

Polish experience in restructuring of steel industry

prepared by Romuald Talarek

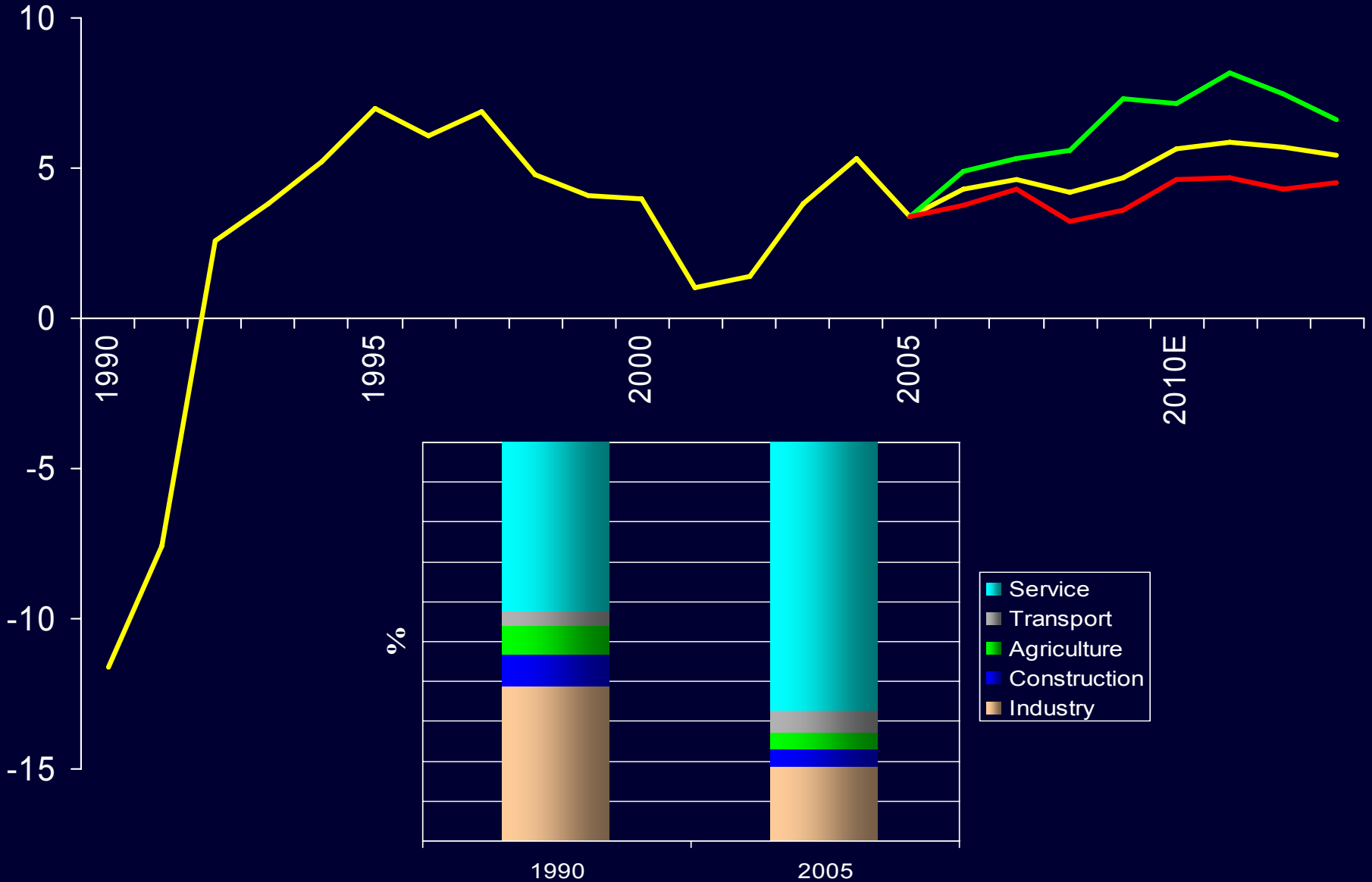
Polish Steel Association

Ankara, August 2006

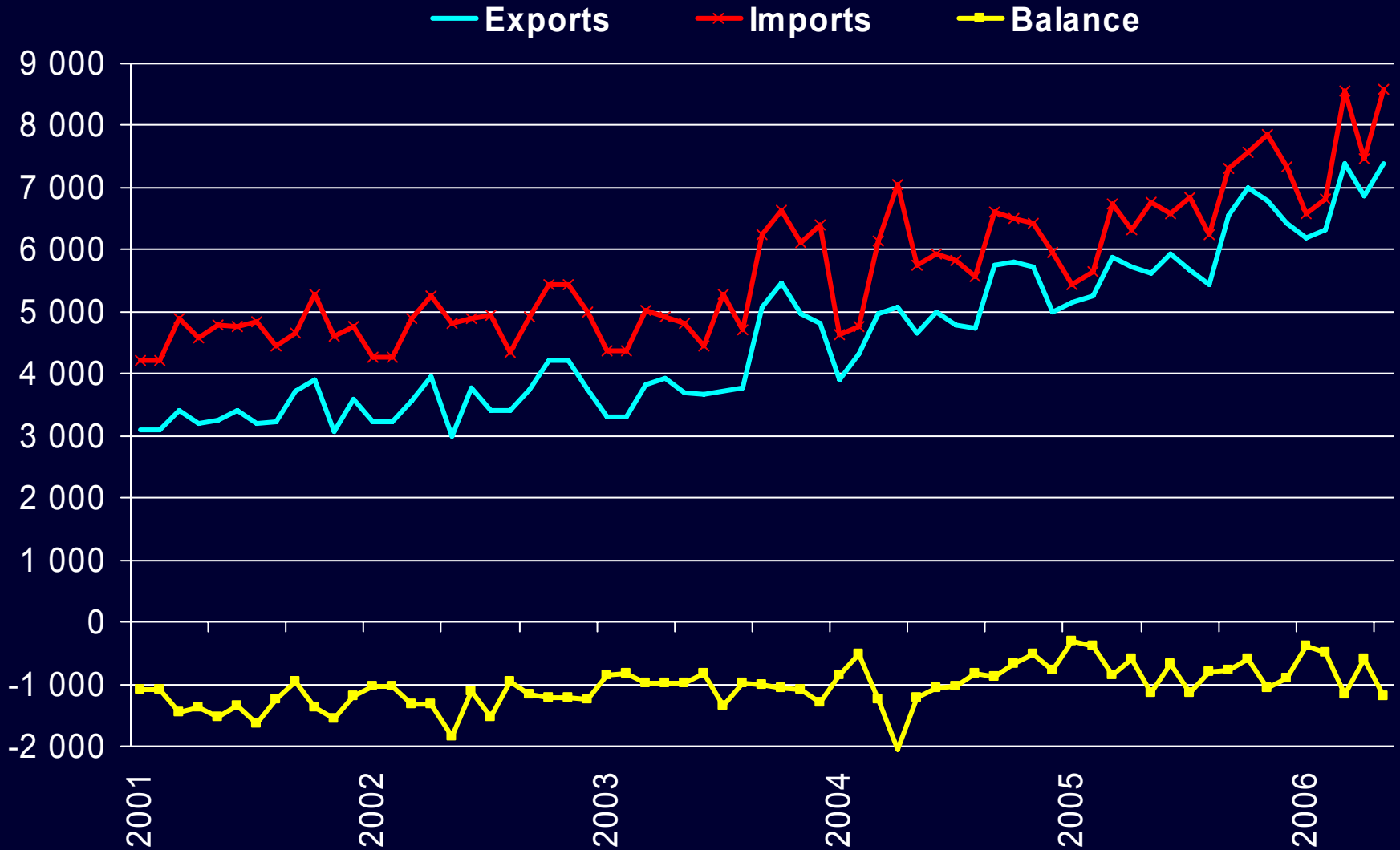
Poland

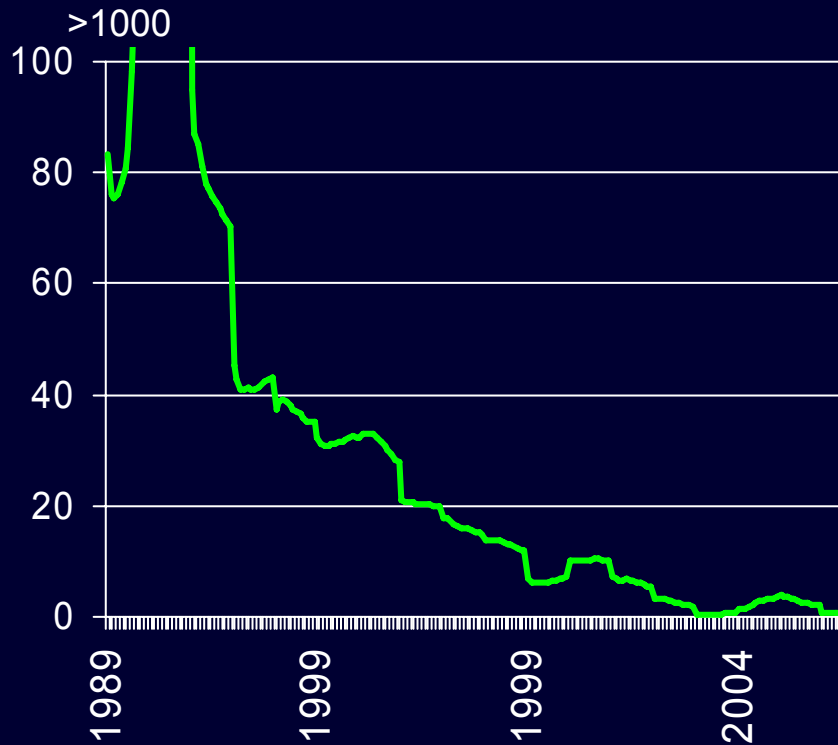


	<u>1990</u>	<u>2005</u>
Area [sq. km]		312 685
Population [M]	38.18	38.16
male	18.71	18.32
female	19.47	19.84
GDP [bln USD]	59	286
Languages		
Polish	98%	97%
Other	2%	3%
Ethnic group		
Polish	98%	97%
Other	2%	3%
Religious		
Roman Catholic	93.7%	89.8%
Other	6.3%	10.2%



External trade in years 2001-2006 [M EUR]





Hyperinflation in 1989-1993

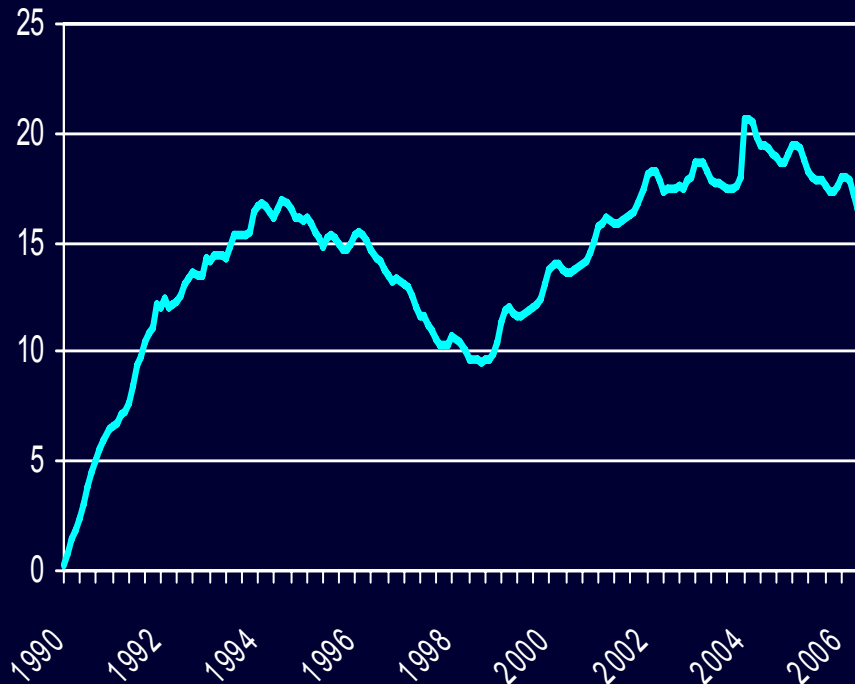
Changes of Polish economy from central-planned to market economy in 1989 - 1990.

Trade liberalization of consuming goods,

Elimination of subsidies for enterprises

June 2006 inflation rate 0,8%

Registered jobless rate in Poland in 1990-2006 [%]



1990-1994 increase of unemployment: state-ownership is reduced within the national economy, no market protection, numerous bankruptcies

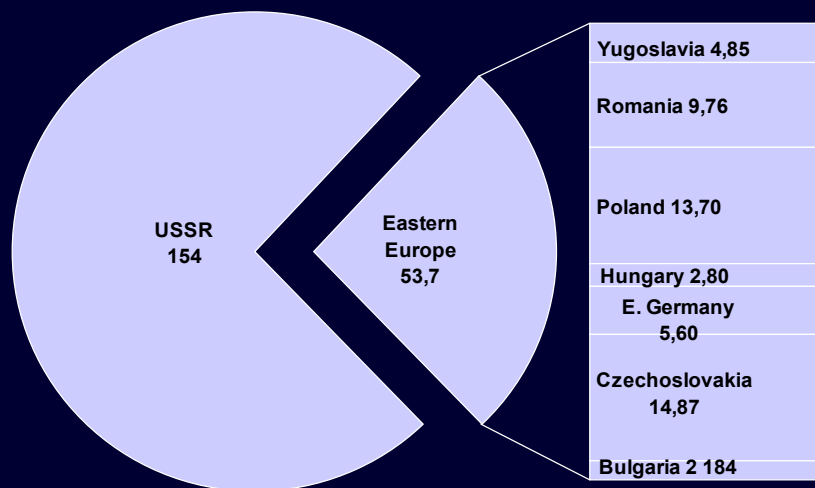
1995-1997 unemployment down: better market condition and economic upturn, active unemployment countervailing policies.

1998-1999 market down, GDP decelerates – unemployment up again.

Mid-year 2005 on: gradually lasting jobless rate decreasing

**Steel industry
at the beginning of the 1990's**

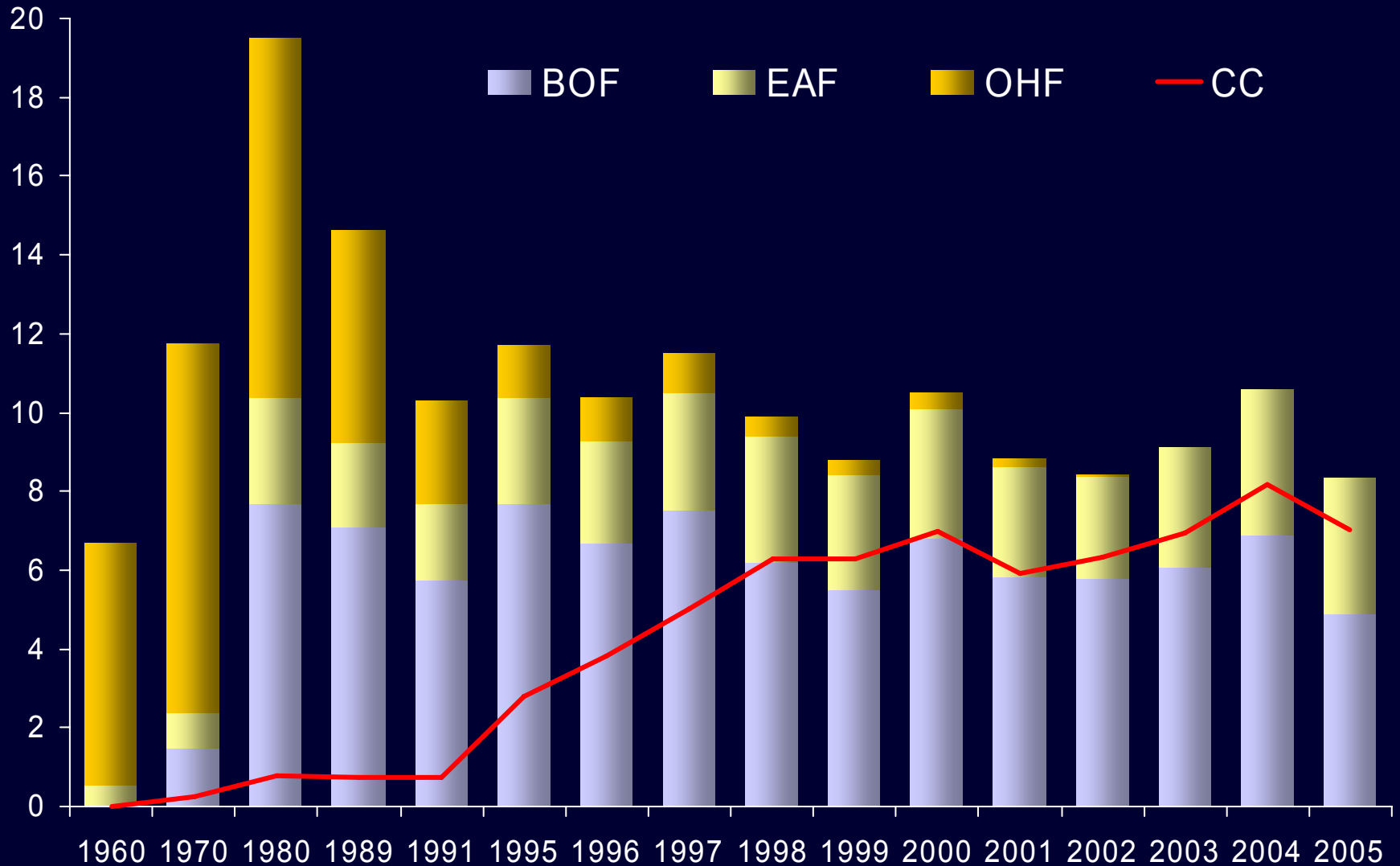
1990



COMECON countries contributed 28% to the worldwide crude steel output in 1998

Poland – contributed 2,5 % to the worldwide crude steel output in 1998

Structure of steel making technologies used in Poland [M mt]

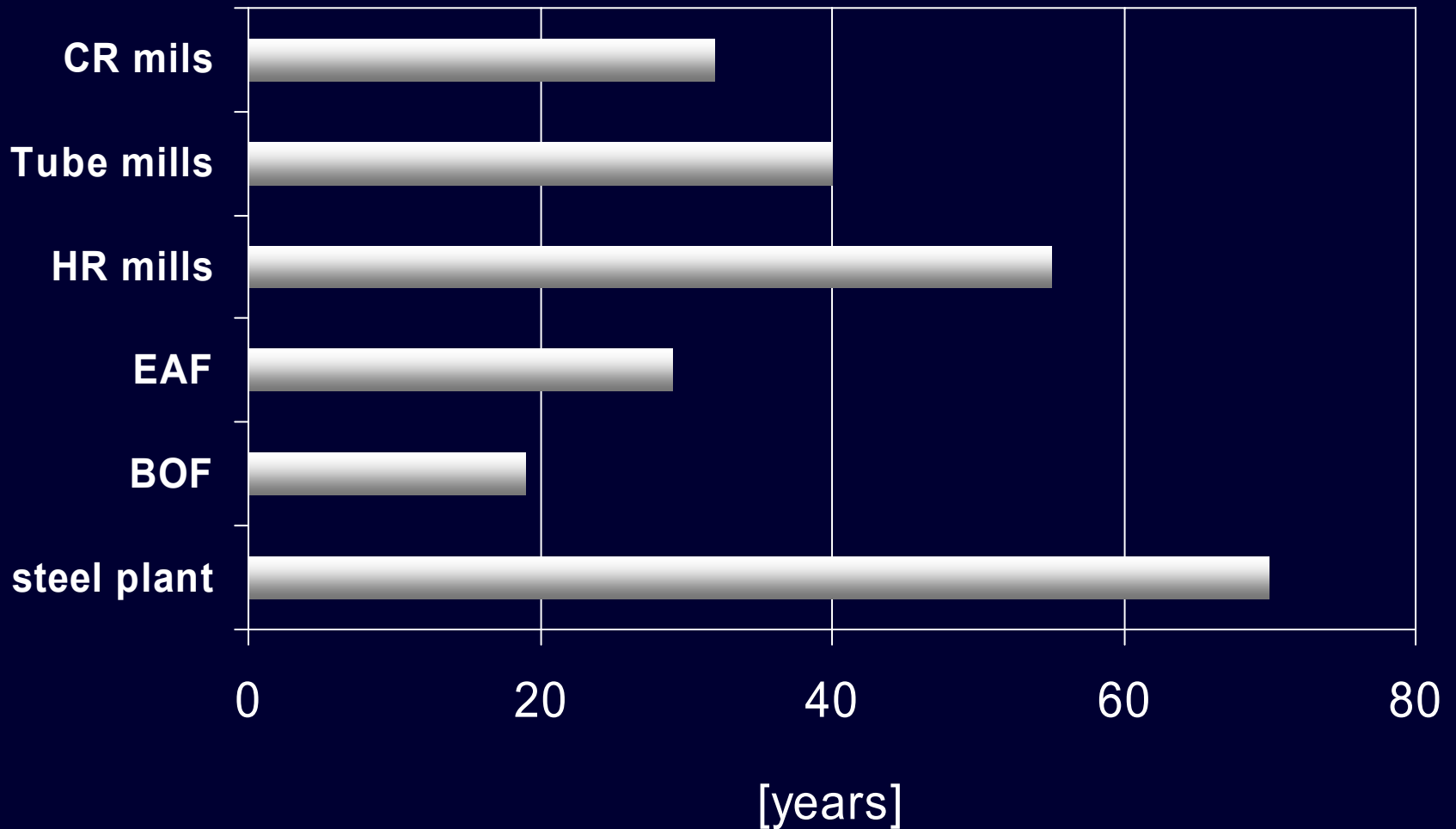




State of Polish Steel Industry before restructuring (1989)

Number of plants	26	Country in transition from centrally planned economy to market
Crude steel structure	OHF 29%, BOF 54% EAF 17%	
Legal status	State ownership	
Employment	147 thousand people	
Management	Full autonomy	
Labour intensity [hour/tonne]	22	
Mix products	Flats 34%, Longs 66%	

Median vintage of process plant & equipment at main facilities before restructuring





Costs structure in Polish Steel Industry before restructuring

Materials and energy	61%	Polish steel highly energy- and materials-intensive.
Wages & salaries (with / without statutory levies)	11%/16%	
Depreciation	8%	
Others	15%	
Energy-intensiveness	≥ 27	



Polish steel's strengths prior to restructuring

- Modern lines: BOF in Katowice, CONEL & quarto in Częstochowa
- Raw materials availability in the country (except for iron ore and some alloys)
- Highly skilled and experienced staff
- Captive R&D infrastructure



Restructuring Process



Integration of Poland into EU & other International organizations

•Before 1993

- Council of Europe, IMF, Observer in OECD

•1993

- Agreements with EC, EFTA
- Participations in GATT preparations
- Visegrad group
- Bilateral Agreements with Neighbour Countries

•EU Accession – 01.05.2004

Polish Steel Industry

- 1992 Canadian Consortium Strategy
- 1993 Europe Agreement Protocol 2
- 1998 & 2003 Government Steel Restructuring Program
- 2001 Restructuring Law Accession Treaty and Protocol No 8



Restructuring strategy

based on CC study & approved by Polish Government

GOAL

To make Polish steel industry:

- competitive on the open market
- economically viable
- environment friendly

- adjustment of capacity production to sales levels
- upgrade of technology
- adjustment of mix product to market demand
- orientation to the local market
- rationalization of employment
- improvement of environmental protection
- base restructuring on the sub sectors approach (long, flat, special steel & pipes)

	1990	2002	2010
Crude steel capacity [M mt]	19.0	11.7	14.0
Employment ['000']	147	43,5	23
Share of CC [%]	8	75	>90
Manpower [hour/tonne]	22	6	2
Hot-rolled to crude steel ratio [%]	73	88	>90



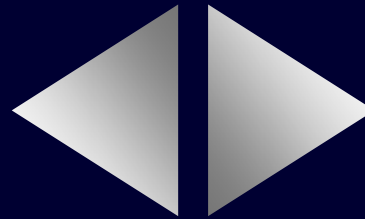
Restructuring costs

	[bn USD]
New and overhaul projects, including:	1.8
- loans to imported purchases	0.9
- loan service cost	0.15
- average own construction and assembly	0.75
Financial restructuring	0.55
Employment restructuring	0.30
Current and repairs	1.8
TOTAL	4.45

What determined technology changes in the Polish steel industry before restructuring?

DRIVERS

Competitiveness
Innovativeness
Productivity
Environment



BARRIERS

Capital availability
Existing assets
Infrastructure
Raw material & energy availability and cost
Employment and social impacts of radical downsizing

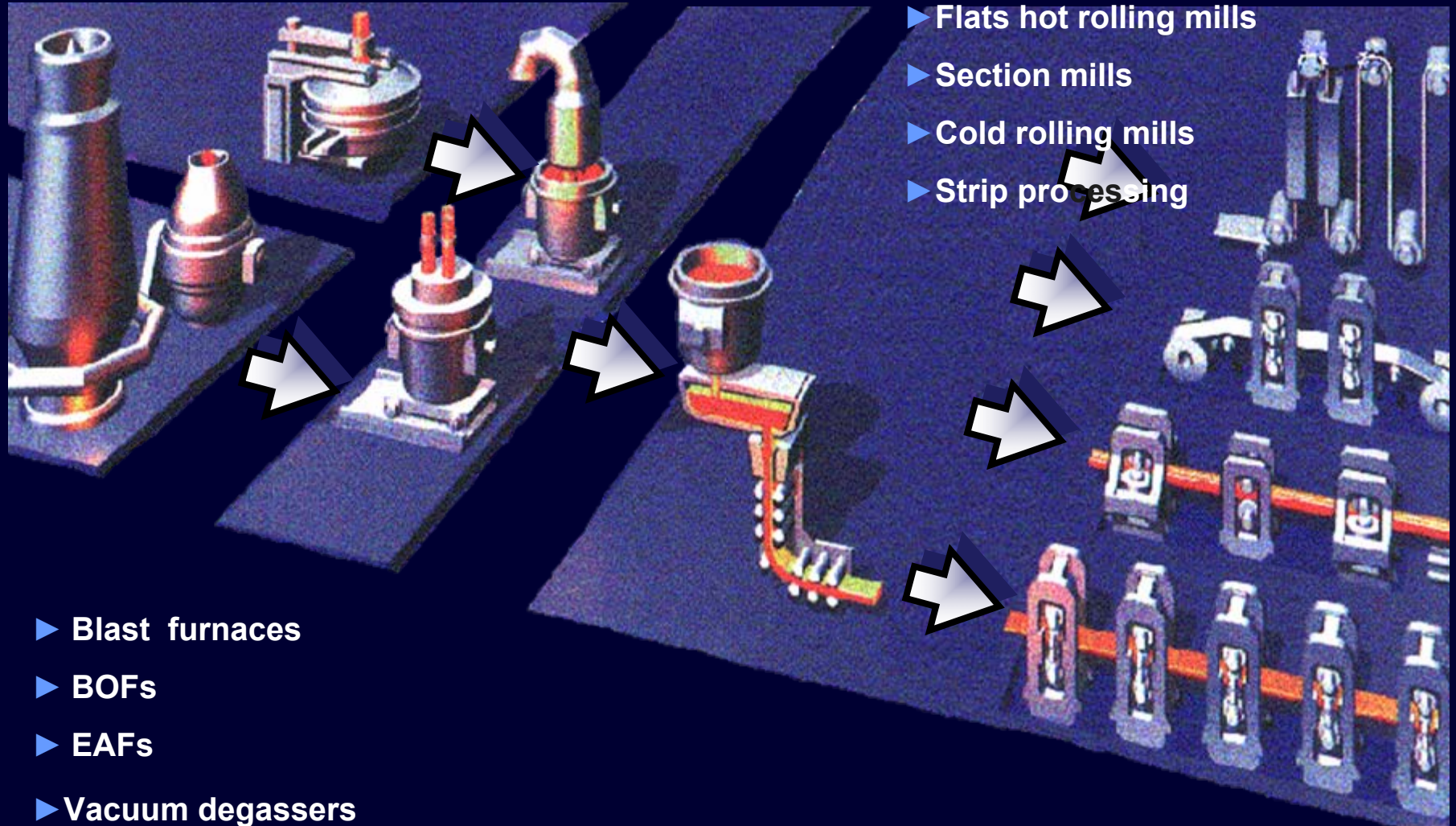
- Interministerial Committee for Steel Restructuring and Privatization
(Vice Ministers of: Economy, State Treasury and Finance)
- Industrial Development Agency (for metallurgy)
- Institute for Ferrous Metallurgy
- Engineering offices and contractor entities
- Metallurgical Chamber of Industry and Commerce



Restructuring Process

Advanced iron and steel industry model

efforts as related to the model structure acc. to SMS AG



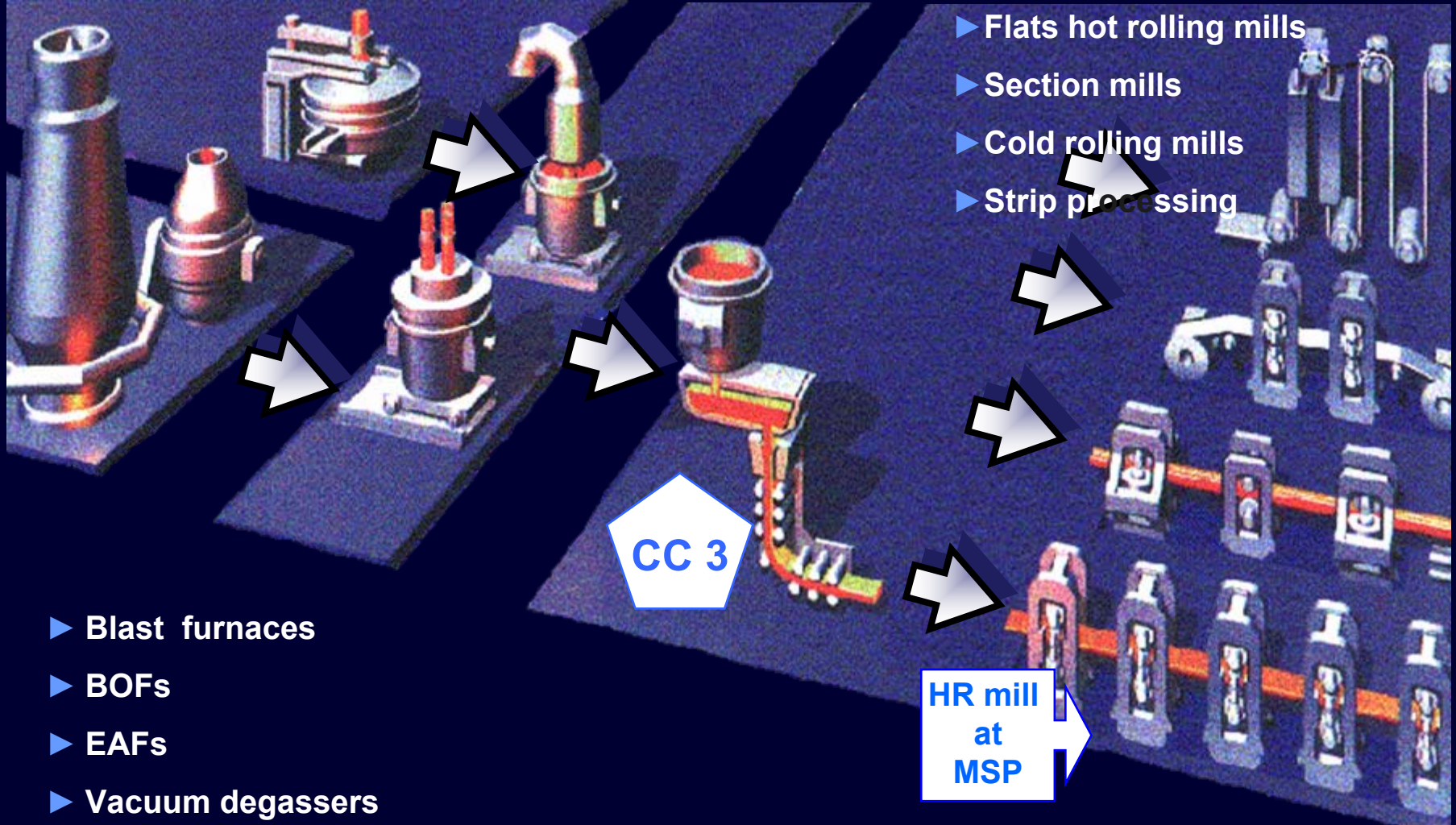


Implementation of the restructuring program in the period 1989-1998

[‘000 mt]

Product	Shut-down and liquidation	New investment	Net changes	MPP utilisation %
Sinter	3 600	-	-3 600	77
Pig iron	1 820	-	-1 820	94
Crude Steel	8 295	1 630	-6 665	92
CC	200	8 800	+8 600	86
HR long	700	480	-220	80
HR flat	160	-	-160	90
CR flat	20	-	-20	77
Tubes	135	-	-135	80

Necessary investment projects to complete Polish iron and steel restructuring



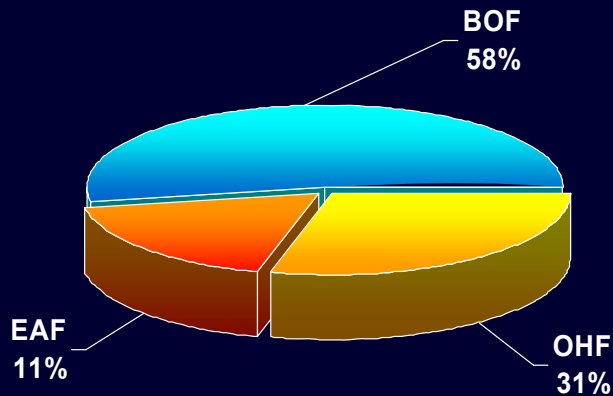
- ▶ Blast furnaces
- ▶ BOFs
- ▶ EAFs
- ▶ Vacuum degassers
- ▶ Tundish

- ▶ Continuous casters
- ▶ Flats hot rolling mills
- ▶ Section mills
- ▶ Cold rolling mills
- ▶ Strip processing

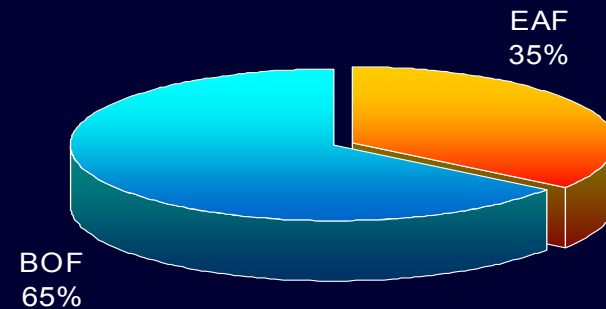
CC 3

HR mill
at
MSP

1990



2005

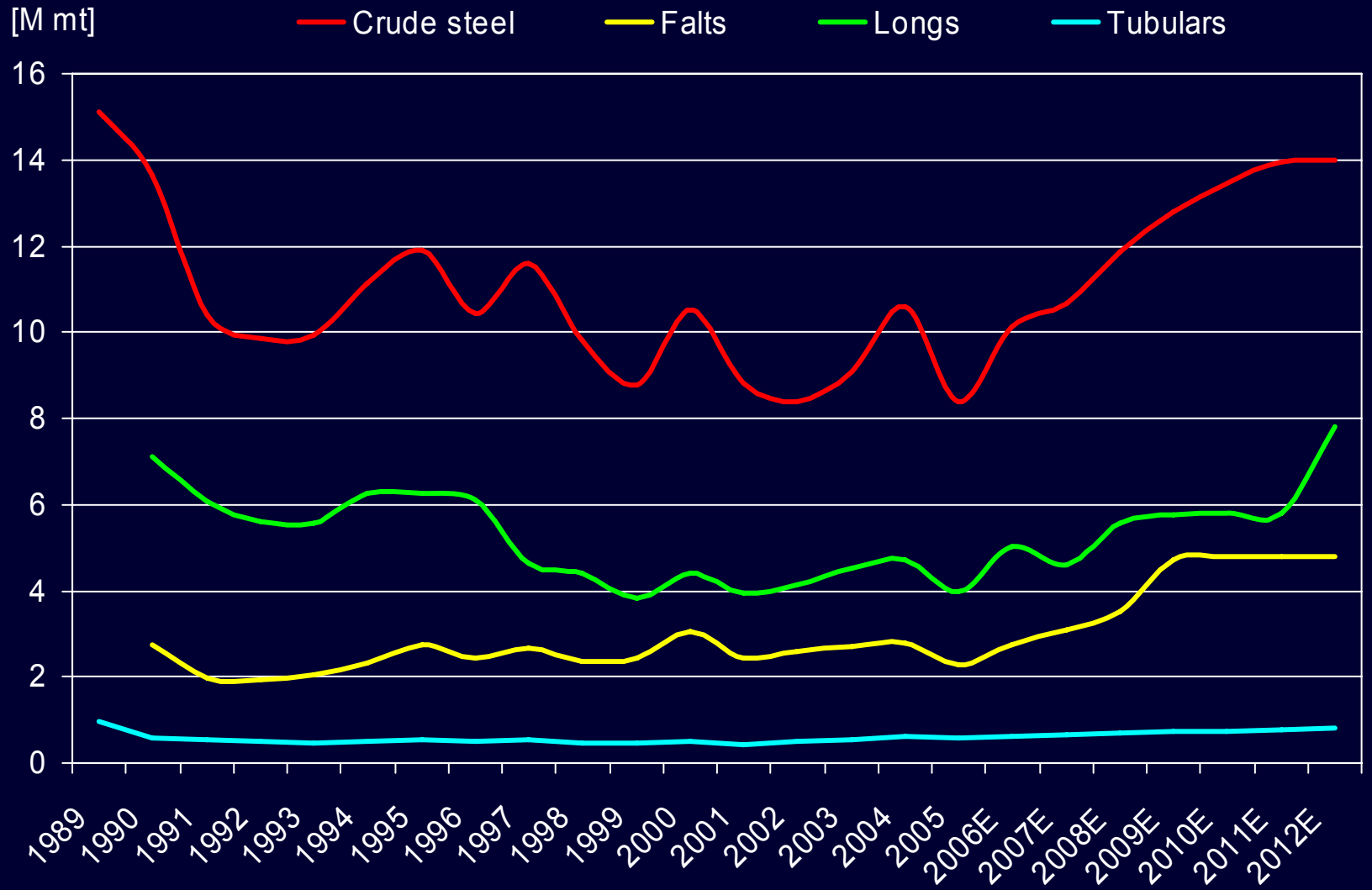


	Poland	World
Energy consumption	27 GJ/ton crude steel	20 GJ/ton crude steel
CC	8%	>80%
Finished products to semis ratio	very low	high

	Poland	World
Energy consumption	< 20 GJ/ton crude steel	< 20 GJ/ton crude steel
CC	≈ 80%	>80%
Finished products to semis ratio	low	high

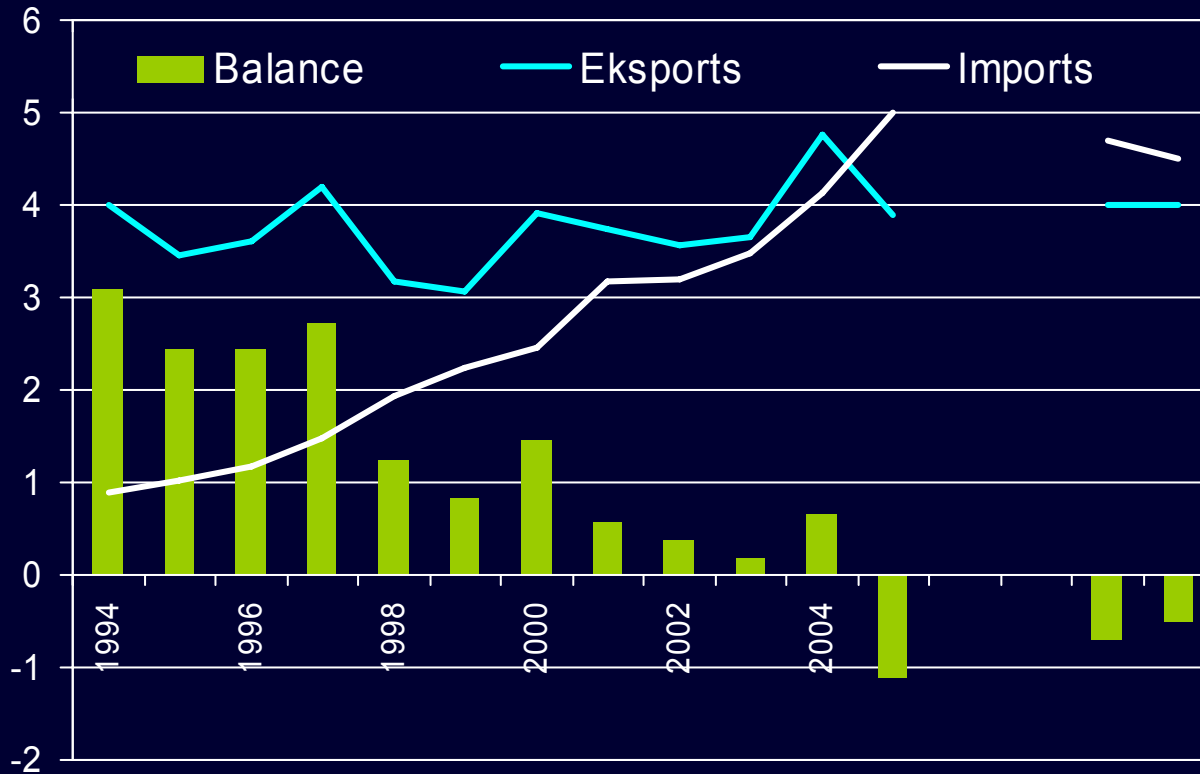


Production of crude steel, flats, longs and tubulars from 1989 to 2012E [M mt]



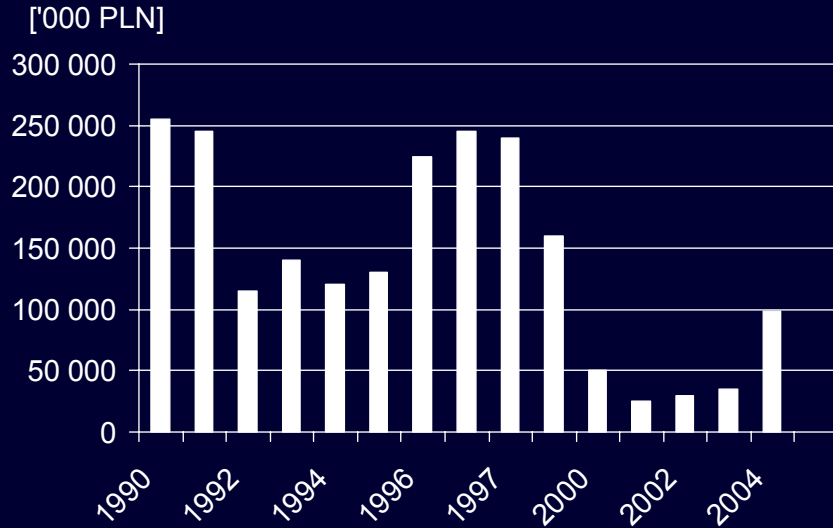
Foreign trade of finished products [M mt]

[M mt]

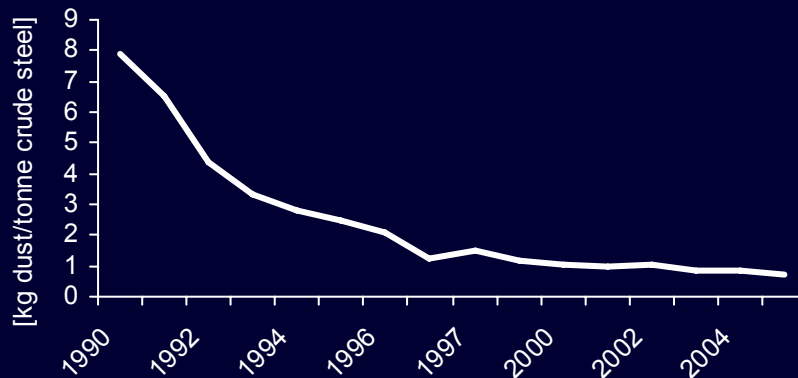


Supply shortages in flat products from domestic manufacturers versus foreign currency advantage to imports

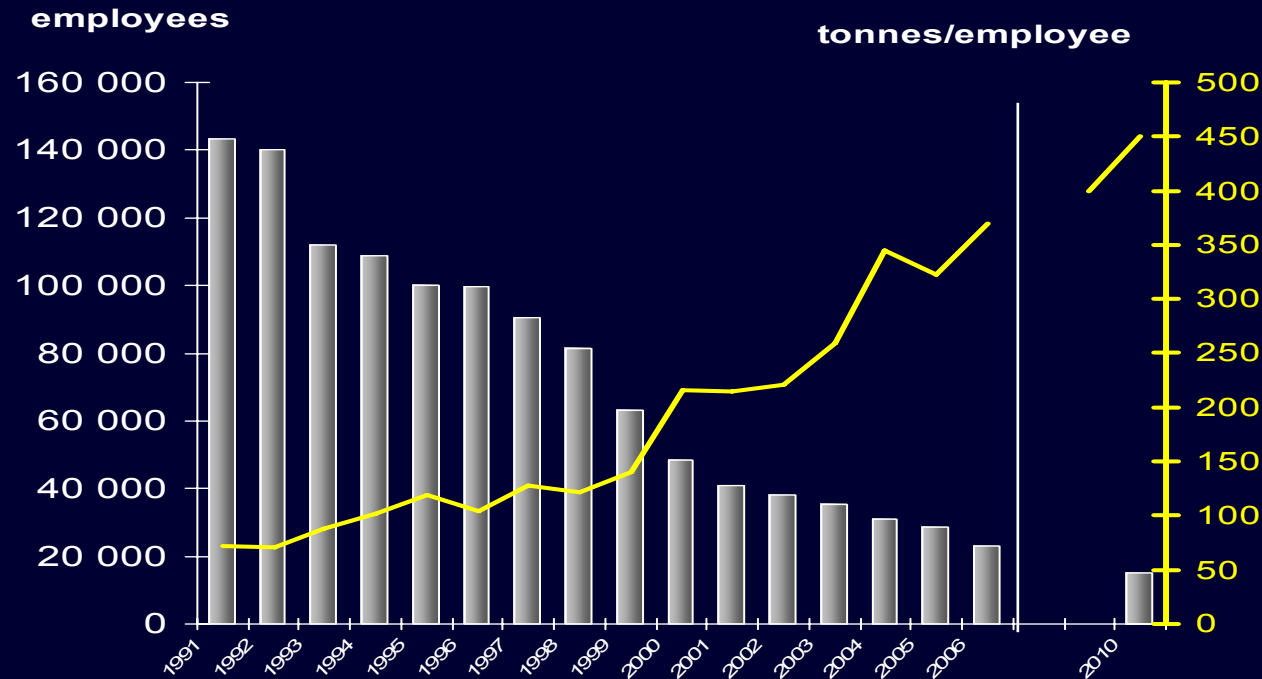
Spending to environmental projects vs. changes in dust emissions in 1990-2005



2000 – 2003: Asian crisis limited growth opportunities for Polish steel, too



1990-2005: dust emissions reduced 10-fold



Productivity down in 2005 – as a result of lower output

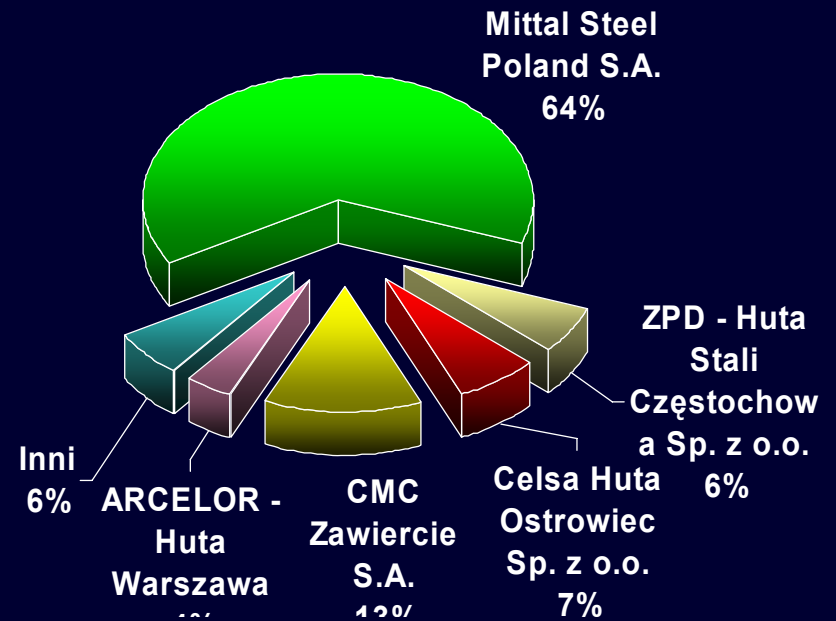
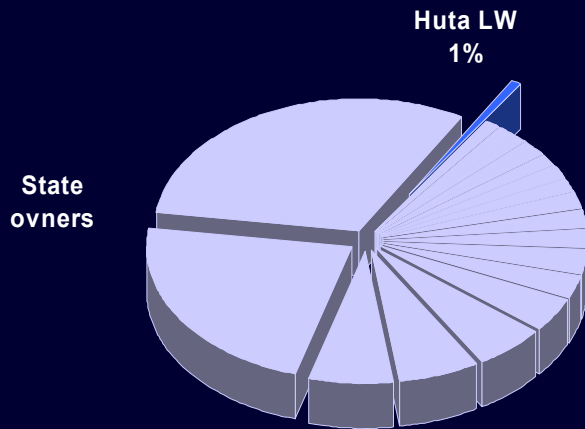
Reduction of employment by: Retirement, Re-employment in spin-off & Redundancy

Implementation of a social protection package

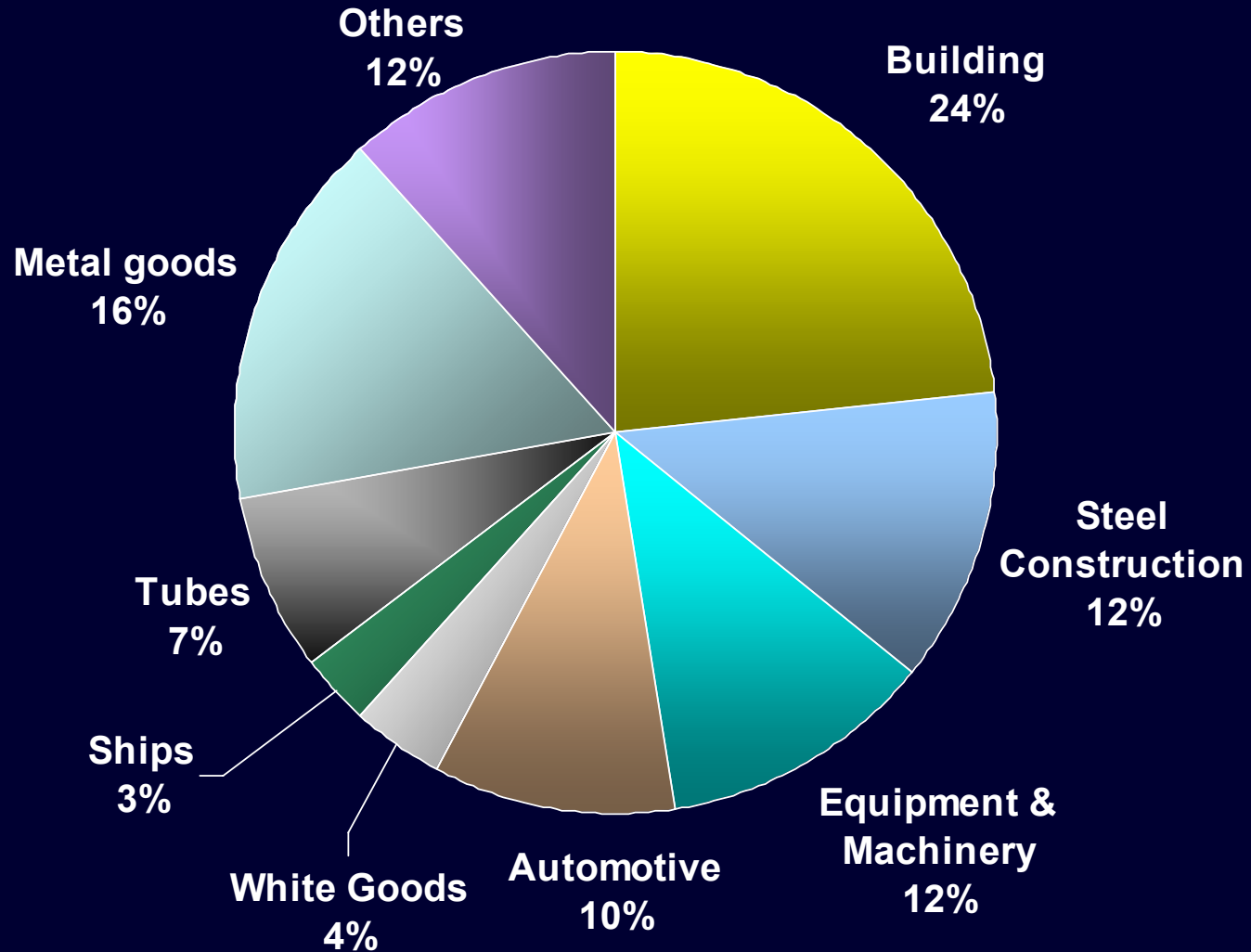
Development of a system & organization responsible for retraining

1990

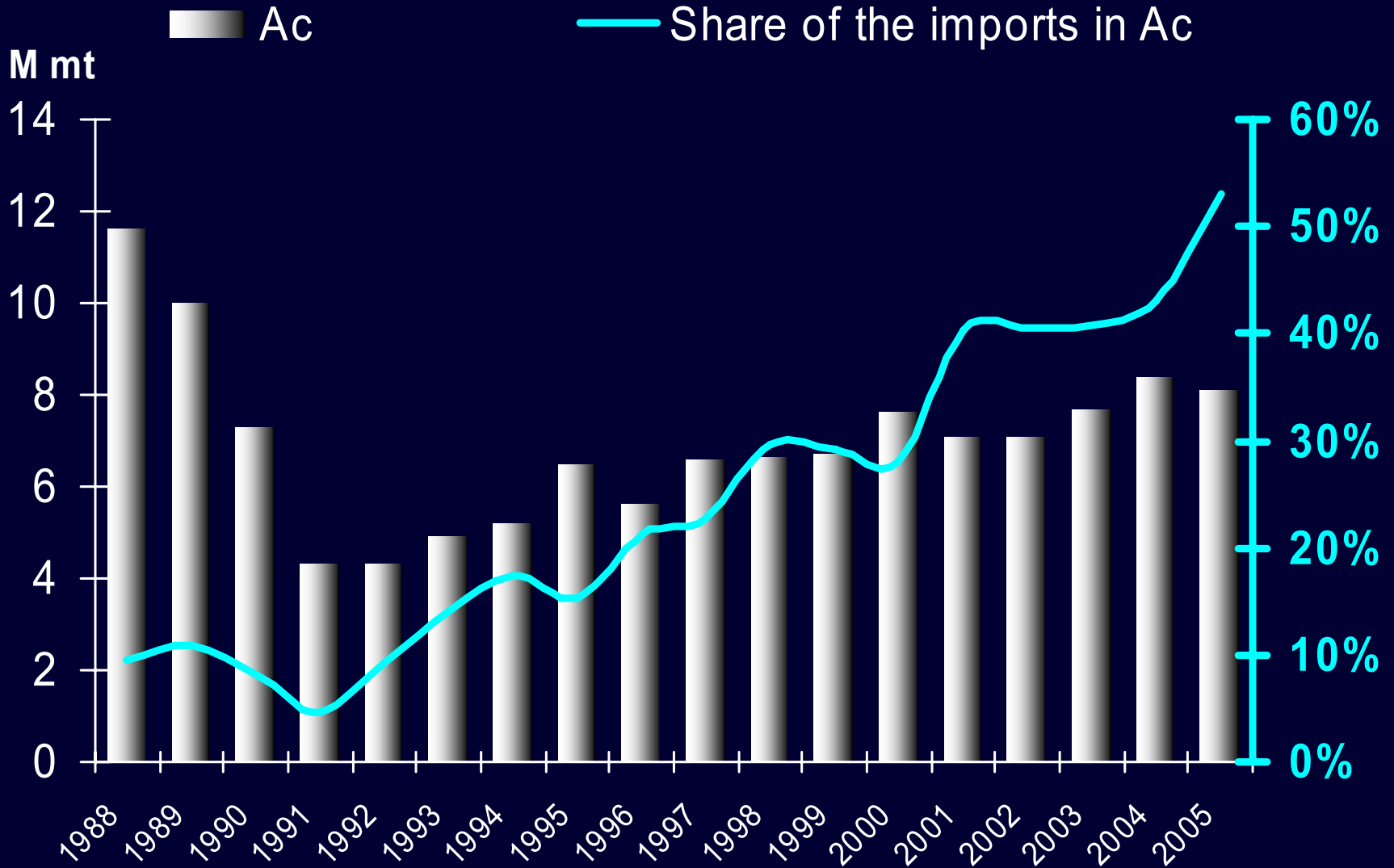
2005



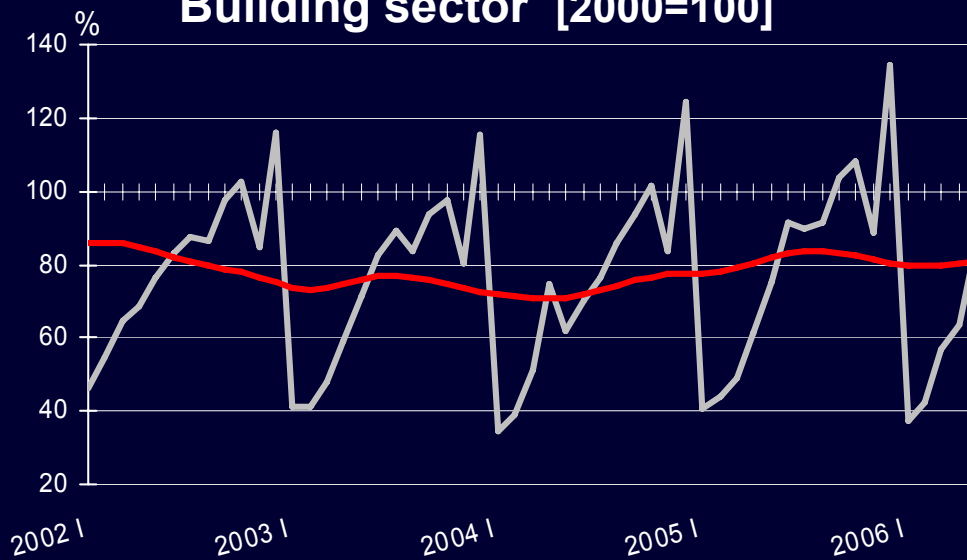
Consuming sectors



Share of the imports in Apparent Consumption (Ac) in 1988-2005

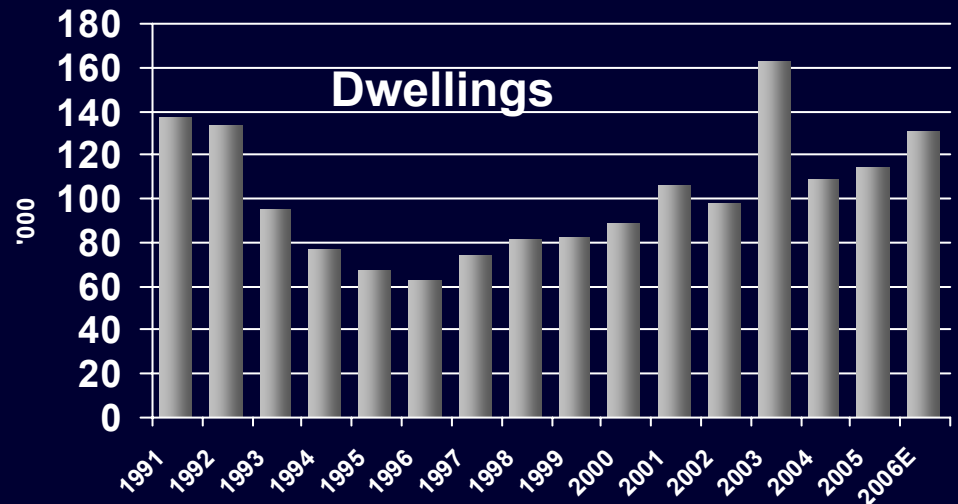


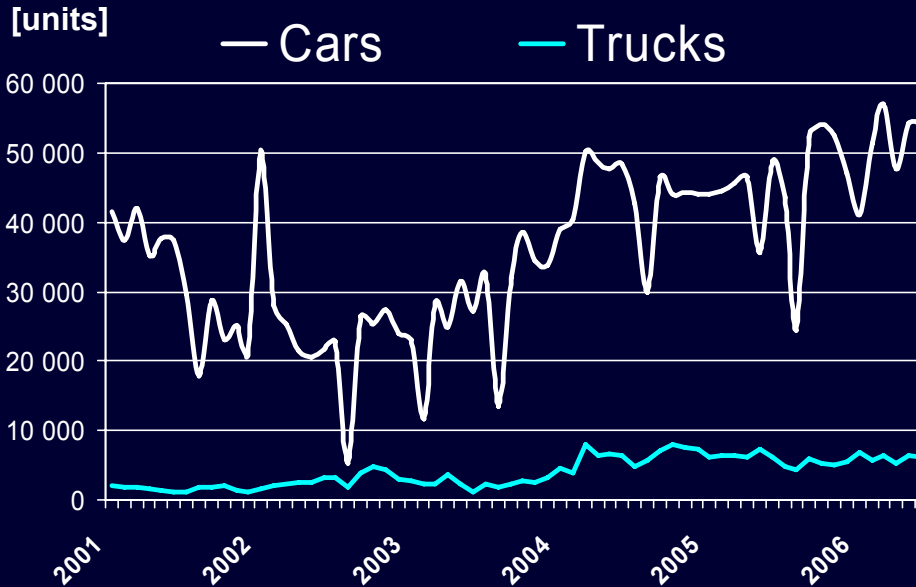
Building sector [2000=100]



Building sector continues to be a rather potential than factual sector to drive steel consumption in Poland

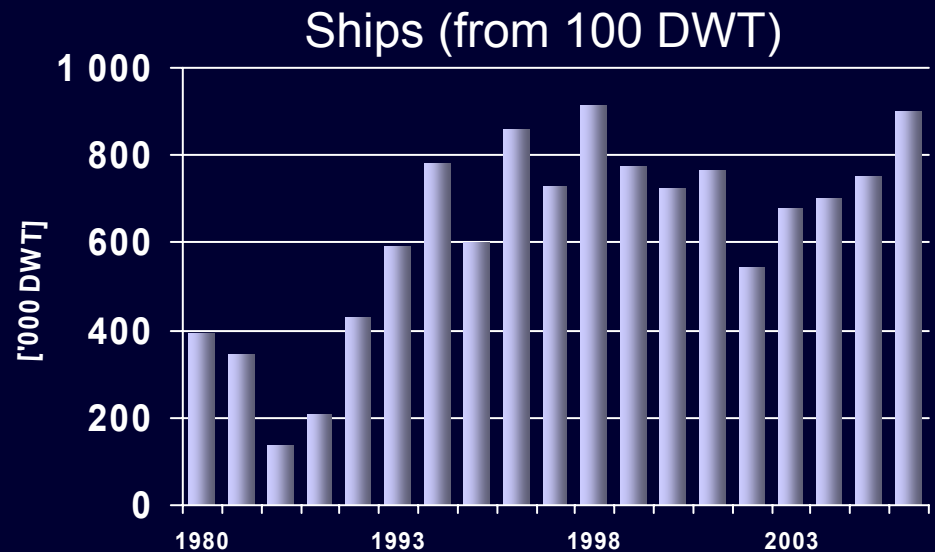
In coming 8 years, 3 million new flats are expected to be built by Polish Government



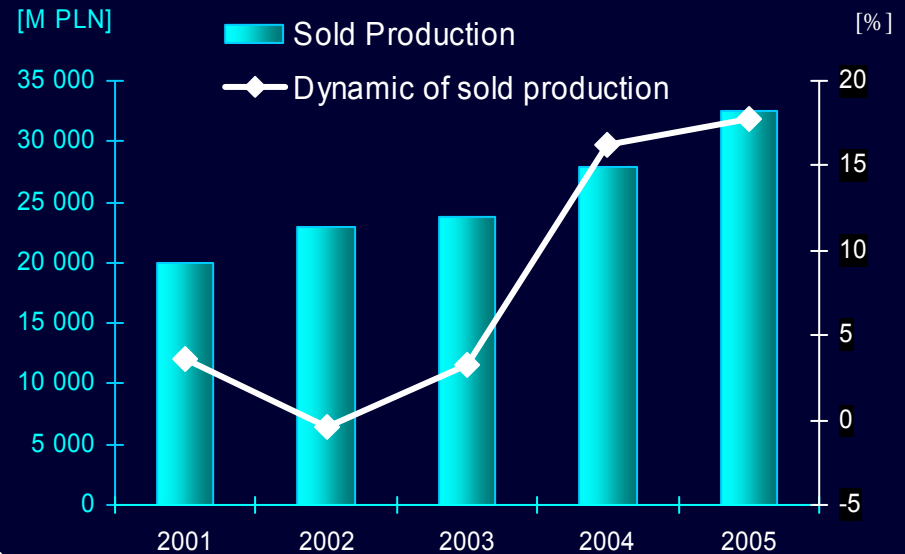
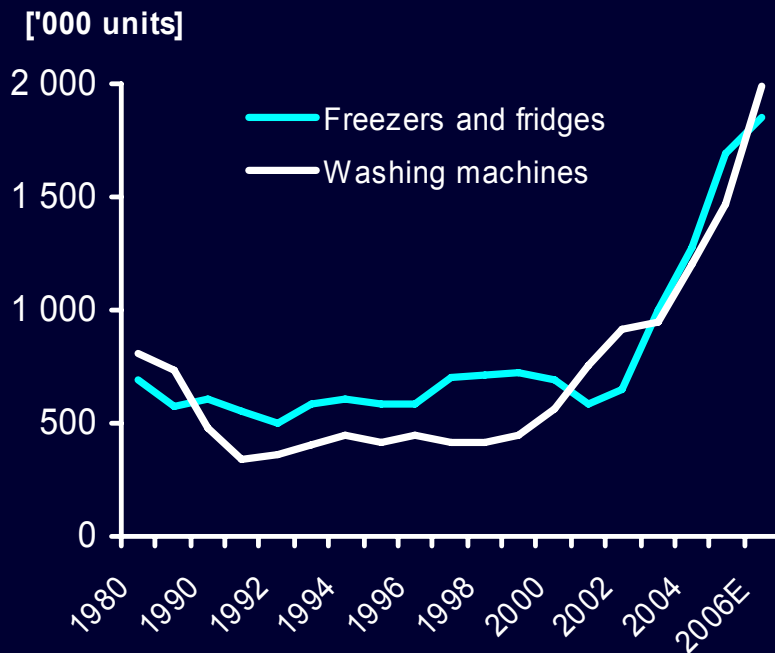


Cars and trucks production is growing, but the growth rate is lower than that of our southern neighbours: Czech and Slovak republics

Ships (from 100 DWT) – outlooks are good, notably with specialist and niche vessels



Machinery - sector which to drive steel consumption in Poland



White goods output increase after 2000 is the result of foreign investors coming to Poland

Conclusions

1990-2004 = very hard transition period of restructuring for Poland!
Main reasons:

- * EU criteria: each country restructuring plan must be agreed by:
GVT + Unions + Steel Managers!

- * Insufficient protection of Accession Countries markets against EU exports

- * EBRD loans for restructuring follow EU restructuring plan agreement

- * Accession Countries changing Gvts., afraid of socially/financially unpopular consequences, do not play their role of restructuring leaders.

- * Transition socially painful and financially expensive



Polish Steel Industry – main differences before and after restructuring

	≤ 1990	≥ 2004	Remarks
Supply/demand	Offer ≤ Demand	Ofer ≈ Demand	Strong capacity reduction - 50% more than
Owners	State	Private owners	
Main end - users	Armaments + Infrastructure	≈ EU	
Mix product	Long >> Flat	Long > Flat	Objective: Flat 60% total
Steelworks	Majority: open hearth	Majority: BOF + EAF	

	≤1990	≥2004	Remarks
Steel distribution (SSC+SSH)	By steel producers or end users	Between the two (in process)	
Ecology/ Environment	Secondary	Became important	Strong emission reduction
Profits	Volumes over profits	Cash rules	



Thank you for your attention

Polish Steel Association Hutnicza Izba Przemysłowo-Handlowa

ul. Lompy 14, 40-040 Katowice, Poland

tel. +48 32 788 77 77

fax +48 32 788 77 78

www.hiph.org

hiph@hiph.org

