

OVERVIEW OF THE PELLET MARKET IN THE BALTIC STATES

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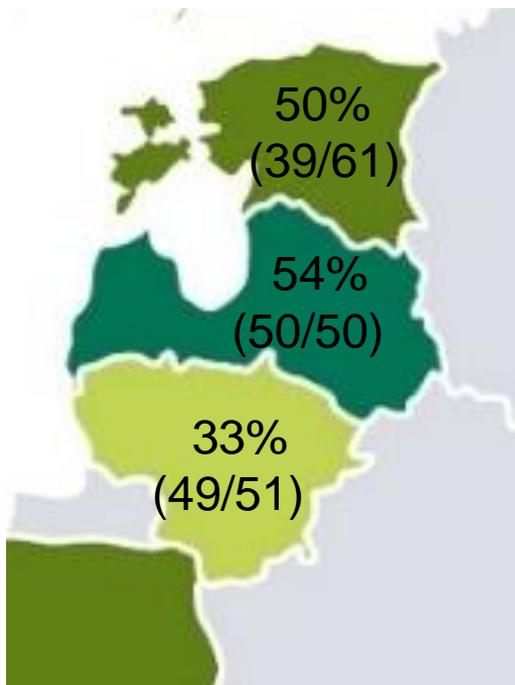
Polish Pellet Forum

19-20 September 2016, Rawa Mazowiecka, Poland

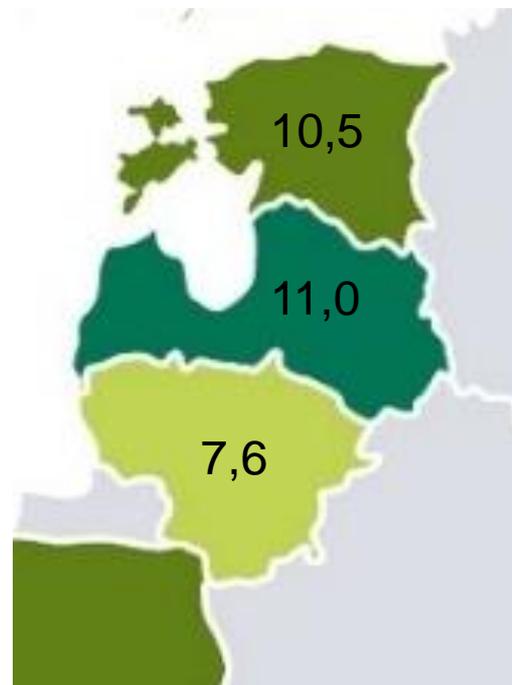


FOREST RESOURCES IN THE BALTIC STATES

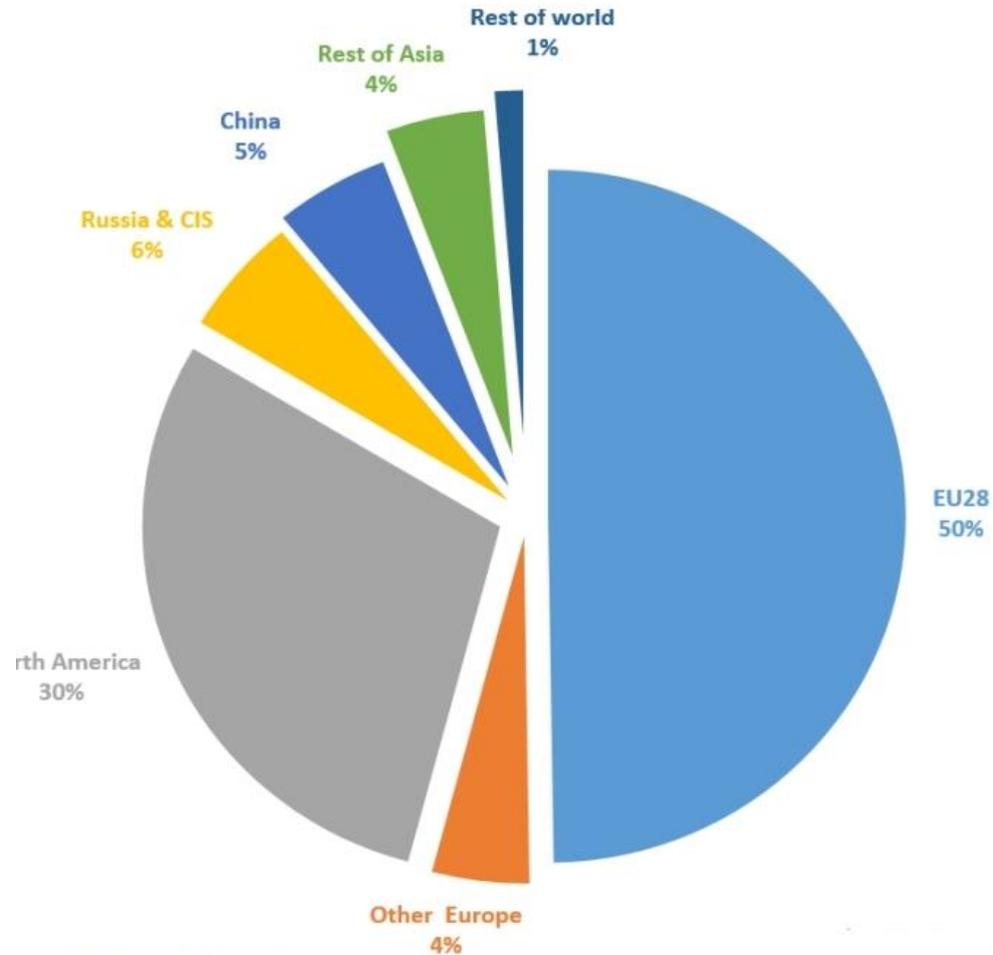
**SHARE OF FOREST AND
OWNERSHIP RIGHTS (S/P)**



**ANNUAL ROUNDWOOD
CUT (MILL. M3)**



World wood pellet production shares in 2014 (in %)

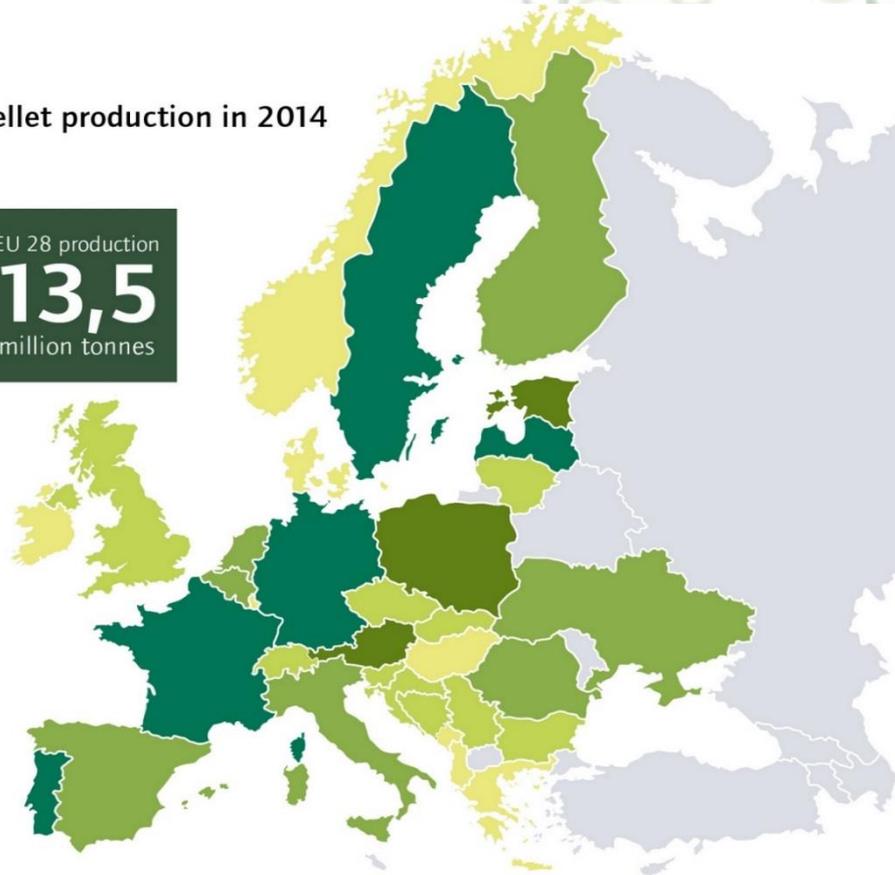




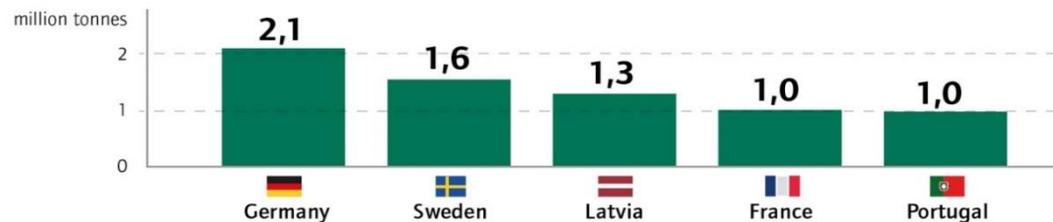
European wood pellet production in 2014

EU 28 production
13,5
million tonnes

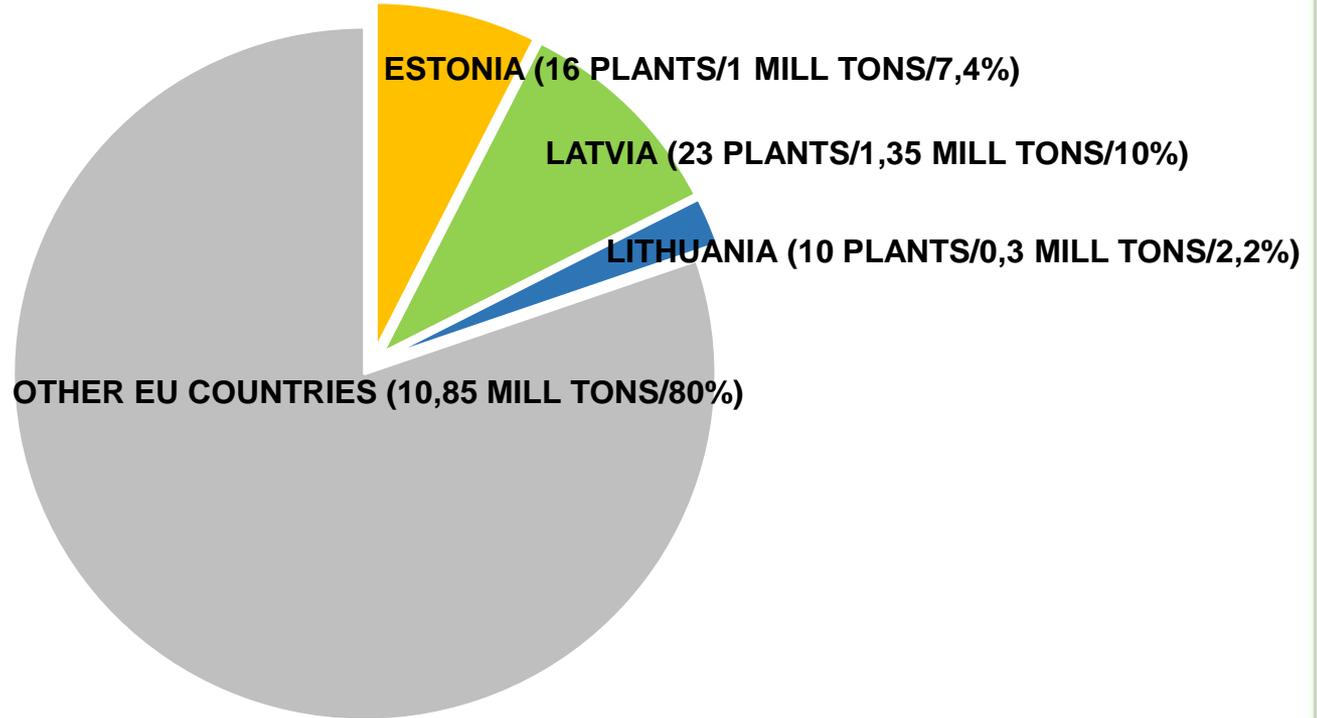
Actual production [in tonnes]



Production in top 5 EU28 countries

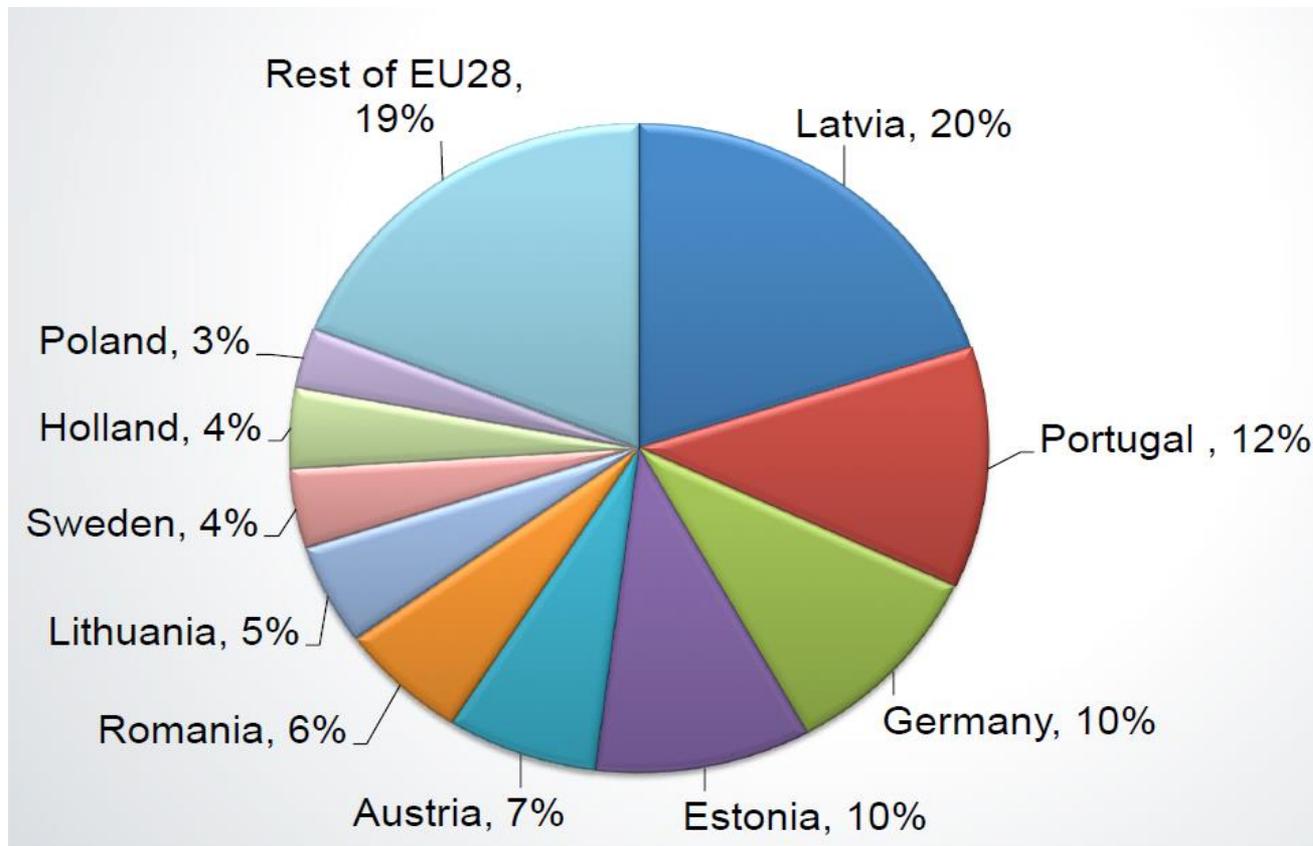


BALTIC PELLET PRODUCTION SHARE IN EU MARKET IN 2014 2,65 MILL TONS = 20%



EU WOOD PELLET EXPORTS IN 2014

BALTIC STATES SHARE – 35%



Source: Ekman & Co AB

DRIVING FORCES FOR BALTIC PELLET MARKET

- ✓ **GROWING DEMAND FOR PELLETS IN DOMESTIC AND INTERNATIONAL MARKETS**
- ✓ **SUFFICIENT AVAILABILITY OF RAW MATERIAL RESOURCES**
- ✓ **ABILITY TO DEVELOP LONG-TERM RELATIONS WITH CUSTOMERS**
- ✓ **AVAILABILITY OF BIG PORTS FOR SEA TRANSPORTATION**
Parnu, Kunda, Paldiski, Tallinn (ESTONIA)
Riga, Ventspils, Liepaja (LATVIA)
Klaipeda (LITHUANIA)

BALTIC PELLET DOMESTIC MARKET

- ✓ EXPORT ORIENTED – DOMESTIC CONSUMPTION IS RELATIVELY SMALL
- ✓ DOMESTIC MARKET MAINLY DOMINATED BY PREMIUM PELLETS AND SMALL CONSUMERS
(private households, schools, hospitals, etc.)
- ✓ THERE IS AN UNUSED POTENTIAL FOR INCREASING DOMESTIC CONSUMPTION ESPECIALLY FOR INDUSTRIAL GRADE PELLETS
- ✓ FACTORS LIMITING USE POTENTIAL:
 - Wide use of cheaper biomass alternative – wood chips
 - Renewable energy targets for 2020 already reached

IS BALTIC PELLET MARKET MATURE OR EMERGING?

- ✓ LACK OF DOMESTIC EQUIPMENT PRODUCERS/ CONSULTANTS/ EXPERTS
- ✓ LACK OF BIG DOMESTIC CONSUMERS
- ✓ THE REGION PRESENTS A LARGE SHARE OF FOREST LANDS AND UNUTILIZED POTENTIALS FOR THE PROVISION OF WOOD ENERGY
- ✓ STRONG INVESTMENTS HAVE LATELY BEEN MADE WITH NEW PLANTS BEING BUILT AND CAPACITY OF EXISTING PLANTS BEING INCREASED

A low-angle, upward-looking photograph of a large industrial facility, likely a wood pellet mill. The structure is composed of dark metal beams, walkways, and large cylindrical silos or storage tanks. The scene is bathed in a warm, golden-orange light, suggesting either sunrise or sunset. The sky is a uniform, hazy orange color. The overall composition is industrial and imposing.

GRAANUL INVEST
THE BIGGEST
WOOD PELLET PRODUCER
IN EUROPE

KEY FIGURES ABOUT GRAANUL INVEST

2004

YEAR OF ESTABLISHMENT



OVER 2 000 000 TONS OF
WOOD PELLETS ANNUALLY



11 PELLET PLANTS



5 CHP PLANTS



632 EMPLOYEES

PELLET PRODUCTION

11 PELLET PLANTS

ESTONIA



LATVIA



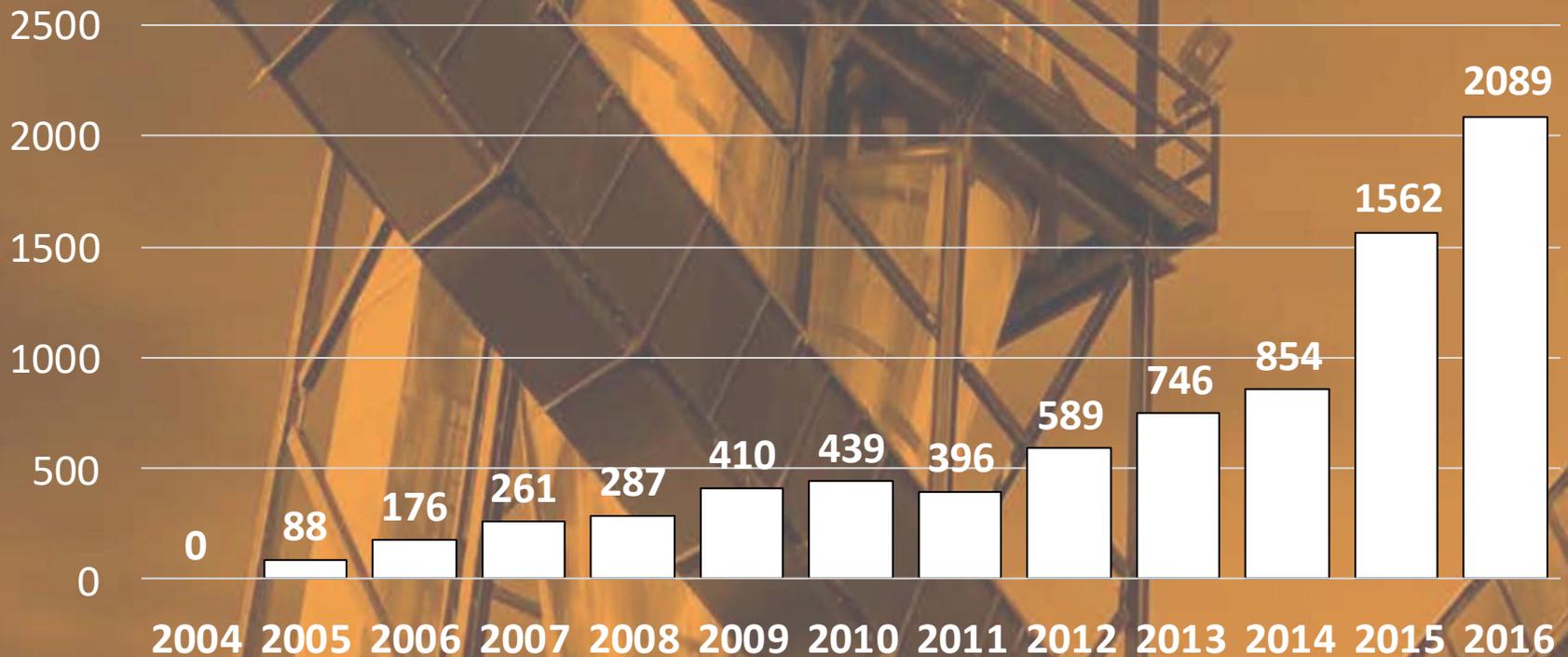
LITHUANIA



PELLET PLANT CAPACITY VARIES FROM
85'000 TONS/ANNUALY (ALYTUS, LITHUANIA)
TO 350'000 TONS/ANNUALY (OSULA, ESTONIA)

TIMELINE OF PELLET PRODUCTION

PELLET PRODUCTION (thousand tons)



GREEN ENERGY PRODUCTION AND FORESTRY

5 CHP PLANTS



TOTAL CAPACITY 30 MW INCREASE TO 40 MW BY THE 2017

3 FORESTRY COMPANIES



FOREST PORTFOLIO OVER 30'000 HA

QUALITY-ORIENTED PRODUCTION

✓ ISO 9001:2015

✓ ISO 14001:2015

✓ ISO 18001:2007

✓ ISO 50001:2011



FUTURE PROSPECTS

- ✔ 556 MW POWER PLANT CONVERSION IN BELGIUM (from coal to wood pellets, consumption 1,85 mill t)
- ✔ NEW CHP PLANT IN ESTONIA (10 MW)
- ✔ NEW PELLETT PLANT IN LATVIA (300'000 TONS)
- ✔ INCREASE OF FOREST LAND PORTFOLIO TO 100'000 HA

The background of the image shows a complex industrial structure, likely a grain elevator or processing plant. It features a large, vertical cylindrical tank in the center, surrounded by a network of dark metal beams and walkways. The entire scene is bathed in a warm, golden-orange light, suggesting either sunrise or sunset. The perspective is looking upwards, emphasizing the height and scale of the machinery.

STAY RELIABLE WITH US!
GRAANUL INVEST