

Food and Agriculture Organization of the United Nations

Item 4

Reporting on implemented and ongoing work

Forest products and wood energy statistics

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Geneva, 22–24 May 2024



Forest Products and Wood Energy Statistics

Report by the Team of Specialists





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Joint Forest Sector Questionnaire

- 44 replies in 2023, an increase of 2 from previous year
- JFSQ Questionnaire issued 9 April 2024
- UNECE and Eurostat Deadline: 10 June
- FAOSTAT upload August and December
- Resources not available for data checking in 2023 (UN liquidity crisis)
- Central Data Platform under development for JFSQ





Timber Forecast Questionnaire 2024

- 28 replies in 2023, an increase of 7 from previous year
- Some member States reply with few data points.
- The proposed deadline for TFQ 2024 is 1 October 2024.
- The questionnaire will be sent by **30 August 2024**.





Joint Wood Energy Enquiry

- 26 replies to JWEE for 2021 data
 - 4 member States resumed submitting data
 - 6 member States that provided data in 2019 didn't provide data in 2021
- Only 12 member States have consistently reported for 2009-2021
 - Gaps in reporting can make it more difficult to evaluate regional trends



Existing Statistical Systems

Data Collection

- Excel-based data collection, processing and validation
- The UNECE version of the JFSQ for 2023 data requests 888 data points
- Access database (For JFSQ and TFQ) created in 2002 is used for storage
- Data uploaded UNECE website (Excel File) and provided to FAO for upload to FAOSTAT.

• High share of manual work

- National replies individually checked in Excel
- Summary log of changes drafted for validation by correspondents
- Significant data processing required after exporting data from Access to develop output tables (e.g. for FPAMR)



Existing Statistical Systems

• Each product code is reviewed in Excel using checks based on:

- Apparent Consumption or Net Trade
- Change from prior year/historical values and ratios
- Regional Average Unit Price
- Discrepancies between aggregates and disaggregates
- Missing Quantities
- Unit and conversion factor errors
- Wood balance
- Third party sources (COMTRADE)
- Exchange with national correspondents
- Changes are documented in a log shared with the national correspondent



- Currently developing platform with capabilities to partially automate data exchange and processing for JFSQ by secretariat
- A version with an interface for national correspondents could be developed after the Secretariat pilots the platform
- The ToS expressed strong interest in
 - Enhanced data visualization and dissemination capabilities as part of the platform
 - Including and linking the JWEE, TFQ, JFSQ and potentially other data sets on the platform



- The JFSQ dataset dates to 1964.
- We must be careful not take it for granted even if it seems routine. Its value should be recognized.
- Modern data collection and dissemination requires appropriate information technology (IT) resources.
- However, the Secretariat has never received regular budget (RB) IT resources for forest product and wood energy statistics.
- Requests for RB have been unsuccessful to date.



- The ToS strongly supported a proposal to fund a multi-year, multi-donor project to support the digitalization of forest products and wood energy statistics, via the Central Data Platform, and requested that member States contribute to such a project
- This would allow for the development of additional features requested by the ToS





- These features could, for example:
 - Strengthen capacity for data analytics and elaboration of data briefs and publications
 - Greatly enhance capacity and flexibility to assess trends and their drivers
 - Dramatically improve outreach and dissemination capacity
 - Reduce reporting burden on member States and the Secretariat
 - Significantly improve the speed and quality of data availability
 - Allow for partial data submission, easier revision of datapoints





Forest Products and Wood Energy Statistics

Report by the Team of Specialists





Geneva, 22-24 May 2024

ToS on Forest Products and Wood Energy Statistics

- Team Leader: Mr. Francisco Aguilar
- Deputy Leader: Mr. Branko Glavonjic, Ms. Ewa Leszczyszyn, Ms. Graça Louro and Mr. Holger Weimar
- Members: 64 members, of which 23 female (to reach 65 members and 28 Countries, new member from Romania)





ToS Activities

- Expert technical support to enhance data quality and availability (JFSQ, TFQ, and JWEE)
 - Example of related contributions: 2023 Data Brief "Wood pellets and wood fuels".
- *Two ad hoc* task groups were created to address specific questions on
 - Wood removals
 - Wood energy

UNECE/FAO Data Brief 2023 Wood pellets and wood fuel

Introduction

This Data Brief on Wood Energy focusses on the production and trade in wood pellets. In 2022 worldwide the value of exported wood pellets (HS 440131) totalled an estimated US\$5.87 billion. This accounted for about 69% of the combined export value of energy-related wood products (wood briquettes, wood charcoal, coniferous and non-coniferous wood fuel, wood pellets). Nine of the ten top wood pellet exporters are located in the UNECE region. Viet Nam is the only country outside this region. with a significant production of wood pellets (3.5 million tonnes). The total value of wood pellets exported by the top-10 producers from the UNECE region (Table 1) was over ten times that of wood fuel in 2022. UNECE/FAO annual data reliably track market trends in wood pellets using information collected through a survey which includes wood sources and users. Data from this survey (the Joint Wood Energy Enquiry) indicate that wood fibres used for wood pellet production were derived from wood processing co-products such as chips and particles (47.8%) and directly from forests (52.2%).

Europe

European wood pellet production increased marginally in 2022 (by 1.1% from 2021 levels). Longer trends show production growing by 22% since 2018, and by nearly 25% from 2015 levels (Graph 1). In 2022, the import of wood pellets into Europe declined by about 6% partly because of the conflict in Ukraine and subsequent EU sanctions. In 2021, the quantity of imported wood pellets equalled that of European regional production of about 21 million tonnes each. In 2022 the total imports of wood pellets amounted to about 90% of the regional production. The net consumption in Europe seems to have plateaued, although it might grow soon, possibly from greater demand by the residential sector. The annual average value of wood pellets imported into Europe grew by nearly 24% to 232 US\$/tonne in 2022 from 188 US\$/tonne in 2021.

GRAPH 1

Europe: Wood pellet production, trade and consumption, 2015-2022

NECE Top-10 exporters of wood fuel and wood pellets, 022										
	Wood fuel		Wood	Total						
	1,000 m ³	\$ million	1,000 tonnes	\$ million	\$ million					
USA	71	5	8,989	1,555	1,560					
Canada	101	8	3,651	576	584					
Latvia	675	142	1,890	397	539					
Estonia	196	37	1,418	313	350					
Austria	12	2	760	293	294					
Germany	247	20	882	293	313					
Denmark	46	1	1,446	243	244					
Russian Federation*	175	6	2,294	234	240					
Croatia	547	76	433	133	209					
Belgium	99	9	1048	184	193					
UNECE top-10	2,168	306	22,811	4,221	4,527					

Production imports _____ Exports _____ Consul

Note: Exports are shown as negative numbers Source: UNECE/FAO database, 2023.



Note: * 2021 data. By decreasing total value. Sources: UNECE/FAO database, 2023 ; FAOSTAT, 2023; UN Comtrade, 2023.



ToS Activities

Since the 2023 Joint Working Party:

- 16 January 2024: ToS Leadership meeting
- 20-21 May 2024: 3rd Meeting of the Joint ECE/FAO Team of Specialists on Forest Products and Wood Energy Statistics (Geneva)
- Ad hoc Task Group Meetings:
- 5 April 2024: Ad Hoc Task Group on Wood Energy Statistics
- 20 March 2024: Ad Hoc Task Group on Removals Statistics
- Working meetings: 11 August 2023, 8 Sept 2023, 18 Sept 2023



Ad hoc task: Wood removals

• Task: Review of statistics regarding removals to share information, identify gaps and inconsistencies in definitions and methodologies

<u>Coordination</u>: Mr. Michal Synek, Ms. Graça Louro

- On 21 May 2024 the Coordinators of the *ad hoc* Task Group on Wood Removals updated the ToS, including on proposed template for country profiles of removals statistics.
- ToS offered recommendations to the drafted country profile template to ensure the collection of quality data which were all welcomed by the Coordinators.
- <u>Expected output</u>: Summary of the responses to the country template to identify inconsistencies, gaps and opportunities for data improvements regarding wood removals.
- <u>Aim:</u> Complete activities during calendar year 2025



Ad hoc task: Wood removals

1	Select country	•						
2	Select country	JFSQ definition			Yes/No	Explain here if you do not follow the definition		
3	The volume of all trees, living or dead	l, that are felled and	removed from the forest, other woo	ded land or other felling sites.				
4	This includes removals from all source	ncludes removals from all sources within the country including public, private, and informal sources.						
5	is reported in cubic metres solid volume underbark (i.e. excluding bark).							
6	It includes:							
7	- unsold roundwood stored at the for	est roadside						
8	- natural losses that are recovered (i.e	e. harvested).						
9	- removals during the year of wood fe	elled during an earlie	r period					
10	- removals of non-stem wood such as	stumps and branch	es (where these are harvested)					
11	removal of trees killed or damaged by natural causes (i.e. natural losses), e.g. fire, windblown, insects and diseases							
12	t excludes:							
13	- bark and other non-woody biomass	and any wood that	is not removed, e.g. stumps, branche	es and tree tops and felling residues				
14								
15								
16	Assortment		Source of	information		Periodicity	Most recent year (if periodic)	Method for Annual Adjustments if Periodic (if applicable)
17		source specification short description			used since [year]	years	year	select a method
18	Total Removals (for sources not	1st source	select from the list			select from the list		select from the list
19	incremated by assortinency	2nd source	select from the list			select from the list		select from the list
20		3rd source	select from the list			select from the list		select from the list
21	Do not use if you have information on assortments!	4th source	select from the list			select from the list		select from the list
22		5th source	select from the list			select from the list		select from the list





Ad hoc task: Wood energy

- Task: Review of methods of data collection to better respond to policy questions on wood energy supply-chain
- <u>Coordination</u>: Ms. Consuelo Brandeis, Mr. Sebastian Glasenapp
- On 21 May 2024 the coordinators presented an update on the work done to date, including the proposed outline for a manuscript on wood energy metrics relevant to policy issues, with the ToS offering feedback.
- <u>Output</u>: compilation of <u>policy-relevant wood energy metrics</u> derived from the JWEE, and accompanying <u>technical report</u> pointing to gaps, inconsistencies and opportunities to inform policy debates revolving around *climate mitigation, cascading principles, sustainability, energy security*
- <u>Aim</u>: Complete activities during calendar year 2025



Ad hoc task: Wood energy

Example: Metrics on sustainability

3.1. Sustainability

This category identifies available metrics for evaluating the impact of wood energy use on global forest resources, which can assist addressing question such as:

3.1.1. Woody Biomass Supply

Metric: Roundwood removals from forest and outside forest (1000m3)

Metric: Roundwood supply from forest and outside forest including net trade (1000m3)

Metric: Total calculated domestic supply of woody biomass (1000m3)

3.1.2. Energy Resources
Metric: Total wood energy supply, volume basis (1000m3)
Metric: Total wood energy supply, energy basis (ktoe)

3.1.3. Wood Energy Intensity

Metric: Average wood energy consumption (m3/capita)

Metric: Fuelwood consumption per rural inhabitant (m3/inhabitant)

3.1.4. Role of Wood Energy in Forest Sector

Metric: Share of net annual increment directly used for energy (%)

Metric: Share of Roundwood supply directly used for energy purposes (%)

Metric: Share of calculated domestic woody biomass consumption used for energy purposes (%)



ToS Forest Products and Wood Energy Statistics

Actions:

- Continue active support to Secretariat and IWG activities, including FPAMR 2023-2024, JFSQ, JWEE, ...
- Complete two ad hoc tasks in calendar year 2025, with the expectation that the 2025 JWP will be informed of the work completed by then.
- Active discussion for strategic prioritization of activities over next two years, which started on 21 May 2024 (Next slide: list of items)



Issues for the Attention of the Working Party

Top priority:

 ToS strongly recognizes opportunities that investments in digitalization will create for the more efficient gathering and analyses of core statistics. Important opportunity to expand and enhance the capabilities of the central data platform for forest sector statistics (in development) as a tool to improve data exchange among IWG members.

Other ToS priorities:

- Add value & visibility of data collection and analyses efforts through:
 - Active communication, visualization, short thematic reports
- Continue following new products and trends that may be relevant to include in the JFSQ, JWEE or other instruments:
 - For example: construction wood products, wood bio-products (wood-based products such as chemicals and textiles), in order to have a comprehensive view.







Food and Agriculture Organization of the United Nations

Thank you

Geneva, 22–24 May 2024

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