

## General Sustainability Facts

1. **Population Growth and Resource Use:**

By 2050, the global population is expected to reach **9.7 billion**, increasing the demand for food, water, and energy significantly.

2. **Earth Overshoot Day:**

Humanity currently consumes natural resources **1.7 times faster** than the Earth can regenerate them. This means we are essentially "borrowing" from future generations.

3. **Greenhouse Gas Emissions:**

The top three countries—**China, the United States, and India**—account for over **50% of global CO<sub>2</sub> emissions**.

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## Energy and Climate Change

4. **Renewable Energy Potential:**

The solar energy hitting the Earth every hour could meet **global energy needs for a year**, yet only about **3% of global energy** comes from solar power.

5. **Fossil Fuel Dependence:**

Fossil fuels still account for about **80% of global energy consumption**, contributing heavily to climate change.

6. **Temperature Rise:**

Since the late 19th century, the global average temperature has risen by **1.2°C (2.2°F)** due to increased greenhouse gas emissions.

7. **Sea Level Rise:**

Global sea levels have risen by about **8 inches (20 cm)** since 1880, and the rate of rise is accelerating.

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## Water Sustainability

8. **Water Scarcity:**

Over **2 billion people** live in regions experiencing water stress, and by 2025, an

estimated **half of the world's population** will be in water-stressed areas.

9. **Agriculture and Water Use:**

Agriculture accounts for approximately **70% of global freshwater use**, making it a key sector for improving water sustainability.

10. **Plastic Pollution in Oceans:**

By 2050, there could be more plastic in the ocean by weight than fish if current pollution trends continue.

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## Biodiversity

11. **Species Extinction:**

Human activity is driving species to extinction at a rate **1,000 to 10,000 times faster** than the natural rate, leading to what scientists call the sixth mass extinction.

12. **Rainforests and Biodiversity:**

Rainforests, which cover only **6% of Earth's surface**, are home to about **50% of the world's species**. Yet, deforestation is causing the loss of **18 million acres annually**.

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## Soil and Agriculture

13. **Soil Degradation:**

Over **33% of global soil** has already been degraded due to deforestation, overgrazing, and poor agricultural practices.

14. **Food Waste:**

Approximately **1/3 of all food produced globally**—about **1.3 billion tons**—is wasted annually, contributing to greenhouse gas emissions and resource depletion.

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## Urban and Lifestyle Sustainability

15. **Urban Population Growth:**

By 2050, **68% of the world's population** will live in urban areas, highlighting the need

for sustainable cities.

**16. Carbon Footprint of Transportation:**

Transportation accounts for **23% of global CO<sub>2</sub> emissions**, making sustainable alternatives like public transit and electric vehicles essential.

**17. Single-Use Plastics:**

About **40% of plastic produced annually** is single-use, meaning it is discarded after one use. It takes centuries to decompose.

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## Waste and Circular Economy

**18. E-Waste Generation:**

The world produces over **50 million tons** of electronic waste annually, and only about **20%** is formally recycled.

**19. Circular Economy Impact:**

A shift to a circular economy could reduce global emissions by **39%** and raw material usage by **28%** by 2030.

**20. Recycling Aluminum:**

Recycling one ton of aluminum saves **14,000 kWh of electricity**, enough to power an average home for a year.

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## Conservation and Restoration

**21. Reforestation Benefits:**

Planting trees at scale could capture **25% of the global annual CO<sub>2</sub> emissions**, significantly contributing to climate change mitigation.

**22. Protected Areas:**

Currently, about **15% of terrestrial** and **7% of marine areas** are protected, but the goal under international agreements is to protect at least **30% by 2030**.

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These facts underscore the urgency of adopting sustainable practices and policies across sectors to ensure the planet's long-term health and viability.

