

# **Workshop on Bioenergy from the Forest Sector - Capacity Building for Information**

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## **Wood energy sector and data collection in the Czech Republic**

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Budapest 6<sup>th</sup> to 8<sup>th</sup> December 2016

# Outline

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1. Wood energy related statistics
  - a) Forest products statistics
  - b) Recovered wood waste statistics
  - c) Energy statistics
2. Changes in energy sectors
3. Sawmill industry
4. Pulp mills

# Forest products statistics

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Ministry of Agriculture

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Czech Statistical Office

- ✓ Joint Forest Section Questionnaire (JFSQ)
  - ✓ Removals
  - ✓ Wood pellets and briquettes
  - ✓ Wood pulp production
  - ✓ ...
- ✓ National forest products statistics
  - ✓ Felling residues (estimation based on state forests merchandise) – not included in JFSQ, but used in JWEE



# Recovered wood waste statistics

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## Czech Statistical Office

- ✓ Reporting based on Regulation No.2150/2002/ES
  - ✓ Every two years
  - ✓ 2 years delayed – data for 2014 in autumn 2016
  - ✓ Eurostat not publish ??

2014	Energy recovery	Incineration	Recovery other than energy recovery - Except backfilling	Recovery other than energy recovery - Backfilling	Deposit onto or into land	Land treatment and release into water bodies	Total waste treatment
Wood wastes	21 476	251	281 118	623	4 812	0	308 280



# Energy statistics

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Ministry of Industry and Trade

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Czech Statistical Office

- ✓ Renewable energy statistics
  - ✓ Wood fuel
  - ✓ Wood chips and wood residues
  - ✓ Wood pellets and briquettes
  - ✓ Black liquor
- ✓ Consumption on energy and heat production
- ✓ Available at the end of November

# Energy statistics

## Biomass consumption for energy production 2014 (t)

Type	Electricity production	Heat production	Total
Wood waste, wood residues, etc.	908 098	1 335 912	2 244 010
Wood fuel	595	49 177	49 772
Plant material	96 719	61 033	157 752
Pellets and briquettes	135 510	52 355	187 865
Black liquor	362 947	1 050 728	1 413 675
Other biomass	0	0	0
<b>TOTAL</b>	<b>1 503 869</b>	<b>2 549 205</b>	<b>4 053 074</b>
Assumption of wood consumption in households			3 818 325
Export of the biomass suitable for energy production			641 708
<b>Total biomass used for energy production or exported</b>			<b>8 513 107</b>

# Changes in the energy sector

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- ✓ Cofiring of the biomass and fossil fuels was fully supported until 2012
- ✓ Change of the calculation since 2013
- ✓ Since 1.1.2016 only highly efficient cogeneration is supported by cofiring of the biomass and fossil fuels
  - ✓ Efficiency 70 % is requested for heat plants
  - ✓ Lower consumption of the biomass for cofiring
  - ✓ 400.000 t of biomass will be available for new projects





# Sawmill industry

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Big sawmills (process  $> 500.000 \text{ m}^3$  roundwood)

- ✓ wood chips as co-products of sawnwood production are sold to pulp mills or used for pellets production
- ✓ bark is burnt in cogeneration plants (cofinanced from EU funds) to produce heat and electricity
- ✓ heat is used to dry sawdust and shavings for production of pellets, briquettes or pallet blocks





# Sawmill industry

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- ✓ Big sawmills are the biggest producers of pellets:
  - ✓ Mayr Melnhof Paskov 80.000 t
  - ✓ Pfeifer Holz 66.000 t
  - ✓ Stora Enso 55.000 t
- ✓ Wood pellets production and export have been increased

Year	Production	Import	Export
2003	4	0	3
2004	11	0	9
2005	16	0	12
2006	27	0	20
2007	60	0	46
2008	135	0	112
2009	158	4	134
2010	145	13	111
2011	148	19	111
2012	157	18	128
2013	163	36	131
2014	199	25	138
2015	300		

# Pulp mills

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## **Biocel Paskov (Lenzing group)**

- ✓ changed production from chemical pulp to dissolving pulp during last three years
- ✓ 262.000 t in 2015
- ✓ extension to 285.000 t in the near future

## **Mondi Štětí (Mondi group)**

- ✓ Intention to build up a new sawmill with the processing capacity 1 mill. m<sup>3</sup> of coniferous roundwood connected to pulp and paper mill
- ✓ Modernization and extension of pulp production
  - ✓ a new cogeneration unit will be installed
  - ✓ doubled paper production (to 1 mil. t/year)
  - ✓ extension of pulp production (+ 300.000 t/year)

**Thank you for your attention !**

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