

## Anthropocene: From Changing Globe to Developing Sustainability

Young men and women of today, I implore you to make adequate preparations for the era you will live in.

The human being evolved from *Homo habilis*, which appeared on Earth 2.8 million years ago, to *Homo sapiens*. Emerging from the jungles as hunter-gatherers, *Homo sapiens* made leaps and bounds to become a crucial agent on Earth and ushered in the thrilling new era in the history of the Earth—Anthropocene.



Satellites allow us to observe the Earth system and witness any changes that happen to it in real time, while the Internet allows simultaneous exchange of information. The future change and destiny of our mother Earth seem to be in firm grips of science and technology. However, will the accelerated developments in this era lead to a better future for humans or the Armageddon?

This talk will examine evidence for the “Anthropocene,” and discuss how humans have changed the Earth. Based on current development, a projection of developing trends of human population, energy consumption, greenhouse gas emissions, water resources, food supplies and ecological footprint in 2050 will be made, followed by a discussion on how humans can adjust their ways to develop sustainability.

### About the Speaker

**Prof. Kuo-Yen Wei** is a geoscientist based in Taiwan. He currently teaches at the Department of Geosciences, National Taiwan University and is also an adjunct research fellow at the Institute of Earth Sciences at Academia Sinica.

In 1987, Wei obtained a doctoral degree in oceanography from the University of Rhode Island in the United States. Afterwards, he conducted post-doctoral research at the University of California, Santa Barbara. Between 1988 and 1994 he worked as an assistant professor of geology and geophysics at Yale University.

Wei has been an advocate for environmental issues and writes extensively on issues relevant to sustainable development. In 2014, he joined the cabinet, serving as the Minister of Environmental Protection Administration in Taiwan. During his tenure, the Legislative Yuan passed the Greenhouse Gas Reduction and Management Act. Wei also headed a delegation of Taiwan government officials to 2015 UN Climate Change Conference in Paris, pledging to reduce Taiwan’s carbon emissions by 50% below BAU emissions by 2030 and thus showing to the international community Taiwan’s full commitment to contribute to the global effort in carbon reduction.