

Summary

Under the Paris Agreement ratified by many countries, policies and business to reduce GHG emissions, and businesses to induce more reduction become major component of the world. Also, the impacts of climate change have become obvious with more frequent flood or draught in many parts of the world.

The future is becoming more uncertain, and the traditional outlook methods which assumes historical pattern will last for the future, is not appropriate under this uncertain circumstances. Also, Back Casting methods has no procedure to become prepared to the big change.

LCS has applied Scenario Planning methods, developed by Shell Company, and had a session with 20 people in November, 2016. By the session, we attained 2 very different scenarios, one is “Virtual Utopia”, and the other is “Local Frontier”.

In the Virtual Utopia scenario, high technologies are utilized, and all the labor work is substituted by robots and artificial intelligences. People only do creative works, mainly at home. People will have more time to relax, art work, sports, and games. All materials are mass produced, and mass recycled. artificial insemination technology is also utilized, and the population is gradually started to grow. Electricity is managed worldwide by the world interconnected grid system, and many renewables are utilized and fuel the cars.

In another scenario, Local Frontier, hand-made and slow-life is more valued. It is more worthwhile to put the efforts, not automatic. People have their own vegetable field, make miso and shoyu (soy sauce) at home. Reuse and share are the main stream way to substitute buying new things. Energy and electricity is supplied by local micro-grid by utilizing local renewables and labors. Due to more meetings and working together, birth rate also recovers.

Based on these 2 scenarios, we have done quantitative analysis using Computable General Equilibrium model. The result shows, even the society are so different in both scenarios, GHG emissions are about same level in 2 scenarios.

We would conduct several more scenario planning session in the future, and deepen “low carbon scenario”. It is very important that citizens, governments, and companies to consider uncertainty of current society, and join scenario planning sessions. We also plan to hold scenario planning sessions with many type of stakeholders of future society.