

Summary and discussions

Negative Emission Session1

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NIES

Summary

- *Land, water, ecosystem (Yamagata, Yokohata)*
 - Connection of human activities and environment
 - Relationship between food, pollution, land management
- *BECCS and 2C° target, Potential in Japan (Kato)*
 - 1st generation (sugar)=x, 2nd generation (cellulous)= Δ
 - About 10% in Japan under current economy, technology
- *Current BECCS technology in Japan (Kurosawa)*
 - Current technology on BECCS in Japan
 - Need bridges between BE and CCS
- *Innovative technology on BECCS (Yoshikawa)*
 - “Green” technology for viable CCS (different from coal-CCS)
 - [Waste -> Energy, fertilizer] + CCS + commercialize

Discussions

- ***Possibility of BECCS***

- **Productivity**: Fertilizer, water, and land
- **Technology**: gasification, capture rate, “residue” use, scale-up or commercialization, transportation
- **Economy**: Climate policy, carbon revenue,

- ***Is negative emission really possible?***

- It seems difficult assessed by the process based model **under current economy, technology** (Kato)
- Possibility **under different regime of society** (IAM results)