



# Russian flat glass market: Advance increase of demand

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# Introduction



**In 2005 we considered peculiarities of Russian Flat glass market research**

**We analyzed:**

**State of statistic reports:**

**– on manufacture, import, export and flat glass consumption**

**Manufacture of flat glass in Russia**

**– capacity of house construction, civil engineering, industrial construction**

**House construction in Russian Federation**

**Results:**

**Introduction of corrective coefficients system in flat glass construction calculation**

**Content:**

**Condition, tendencies and prospects of development of Russian flat glass market**



# MANUFACTURE OF FLAT GLASS IN RUSSIA /1990–2006/

million Sq.m – 4 mm

Product name	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Flat glass including:	213,7	105,7	112,8	126,1	109,9	110,9	101,4	118,5	124,3	136,1	150,2	136,4	173,4
vertical processing glass	109,5	28,5	30,6	39,3	25,6	24,5	24,2	31,1	31,1	30,1	15,2	8,4	8,4
float glass	104,2	77,2	82,2	86,8	84,3	86,4	77,2	87,4	93,2	106	135	128	165
ante float glass, %	48,76	73,04	72,87	68,83	76,71	77,91	76,13	73,73	74,9	77,9	89,9	93,8	95,2

Decreasing of manufacturing volume of flat glass in 2000 year to 2,1 times advantage through decreasing to 4,5 times manufacturing of vertical processing glass, increase of float glass from 48,76% to 76,13%.

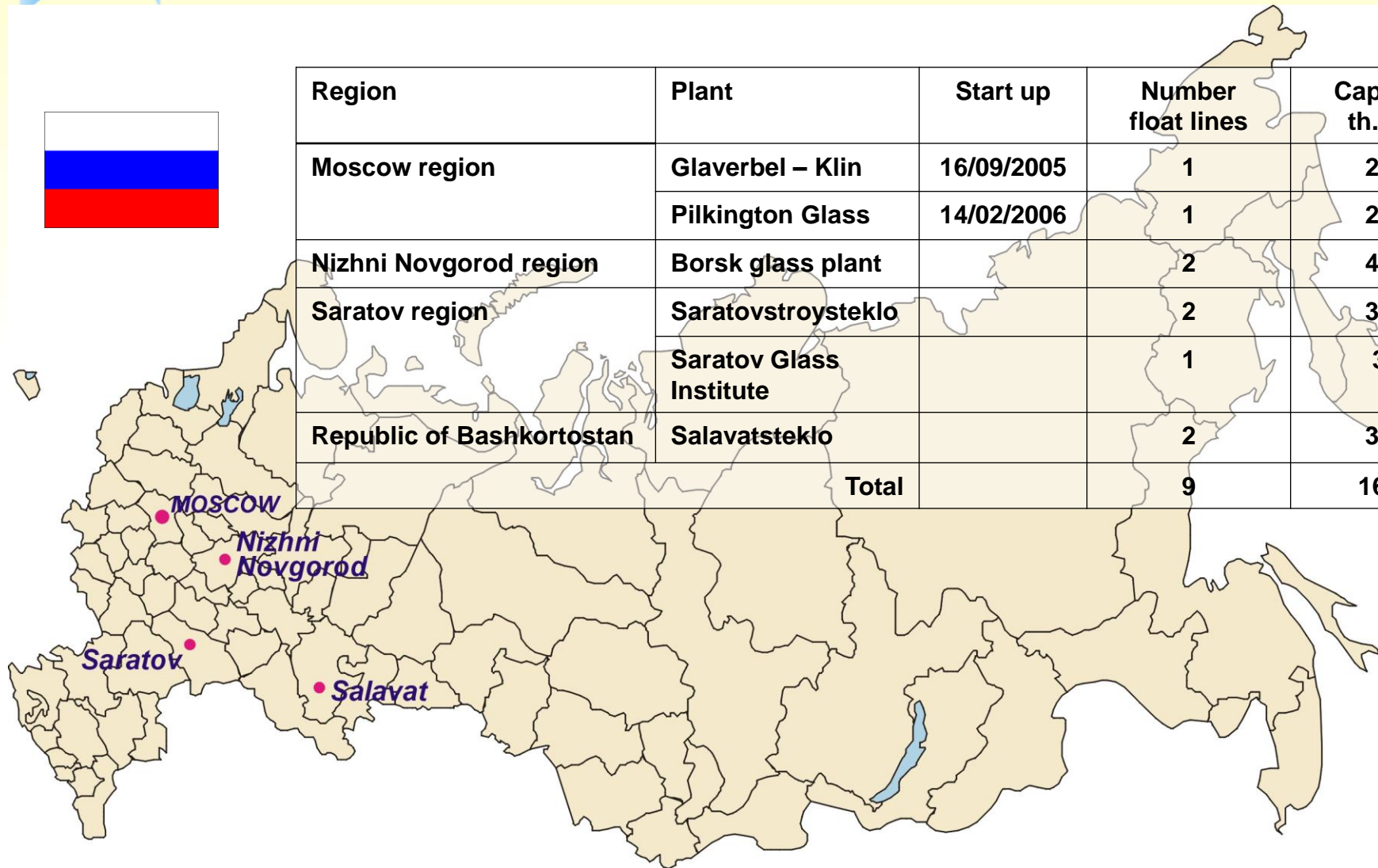
Increasing of manufacturing volume of flat glass in 2006 year to 1,71 times advantage through decreasing to 2,9 times manufacturing of vertical processing glass, increase of float glass from 76,13% to 95,2%.



# FLOAT-GLASS MANUFACTURERS IN RUSSIA /2006/



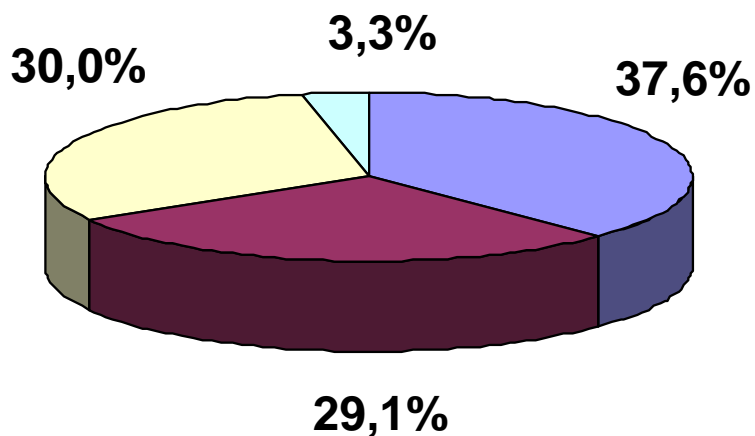
Region	Plant	Start up	Number float lines	Capacity th. ton
Moscow region	Glaverbel – Klin	16/09/2005	1	220
	Pilkington Glass	14/02/2006	1	240
Nizhni Novgorod region	Borsk glass plant		2	440
Saratov region	Saratovstroysteklo		2	320
	Saratov Glass Institute		1	35
Republic of Bashkortostan	Salavatsteklo		2	375
Total			9	1630





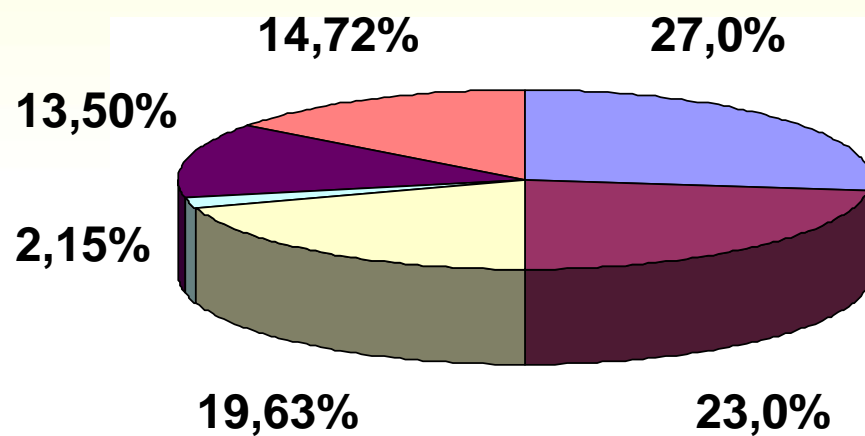
## Companies' shares in Russian float glass production

2003  
/1065 th. ton/



- Borsk glass plant
- Salavatsteklo
- Saratovstroysteklo
- Saratov Glass Institute

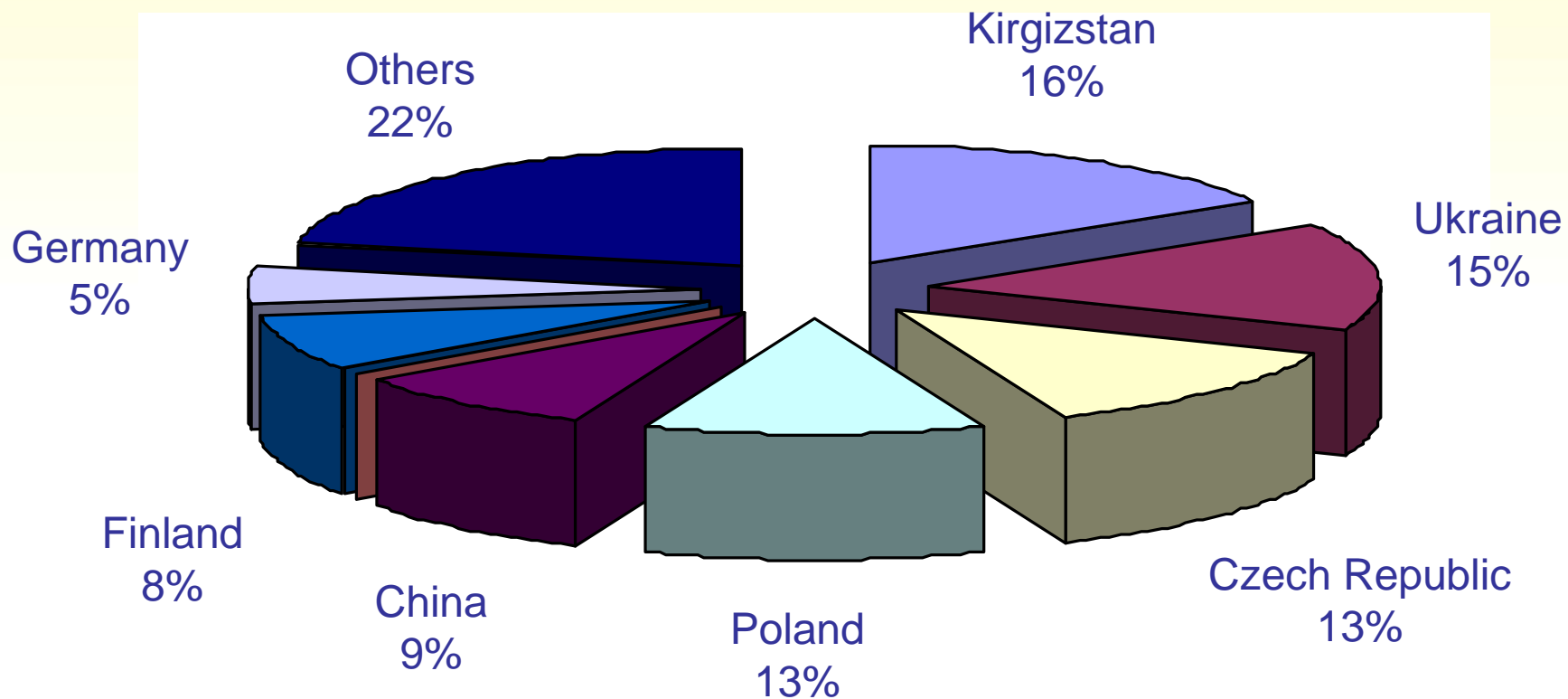
2006  
/1630 th. ton/



- Glaverbel – Klin
- Pilkington Glass

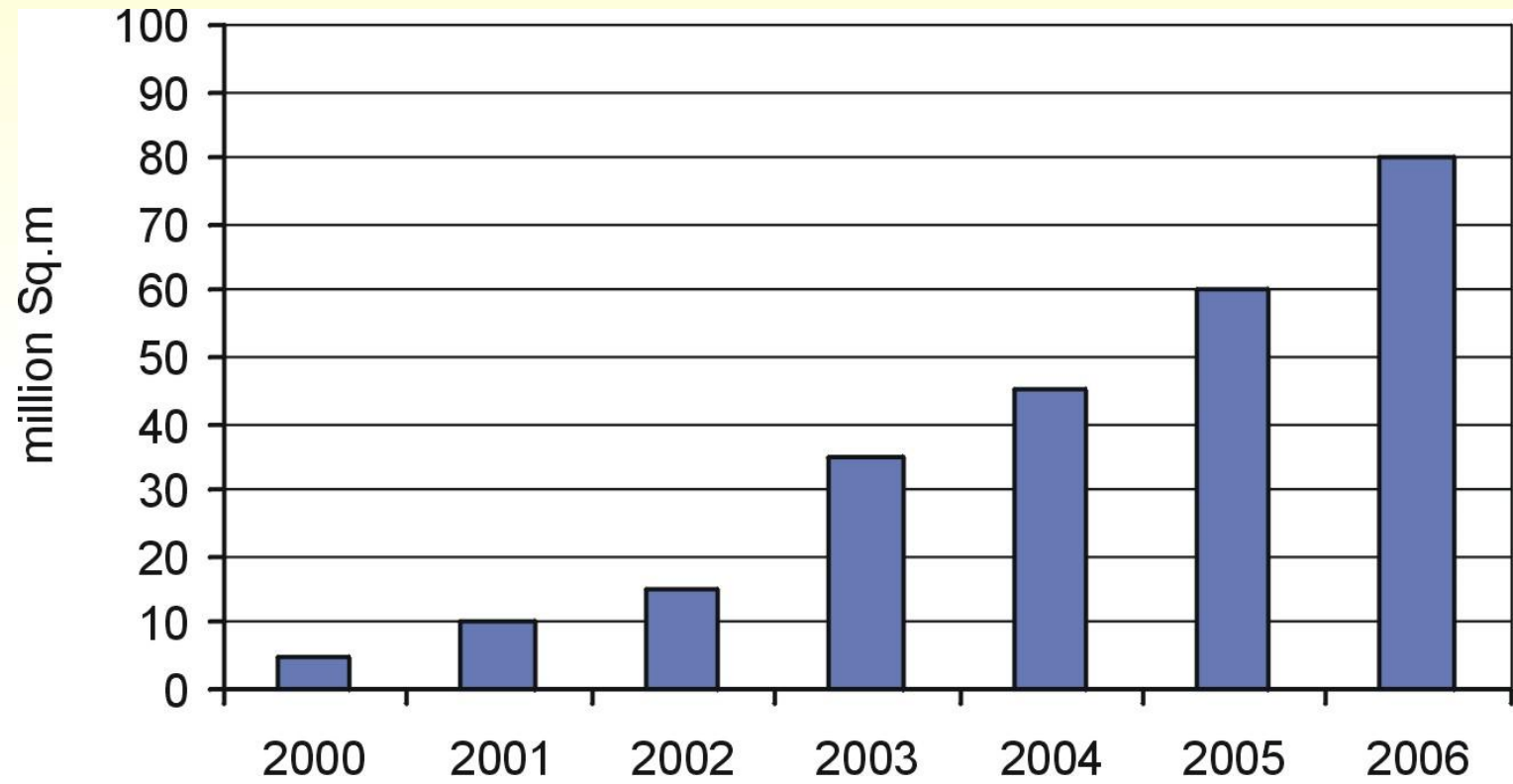


# Import flat glass /2003/





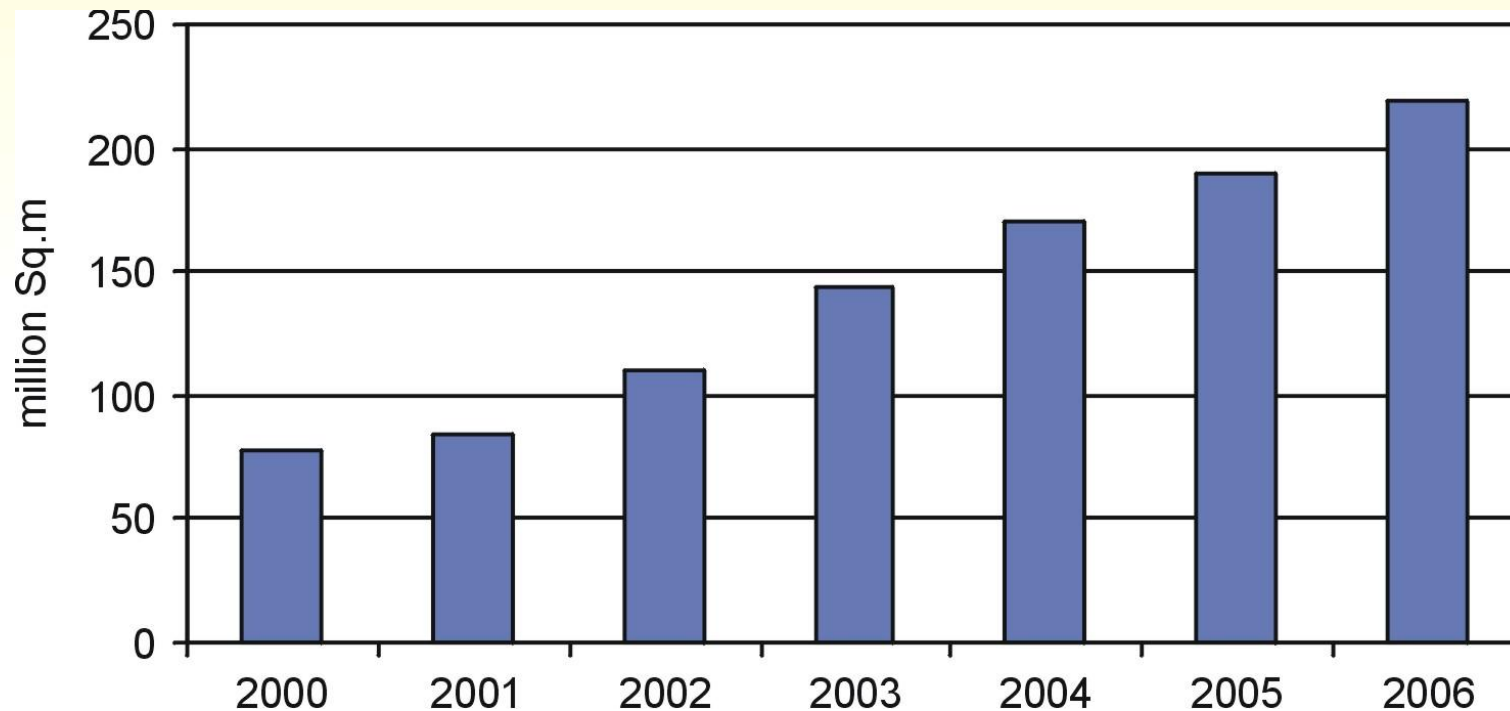
## Import of float glass



In 2006 Chinese float glass was 50% of all the imported glass in Russia.

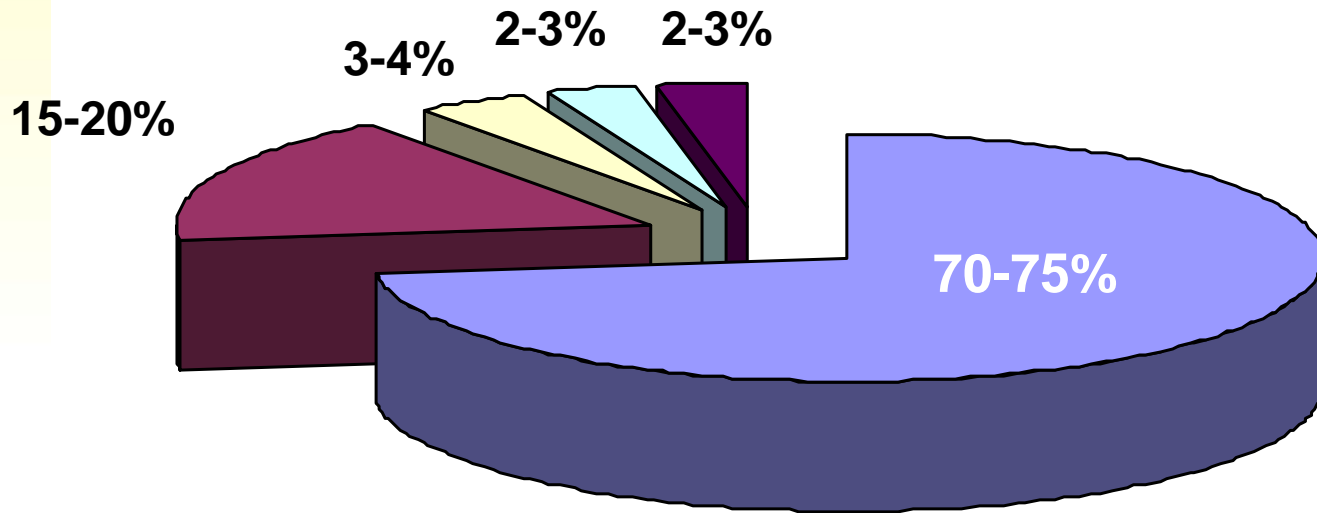


## Float Glass consumption in Russia /2000–2006/





# Float Glass consumption structure

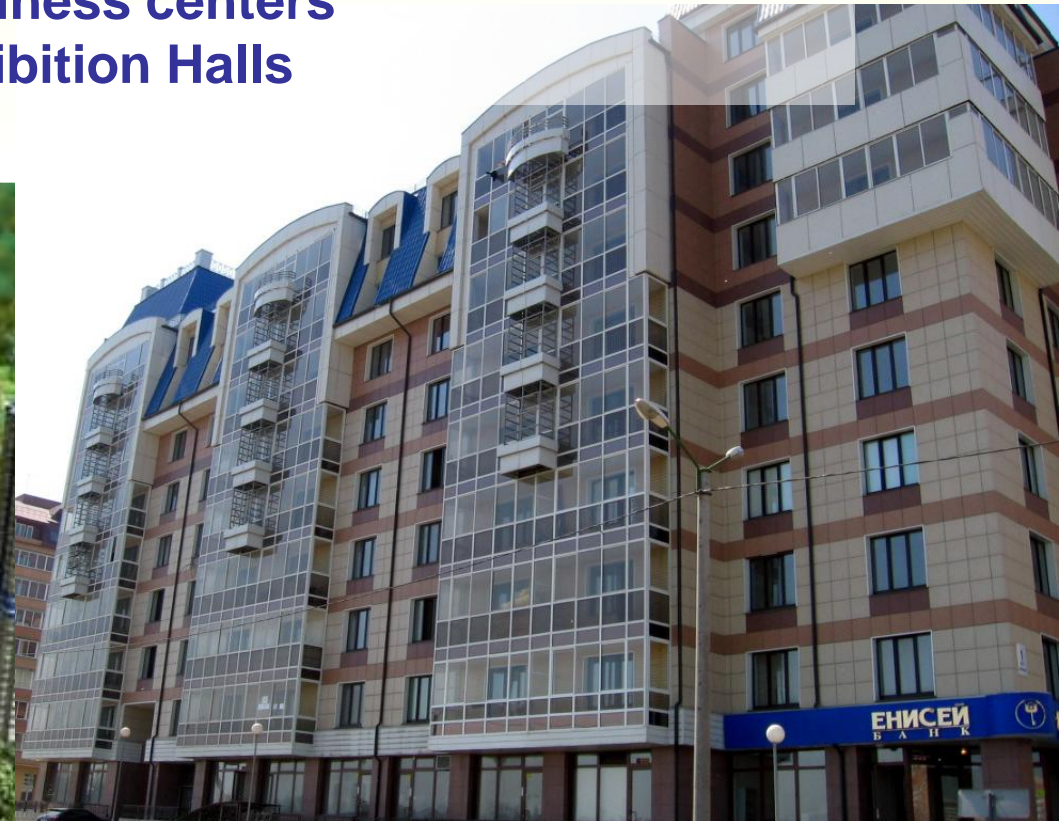


- Construction (houses, civil, industrial)
- Transport (automotive, railway, municipal passenger)
- Mirrors
- Furniture and appliances
- Others



# Construction projects – attractive investment wise

- Housing
- Shopping and entertainment centers
- Hotels
- Business centers
- Exhibition Halls



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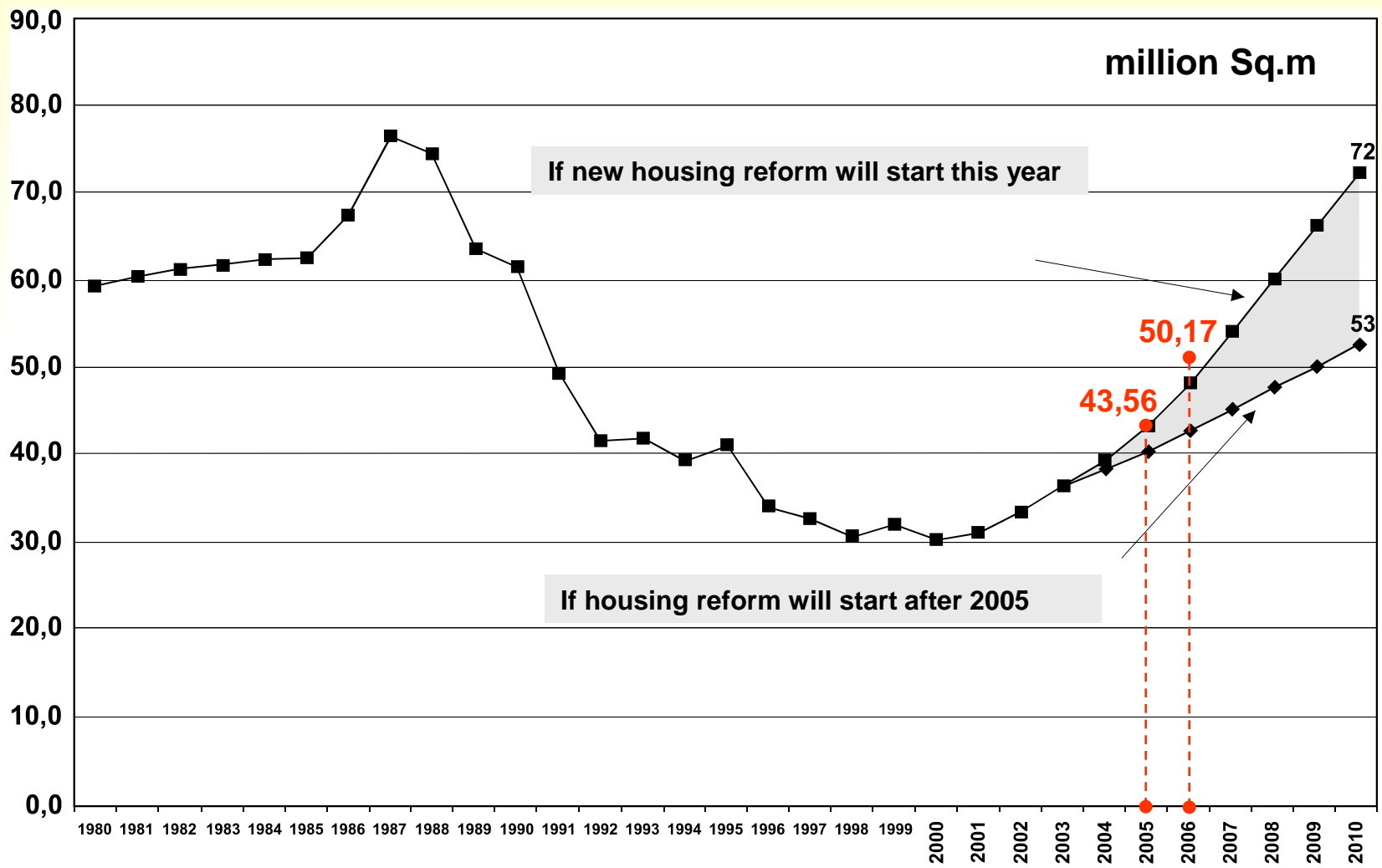
# House Construction /2006/

	Constructed hundred.m <sup>2</sup> of total sq.area	% In comparison to 2005	Total population on Jan 1st, people	House construction per 1 resident, m <sup>2</sup>
<b>Russian Federation</b>	<b>50173,1</b>	<b>115,2</b>	<b>142753551</b>	<b>0,35</b>
<b>Central Federal district</b>	<b>17292,6</b>	<b>113,3</b>	<b>37356361</b>	<b>0,46</b>
<b>North-West Federal District</b>	<b>4620,2</b>	<b>116,1</b>	<b>13628306</b>	<b>0,34</b>
<b>South Federal District</b>	<b>7438,9</b>	<b>119,7</b>	<b>22790246</b>	<b>0,33</b>
<b>Privolzhsky Federal District</b>	<b>9898,7</b>	<b>108,3</b>	<b>30511236</b>	<b>0,32</b>
<b>Ural Federal District</b>	<b>4187,6</b>	<b>117,3</b>	<b>12244214</b>	<b>0,34</b>
<b>Siberian Federal District</b>	<b>5307,2</b>	<b>120,5</b>	<b>19676262</b>	<b>0,27</b>
<b>Far East Federal District</b>	<b>1037,1</b>	<b>111,1</b>	<b>6546926</b>	<b>0,16</b>

Number of regions, where the house construction per 1 resident exceeded 0,3 m<sup>2</sup>, increased from 13 in 2004 to 28 out of 89 Federation subjects in 2006.



# Trends of house construction in Russian Federation





# Growth factors of flat glass consumption in house construction



## I. New construction

- realization of national project «Reasonable and comfortable housing – to Russian Citizens»
- realization of the program of settling from slum and hazardous dwellings
- trends in architecture (increase in areas of external glazing, wide implementation of glass structures inside buildings, increase in sizes of applied glass elements)

## II. Replacement of windows in functioning housing

- increase in effective demand of population
- development of purpose consumer loans for window replacement
- anomalous cold winters for 3 years running (2003/2004, 2004/2005, 2005/2006)
- replacement of windows at the expense of municipal budgets in order to get the required level of noise protection in the housing facing the freeways with intensive traffic

## III. Housing repair

- sanitation programs for the housing, providing along with other measures, window replacement



## Cooperative Housing «Zivoi Rodnik» (Saint-Petersburg)

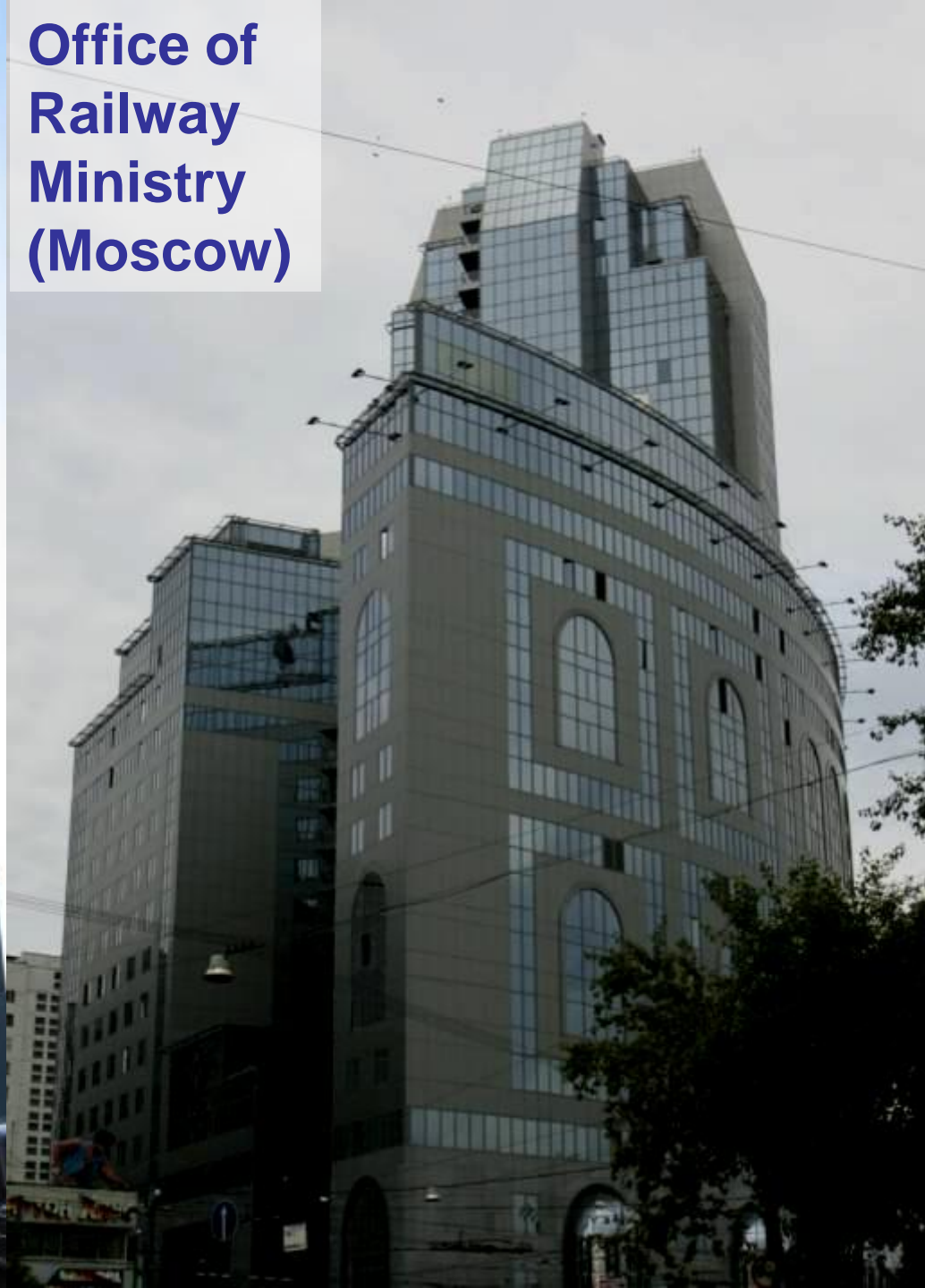


## Housing (Novosibirsk)

**Office of  
Railway  
Ministry  
(Moscow)**



**Railway Station  
(Samara)**





## Ice Sport Place (Saint-Petersburg)



## Lexus Auto show (Saint-Petersburg)





# Moscow International Business Center: Moscow-City

**Location:  
Moscow Center**

**Total  
Area: 100 ra**

**Total Glazing area:  
> 1 000 000 sq.m**





**TOWER on  
Embankment**



**NORTHERN TOWER**

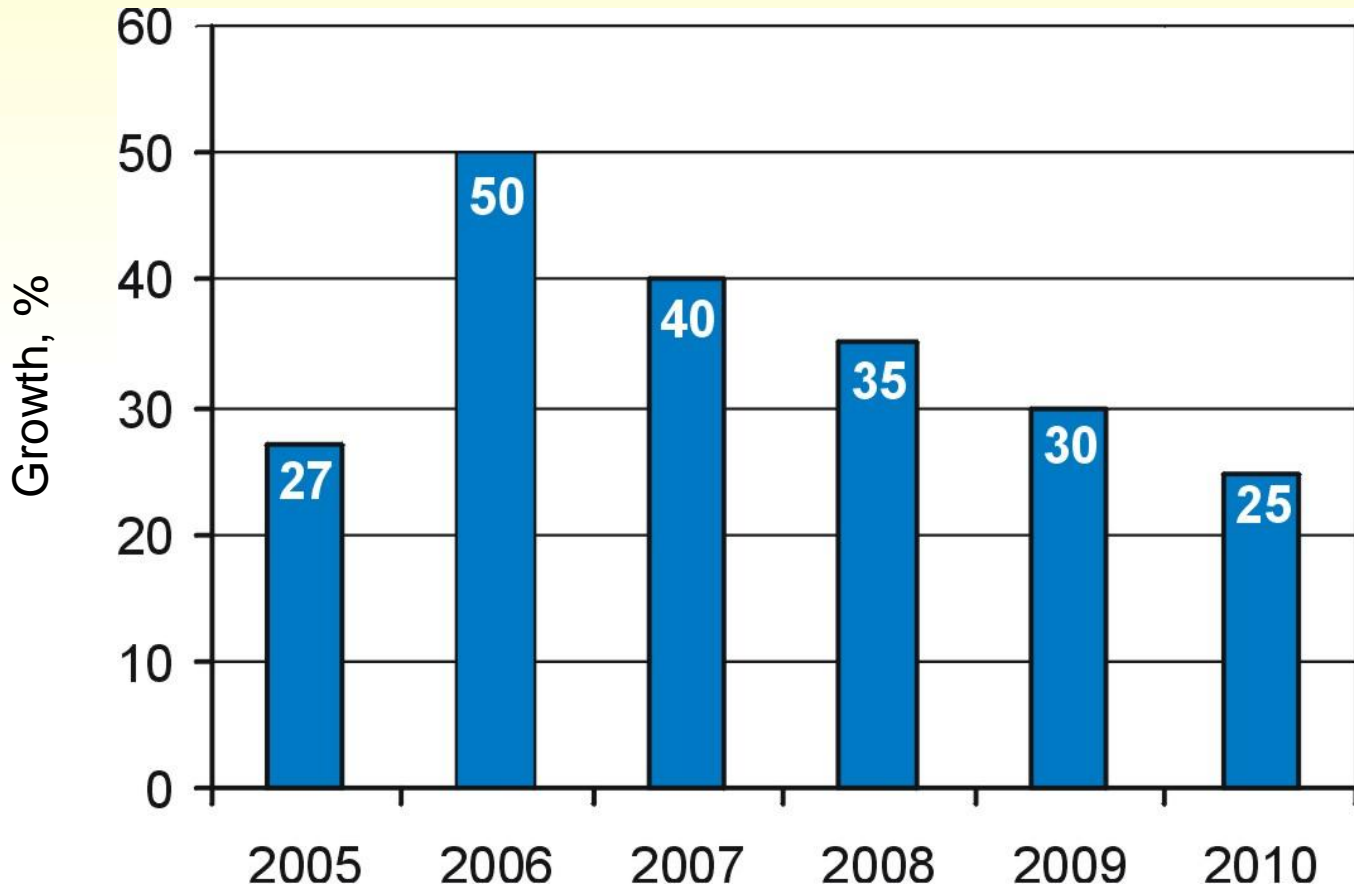


**TOWER – 2000**

**GLASS PROCESSING DAYS 2007**

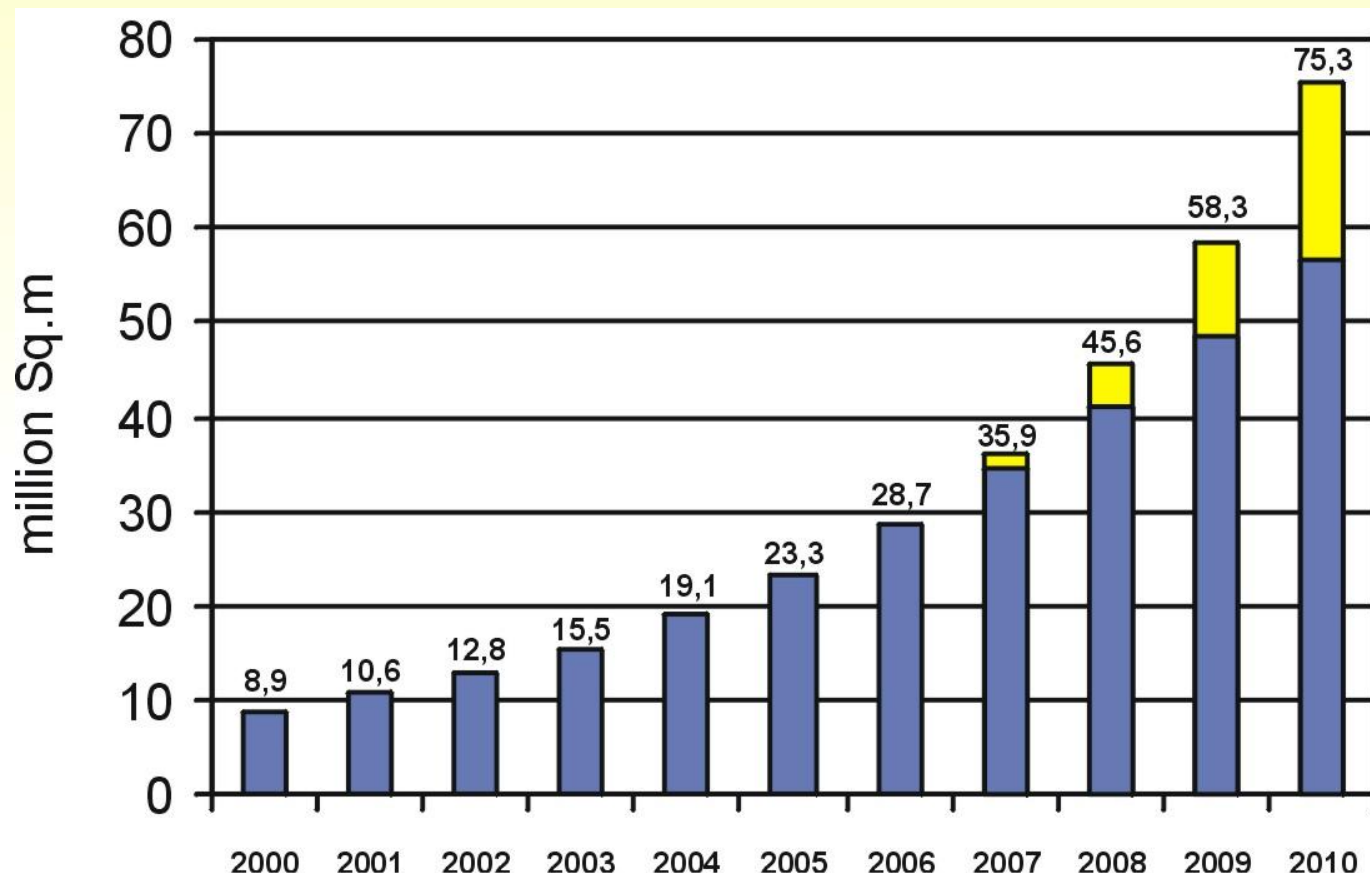


# Translucent Construction market. Rate of Growth.





## IG Production. Dynamics and prognosis.



### Biggest Russian IG Manufactures:

- specialized glass companies: Group «IG units and glass» – «StiS», Holding «Adamant», «Solarex» LTD, «Steklostroikomplekt» LTD, «Mosavtosreklo» LTD etc.;
- companies – window manufacturers: KALEVA, Industrial group «Hobbit», «Okna Rosta», «Samara Window constructions» and others.



# Construction in Russia

From the President's message to Federal Assembly of Russian Federation on April 26, 2007

- ... high guiding lines – such as the construction till 2010 of 80 bln.sq.m. of housing annually – already can't satisfy the demand of modern Russian society.
- ... provide the growth up to 100–130 bln.sq.m. per year
- ... construct not less than one sq.m. of housing per one Russian citizen.

- ... to provide for the program of settling from slum and hazardous dwellings with not less than 100 bln. rub / 2,9 mln EUR
- ... to provide for the reconstruction and repair of housing with not less than 150 bln. rub / 4,3 mln EUR

# Factors of flat glass consumption growth in transport industry



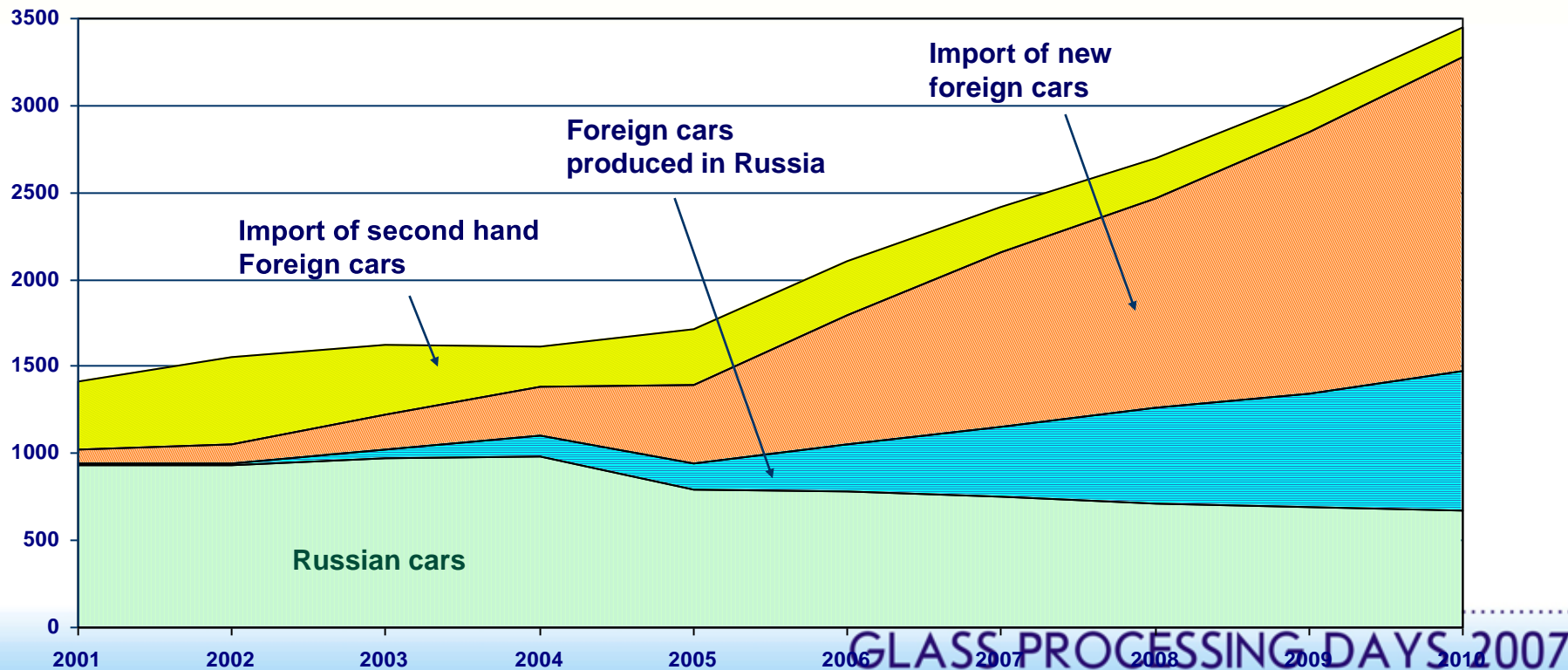
I. Growth of passenger car fleet	from 1995 till 2006 fleet growth – 82,3% (from 14 700 th. cars. To 26 794 th.cars.)
Increase in passenger car import	2006 – 1 049,500 th. cars (growth – 35,6%) 2005 – 773,700 th. cars (growth – 52,0%) 2004 – 509 th. cars
Increase in car production by foreign companies in Russia	2006 – 270 th. cars (market share – 12,8%) 2005 – 151,5 th. cars (market share – 8,8%) 2004 – 121 th. cars (market share – 8,1%)
According to prognosis the volume of sales of passenger cars in Russia may reach in 2010 3 450 th. cars. (in 2006 – 2103,0 th.cars.).	
II. Growth of truck fleet	2006 – 4 930 th.cars (growth 1,67%) 2005 – 4 850 th.cars(growth 1,7%) 2004 – 4 770 th.cars. (growth 2,1%)
III. Growth of bus fleet	2006 – 824 th.cars (growth 4,0%) 2005 – 792 th.cars (growth 3,4%) 2004 – 766 th.cars (growth 4,9%)
IV. Modernization and purchase of locomotives and passenger coaches for railway	Development strategy for transport machine building in 2007 – 2010 and for the period till 2015

# Prognosis of passenger cars in Russia



Th.cars

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<b>Total sales</b>	1415,5	1555,7	1622,4	1610,8	1714,4	2103,0	2414,0	2700,0	3050,0	3450,0
including:										
Russian models	932,60	930,11	969,35	980,00	789,20	783,50	750,00	710,00	690,00	670,00
Foreign models	482,90	625,60	653,10	630,80	925,20	1319,50	1664,00	1990,00	2360,00	2780,00
including:										
Produced in Russia	6,50	11,10	57,70	121,80	151,50	270,00	400,00	550,00	650,00	800,00
Imported new	79,10	111,50	195,40	285,00	456,00	743,80	1004,00	1210,00	1510,00	1810,00
Imported second hand	397,30	503,00	400,00	224,00	317,70	305,70	260,00	230,00	200,00	170,00





**Volume increase in consumption  
of high quality flat glass and glass articles determined  
the high investment attraction  
of glass industry in Russia**





# NEW FLOAT-GLASS MANUFACTURERS IN RUSSIA /2008–2010/



Region	Plant	Start-up	Number of Float lines	Capacity Th.tons
Moscow	Glaverbel – Klin	Beginning of 2009	1	320
St.– Petersburg region	“North-West Glass company”	III квартал 2008	1	160
	“RSK” LTD		1	160
Ryazan region	“Guardian Glass Rjazan”» (Guardian Industries, USA)	середина 2008	1	250
Tver region	“Vostek Tver” SC	2009	1	160
Republic of Kalmykia	“RSK” LTD		1	160
Stavropol	“JugVostProdukt”		1	160
Ulyanovsk	“Promtechinvest” LTD	2009	1	160
Perm region	“RSK” LTD		1	160
Novosibirsk	“RSK” LTD		1	160
	<b>Total</b>		<b>10</b>	<b>1850</b>

\* “RSK” LTD – «Russian Soda Company»



## **Tremendous plans of glass factory construction demand consideration and registration:**

- fuel and energy complex potential in providing the glass industry enterprises with gas and electricity (availability and prices);
- state and prospects of raw material base development, balanced provision by high quality raw material (silica sand, soda ash, dolomite, feldspar, salt cake)



## Measures on energy deficit elimination



### General scheme of power industry projects' location till 2020

Investment program of RAO «EAS Russia» provides for construction and putting into operation of new generative capacities till 2011 in volume terms of 40,9 th. MVt.

### Gas transport reconstruction program for the period 2007–2010

As a result of the program realization the capacity of gas transport network will increase on 32 bld. cubic meters, including 14 bld. For export channels.

### General scheme of gas industry development till 2030

... will allow «Gasprom» and independent manufacturers to increase the gas output on 24-44%.

### Prices for gas and power supply

Gradual Gas and power price rise started in 2007 and is supposed to be fully completed :

- |                    |                      |
|--------------------|----------------------|
| by the end of 2011 | – for industry,      |
| by 2013            | – for rural economy, |
| by 2015–2016       | – for population.    |



## Conclusion



For stable and dynamic development of flat glass market against a background of economic growth, there is a demand of forming scientifically well grounded prediction balances, that guarantee the fulfillment of national projects and long term tasks of society development:

- flat glass demand and supply considering the situation on glass markets of CIS and foreign countries;
- glass production volumes and supplying glass industry with the main raw materials;
- consumption volumes of gas and power by glass industry and the potentials of fuel energy complex enterprises in certain areas.



**Thank you for your  
attention**



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