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# **BIOETHANOL AND BIODIESEL PRODUCTION AND REALISATION IN LATVIA**

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# Key points of the presentation

- General trend in primary energy consumption

- Overview of the biofuel

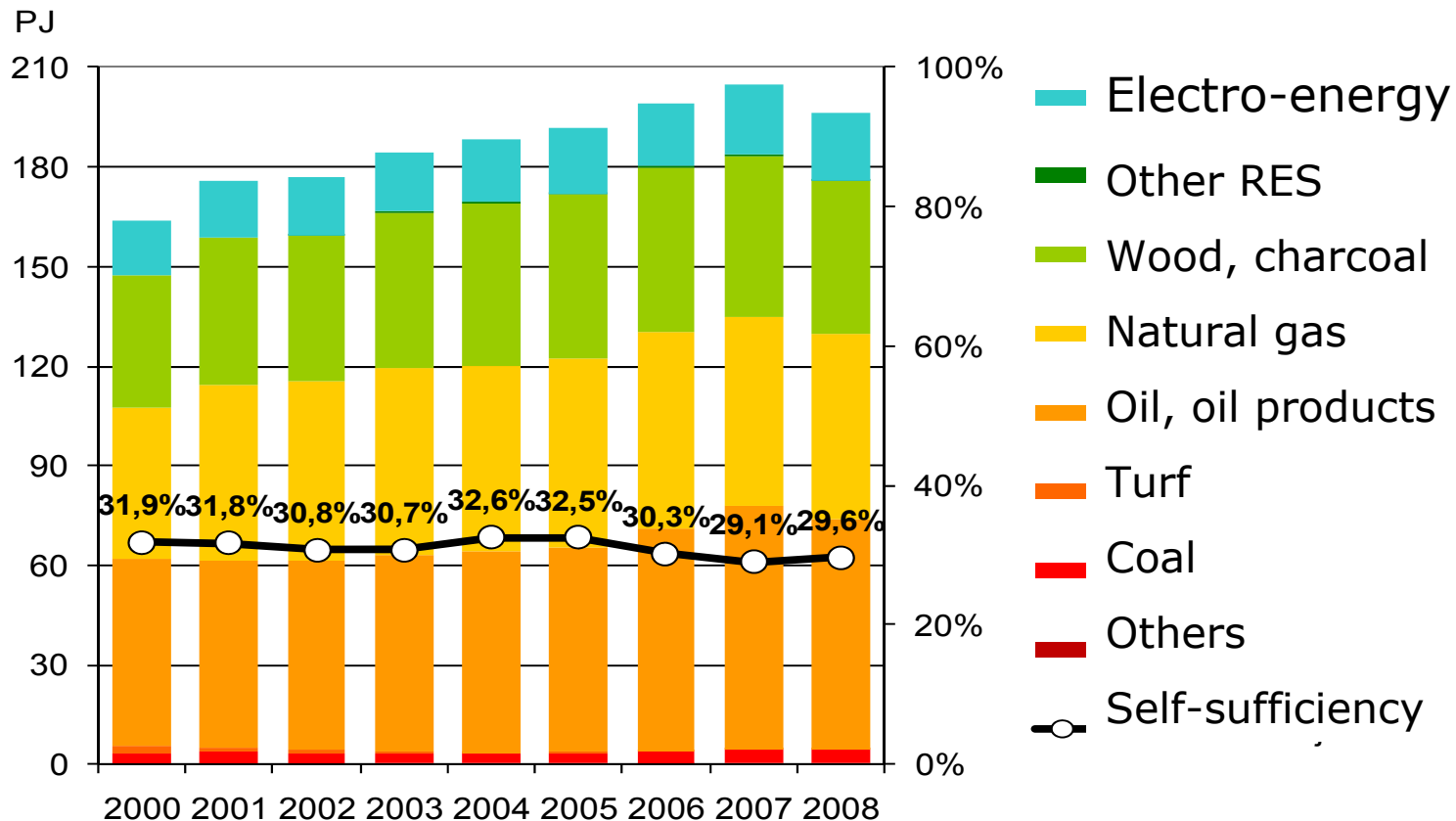
production

realisation

- Give inside of bioenergy producers potential

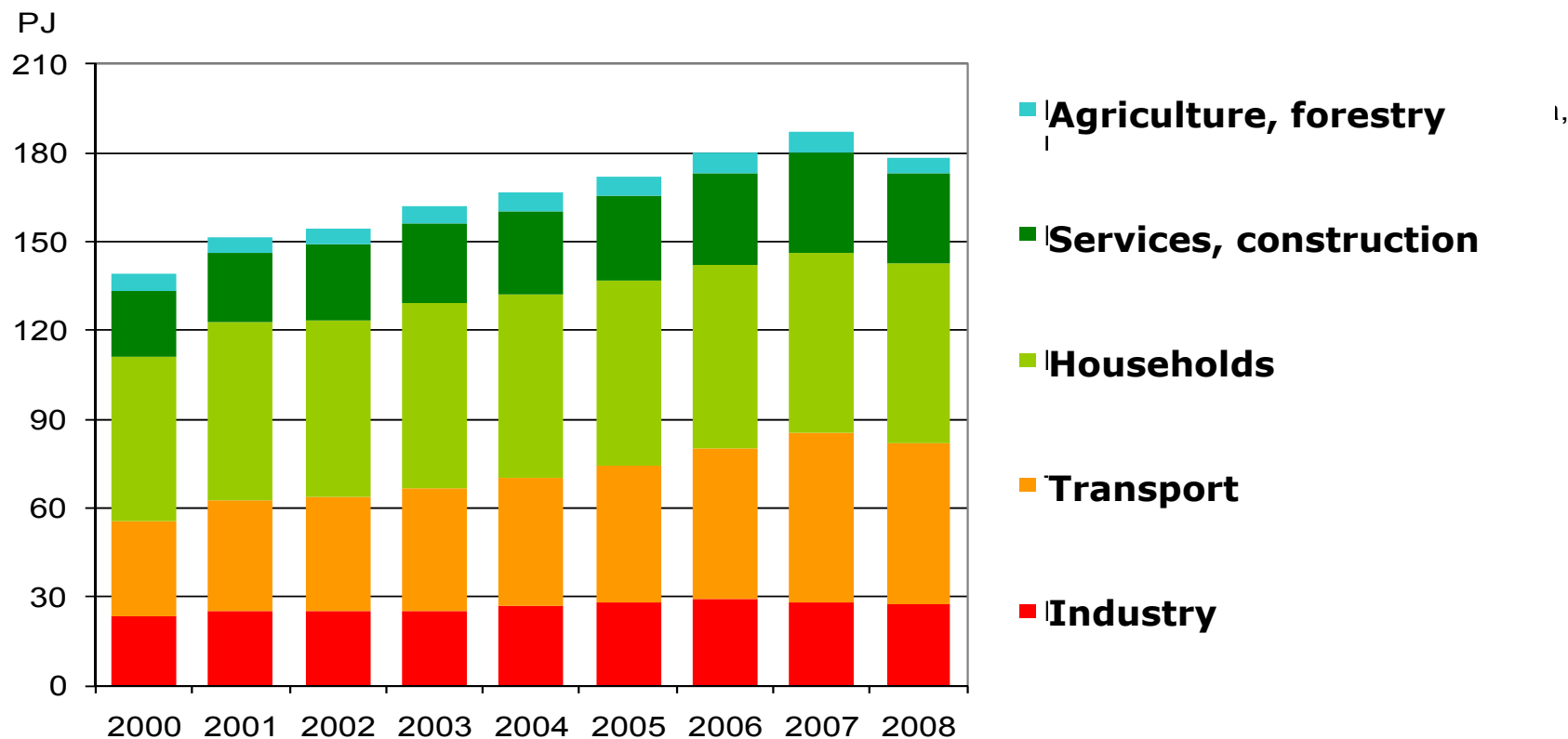
- Clarify the potential points in promoting of green energy
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# Total consumption of primary energy in Latvia, 2000-2008 (by resources)



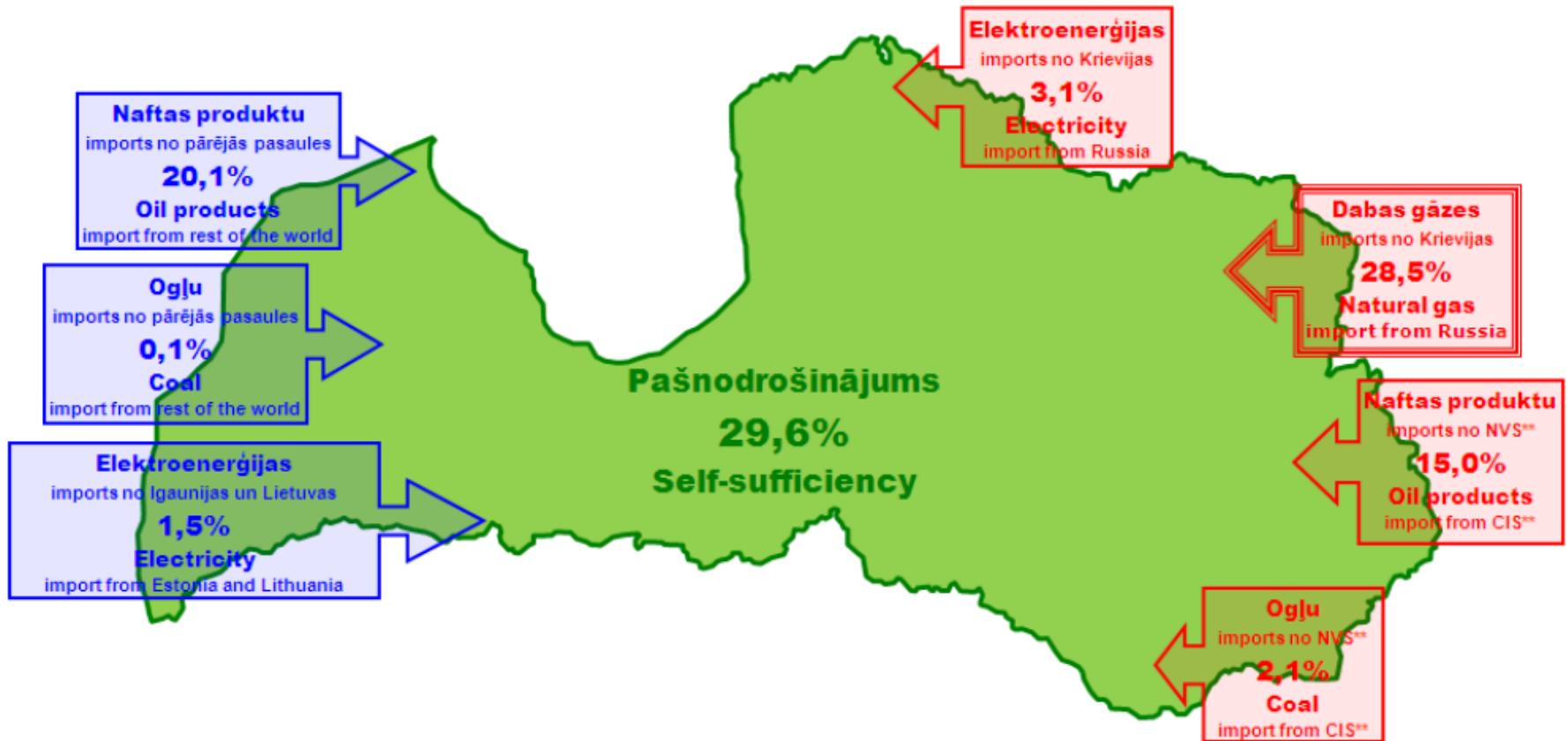
Source: LR EM, 2008

# Total consumption of primary energy in Latvia, 2000-2008 (by sectors)



Source: LR EM, 2008

# Energy dependence structure in Latvia, 2008

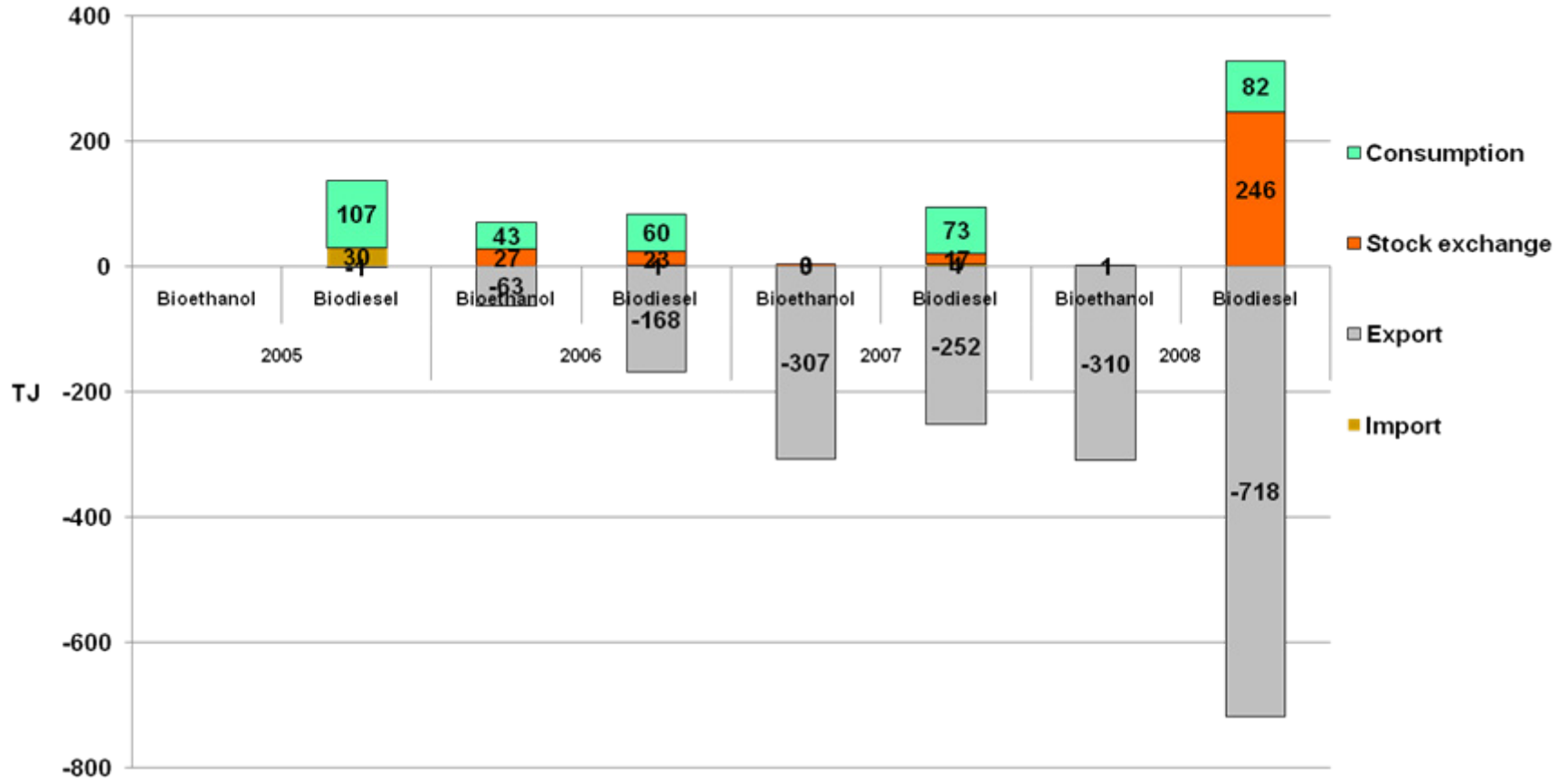


\* Aprēķināts, izmantojot Eurostat (External trade) datu bāzi / Calculation is based on Eurostat (External trade) database

\*\* Neatkarīgo Valstu Savienība / Commonwealth of Independent States

Source: LR EM, 2008

# Energy resource flows: bioethanol and biodiesel, 2005-2008

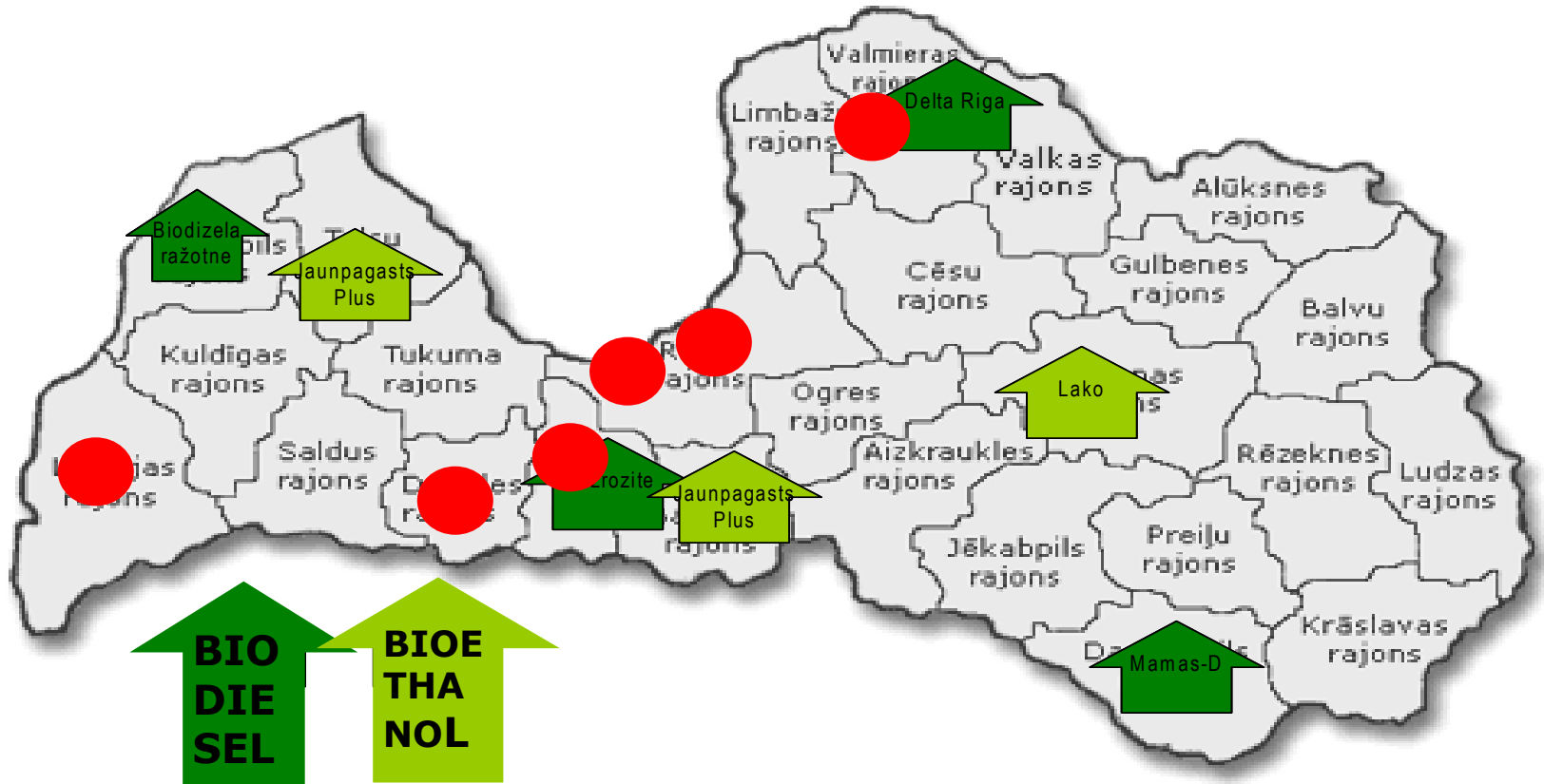


Source: LR CSB, 2010

# Biofuel producers supply potential (t)

Producer	2006	2007	2008	2009
SIA „Delta Rīga”	2500	4083	15000	15000
<b>SIA „Mežrozīte”</b>	<b>2500</b>	<b>4000</b>	<b>18000</b>	<b>18000</b>
SIA „Mamas-D”	2500	4500	4500	4500
SIA „Oniors”	*	*	5400	5400
<b>SIA „Jaunpagasts Plus”</b>	<b>9000</b>	<b>13430</b>	<b>15000</b>	<b>20000</b>
SIA „BioDegviela”			5000	5000
SIA „Latraps”	*	*	15000	15000
<b>SIA „BioVenta”</b>	*	*	<b>100000</b>	<b>100000</b>

# Locations of biogas, ethanol and biodiesel plants



# Export structure of biofuel to EU, t

Product	2006	2007	2008	2009	2010*
Gasoline (+5% mix)	116959	26897	25501	47737	8755
Gasoline	0	6002	0	6912	990
Biofuel E85	<b>47043</b>	<b>43047</b>	<b>41991</b>	<b>127897</b>	<b>48610</b>
Diesel	<b>4933</b>	<b>53100</b>	<b>41729</b>	<b>61049</b>	<b>15736</b>
Bio DD (100%)	0	0	84	0	0
DD+BioDD (5%-30%)	0	0	0	15	174

# Export structure of biofuel outside EU

Product	2006	2007	2008	2009	2010*
Gasoline	14827	17504	7106	8209	498
Diesel	86729	27645	10329	6686	1570
BioDD (100%)	0	1203	2198	5139	1329

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# Biodiesel producer capacity

Capacity is enough to cover 5% mix with fossil fuel

However, not all mixed fuel in Latvia come from Latvia (e.g. In 2010. first 6 month - only 63%).

Biogas as transport fuel at the moment is not produced.

Bioenergy production in Latvia depends very much on unstable (unpredictable) policy of Minister Cabinet decisions (e.g. Added value tax for biomass – 2 times in one year)

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# Characteristics of biodiesel producers in 2009

Producer	Production capacity (l)*	Amount of quota subsidized biofuel (l)**	Produced amount of subsidized biofuel (l) ***
LPKS „Latraps”	34 090 909	1 023 559	-
SIA „Mamas D”	7 954 545	1 669 834	1 669 834
SIA „Delta Rīga”	15 330 000	3 218 022	2 362 643
SIA „Mežrozīte”	45 454 545	7 198 864	5 691 587
SIA „Oniors”	15 000 000	2 374 432	2 374 432
SIA „Bio-Venta”	113 250 283	23 756 654	23 756 654
„VL Bunkerings”	20 000 000	531 362	-
<b>Total</b>	<b>251 080 282</b>	<b>39 772 727</b>	<b>35 855 150</b>

\* Biofuel producers information

\*\* Official subsidized amount stated by MC in 2008 Nr.280

\*\*\* Ministry of Agriculture information

# Characteristics of bioethanol producers in 2009

Producer	Production capacity (l)*	Amount of quota subsidized biofuel (l)**	Produced amount of subsidized biofuel (l) ***
SIA „Jaunpagasts plus”	24 500 000	24 500 000	17 128 868
SIA „Biodegviela”	11 400 000	1 057 135	57 135
Kopā	35 900 000	25 557 135	17 186 003

\* Biofuel producers information

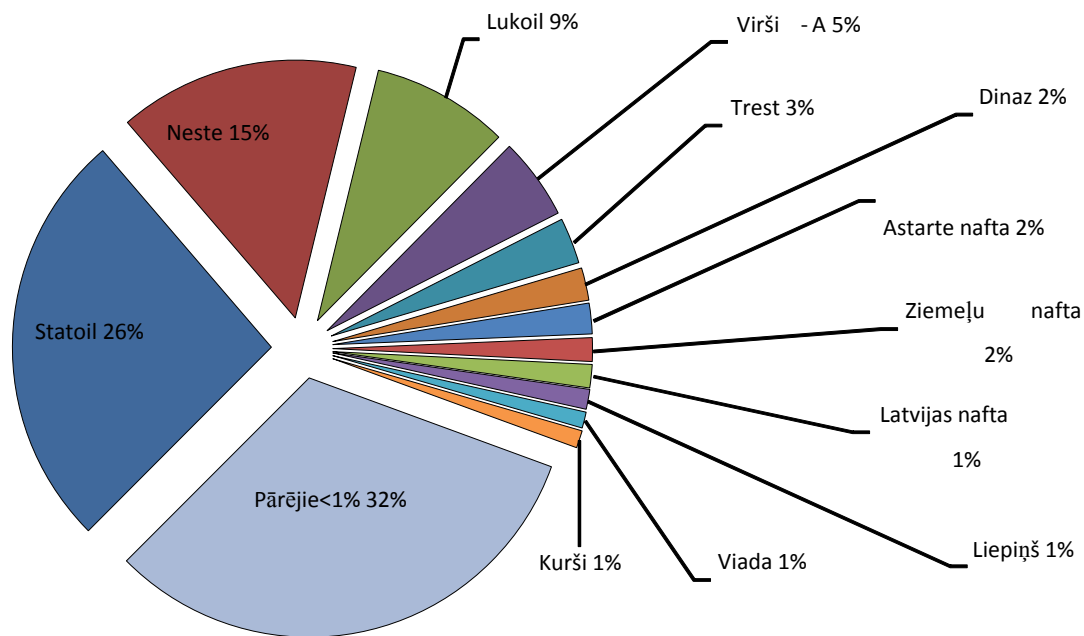
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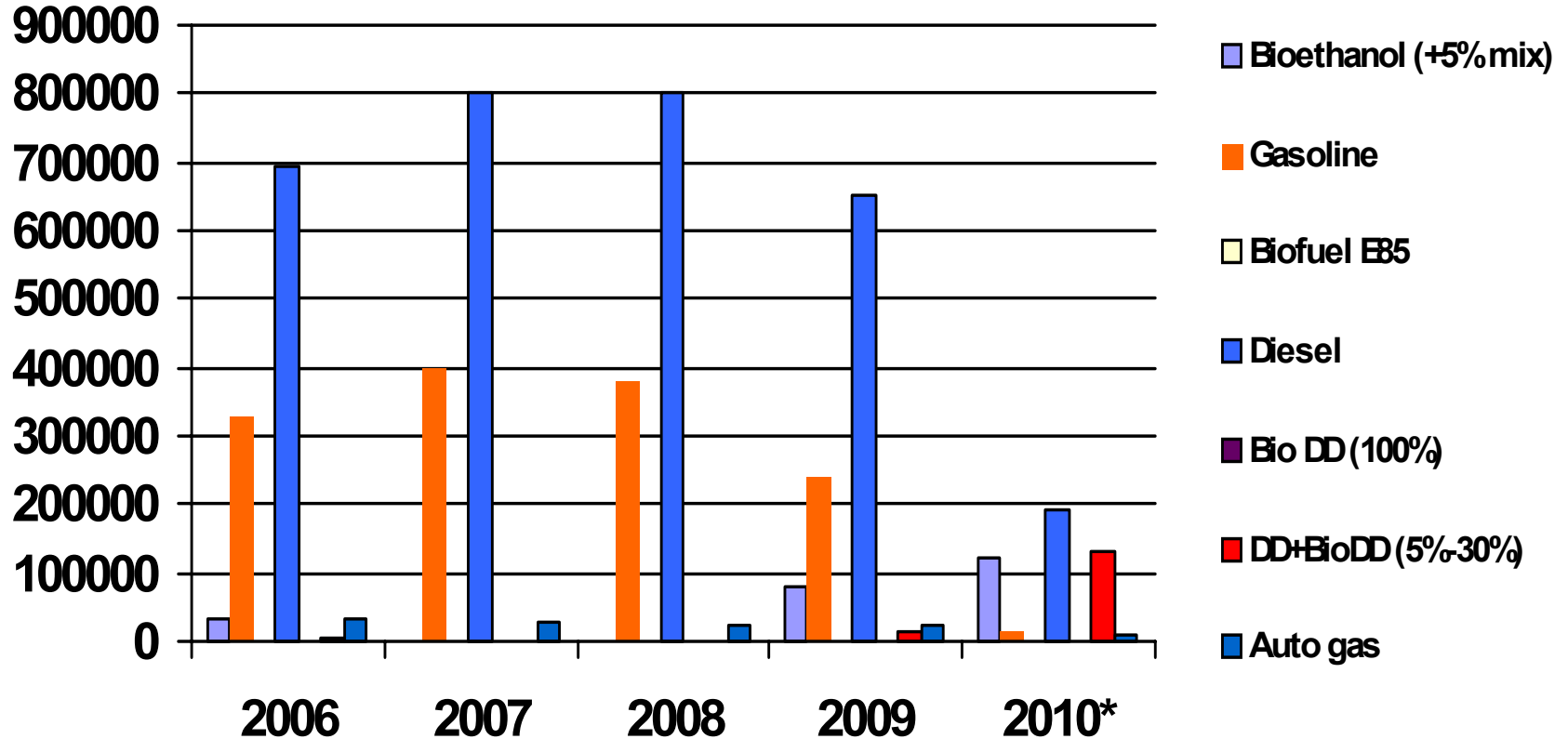
# Biogas producers in 2010

<b>Producer</b>	<b>Production capacity, kWel</b>
<b>SIA “Rīgas ūdens”</b>	<b>2 MWel</b>
<b>“ZAAO”</b>	<b>170 KWel</b>
<b>Waste disposal center near Liepāja city</b>	<b>1 MWel</b>
<b>SIA “Getliņi Eko”</b>	<b>5 MWel</b>
<b>SIA “LLU MPS Vecauce”</b>	<b>270 KWel</b>
<b>Farm “Līgo”</b>	<b>500 KWel (projected)</b>
<b>Farm “Zieds”</b>	<b>1 MWel (projected)</b>
<b>Farm “Meža cīruļi”</b>	<b>500 KWel (projected)</b>

# Amount of fuel retail traders in Latvia



# Total fuel consumption in Latvia, t



# Auto proportion by fuel usage in 2010

Fuel	Trucks		Cars		Busses		Total	
	amount	%	amount	%	amount	%	amount	%
Gasoline	29089	27.6	<b>583980</b>	70.1	2448	29.4	615517	65.0
Gasoline & gas	2353	2.2	<b>27036</b>	3.2	107	1.3	29496	3.1
Diesel	73662	70.0	<b>222356</b>	26.7	5778	69.3	301796	31.9
Gas	124	0.1	<b>29</b>	0.0	5	0.1	158	0.0

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# Conclusions

Business is ready for biodiesel and bioethanol production, but

- no local demand for the production
- lack of promoting policies to stimulate end-users
- weak financial support from the state
- strong lobbies from retail traders of fossil fuel
- current fiscal policy directed toward state budget cutting (including support for bioenergy resource production)

Excess duties for biofuel should be lowered

Governmental as well as self-government institutions should use only transport with biofuel.

Discounts for cars and trucks with biofuel usage

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**Thank you for your attention**

