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Challenges to Carbon Neutrality

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In 2023, the global average temperature got 1.52degC higher than that of pre-industrial time, already exceeding the +1.5degC limit set by IPCC. There won't be any winner in the fight against global climate change. If we are unable to cooperate now, we will all fall down, going into the future of catastrophic starvation, water and energy shortage, plague, anything horrible you can imagine.

Our kind of people like to talk about new technologies for clean energy, energy saving and storage…but we must remember that these "green techs" are simply used for winning in the economic competition, rather than helping each other. For example, extreme exploitation and human rights abuse are taking place in Congo Republic, for cobalt mining, that is essential for lithium batteries. People are also seeking precious minerals deep in ocean, where they still know almost nothing about its ecosystem. Recent study found that those nodules of precious metals are acting like batteries for water electrolysis to supply oxygen to the aerobic lives in the deep sea. Test mining of the nodules thus resulted in complete extinction of the lives, as they were dependent on this non-photosynthetic oxygen!

Technological development could reduce GHG emission per USD of GDP to 1/3 in 100 years, while global GDP increased more than 8 times in the last 60 years. It is obvious that technological advancement cannot solve the problem, but every one of us will have to learn a new way of life. Geographical and historical background of development results in different habits and mindset when talking about sustainable society. The USA has 333 million people, No. 1 GDP of 27 trillion USD, self-sufficient for food and energy, whereas Japan has 125 million people, No. 4 GDP of 4.2 trillion USD, 90% of energy and 60% of food are imported. "Global economy" is the word for Japan. Global supply chain is the lifeline for Japanese, but majority of people living on that island, enjoying its slow and comfortable life, are unaware of this. I would like to share some of my thoughts about the importance of international collaboration for co-existence.

Type of presence

Presence online

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