End of Action Report
Action 6: National bio-waste plan and recommendations

Reporting Date
August 2014
1. GENERAL INFORMATION

1.1. ACTION DESCRIPTION

This Action is entitled “National bio-waste plan and recommendations”, with a duration of 7 months (start date: 01/01/2014 and end date: 30/07/2014).

The beneficiary responsible for action coordination was NTUA.

The overall target of Action 6 was to summarize the results of all previous actions, produce a guide on biowaste management and provide recommendations for drafting the new technical specifications on biowaste management.

This actions consisted of two activities:

Activity 6(a): Guide on biowaste management for local authorities. EPTA was in charge of this activity in cooperation with NTUA and EDSNA.

Activity 6(b): Recommendations for technical specifications and biowaste related legislation. NTUA was in charge of this activity in cooperation with EPTA.

The expected results were:
- Creation of one guide one bio-waste management for local authorities
- At least 5 technical recommendations for the amendment of technical specifications.
2. ACTION ASSESSMENT AND EVALUATION

2.1. DELIVERABLES AND MILESTONES

In the following Table the deliverables and milestones of Action 6 are presented along with the deadlines and the current status.

<table>
<thead>
<tr>
<th>A/A</th>
<th>Deliverables</th>
<th>Deadline</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Guide on biowaste management for local authorities</td>
<td>30/05/2014</td>
<td>The Guide was produced in July 2014.</td>
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<tr>
<td>2.</td>
<td>Recommendations for technical specifications and biowaste related legislation</td>
<td>30/07/2014</td>
<td>The Recommendations were prepared in August 2014.</td>
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Milestones

<table>
<thead>
<tr>
<th>A/A</th>
<th>Milestones</th>
<th>Deadline</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>National Biowaste Plan prepared</td>
<td>30/05/2014</td>
<td>The national biowaste plan was not a deliverable. However, a national action plan was proposed and presented by project beneficiaries in Athens Biowaste Conference on the 12th of June 2014 (see presentation of A. Bourka).</td>
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<td>2.</td>
<td>Distribution of the Guide on biowaste for local authorities commenced</td>
<td>01/06/2014</td>
<td>The Guide was distributed via emailing list to all local authorities in Greece by NTUA in August 2014 and it was uploaded on project website. More details about the dissemination list, see below in 2.2.</td>
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<tr>
<td>3.</td>
<td>Recommendations for technical specifications and biowaste related legislation submitted to the Ministry for the Environment</td>
<td>30/07/2014</td>
<td>The recommendations were submitted to the Ministry for the Environment in August 2014 to two Advisors of the Minister for the Environment (Mr Liogas &amp; Mr Andreopoulos).</td>
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As shown in the aforementioned table, this action has been implemented with a short delay of 2 months. The delay in the implementation of action 3 in MoA (implementation of the biowaste separate collection scheme) as well as the work load prior to Athens Biowaste conference (May-June 2014) affected project timeframe. In any case, all deliverables and milestones have been successfully achieved and dissemination activities will continue to take place in the framework of After-Life communication plan.

2.2. PROGRESS INDICATORS

The progress indicators of the Action as described in the project Proposal are the following:

*Number of technical specifications provided, number of bio-waste recommendations, number of guides distributed, number of bio-waste related issues covered by the guide.*

A number of additional indicators have been developed in order to assess the progress of the project, which are presented below.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Values</th>
<th>Notes</th>
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<tbody>
<tr>
<td><em>Number of bio-waste related issues</em></td>
<td>-</td>
<td>All bio-waste related issues</td>
</tr>
</tbody>
</table>
| covered by the guide | - Selection and supply of equipment and consumables  
- Awareness campaign plan  
- Cost estimation  
- Distribution of bins  
- Operation, Monitoring and Evaluation of separate collection scheme  
- Minimum biowaste quality criteria for composting  
- Composting results  
- Templates | concerning a Municipality, have been covered in the Guide |
| Number of times that the guide was widely disseminated (not distributed) | The guide was promoted in the following events:  
- Athens Biowaste website  
- International Athens Biowaste Conference (June 2014)  
- National Congress of Waste Management Authorities in Syros (July 2014)  
- National seminar for composting and recycling in Municipalities (November 2014) – participation confirmed  
- Beneficiaries' websites |
| Number of times that the guide was distributed or downloaded | - 200 downloads up to now.  
- Distributed to all Greek Municipalities & Waste management authorities via mailing list (August 2014) – electronic version  
- The Ministry for the Environment (August 2014) – hardcopy version  
- National seminar for composting and recycling in Municipalities (November 2014) – participation confirmed (hardcopy)  
- Beneficiaries' websites (electronic) |
| Further dissemination activities of the guide | - EDSNA will distribute the hardcopy of the Guide to all members - municipalities  
- NTUA and EPTA will distribute to all municipalities that co-operate with. |
| Number of minimum compost quality specifications from separated at source materials | 7 |
3. RISKS, PROBLEMS ENCOUNTERED AND SOLUTIONS FOLLOWED

The implementation of this action has not raised serious risks or problems. However, a few problems have been identified and are described below:

- **Guide on biowaste management for local authorities**

In 2012, a Guide for separate collection of biowaste was published by the O.P. for the Environment and Sustainable Development under the Ministry for the Environment. This Guide included all European experience on how to set up a biowaste collection scheme, lacking though national practices and step-by-step guidance. The preparation of the Athens Biowaste Guide was thus a difficult project, as it had to supplement the 2012 guide of the Ministry and had to be innovative and practical. It is believed that finally this was achieved and the Athens Biowaste Guide has been acknowledged by the majority of the Municipalities and other stakeholders as a useful guide to start implementing and monitor biowaste separate collection.

- **Dissemination activities**

The municipal and regional elections in June 2014 and the assignment of the new councils in September 2014 have produced additional dissemination requirements dedicated to municipalities after the end of the project. However, the After-LIFE communication plan foresees such activities. Therefore, it is expected that the majority of Greek municipalities (the new councils) will get familiar with the Guide.

4. OVERALL ACTION EVALUATION

The action has been successfully implemented and all targets have been over fulfilled. More specifically:

<table>
<thead>
<tr>
<th>Action 5 (according to proposal)</th>
<th>Results achieved</th>
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<tr>
<td>- Create one guide on bio-waste management for local authorities summarizing the results of all previous actions and giving emphasis in the practical aspects of separate collection</td>
<td>One guide has been developed fitting to the needs of Municipalities which seek to start implementing and monitoring biowaste separate collection. It is considered practical, as it includes examples (photos, forms, templates, FAQ, etc.) from Athens Biowaste project. It also summarizes all project results and provides equations and indicators that have been developed in the framework of the project.</td>
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<td>- Provide recommendations for the drafting of the new technical specifications which will amend the existing legislation.</td>
<td>As the existing legislation on biowaste management has not been issued yet, it is expected that the recommendations prepared within the project will be taken into account by the Ministry for the Environment. It is acknowledged that Athens Biowaste is the only pilot scheme of biowaste source separation in Greece and will be certainly utilized by competent authorities.</td>
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