

Joint Wood Energy Enquiry (JWEE) Results for the reference year 2019*

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*as of May 2022

1. Submissions to the JWEE

2. Results

- General overview
- Wood energy from...
 - primary sources
 - secondary sources
 - tertiary sources
 - unknown sources

1. Submissions to the JWEE

JWEE 2019

- **Total: 26 submissions**
 - 24 member states provided data in table IV
- 8 member states that provided data in 2017 stopped reporting
 - 2 member states resumed submitting data
 - 2 member states provided a JWEE questionnaire for the first time

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Timeline

#-number of submission to table IV

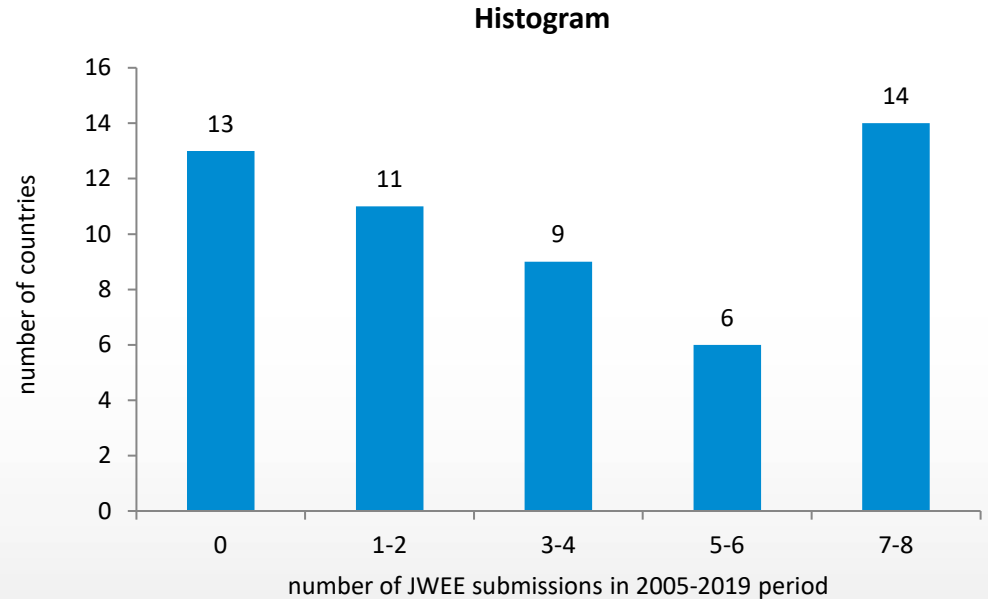


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1. Submissions to the JWEE

JWEE 2005-2019

- **A total of N = 189 questionnaires have been submitted**
- The database contains 138,156 entries, inclusive of 12,228 datapoints greater than 0

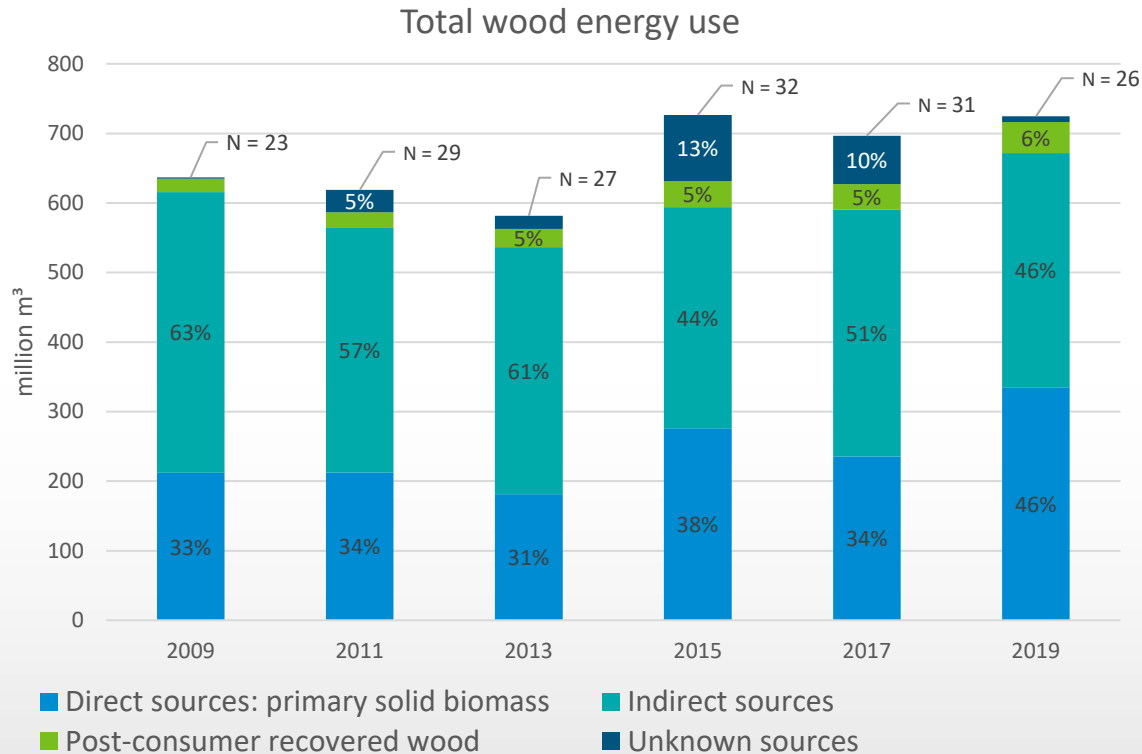


1. Submissions to the JWEE

2. Results

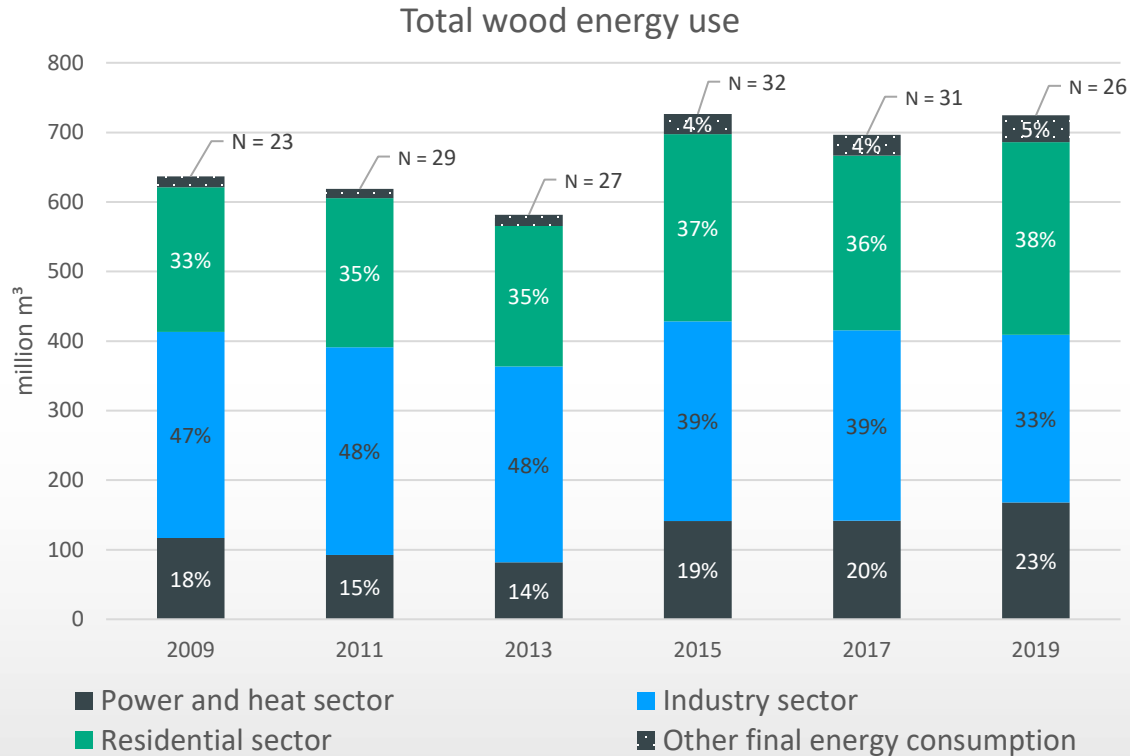
- General overview
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2. Results: General overview



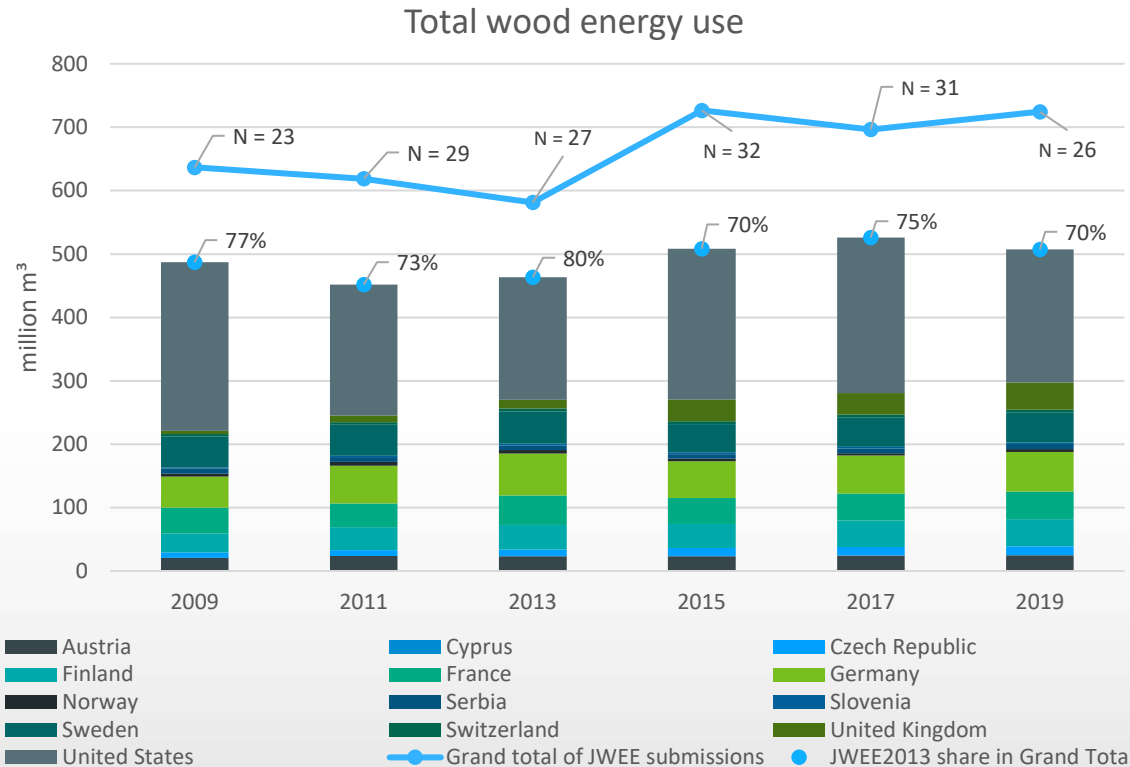
- In 2019 a total of **725 million m³** of **wood resources** have been used for energy in 26 participating member states
- Wood energy is mainly sourced from **forests and non-forest land** (i.e. primary sources) and **wood processing industries** (i.e. indirect sources)

2. Results: General overview



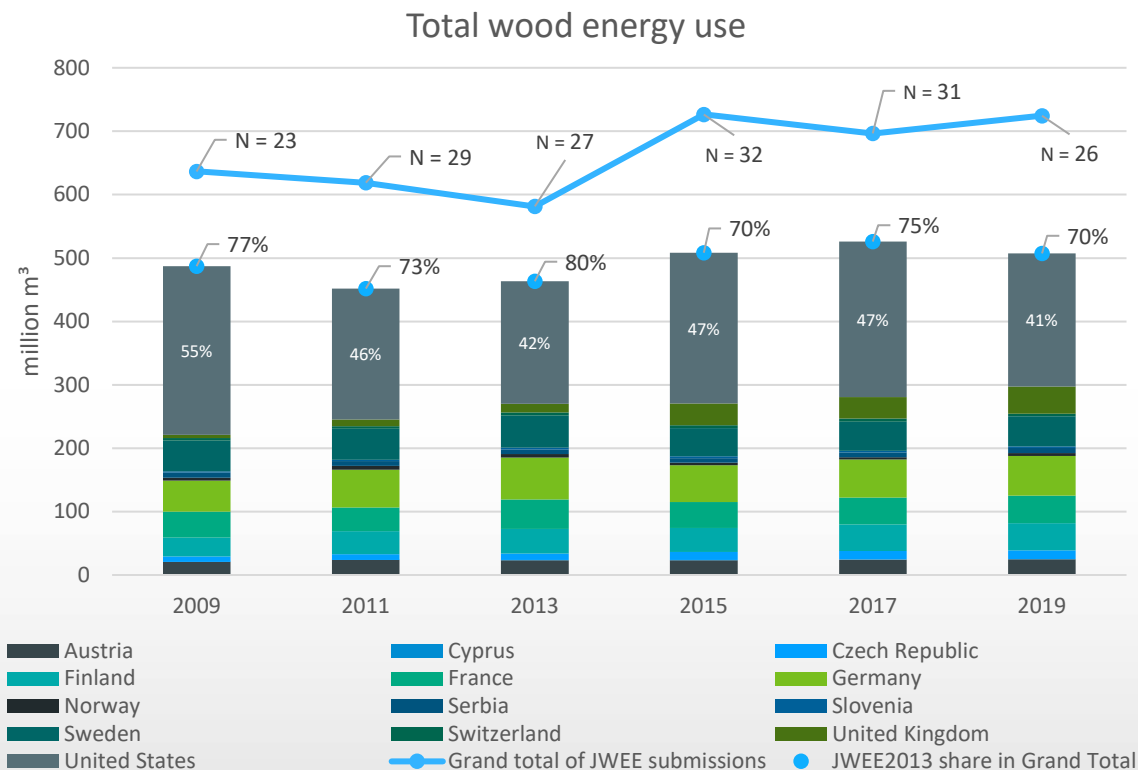
- The **residential sector** and **industry sector** are the largest wood energy consuming sectors
- Interpretation of **trends** is restricted due to changing number of participants across years

2. Results: General overview



- **13 countries** consistently participated in JWEE reporting since 2009 which allows for assessing trends in these **JWEE13-countries**
- Wood energy consumption in **JWEE13-countries account for 70-80%** of the total wood energy consumption in JWEE reporting

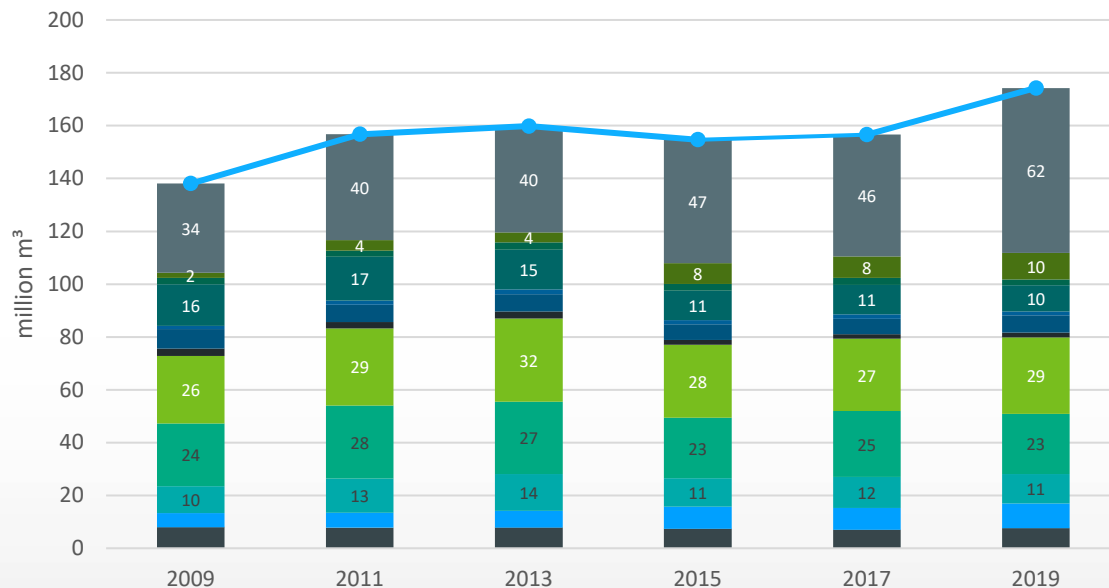
2. Results: General overview



- **13 countries** consistently participated in JWEE reporting since 2009 which allows for assessing trends in these **JWEE13-countries**
- Wood energy consumption in **JWEE13-countries account for 70-80%** of the total wood energy consumption in JWEE reporting
- Wood energy consumption in the **USA** accounted for **41-55%** in total wood energy consumption of **JWEE13-countries**

2. Results: Primary sources

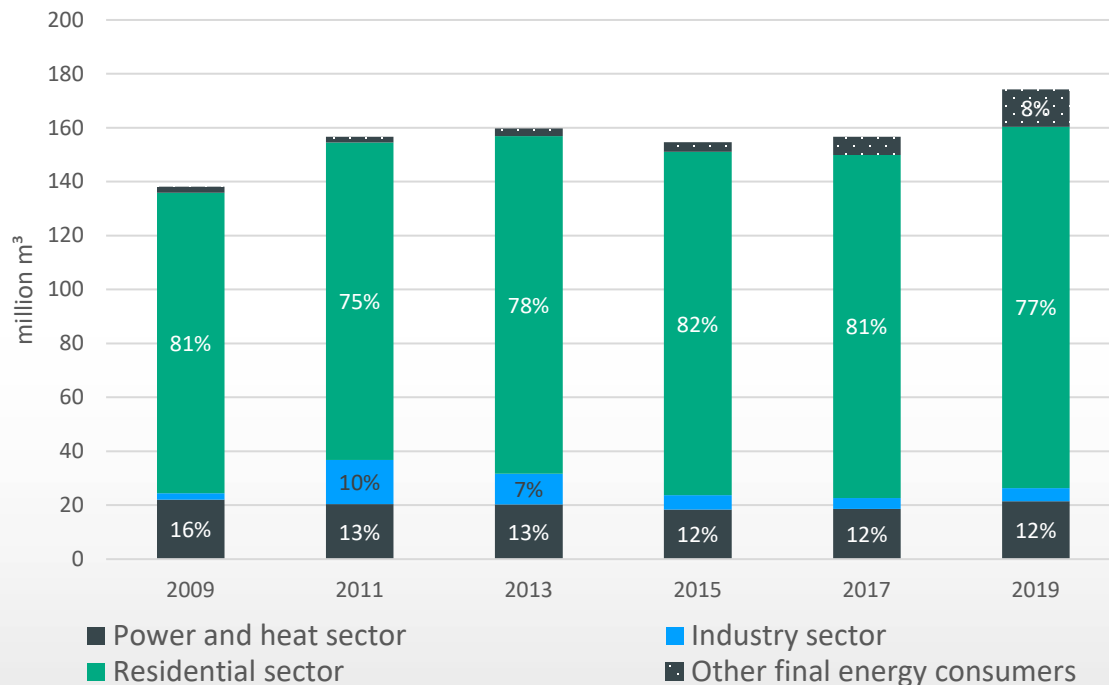
JWEE13: Wood energy sourced from primary sources



- In 2019 JWEE13-countries consumed **174 million m³** of wood energy sourced from **primary sources**
- In **2009-2019 period** the consumption of wood energy from primary sources increased by **+36 million m³**

2. Results: Primary sources

JWEE13*: Wood energy sourced from primary sources

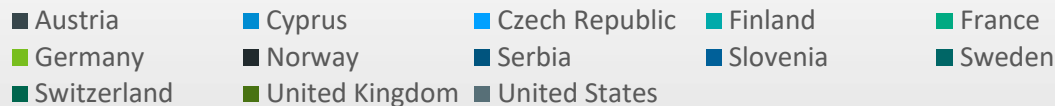
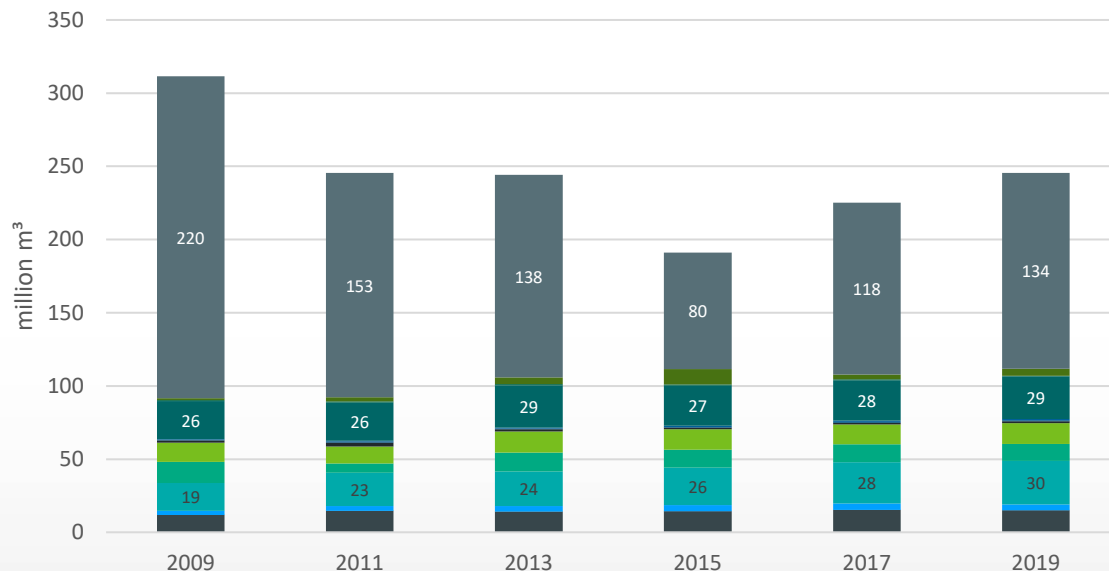


- **75-82%** of the wood energy sourced from forests and non-forestland is consumed in the **residential sector**
- The share of wood energy consumed by **Other finale energy consumers** increased in 2019

*JWEE13: Austria, Cyprus, Czech Republic, Finland, France, Germany, Norway, Serbia, Slovenia, Sweden, Switzerland, United Kingdom and United States

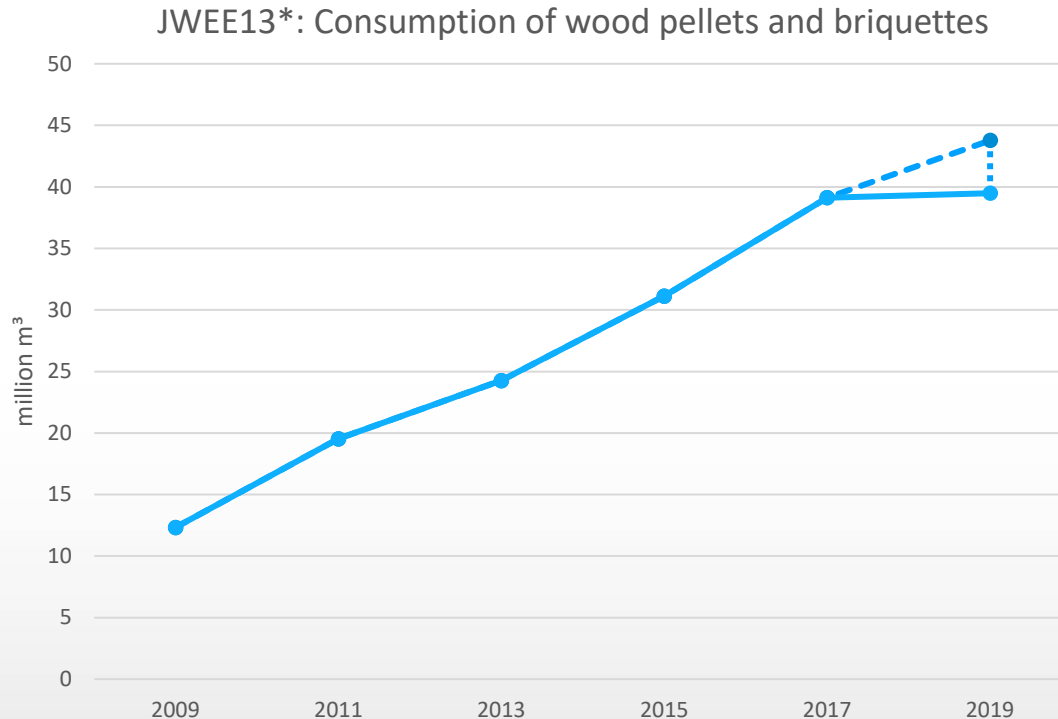
2. Results: Secondary sources

JWEE13: Wood energy from wood processing industry



- **244 million m³** of wood sourced from **wood processing industry** were consumed for energy in 2019
- In **2009-2015** period consumption decreased by **-120 million m³**
- In **2015-2019** period consumption increased by **+54 million m³**

2. Results: Secondary sources

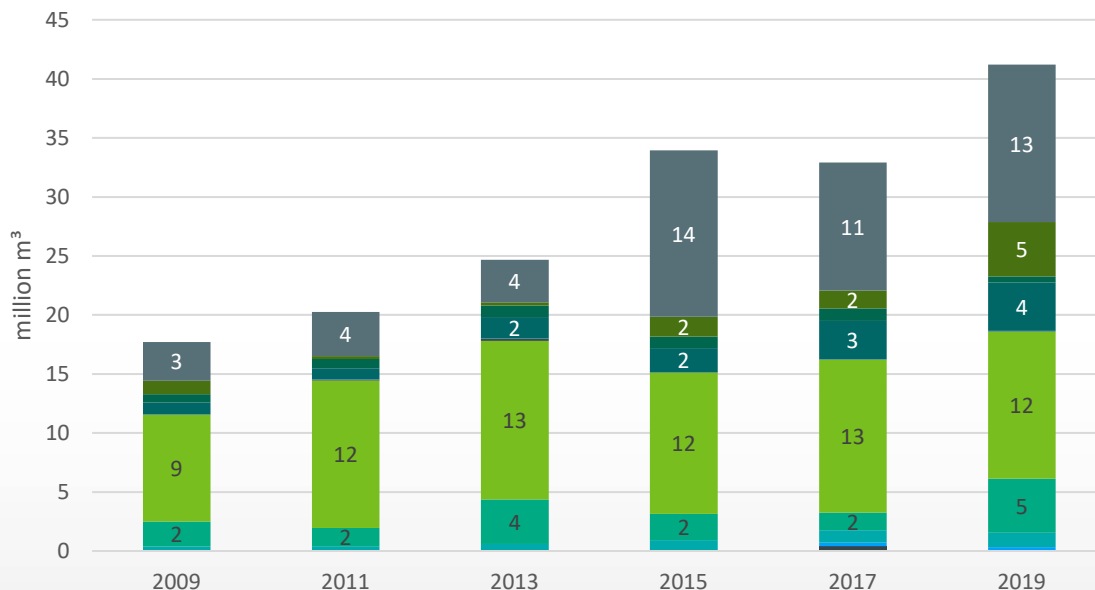


- In **2019** the consumption of wood pellets and briquettes was reported as **39 million m³**
- Absolute changes from 2017 to 2019:
 1. UK: +3 M m³
 2. Germany: +1 M m³
 - ...
 13. USA: (-4 M m³)

*JWEE13: Austria, Cyprus, Czech Republic, Finland, France, Germany, Norway, Serbia, Slovenia, Sweden, Switzerland, United Kingdom and United States

2. Results: Tertiary sources

JWEE13: Post-consumer recovered wood for energy



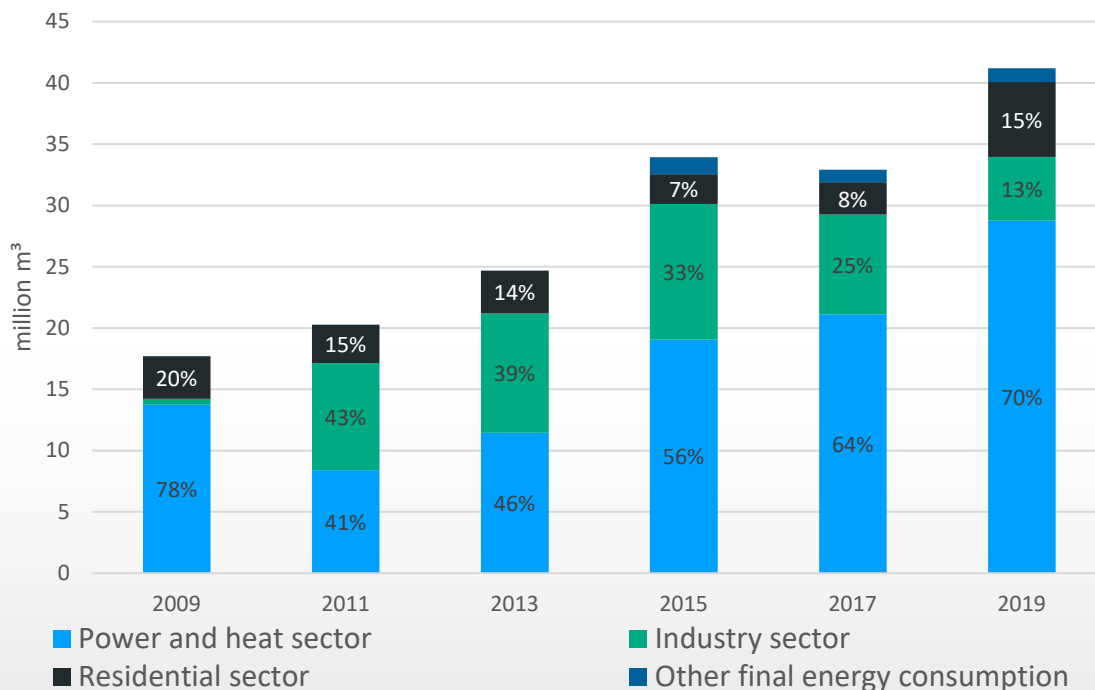
- The consumption of post-consumer recovered wood was at **41 million m³ in 2019**
- **Highest consumption since 2009**
- Absolute changes from 2017 to 2019:

1. UK: +3 M m³
2. France: +3 M m³
3. USA: +2 M m³

...

2. Results: Tertiary sources

JWEE13*: Post-consumer recovered wood for energy

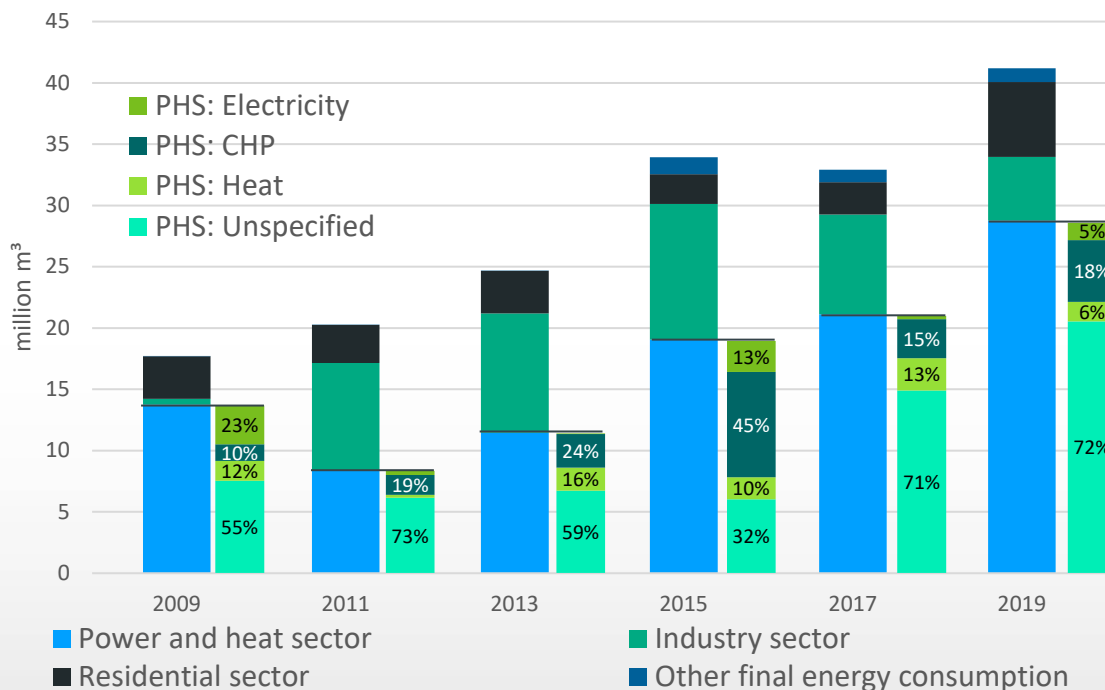


- The **power and heat sector** used most of the of post-consumer recovered wood for energy generation (i.e. **29 million m³ in 2019**)
- Since 2011 the **power and heat sector** demands increasing shares of total post-consumer recovered wood used for energy generation

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2. Results: Tertiary sources

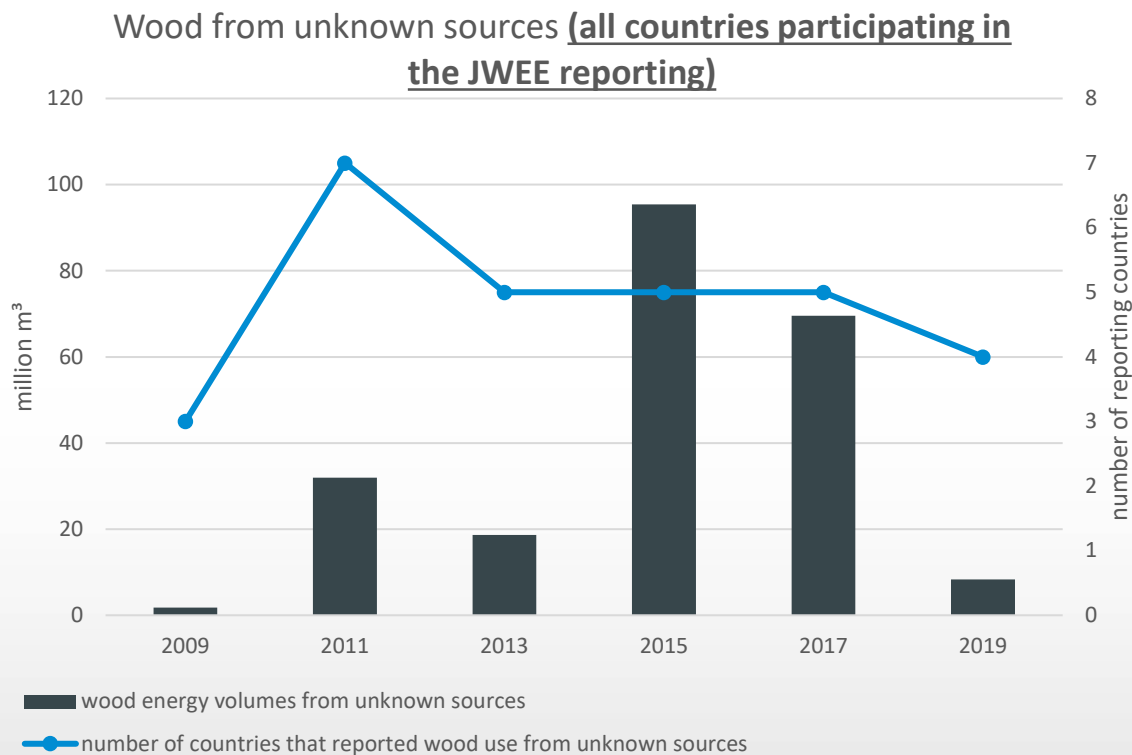
JWEE13*: Post-consumer recovered wood for energy



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2. Results: Unknown sources



- **Volumes of wood energy from unknown sources decreased in 2019**
 - Change in the data of **one country led to a 97% decrease** in 2017-2019 period
- **The number of countries that reported unknown wood energy consumption slightly decreased (-1 in 2017-2019 period)**

Thank you for your attention!

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[JWEE information and data:](#)

<https://unece.org/joint-wood-energy-enquiry-2>