

# Global Climate Change:

An Introduction to the IPCC  
& the 2007 IPCC Synthesis Report



## Introduction to the IPCC

- The "IPCC" stands for the "Inter-governmental Panel on Climate Change"
- The IPCC was established in 1988 by 2 branches (WMO & UNEP) of the **United Nations**
- The purpose of the IPCC is to evaluate the anthropogenic (human-induced) climate change, including its ramifications, & possible adaptations, & better yet, solutions
- The Official IPCC Website: <http://www.ipcc.ch/>
- Won the 2007 Nobel Peace Prize



## Who makes up the IPCC?



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- **The Panel:**  
30 representatives governmental & organizational appointed from all over the world
- **Contributors:**  
Contributors include people from > 130 countries
  - 2500 scientific **expert reviewers**
  - > 800 **contributing** & >450 **lead authors**
- **Requirement:**  
Any scientist who participates in the IPCC assessment process **MUST** do so **WITHOUT** any type of **compensation** (monetary or otherwise)

## The Pro's & Con's of the IPCC

### Pro's:

- IPCC reports are the **most reliable** information on climate change because they represent a **consensus** of the global scientific community
- The "Boy who Cried Wolf" syndrome is prevented by the conservative nature of the IPCC reports
  - The IPCC was designed intentionally to be very conservative so as to **NOT** overstate or exaggerate any of the risks of Climate Change.

### Con's:

- IPCC reports are **too conservative**
  - By only reporting the "lowest common denominator" findings, they're **under-estimating the dangers & risks** of climate change
- **Objectivity** of the 30 Panel members
  - There's concern that governments will only the people they have a strong influence over.
- Reports are **Out of Date** by the time they are published
  - All the literature must be extensively peer-reviewed in order to become eligible for review by the IPCC. The most recent data included in each IPCC report is at least 2 years old.
- The "No compensation" requirement weeds out good Scientists

## The Importance of IPCC Findings

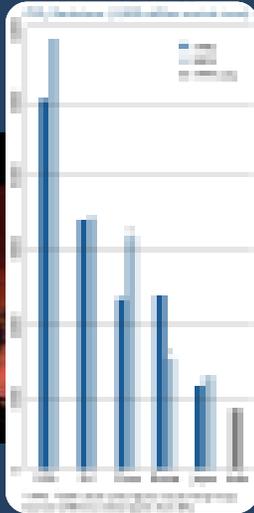
### I. Give the Facts:

- Describe the **current** condition of Earth
- Of what we are seeing now, what can we definitively say is due to Climate Change

### II. Develop Scenarios

### III. Make Recommendations

## I. Fact – The US emits the most CO<sub>2</sub>



<http://news.bbc.co.uk/2/hi/science/nature/3143798.stm>

<http://www.climatecrisis.net/downloads/images/Desktop-6.jpg>

## I. Fact – The Poles are Melting RAPIDLY



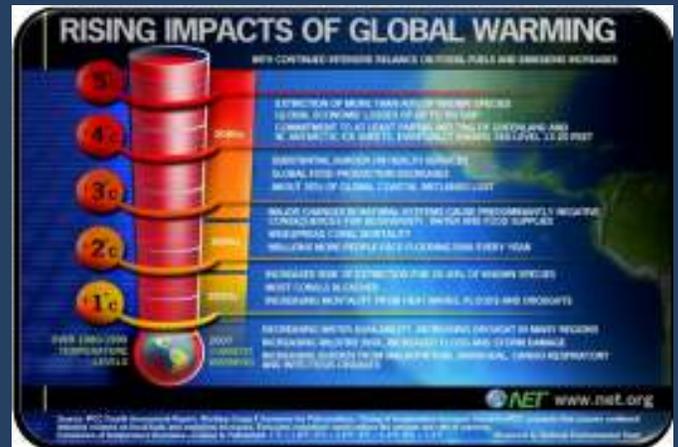
## II. Expected impacts of Projected Warming

Examples of impacts associated with global average temperature change (Impacts will vary by extent of adaptation, rate of temperature change and socio-economic pathway)

Global average annual temperature change relative to 1980-1999 (°C)

| Category   | 1.5°C   | 2.0°C   | 2.5°C   | 3.0°C   | 3.5°C   | 4.0°C   |
|------------|---|---|---|---|---|---|
| WATER      | Decreasing water availability and increasing drought in arid and semi-arid regions; increasing sea level rise | Decreasing water availability and increasing drought in arid and semi-arid regions; increasing sea level rise | Decreasing water availability and increasing drought in arid and semi-arid regions; increasing sea level rise | Decreasing water availability and increasing drought in arid and semi-arid regions; increasing sea level rise | Decreasing water availability and increasing drought in arid and semi-arid regions; increasing sea level rise | Decreasing water availability and increasing drought in arid and semi-arid regions; increasing sea level rise |
| ECOSYSTEMS | Increased mortality of marine life; increased mortality of marine life  | Increased mortality of marine life; increased mortality of marine life  | Increased mortality of marine life; increased mortality of marine life  | Increased mortality of marine life; increased mortality of marine life  | Increased mortality of marine life; increased mortality of marine life  | Increased mortality of marine life; increased mortality of marine life  |
| FOOD       | Decreasing crop yields; decreasing crop yields  |
| COASTS     | Increased sea level rise; increased sea level rise  | Increased sea level rise; increased sea level rise  | Increased sea level rise; increased sea level rise  | Increased sea level rise; increased sea level rise  | Increased sea level rise; increased sea level rise  | Increased sea level rise; increased sea level rise  |
| HEALTH     | Increased mortality; increased mortality  |

## II. Expected impacts of Projected Warming



<http://www.scrd.ca/files/File/Sustainability/IPCC%20scenario1.jpg>

The Joy of Tech...

By Witness & Swaggy



Schneider SH (2009) Presentation

## Quiz # 15

### ➤ Question:

“IPCC” is an abbreviation for \_\_\_\_\_?

### ➤ Answer:

\_\_\_\_\_

\_\_\_\_\_