Secure Chain Finance Day

Matteo Bigoni Certification Manager Climate Bonds Initiative

Brussels | 6th June 2018













Importance of bioenergy

- Given its potential for electricity, heating, cooling and transport sectors, IEA modelling suggests that an expanded role of bioenergy is required for the transition to a low carbon economy replacing fossil fuels with bioenergy can contribute almost 20% of the cumulative carbon savings to 2060
- Investment in bioenergy needs to rise from current levels of around USD 25 billion per year to USD 60 billion per year by 2030, and to around USD 200 billion per year between 2050 and 2060.
- In addition, over 60 countries have enacted legislation on promoting the use of bioenergy production and use which continue to drive demand and production for bioenergy.
- Therefore, although this is a relatively high risk area, it is important to send clear signals on ambitious and rigorous requirements for climate-compatible bioenergy assets and projects that are and will come to the green bond market seeking certification



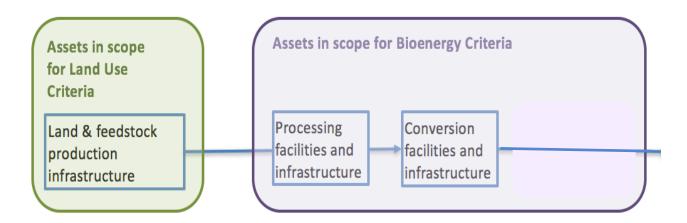








Assets in scope



N.B. Feedstock agnostic, except: does not cover biodegradable municipal solid waste, algae or wet agricultural waste

Covers facilities for

- Combustion of biomass for electricity and/ or heat production and/ or cooling facilities
- Biomass production (as input to electricity or heat production processes)
- Biofuel production for transport (for road, shipping and aviation)

Does not cover

- Facilities dedicated to production of other materials from biomass (e.g. chemicals, plastics)
- Land use assets relating to production of feedstocks themselves (which are covered under land use)













Component I: Mitigation

Mitigation Criteria for bioenergy assets and projects

- Conduct a Life Cycle Analysis of GHG emissions and associated metrics; and
- Meet the specified hurdle rates and thresholds
 - A reduction in biofuel input emissions of 80% compared to fossil fuels;
 - Best practice energy efficiency thresholds for such facilities

More details on these hurdle rates and thresholds are given on the following slides

Component 2: Climate Adaptation & Resilience

Objectives:

Certified bioenergy assets and projects are

- Resilient to climate change; and
- Have no negative impact on climate resilience of the surrounding ecosystem.

Eligibility Criteria

The issuer must demonstrate:

- a. The feedstocks being used by the asset have been produced in-line with **best practice standards**, and the asset itself is being operated in line with best practice standards
- b. They have assessed and mitigated the climate change risks and vulnerabilities that the asset is exposed to, and might exacerbate for either itself or other stakeholders;

Best Practice Standards

• Demonstrated by the issuer's asset and feedstock inputs being certified under one of the following, pre-assessed and pre-approved voluntary standards:

RSB, RTRS, FSC, ISCC Plus