

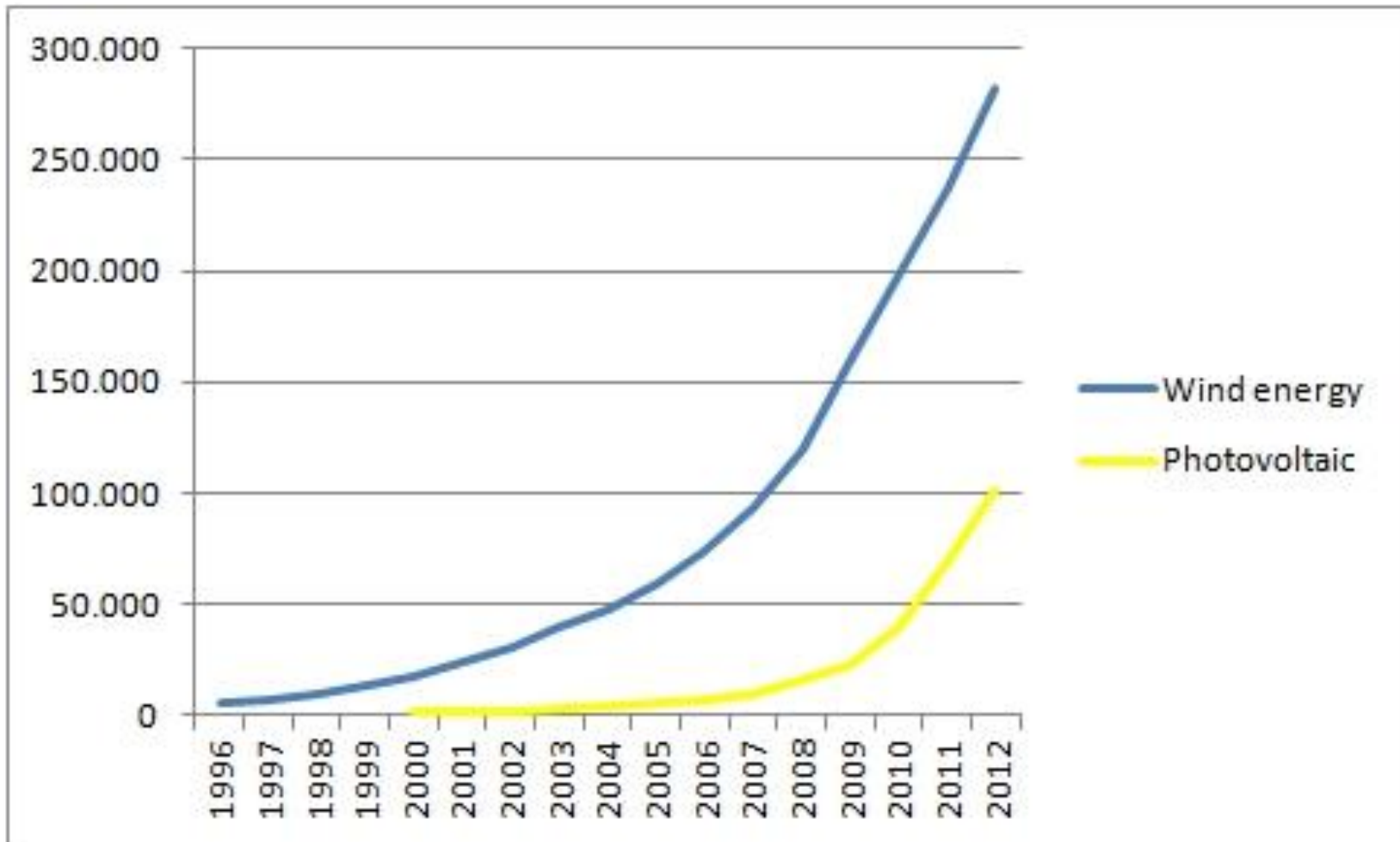
Towards a new power system.

Is Poland staying behind?"

Recent developments

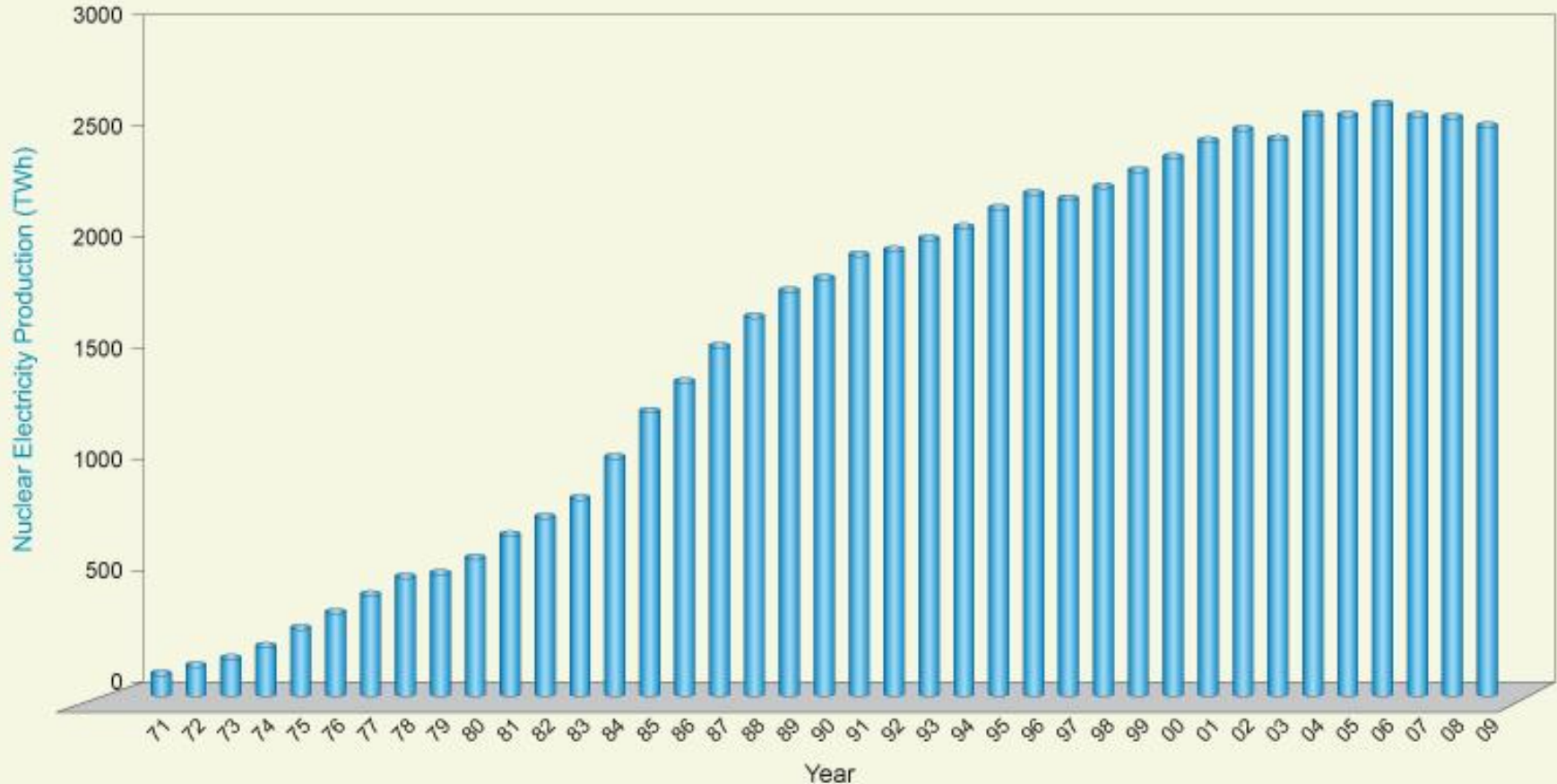
- Renewable sources of energy are not anymore the specialty of developed countries: China, India are joining the bandwagon
- New industry instead of „deindustrialization“
 - 1.186.460 jobs in renewable energy sector in 2011 in the EU-27
 - €137.274.000.000 turnover

Global installed capacity in MW

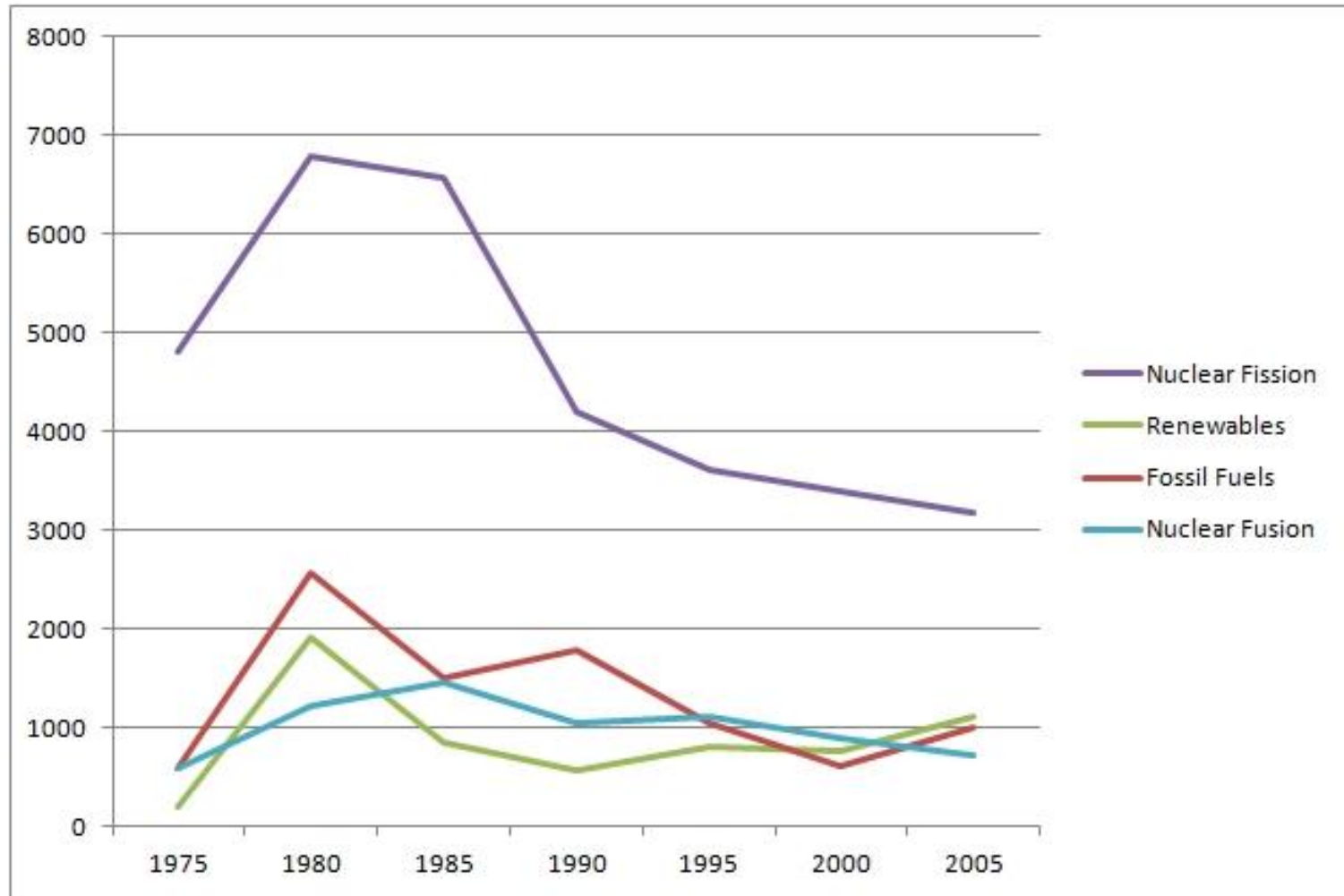


Nuclear Renaissance...?

Nuclear Electricity Production



Subsidies in R&D in mln €



Why is a change necessary?

- New phase of civilizational development – *sustainable development*
 - Depletion of fossil fuels
 - Climate change
 - Energy independence
 - Economic development
- Empowering middle class and local communities
 - The notion of *prosumers*
 - Thousands of small enterprises (installators, maintenance, *internet of energy*)



The challenges

Intermittent character of RES-E

- Solutions:
 - Interconnections
 - Storage
 - Flexible sources of energy: hydro and biomass
 - Demand management => smart metering
 - Some conventional fuels for the transition period

The costs

- The prices of PV Panels fell by 80% and wind turbines by 29% in the period 2008-2012
- German feed-in tariffs for PV fell from €0,50 to €0.09
- The benefits of scale will lead to further price decrease in the future

Policy, not the money is the issue!!!

- The sources of instability
 - The character of the support mechanism
 - Legal instability
- The impact of instability
 - Discourages companies from investment in R&D
 - Makes it more expensive to get financing for an investment
 - Strenghtens the dominance of big players