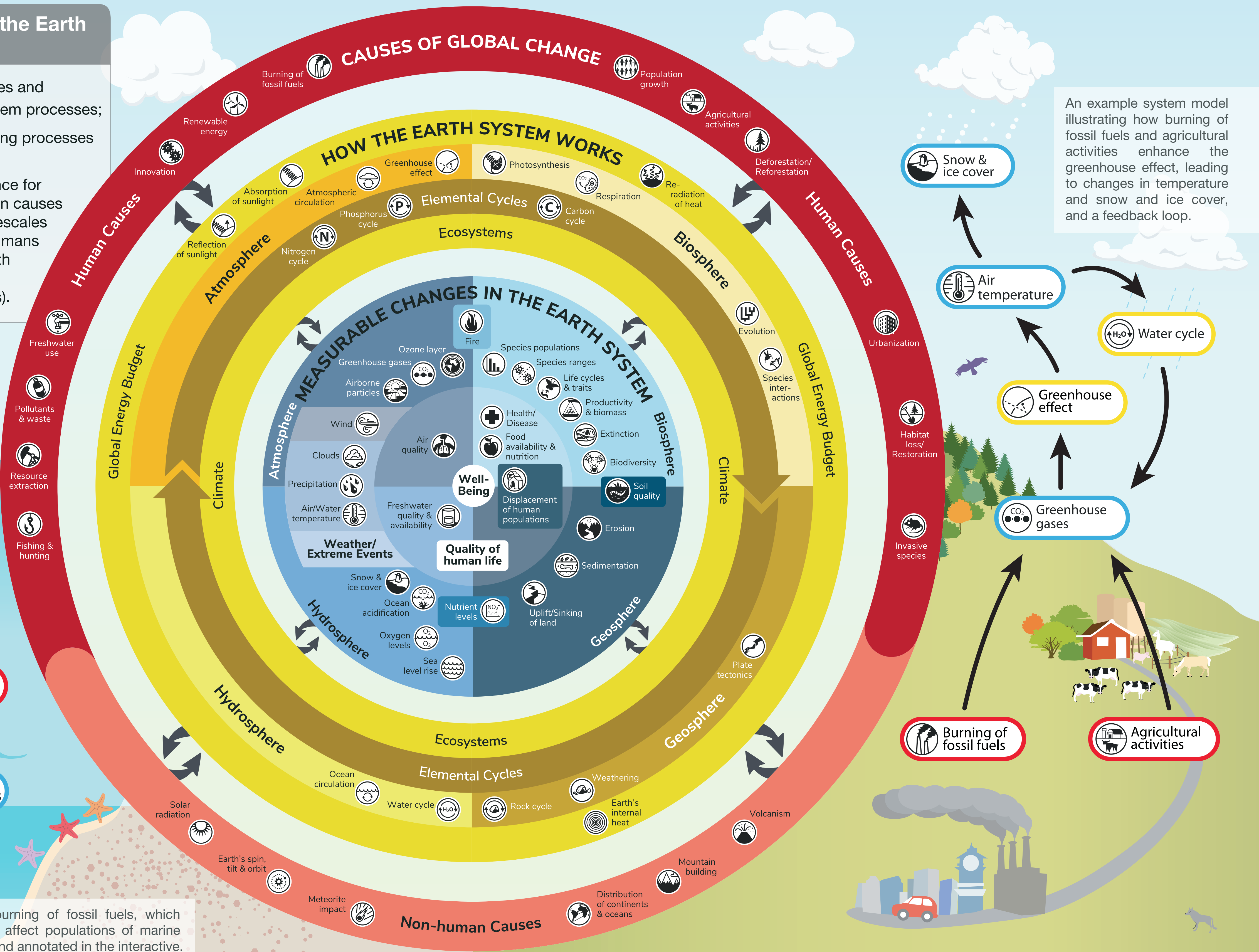


# Understanding Global Change

Earth is a dynamic system with many interacting parts that shape the world we live in. HHMI and the University of California Museum of Paleontology at UC Berkeley have partnered to create an online resource to visualize these interactions. Students and teachers construct models that connect the human and non-human causes and effects of changes in the Earth system.

We can organize the parts of the Earth into three categories:

- CAUSES OF CHANGE** —human activities and non-human factors that affect Earth system processes;
- EARTH SYSTEM PROCESSES** —ongoing processes that shape Earth through time; and
- MEASURABLE CHANGES** —the evidence for global changes through time. Non-human causes of change tend to operate over long timescales (thousands to millions of years), while humans are causing major disruptions to the Earth system we can measure over relatively short timescales (decades, years, or less).



An example system model illustrating how burning of fossil fuels, which contributes to ocean acidification, and fishing affect populations of marine species. Complex models can be constructed and annotated in the interactive.