



IEA Bioenergy
Technology Collaboration Programme

Summary Series

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Approaches to sustainability compliance and verification for forest biomass

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PROJECT SUMMARY

The global demand for biobased products and bioenergy is continuously increasing. One of the consequences of this increased demand is the development of a wide range of sustainability certification schemes and labels, aiming to verify compliance with sustainability requirements in biobased value chains for bioenergy and biobased products.

To better understand the methodological differences between the existing approaches to demonstrate sustainability compliance, the IEA Bioenergy T45 project on “approaches to sustainability compliance and verification for forest biomass” has analysed a number of existing certification schemes and the frameworks they employ for compliance and verification.

Amongst others, the analysis covered the following aspects and elements:

- risk assessment processes in sustainability certification,
- demand for further harmonisation to increase cross comparability across schemes,
- the transparency of a scheme’s procedures, the data collection and transfer as well as the claims attached to a certificate,
- the importance of auditor competencies for the overall robustness of the certification approach,
- internal processes for continuous improvements of the scheme, e.g. by an integration of new developments and trends from science, industry and society,
- the general opportunities and limitations of sustainability certification as a tool to verify compliance with sustainability requirements from policy frameworks and market actors.

The full project report with the main findings and conclusions is now available [here](#).

Main conclusions and take away messages of the project

Sustainability certification is a tool that can be used to support and drive processes to achieve higher levels of sustainability in biomass supply chains. It has been used since the 1990s, and is usually voluntary and market-driven. However, it is not enough on its own to guarantee sustainability, and should be used as part of an overall governance sustainability framework that includes other elements such as laws, policies, and international agreements.

Certification schemes are used to identify and reduce sustainability risks associated with the production, trade, and utilization of biomass resources. The setup and operation of these schemes are influenced by a range of factors, including stakeholder expectations, market demand, policy requirements, and the dynamics of their internal processes. These factors can create potential trade-offs between the expected sustainability impact, efficiency, and applicability of a scheme, as well as its costs, uptake, and complexity. If the market and policy framework is not managed properly, there is a risk of a 'race to the bottom' where more complex and ambitious schemes with higher levels of assurance are replaced by less ambitious schemes with lower levels of assurance. It is the responsibility of policymakers and the sector to prevent this downward cycle, as it could lead to a loss of trust and reputation for guaranteeing the sustainability of a sector.

Certification schemes are dynamic frameworks which can integrate new developments, requirements and trends with regular standard revision processes. However, there may be tension between the speed of incorporating new criteria into standards and the time needed for robust standard revision cycles with stakeholder involvement. Transition time and new competences and training for auditors may be necessary for large revisions in a standard.

Risk assessment processes are key elements in certification scheme development and application, which may change over time due to aspects like changing stakeholder values and perceptions. Criteria and procedures to define risk assessments in certification must be consistent, transparent and meet certain good practices to ensure credibility. A further harmonization of methodologies and approaches for criteria evaluation can help increase comparability across schemes.

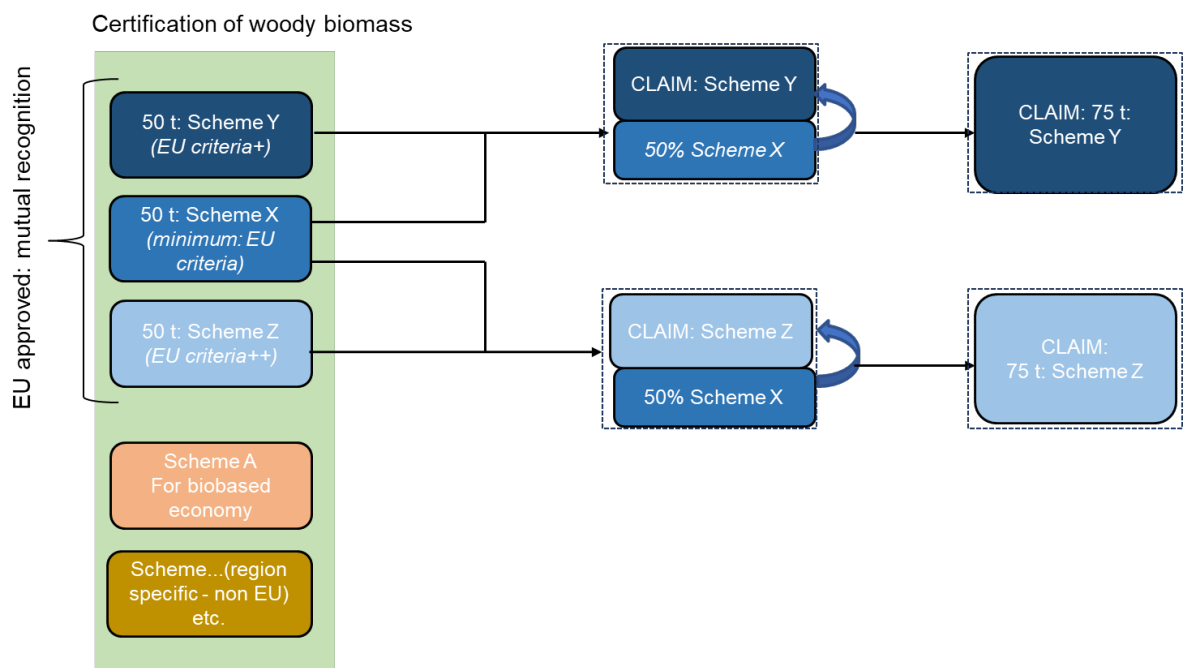


Figure 1 Theoretical example of cross-recognition of schemes for the certification of a supply chain based on forestry biomass