



# EU SUSTAINABLE ENERGY WEEK 18-22 JUNE 2012

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20.06.2012

## ACHIEVEMENTS DURING THE PROJECT

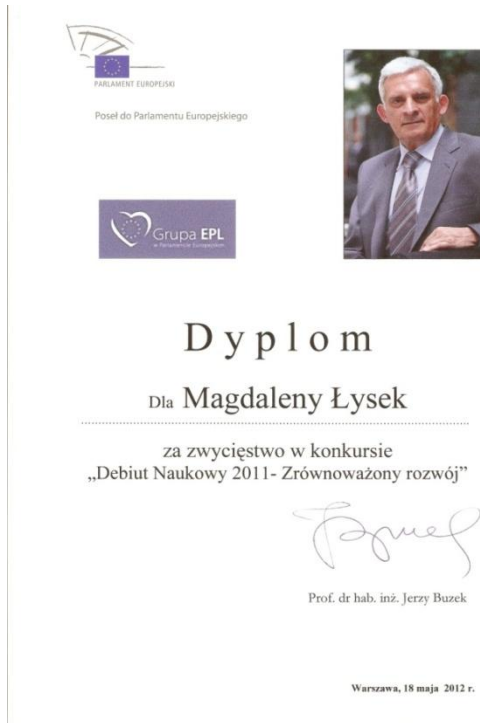
### "Bioenergy for the Region - Programme for PhD Students Development"

#### Publications:


- Legal basis for the incineration of waste as an alternative energy source
- Natural risk assessment in renewable energy investment
- Model of investment regulation in renewable energy in economic environmental protection law
- Energy from waste



# Sustainable development of the European Union energy policy



PARLAMENT EUROPEJSKI  
Posel do Parlamentu Europejskiego




Grupa EPL

## Dyplom

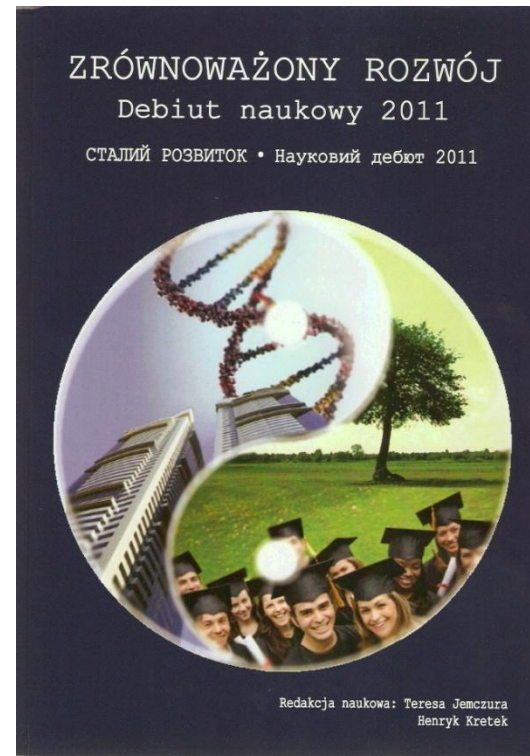
Dla **Magdaleny Łysek**

za zwycięstwo w konkursie  
„Debiut Naukowy 2011- Zrównoważony rozwój”

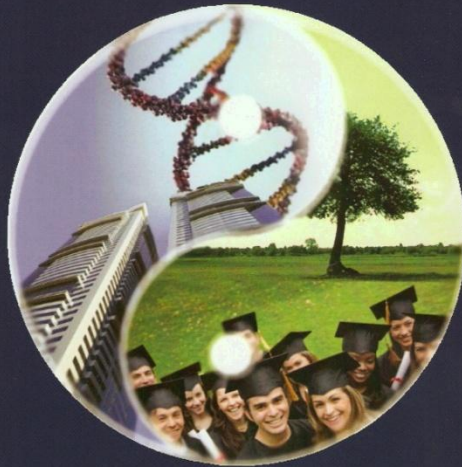


Prof. dr hab. inż. Jerzy Buzek

Warszawa, 18 maja 2012 r.



ZRÓWNOWAŻONY ROZWÓJ  
Debiut naukowy 2011  
СТАЛИЙ РОЗВИТОК • Науковий дебют 2011



Redakcja naukowa: Teresa Jemczura  
Henryk Kretek



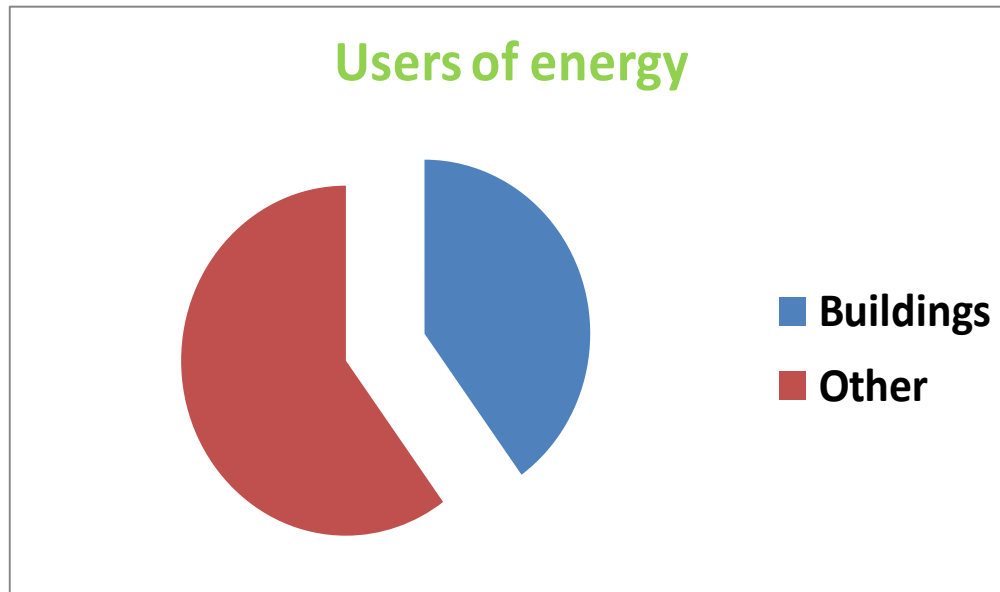
# Analysis of legal determinants for energy-efficient construction development in the context of the energy performance certificate.

- Legal basis for the energy performance of buildings
- The nature and form of the energy performance of buildings
- The energy performance certificate
- The methodology for calculating energy performance of buildings
- The scope and form of the construction project - legal aspects
- Experts qualifications
- Benchmarking - the best measure of indicators to improve the energy performance of buildings
- Building energy efficient in the context of life cycle assessment





European  
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**The most important measures for the Member States are taken to improve the energy efficiency of buildings.**

**It is estimated in this sector energy savings of 1 509 million tones of oil equivalent by 2050.**



## Legal basis for energy certification of buildings

- The decision of the European Parliament and the Council No 406/2009/EC of 23 April 2009
- Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings
- Delegated to the Commission Regulation (EU) No 244/2012 of 16 January 2012



## Legal basis for energy certification of buildings

### Increase the number of nearly zero energy buildings:

- by 31 December 2020 all new buildings
- after 31 December 2018 buildings occupied and owned by public authorities



The European Commission estimates that the homes of nearly zero energy, make that households can save up to 300 euro per year.





## Life Cycle Assessment

is understood as consecutive and interlinked stages of a product from raw material use to final disposal, should be done based on the environmental aspect, which means an element or function of the product that can interact with the environment during its life cycle.





## The energy performance of buildings

Requirements for energy performance of buildings take account of relevant technical, environmental and economic feasibility studies such as:

- decentralized renewable energy supply;
- CHP (combined heat & power);
- district or block heating or cooling;
- heat pumps, if possible before construction begins.





## Energy performance certificate

**Key policy instrument that can assist governments in reducing energy consumption in buildings.**

In Poland, the obligation to obtain an energy performance certificate is from 01.01.2009 for each building to be put into use, rented or sold, and the reconstructed or renovated.



## Energy Performance Contracts

- they offer owners a guaranteed, quantifiable and long-term reduction in energy consumption and energy costs.



- Current energy performance contracts deliver to 30% energy savings.



# Benchmarking - the best measure of indicators to improve the energy performance of buildings

Denmark,

Netherlands,

Great Britain,

Germany,

Italy





## Energy education

**According to Günther Oettinger - EU Commissioner for Energy, energy education is the most profitable investment of the EU.**

- Union financial instruments and other measures are being put into place or adapted with the aim of stimulating energy efficiency-related measures.
- "European energy-efficient buildings" - initiative to promote green technologies and the development of energy-efficient systems and materials in new and renovated buildings.





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**Thank you for your attention!**

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