



THE COMMERCIO

P.G. DEPARTMENT OF COMMERCE & RESEARCH

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13 CLIMATE ACTION





*From the
Editor's Desk...*

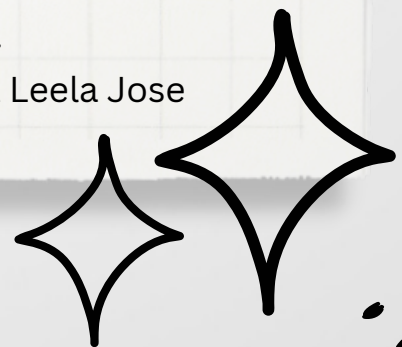


REDEFINING OUR PATH TO A GREENER FUTURE

I welcome all readers to a fresh series of 'Commercio' Newsletter for the academic year 2023-24, conceived of and given expression to by the students from the Post Graduate Department of Commerce and Research. These theme-based Digests are envisaged for monthly publication and are expected to carry elements from the United Nations' 17 Sustainable Development Global Goals (SDGs). The current edition of the newsletter dwells on 'Climate Action', one of the seventeen goals of the UN and fundamental to life, health and prosperity. It is hoped that these publications would keep the readers updated on global macro-developments without losing sight of more local and institution-related information. A larger readership and stepped-up willingness to meaningfully contribute to the cause of the Newsletter would enrich the experience of reading.

The current edition of the Newsletter has been imagined, designed and scripted by second semester M com students and their efforts are sincerely appreciated.

-Dr.Nisha Leela Jose



Gratitude

The Commercio wishes to thank the Editorial Team, Student Contributors and everyone involved in its making. At The Commercio, we believe in the Kaizen philosophy of Continuous Improvement and would therefore welcome your comments and feedback for making the next issue even better. Please feel free to reach out to a student member with your comments. We look forward to your support in the future.

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What is Climate Action

According to UNDP, climate action means stepped-up efforts to reduce greenhouse gas emissions and strengthen resilience and adaptive capacity to climate-induced impacts, including climate-related hazards in all countries; integrating climate change measures into national policies, strategies and planning.

Climate change matters because it affects all life on Earth, from humans and animals to plants and the environment. It leads to extreme and unpredictable weather patterns that can be harmful to humans and ecosystems.

WHAT ARE THE AIMS OF CLIMATE ACTION?

"BUILD KNOWLEDGE AND CAPACITY TO MEET CLIMATE CHANGE" Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

WHAT IS AN EXAMPLE OF A CLIMATE ACTION?

Use less energy by reducing your heating and cooling use, switching to LED light bulbs and energy-efficient electric appliances, washing your laundry with cold water, or hanging things to dry instead of using a dryer.



Change of Guard

Dr. Preema Rose Nichlavose succeeds Dr. Rose V.J as the Head of the Post Graduate Department of Commerce and Sr Teseena P Emmatty ascends to the post of 'Vice-Principal', effective the new academic year.



Polar ice caps melting

WHAT ARE POLAR ICE CAPS?

The polar ice caps are dome-shaped regions of ice that exist in the northern and southernmost regions of a planet. Polar regions exist on many planets, including the Earth and Mars. On Earth, the polar ice caps cover about 10% of the planet and are an estimated 70% of our freshwater supply. Unfortunately increasing average global temperatures have resulted in a gradual and worrisome change in our polar regions. The melting of the polar ice caps has a direct impact on the planet's climate. This includes global temperature, greenhouse gases sea level, international trade, coastal communities, and wildlife. Ice caps are melting due to an overall increase in the average temperature on Earth. In 1994, the planet was losing around 800 billion metric tons of ice per year.

Today, the planet loses around 1.2 trillion tons per year. Altogether, Earth has lost around 28 trillion tons of ice in the past three decades. That number is accelerating each decade. It is reported that Antarctica is losing ice polar ice at an average rate of about 150 billion tons per year, and Greenland is losing polar ice at a rate of 280 billion tons per year.



CAUSES OF POLAR ICE CAP MELTING

Since the industrial revolution, increased amounts of carbon dioxide and other greenhouse gases in the atmosphere have raised global temperatures, especially in the polar regions. This accelerates the overall melting. Some causes for the melting of polar ice are listed below.

- Burning of fossil fuels
- Oil and gas drilling
- Deforestation
- Ice-breaking ships

IMPACTS OF POLAR ICE CAP MELTING

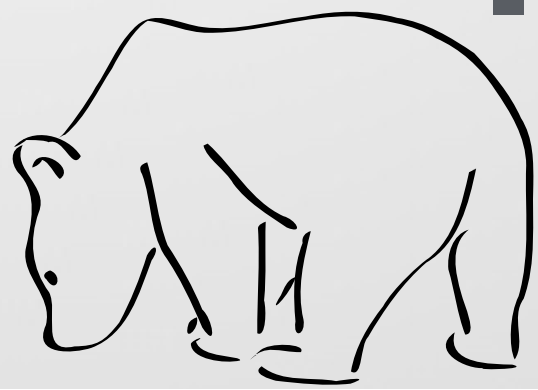
The effects of continued melting ice in the Arctic and Antarctic regions are numerous and severe.

- 1)Increased global temperature.
- 2)Rising sea level.

- 3)Habitat loss for polar wildlife
- 4)Increased rate of global warming

HOW WILL THE MELTING ICE CAPS AFFECT US?

The melting of the polar ice caps will impact all people on Earth. Polar ice reflects sunlight back into the atmosphere. Less polar ice means more sunlight is being absorbed by the planet. This results in faster rates of global warming, leading to the destabilization of global food systems, increased natural disasters, hotter summers, and colder winters. Additionally, melting polar ice will cause rising sea levels which will directly impact coastal communities.



Climate Action Trivia

1. Out of the 197 Parties to the United Nations Framework Convention on Climate Change, how many have ratified the Paris Agreement?

- ☐ 175
- ☐ 189
- ☐ 197

2. Who was awarded the Nobel Peace Prize for his/her contributions to climate action?

- ☐ Greta Thunberg
- ☐ Al Gore
- ☐ Malala Yousafzai

3. _____ accounts for about two-thirds of all greenhouse gases (GHG), which trap heat in the atmosphere and causes the planet to become warmer.

- ☐ Carbon Dioxide (CO₂)
- ☐ Methane
- ☐ Nitrous Oxide

4. The oceans, which cover _____ per cent of the Earth's surface, play a vital role in the global climate system, generating oxygen and absorbing carbon dioxide from the atmosphere.

- ☐ 95
- ☐ 72
- ☐ 6

5. Which of the following is not among the six climate-positive actions to help rebuild economies from the COVID-19 pandemic urged by UN Secretary-General Antonio Guterres?

- ☐ Invest in green jobs
- ☐ End fossil-fuel subsidies
- ☐ Plant more trees





6. During the 2015 United Nations Climate Change Conference in Paris, how many countries committed to doubling clean energy research and development?

- ☐ 76
- ☐ 20
- ☐ 195

7. The government of India launched National Action Plan on climate change (NAPCC) on

- ☐ 30 June 2008
- ☐ 30 August 2008
- ☐ 30 July 2008

8. Where was sustainable development explained for the first time?

- ☐ World development report
- ☐ Brundtland commission report
- ☐ First earth summit report

9. Which household waste has an excellent recycling potential?

- ☐ Vegetable scrap
- ☐ Plastic
- ☐ Rubber

10. Which one of the following sustainable development goals (SDGs) pertains to climate action?

- ☐ SDG 12
- ☐ SDG 13
- ☐ SDG 14

11. Which population is most vulnerable to health risks of climate change?

- ☐ Rural
- ☐ Children
- ☐ Middle-Aged

12. The 2021 Nobel Prize in Physics was awarded to pioneering climate scientists who laid the foundations for understanding of the role of human activities and greenhouse gases in climate change.

Who is NOT one of the laureates of the Prize?

- o Syukuro Manabe
- o Abdulrazak Gurnah
- o Klaus Hasselmann

13. Which organization published a report which warned that even if all governments' net zero pledges were fully implemented, the world would only achieve 20 per cent of the emission cuts by 2030 needed to keep the goal of net zero emissions by 2050 a possibility?

- o IAEA
- o IEA
- o UNEP

14..In which city was the COP 26 UN Climate Change Conference held?

- o Madrid
- o Katowice
- o Glasgow

15. Which of the following types of gases is responsible for a majority of the warming effect on the climate?

- o Carbon Dioxide
- o Methane
- o Nitrous Oxide

Answers

1.189

2.Al Gore

3.Carbon Dioxide

4.72

5.Plant more trees

6.195

7.30 June 2008

8.Brundtland commission report

9.Vegetable scrap

10. SDG 13

11. Children

12. Abdulrazak Gurnah

13. IEA

14. Glasgow

15. Methane



URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

Climate change is a real and undeniable threat to our entire civilization. The effects are already visible and will be catastrophic unless we act now. Through education, innovation and adherence to our climate commitments, we can make the necessary changes to protect the planet. These changes also provide huge opportunities to modernize our infrastructure which will create new jobs and promote greater prosperity across the globe. Sustainable Development Goal 13 (SDG 13 or Global Goal 13), 'Climate Action' is to limit and adapt to climate change. The official mission statement of this goal is to "take urgent action to combat climate change and its impacts".SDG 13 has five targets which are to be achieved by 2030. They cover a wide range of issues surrounding climate action.The first three targets are outcome-centric and the remaining two targets prescribe implementation methods. The United Nations Framework Convention on Climate Change. is the primary international, inter-governmental forum for negotiating the global response to climate change.

The Five goals are:

13.1 STRENGTHEN RESILIENCE AND ADAPTIVE CAPACITY TO CLIMATE-RELATED DISASTERS

Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters across the globe.





13.2 INTEGRATE CLIMATE CHANGE MEASURES INTO POLICIES AND PLANNING

Integrate climate change measures into national policies, strategies and planning.

13.3 BUILD KNOWLEDGE AND CAPACITY TO MEET CLIMATE CHANGE

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.



13.4 IMPLEMENT THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE

Implement the commitment undertaken by developed countries, and parties to the United Nations Framework Convention on Climate Change, to address the needs of developing countries in the context of meaningful mitigating actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization on an urgent basis.



13.5 PROMOTE MECHANISMS TO RAISE CAPACITY FOR PLANNING AND MANAGEMENT

Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and Small Island developing States, including focus on women, youth and local and marginalized communities.



Sustainable Solutions Towards a Healthy Planet

• **Judicious Consumption of energy at home**

Much of our energy is generated using water, coal, oil and gas. Use less energy by switching to LED light bulbs, and energy-efficient electrical appliances, and resort to natural drying instead of appliances. Replacing oil and gas-powered heating appliances with electric heaters can significantly reduce carbon footprint.

• **Walk, bike, or take public transport**

The world's roadways are clogged with vehicles, most of them burning diesel or petrol. Walking or riding a bike instead of driving will reduce greenhouse gas emissions -- and preserve health and fitness. Adoption of public transport in preference to private transport is another way to reduce carbon emissions



• **Switch to an electric vehicle**

If you plan to buy a car, consider going electric, with more and cheaper models in the pipeline. Electric cars help reduce air pollution and significantly reduce greenhouse gas emissions. Notwithstanding the merits, many electric cars still run on electricity produced from fossil fuels, and the batteries require rare minerals which often come at high environmental and social costs. Hopefully, technological alternatives are not far away.

• **Consider your travel needs**

Aeroplanes burn large amounts of fossil fuel, producing significant greenhouse gas emissions.

Therefore, reducing air travel will be one of the effective ways to soften the environmental impact. When you can, meet virtually, take a train, or skip that long-distance trip altogether.

• **Reduce, reuse, repair and recycle**

Electronics, clothes, plastics and other items we buy cause carbon emissions at each stage of production, from the extraction of raw materials to manufacturing and transporting goods to market. To protect the climate, buy only essentials, shop second-hand, and repair what you can. Buying fewer new clothes – and other consumer goods can also reduce carbon footprint.

• **Eat more vegetables**

Eating more vegetables, fruit, whole grains, legumes, nuts, and seeds, and less meat and dairy can

significantly lower environmental impact.

Producing plant-based foods generally results in lesser greenhouse gas emissions and requires less energy, land, and water.

• **Minimise wastage of food**

When you throw food away, you are also wasting the resources and energy that went into various evolutionary stages of growth, production, packaging, and transport. And when food rots in a landfill, it produces methane, a powerful greenhouse gas. So purchase only what you need, use what you buy and compost any leftovers.



•Plant native species

If you have a garden or even just a plant or two outside your home, check for native species. Plants, animals and insects depend on each other. Most insects will not eat non-native plants, which means birds and other species lose a food source affecting biodiversity. Even a single tree or shrub can offer a refuge; therefore, remember to avoid the use of insecticides and other chemicals that can endanger flora.

•Clean up your environment

Humans, animals and plants suffer from land and water contamination caused by irresponsible discharge of garbage. Use what you need, and when you have to throw something out, dispose of it off properly. Educate others to do the same, and participate in local clean-ups of parks, rivers, beaches and beyond.

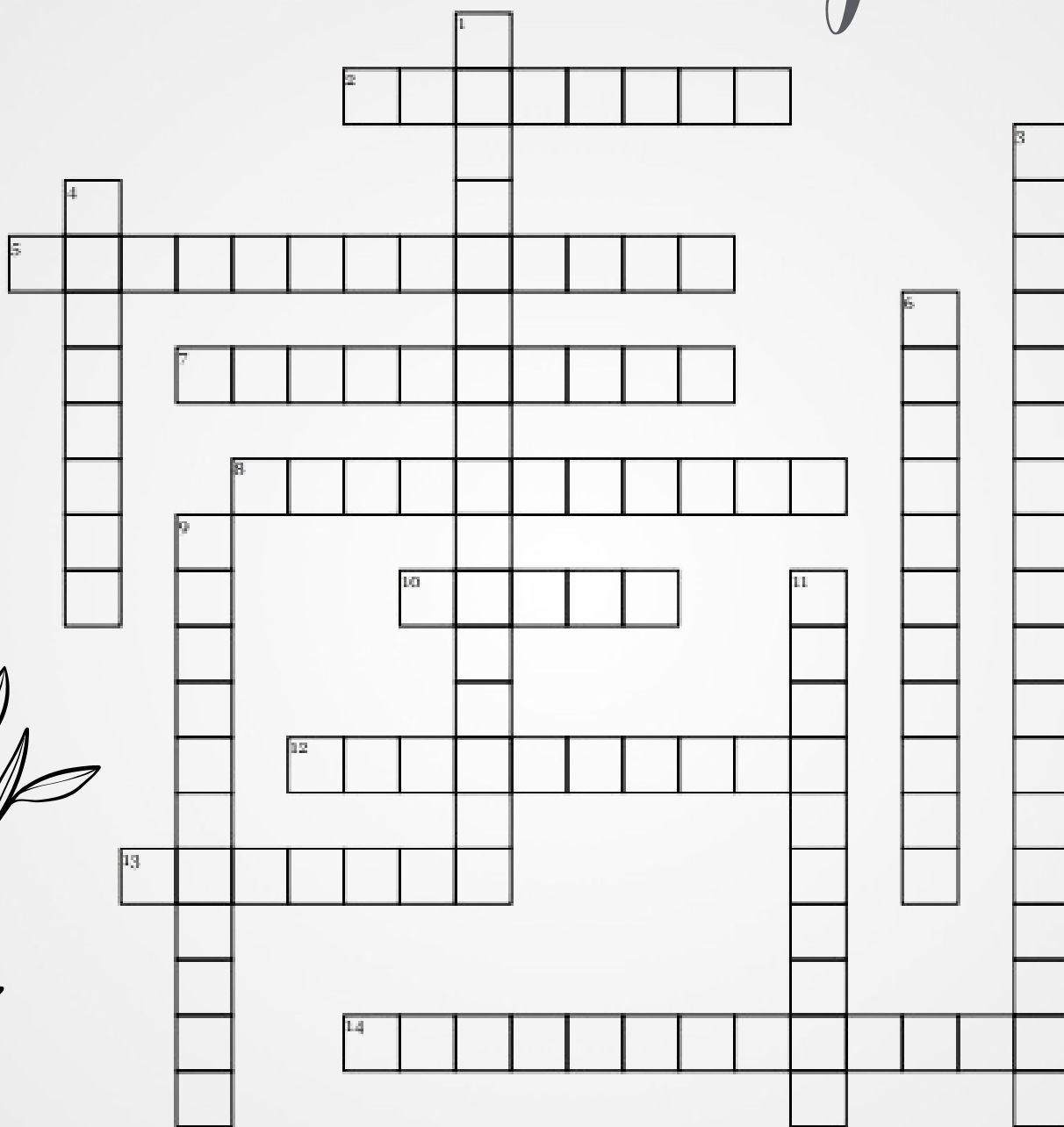
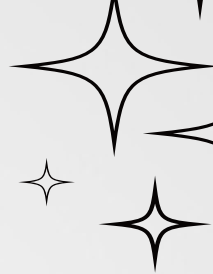


Every year, people throw out 2 billion tons of trash. About a third cause environmental hazards, from choking water supplies to poisoning soil.

•Make your money count

Everything we spend money on affects the planet and hence apply discretion to choose goods and services that are environment friendly. To reduce environmental impact, choose products from companies that utilise resources responsibly and are committed to cutting their gas emissions and waste. Making sure your savings are invested in environmentally sustainable businesses can greatly reduce your carbon footprint.

Climate Change



Across

2. what is rising because of global temperature rise? 5. Anthropogenic climate change is also known as what?
7. What is the blanket of O₃ covering the earth?
8. The burning of this has caused an imbalance in the carbon cycle.
10. Hydropower is the use of _____ as a renewable resource.

12. Water vapor, carbon dioxide, methane, nitrous oxide, and ozone are the primary _____ gases in the earth's atmosphere.
13. What is shrinking because of global temperature rise?
14. What does CO₂ stand for?

Down

1. Climate change has increased the suverity of _____.

3. Wind, solar, and hydro are examples of _____.
4. What is shrinking in the mountains?
6. What has increased drastically in the last 100 years?
9. What is the biogeochemical cycle by which carbon is exchanged among the biosphere, pedosphere, geosphere, hydrosphere, and the atmosphere of the earth?
11. The most abundant greenhouse gas is _____.

GLOBAL MIRROR

01

Global Climate Summit concludes in Paris on 23 June 2023.

02

The 2023 United Nations Climate Change Conference or COP 28 is to be held in Dubai in November - December 2023.

03

Europe stands out as the world's warmest continent.



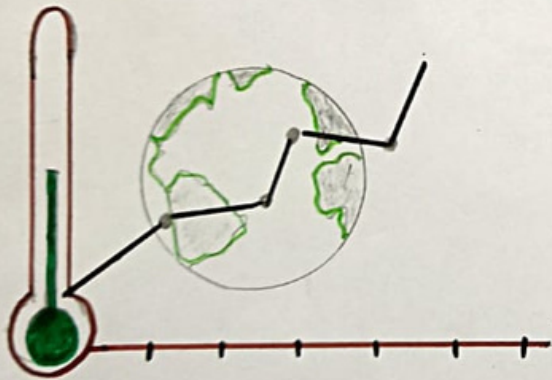
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CLIMATE ACTION



BEFORE COVID-19

GLOBAL COMMUNITY SHIES AWAY FROM COMMITMENTS REQUIRED TO REVERSE THE CLIMATE CRISIS



↓
2019 WAS THE SECOND WARMEST YEAR ON RECORD

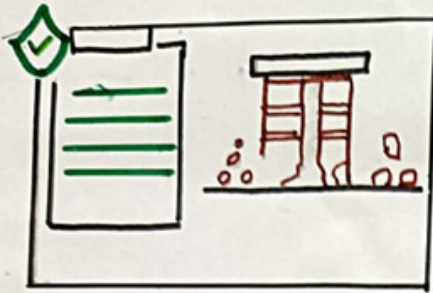
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GLOBAL TEMPERATURE WAS PROJECTED TO RISE BY UPTO 3.2°C BY 2100

COVID-19 IMPLICATIONS



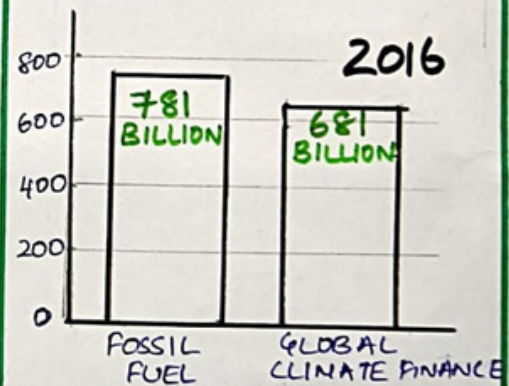
COVID-19 HAS RESULTED IN A 6% DROP IN GREENHOUSE GAS EMISSIONS FOR 2020

WHICH STILL FALLS SHORT OF THE REQUIRED 7.6% ANNUAL REDUCTION TO LIMIT GLOBAL WARMING TO 1.5°C



ONLY 85 COUNTRIES
HAVE NATIONAL
DISASTER RISK
REDUCTION STRATEGIES
ALIGNED TO THE
SENDAI FRAMEWORK

CLIMATE FINANCE:
INVESTMENT IN
FOSSIL FUELS
CONTINUES TO BE
HIGHER THAN
INVESTMENT IN
CLIMATE ACTIVITIES



CLIMATE CHANGE CONTINUES TO
EXACERBATE THE FREQUENCY AND
SEVERITY OF NATURAL DISASTERS

AFFECTING MORE THAN
39 MILLION PEOPLE
IN 2018

MASSIVE WILDFIRES



DROUGHTS



HURRICANES



FLOODS



Seguro





Thank You