

Energy Efficiency refurbishment for public buildings - an example from Poland

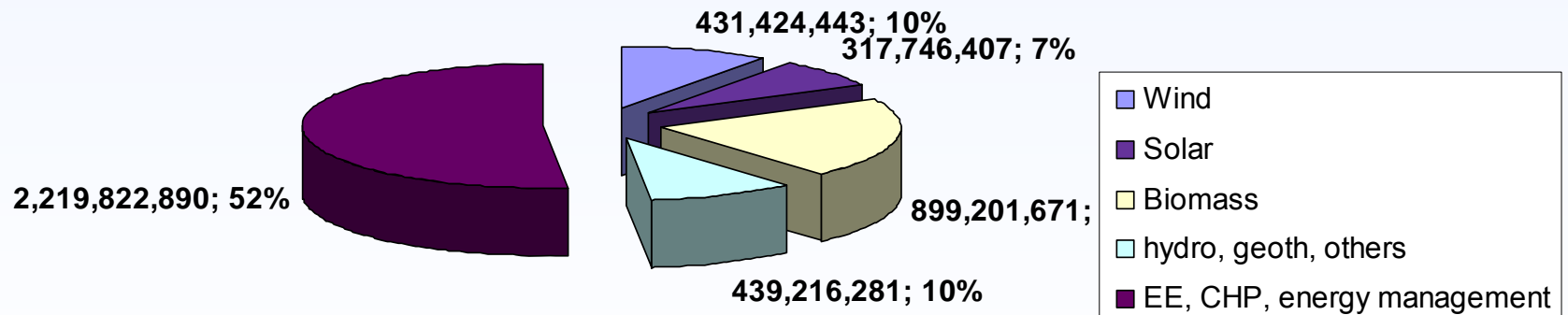
Ralf Goldmann - Jaspers

JASPERS, JEREMIE, JESSICA
**A New Generation of Instruments in European Regional
Policy**
Bratislava, 15-16 October 2008

- *"The regions are essential in reaching ambitious goals in the energy sector through judicious Cohesion policy investment. I am impressed with the imagination that has gone into local initiatives already up and running – they are good examples for others. And I see huge potential for creating sustainable jobs and growth through devising innovative technologies that help reduce our carbon footprint. The sooner regions act, the sooner they can benefit from a low-carbon lifestyle"*

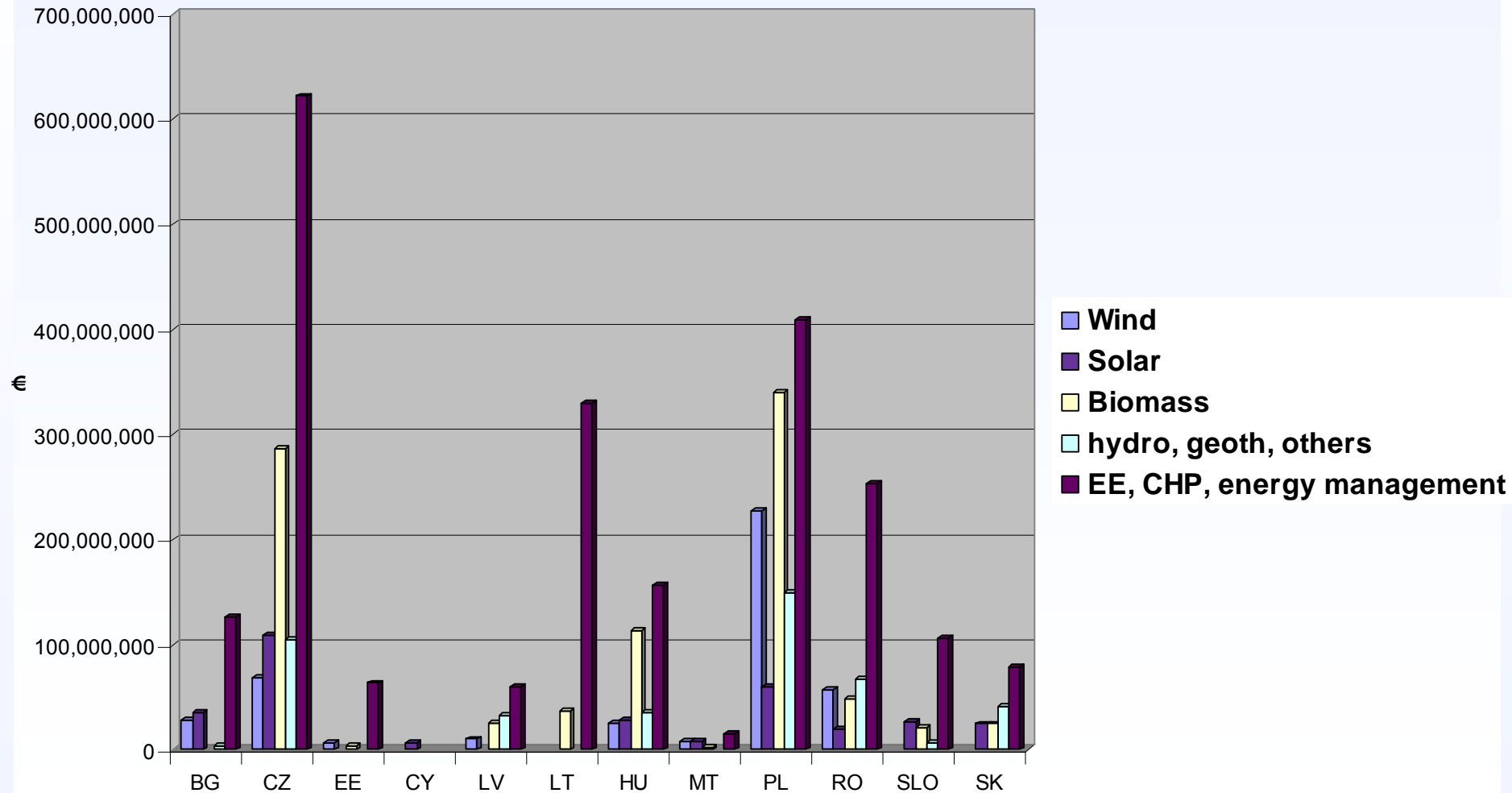
Danuta Hübner

Budget allocation EU-12 for EE & RES



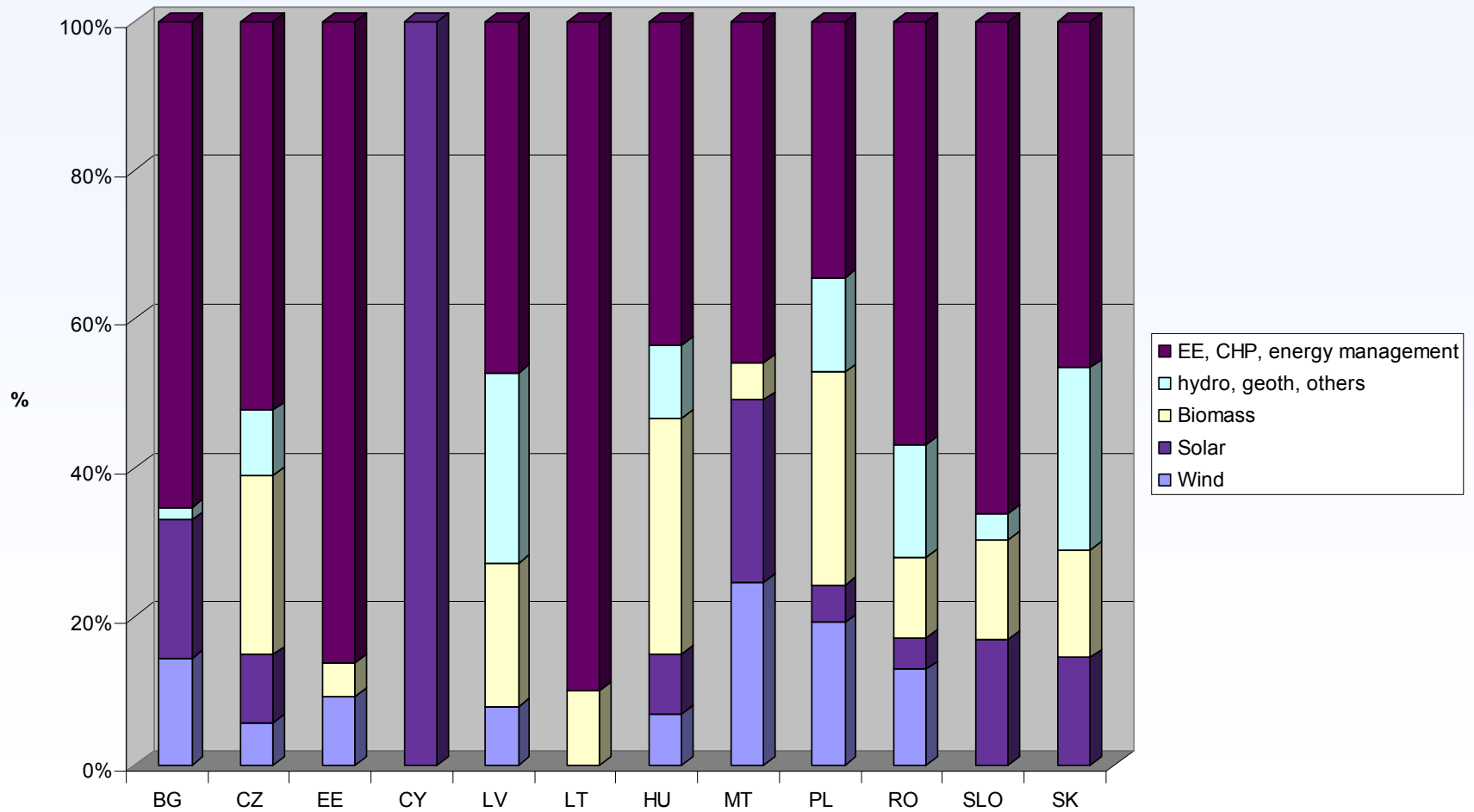
Overview

Allocations per country



Overview

Budget distribution EE & RES per country



- Overall allocations for Energy Efficiency, CHP and Energy Efficiency in the New Member States amounts to 2.2 billion €
- Large energy efficiency potential in public buildings
- Large investment is needed to exploit the potential
- The Warsaw University of Technology wants to start major refurbishment of the main campus

Ecological Revitalisation of Warsaw University of Technology

- thermomodernisation of buildings and modernisation of internal lighting
- limiting the burden of energy costs
- improved comfort of building users
- creation of a sustainable and effective energy management system
- limiting the energy-related emissions
- promotion of efficient use of energy

Ecological Revitalization of WUT

JASPERS Support

- Reviewing proposed technical solutions to keep high innovation standards
- Providing advice and guidance on rules and procedures to avoid unnecessary administrative burden
- Provide consultancy on optimal financing and governing rules
- General review of the proposal to avoid evident errors in application phase
- Input to the structuring of the project implementation (institutional set-up, monitoring..)

Determinants of the investment scope in each building

- Assessment of technical condition of the buildings and the installations related to heat and electricity consumption
 - Performed by energy audits
 - Additional data from site visits and building surveys
- Requirements of funding under Task 9.3 OP IE
 - Eligibility of expenditures
 - Project assessment content-related criteria I
- Financial abilities of WUT

Recommended project scope

- 1. Comprehensive thermal refurbishment measures and modernisation of internal lighting in selected 11 buildings**
- 2. Modernisation of lighting in remaining 9 buildings**
- 3. Thermomodernisation of heat network on the Main Campus**
- 4. Construction of central supervision unit and implementation of Building Energy Management System in the buildings selected for thermomodernisation**

- Review of technical solutions
- Eligibility criteria for project components
- Sources of co-financing
- Discussion on the involvement of a private partner (ESCO) to guarantee level of savings and to provide private sector financing
- Institutional set-up for project implementation

- JASPERS support helped in the identification of feasible project option
- Project scoping difficult under changing environments
- As expected high EE potential, but also high transaction/project development costs
- WUT can serve as an example for other projects in the region