



IEA Bioenergy
Technology Collaboration Programme

The role of bioenergy in a WB2/SDG world:

Contribution of bioenergy systems to SDG implementation

Activity B1: Bioenergy feedstock production that deliver multiple benefits (led by Task 43)

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Project Motivation and Overview

- Biomass production is expected to increase significantly to meet temperature targets set out in Paris Agreement
- General concern that projected increase in biomass production for bioenergy could result in negative (unintended) consequences
- Overall aim of the intertask project to expand knowledge and understanding of biomass production systems that contribute positively to multiple SDGs
 - First need to better understand the potential impacts of bioenergy and biomass supply chains on SDGs
 - Then identify best practices from around the world, for different supply chains, for the sustainable production of biomass

Interactions between bioenergy and SDGs

All bioenergy contributes to:



High likelihood of interaction



- Recent reports draw links between bioenergy and SDGs in general
- General agreement on SDGs most likely to be linked to biomass production for bioenergy

Moderate likelihood of interaction



Low likelihood of interaction



- Impacts are supply chain and location specific, could be positive or negative

Characterization of interactions between biomass production for bioenergy and SDGs

Possible interactions scored at target level based on bioenergy/biomass sustainability literature.

Potential impacts of biomass production (dark in figure) on SDGs vary somewhat between supply chains and are connected to land use and management.

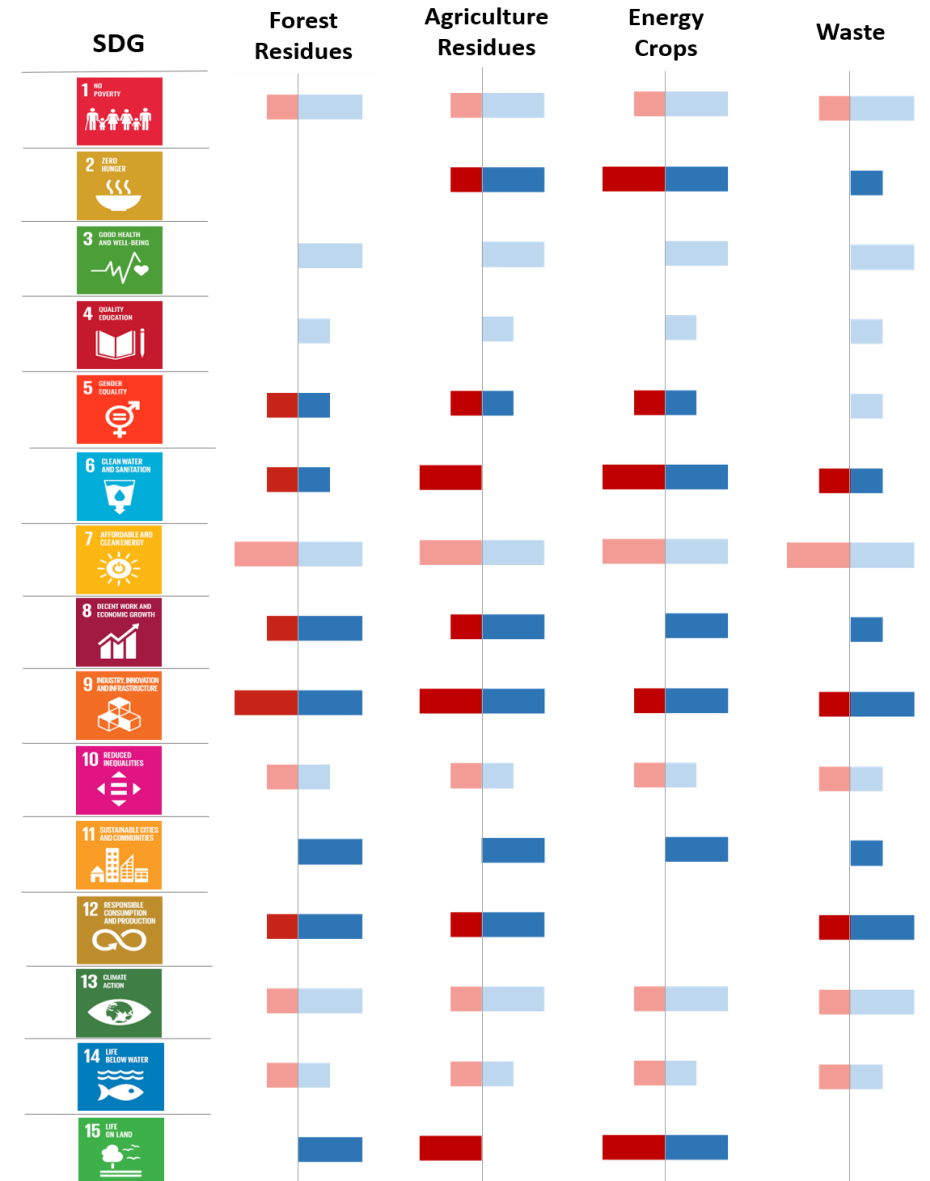
Negative interaction

- Biomass supply
- Bioenergy generation

Positive interaction

- Biomass supply
- Bioenergy generation

(SDGs 16 and 17 act as enablers of bioenergy)



Length of line reflects strength of interaction

Best practice case studies from around the world, for different biomass supply chains

 Forest Biomass

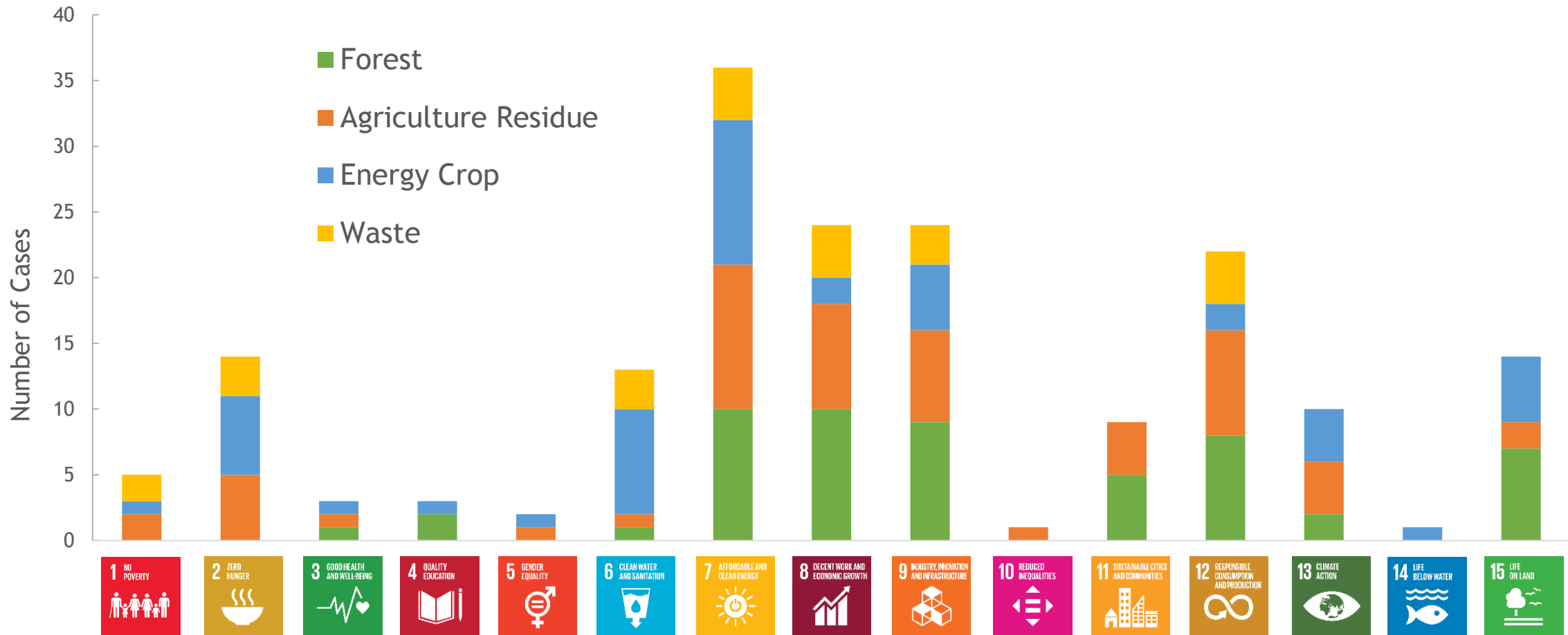
 Agriculture residues

 Energy Crops

 Waste



Multiple benefits of best practice case studies



Common themes: integration into existing land management and resource production systems, cooperation between multiple stakeholders

What's next?

- We have taken this work as far as we can based on literature and a collection of best practice case studies
- We are now looking to hear from the experts in the group
 - What do you feel are the most important impacts of biomass production on SDGs?
 - What are best practices to maximize positive impacts and mitigate negative impacts?
(Day 2)

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Click [here](#) for the publication from this work, co-authored by Bruno Gagnon, Andrew Klain and Biljana Kulišić



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