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Canada Fund for Local Initiatives

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Canada

GREEN ENERGY & SOLAR PV workshop *for* TEACHERS



About Sustainability for Seychelles (S4S)

Our mission:

Sustainability for Seychelles is committed to helping Seychelles and other small island states work toward social, ecological and economic sustainability.

We aim to inspire, inform and enable people to live, work and play in ways that contribute positively to both human and natural communities



About Sustainability for Seychelles (S4S)

Our projects touch on many themes:

- Water
- Waste
- Sustainable tourism
- Sustainable communities
- Green prison
- Climate change education
- Energy

Workshop Objectives

- 1) To build teachers knowledge and understanding of climate change and renewable energy
- 2) To familiarize participants with the components of the Solar PV kit for schools and how to use them
- 3) To inspire participants to plan lessons using the kits to promote active teaching/learning about renewable energy and solar PV in schools

The programme for today

8:30	Welcome & Opening & Icebreaker	S4S/ MoEd
9:00	Introduction to Climate Change & Renewable Energy	Michele
9:20	Activity: Types of Renewable Energy	Michele
9:45	Presentation: Solar PV & Kits for Schools	Magda
10:15	Break	
11:00	Groupwork: Using the solar PV kits	Tim & Magda
12:30	The Solar PV Challenge: A mini science fair	Magda
1:00	Workshop conclusion, evaluation and Lunch	Michele

ECO BINGO!

FIND SOMEONE WHO:

1. Can tell you one easy energy saving tip
2. Can name one type of RENEWABLE ENERGY
3. Can tell you one place in Seychelles that uses solar panels for electricity
4. Has a solar water heater at home or their business
5. Uses energy saver bulbs at home
6. Can tell you how PUC generates electricity

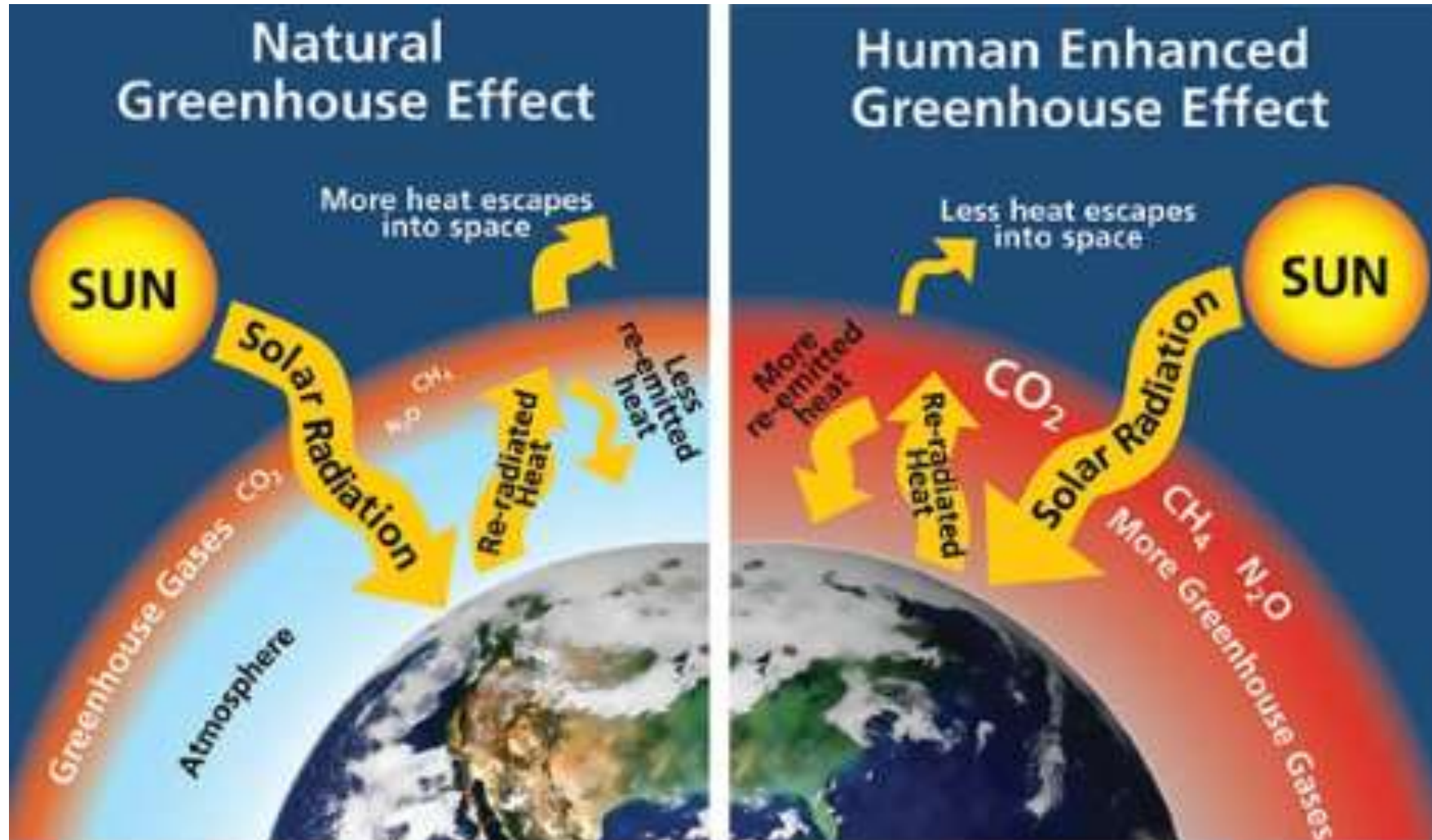
CLIMATE CHANGE

“... any change in climate over time (typically decades or longer), whether due to natural variability or as a result of human activity.”

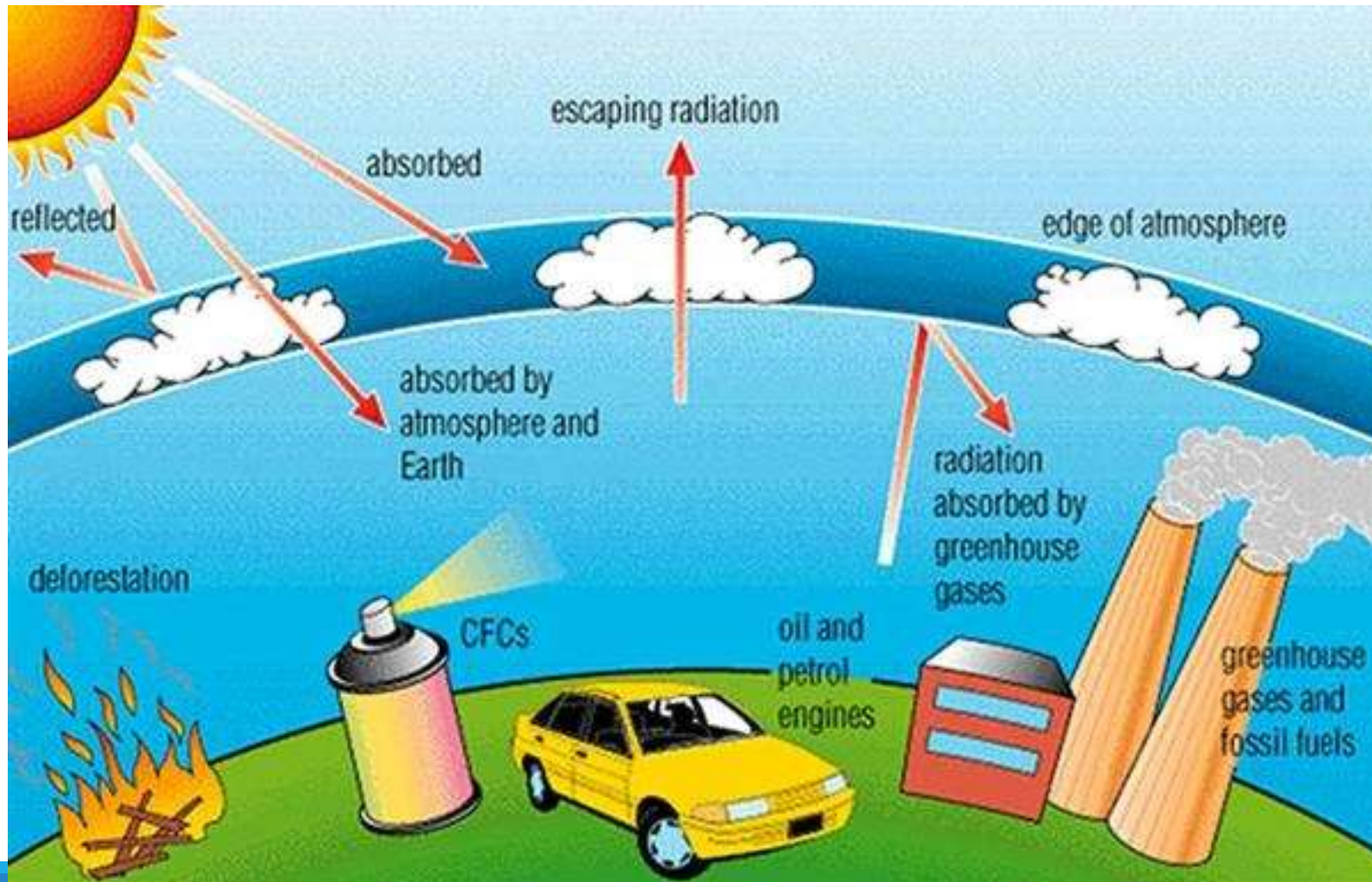
UNFCCC



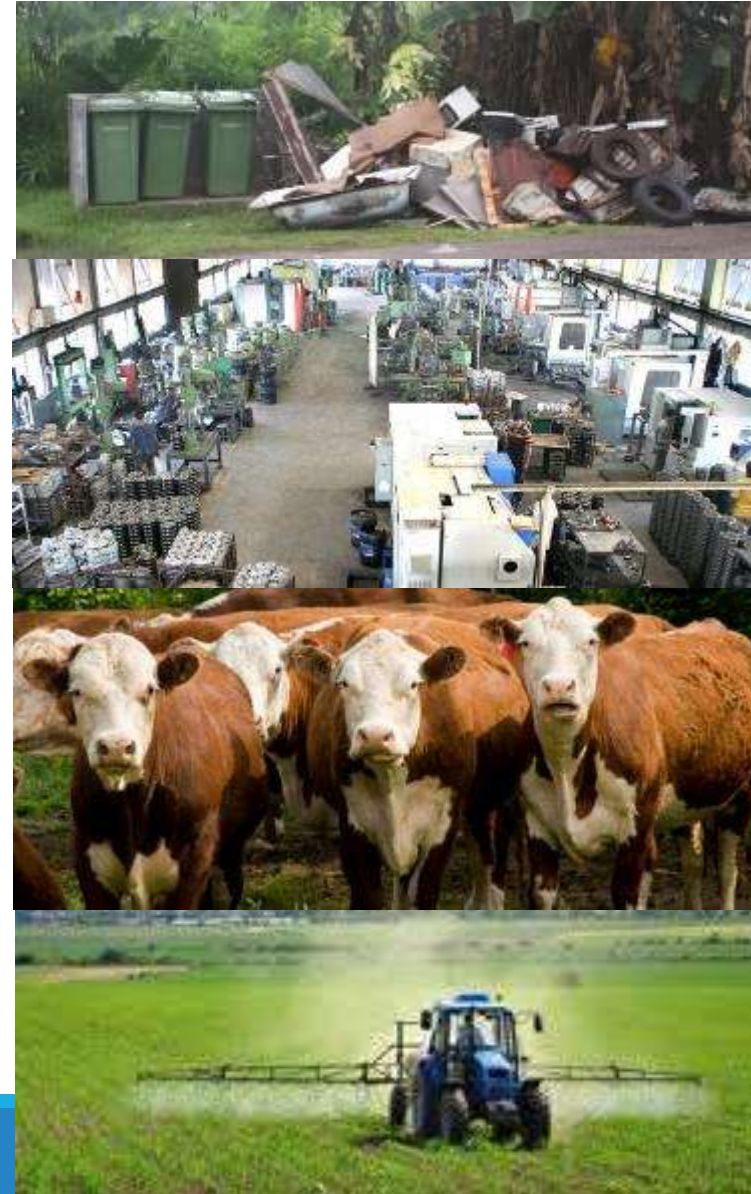
THE GREENHOUSE EFFECT



THE PROBLEM – HUMANS ☹️



CAUSES OF CLIMATE CHANGE



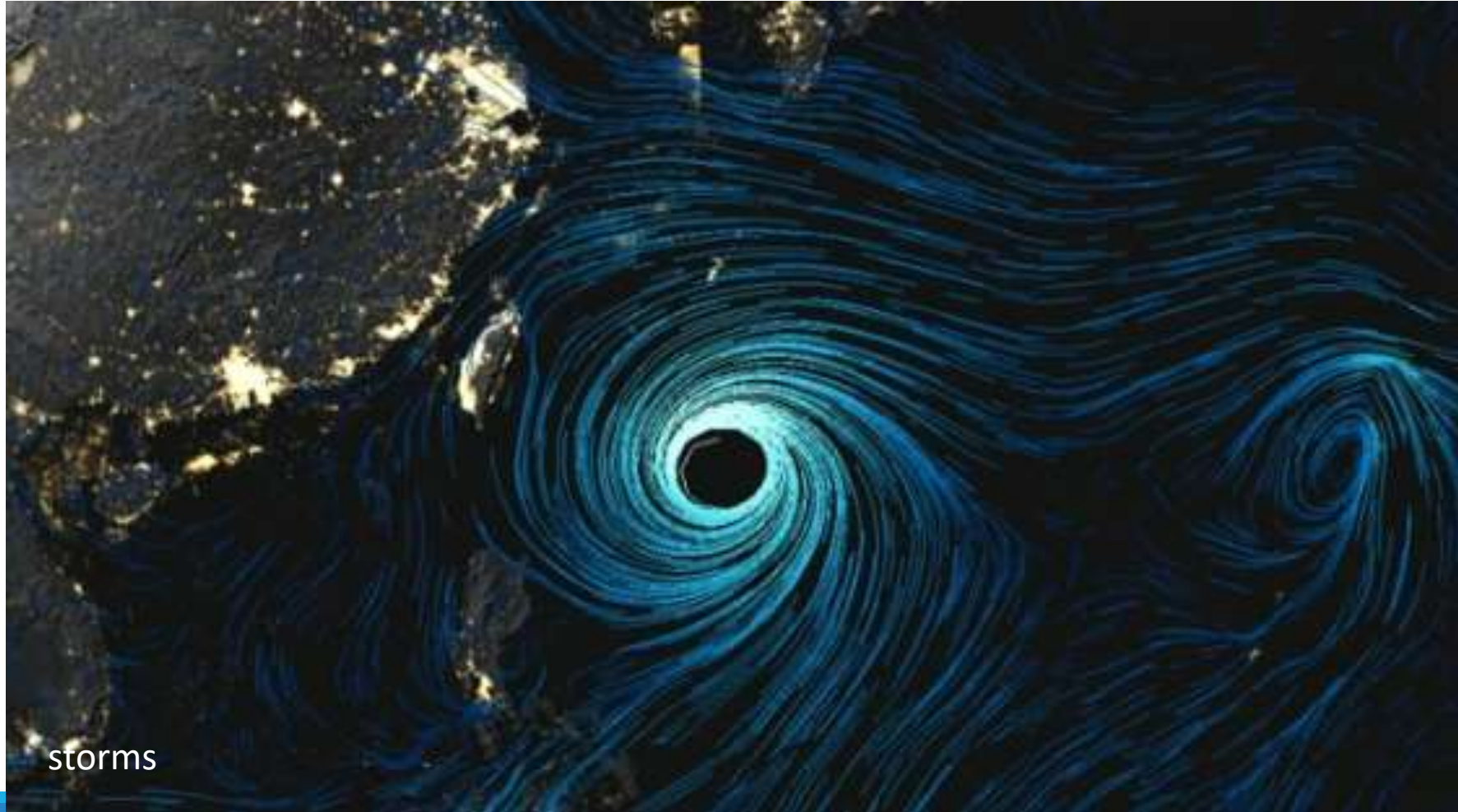
IMPACTS OF CLIMATE CHANGE



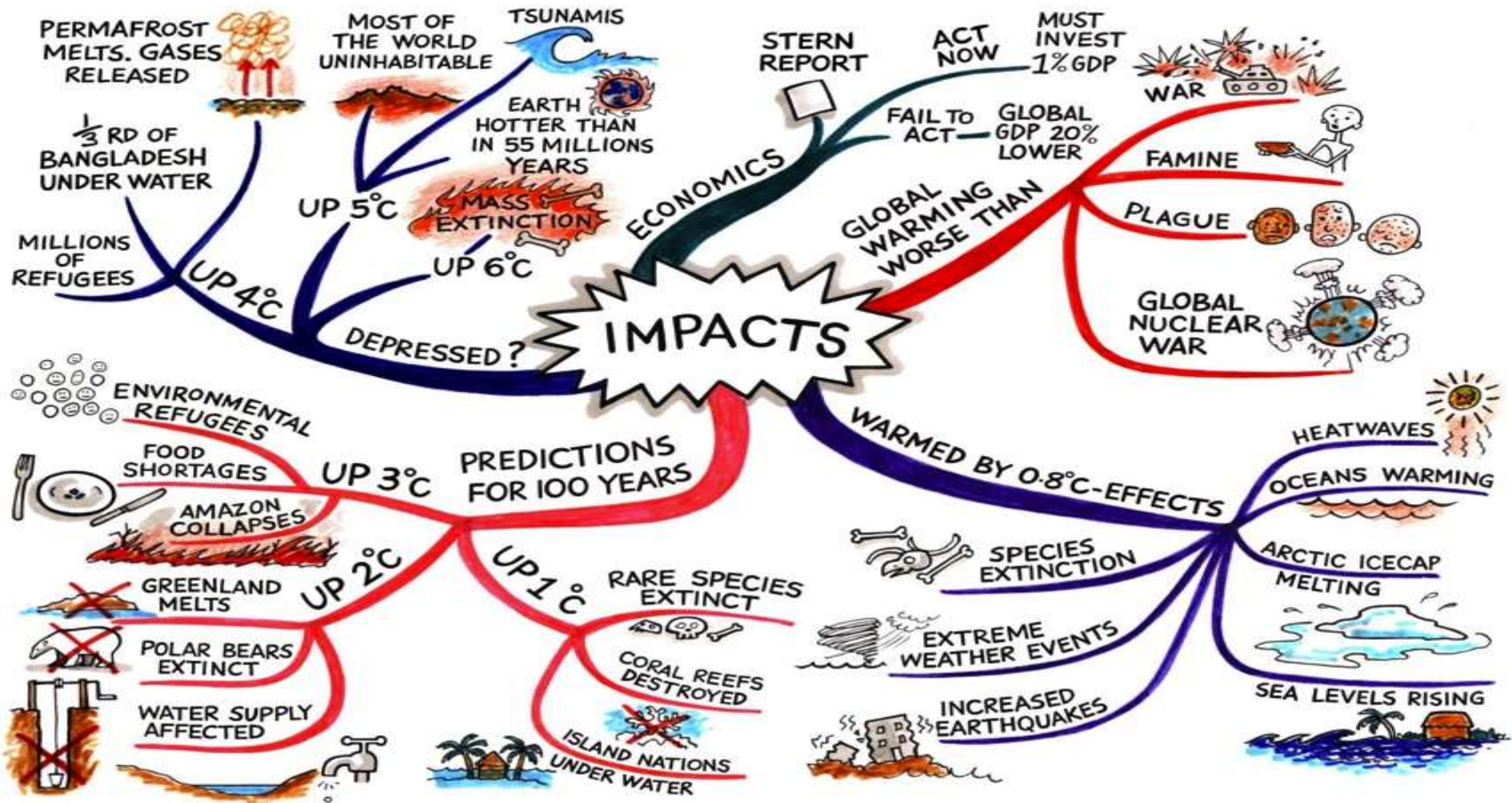
IMPACTS OF CLIMATE CHANGE



IMPACTS OF CLIMATE CHANGE

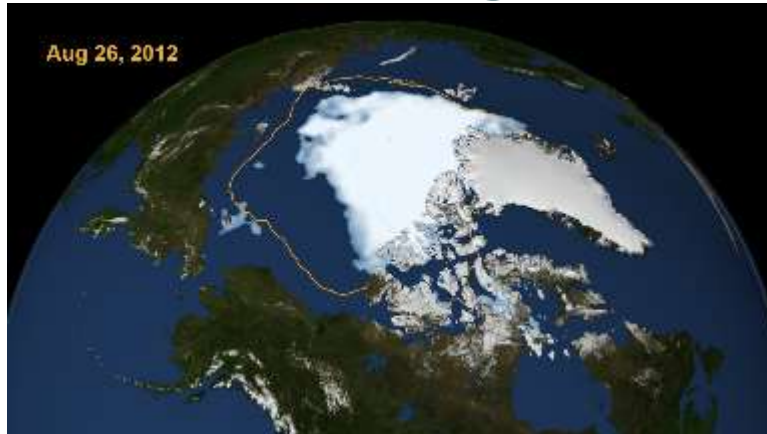


storms



WHO WILL SUFFER?

The arctic regions



SIDS



Least developed countries



Biodiversity



SO WHAT DO WE DO?

MITIGATION – reduce the source of the problem: greenhouse gas emissions from transport, electricity production, agriculture, waste, burning of forests

ADAPTATION – prepare and plan to deal with the impacts of climate change to avoid loss of life, infrastructure and money

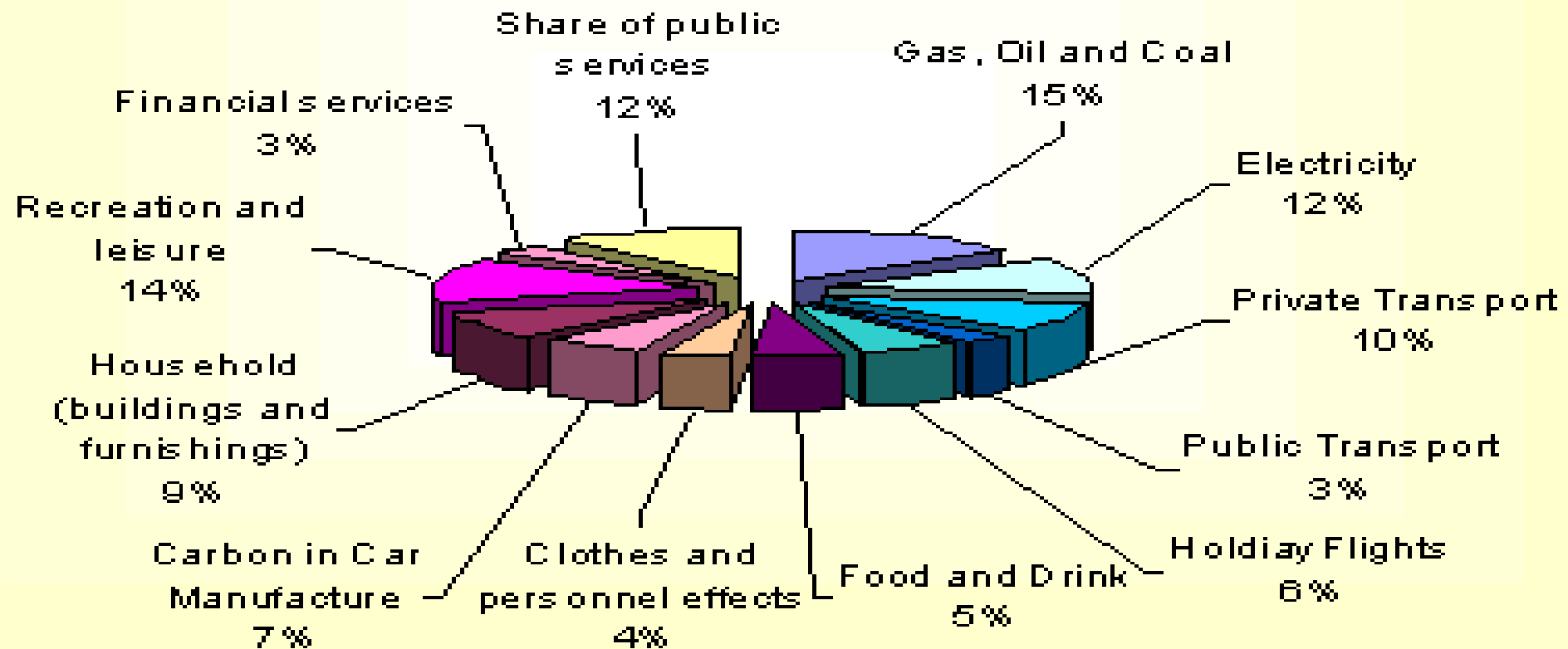
MITIGATION

REDUCE YOUR...

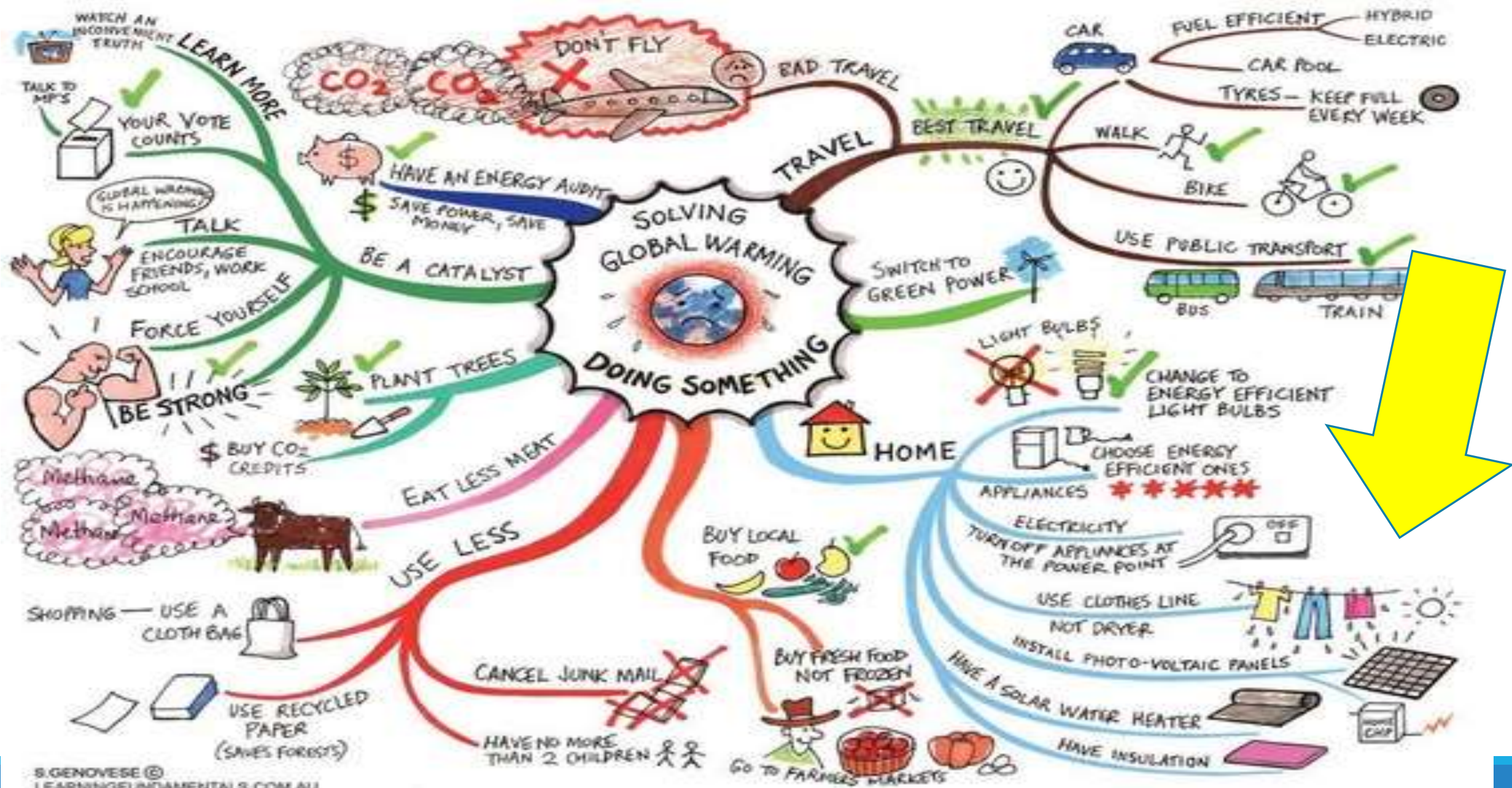


Source: <http://blog.studionorth.co.uk/wp-content/uploads/2008/07/carbon-footprint-logo.jpg>

Breakdown of a typical person's Carbon Footprint



Source: <http://www.goodcleantech.com/images/carbon.gif>



be part of the COOL gang.....



Save energy!!!!



1. Energy conservation
2. Energy efficiency
3. Renewable energy

1 - ENERGY CONSERVATION

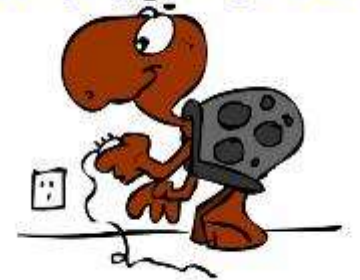
energy conservation means...

using less energy

....and usually involves a change in behaviour,
like turning your lights off when not in use
or setting the air con on 26 instead of 18



UNPLUG APPLIANCES
WHEN NOT IN USE.



2 - ENERGY EFFICIENCY

energy efficiency means...

using energy more effectively

... and is often a **technological change**.

Like switching to energy efficient light bulbs, washing machines, refrigerators – they use less energy (often electricity) to perform the same task, or provide the same comfort.



3 - RENEWABLE ENERGY

renewable energy means...

**energy obtained from natural resources
that can be naturally replenished or renewed
within a human lifespan,**

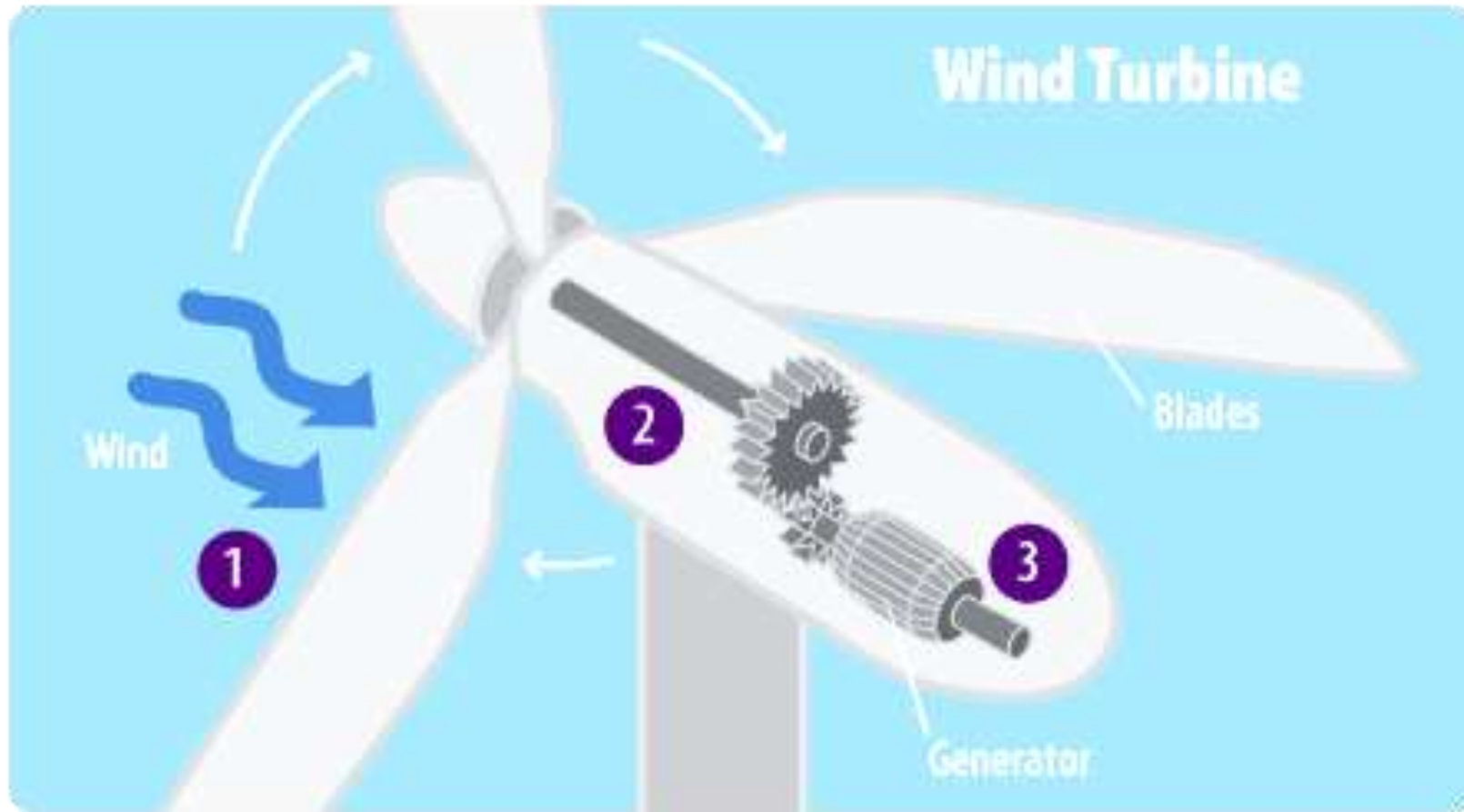
that is, the resource is a sustainable source of energy.

Examples include wind, wave, water, the sun, heat underground, biomass, etc.

ACTIVITY

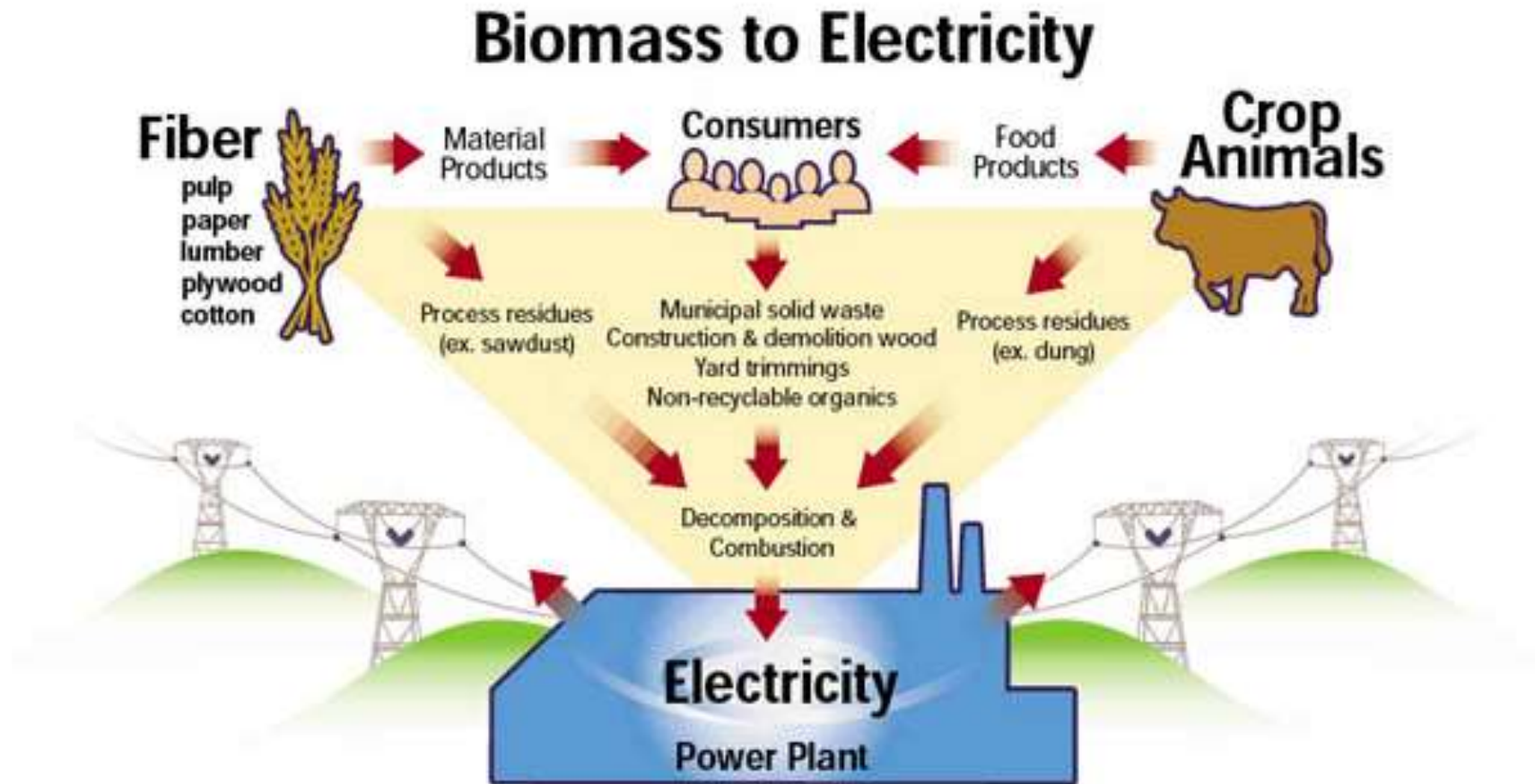
1. Find members of the same group (a source of renewable energy)
2. Read how this technology works to produce electricity
3. Share what you learned with others!

WIND



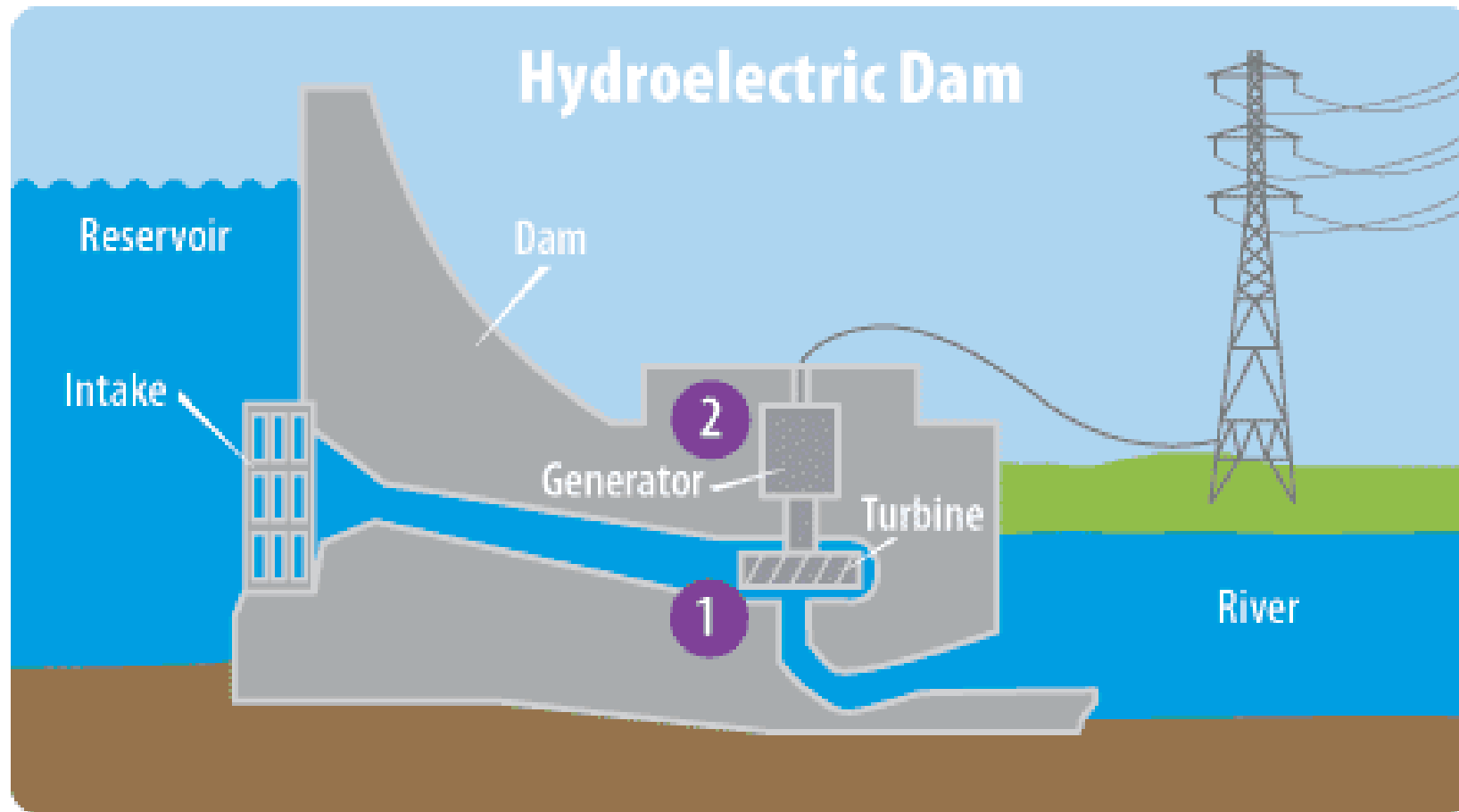
www3.epa.gov

BIOMASS



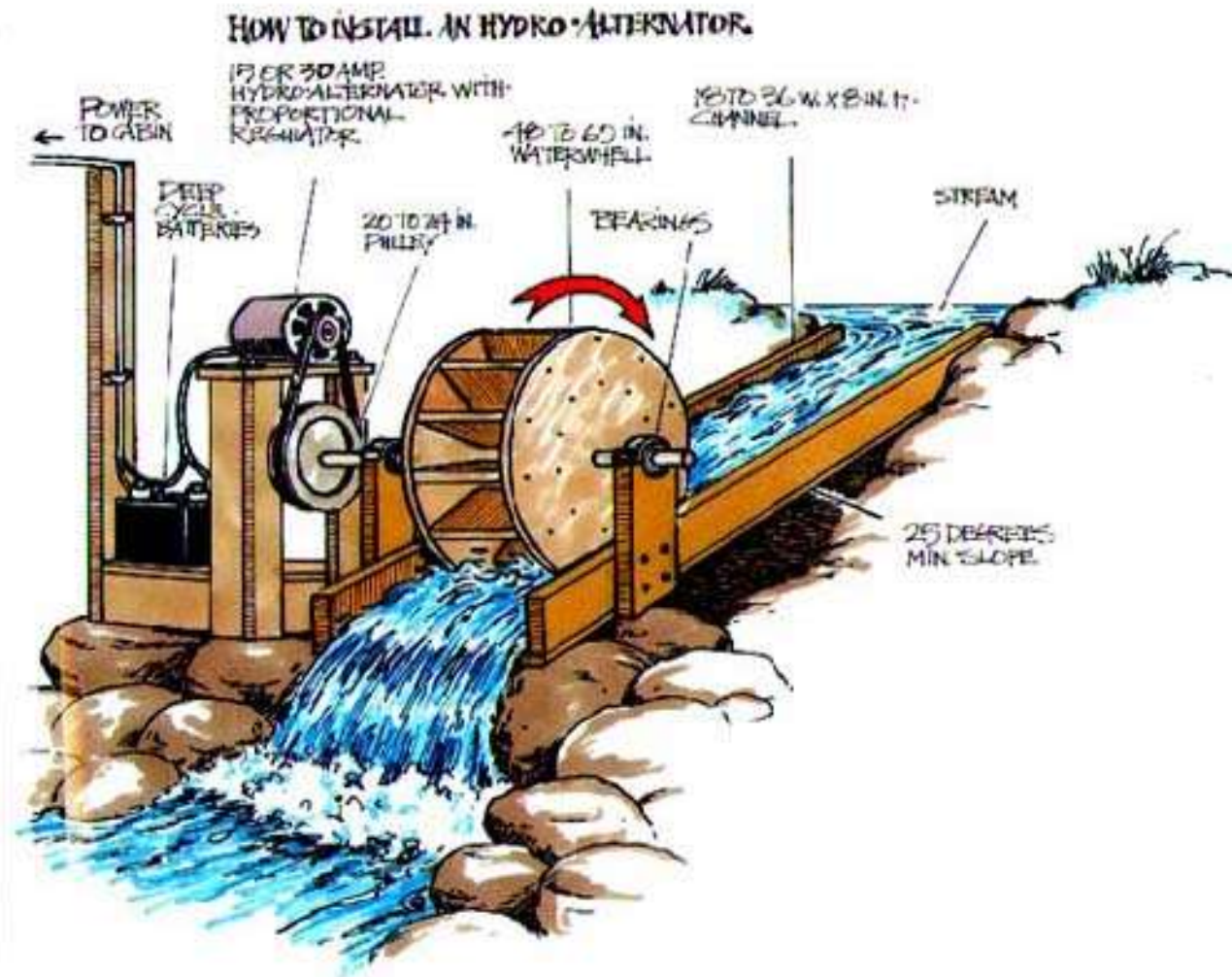
technologygreenenergy-e-online.blogspot.com

HYDRO

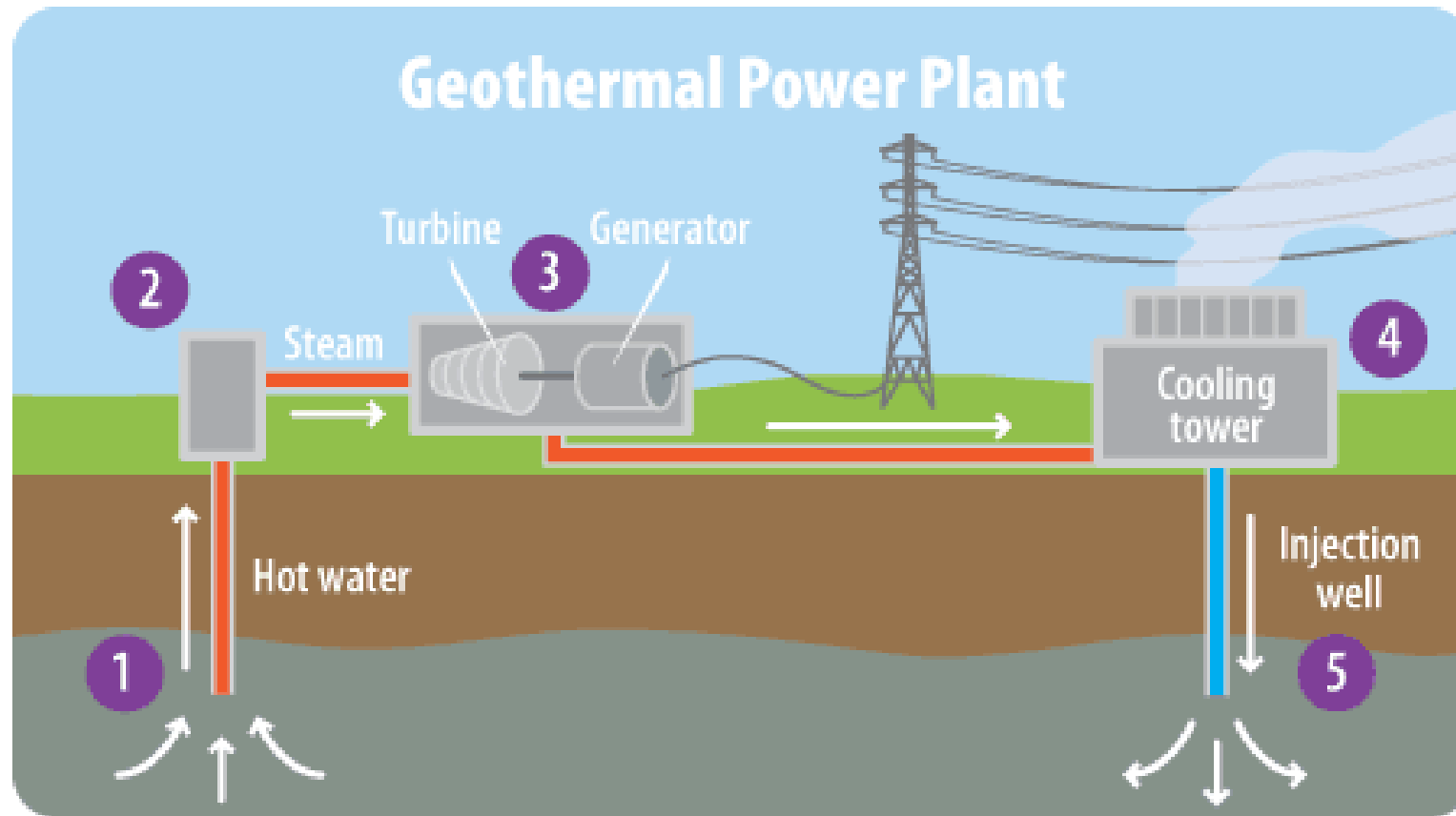


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MICRO-HYDRO

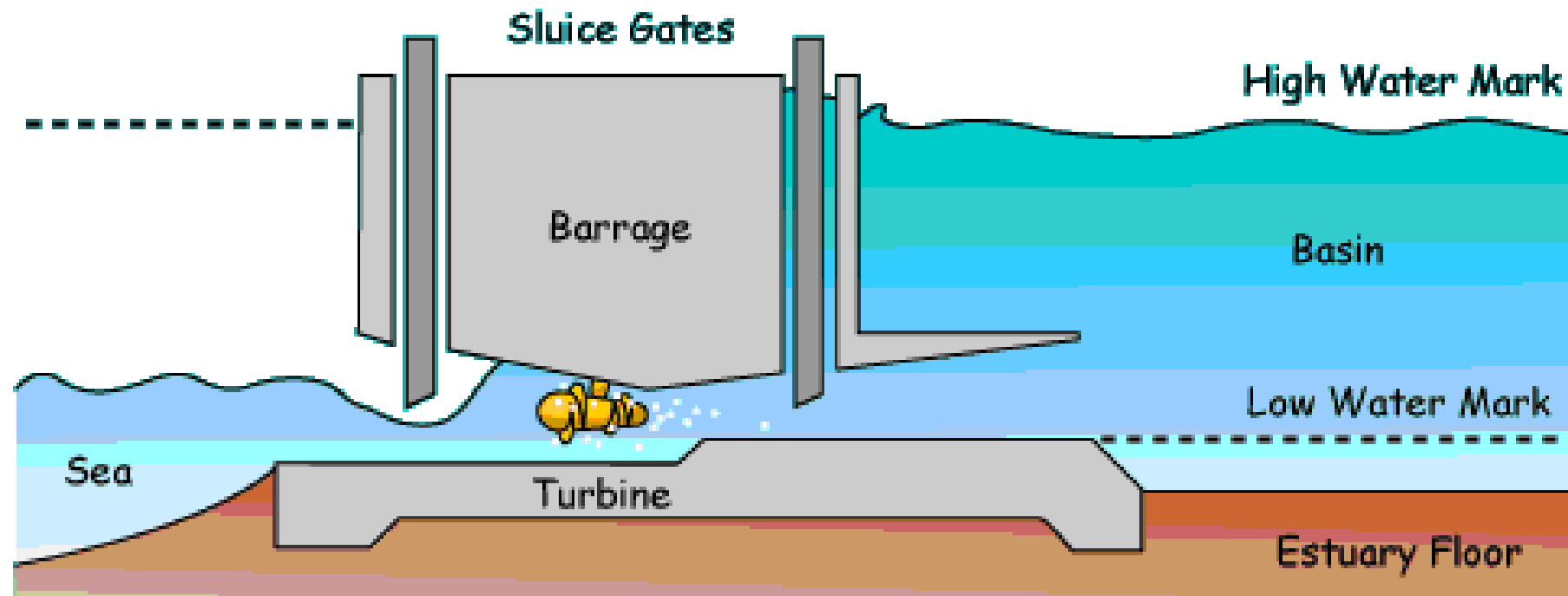


GEO THERMAL



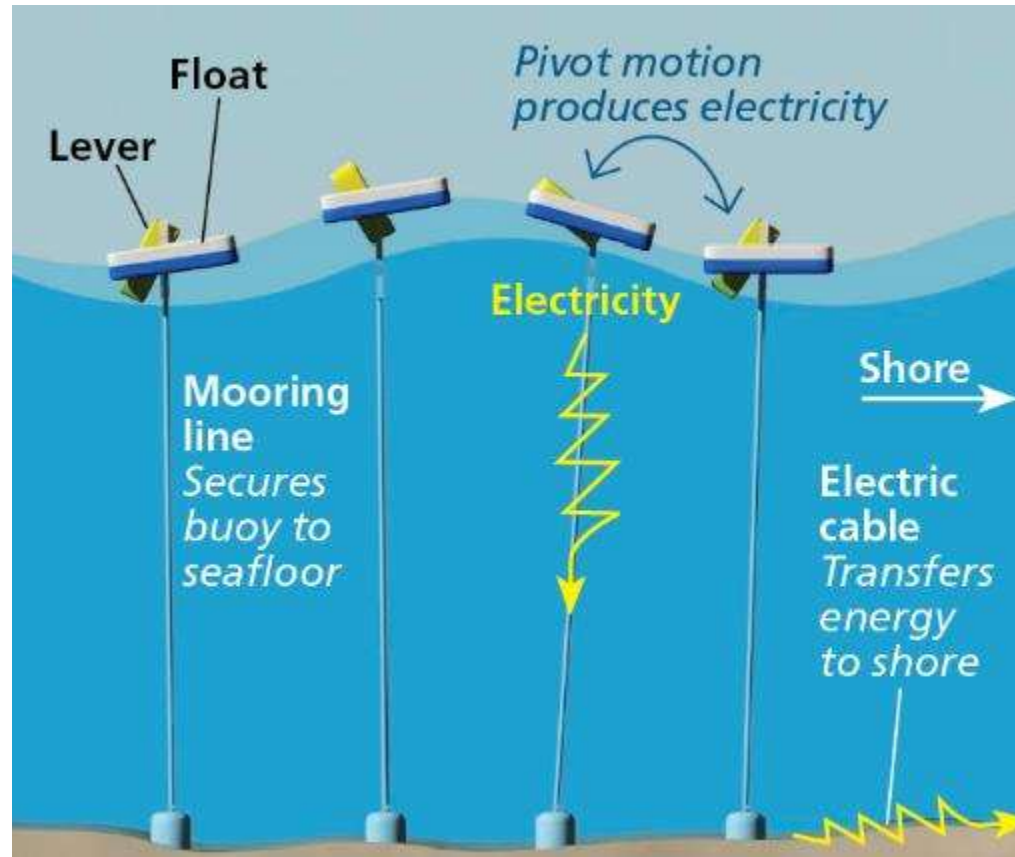
www3.epa.gov

TIDAL

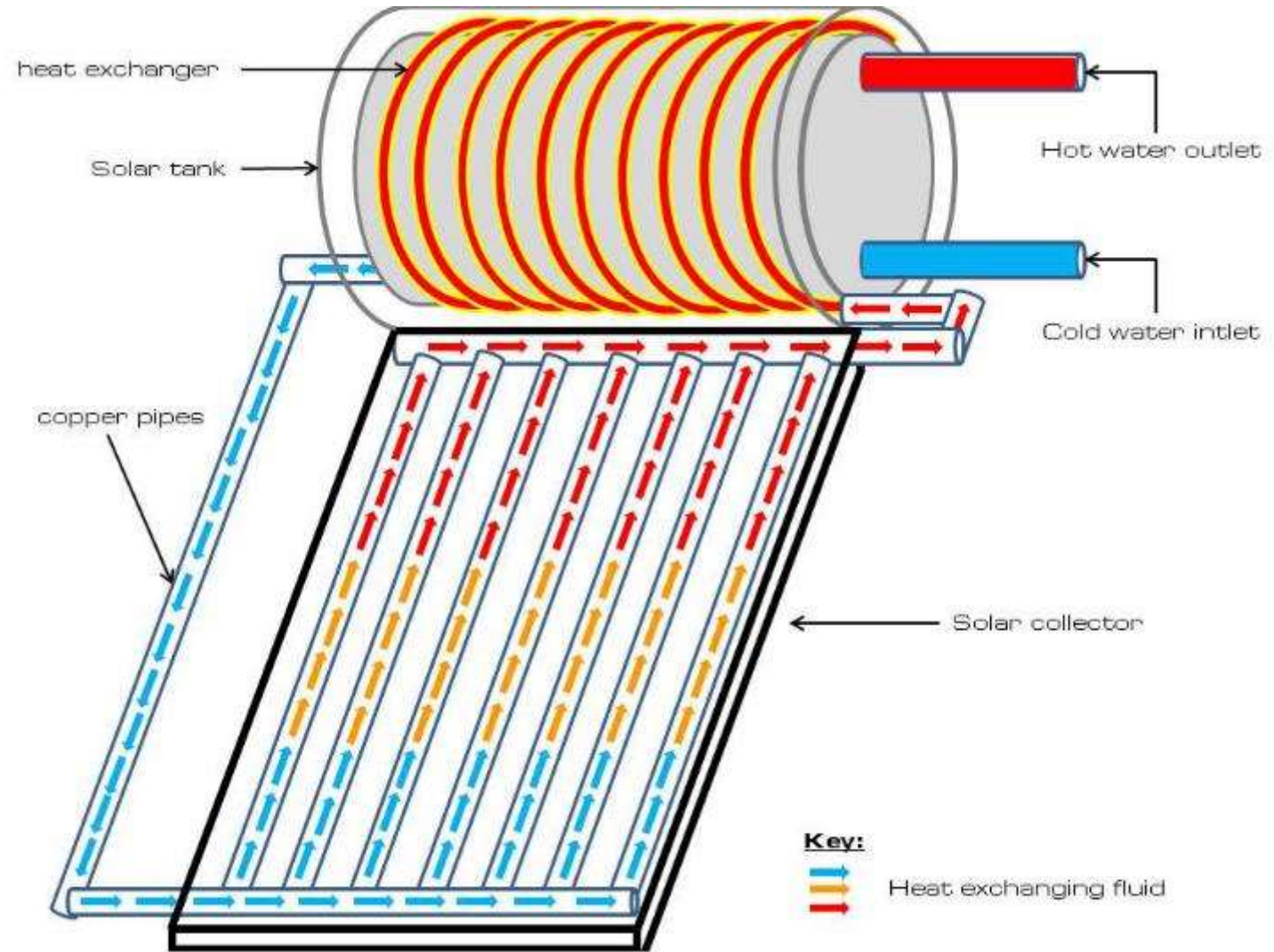


tidal-energy-project.wikispaces.com

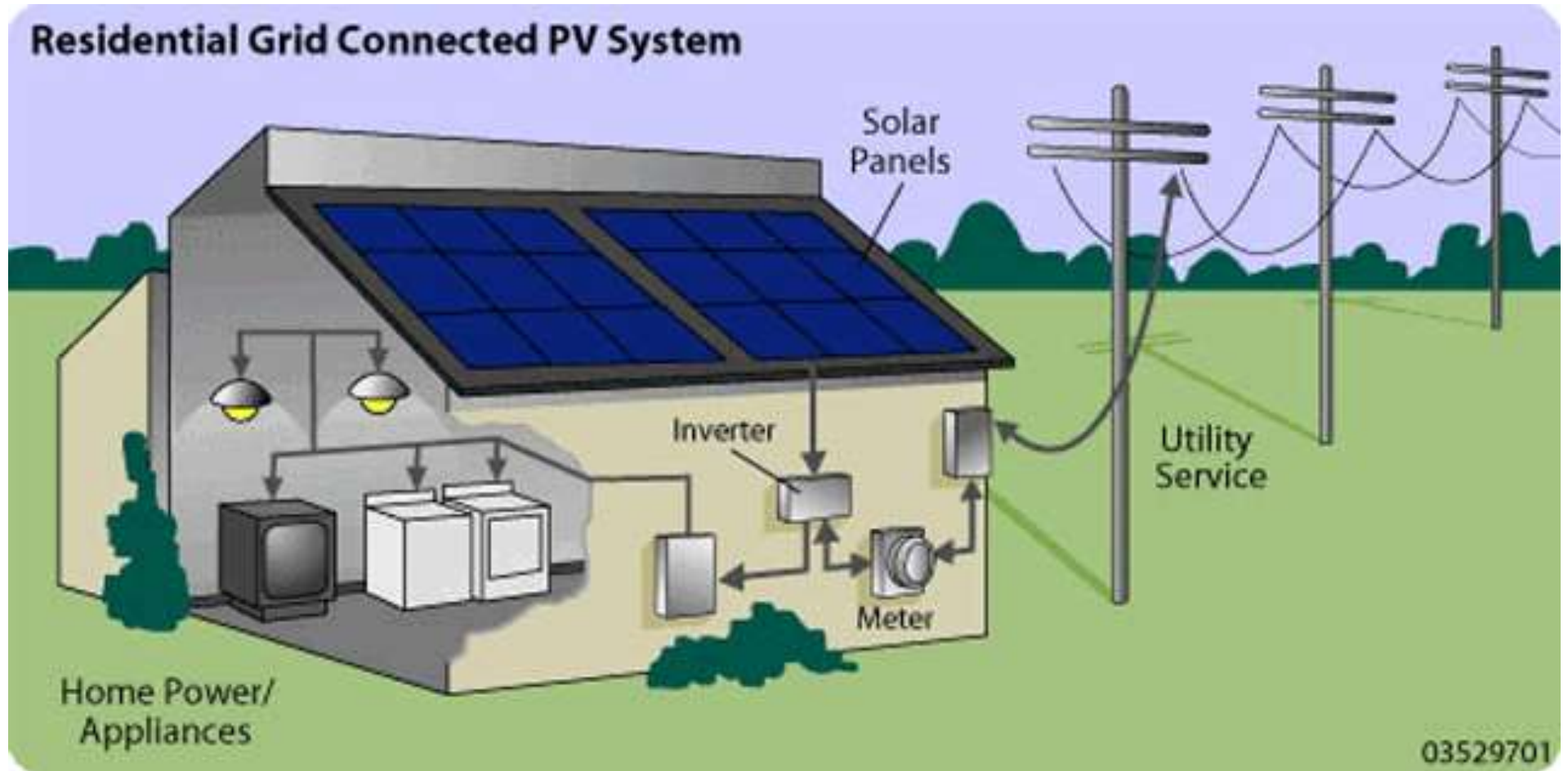
WAVE



SOLAR HOT WATER



SOLAR – PHOTOVOLTAIC (PV)



PRESENTATION ON PV

GROUP WORK:

- 1) In your groups, review the contents of the PV kit**
- 2) Work together to connect the parts together to make the motor / light work**
- 3) Draw a diagram of the circuit and label all of the parts**
- 4) Create a simple model that works using the PV as its source of electricity.**
- 5) Brainstorm ideas for using the PV kits in your schools as part of lessons or extra-curricular activities**
- 6) Share your ideas with colleagues**

WORKSHOP EVALUATION

Please tell us how the info session went:

- 1) Did you learn anything new? (if yes, what...?)**
- 2) What did you enjoy?**
- 3) What didn't you like?**
- 4) Will you do anything differently as a result of the workshop? (if yes, what...)**

be part of the cool gang.....



THANK YOU!

Contact Us! Join Us! Donate!

Sustainability for Seychelles

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