



UN Economic Commission for Europe

Regional Analysis of Policy Reforms to promote Energy  
Efficiency and Renewable Energy Investments  
Interaction with National Participating Institutions

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Presentation to the 13th session of the  
Ad Hoc Group of Experts  
on Energy Efficiency Investments  
for Climate Change Mitigation

Geneva, March 2, 2009

## Situation and context

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The interaction with the National Participation Institutions for the Regional Analysis is based upon the Terms of Reference of the Memorandum of Understanding between NPI and UNECE

- The UNECE Project on Financing Energy Efficiency Investments for Climate Change Mitigation foresees the active involvement of the National Participating Institutions in the elaboration of the project results
- Among other activities, assessment missions have been performed in the participating countries by the UNECE in order to assess the current situation in relation to the development of energy markets and current energy policies
- The questionnaires that have been filled out by the National Participating Institutions as well as draft versions of the assessment missions reports will be consolidated into the Regional Analysis and represent a valuable groundwork to build upon
- Regarding specifically the Regional Analysis, the framework for interaction between the National Participating Institutions and Pöyry is defined by the Terms of Reference of the Memorandum of Understanding signed between the National Participating Institutions and the UNECE
- The present presentation gives an overview of the modalities of the provision of National Energy Policy Information as specified in Par. 2 of the Terms of Reference of the MOU

## Provision of National Energy Policy Information: overview

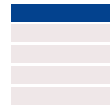
A very intensive interaction will take place at the beginning of the project, when data are collected and consolidated. However, cooperation and close contact with the NPIs will take place over the entire project duration.

	Description
<b>Provision of information</b>	<ul style="list-style-type: none"><li>• Questionnaire on energy markets and policy reforms</li></ul>
<b>Support in data validation</b>	<ul style="list-style-type: none"><li>• Support and clarifications to Pöyry upon necessity</li></ul>
<b>Interviews</b>	<ul style="list-style-type: none"><li>• Discussion of analysis results</li><li>• Identification of barriers and success stories</li></ul>
<b>Consolidation of information in report</b>	<ul style="list-style-type: none"><li>• Support and clarification to Pöyry upon necessity</li></ul>
<b>Support in results validation</b>	<ul style="list-style-type: none"><li>• Discussion and validation of results</li></ul>

## Provision of information on energy markets and policy reforms

For the provision of information on energy markets and policy reforms, a questionnaire has been developed by Pöyry

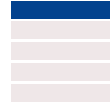
<b>Preparation by Pöyry</b>	<ul style="list-style-type: none"><li>• Development of the questionnaire and specifications based on research methodology and on previous assessment missions questionnaires and reports</li><li>• Send questionnaires to National Participating Institutions</li><li>• Support to National Participating Institutions in the preparation of data and information</li></ul>
<b>Contribution of NPIs</b>	<ul style="list-style-type: none"><li>• Preparation of information and data according to the questionnaire and the specifications prepared by Pöyry</li><li>• Delivery of filled-in questionnaires</li></ul>
<b>Contribution of NCs</b>	<ul style="list-style-type: none"><li>• No direct contribution</li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• Filled-out questionnaires to be consolidated in country analysis</li></ul>
<b>Timeframe</b>	<ul style="list-style-type: none"><li>• Begin of March – Mid April</li></ul>



## Requests for information on energy markets

The analysis of the energy markets covers aspects related to the identification and financing of energy efficiency and renewable energy projects

<b>Energy Supply</b>	<ul style="list-style-type: none"><li>• Electricity production technologies</li><li>• Heat production technologies</li></ul>
<b>Energy Markets</b>	<ul style="list-style-type: none"><li>• Electricity markets, market players and tariffs</li><li>• Gas markets, market players and tariffs</li><li>• Heat markets, market players and tariffs</li></ul>
<b>Energy Efficiency</b>	<ul style="list-style-type: none"><li>• Energy intensity of the country by consumption sector</li><li>• Energy losses from electricity and gas grids</li><li>• Metering of electricity and gas consumption</li><li>• District heating</li><li>• Estimated sources for inefficiency and energy saving potential</li><li>• Energy efficiency markets and business models</li></ul>
<b>Renewable Energy Sources</b>	<ul style="list-style-type: none"><li>• Current deployment of renewable energy sources</li><li>• Estimated potential for renewable energy sources</li><li>• Market players and business models for renewable energy sources</li></ul>



## Requests for information on policy reforms

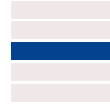
The analysis of policy reforms and regulatory framework covers aspects related to support mechanisms and financial incentives for energy efficiency and renewable energy projects

<b>Market liberalization</b>	<ul style="list-style-type: none"><li>• Degree of liberalization of energy markets</li><li>• Current progress in the liberalization process and future developments</li></ul>
<b>Energy policies on energy efficiency and renewables</b>	<ul style="list-style-type: none"><li>• Degree of implementation of current policies</li><li>• Targets to be achieved</li><li>• Action plans for target achievement and/or implementation of policies</li></ul>
<b>International commitments</b>	<ul style="list-style-type: none"><li>• Implementation of EU directives, targets and standards</li><li>• Implementation of Kyoto protocol</li><li>• Other international commitments</li></ul>
<b>Economic incentives for energy efficiency and renewables</b>	<ul style="list-style-type: none"><li>• Nature, structure and volume of incentives for energy efficiency</li><li>• Nature, structure and volume of incentives for renewable energy sources</li></ul>

## Support in data validation

Once the questionnaires are delivered, Pöyry will consolidate them with other information sources and validate the country-specific analysis results

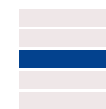
<b>Preparation by Pöyry</b>	<ul style="list-style-type: none"><li>• Consolidation of delivered information</li><li>• Internal validation of consolidated information</li><li>• Contact with National Participating Institutions for clarification or provision of further details</li></ul>
<b>Contribution of NPIs</b>	<ul style="list-style-type: none"><li>• Provision of clarification and/or further details (upon request, on a case-by-case basis)</li></ul>
<b>Contribution of NCs</b>	<ul style="list-style-type: none"><li>• No direct contribution</li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• Consolidated country-specific analysis of energy markets and policy reforms (Phase 2 of the Regional Analysis)</li></ul>
<b>Timeframe</b>	<ul style="list-style-type: none"><li>• April-May 2009</li></ul>



## Interviews

The interviews with National Participating Institutions and National Coordinators will be the occasion for direct dialogue and provide the most valuable information for the Regional Analysis

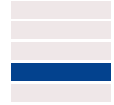
<b>Preparation by Pöyry</b>	<ul style="list-style-type: none"><li>• <b>Planning and organization of the interviews (in cooperation with NPI/NCs)</b></li><li>• <b>Preparation of interview contents</b></li><li>• <b>Preparation of minutes of the interviews to be sent to interview participants</b></li></ul>
<b>Contribution of NPIs</b>	<ul style="list-style-type: none"><li>• <b>Support in the organization of the interviews</b></li><li>• <b>Participation to the interviews</b></li><li>• <b>Preparation and delivery of follow-up information (if necessary)</b></li></ul>
<b>Contribution of NCs</b>	<ul style="list-style-type: none"><li>• <b>Participation to the interviews</b></li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• <b>Interview results to be consolidated in the country-specific analysis of energy markets and policy reforms (Phase 2 of the Regional Analysis)</b></li></ul>
<b>Timeframe</b>	<ul style="list-style-type: none"><li>• <b>Mid-March to May 2009</b></li></ul>



## Contents of the interviews

The interviews will be prepared on a country-specific, case-by-case and will cover a variety of topics related to the Regional Analysis

		<b>EXAMPLES</b>
<b>Information from Assessment Missions</b>	<ul style="list-style-type: none"><li>• Discussion of information provided during assessment missions</li><li>• Clarifications and in-depth discussion</li></ul>	
<b>Information from present Request for Information</b>	<ul style="list-style-type: none"><li>• Discussion of information provided (or to be provided) for the present questionnaire</li><li>• Clarifications and in-depth discussion</li></ul>	
<b>General issues related to the energy policies of the country</b>	<ul style="list-style-type: none"><li>• Topics of interest related to the energy policy of the country (current projects and activities, current political</li></ul>	
<b>Barriers to investments</b>	<ul style="list-style-type: none"><li>• Present barriers to investments in energy efficiency and renewable energy projects – and possible ways and solutions to overcome them</li><li>• Past barriers to investments in energy efficiency and renewable energy projects – and how they have been overcome</li></ul>	
<b>Success stories</b>	<ul style="list-style-type: none"><li>• Examples of successful policy reforms that have supported the implementation of energy efficiency and renewable projects</li></ul>	



## Consolidation of information into draft report

In the third project phase, Pöyry will consolidate the results of the analysis of the energy markets and policy reforms as well as the analysis of the case studies into a first draft of the report

<b>Preparation by Pöyry</b>	<ul style="list-style-type: none"><li>• Preparation of report draft</li><li>• Identification of issues to be clarified in relation to the consolidated information (upon necessity and on a case-by-case basis)</li></ul>
<b>Contribution of NPIs</b>	<ul style="list-style-type: none"><li>• Provision of clarifications on delivered information (upon necessity)</li></ul>
<b>Contribution of NCs</b>	<ul style="list-style-type: none"><li>• No direct contribution</li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• Draft report with consolidated information</li></ul>
<b>Timeframe</b>	<ul style="list-style-type: none"><li>• June-October 2009</li></ul>

## Support in results validation

In the final phase of the project, the recommendations for policy reforms will be defined, based upon the results of the country analysis and of the case studies

<b>Preparation by Pöyry</b>	<ul style="list-style-type: none"><li>• Preparation of analysis results</li><li>• Development of recommendations for policy reforms</li><li>• Organization of bilateral meetings or conference calls with National Participating Institutions and National Coordinators for discussion of results and findings</li></ul>
<b>Contribution of NPIs</b>	<ul style="list-style-type: none"><li>• Discussion of results and findings in bilateral meetings or conference calls</li></ul>
<b>Contribution of NCs</b>	<ul style="list-style-type: none"><li>• Discussion of results and findings in bilateral meetings or conference calls</li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• Validated results and findings of the Regional Analysis to be consolidated into draft report</li></ul>
<b>Timeframe</b>	<ul style="list-style-type: none"><li>• July-October 2009 (and longer, if necessary)</li></ul>

## Next Steps

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Shortly after the meeting in Geneva, the questionnaires will be sent to the NPI and the planning and the organization of the interviews will begin

<b>Activity</b>	<b>Responsible entity</b>	<b>Expected Deadline</b>
<b>Send general questionnaire to NPIs</b>	<b>Pöyry</b>	<b>06.03.2009</b>
<b>Contact NPIs for interview planning</b>	<b>Pöyry</b>	<b>06.03.2009</b>
<b>Deliver of filled-out questionnaires to Pöyry</b>	<b>NPI</b>	<b>17.04.2009</b>
<b>Organization of interviews</b>	<b>Pöyry / NPI</b>	<b>03/09-05/09</b>

## Key success factor for Regional Analysis

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The dialogue and the interaction between Pöyry and the National Participating Institutions will be maintained throughout the entire course of the Regional Analysis

- Pöyry contact persons are available any time to discuss and provide clarifications on the present requests for information
- Pöyry will support the National Participating Institutions during the preparation of the information to be delivered
- Both Pöyry and the National Participating Institutions will benefit from the interaction and the exchange of the information for the Regional Analysis
- ***Should you have any question or need for support, simply do not hesitate to contact us: we will be glad to help you!***

**The key success factor for the Regional Analysis is an open, trustful and constructive interaction between Pöyry and the representatives of the participating countries**

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## Annex: Work Plan of the Regional Analysis

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## Situation and context

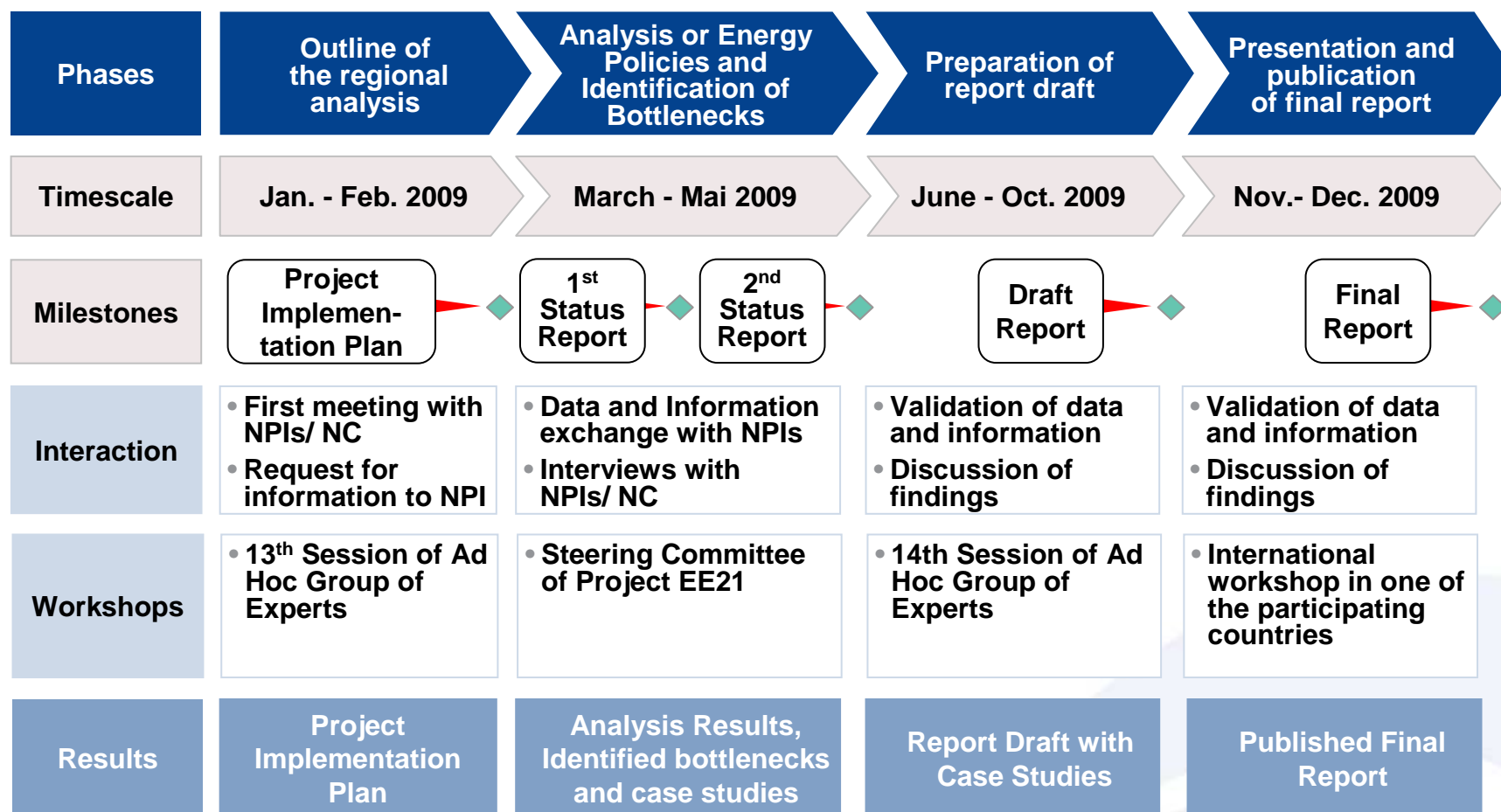
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The Work Plan describes the methodological approach that will be used for the Regional Analysis

- In November 2008, Pöyry received the mandate for the Regional Analysis
- In December 2008, Pöyry presented its vision for the implementation of the assignment at the 12<sup>th</sup> Session of the AHGE
- Following the session, Pöyry was requested to provide a detailed work plan on project implementation to the 13<sup>th</sup> Session of the AHGE
- In January 2009 the project activities started (Phase I of the project)
- The first activities were the definition of a detailed work plan for project implementation and the outline of the report : these inputs have been consolidated into the Project Implementation Plan, which has been discussed with the UNECE Project Management Unit in the first face-to-face meeting in Geneva on the 29.01.2009
- Once finalized, the Project Implementation Plan has been submitted to the UNECE Project Management Unit for approval
- The current presentation responds to the request of the AHGE and is based on the finalized version of the Project Implementation Plan

## Activities of the Regional Analysis: overview

The project results will be achieved in four phases; interaction with the participating countries will take place throughout all project phases



## Phase 1: Outline of the regional analysis



In the first phase of the project, the outline for the Regional Analysis is defined and agreed upon jointly between Pöyry and the Project Implementation Unit

<b>Activities (Pöyry)</b>	<ul style="list-style-type: none"><li>• <b>Project Implementation Plan</b></li><li>• <b>Methodological Outline of the Analysis and Report Structure</b></li><li>• <b>Presentation and discussion of Request for Information from National Participating Institutions (at 13<sup>th</sup> Session of AHGE)</b></li></ul>
<b>Activities (NPI)</b>	<ul style="list-style-type: none"><li>• <b>Participation on first meeting on Requests for Information (02.03.2009)</b></li></ul>
<b>Activities (NC)</b>	<ul style="list-style-type: none"><li>• <b>No activities</b></li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• <b>Project Implementation Plan (approved by UNECE PMU)</b></li><li>• <b>Outline of final report (in Project Implementation Plan)</b></li><li>• <b>Project Work Plan (sent to Ad Hoc Group of Experts)</b></li><li>• <b>Outline for collaboration between Pöyry and National Participating Institutions / National Coordinators</b></li></ul>

## Phase 2: Analysis of Energy Policies and Identification of Bottlenecks



In the second phase of the project, the energy markets developments and the policy frameworks of each countries are analyzed

<b>Activities (Pöyry)</b>	<ul style="list-style-type: none"> <li>• <b>Collection and consolidation of information from UNECE assessment missions, NPIs and independent sources</b></li> <li>• <b>Support to NPIs in the preparation of data / Clarification of delivered data</b></li> <li>• <b>Interviews with National Participating Institutions and National Coordinators</b></li> <li>• <b>Validation of data and elaboration of analysis results</b></li> <li>• <b>Identification of the bottlenecks and barriers to investments</b></li> <li>• <b>Selection of case studies to be analysed</b></li> </ul>
<b>Activities (NPI)</b>	<ul style="list-style-type: none"> <li>• <b>Preparation of data and delivery to Pöyry</b></li> <li>• <b>Support to Pöyry in data validation</b></li> <li>• <b>Participation to interviews</b></li> </ul>
<b>Activities (NC)</b>	<ul style="list-style-type: none"> <li>• <b>Participation to interviews</b></li> </ul>
<b>Results</b>	<ul style="list-style-type: none"> <li>• <b>Country-specific results of the analysis of energy market developments and policy frameworks</b></li> <li>• <b>Country-specific identified bottlenecks and barriers to investments</b></li> <li>• <b>Overview of case studies to be analyzed in next phase</b></li> </ul>

## Phase 2: Analysis of energy markets development



The analysis of the energy markets will cover all aspects related to the identification and financing of energy efficiency and renewable energy projects

<b>Energy Supply</b>	<ul style="list-style-type: none"><li>• <b>Primary energy sources and energy balance</b></li><li>• <b>Electricity generation, heat supply and technologies in use</b></li></ul>
<b>Energy Demand</b>	<ul style="list-style-type: none"><li>• <b>Demand of primary energy resources by consumption sectors</b></li><li>• <b>Demand of electricity, gas and heat by consumption sectors</b></li></ul>
<b>Energy Markets</b>	<ul style="list-style-type: none"><li>• <b>Structure of markets and market players for electricity, gas and heat</b></li><li>• <b>Tariffs and tariff policy for electricity, gas and heat</b></li></ul>
<b>Energy Efficiency</b>	<ul style="list-style-type: none"><li>• <b>Energy intensity of the country by consumption sector</b></li><li>• <b>Possible sources for energy losses and estimated saving potential</b></li><li>• <b>Energy efficiency markets and business models</b></li></ul>
<b>Renewable Energy Sources</b>	<ul style="list-style-type: none"><li>• <b>Current deployment of renewable energy sources</b></li><li>• <b>Estimated potential for renewable energy sources</b></li><li>• <b>Market players and business models for renewable energy sources</b></li></ul>

## Phase 2: Analysis of policy reforms and regulatory frameworks



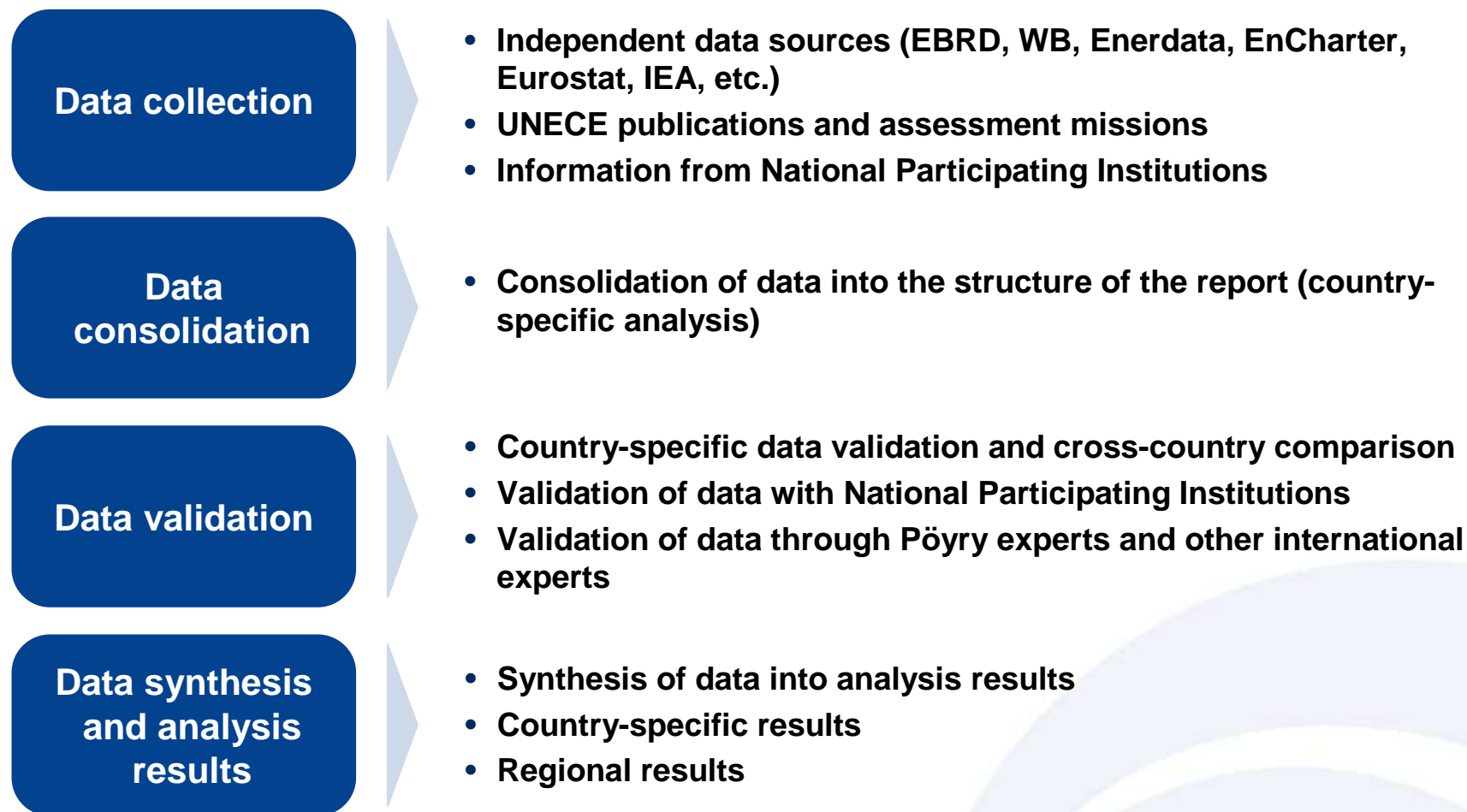
The analysis of policy reforms and regulatory framework will cover all aspects related to support mechanisms and financial incentives for energy efficiency and renewable energy projects

<b>General framework for investments</b>	<ul style="list-style-type: none"><li>• <b>General framework for investments</b></li><li>• <b>Attractiveness of the country for investors</b></li><li>• <b>Authorization procedures</b></li></ul>
<b>Energy policies and policy makers</b>	<ul style="list-style-type: none"><li>• <b>Current policy and regulatory framework in the energy sector, on energy efficiency and renewable energy sources</b></li><li>• <b>Policy makers in the energy sector</b></li><li>• <b>Future developments of policy and regulatory framework</b></li></ul>
<b>International commitments</b>	<ul style="list-style-type: none"><li>• <b>Implementation of EU directives, targets and standards</b></li><li>• <b>Implementation of Kyoto protocol</b></li><li>• <b>Other international commitments</b></li></ul>
<b>Economic incentives and financing mechanisms</b>	<ul style="list-style-type: none"><li>• <b>Nature, structure and volume of incentives for energy efficiency</b></li><li>• <b>Nature, structure and volume of incentives for renewable energy sources</b></li><li>• <b>Financing mechanisms for energy efficiency and renewable energy projects</b></li></ul>

## Phase 2: Methodology for analysis



The methodology for the analysis phase involves thorough validation of the data and the elaboration of the results in subsequent steps



## Phase 2: Identification of barriers and selection of case studies



The results of the analysis phase will be identified country-specific bottlenecks for investments and the selection of case studies to be analyzed

**Identification of barriers to the implementation of projects**

- **Legal, institutional and administrative barriers**
- **Economic and financial barriers**
- **Lack of awareness and human capacities**

**Criteria for selection for case studies (criteria)**

- **The selected case studies are examples of success stories of overcome barriers**
- **Each case study shall have a direct link to an identified barrier in the participating countries**
- **The case studies will be identified among the participating countries or in countries with similar conditions**
- **The case studies will allow the definition of recommendations for policy reforms**

## Phase 3: Preparation of the report draft



In the third phase of the project, the identified case studies are analyzed in detail and consolidated into the report draft

<b>Activities (Pöyry)</b>	<ul style="list-style-type: none"><li>• <b>Elaboration of case studies</b></li><li>• <b>Develop recommendation for policy reforms</b></li><li>• <b>Validate results of case studies and developed recommendations with NPIs, NC, UNECE PMU and international experts</b></li><li>• <b>Preparation and presentation of report draft</b></li></ul>
<b>Activities (NPI)</b>	<ul style="list-style-type: none"><li>• <b>Discussion and validation of case studies results and proposed recommendations</b></li></ul>
<b>Activities (NC)</b>	<ul style="list-style-type: none"><li>• <b>Discussion and validation of case studies results and proposed recommendations</b></li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• <b>Draft report of the Regional Analysis, including the 12 analyzed case studies (approved by UNECE PMU)</b></li></ul>

## Phase 3: Methodology for analysis of case studies



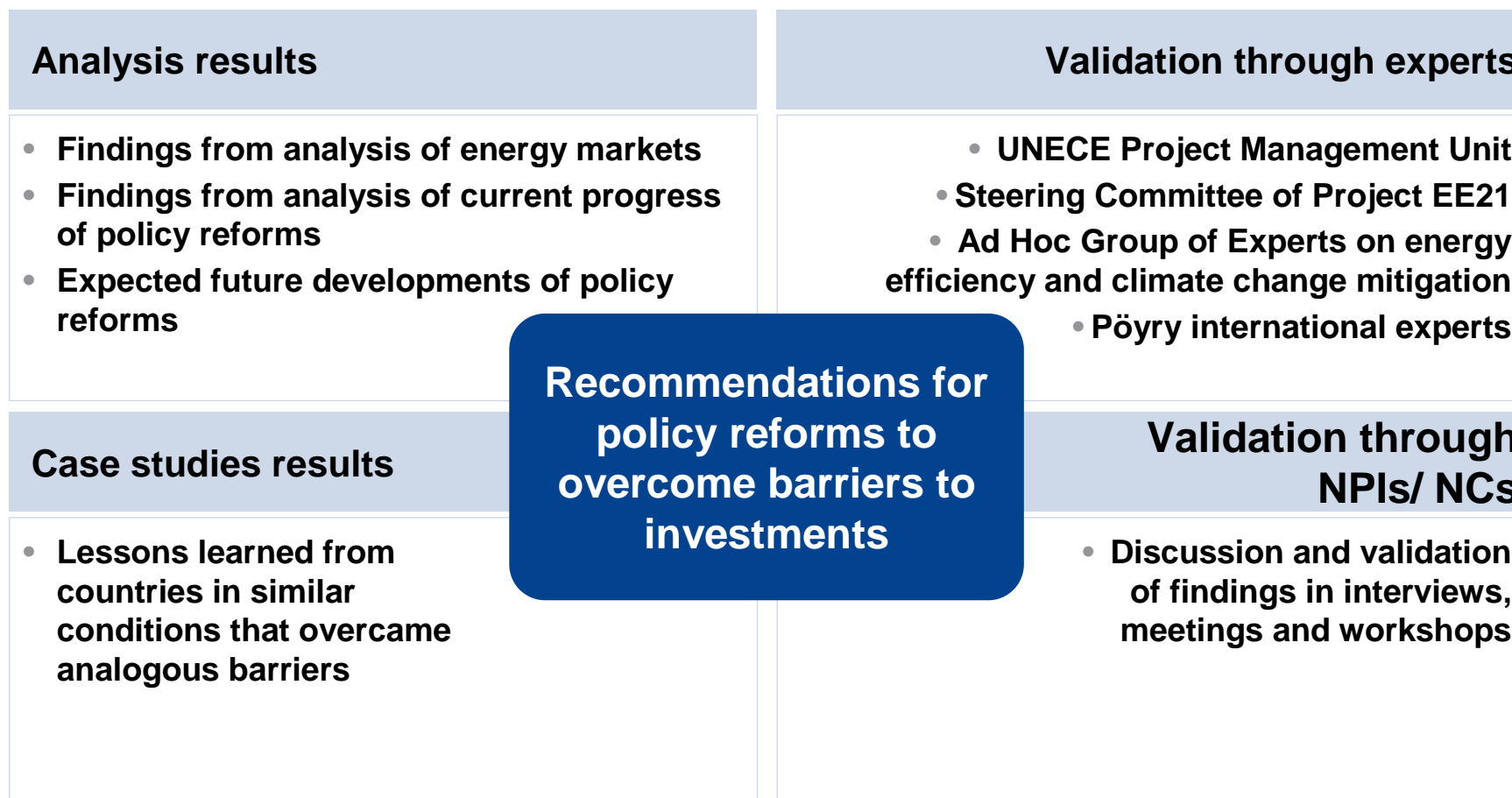
The case studies will be analyzed from different points of view in order to draw specific recommendations for implementation

<b>General description</b>	<b>Barrier to be overcome, originating country, countries concerned</b>
<b>Business case</b>	<b>Solution applied, involved entities, business model where applicable</b>
<b>Benefits</b>	<b>Scaled-up impacts at national level: economic, financial, environmental and social benefits</b>
<b>Costs</b>	<b>Costs for implementation, cost bearers</b>
<b>Regulatory prerequisites</b>	<b>Regulatory preconditions for successful realization</b>
<b>Time necessary</b>	<b>Time necessary for implementation and for benefits to be achieved</b>
<b>Critical success factors / Risks</b>	<b>Lessons learned, Do's and don'ts, Risks and their management</b>
<b>Recommendations</b>	<b>Recommendations for implementation in the participating countries</b>

## Phase 3: Development of recommendations for policy reforms



The proposed policy reforms are developed through the consolidation of the results achieved during analysis and through the contribution of experts



## Phase 3: Structure of final report



The structure of the final report for the Regional Analysis has been agreed upon with the UNECE PMU and is included in the Project Implementation Plan

<b>INTRODUCTION</b>	<ul style="list-style-type: none"><li>• <b>Goals and scope of the Regional Analysis and the UNECE framework activities</b></li><li>• <b>Overview of the energy sector in the project region</b></li></ul>
<b>METHODOLOGY</b>	<ul style="list-style-type: none"><li>• <b>Methodology for collection and consolidation of data</b></li><li>• <b>Synthesis of data and validation of results</b></li><li>• <b>Cooperation with National Participating Institutions</b></li></ul>
<b>ANALYSIS OF POLICY FRAMEWORK</b>	<ul style="list-style-type: none"><li>• <b>Country-specific analysis results</b></li><li>• <b>Regional summary from the analysis of the policy framework</b></li></ul>
<b>CASE STUDIES</b>	<ul style="list-style-type: none"><li>• <b>Criteria for the identification of case studies</b></li><li>• <b>analysis of the 12 selected case studies</b></li><li>• <b>Regional summary of the analysis of the case studies</b></li></ul>
<b>CONCLUSIONS AND RECOMMENDATIONS</b>	<ul style="list-style-type: none"><li>• <b>Country-specific conclusions and recommendations</b></li><li>• <b>Conclusions and recommendations for policy reforms at the regional and sub-regional level</b></li></ul>

## Phase 4: Presentation and publication of final report

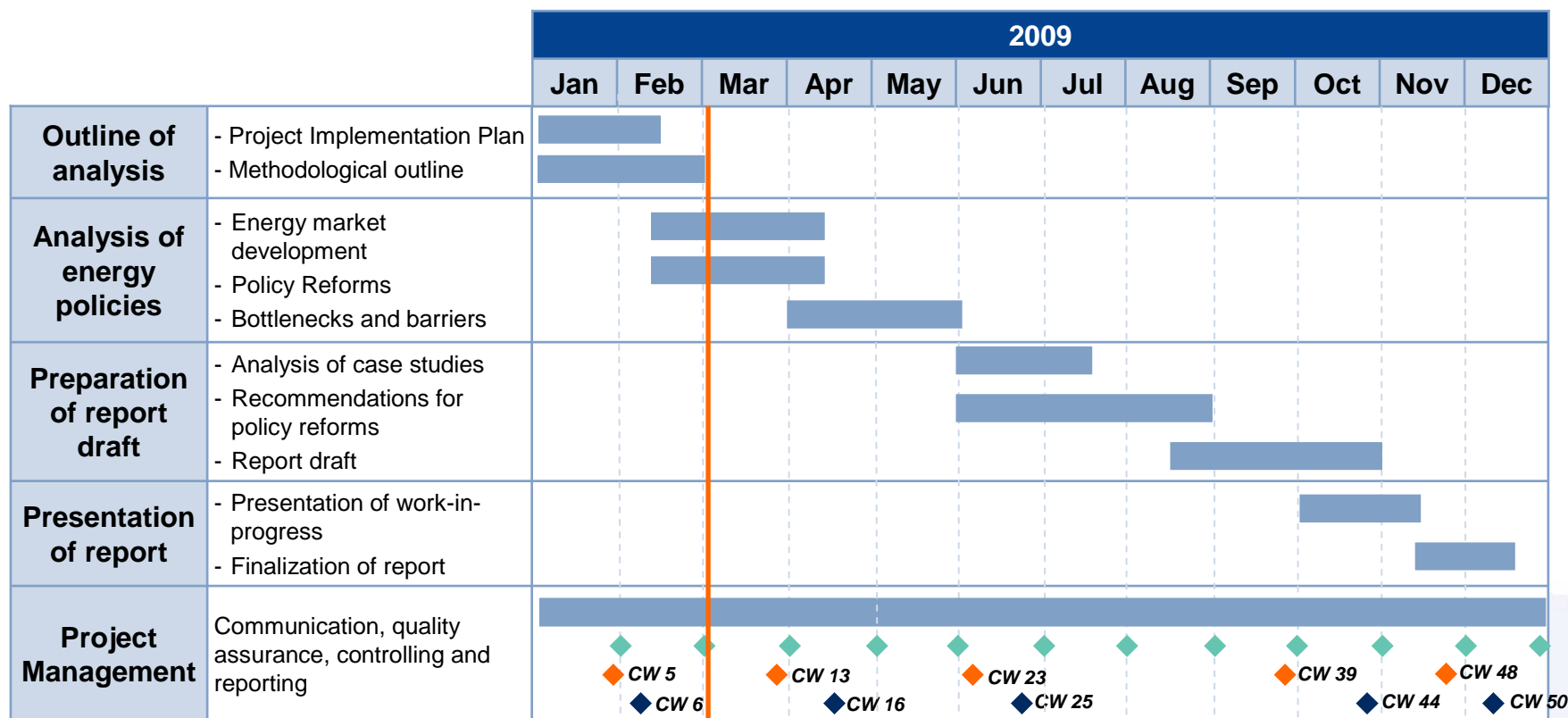


In the fourth phase of the project, the draft report is finalized for publication as a UNECE report and presented at an international workshop

<b>Activities (Pöyry)</b>	<ul style="list-style-type: none"><li>• Final validation of data and findings</li><li>• Presentation of work-in-progress at international workshops</li><li>• Finalization of report</li></ul>
<b>Activities (NPI)</b>	<ul style="list-style-type: none"><li>• Final validation of data and findings</li></ul>
<b>Activities (NC)</b>	<ul style="list-style-type: none"><li>• Final validation of data and findings</li></ul>
<b>Results</b>	<ul style="list-style-type: none"><li>• Finalized version of the Regional Analysis for publication as a UN report (approved by UNECE PMU)</li></ul>

# The timeline of the project activities

The Regional Analysis will be concluded at the end of 2009



Current phase

◆ Monthly progress reports    ◆ Face to face meetings with PMU    ◆ Milestones

