8TH INTERNATIONAL SCIENTIFIC CONFERENCE ON ENERGY AND CLIMATE CHANGE:
CONTRIBUTING TO DEEP DECARBONIZATION
VENUE: *NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, GREECE*
DATE: *7-9 OCTOBER 2015*

Identification of knowledge needs on climate policy implications through a participatory process

KARAKOSTA Charikleia, DEDE Phaedra, FLAMOS Alexandros

Contents

Background & context

*Current **intensification** of the international community's activity towards a collective response to climate change*

- Mitigation and adaptation efforts in the spotlight of future negotiations
- Industrialized & developing countries face different challenges regarding targets set
- INDCs' submission according to each party's potential and needs
- No consensus on the way cost of mitigation efforts and level of ambition will be distributed among parties

Constantly changing political scenery of climate negotiations

Uncertainties for EU policy and decision makers about the shape of the future regarding:

- Different possible international climate policy ***scenarios***
- ***Impacts*** they could entail for EU society, business, economy and, environmental at an MS level and to EU as a whole

Background & context

Emerging need for *EU policy and decision makers:*

Improved access to **solid and accurate knowledge**

Facilitation of **information exchange**

Support in **knowledge transfer**

Offer clear understanding of ***current regimes***, their ***possible directions***, ***implications*** and ***consequences***

"Identification of knowledge needs on climate policy implications for the EU stakeholders"

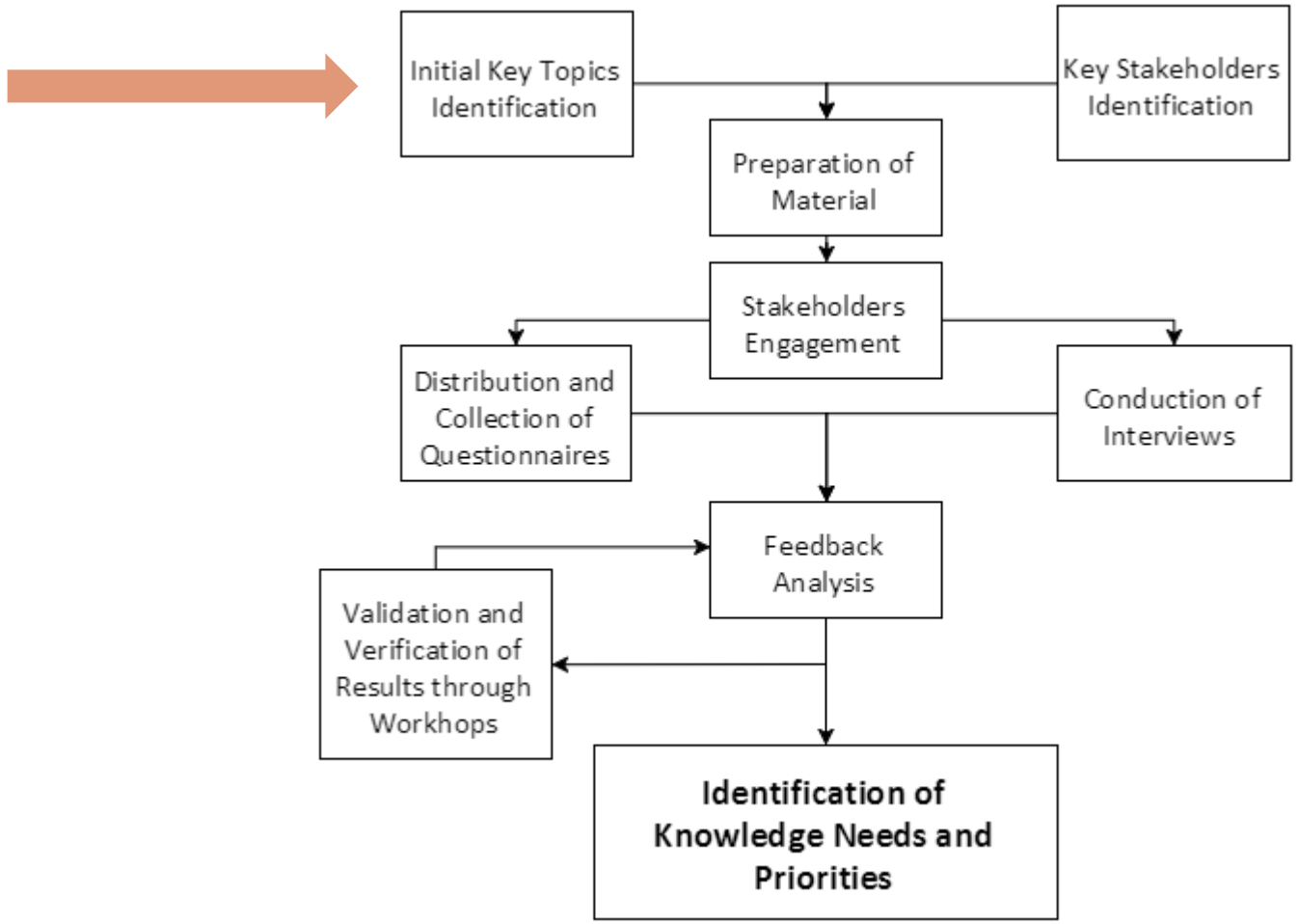
⇨ **Well-informed decisions** based on up-to-date reliable facts

Methodological approach

A methodology for **identifying knowledge gaps** on implications of possible directions of EU and international climate policies, through a ***participatory process*** of stakeholders' engagement.

- Stepwise method
- Concurrent or consecutive steps

Knowledge gaps can either mean lack of awareness of existing knowledge, or actual absence of scientific analysis regarding an issue.



Desk analysis: Initial key topics identification

Extensive literature review & close monitoring of current developments in climate policy

Starting point for discussion:

Initial thematic area of ***11 main topics***

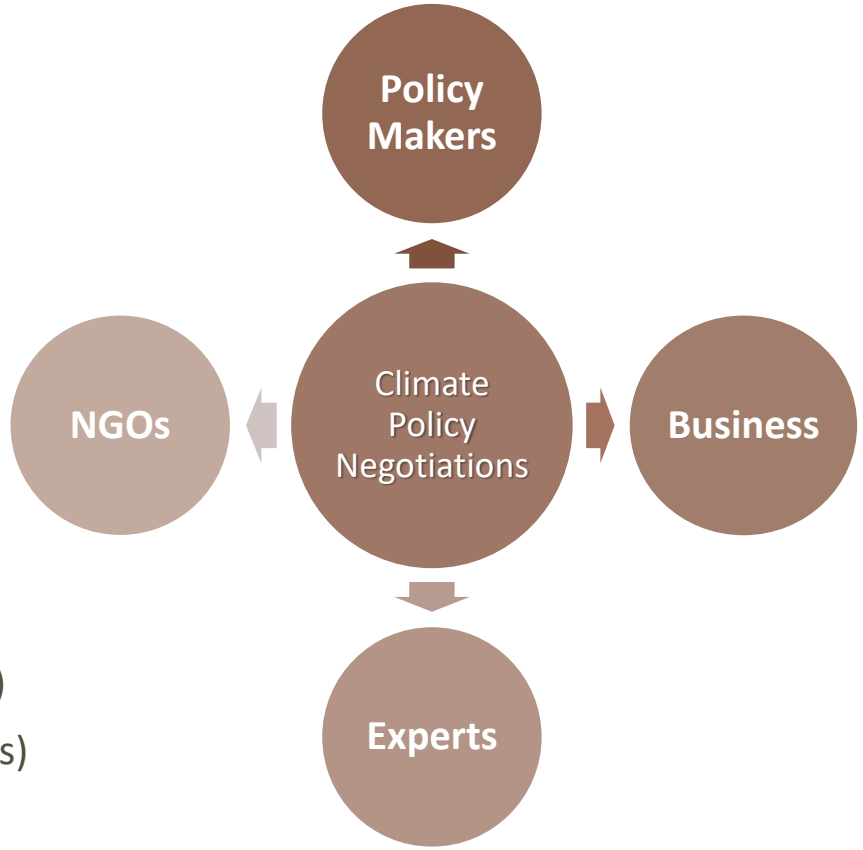
Further examination: ***4-6 possible issues of core importance*** and interest for the following years

- different aspects of analysis
- sectoral breakdown of main topics and
- different phases of policy making

Main Topics	Relevant Issues					
1. Renewable Energy	Support Systems	Costs & Benefits	Acceptance	Grids	Environment Impacts	
2. Energy Efficiency	Policy Mix	Costs & Benefits	Buildings	Industry	Barriers	
3. Transport	Technology & Innovation	Costs & Benefits	Policy Mix	Barriers	Drivers	
4. Emissions Trading	Implementation	Costs & Benefits	Technology Innovation	Reform of EU-ETS	International Context	
5. Industry	Policy Mix	Costs & Benefits	Green IT	Potential	International Context	
6. Adaptation	Financing Instruments	Mainstreaming	Costs & Benefits	Public Participation	Evidence Base	
7. Agriculture & Forestry	Bioenergy & Biomass Use	Land Use Change	Consumption Patterns	Ecosystem Services	Increasing Farm Efficiency	Support
8. Financing	Financing Needs	Costs & Benefits	Policy Mix	International Context		
9. International Climate Negotiations	Mitigation	Finance	Mechanisms	Adaptation	Regime & Institutions	
10. Energy Policy	Energy Markets	Costs & Benefits	Technology & Innovation	Grids	Security Of Supply	Risks & Uncertainty
11. EU Climate Policy	Post-2020 Targets	Costs & Benefits	Policy Mix	Link To Energy Policy	International Context	

Stakeholders mapping

- **Governmental representatives**
  - International
  - National
  - Subnational
- **Observer Organizations**
  - UN bodies and secretariats
  - Specialized international agencies
  - Intergovernmental organizations (IGOs)
  - Non governmental Organizations (NGOs)



Climate - Policy
POLIMP

"Mobilizing and transferring knowledge on post-2012 climate policy implications"

Preparation of material (1/2)

Descriptive survey through a **questionnaire** with a twofold purpose:

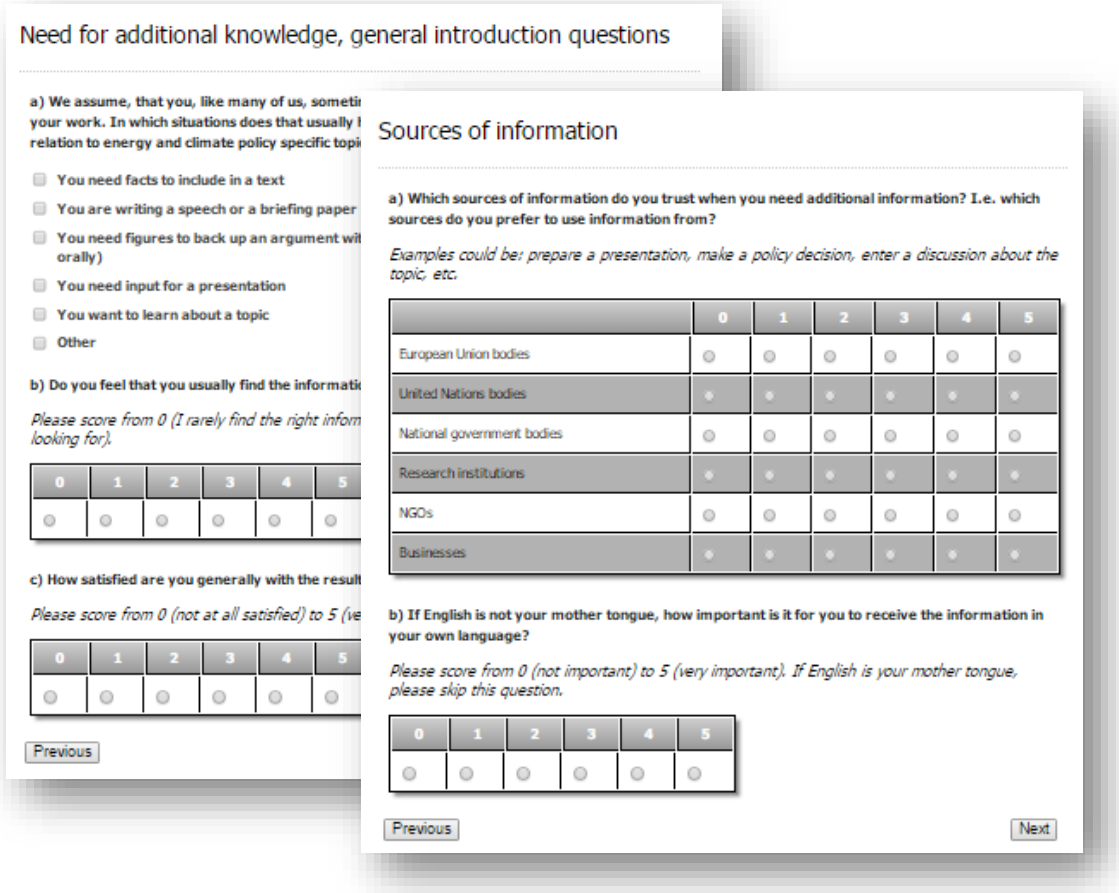
- ✓ Direct completion by stakeholders
- ✓ Guide for the conduction of interviews

Part 1: General questions

- frequency when additional information is needed to help stakeholders in their work
- the exact task they need it for
- their success in finding it.

Part 2: Search and use of information

- search techniques and tools
- sources of information
- desired presentation and form of acquired information
- preferred language



Online form at: http://www.polimp.eu/questionnaire

Preparation of material (2/2)

Part 3: Knowledge Needs

Level 1: Main Topics

Question: Which are your areas of expertise, from the list provided?

Choose 1-2 of 11

Level 2: Relevant Issues within the areas of expertise

Question: Which issues do you expect to be focusing on during the following 3 years?

Choose 2-3 of 4-6

Level 3: Subtopics (per issue, within each area of expertise)

Question: To what extent to you personally expect to be searching for additional information on each subtopic?

Rate on a scale from 0 "I will not need additional information" to 5 "I expect to need a high amount of additional information"

Part 4: Society as a whole

- opinion on whether lack of knowledge impedes policy design
- whether they personally acknowledge the existence of real gaps in scientific knowledge.

The session concluded with the provision of some additional information of personal and professional nature

Stakeholders engagement & participation (1/2)

Engagement Procedure

- Initial Contact with stakeholders
- Official Invitation upon acceptance
- Selection of preferred way of participation
- Phone communication and arrangement of interview
- Provision of questionnaire (also online)

Final Participation:

- ✓ **27 online questionnaires**
- ✓ **12 interviews**

Stakeholders engagement & participation (2/2)

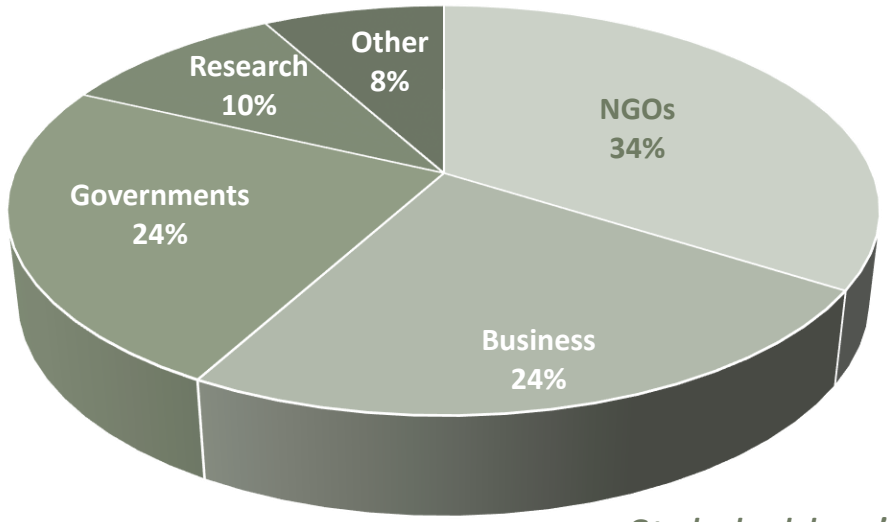
Stakeholders' origin

Sample Synthesis:

- ***89%*** *from 14 Member States*
- ***11%*** *outside the EU*

More figures:

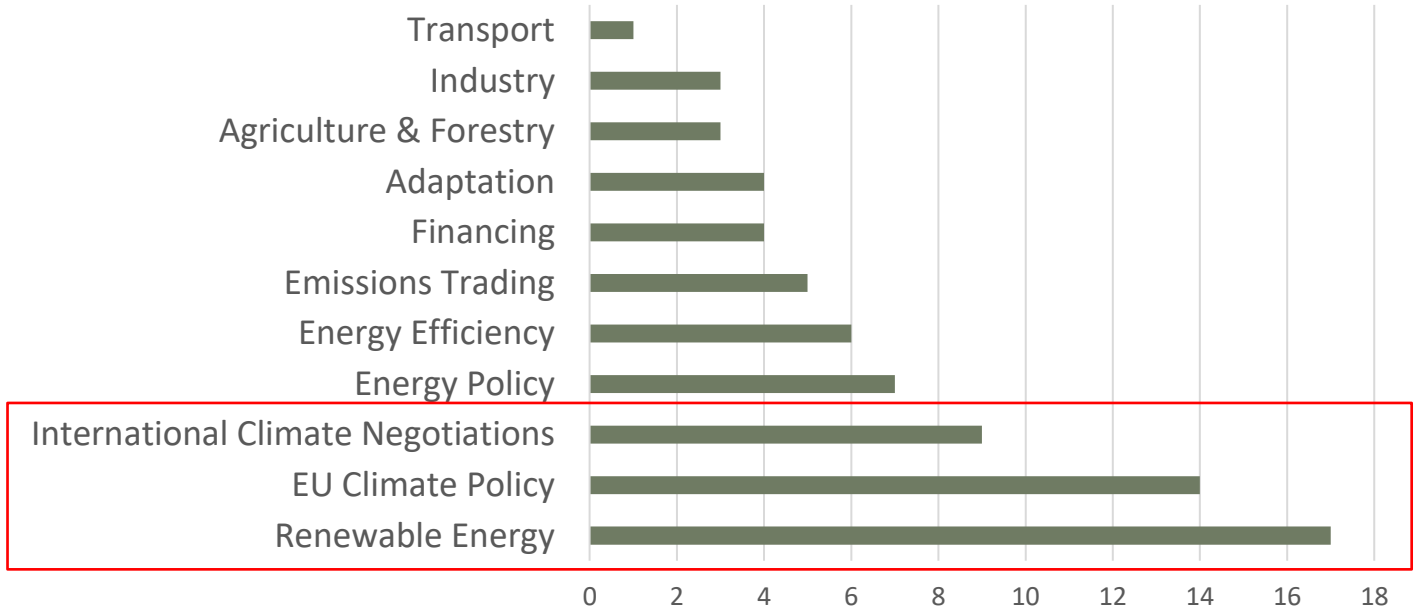
- ***79%*** *in the age group 30-50*
- ***26%*** *female*
- ***60%*** *proficient in English*



Stakeholders' occupation

Feedback analysis

Selection of Main Topics: *Areas of Expertise*



- Identification of **most popular relevant issues** per main topic
- Discard of issues with little or no selection by stakeholders
- **Calculation of total scores per subtopic** *(score x frequency)*

Preliminary Knowledge Gaps

Validation and verification of results through workshops

Preliminary results were verified and refined according to feedback provided during three thematic workshops, organized within the framework of the POLIMP project:

- "**Financing for low carbon technology** - the renewable energy example"
- "**Public acceptance** of low-carbon technology options"
- "The role for **emissions trading** in low-carbon technology deployment"

Stakeholders were **provided with preliminary results per thematic area** during special sessions and were encouraged to *comment* and provide *feedback* on them

- ➢ Update and modifications of results
- ➢ Additions or elimination of certain subtopics

→ **Finalization** and **validation** of the emerging list of results according to participants' feedback.

Results: Key knowledge needs and priorities

Prioritized Main Topics	Knowledge Needs
Renewable Energy	• Cost-effectiveness of support schemes for renewable energy • Costs development of renewable energy technologies • Harmonisation of support schemes for renewables within and across EU member states • Smart grids
EU climate policy	• Interaction of different climate policy instruments and different targets • Cost-effectiveness of targets • Carbon-pricing instruments (ETS, taxation) • Actions in other parts of the world, compared to the European Union
International Climate Negotiations	• Climate finance generating mechanisms, innovative climate finance schemes • Types and timescales of climate change mitigation targets • Vertical integration between decision-making levels
Energy Policy	• Electricity market design • Energy price developments in different world regions and its impacts
Energy efficiency	• Effectiveness of existing energy efficiency policy • Possible energy saving obligation schemes and financing options • Energy efficiency measures savings potential • Access to capital for energy efficiency measures
Emissions Trading	• Further harmonization of emissions trading scheme implementation across the EU • Price stabilisation mechanisms, back loading, changes to the linear reduction factor • Potential for and impacts of links to other emissions trading schemes around the world

Prioritized Main Topics	Knowledge Needs
Financing	• Incremental additional investment required in specific sectors • Mobilisation of private financial flows • Innovative finance schemes in an international context
Adaptation	• Institutional setup and organisation of mainstreaming of adaptation • Methodologies for estimation of costs and benefits of adaptation measures • Effective tools and best practices for raising public awareness and public participation • Indicators for the evidence base for adaptation policy decisions
Agriculture & Forestry	• Sustainability criteria for biomass • Indirect land use and LULUCF accounting • Carbon sequestration • Fertiliser, manure and livestock management
Industry	• Competitiveness: carbon leakage impacts and related exemptions • Sectoral innovation scope, reduction potential and costs
Transport	• Increasing efficiency through intelligent transport systems • Efficient integration of modal networks

Results: Knowledge presentation requirements

English	Although stakeholders are from a diverse national background, they stated that it is not important to them if information is presented in their native language or in English.
PDF	PDF files are the preferred type of knowledge presentation, with html pages being the second most popular choice.
Illustrations	Good illustrations are appreciated, although not as the main source of information, but as complementary material to a text.
Links	Links to background information on issues under examination were stated to facilitate stakeholders and are therefore welcome as sources for further reading.
Videos	Videos are commonly not appreciated.
Desktops & laptops	Information should be accessible and printable by desktop computers or laptops. Tablets and smartphones are not so widely used to access such information.

Discussion & Conclusions (1/2)

- **First Step** towards enhancing understanding of possible directions of climate policies among policy makers and other stakeholders and enabling them to form well-informed, consolidated decisions.

➢ ***Next Step:*** *Addressing identified knowledge needs*

- ***Collection*** *of available information by a wide range of up-to-date sources*
- ***Synthesis*** *into well-structured articles*
- ***Communication*** *to stakeholders during conference presentations, dialogue sessions, workshops and meetings*
- ***Integration*** *of such articles into a knowledge platform*

➢ The proposed methodology was proven to be ***fruitful and efficient*** in fostering participation and revealing knowledge needs and priorities on climate policy implications. **A further perspective:**

- Involvement of a ***wider and larger range*** of stakeholders
- Conduction of ***more workshops*** or introduction of small group meetings to enhance accuracy of the final outcomes.

Discussion & Conclusions (2/2)

- The results from the proposed approach can also be considered as ***realistic***, since they were subsequently validated through a series of workshops, where stakeholders reflected upon the derived list of knowledge needs.

➢ Although the approach adopted assisted this specific problem, ***the analysis provides*** a basis for supporting a wide range of applications in the field of priorities' identification and even expanding to decision making problems.

➢ Future research efforts could therefore be placed on the **participation** of stakeholders in the

- *evaluation and selection of policy pathways and sustainability strategies,*
- *climate policy decision making*
- *assessment of the public acceptance of different schemes identified.*

Thank you!

Any questions?

Dr. KARAKOSTA Charikleia

Research Associate in the University of Piraeus Research Centre

- chakara@unipi.gr

Ms. DEDE Phaedra

PhD Candidate in the National Technical University of Athens

- pdede@epu.ntua.gr

Ass. Prof. FLAMOS Alexandros

Assistant Professor in the University of Piraeus

- aflamos@unipi.gr