

Climate Change & Environment Workshop

Updated : 2018-11-17

Overview

- * This workshop focusses on Climate Change - what it is, what causes it, its results, what we can do, and the role of spirituality and the Faith.
- * At the end of each question, check the question hints at the end for any topics you missed and would like to discuss before going on to the next question.
- * It is assumed that collectively the group will have enough knowledge to work through it: you must ensure in advance that at least one member is knowledgeable on the subject or has worked through the workshop in advance and prepared material for each item.

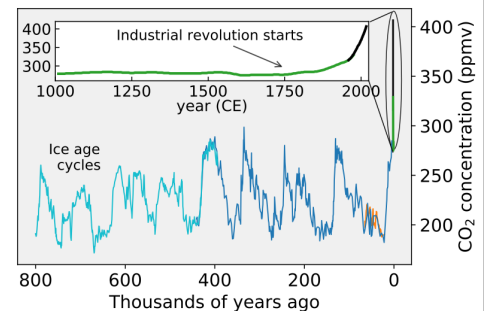
Questions

Defining the Problem

- 1. What is Climate Change?**
 - a. What is the difference between Climate and Weather?
 - b. What is Climate Change (generally)?
 - c. What caused Climate Change in the past?
 - d. What today is causing Climate Change?
 - e. How long has this been known for?
- 2. What is being forecast and its impacts?**
 - a. Expected scenarios
 - b. Worst case scenarios
 - c. How are these scenarios arrived at?
 - d. What impacts will these have?
 - e. Who/where will be most impacted?
- 3. What are the biggest contributions to the problem?**
 - a. Outside the home
 - b. Within the home

Exploring the Solutions

- 4. What needs to be done / solutions (general and specific)?**
 - a. Individually
 - b. Familywise
 - c. Politically/Institutionally (Edinburgh, UK and Internationally)
 - d. Baha'i-wise (Edinburgh, UK and Internationally)
- 5. What helps achieve those solutions?**
 - a. Materially / Practically
 - b. Spiritually
 - c. Baha'i-wise
- 6. How well are we doing?**
 - a. Individually / Familywise
 - b. Baha'i-wise
 - c. Societally
 - d. How long have we got?
 - e. How will the future view us if we don't act?
- 7. What does a functional future look like?**
 - a. What does a functional future look like?
 - b. How does this compare with what people imagine of the future?



HINTS

These hints are to assist the discussion whenever required.

Q1. What is Climate Change?

Scientific Causes -

AIR : CO₂ (warms lower atmosphere, cools upper) • Methane • Aerosols/Soot/CFCs/Nitrous Oxide (esp agriculture) (+ -) • Clouds. Water (36-70%) • CO₂ (9-26%) • Methane (4-9%) • Ozone (3-7%) • CO₂ and Methane have increased 36% and 148% in 250 yrs

SPACE : Sun Strength (Sun Aging and still strengthening; 11-year and longer cycles) • Orbit (Shape, Axis Tilt) • Meteorites (cooling) • Cosmic Rays

OCEAN : Periodic Oscillations (Multi-Yearly, Multi-Decadal)

LAND : Ice-Cover (Reflective) • Plate Tectonics (Currents, Mountains) • Volcanoes (Man causes 100-300 x the CO₂ of Volcanoes) • Mountain-Building • Geothermal (Radioactivity, Tidal).

BIOLOGICAL : Biosphere Change (affecting CO₂, CH₄ in air) • Soil Carbon Release (Knock-On)

MISC : Feedback Loops and Knock On Effects • IPCC • Fossil fuels caused 75% in last 20 years, land use change 25% esp deforestation.

Measured By - Ice Cores (trapped air, layer thickness, to 800,000 yrs) • Tree Rings • Sea Levels • Glacial Effects • Vegetation (Pollen)/Animals/Insects • Historical/Oral/Archaeological/Rock Art Records • Satellites

Q2. What is being forecast and its impacts?

Energy Content • Climate Stability/Farming/Famine • War • Disease • Pests • Fires • Extreme Weather (Rain/Drought/Storms/Floods/Snow/Heat Waves) • Water Availability/Changes in Deserts • Migration • Bio-Order • Oceans (Temperature/Heat Content (90%) • Acidity • Currents • Sea-Levels (3.1 mm/yr esp thermal expansion) • CO₂ levels affects fish nervous system) • Ice Masses • More Rain/Snow • Humidity • End of Holocene (11700 yrs) • Sea Ice Area v Land Ice Volume • Temperature Effect Greatest over Arctic • Permafrost • Gas Hydrates • Tsunamis from land rebound earthquakes/landslides • Social Unrest • Crime Rates (people more volatile when warmer) • Lack of National Security • Loss of Energy Sources; Affect for many 10000s Years; Climate Models usually underestimate. Most people live by the sea. Heat Waves with high humidity cause death • with low humidity wildfires. Warming oceans take on less CO₂. Most affected are the poor, children and elderly.

Q3. What are the biggest contributions to it (making it worse)?

Outside Home : Farming/Land Use • Transport • Heating/Shower • Heavy Industry • Energy Sources • Population • Cement Manufacture • Ruminants (Beef) • Deforestation • Economic Models/Consumerism/Capitalism

Inside Home : Heating • Shower • Driving • Holidays • Materials Acquisition/Consumption

Q4. What needs to be done / solutions (general and specific)?

Individually : Renewables (using) • Diet/Vegetarianism • Travel Little • Wear a Coat • Only Heat Rooms Used • Keep Showers Short / Baths Less Full • Consume only Necessities

Politically / Institutionally : Education • Renewables (promoting) • Migration • Adaptation • Fusion Energy? • Carbon Trading • Depopulation • Climate Engineering(!) • Robotics

Baha'i-wise :

Q5. What helps achieve these?

Materially / Practically : Setting Trend/Example • Care for Next Generation • Sense of urgency • Frugality • Social Media • Petitions • Marches • Financial Incentives

Spiritually : Virtues (Self-Sacrifice, Discipline, Sense of Duty)

Baha'i-wise : Virtues, Current Core Activities, Community, Consultation, Cooperation