Implementation of Surveys on Energy Consumption in Households and Services in Energy Community

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- The background of the ECS initiative to support the implementation of survey in selected Contracting Parties
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1. The background of the ECS initiative to support the implementation of survey on energy consumption in the selected Contracting Parties
Energy Statistics in Energy Community

- In 2012 Energy Community’s Ministerial Council adopted the *Decision concerning the incorporation of the rules of energy statistics in the Energy Community* and made the relevant rules on energy statistics a part of the *acquis* under the Treaty establishing the Energy Community.
- The ECS committed to support the work of the Contracting Parties to implement Regulation (EC) No 1099/2008 on Energy Statistics and Directive 2008/95/EC concerning the procedure to improve the transparency of gas and electricity prices charged to industrial end-users.
- **Two phases** of support were planned.
1st phase

- August, 2013 – April, 2014
- Technical assistance provided in the following fields:
  - Activity A - Improving annual data collections with emphasis on RES,
  - Activity B - Monthly statistics,
  - Activity C - Price statistics.
- Technical assistance included the implementation of pilot surveys in selected Beneficiaries and it was expected that these countries will implement surveys fully in the period after the project has ended.
2nd phase

- December, 2014 – November, 2015
- The Contracting Parties interested in technical assistance and financial support for conducting energy surveys were requested to submit a detailed implementation and financial plan of the survey to the EC. The supports were given to the NSIs in the following countries:
  - to Bosnia and Herzegovina in conducting the Survey on energy consumption in households,
  - to Montenegro in conducting the Survey on energy consumption in services,
  - and Macedonia in conducting the Survey on energy consumption in households.
Obligations of the NSIs:

- Development of methodological and financial concept based on conducted pilot surveys: sampling method, sample sizes, interviewing, compilation of results, ...
- Ensure availability of NSI specialists and temporary staff who are to conduct the survey;
- Organization, management, conducting and finalization of the survey in accordance with the defined method and under the supervision and guidance of the external expert(s),
- Making of the final report after the survey results have been obtained and making of a separate financial report.
Financial assistance covers:

- Preparation of a detailed work plan of conducting the survey,
- Identification of respondents per consumer group, including sampling where appropriate,
- Selection of interview types and testing,
- Finalization of questionnaires for respondents,
- Selection and training of interviewers,
- Mailing, interviewing, field work services,
- Processing and compilation of data,
- Modelling,
- Any other task necessary.
Technical assistance covers:

- Energy Institute Hrvoje Požar is the consultant selected to provide Technical Assistance to:
  - Review and analysis of the survey concept and proposed costs and budgets per activity;
  - Provide recommendations and validation of methods and procedures;
  - Supervising of all activities and guiding the NSI staff;
  - Review of the methodologies and procedures for compilation, calibration and validation of the final results;
  - Review of the final report and financial reports.
2. Survey on Energy Consumption in Household Sector in Bosnia and Herzegovina
The objective

- The main objective of the project is conducting survey on energy consumption in households on a representative sample, with focus on renewable energy and to obtain reliable information for reporting on compliance with obligation;
- The project was officially initiated in April 2015 and is planned to end in November of 2015;
- The costs of survey covered by EC are EUR 58,000.
Planned and implemented activities

Activities implemented in April - September 2015:

- Initial TA mission was implemented on 8-9 April, 2015;
- Sample size is 7083, the goal was to get the answers from 5600 households;
- The sample is stratified in strata based on belonging to entities and type of settlement urbanization;
- Final comprehensive questionnaire designed (includes questions about main household characteristics, technologies and energy for end-uses, annual energy consumption, electrical appliances in households and fuel consumption in personal cars);
Planned and implemented activities (continued)

Activities implemented in April - September 2015:

- Instructions for interviewers were prepared, interviewers were trained;
- About 104 interviewers engaged in field work (pen and paper method), as well as 22 controllers and 15 supervisors to control results;
- Interviews were completed (25th May – 07th June, 2015)
- Database designed and data entry completed.
Planned and implemented activities (continued)

Remaining activities:

- Second TA mission planned for 12-13 October, 2015 the aim of which is to provide support for remaining activities;
- Additional numerical and logical controls, imputations of missing data, weighting and assessment of entire population, data calibration, data verification and preparation of Quality Report;
2. Survey on Energy Consumption in the Service Sector in Montenegro
The objective and overall costs

- The main objective of the survey is to provide inputs for national energy balance, as well as tracking energy efficiency improvements, monitoring results of energy efficiency measures, complementing statistics related to environmental issues and other.
- Project was officially initiated in January, 2015 and is planned to end in December of 2015;
- The costs of survey covered by EC are EUR 36,000.
Planned and implemented activities

Activities implemented in January - September 2015:

- Initial TA mission was implemented on 22-23 January, 2015;
- The focus of the survey were five sub-sectors: health services: health services, education, tourism, public service and administration, trade and other services and production sections: agricultural, industry and construction;
- Methodology and sample defined: sample size are 1765 enterprises/local units out of total 46,000;
Planned and implemented activities (continued)

Activities implemented in January - September 2015:

- Public enterprises (education sector, health sector, administration) were surveyed in cooperation with the State Office for Property, which regularly collects parts of necessary energy data;
- Sample includes enterprises with number of employees over 50 and annual turnover above 18 thousand € in 2014;
- The survey includes, besides the enterprises in the services sector, those in the industry sector and agriculture;
Planned and implemented activities (continued)

- A detailed questionnaire for each sub-sector was designed and it includes explanations and clarifications of the questions; Reduced pilot survey was conducted;
Planned and implemented activities (continued)

Activities implemented in January - September 2015:

- Instructions for interviewers were prepared, interviewers trained;
- About 30 interviewers were engaged in field work (pen and paper method) and 12 supervisors for result control;
- Interviewing was completed (14.04. – 30.04.2015)
- Database was designed and data entry completed

Remaining activities:

- Numerical and logical controls of survey results, data inputation and verification; Final results and Financial Report
2. Survey on Energy Consumption in Households in Macedonia
The objective and overall costs

- The aim of the survey is obtaining detailed information on the consumption of various energy sources, including RES, and analyzing the use of energy and devices.
- The results of the survey will lead to upgrading the quality of national energy statistics and will also contribute to the improvements in the energy efficiency in households.
- Project was officially initiated in February 2015 and is planned to end in December of 2015;
- The costs of survey covered by ECS are EUR 37,683.
Planned and implemented activities

Activities implemented in January - September 2015:

- Initial TA mission was implemented in February, 2015;
- Methodological instruments were prepared, draft questionnaire agreed with relevant public institution in Macedonia; Pilot survey in 25 household conducted;
- Study visit in Bulgaria was organized, the main emphasis was put on sampling techniques;
- A manual for interviewers was prepared;
- Sample created from Census data, sample size was 3500 households.
Planned and implemented activities (continued)

Activities implemented in January - September 2015:

- A two-day training for 80 interviewers was organized;
- Information letters were prepared and delivered to the sampled households;
- The survey was conducted in the period 8th June – 3rd July, 2015;
- The total number of successful interviewers was 3142.
Planned and implemented activities (continued)

- The response rate:

<table>
<thead>
<tr>
<th>REGIONAL STATISTICAL OFFICES</th>
<th>Response</th>
<th>Non-response</th>
<th>Total</th>
<th>% Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKOPJE</td>
<td>725</td>
<td>125</td>
<td>850</td>
<td>85.3</td>
</tr>
<tr>
<td>VELES</td>
<td>296</td>
<td>24</td>
<td>320</td>
<td>92.5</td>
</tr>
<tr>
<td>TETOVO</td>
<td>393</td>
<td>47</td>
<td>440</td>
<td>89.3</td>
</tr>
<tr>
<td>STRUMICA</td>
<td>369</td>
<td>11</td>
<td>380</td>
<td>97.1</td>
</tr>
<tr>
<td>OHRID</td>
<td>332</td>
<td>28</td>
<td>360</td>
<td>92.2</td>
</tr>
<tr>
<td>KUMANOVO</td>
<td>290</td>
<td>40</td>
<td>330</td>
<td>87.9</td>
</tr>
<tr>
<td>STIP</td>
<td>350</td>
<td>30</td>
<td>380</td>
<td>92.1</td>
</tr>
<tr>
<td>BITOLA</td>
<td>387</td>
<td>53</td>
<td>440</td>
<td>88.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3142</td>
<td>358</td>
<td>3500</td>
<td>89.8</td>
</tr>
</tbody>
</table>

Macedonia
Planned and implemented activities (continued)

Activities implemented in January - September 2015:

- A database was designed and data entry completed using the Blaise tool;
- Control and corrections of data entered was done.

Remaining activities:

- Data analysis and publication;
Conclusions

- Implementation of surveys progress as scheduled in time tables;
- The final results will show only the survey results;
- It is suggested that Beneficiaries:
  - Continue with further processing of data and performing the modeling or other advanced analysis;
  - Analyze options for periodical conducting of such surveys.
THANK YOU!

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