

Linking North Africa's Renewable Electricity Potential to Europe: Policy Challenges

24 – 26 November 2008

*Hosted at the International Institute for Applied Systems Analysis (IIASA)
Laxenburg, Austria*

Organized by



International Institute for
Applied Systems Analysis
(IIASA)



European Climate Forum
(ECF)



Potsdam Institute for
Climate Impact Research
(PIK)

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Sponsored by



The European Climate Foundation

with additional support from the German Federal Ministry of Education and Research funded
ALICE project and the EU funded CIRCE project

INTRODUCTORY BRIEFING SESSION

Monday, 24 November

The opening evening of the workshop will consist primarily of briefings given by IIASA and PIK staff on technical issues and analytic frameworks for the workshop.

After a short welcome, these briefings will provide participants with a common understanding of the technical aspects and feasibility of potential trans-Mediterranean renewable electricity cooperation. The workshop organizers will present basic scenarios, governance frameworks, and policy-oriented questions to aid in structuring the discussions throughout the workshop.

16.00 – 17.00 **Arrival & registration**

17.00 – 19.00 **Welcome and Technical Briefing (with Q&A)**

1. *Welcome – An Overview of Workshop Format and Objectives* (15mins)
 - Presented by Antonella Battaglini (ECF) and Anthony Patt (IIASA)
2. *What We DO Know: A Survey of the Technical Feasibility of Linking North African Renewable Electricity Generation Potential to the EU* (30 mins+Q&A)
 - Presented by Johan Lilliestam (PIK)
3. *Goals for the workshop* (30 mins+Q&A)
 - Presented by the workshop organizers

19.00 – 21.00 **Dinner** at the Gallo Rosso Restaurant, Laxenburg

WHAT WE DO NOT KNOW: THE POLICY CHALLENGES

Tuesday, 25 November

7.00 – 8.00 **Breakfast** at the Hotel Europa, Vienna

9.00 – 12.30 **Working Group Session I: Invited Presentations and Roundtable Issue Discussion**

This first *Working Group* session will be opened with a set of short invited presentations by select participants in each group, provided in an informal Chaired panel format encouraging discourse among all participants. This will be followed by a facilitated roundtable discussion building upon the opening presentations and each groups' policy-oriented questions. The main objective of the morning session is to identify broad policy issues that would value from further detailed (scenario-based) analysis in the afternoon session.

Economic and Finance Working Group

9.00 - 10.15 **Opening Invited Panel Talks & Informal Discussion**

1. *“A New Dimension of Investment – Understanding the Economic Implications of Large-Scale Energy Cooperation”* (15mins)
2. *“Requirements and opportunities for Funding North African Renewable Electricity Infrastructure Development”* (15mins)
3. *“Financing Cross-Continental Energy Projects – What financial instruments and policy environment are needed?”* (15mins)

10.30 - 12.30 **Roundtable Discussion on Policy-Oriented Questions and General Issues**

Questions related to developing a trans-Mediterranean Renewable Electricity Partnership:

- What levels of funding (in the short, medium and long term) would be needed to achieve the workshop scenario objectives of 20%, 50% and 80% of EU net electricity requirements by 2050?
- How should any produced renewable electricity be allocated between the North African region and the EU? How would this allocation change over time?
- What sources of financing—public and/or private—are best suited to facilitate such development?

- What financing mechanisms would best suited to facilitate such a development in the short, medium and long term?
- What share of the necessary financing would come from the EU and what share from North Africa? How would this translate into ownership shares and short, medium and long term revenue and tax collection?
- What policy environments (in the EU and North Africa, both nationally and regionally) would best suited to facilitate such a partnership in the short, medium and long term?

Security and Governance Working Group

9.00 - 10.15 Opening Invited Panel Talks & Informal Discussion

1. “*What is at stake for Europe: Thinking beyond Energy Independence*” (15mins)
2. “*Global Implications of a Cross-Continental Energy Scheme*” (15mins)
3. “*Sustainable Electricity Development in North Africa*” (15mins)

10.30 - 12.30 Roundtable Discussion on Policy-Oriented Questions and General Issues

Questions related to developing a trans-Mediterranean Renewable Electricity Partnership:

- What would be the likely short-term and long-term impacts on the EU’s external energy dependencies? What net impacts would these have on EU energy security?
- What would be the likely effects on the EU’s relations with energy producing regions? What would be the likely geopolitical implications?
- How would the vulnerability to terrorism of the EUs electricity supply change?
- What would be the most important new security risks that could be created?
- What potential exists for the North African region to develop “resource curse” problems as a consequence?
- What would be the likely impacts on (sustainable) development within the North African region?
- What would be the likely correlations to labor mobility and immigration between North Africa and the EU?
- What are the North African government characteristics best suited to address this full range of challenges?
- What trans-national governance structures (governmental and/or corporate) are best suited to address this full range of challenges?

12.30 – 14.00 Lunch at the IIASA Schloß Restaurant, Laxenburg

14.00 – 17.30 Working Group Session II: Scenario Exploration

The afternoon *Working Group* session will focus on evaluating the broader issues and questions identified during the morning session in the specific context of the three workshop scenarios—specifically the development of renewable electricity generation in North Africa to supply 20%, 50% and 80% of the EU’s projected net electricity requirements in the year 2050. The Chair of each working group will decide based on group input whether to explore each scenario through a full-group roundtable discussion or through smaller sub-group examinations of each scenario. The objective of this session is to analyze in detail the challenges that would be associated with the EU pursuing each of these scenarios, and to identify outstanding questions and (where possible) policy measures for addressing those challenges.

19.00 – 21.00 Dinner at the Palmenhaus Restaurant, Vienna (tentative)

INTEGRATION & OUTLOOK

Wednesday, 26 November

7.00 – 8.00 **Breakfast** at the Hotel Europa, Vienna

9.00 – 12.00 **Presentation and Integration of Working Group Findings**

The morning plenary will be opened with the Chairs of both *Working Groups* presenting the key findings from the previous day's discussions in an informal plenary session, including time for Q&A and roundtable discussion. This will be followed by a roundtable discussion focused on integrating the findings of the two groups, and particularly highlighting synergies and tensions between any developing policy recommendations.

9.00 – 10.15 **Presentation and Plenary Discussion of Working Group Findings**

10.30 – 12.00 **Integration of Working Group Findings: Identifying Synergies and Tensions**

12.00 – 13.30 **Lunch** at the IIASA Schloß Restaurant, Laxenburg

13.30 – 16.00 **Recommendations and Preliminary Policy Roadmap**

The final plenary session of the workshop will focus on converting the integrated findings into a series of questions for further exploration and, wherever possible, into clear and concise policy recommendations for ongoing decision-making and policy processes. If possible, a preliminary policy roadmap will be articulated, including explicit timelines for addressing outstanding questions and (where possible) near-term action steps.

16.00 **Participant Departure**

Project Team Report Synthesis

Thursday, 27 November

The organizing team will consolidate the output into a report outline and with draft content the day following the workshop. This draft will be subsequently edited over the period of one to two weeks, and then distributed to the participants for comments and input. The objective is to have completed workshop report for distribution to decision- and policy-makers within three weeks of the workshop.
