

**ToS on Forest Products & Wood Energy
Statistics
Wood Energy ad-hoc task team**

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Task

- Review of methods of data collection to better respond to policy questions on wood energy supply-chain

Activities to Date

- **Two TEAM meetings, plus e-mail communications**

- June 22, 2022:**

- The group identified a set of interest areas related to wood energy policy issues.
 - Those ideas were organized and paired with currently available indicators from the JWEE that could be used to address each identified wood energy policy issue.

As a follow-up action, an online survey was conducted. The survey asked ToS members to rate the top 3 topics, by level of interest

- October 12, 2022:**

- Review survey results with the team
 - During the call, the team proposed extending the list from 3 to 4 relevant topics.
 - Sustainability, Cascading Use, Climate Change Mitigation, and Energy Security
 - The ad-hoc team also identified three general wood energy related policy questions, to use for initial analysis.

- Report of activities sent to ToS Leadership (December, 2022)

Survey Results

Survey results - overview

Ad-hoc task group:

Total: 68 members

Replies: 28 (41%)

Task:

Assign 8 policy issues to rank 1-3.

Policy issues:

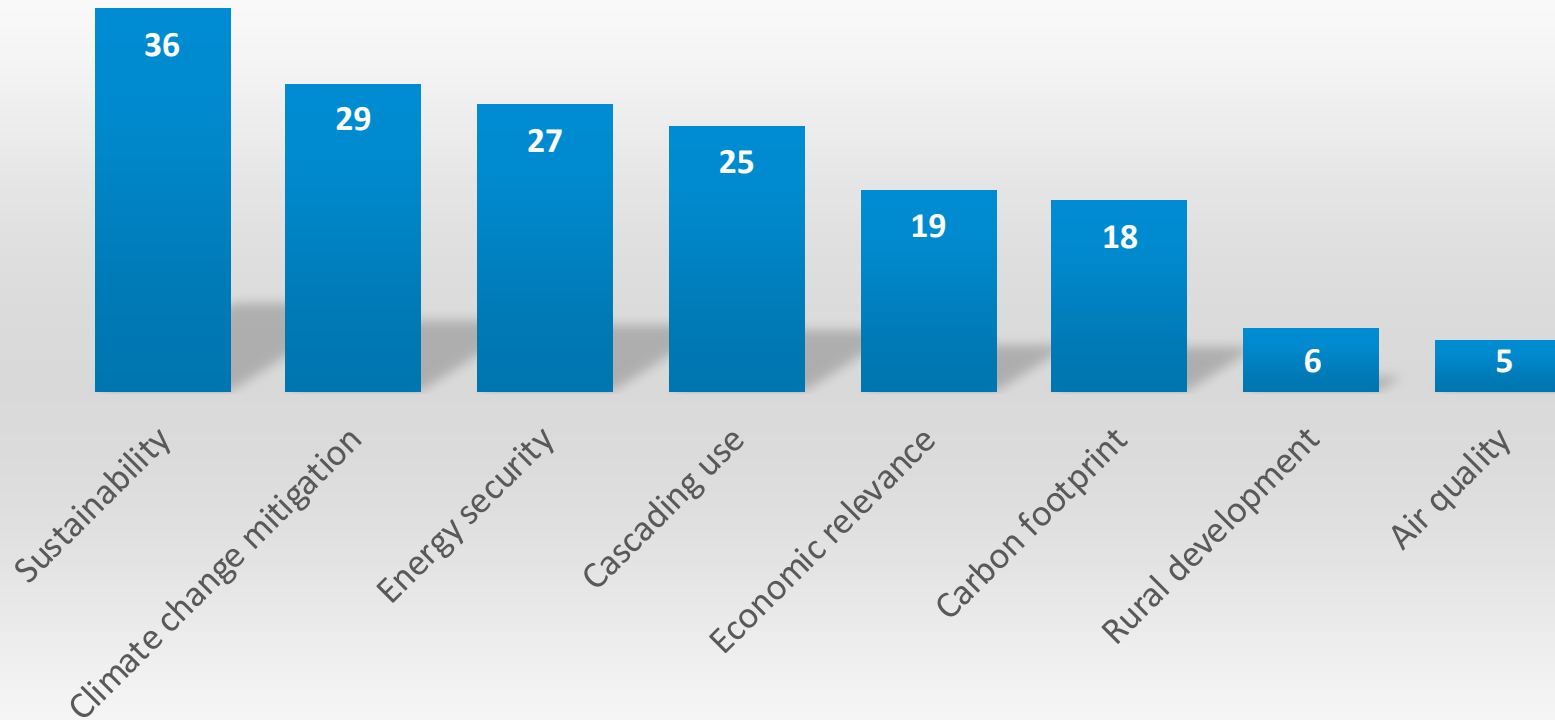
- Air quality
- Carbon footprint
- Cascading use
- Climate change mitigation
- Economic relevance
- Energy security
- Rural development
- Sustainability

Survey results - ranking

Policy issues	Rank 1	Policy issues	Rank 2	Policy issues	Rank 3
Sustainability	7	Climate change mitigation	7	Carbon footprint	6
Energy security	5	Energy security	5	Sustainability	5
Cascading use	5	Sustainability	5	Economic relevance	4
Climate change mitigation	4	Economic relevance	3	Cascading use	4
Economic relevance	3	Cascading use	3	Climate change mitigation	3
Carbon footprint	2	Carbon footprint	3	Energy security	2
Rural development	1	Rural development	1	Rural development	1
Air quality	1	Air quality	1	Air quality	0

Survey results - score

Score:



rank 1 $\hat{=}$ 3 points
rank 2 $\hat{=}$ 2 points
rank 3 $\hat{=}$ 1 point
score $\hat{=}$ sum of points

Results from group's work

- Policy Topics
- Indicators
- Questions

Policy Topics of Interest

1. **Sustainability: Evaluating the impact of wood energy use on global forest resources**

1. How does wood energy use affect forest growth (incl. annual increment, forest area, etc.)?
2. Providing an overview on forest products used for energy generation or the production of energy products (e.g., summarizing wood pellets sourcing) and evaluating wood use for energy
3. How do policy measures (e.g., Renewable Energy Directive) affect wood energy use? How do available policy measures improve sustainability of wood energy use already?

2. **Cascading use: Promotion of efficient use of wood resources**

1. Assessment of the efficiency of wood use to meet demand. One target could be to assess the average length of wood use cascades (e.g., sawnwood > packaging > particle board > furniture > ... > wood energy). In principle, wood should be used for material use (i.e., higher value products) first, with wood energy at final use - after as many cascades as possible.
2. Providing an overview on quality-categories of wood (e.g., logs > chips > ...> fibers > energy) and implication on the opportunities to use wood with different qualities. This might also include an assessment of the opportunities and limitations to use damaged wood.
3. Showing the role of wood energy when transforming the wood processing industry into a circular economy (closed loop)

3. **Climate change mitigation: Role of wood products (incl. wood energy) in climate change mitigation strategies**

1. Policymakers show interest in carbon benefits of mass timber and wood in the construction environment. There is a need for a link to wood energy, compatibility between the two applications (i.e., energy and construction).
2. Evaluation of the role of wood energy in the processing chain of wood (incl. potential synergies as well as conflicts/competition) with a focus on climate change mitigation

4. **Energy security: Contribution to domestic energy supply**

1. Evaluate the contribution of wood energy to the energy sector, in particular contribution to renewable energies, the heating sector, etc.
2. Providing an overview of the origin (i.e., domestic production, trade) of wood energy by products (e.g., logs, post-consumer recovered wood, wood pellets).

Indicators

indicator	Description	Sustainability	Cascading use	Climate change mitigation	Energy security
1	Roundwood removals from forest and outside forest (1000m3)	x			
2	Roundwood supply from forest and outside forest including net trade (1000m3)	x			
3	Total calculated domestic supply of woody biomass (1000m3)	x			
4	Total primary energy supply (TPES), (ktoe)				
5	Share of renewables (RES) in TPES				
6	Total wood energy supply, volume basis (1000 m3)	x			x
7	Total wood energy supply, energy basis (ktoe)	x			x
8	Average wood energy consumption (m3/capita)	x			x
9	Fuelwood consumption per rural inhabitant (m3/inhabitant)	x			x
10	Pellets consumption per inhabitant (kg/capita)		x		
11	Share of net annual increment directly used for energy (%)	x	x		x
12	Share of Roundwood supply directly used for energy purposes (%)	x	x		x
13	Share of calculated domestic consumption of woody biomass used for energy purposes (%)	x	x		x
14	Share of woody biomass in TPES (%)			x	x
15	Share of woody biomass in RES (%)			x	x
16	Share of wood energy generated from black liquor, energy basis (%)		x	x	x
17	Imported wood fuel as share of wood energy, volume basis (%)				x

Questions For Initial Analysis

- What is the composition of the wood energy industry feedstocks (virgin/plantation/residues/etc.)?
- Is production of wood energy from forests sustainable in the long term?
- How is consumption of wood energy distributed across sectors (industrial/residential/commercial). Implications for future demand?

Proposed Actions

1. Use identified indicators to offer a report on issues revolving around sustainability, climate, and energy security for wood energy in the ECE
2. Identify and propose possible amendments to the JWEE (including potentially new indicators) that would help the ToS be better prepared to respond to policy questions
3. Assess potential new indicators and/or identify other sources of information that could complement the JWEE 2.
 1. Suggestion from Holger– Consider applying criteria and indicators from the SDG set to JWEE data.
4. Plans to reconvene (late June?)

Comments/Questions?