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Disrupting the Carbon Balance

Carbon is essential in the natural environment, but changes in land use may release stored carbon and contribute to climate change.

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Agriculture

Greenhouse gases are emitted in the production of food. While some agriculture meets basic needs, some simply provides wealthy consumers with the luxury of choice.

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PART 4: EXPECTED CONSEQUENCES

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Disrupted Ecosystems

Many species and ecosystems, already at risk from human development, may not be able to adapt to new climatic conditions and stresses.

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Threatened Water Supplies

Water scarcity is already a growing concern. In some places climate change will make it even more critical.

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Food Security

Climate change threatens food security, although crop yields in temperate regions may improve.

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Threats to Health

Climate change threatens human health. The poorest regions are likely to be the hardest hit.

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Rising Sea Levels

Thermal expansion of oceans and melting ice will lead to a substantial rise in sea level, threatening many coastal communities.

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Cities at Risk

Coastal erosion, salt-water intrusion into freshwater supplies, and coastal storms all threaten coastal areas – often regions of high population growth and intensive economic development.

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Cultural Losses

Damage to indigenous cultures, historical monuments and archaeological sites adds to the incalculable economic losses of climate change.

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PART 5: RESPONDING TO CHANGE

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International Action

Most countries have acknowledged the problem of climate change by signing the Convention on Climate Change.

70

Meeting Kyoto Targets

Many countries are making progress towards their Kyoto commitments, but even the agreed targets fall far short of stabilizing greenhouse gas emissions at levels considered to be safe.

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Carbon Trading

Trading in carbon credits is one way to share the burden of reducing emissions globally.

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Financing Responses

Current funding is inadequate to help countries respond to climate change.

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Local Commitment

In many places, local and regional authorities are developing more aggressive emission reduction policies than federal governments.

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Carbon Dioxide and Economic Growth

Economic growth can be achieved with lower greenhouse gas emissions.

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Renewable Energy

Renewable energy sources could be the technological key to economically and socially sustainable societies.

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Adapting to Change

The capacity to adapt to climatic hazards and stresses depends on a country's wealth, resources and governance.

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PART 6: COMMITTING TO SOLUTIONS

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Personal Action

People all over the world are taking measures to reduce the greenhouse gases emitted as a result of the way they live.

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Public Action

The policies, practices, and investments of governments, businesses, and civic organizations will have the greatest impact on our future.

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