

## Session 3 -Bold Action

### Quiz

1. To avoid global average temperature exceeding 1.5°C above pre-industrial levels (the threshold for sustaining life as we know it) what do we need to achieve?
  - a. Reduce emissions of greenhouse gases by 70-100% by 2030 thru energy efficiency & conservation and by replacing fossil fuels with zero emission sources of energy (solar, wind, nuclear, small hydro, geothermal)
  - b. Remove at least 140 gigatons (140 billion tons) of CO<sub>2</sub> from the atmosphere and store it in the soil and or in biomass thru reforestation/afforestation and soil management
  - c. All the above
  - d. a. only
  - e. None of the above
2. Which of the following statements are valid?
  - a. *Adaptation* is the process of adjusting to actual or expected climate change (i.e., building a dike)
  - b. *Mitigation* is a human intervention to reduce heat-trapping emissions or remove carbon already in the atmosphere.
  - c. Focusing on adaptation alone is short-sighted. If we don't reverse the warming by mitigation, the impacts of the warming will be too severe to manage
  - d. Communities that embrace "*adaptive mitigation*" (those that help their residents adapt to a changing climate while also reducing emissions and sequestering more carbon) are better positioned to remain livable in the years ahead.
  - e. All the above
3. True or False? "Clean" and "renewable" can be misleading terms when used to describe energy choices. It can clarify discussion to avoid these adjectives and say instead that we aim to use only zero emission energy sources: wind, solar, nuclear, geothermal and small hydro power.
4. True or false? There is a strong argument to electrify everything (except heating water with the sun) and produce the needed electricity from zero emission sources of energy (wind, solar, small hydro, geothermal and nuclear).
5. Improving our food system involves which of the following?
  - a. Reducing food waste
  - b. A plant-based diet
  - c. Silvopasture and Regenerative agriculture
  - d. Composting and elimination of most if not all synthetic nitrogen fertilizers
  - e. All the above

6. Policies which hinder the decarbonization of our economy include
  - a. Subsidizing fossil fuels.
  - b. Subsidizing monoculture, chemical heavy agriculture.
  - c. Not having a price on the emission of greenhouse gases.
  - d. Striving to satisfy obsolete measures such as GDP, while not gauging success on wellbeing and the state of the natural world.
  - e. All the above.
7. Which of the following are true about the economics of climate mitigation?
  - a. Zero-emission energy is already cost competitive if not outright cheaper (with prices falling dramatically) than fossil fuels.
  - b. Solar and wind energy are returning a healthy return on investment while stimulating the economy and creating jobs.
  - c. Health benefits from reduced pollution (no smokestacks, no tailpipes) translates to dollars and lives saved.
  - d. Doing nothing or doing too little to mitigate climate threatens the whole economy with collapse.
  - e. All the above.
8. A *finite earth economy* could benefit from which of the following characteristics?
  - a. Ending subsidies to the fossil fuel industry.
  - b. Putting a price on carbon emissions.
  - c. Rewarding folks who sequester carbon and work in zero emission jobs.
  - d. Measure economic success by metrics that gauging wellbeing and the state of the natural world such as life expectancy, a living wage, the amount of carbon in the atmosphere, and education.
  - e. All the above.
9. Concerning the uncertainty of others taking/not taking action to on climate,
  - a. Among our choices are taking no action and taking bold action
  - b. What others do is an uncertainty
  - c. The best case may be achieved and the worst case avoided by choosing to take bold action
  - d. All the above
  - e. None of the above
10. True or False? Amending the constitution with the *We The People* amendment would take away constitutional rights from corporations and not allow money to be treated as free speech.

Answers: 1c, 2e, 3 True (Natural gas is often touted as a “clean” energy source –But if it is leaked, it emits the potent heat trapping gas methane to the atmosphere, and when it is burned it emits CO<sub>2</sub>. Biofuels -ethanol and biodiesel- and wood/biomass are considered “renewables”, yet when they are burned, they emit heat trapping gases.). 4 True, 5e, 6e, 7e, 8e, 9d, 10 True

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