Sea-level rise is relatively slow, allowing most coastal populations time to adapt with more resilient infrastructure. Melted ice caps create new shipping and trade routes, increasing economic opportunities. Melting permafrost can create newly usable land for agriculture and other infrastructure. Higher CO₂ concentrations and warmer weather can increase crop yields while reducing overall climate-related deaths, which primarily come from cold exposure. The most cost-effective solutions to climate issues are an investment in resilient infrastructure, while switching from fossil fuel can create energy insecurity.

How Does It Work?

1. The sun radiates heat towards the earth, which absorbs then reradiates heat into the atmosphere.
2. Water vapor, methane, carbon dioxide, and other gases, trap heat in the atmosphere.
3. Large-scale utilization of carbon-based fossil fuels, and emissions from natural sources, increase the concentration of greenhouse gases in the atmosphere.
4. The heat that is trapped impacts weather and ecological conditions.
5. Different regions experience this differently, some as drought, others as more rain, and these can impact everything from health to agriculture to infrastructure stability.