



The current situation of the SHP sector in the EU



Contents

The presentation is based on the SHERPA study finished in year 2008.

1st PART (Tomas Söderlund)

- 1.State of the Art (2006)
- 2.SHP Potential in the EU
- 3.EU Directives and their impact on SHP
- 4.Support systems
- 5.Economics
- 6.Conclusions and recommendations

2nd PART (Petras Punys)

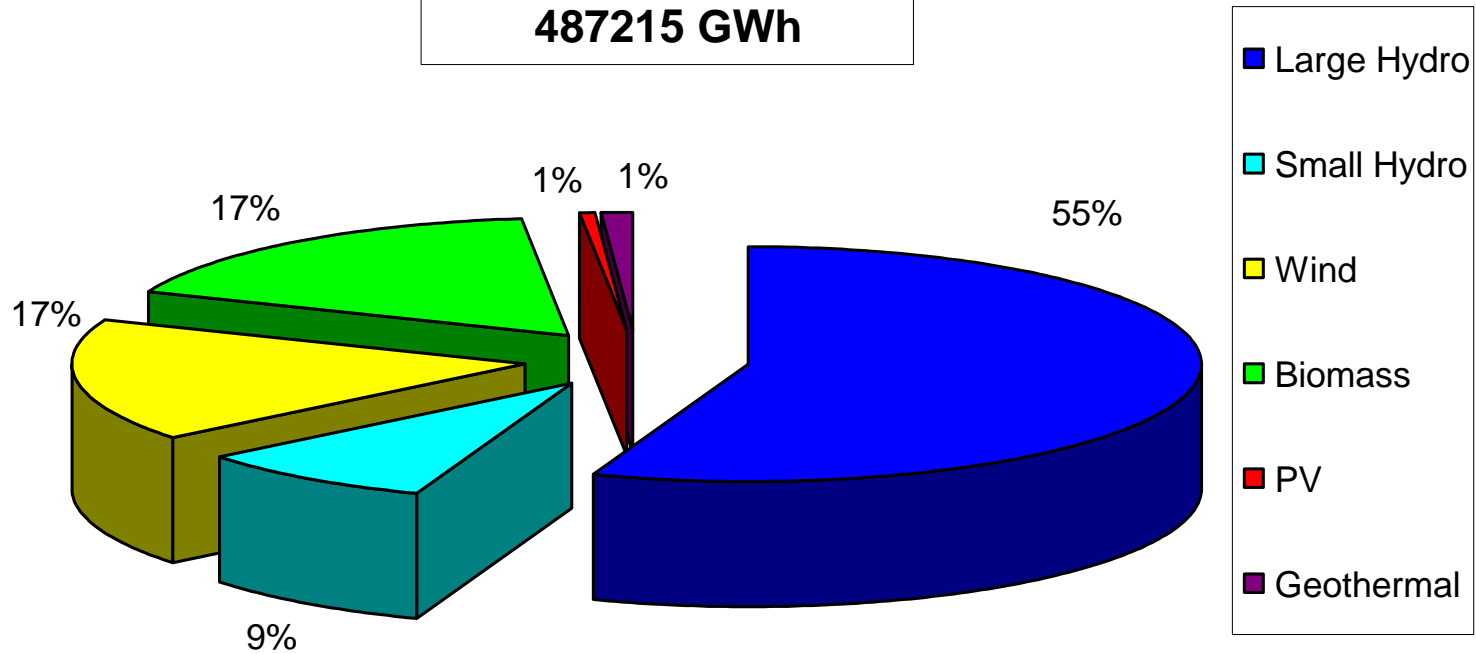
- 1.SHP general Policy framework
- 2.SHP and Environment
- 3.SHP Manufacturing industry
- 4.Social acceptance
- 5.Conclusions and recommendations



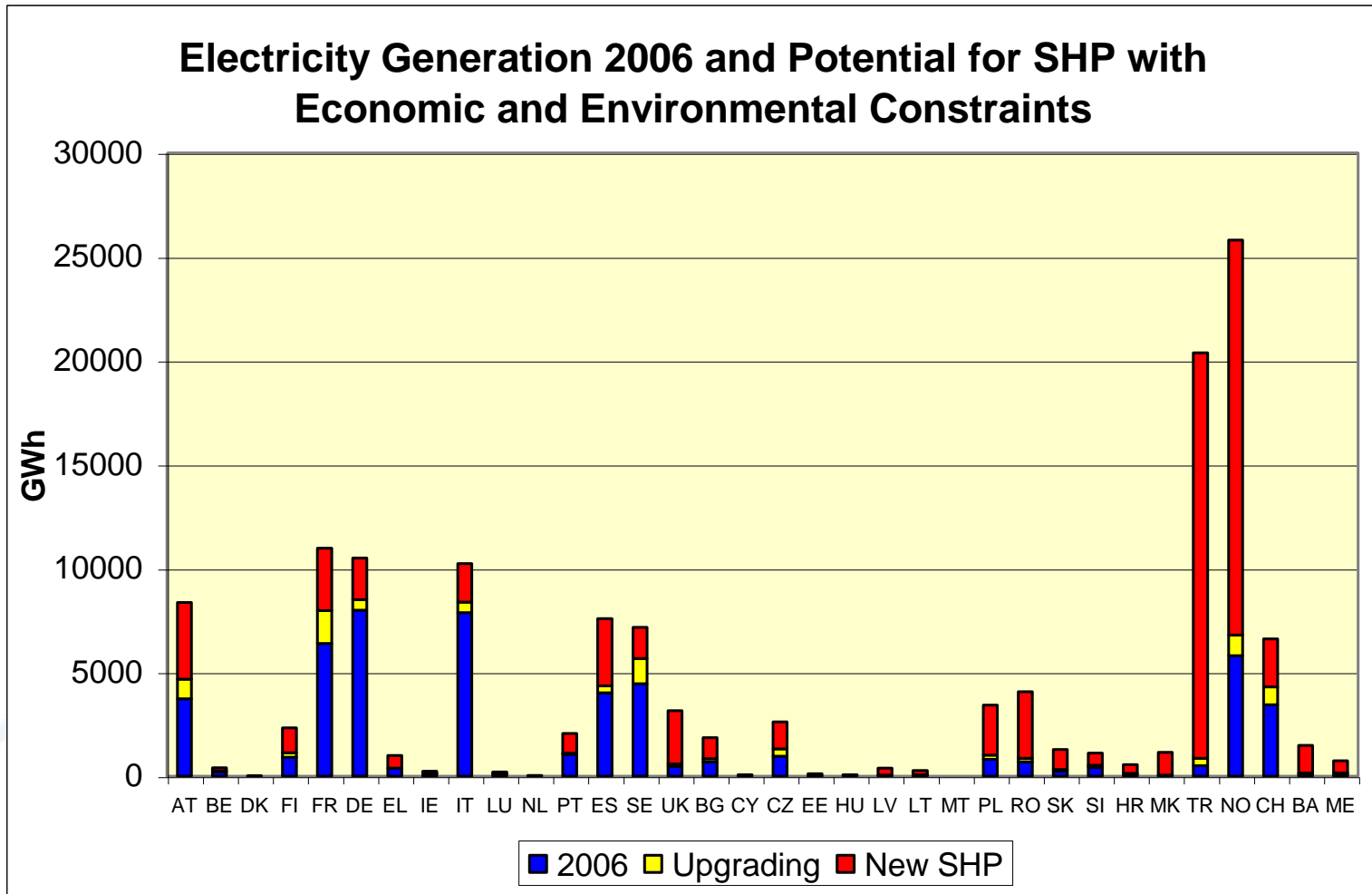
State of the Art

RES-E in the EU-27, 2006 (percentage of GWh)

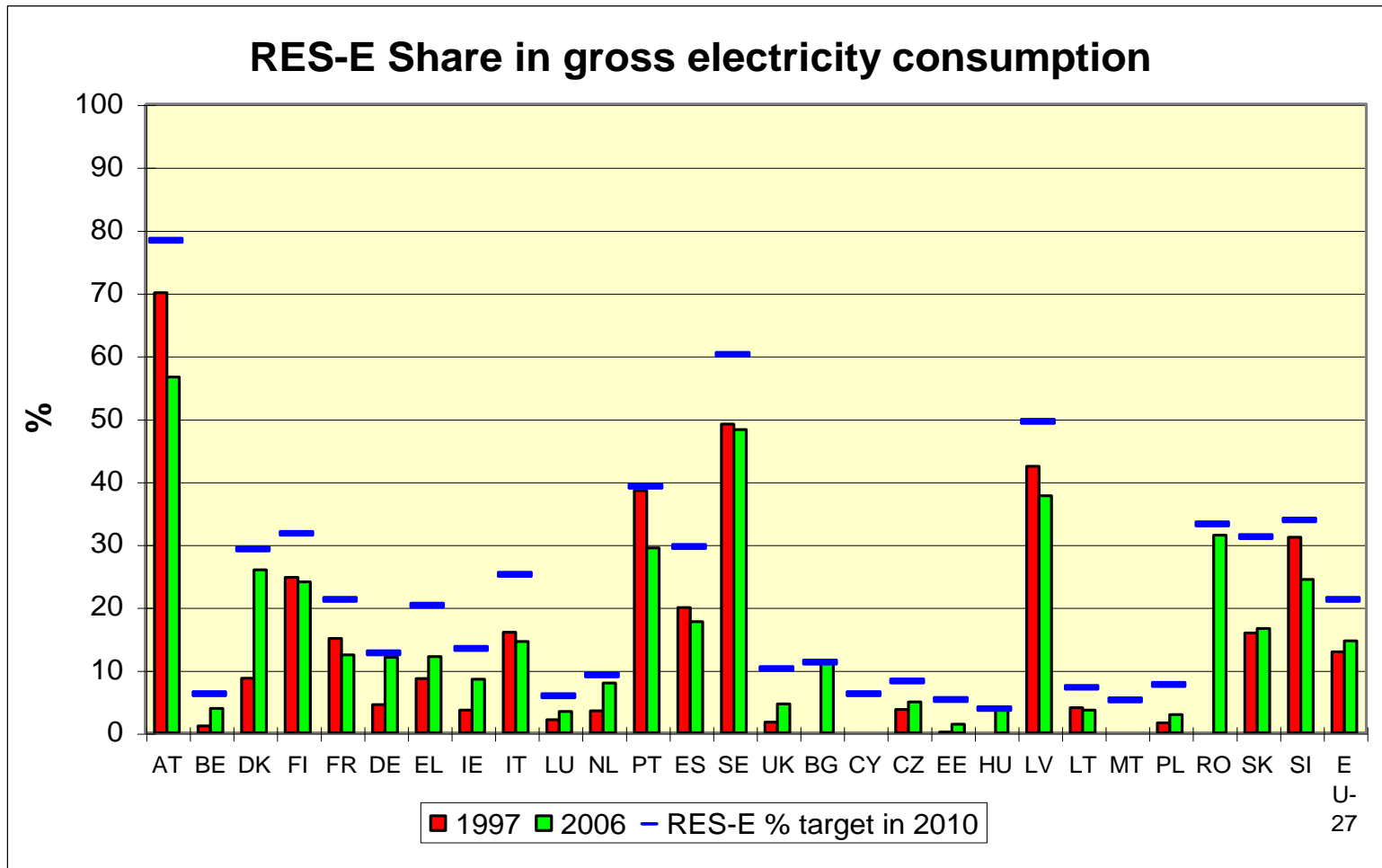
487215 GWh



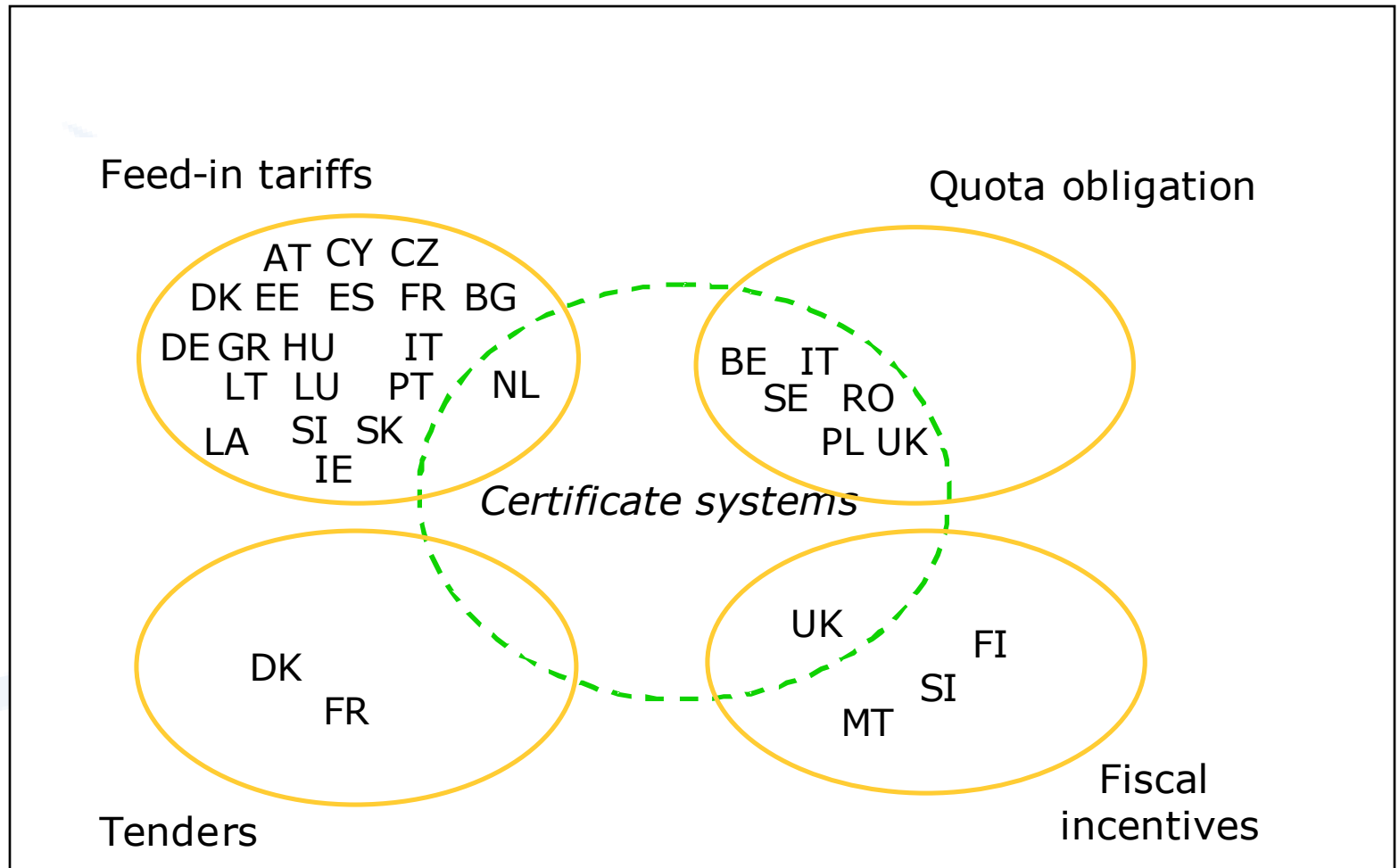
SHP Potential in the EU



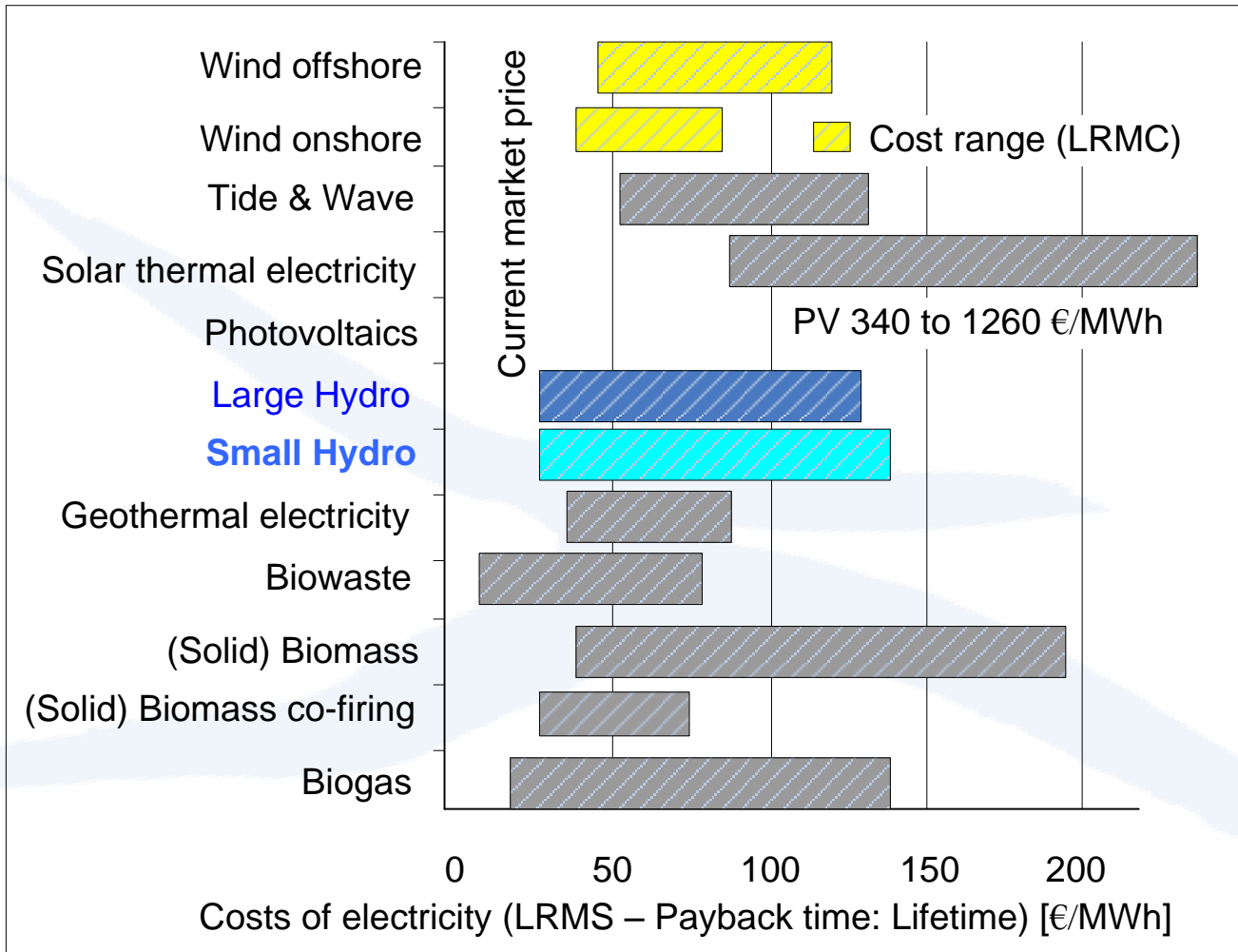
EU Directives and their impact on SHP



Support systems



Economics



Conclusions and *recommendations*

State of the art (year 2006)

- The SHP contribution to the overall RES-E in the EU is nearly 10 %.
- The SHP can highly contribute in reaching the targets of the RES Directives.

SHP Potential in the EU

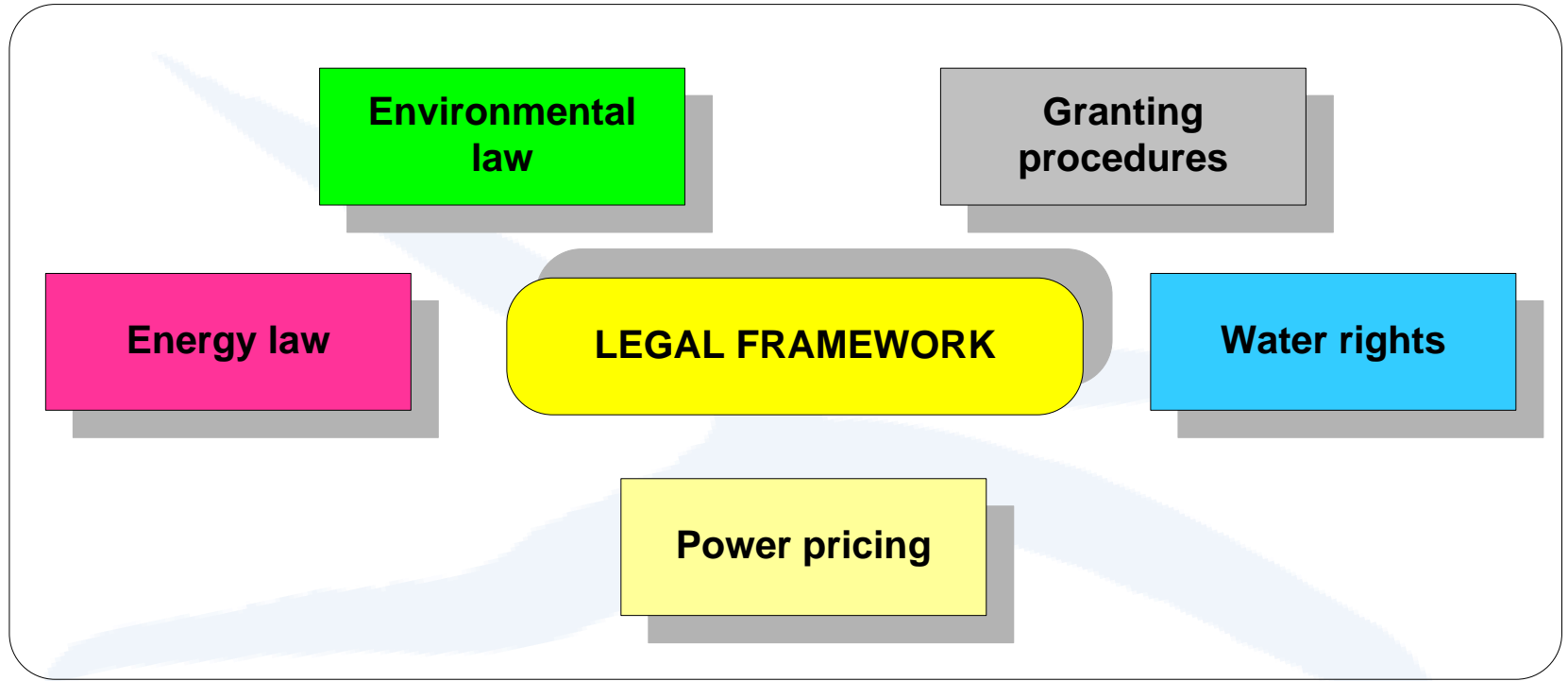
- The electricity production from SHP in the EU can double from the level of year 2006 taking environmental and economical constraints in consideration.
- Most likely the potential is larger than is known today.
- More careful examinations should be performed in the EU countries to evaluate the true SHP potential (good examples can be found from Scotland and Norway)*



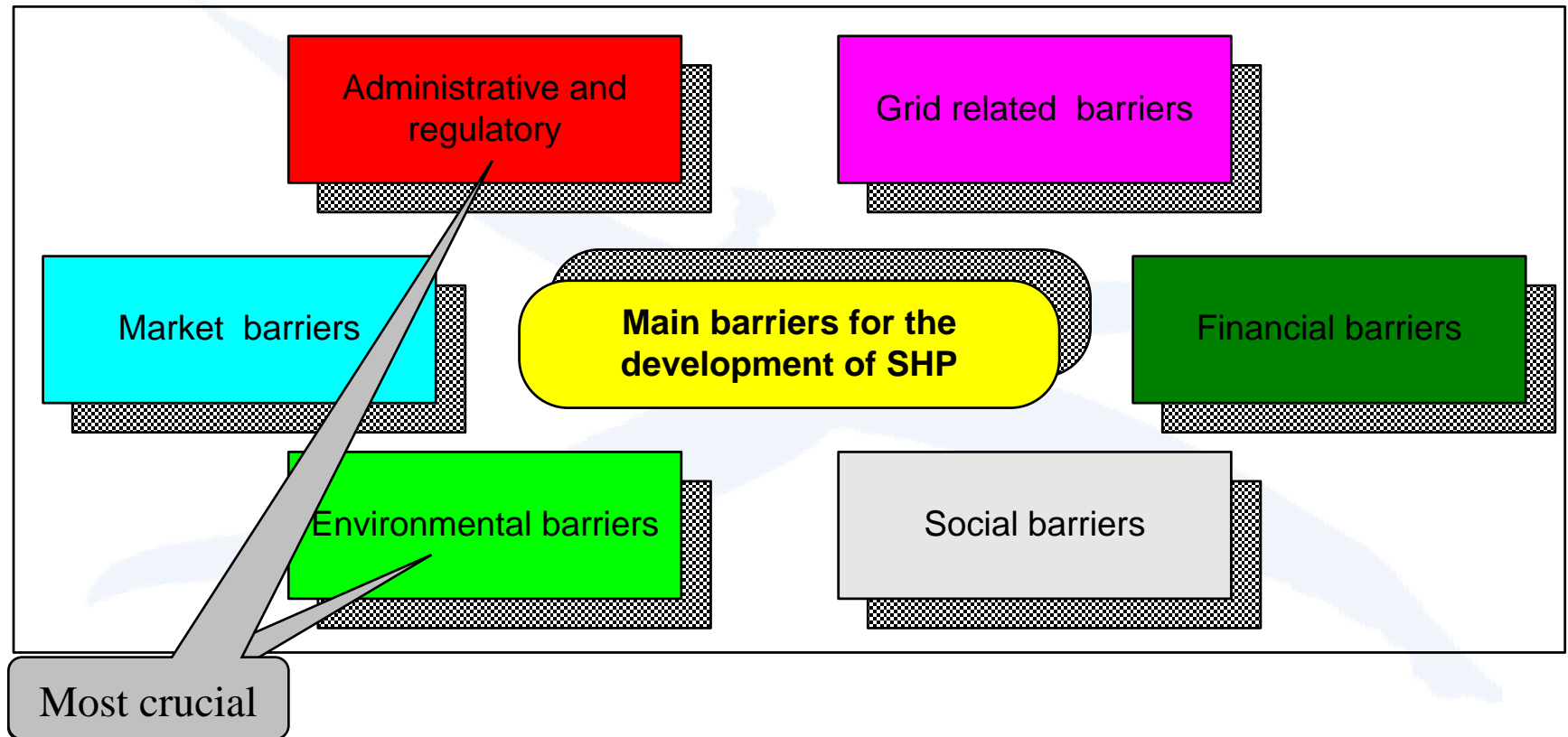
Conclusions and *recommendations* cont.

- EU Directives and their impact on SHP
 - The directive is very important for the development of SHP
 - Follow up to what extent the Directives has been implemented to reduce the obstacles to increasing production and to rationalise and speed up administrative procedures. According to this study there are still many obstacles and not much have changed.*
- Support systems
 - Support systems is absolutely necessary for existing SHP and the development of new SHP.
- Economics
 - SHP is very competitive to other RES-E.
 - All RES-E need support system to be able to compete with established electricity production and the price in the market.

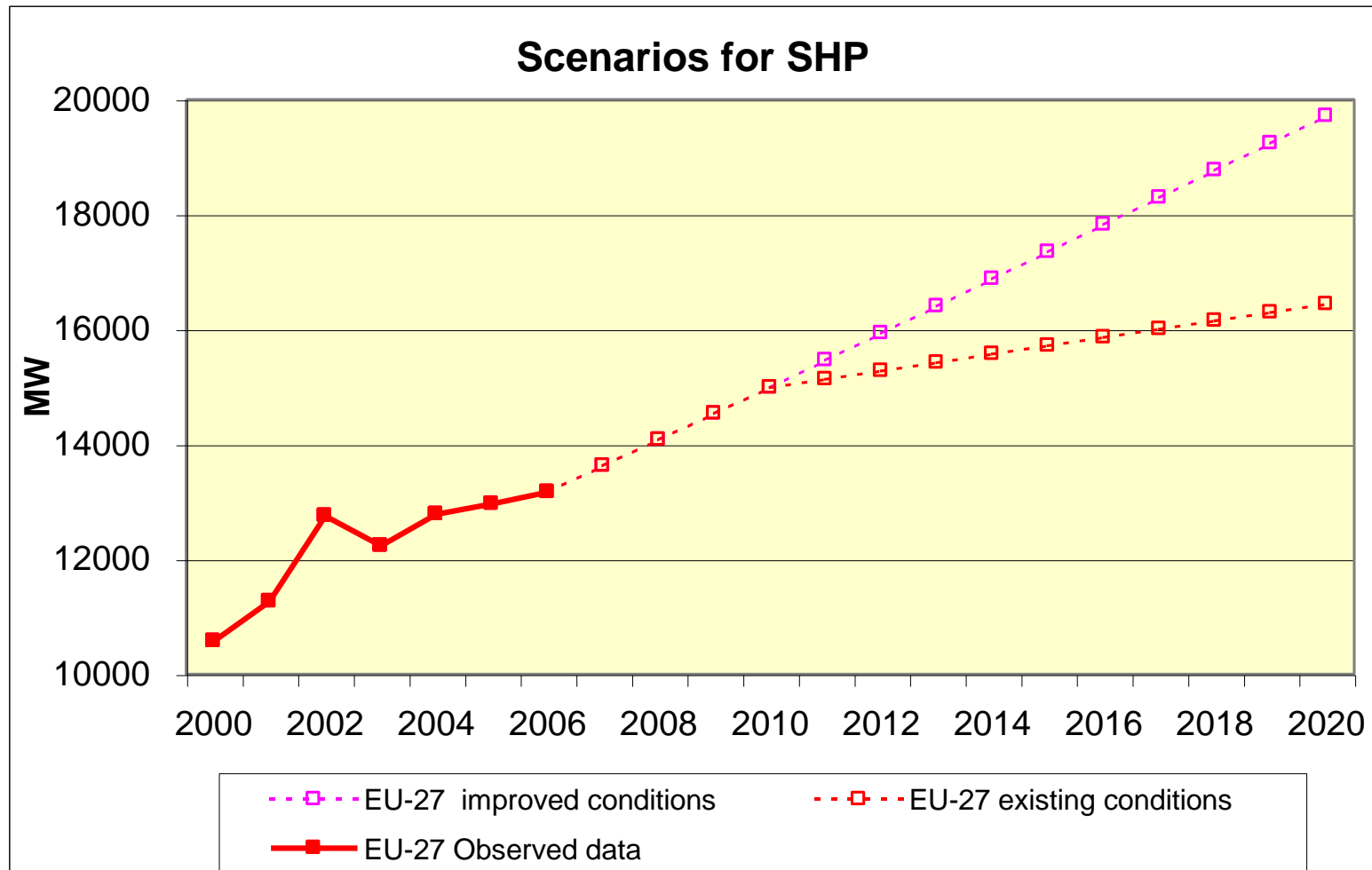
Policy framework



Classification of barriers



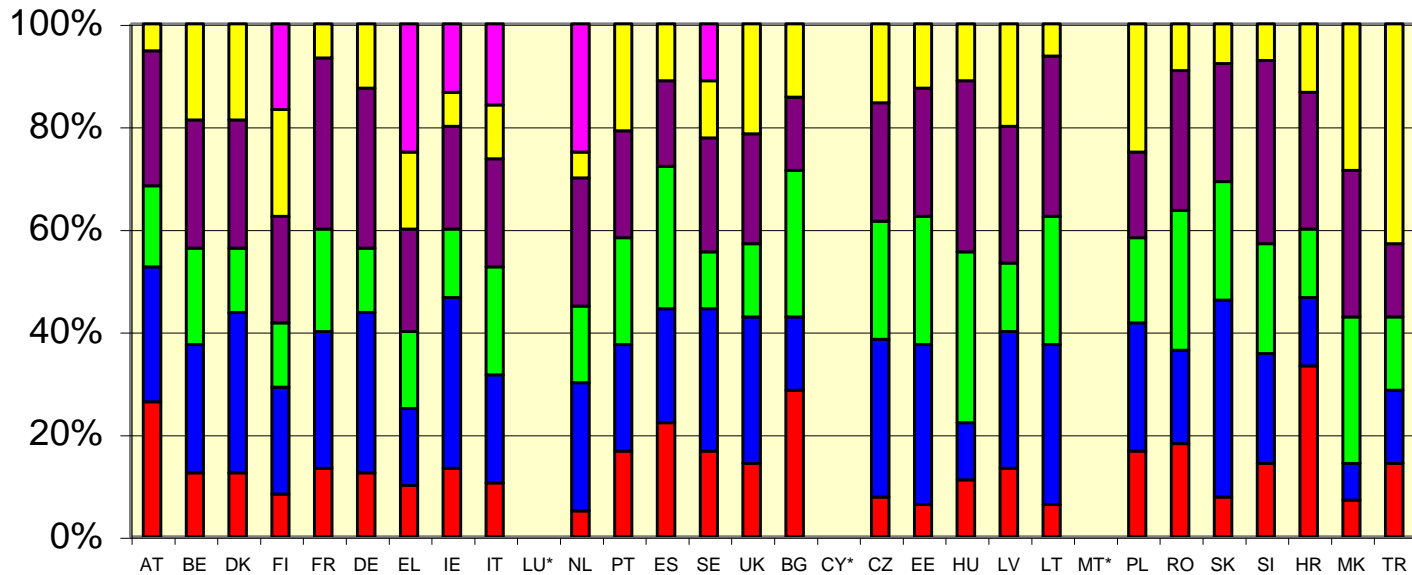
Scenarios: existing and improved conditions



Environment

Environmental Integration - Resistance to SHP development EU-27 & CC

- Visual impact
- Fishery
- Water regulation
- Environmental Regulation
- Competition with other uses
- Other kinds of resistance

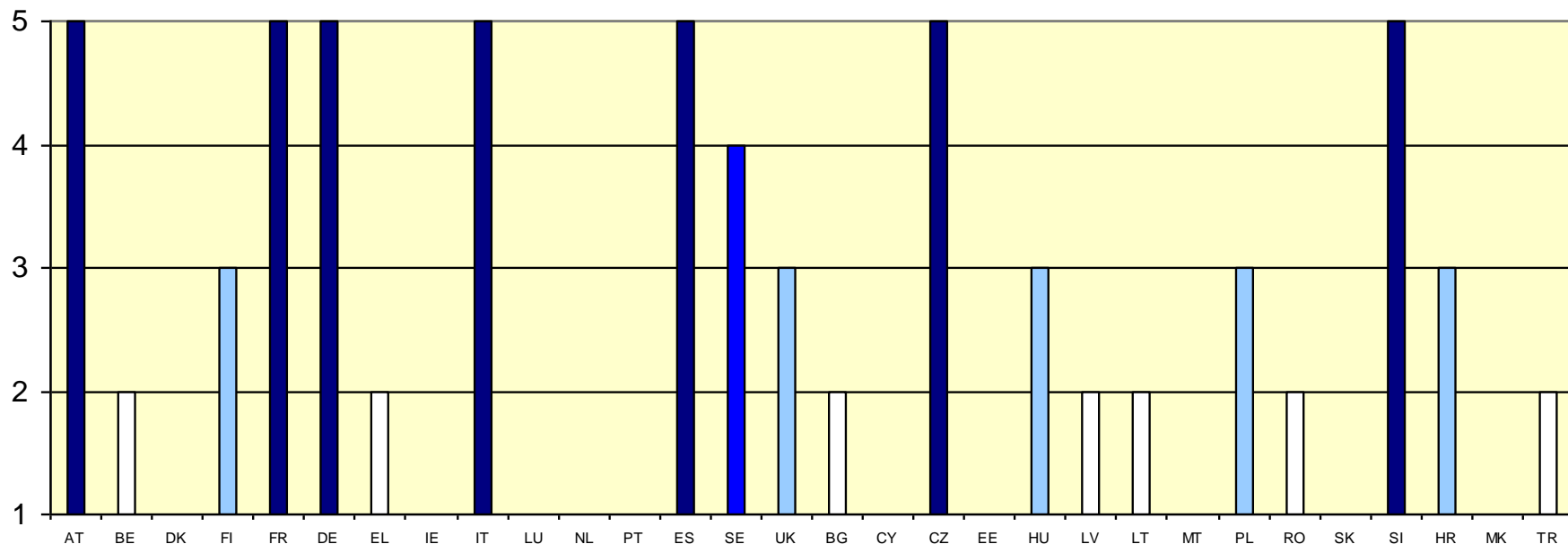


*Information not available due to too small number SHPP



Manufacturing industry

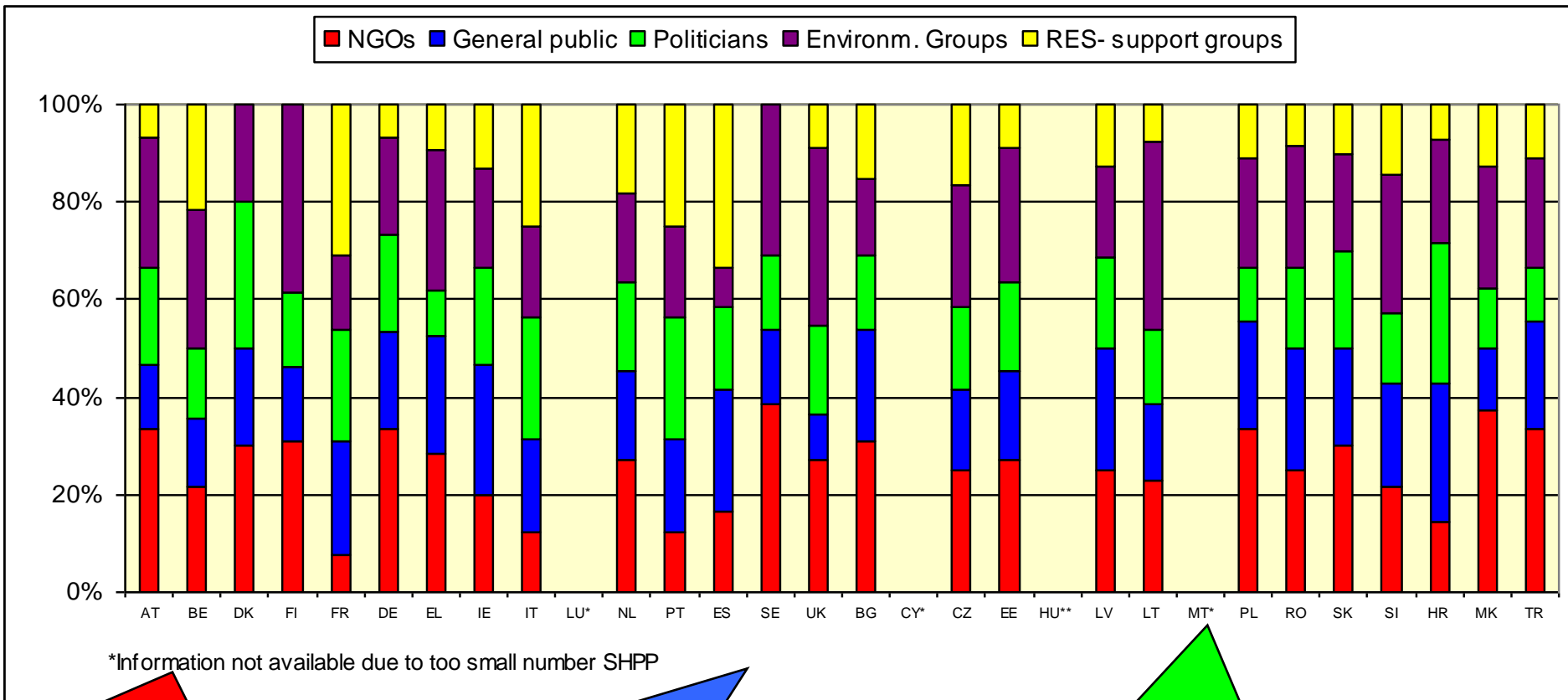
Classification of SHP Turbine Manufacturers EU-27 & CCs



- (1) no turbine manufacturers
- (2) turbine manufacturers exist, but are not able to cover domestic demand
- (3) turbine manufacturers exist, are able to cover domestic demand with limited export capacities
- (4) turbine manufacturers exist, are able to cover domestic demand with some export capacities
- (5) turbine manufacturing industry is well developed, with high export capacities



Social acceptance



NGOs: opposition (F, IT, PT). Positive (AT, DE, SE, PL, MK)

General public: reserved (AT, UK, MK), positive (DE, IE, BG, PL, HR)

Politicians: positive (DK, FR, IT, PT, SK, HR), less active (EL, PL)

Environ. bodies: big opposition (ES, FR), positive (AT, BE, FI, EL, UK, PL, RO)



Conclusions and *recommendations*

Long term

- Decrease barriers

- Decrease the barriers for developing SHPP by setting up clear rules and timeframes in the licensing process.*
- Support the manufacturing industry by increasing the research of finding new, more efficient and more environmental friendly ways to generate electricity from hydropower. This in order to secure that the SHP manufacturing industry will still be international competitive in the future.*

Conclusions and *recommendations* cont.

Finally it is of vital importance that the Commission gives concrete guidelines in order to follow the development towards the renewable targets of year 2020.



Country overview on SHP (SHERPA Project Report)

32 European countries are represented (6 to 10 p.)

1. Geography and Water Resources

2. Current Energy Sector

3. Renewable Energy Sources

RES-E Supporting Policies; RES Targets; SHP Status within RES-E Generation Mix

4. Current SHP Data and Potentials

Current Status and Forecasts; Potentials

5. SHP General Policy Framework

Legal Conditions and Support Policy; Impact of EU Directives

6. SHP Sector Development

Economic Issues; SHP Manufacturing Industry; Technological Advancements;
Environmental Integration and Social Acceptance; Barriers for SHP Development

Available at: <http://www.esha.be>