

Switch from gas to biomass Success story of Lithuania



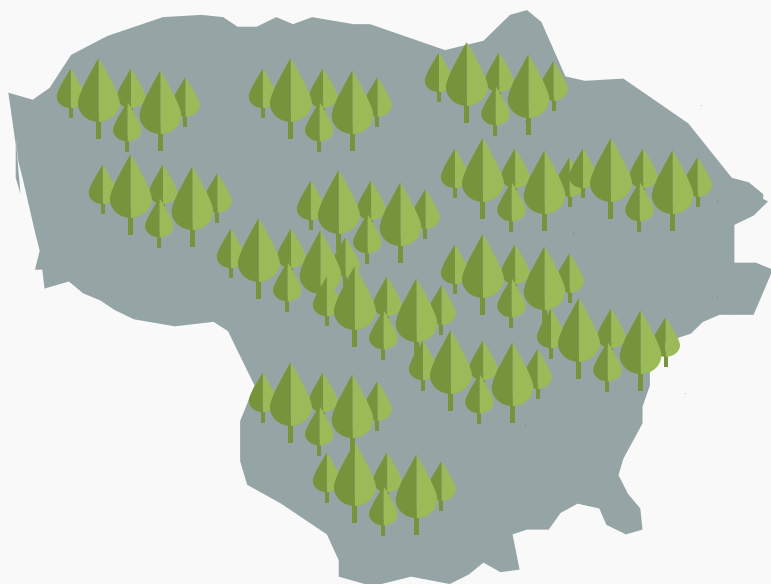
Lithuanian Biomass Energy Association LITBIOMA

Vilma Gaubyte

30th of March, 2017



Well known success
story of Lithuania



Lithuania

Forests cover 2.200.000 ha of
Lithuanian land



33,2 %

General data of energy consumption

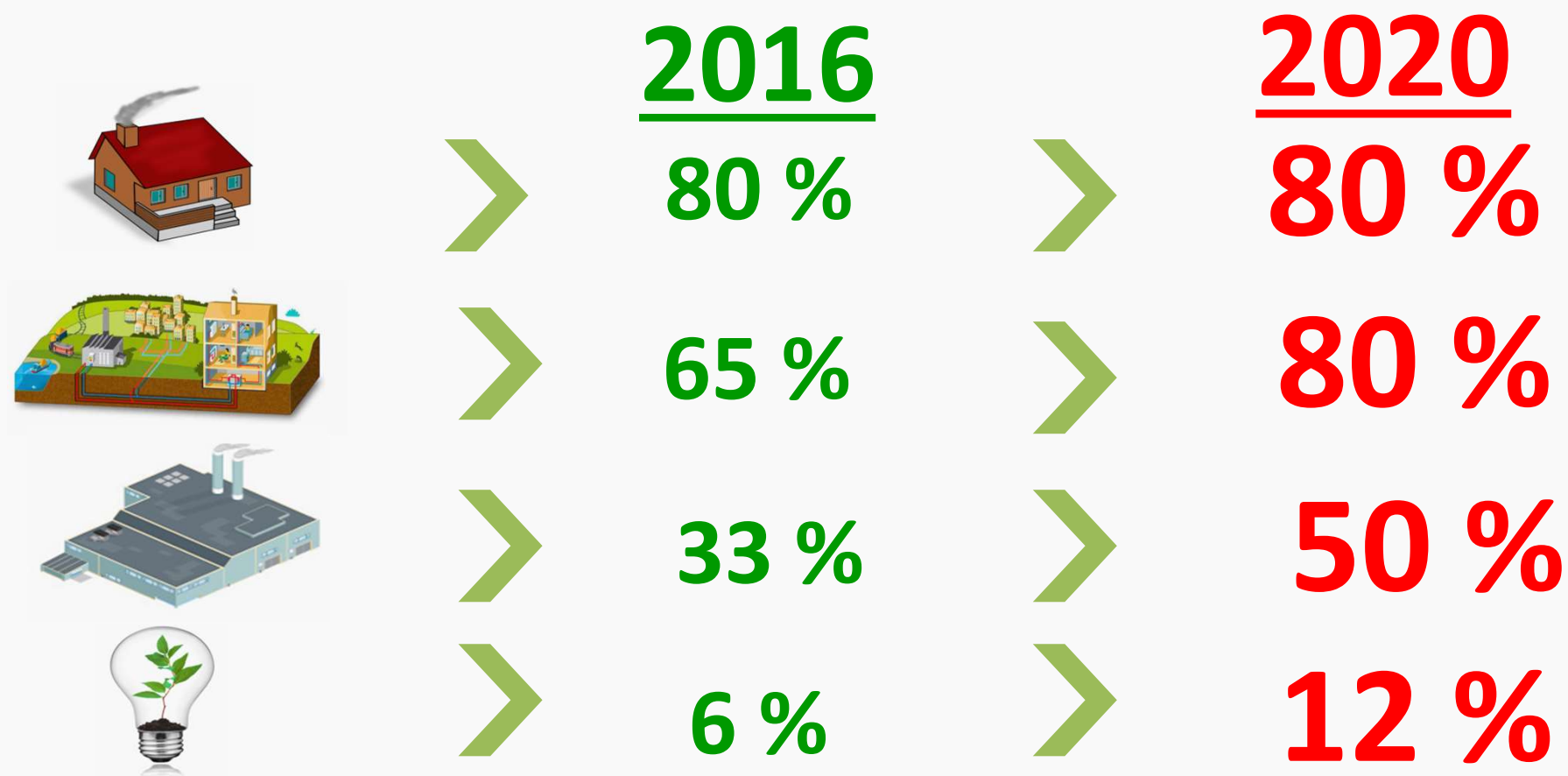
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1. • Electrical energy consumption ~ **10 TWh**
2. • Heat power consumption ~ **20 TWh**
3. • Liquid fuels for transport ~ **18 TWh**

Power and heat generation from biomass

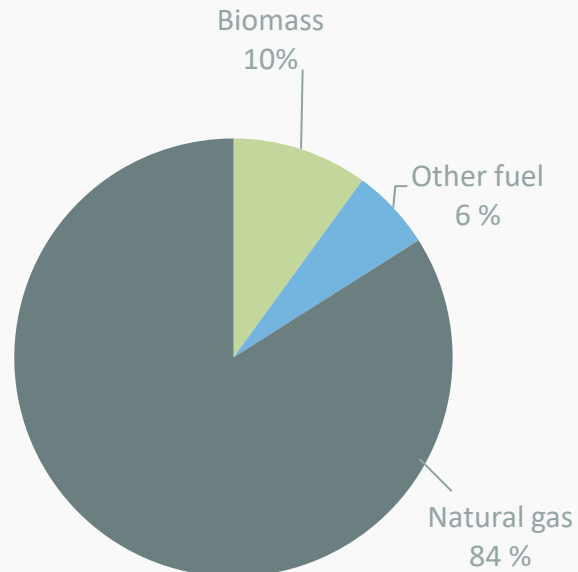
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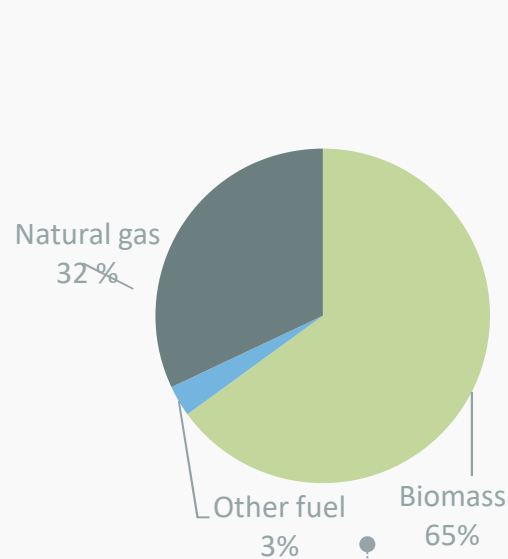


The use of biomass for energy production in the DH sector

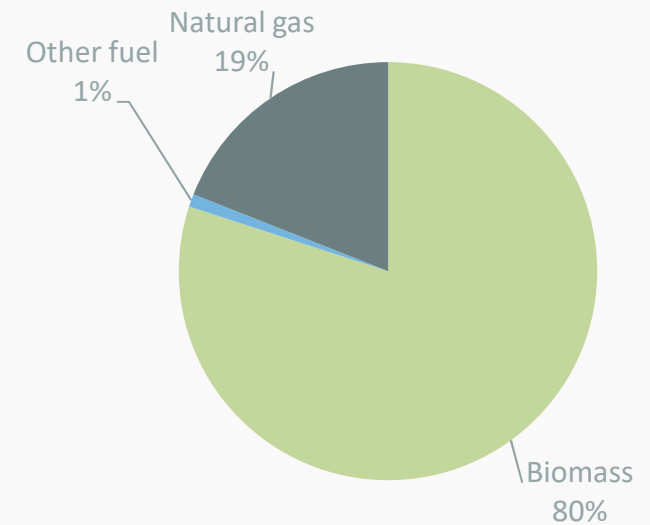
Lithuanian District Heating Association



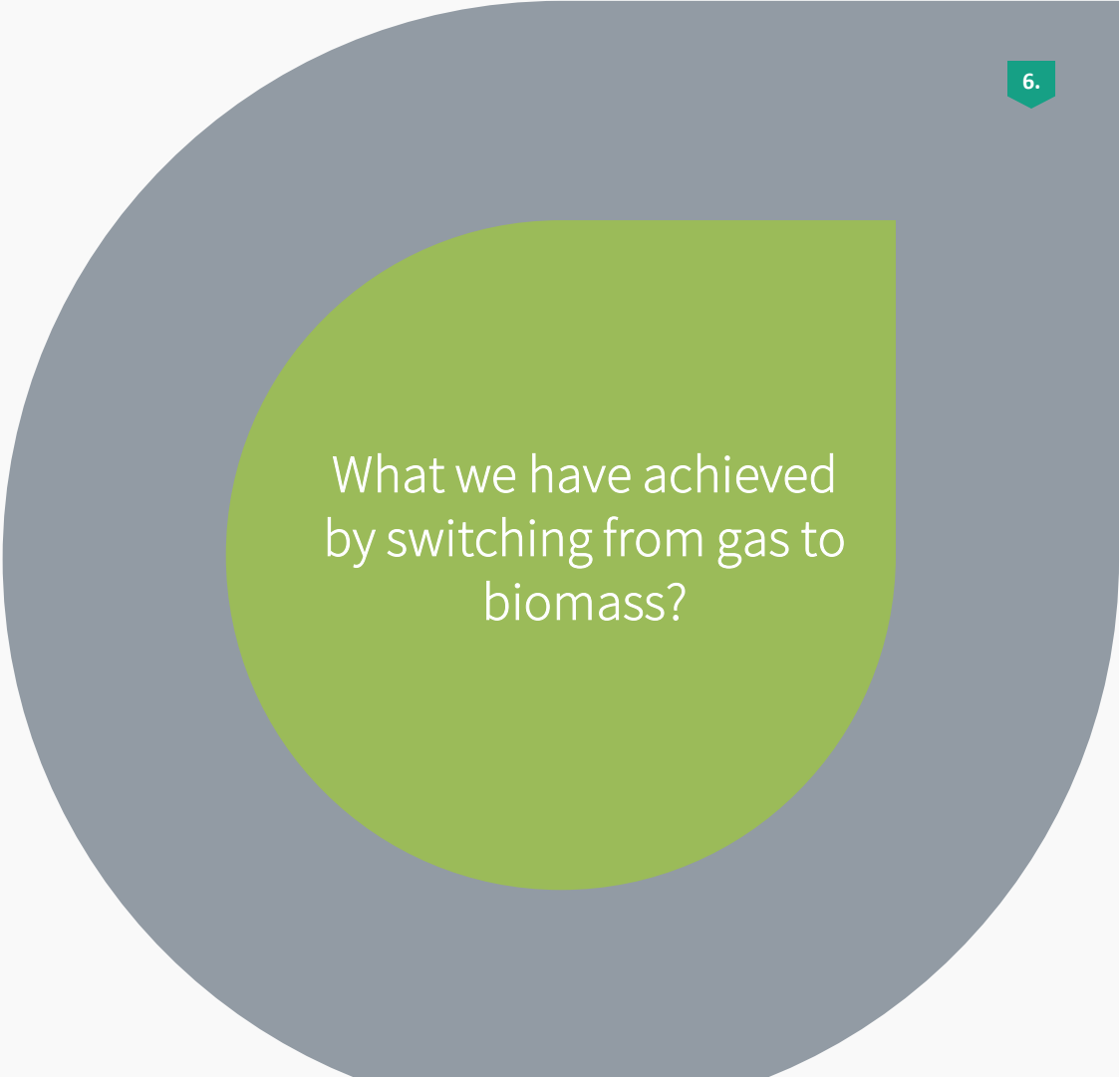
2004



2016



2020



What we have achieved
by switching from gas to
biomass?

Bioenergy sector in numbers

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410 M
Annual
Turnover

100 M
Export

7.500
Employees

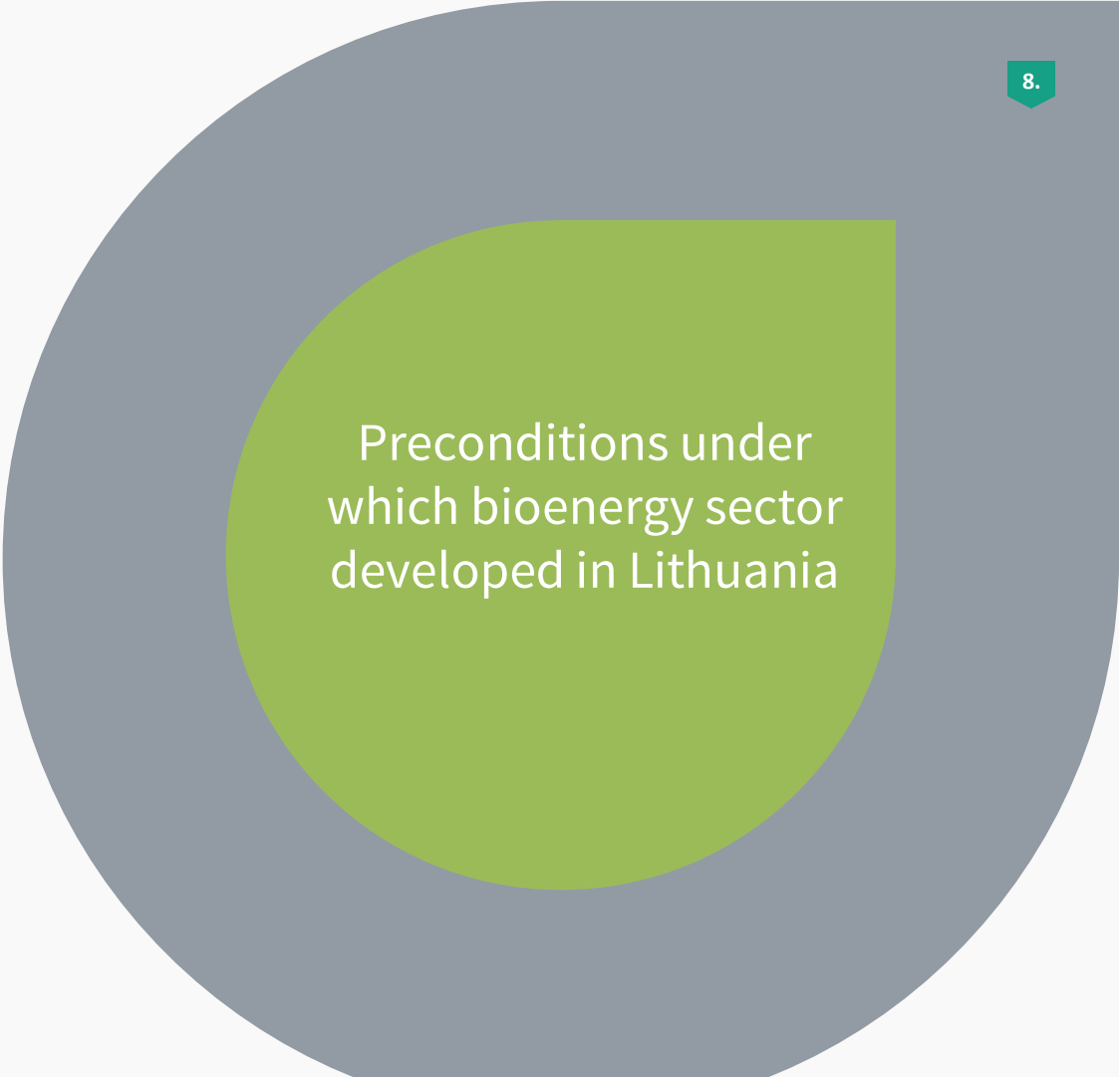
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Salary

Annual Turnover is 410 M EUR

The export of technological equipment reached 100 M EUR in 2016, **300 M EUR in 2020**

More than 7.500 people are employed in Bioenergy sector in Lithuania, **10.000 in 2020**

The average salary is 50% higher comparing to the average

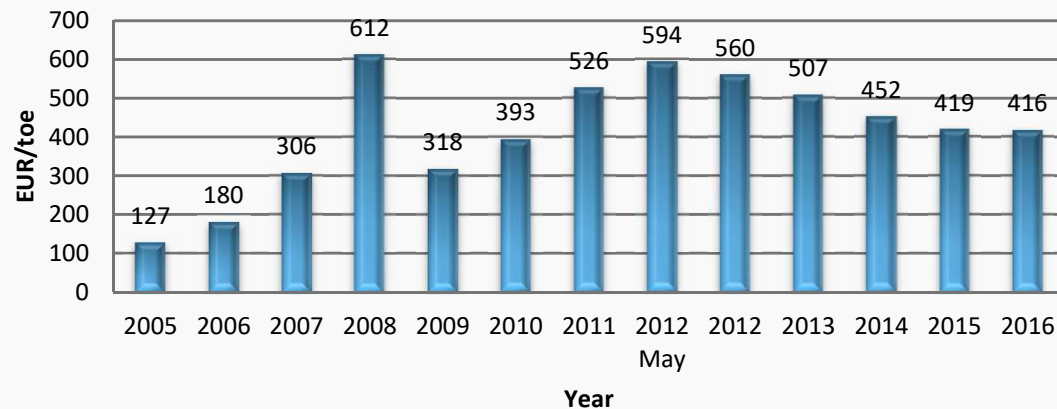


Preconditions under
which bioenergy sector
developed in Lithuania

Political Price

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Lithuania became a MS of the EU, paying the highest price for imported gas. This price became recognized as “political” price, having nothing in common with the market situation.



Huge support from the EU and local Government?

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European Union directives

- In 2009 the Renewables Directive set binding targets for all EU Member States. In Lithuania the target was 23 %

European Union support schemes

- Direct subsidies for research
- Support programs for establishing 'bio-plants'
- Support through EU rural development programs

Local Government initiatives

- Feed – In Tarrifs for electricity produced from renewables
- Investment support from Ministry of Economy for instalation of biomass boilers, using EU funds
- Support from Lithuanian Environmental Investment Fund for biotechnologies (money from ETS)



After 1990 – new sector for local business

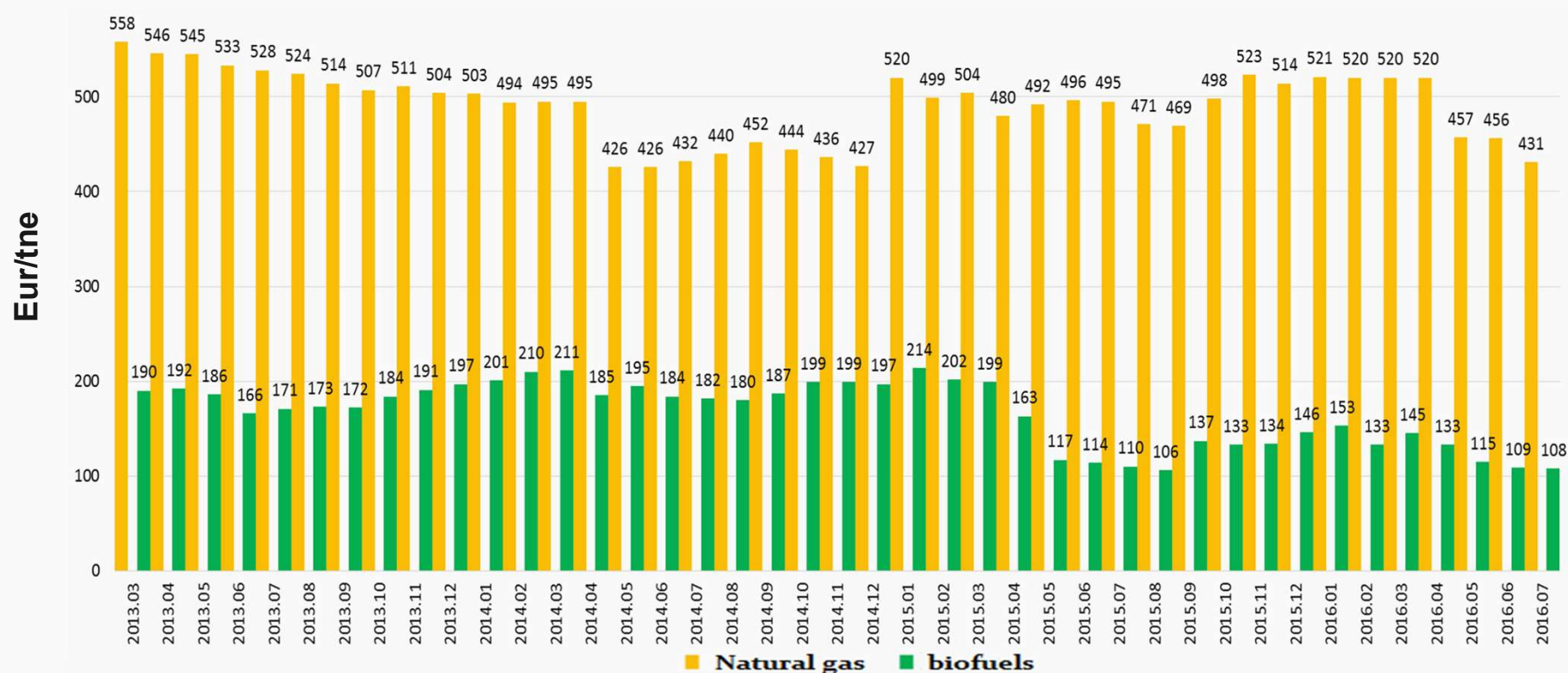
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- More than 200 companies working in whole bioenergy chain!
- More than 20 companies producing and exporting bioenergy technologies!
- 7500 employees!



The comparison of natural gas and biomass price

The Lithuanian District Heating Association



Science role in Bioenergy sector

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Cooperation with science from beginning of the process in 2003

In 2014 LITBIOMA founded **Scientific and Technical Council**

13 scientists from the most respected Universities and Institutes
in Lithuania



Aleksandras
Stulginskis
University



VYTAUTAS MAGNUS
UNIVERSITY
MCMXXII



kaunas
university of
technology



Conclusions for Europe

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Final energy consumption from renewable sources in Europe (2015) – 16,4 %

EU Renewable energy target for Lithuania was 23 %

Final energy consumption from renewable sources in Lithuania (2015) – 25,9 %

BENEFITS FOR LITHUANIA

Stable and low energy prices

Local jobs and rural development

Technological development

Improved foreign trade balance

Improved cooperation between science and business

Combat climate change and cleaner environment for our children



EUROPE has a specific responsibility to take a leading role in the World in bioenergy development

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