Legislative framework for bioenergy

Turning Biomass into Watts: The Importance of Biomass in the 2030 Energy Mix of the CEE Region

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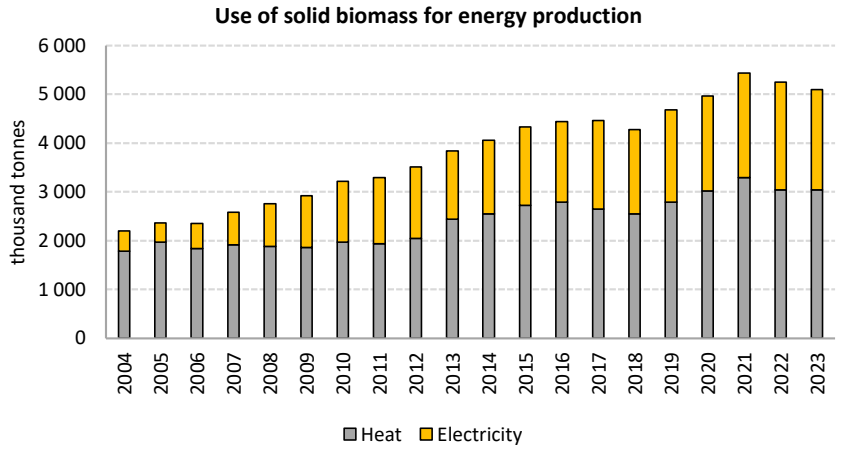
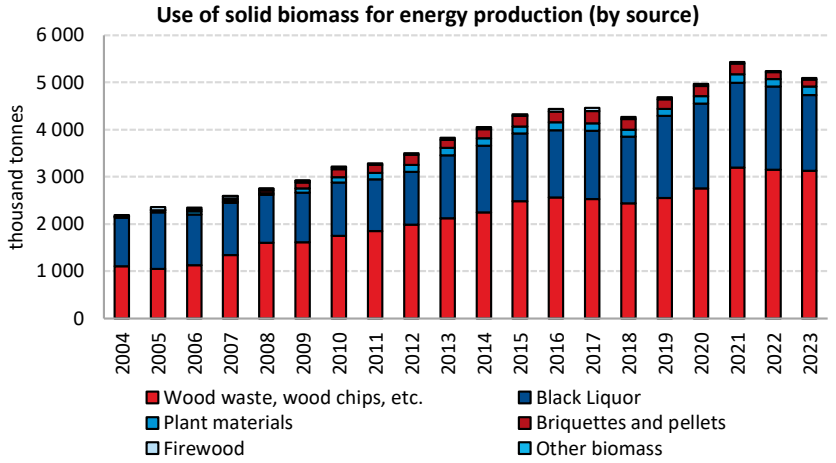
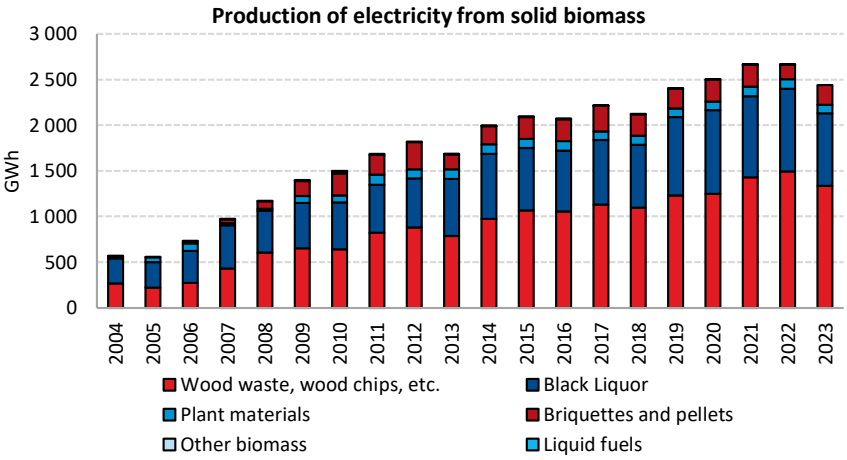
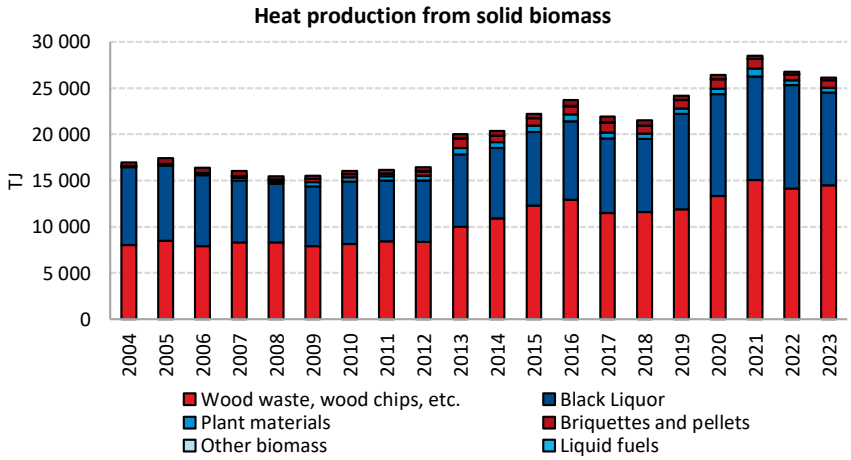
Role of biomass in energy system









Sustainability criteria for biomass

- **Legislative framework**
  - Introduced in legislation in the **year 2022** through Act. No. 165/2012 Coll. and **Decree No. 110/2022 Coll.**
  - Transposed from EU legislation (EU directive no. 2018/2001 – RED II)
- **Main legislative changes**
  - Act. no. 87/2025 Coll. (so called LEX RES III) decreased the threshold for application of **sustainability criteria from 20 MWt to 7,5 MWt** (reflecting EU directive no. 2018/2001 – RED III)
  - **Secondary legislation** (decree No. 110/2022 Coll. and 166/2022 Coll.) **is currently amended.**

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Sustainability criteria for biomass

- **Sustainability criteria for biomass** => obligation to prove:
  - **Sustainable origin** of biomass
  - No harvesting from **protected or high-carbon areas**
  - **Documentation** of origin, quantity, emissions, and certification along the whole supply chain
  - **GHG savings** must meet required thresholds
- **Applies to larger plants**: biogas stations > 20 MWt (no threshold for biomethane) and solid biomass (boilers and CHPs) > 7,5 MWt
- Public support only if **certified by approved schemes**
- **Some public support schemes requires stricter rules:**
  - Audit above 5 MW, 80% GHG savings from the start
  - Small projects (≤ 5 MW): supplier declaration + own GHG calculation (no audit)

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Secondary legislation

- **Decree No. 110/2022 Coll.** on types and parameters, sustainability criteria and GHG savings for bioenergy
  - Obligations for subjects producing **sources of bioenergy intended for energy production**
  - Amendment currently in the **final stages of interministerial consultation process**
- **Decree No. 166/2022 Coll.** on reporting energy from supported sources
  - Obligations for subjects **producing energy from bioenergy**
  - Amendment currently at the **early stages of interministerial consultation process**

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Amendment of Decree no. 110/2022 Coll.

- **Introduction and modification of criteria for agricultural biomass and forest biomass** in line with RED III requirement
- Modifies **requirements for GHG savings**
  - from 2027 also for biogas put into operation by 31.12.2020 => emission savings of 80%
- Specification of information needed for the national scheme for demonstrating sustainability criteria and greenhouse gas emission savings:
  - **scope of the audit**
  - **template for the declaration of origin** of forest biomass
  - **fulfilment of GHG savings**
- **Annex 1 - Types and parameters of supported renewable sources using biomass and bioliquids and raw materials defining advanced biomethane**
  - Complete revision of this annex
  - Alignment with RED III Directive and Commission Delegated Regulation 2024/1405 amending Annex IX to the Directive.
  - Expansion of range of input raw materials for the production of advanced biogas and biomethane
    - e.g. grass matter from permanent grassland, biomass from public land maintenance, bone meal

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Amendment of Decree no. 110/2022 Coll.

- **Annex No. 3 - Documents and records on the fuel used in the production of energy from supported RES and on the method of production of this fuel**
  - **Completely changed**
  - Demonstration of the **compliance with the sustainability criteria and GHG savings** through:
    - **Optional international regime** – abolishment of "duplication" of documentation and reporting according to Annex no. 3 => verification based on a documentation according to the rules of the optional international regime used for verifying compliance with sustainability criteria and greenhouse gas emission savings
    - **National regime** – introduction of new reports for the use of forest biomass in the national regime for demonstrating sustainability criteria and greenhouse gas emission savings
- **Annex No. 4 - Rules for calculating greenhouse gas emissions for biomass fuels**
  - **Completely deleted** => direct reference to individual parts EU legislation (RED III Directive etc.).

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Amendment of Decree No. 166/2022 Coll.

- **Comprehensive Reporting Reform**
  - **Complete revision of reporting obligations** for all producers under Act No. 165/2012 Coll.
  - Introduction of a **single unified report** and a **single reporting system**, used when a producer:
    - is required to meet sustainability and GHG-saving criteria,
    - applies for operational support for electricity, heat, or biomethane,
    - applies for a guarantee of origin, or
    - applies for inclusion in credit systems for renewable electricity used in transport.

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Amendment of Decree No. 166/2022 Coll.

- **Integration with Other Regulations**
  - Other decrees (e.g., the decree on guarantees of origin) will reference and use this unified report.
  - Eliminates duplicate reporting of identical information across different decrees and reporting forms.
- **Replacement of Existing Reporting Forms**
  - All current reporting templates in Annexes 1–5 are abolished.
  - Replaced by a completely new Annex 1, containing a universal reporting template for all purposes within the entire fuel- and energy-traceability system.
- **Procedure for Commissioning Power Plants**
  - Updated rules and procedures for bringing electricity-generation facilities into operation.

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New support scheme for biomethane

- **Legislative framework**
  - introduced through **Act. no. 87/2025 Coll.** (so called **LEX RES III**)
- **New support scheme**
  - Will be applied in 2026
  - is currently in the process of notification using **simplified state aid framework** introduced in **Clean Industrial Deal State Aid Framework** (CISAF)

Year	2026	2027	2028	Total
Volume	90 mil. m^3	110 mil. m^3	150 mil. m^3	**350 mil. m^3**

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New support scheme for biomethane

- **Key features of new support scheme for biomethane:**
  - Guaranteed support for **15 years**.
  - The amount of support is **determined exclusively by auction**.
  - The producer is guaranteed to sell biomethane to **central buyer**.
  - The producer **does not trade guarantees of origin**.
  - The auction (green) bonus is **linked to the so-called monthly unit price of gas**.
  - The **contract for difference** principle is applied.
  - The producer must meet **sustainability and emission savings criteria**, which it reports only to Market operator (OTE), not in Union database for bioenergy (UDB).

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Investment support for biomass

- Investment support mainly through **Modernization fund** (program HEAT) and **cohesion funds** (mainly OP TAK)
- Call from Operational **Programme Technology and Applications for Competitiveness (OP TAK)** announced at 12 December 2024

- **Type:** Continuous call
- **Application Period:** 9 Jan 2025 – 9 Jan 2026
- **Project Completion** Deadline: 31 Oct 2027
- **Planned Allocation:** CZK 500 million

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Bioenergy in transport (target for 2030)

Overall Renewable Energy Requirement (by 2030)

- Member States must ensure that fuel suppliers comply with **one** of the following:
  - **At least 29% share of renewable energy** in final energy consumption in transport, or
  - **At least 14.5% reduction in GHG intensity**
    – compared to the baseline under Article 27(1)(b)
    – following the Member State's indicative trajectory

Advanced Biofuels & Renewable Fuels of Non-Biological Origin (RFNBOs)

- Minimum **1%** share in 2025
- Minimum **5.5%** share in 2030, including:
  - At least **1 percentage point** from RFNBOs in 2030

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Bioenergy in transport (target for 2030)

Table: Expected fleet composition (1/2)

	Diesel	Gasoline	LPG	CNG	LNG
Passenger cars	2 154 000	3 321 000	170 000	24 500	
Buses	12 600			2 530	
Light commercial transport (N1)	296 000	26 000	12 800	7 700	
Light commercial transport (N2)	48 300			210	60
Heavy commercial transport – trucks (N3)	96 400			310	2 500
Heavy commercial transport – road tractors (N3)	4 200				1 500

Table: Expected fleet composition (2/2)

	FC-H2	BEV	PLUGIN	HYBRID	Total
Passenger cars	3 000	250 000	128 000	380 000	**6 431 000**
Buses	200	1 200			**16 500**
Light commercial transport (N1)	800	20 000			**363 000**
Light commercial transport (N2)	100	3 600			**52 300**
Heavy commercial transport – trucks (N3)	280	1 800			**101 300**
Heavy commercial transport – road tractors (N3)		600			**6 300**

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Bioenergy in transport (target for 2030)

Table: Distribution of GHG savings in 2030

	1. generation	2. gen. (IXa)	2. gen. (IXb)	RFNBO	Rec. fuels	Other	Total
Diesel	3,4 %	1,1 %	1,4 %		0,1 %		**6,0 %**
Gasoline	1,6 %	0,2 %					**1,8 %**
LPG	0,1 %		0,1 %				**0,1 %**
CNG		1,3 %					**1,3 %**
LNG		1,2 %					**1,2 %**
Hydrogen (transport)				0,1 %			**0,1 %**
Hydrogen (refineries)				0,4 %			**0,4 %**
Elektricity (rail)						1,4 %	**1,4 %**
Elektricity (road)						1,4 %	**1,4 %**
Total	**5,0 %**	**3,8 %**	**1,5 %**	**0,5 %**	**0,1 %**	**2,8 %**	**13,8 %**

Table: Share of renewables with multiplicators (2030)

	1. generation	2. gen. (IXa)	2. gen. (IXb)	RFNBO	Rec. fuels	Other	Total
Diesel	4,3 %	2,4 %	3,2 %	0,0 %	0,1 %		**10,1 %**
Gasoline	1,2 %	0,5 %					**1,7 %**
LPG	0,1 %		0,2 %				**0,2 %**
CNG		2,9 %					**2,9 %**
LNG		2,7 %					**2,7 %**
Hydrogen (transport)				0,3 %			**0,3 %**
Hydrogen (refineries)				0,8 %			**0,8 %**
Elektricity (rail)						1,1 %	**1,1 %**
Elektricity (road)						2,9 %	**2,9 %**
Total	**5,6 %**	**8,5 %**	**3,4 %**	**1,0 %**	**0,1 %**	**4,0 %**	**22,7 %**

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Strategic documents

- Raw material policy for wood (link); July 2024
- Assessment of trajectories of sustainable bioenergy use in the Czech Republic (link), August 2024
- Action plan to support the development of biomethane (link); July 2025

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Thank you for your attention

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