



Earth's vital signs at risk from climate change

Description

ESL-NEWS.COM





A wildfire burns in California on 30 July 2024

David McNew/Getty Images

A recent report by a team of renowned researchers highlights the alarming escalation of several critical environmental indicators, fueled by climate change and other threats. The study, led by William Ripple at Oregon State University, paints a grim picture of the planet's current state, labeling it an imminent global emergency with profound consequences for Earth's ecosystems.

This comprehensive fifth annual State of the Climate report meticulously examines 35 crucial planetary parameters, revealing that a staggering 25 of them have notched unprecedented records this year, surpassing previous benchmarks set in 2023. From greenhouse gas emissions to deforestation rates, the data portrays a grim reality that signals an impending crisis of unparalleled proportions.

Experts like Michael Mann at the University of Pennsylvania emphasize the pressing nature of this climatic upheaval, underscoring the need for immediate action to mitigate the extensive damage already inflicted. The report underscores the unprecedented nature of the current climate conditions, emphasizing the urgency of the situation.

Despite some positive trends such as increased adoption of solar and wind energy, the report cautions that these measures are insufficient to counterbalance the escalating environmental degradation. The authors stress the critical need for drastic measures to curb fossil fuel emissions and deforestation rates to avert irreversible harm to the planet.

Vocabulary List:

1. **Escalation** /ˌɛs.kəˈleɪ.ʃən/ (noun): An increase in the intensity or seriousness of something.
2. **Indicators** /ˈɪn.dɪ.keɪ.tərz/ (noun): Factors or signs that provide information about the status or condition of something.
3. **Consequences** /ˈkɒn.sɪ.kwənsɪz/ (noun): Results or effects of an action or condition.
4. **Mitigate** /ˈmɪt.i.geɪt/ (verb): To make less severe serious or painful.
5. **Curb** /kɜːrb/ (verb): To restrict or control something.
6. **Irreversible** /ˌɪr.ɪˈvɜː.sə.bəl/ (adjective): Not able to be undone or altered.

Comprehension Questions



Multiple Choice

1. Who led the study mentioned in the text?

- Option: William Ripple
- Option: Michael Mann
- Option: David McNew
- Option: Earth's Ecosystems

2. How many crucial planetary parameters were examined in the report?

- Option: 25
- Option: 35
- Option: 50
- Option: 10

3. Which positive trends are mentioned in the report?

- Option: Increased fossil fuel emissions
- Option: Rising deforestation rates
- Option: Adoption of solar and wind energy
- Option: Environmental degradation

4. What is emphasized as the critical need in the report?

- Option: Increasing fossil fuel emissions
- Option: Deforestation rates
- Option: Immediate action
- Option: Mitigation of extensive damage

5. Who stresses the urgency of the current climate conditions?

- Option: William Ripple
- Option: Michael Mann
- Option: David McNew
- Option: Earth's Ecosystems

6. What is highlighted as insufficient to counterbalance environmental degradation?

- Option: Increased fossil fuel emissions
- Option: Deforestation rates
- Option: Adoption of solar and wind energy
- Option: Immediate action



True-False

7. The study led by William Ripple paints a positive picture of the planet's current state.
8. The report reveals that all 35 crucial planetary parameters have notched unprecedented records this year.
9. The authors stress the need for drastic measures to increase fossil fuel emissions.
10. Michael Mann is an expert mentioned in the study.
11. The authors caution against the adoption of solar and wind energy.
12. The report underscores the unprecedented nature of the current climate conditions.
13. The study led by William Ripple at Oregon State University labels the planet's current state an imminent global emergency with profound consequences for Earth's ecosystems.
14. 25 out of _____ crucial planetary parameters in the report have notched unprecedented records surpassing previous benchmarks set in 2023.

Gap-Fill

14. 25 out of _____ crucial planetary parameters in the report have notched
unprecedented records surpassing previous benchmarks set in 2023.
15. Michael Mann at the University of Pennsylvania underscores the need for _____ to mitigate the
extensive damage already inflicted.
15. Michael Mann at the University of Pennsylvania underscores the need for _____
to mitigate the extensive damage already inflicted.
16. The study cautions that increased adoption of solar and wind energy is insufficient to _____ the
escalating environmental degradation.



16. The study cautions that increased adoption of solar and wind energy is insufficient to _____ the escalating environmental degradation.
17. The authors stress the critical need for drastic measures to curb _____ and deforestation rates to avert irreversible harm to the planet.
17. The authors stress the critical need for drastic measures to curb _____ and deforestation rates to avert irreversible harm to the planet.
18. The comprehensive report meticulously examines _____ crucial planetary parameters.
18. The comprehensive report meticulously examines _____ crucial planetary parameters.

Answer

Multiple Choice: 1. William Ripple 2. 35 3. Adoption of solar and wind energy 4. Immediate action 5. Michael Mann

True-False: 7. False 8. False 9. False 10. True 11. False 12. True 13. False 14. False 15. False 16. False 17. False 18. False

Gap-Fill: 14.

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)

1. Which term relates to the Earth's atmosphere?
- Option: Atmospheric
 - Option: Sustainable
 - Option: Quartz
 - Option: Congestion
2. What term refers to the act of setting up or putting into use?
- Option: Extraction
 - Option: Deployment
 - Option: Regulators



Option: Constraints

3. Which word conveys the ability to adapt to various tasks or functions?

- Option: Implications
- Option: Revolutionize
- Option: Versatility
- Option: Optimization

4. What term means to make less severe serious or painful?

- Option: Irreversible
- Option: Mitigate
- Option: Curb
- Option: Indicators

5. Which word describes something that cannot be undone or changed back?

- Option: Advertise
- Option: Indicators
- Option: Irreversible
- Option: Harvesting

6. Which term refers to permission for something to happen or agreement to do something?

- Option: Allocation
- Option: Consent
- Option: Clarification
- Option: Devastating

7. What word means causing great damage or destruction?

- Option: Escalation
- Option: Mitigate
- Option: Devastating
- Option: Optimization

8. What is a hard mineral often used in electronic devices?

- Option: Quartz
- Option: Crucible
- Option: Atmospheric
- Option: Mitigate

9. Which term is used to describe overcrowding and traffic blockages?



- Option: Constraints
- Option: Consequences
- Option: Escalation
- Option: Congestion

10. Which term refers to the action of making the best or most effective use of a situation or resource?

- Option: Mitigate
- Option: Allocation
- Option: Revolutionize
- Option: Optimization

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. _____ development focuses on meeting the needs of the present without compromising the ability of future generations to meet their own needs.
12. The conflict showed signs of _____ as both sides increased their military presence.
13. She always adhered to her moral _____ even in challenging situations.
14. The _____ of resources should be done fairly and efficiently to ensure optimal use.
15. The damage caused by the earthquake proved to be _____ and could not be repaired.
16. Efforts to _____ the effects of climate change need to be implemented urgently.
17. Despite financial _____ the project was successfully completed on time.
18. The invention of the smartphone helped to _____ the way people communicate.
19. Having a _____ plan in place is essential for dealing with unexpected events.
20. The company focused on _____ its production processes to reduce waste.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

21. Government agencies that set and enforce rules and guidelines for industries and businesses are known as regulators.



22. The company invested heavily in advertising to promote its new product to a wider audience.
23. The decision to cut down the trees had severe consequences on the local ecosystem.
24. The manager provided further clarification on the new company policy during the meeting.
25. The melting pot acted as a crucible where different cultures mixed and blended together.
26. The artist's painting was filled with intricate details that required close observation.
27. The farmers were busy harvesting the ripe crops from the fields.
28. The conflict between the two countries showed signs of escalation as tensions rose.
29. The allocation of funds for the new project was carefully planned and monitored by the finance team.
30. The new technology has the potential to revolutionize the healthcare industry by improving patient care.

Answer

Multiple Choice: 1. Atmospheric 2. Deployment 3. Versatility 4. Mitigate 5. Irreversible 6. Consent
7. Devastating 8. Quartz 9. Congestion 10. Optimization

Gap-Fill: 11. Sustainable 12. Escalation 13. Principles 14. Allocation 15. Irreversible 16. Mitigate 17.
Constraints 18. Revolutionize 19. Contingency 20. Optimization

Matching sentence: 1. Regulators 2. Advertising 3. Consequences 4. Clarification 5. Crucible 6. Intricate
7. Harvesting 8. Escalation 9. Allocation 10. Revolutionize

CATEGORY

1. Sci/Tech - LEVEL5

Date Created

2024/10/09

Author

aimeeyoung99