

# An analysis of social effects of climate and energy usage modernization. Europe case.

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Introduction to environment and social response

- Environment a key differentiation factor and an emblematic matter of the century
- Concerted European efforts to reach a smart sustainable and inclusive economy.
- Social and economic integration increase in quality and life standard, health and well-being of individuals knowledge transfer, improved environmental quality, neighborhood restoration, and reduced health risks from pollutants associated with building energy use.
- Important gateway for a more inclusive Europe
- Selected social outcome the evaluation of "green" labor market at the level of EU, focus on the Danube region – selected case Romania.

## Environmental modernization and social response

- A theory of social change, ecological modernization suggesting we have entered a new industrial revolution, one of radical restructuring the production, consumption and political discourses along ecological lines (Mol, 1995; Hajer, 1995; also Mol and Spaargaren).
- Consequences and future steps of society in terms of ecologic actions
- Resolving environmental problems through 'harmonizing ecology and economy' (Spaargaren and Mol, 1992), including RES.
- Feasible for developed but also relevant for developing countries.

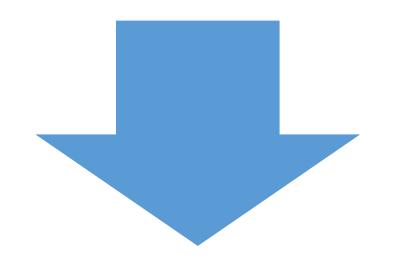
Ecology impacts differentially the society

Economic systems benefit both economically and socially

\* Pye at all, 2008

 Transforming the production mechanisms through innovation, resource efficiencies, change patterns in social value orientations, skills, knowledge, preferencies (Spaargaren and Mol, 2000)

## A two dimensional approach of EMT



#### Social ecologic decisions:

Change in consumption patterns; Shift in priorities;

Social values orientations: Life quality and satisfaction;

Concern for environmental degradation;

Change in technological capital use => new skills.

#### **Un-sustainability:**

Environmental destruction through conventional capitalist economic systems; Significant financial efforts to sustain investments; Resource and extraction efficiciency; Pollution burden.

\* Smith et all (2011), Mol (1995), Mol and Spaargaren (1992, 2000), Pye et. all (2008), Hajer (1995)

## Smart, sustainable and inclusive Europe

#### Europe 2020 strategy transition towards 3 mutually reinforcing priorities

•	Targets	Flagship initiatives	
Smart growth	<ul> <li>Increasing combined public and private investment in R&amp;D to 3 % of GDP</li> <li>Reducing school drop out rates to less than 10 % and increasing the share of the population aged 30 to 34 having completed tertiary education to at least 40 %</li> </ul>	<ul> <li>— Innovation Union</li> <li>— Youth on the move</li> <li>— A digital agenda for Europe</li> </ul>	
Sustainable growth	<ul> <li>Reducing greenhouse gas emissions by at least 20 % compared to 1990 levels</li> <li>Increasing the share of renewable energy in final energy consumption to 20 %</li> <li>Moving towards a 20 % increase in energy efficiency</li> </ul>	— Resource efficient Europe — An industrial policy for the globalisation era	
Inclusive growth	<ul> <li>Increasing the employment rate of the population aged 20 to 64 to at least 75 %</li> <li>Lifting at least 20 million people out of the risk of poverty and social exclusion</li> </ul>	<ul> <li>— An agenda for new skills and jobs</li> <li>— European platform against poverty and social exclusion</li> </ul>	

 European Commission: "Europe is on its way to meet or close enough on education, climate and energy, but not on employment, R&D and poverty reduction" (March 2014).

# Research methodology

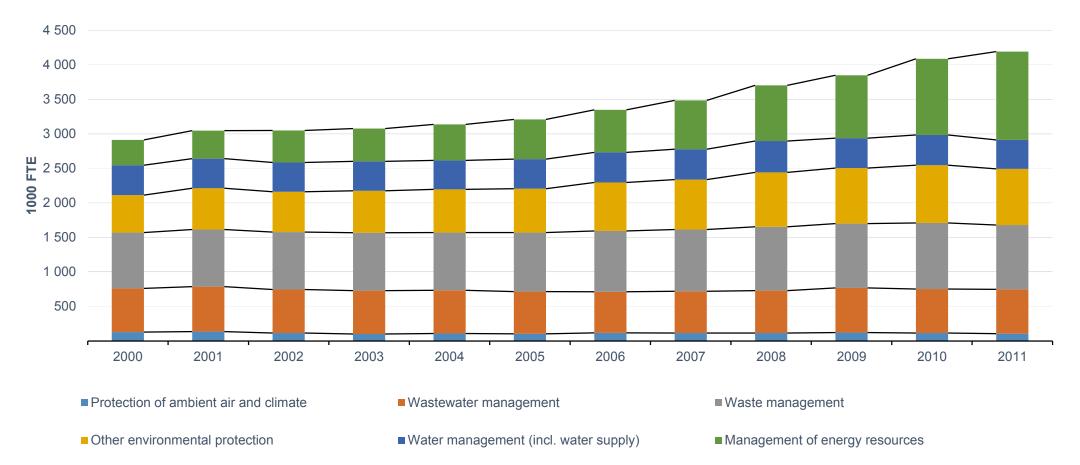
 Evolution of the most environmental employment relevant data for EU28, selected Danube region countries and Romania

 Illustrated analysis through statistical and graphical data management (dynamics and intensity)

Data sources: Eurostat, National statistics Offices and Green Jobs Country Report, 2014.

## A trend towards the "green" labor market

- EU28 employment in the environmental goods and services sector
- 2013 42% of employed persons were working in environmental productive sector



Source: Eurostat, http://ec.europa.eu/statistics\_explained/index.php/Environmental\_goods \_and\_services\_sector

## "Green" labor market in Danube region.

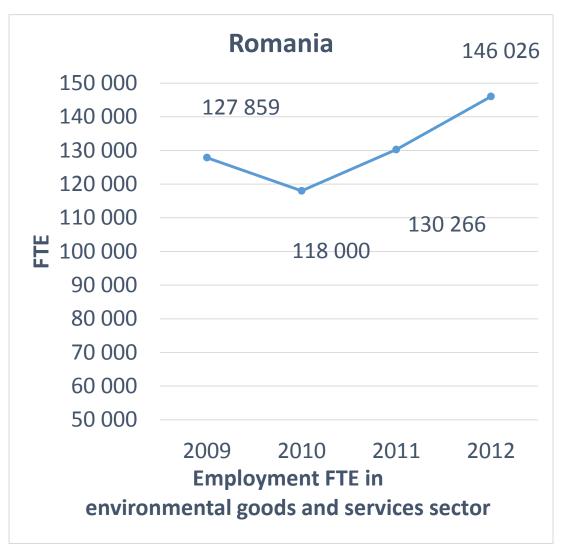
- Development of a "green" labor market in compliance with EU 2020
- Jobs are created with significant social costs, destabilizing the old systems
- Most of the Danube countries pass a transition process from communism to capitalism, from standard coal resources to RES

Employment (FTE) in environmental goods and services sector selected Danube region countries

Green jobs (Full Time Equivalent)						
Country	2009	2010	2011	2.012	% over 2009 - 2012	
<b>EU28</b>	3.934.000	4.068.000	4.181.000	4.282.000	8,85%	
DE	347.973	385.576	421.006	421.006	20,99%	
AT	169.589	170.192	171.245	173.702	2,43%	
RO	127.859	118.000	130.266	146.026	14,21%	

Sources: Eurostat, 2014, http://www.statistik.at/, https://www.destatis.de/ EN/Homepage.html and http://www.insse.ro/cms

# "Green" labor market in Danube region. The case of Romania.



- Towards reaching the full benefits from a cohesion economy.
- Slight increase due to tight market by repressive effects of economic crisis.
- 1,5% of total employed population in environmental sectors
- Constant increase of the productive systems of renewable energy and resource effciciency.

# Closing remarks

- Concerted efforts to stimulate the green sector
- Sligh but sure movements of green jobs, showing an upward trend
- Significant differencies in terms of green jobs mostly influenced by welfare performance
- Transition visible in the Danube region by lower levels of green employment
- Socio ecological transition to smart sustainability and inclusiveness is moving on, according to the strategic plan

## Thank you for your attention!