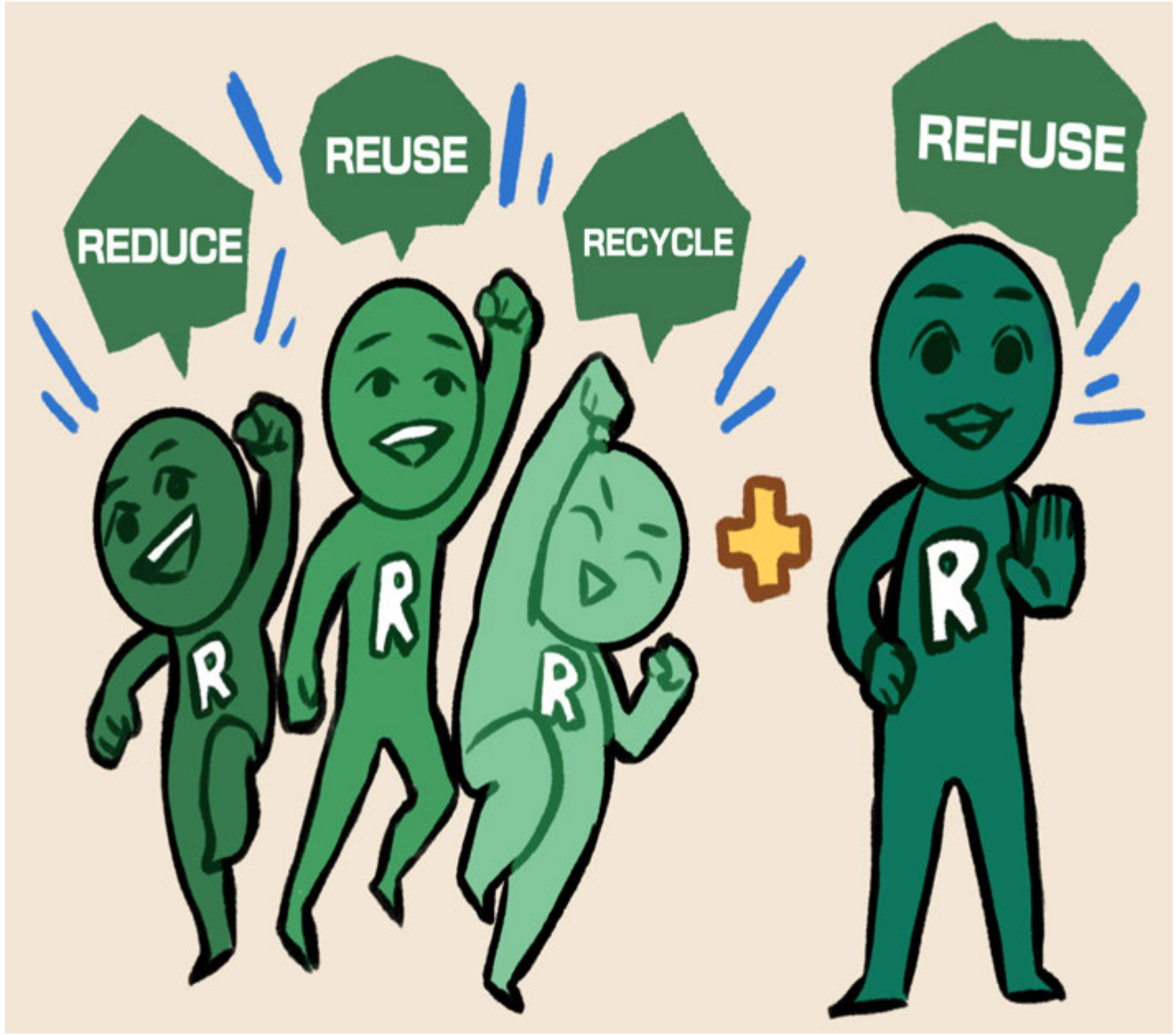
Recycle.®

Lake Victoria

Fishermen collect plastic wastes from Lake Victoria at Mageta Island. Photo by Viola Kosome

The opportunities

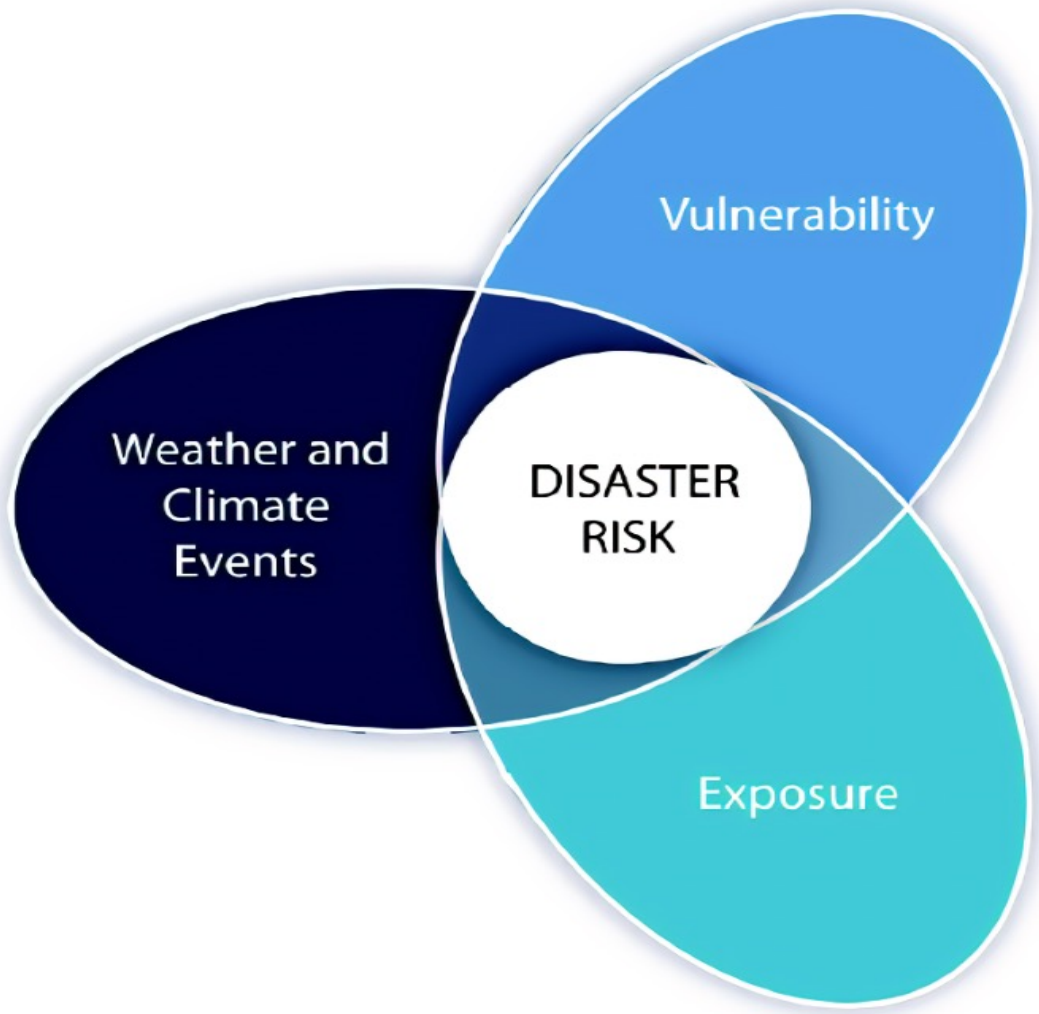
1. Create a Circular Economy
2. Formalize the informal waste collectors (Can someone do a study; The number of people employed, the income and the total worth




Coke
Coke

Risk Mitigation and Risk Management

- ✓ Early Warning Systems
- ✓ Seasonal Rainfall Predictions
- ✓ Land Use Planning
- ✓ Community, towns, cities and National Climate Vulnerability and Risk Register
- ✓ Research and Innovation



Tomorrow's Earth is

Today's Responsibility