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Problems of Sustainable and Innovation Policy in Ukraine

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Economic situation in Ukraine in recent years

- Huge decline in production and foreign trade in 2014-2015 (decline of trade: more than 40% with Russia, more than 25 % - with the EU)
- The country have reached less than 70% of the GDP level of 1990. This year we expect 0% 1½% growth according to different estimates ('slow recovery')
- Negative structural changes: the share of machine building sector declined from 30% of industrial output in 1990 to less than 10% in 2015
- More than 30% of the total export are products of the ferrous metallurgy sector in recent years, only in 2014 agricultural export surpassed export of ferrous metallurgy (34% against 26%).

Situation in ecological and social spheres

- Ecological problems are deeper than in neighboring countries
- Energy consumption per GDP unit is approximately 3.5 times higher than in CEE countries
- Life expectancy is 67 years (74 in Poland, 80 in Sweden), and the situation is worsening in recent years due to economic crisis.
- According to UNESCO data, Ukraine possesses 95th place among 122 countries on indicators of rational water consumption

Situation in ecological and social spheres -2

- 20% of land is contaminated in different ways
- Huge wastes, especially in industrial regions of the East of the country
- There is no special list of dangerous objects at the state level in Ukraine
- A number of enterprises do not follow ecological norms
- Chernobyl remains a serious problem (delays with 'Ukritie' construction)
- Armed conflict in the East of the country has highly negative impact on the ecological situation

Key political initiatives of the Ukrainian authorities

- Strategy of the State Ecological Policy of Ukraine till 2020 (Law N 2818-VI, dated December 21st, 2010)
- Program of Reforms of President Poroshenko, 2014 (it contains several positions, related to sustainable development)
- National plans in different sectors (Energy)
- New draft laws on innovation, technology transfer, S&T (this one passed Parliament already)

Strategy of the State Ecological Policy of Ukraine till 2020

- Key objective of the Strategy is stabilization and improvement of natural environment in Ukraine by the integration of the national ecological policy into broader context of social and economic policy. This will open the way for healthier, safer life, introduction of ecologically balanced system of utilization of natural resources and preservation of natural environment.
- Regional dimension and public support of the Strategy are critically important for its success

Key tasks of the Strategy 2020

- Broad dissemination of ecological information
- Creation of special databases on ecological situation in the regions of Ukraine
- Introduction of ecological education at different levels
- Creation of the system of special regional centers for ecological monitoring
- State support of introduction of energy—saving technologies

Specific goals of the Strategy 2020

- Decline of the level of air pollution by 10% till 2015 and by 20% till 2020
- Decline by 15% of water contamination till 2020
- Growth of territories of forests to 17% of the total territory of the country (less than 14% in 2011)
- Shrinking of agricultural lands by 10-15 % till 2020
- Growth of utilization of consumer wastes by 50% in 2020

Positive impact of the Agreement on Association with the EU (2014)

- The need to follow international standards in ecological sphere, including ISO 14000 and ISO 19000
- EU Drective on prevention and control over contamination ('IPPC' 96/61/EC Directive) will be introduced
- Introduction of ecological insurance
- Changes in the national legal system, aimed at its harmonization with the EU norms

Scoreboard Indicators for Ukraine - 2014-2015

	Indicator	2011	2012	2013	2014	2015
	Non-R&D innovation expenditures					
2.1.2.	as percentage of turnover	0,8	0,6	0,9	0,7	0,5
	SMEs innovating in-house as					
2.2.1.	percentage of SMEs	_	-	_	19,6	18,7
	Innovative SMEs collaborating with					
2.2.2.	others as percentage of SMEs	_	-	-	1,7	1,5
	PCT patents applications per billion					
	GDP (in Purchasing Power Standard					
2.3.1.	€)	9,3	7,9	7,2	7,6	8,9
	Community trademarks per billion					
	GDP (in Purchasing Power Standard					
2.3.3.	€)	0,1	0,1	0,1	0,1	0,1

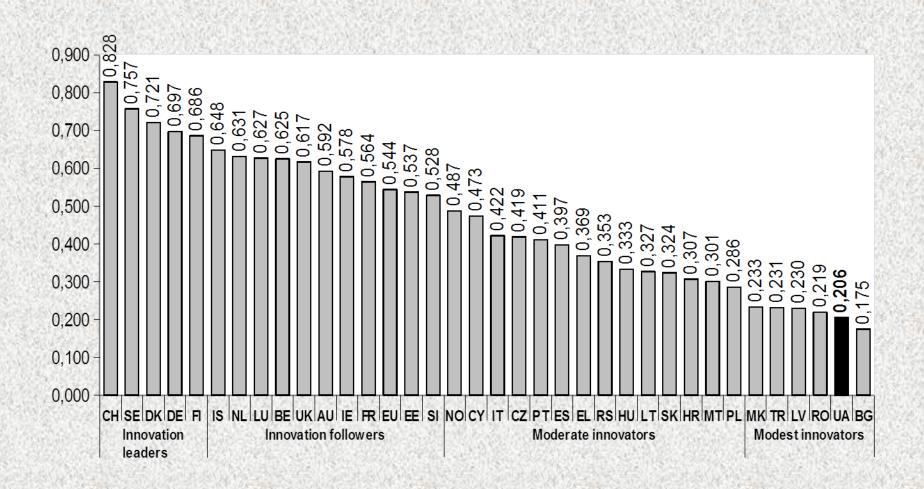
Scoreboard Indicators for Ukraine - 2014-2015

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	2011	2012	2013	2014	2015
New doctorate graduates (ISCED 6)					
1.1.1. per 1000 population aged 25-34	1,0	1,0	1,0	1,0	1,0
Percentage population aged 30-34					
1.1.2. having completed tertiary education	_	-	_	47,3	50,3
Percentage youth aged 20-24 having					
attained at least upper secondary					
1.1.3. level education	_	_	_	58,0	61,7
Venture capital investment as					
1.3.2. percentage of GDP		_	_	_	0,002

Scoreboard Indicators for Ukraine - 2014-2015

	Indicator	2011	2012	2013	2014	2015
3.1.1.	SMEs introducing product or process innovations as percentage of SMEs	_	_	_	7,8	7,4
	SMEs introducing marketing or organisational innovations as					
3.1.2.	percentage	-	-	-	11,2	10,5
	Employment in knowledge-intensive activities (manufacturing and services)	10.1	44.0	100		1.0
3.2.1.	as persentage of total emloyment	12,1	11,9	12,2	15,1	12,9
3.2.3.	Knowledge-intensive services exports as percentage of total service exports	28,4	24,9	25	28,8	38,9
3.2.4.	Sales of new to market and new to firm innovations as percentage of turnover	4,8	3,8	3,8	3,3	3,3

Summary innovation index for EU, Ukraine and possible competitors 2014.



Key problems of the modern Ukrainian S&T and innovation -1

- The key contradiction is that the government and business do not utilize existing S&T potential (which is shrinking every year), and does not create adequate conditions for transformation of research system to adjust it to new realities.
- Ukrainian legal system in R&D and innovation area is not harmonized, as some lobbying groups with the help of the Law on Budget could stop implementation of the most important clauses of the laws, which are aimed at support of innovations.

Key problems of the modern Ukrainian S&T and Innovation -2

- R&D and innovation-related programs are numerous, and in the past it was difficult to find money for their realization. It is much better to have less programs that will receive better financing.
- Ukraine has very few American or EU patents, if compare with other countries of the region, even with countries of smaller size. Partially, it could be explained by relatively high costs of patenting in these countries but the state has no special program of support patenting abroad, despite discussion about such program is still continuing in Ukraine.

Key problems of the modern Ukrainian S&T and Innovation -3

- State agencies that have to support R&D and innovation have overlapping functions, which are not clearly defined. The procedures of evaluation and selection of R&D and innovation projects are not transparent and fair for potential participants, some of them could receive substantial advantages thanks to their direct influence on the results of the competition.
- Support of specialized instruments and elements of R&D and innovation infrastructure are not very effective
- Low level of co-operation with foreign countries in R&D and innovation sphere

Thank you for your attention!