

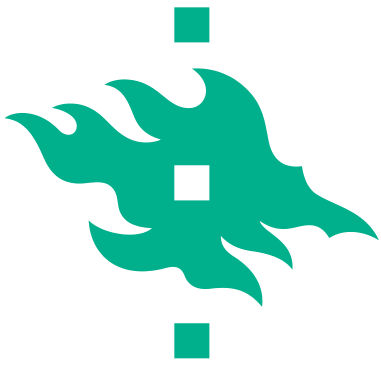


Cultural Sustainability as an Independent Dimension of Sustainability Reporting - Case Forest-Based Bioenergy in Finland

Austin, Texas 9th of June, 2013

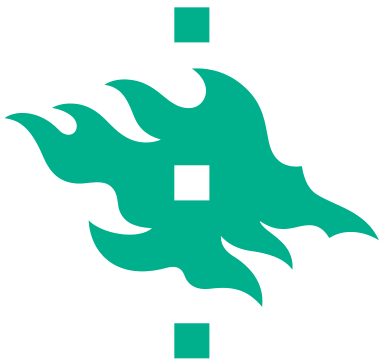
Katja Lähtinen, University of Helsinki, Finland

Tanja Myllyviita, Finnish Environment Institute, Finland



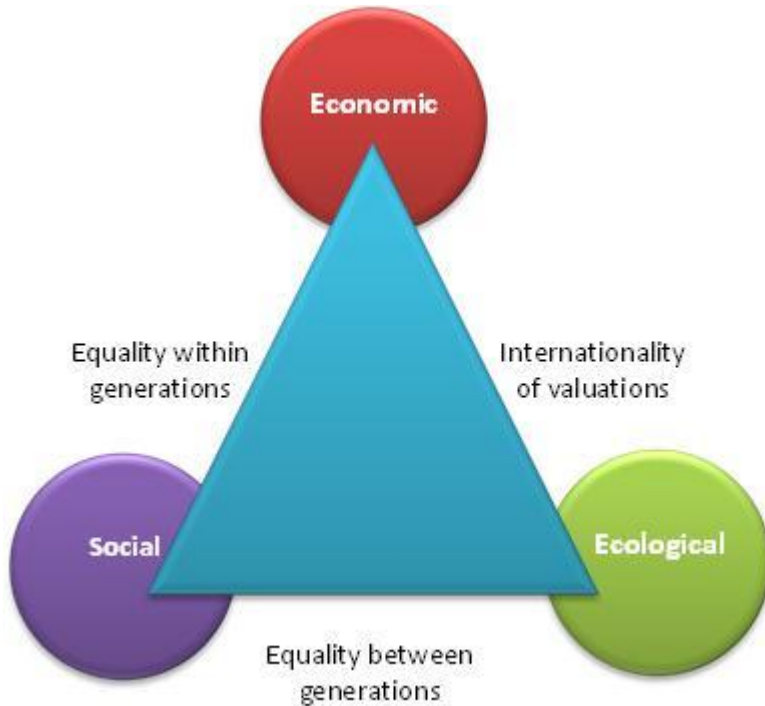
Dimensions of sustainable development

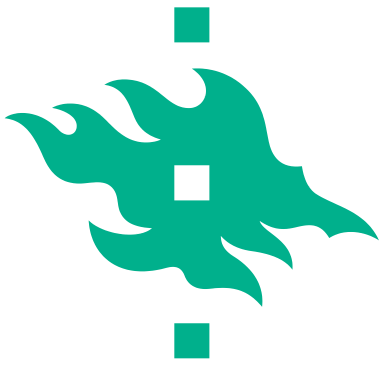
- Sustainable development is usually divided into three “pillars”, i.e., ecological, economic and social dimension - Cultural sustainability as an independent dimension of sustainability has gained more attention in the theoretical and empirical discussions, especially since the late 1990s
- Cultural sustainability is “...*distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, tradition and beliefs*” (Unesco’s declaration)
- Currently no concrete indicators for assessing cultural sustainability neither at societal, nor at firm level



Approaches to sustainable development from the perspective of society...

(e.g., Juurola & Karppinen, 2003)





...and from the perspective of a company and Corporate Social Responsibility (CSR) management

Economic responsibility

Company is a profitable target of investments both in a short and long-term

Competitive products and services that meet the needs of customers are developed in the company

Ecological responsibility

Ecological impacts of operations are known

Environmental laws and regulations are followed

Ecological aspects of operations are constantly developed

Needs for changes in ecological aspects are recognized and they are taken into account in the operations

Social responsibility

Well-being, knowledge-base and motivation of workers are taken care of

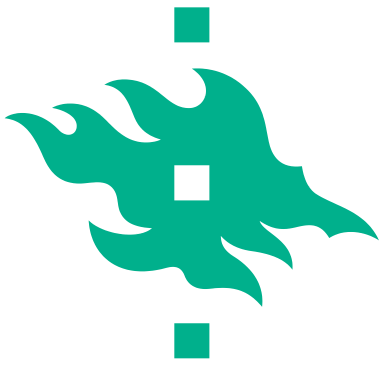
Company maintains open interaction with stakeholders

Co-operation and good human resource policies are enhanced in the company



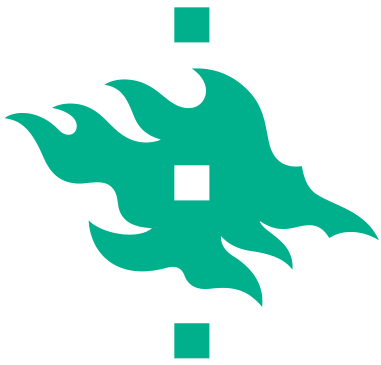
The role of forestry and forest industries in sustainable development

- Globalization has changed drastically the structure of forestry and forest industries since the 1990s affecting the livelihood in all rural areas of the globe
- In the environmental markets, the role of forests and the challenge of combining needs related to their sustainable use for bioenergy, other industrial and non-industrial purposes are major themes in the future
- In current global business environment, forest industries face a challenge to authenticate the acceptability of the usage of wood fiber in industrial processes compared to other uses of forests



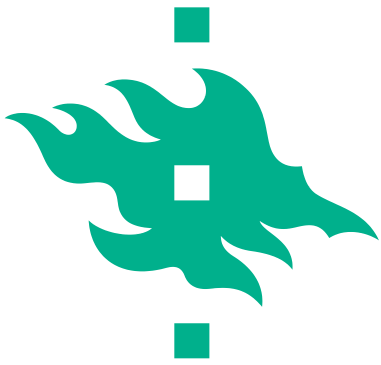
Sustainability impacts of forest-based bioenergy production?

- Positive impacts, e.g.:
 - Climate change mitigation
 - Enhancement of social wellbeing
 - Local development
- Negative impacts, e.g.:
 - Soil and nutrient balance & biodiversity
 - Land-use conflicts
 - Unprofitability



Need for integrating cultural sustainability into CSR management?

- Background for Corporate Social Responsibility (CSR) reporting: Sustainable operations at company-level enhance business development that further contributes to sustainable development in the globe
- Due to globalization, economic actions of forest companies and local cultures in different geographical areas have become more intertwined with each other than ever
- The need for integrating cultural sustainability issues into forest companies' CSR management have been emphasized to be crucial to sustain the cultural capital of forest-dependent communities



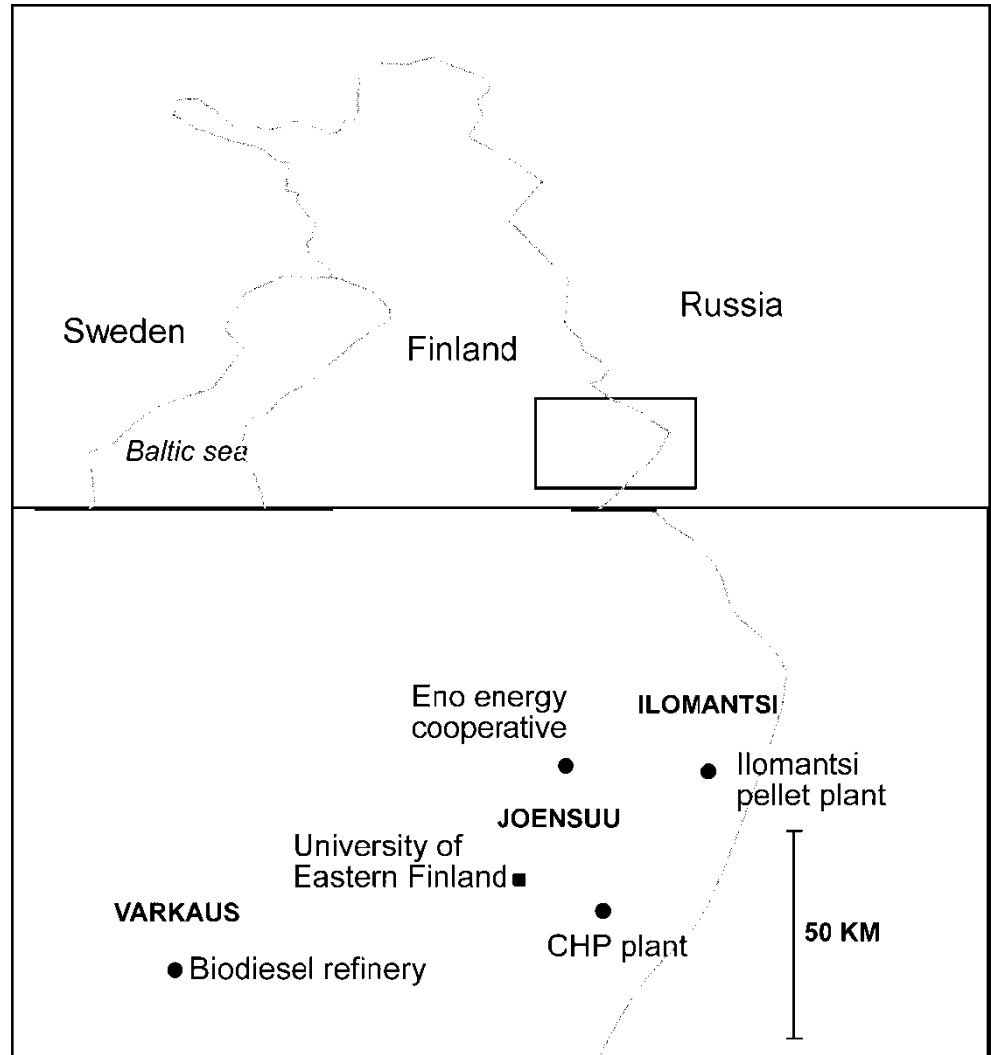
Global Reporting Initiative (GRI) as a CSR management system (GRI 2006)

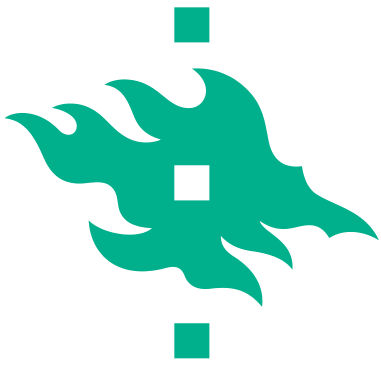
- GRI is one of the most comprehensive guidelines for implementing and developing CSR reporting system both in environmental, economic and social dimensions of sustainability
 - Economic dimension: 3 aspects (economic performance, market presence, indirect economic impacts), 9 indicators
 - Environmental dimension: 9 aspects (e.g., materials, biodiversity, products and services), 30 indicators
 - Social dimension: 25 aspects (e.g., labor/management relations, diversity and equal opportunity, child labor, local communities, corruption, compliance in product responsibility), 42 indicators
- GRI framework used widely also in global forest industries



Forest-based bioenergy in Eastern Finland

- By what concrete measures cultural sustainability could be measured in case companies in the context of Eastern Finland? (Cultural indicator definition as a part of “BioSus”-project in 2009–2011; Leskinen et al. 2012))
- What new issues integration of cultural sustainability integration in CSR management could raise in the context of forest-based bioenergy production?



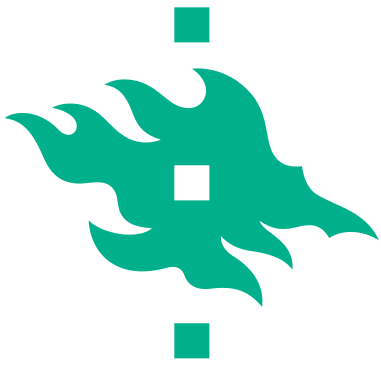


Data for defining cultural indicators for forest-based bioenergy production

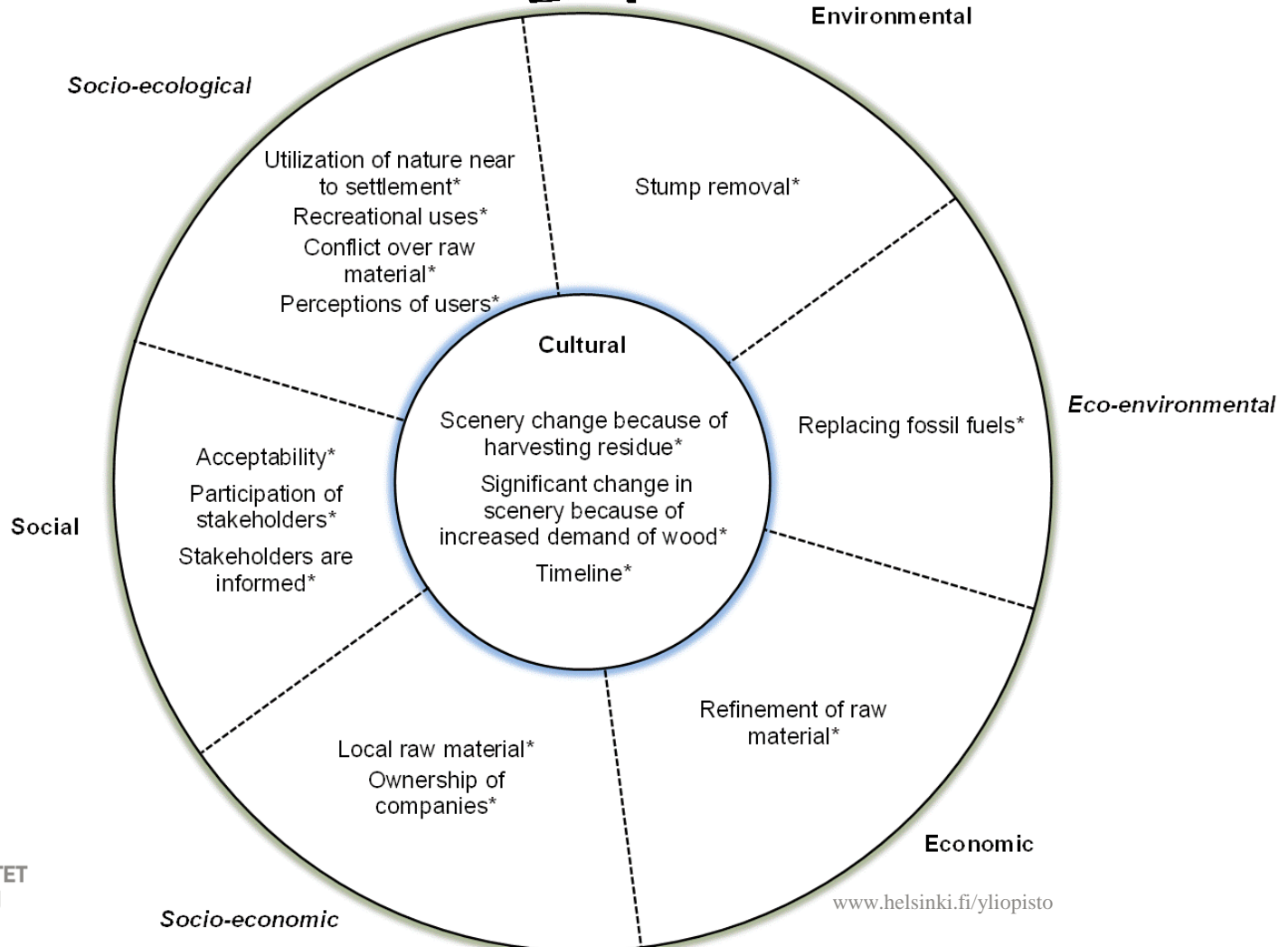
- Individual two-phased interviews for 12 experts with profound knowledge on cultural issues and forest-based bioenergy production especially in Eastern Finland in 2010
- In the 1st phase, each of expert defined cultural indicators, which they considered important for assessing cultural sustainability -> separate indicator lists of individual experts were merged into a 'combined list' (49 indicators); In the 2nd phase, experts rated with SMART methodology the relative importance of the 49 indicators -> 15 were rated to be especially important

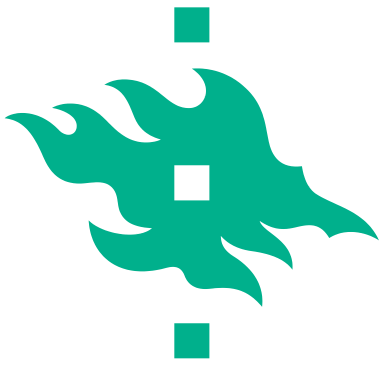
(for details, see Sironen et al. 2013)

- In this study, 49/15 indicators were compared to GRI indicators – are cultural aspects already directly or indirectly defined in the GRI framework? If not, how and what new issues could emerge?



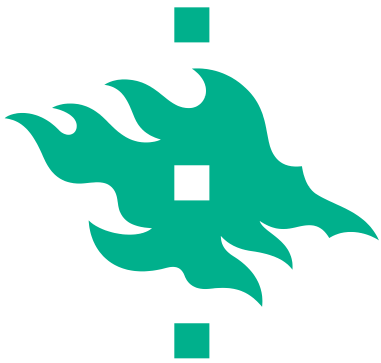
Results: 15 most important cultural sustainability indicators for forest-based bioenergy production vs. GRI





Results: In comparison to the GRI framework, what new in cultural sustainability indicators?

- Of the 15 most important cultural sustainability indicators, 3 (scenery changes & timeline) were not approached in the GRI framework (16 indicators of the all 49)
- Scenery has been found to be very important both for, e.g. citizens and it has strong impacts on other uses of forests. In addition, the forest-resource usage decisions may have deep direct long-term impacts, e.g., in boreal forests
- In the context of forest-based bioenergy production, integration of scenery impacts and timeline in CSR assessment would bring new insights in cultural sustainability aspects
- In addition, impacts on landscape and beauty of scenery exist in all nature-dependent industries – need for such an indicator in the GRI framework?



Literature

- GRI. 2006. Global Reporting Initiative. Sustainability Reporting Guidelines. <https://www.globalreporting.org/resource/library/G3-Guidelines-Incl-Technical-Protocol.pdf>. 170 p.
- Juurola, M. & Karppinen, H. 2003. Sosiaalinen kestävyys ja metsien käyttö. Metsätieteen aikakauskirja 2/2003: 129–142. In Finnish.
- Leskinen, P., Kähkönen, T., Lähtinen, K., Pasanen, K., Pitkänen, S., Sironen, S., et al. (2012). Moniulotteinen kestävyuden arviointikehikko puuenergian tuotannolle - Multi-dimensional sustainability framework to evaluate forest and wood energy production. Finnish environment 9/2012. In Finnish.
- Sironen, S., Hujala, T., Myllyviita, T., Tikkanen, J. & Leskinen, P. 2013. Combining experts' ratings for partly overlapping concept lists: A feasibility test with cultural sustainability indicators. Mathematical and Computational Forestry & Natural-Resource Sciences, Vol. 5(1): 1-13.