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Work package 7: Project Validation

Deliverable 7.4: Report on validation meetings with stakeholders

EMSPI: Energy Management Standardization in Printing Industry

(D7.4 v02-EN, 22nd of February 2017)



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INTRODUCTION OF D7.4: report on validation meetings with stakeholders

At least one final workshop per country will be conducted to review and assess main findings and conclusions from this first batch of implementations.

In these workshops results will be presented to main stakeholders related to the Energy Efficiency in the Printing Industry, including national associations from the countries in the Consortium and new countries of the EU, Energy Agencies, Standard development organizations, ESCOs, Scientific and educational organizations and other any stakeholder involved in the printing industry. Main conclusions and results will be incorporated in the project's web page to facilitate dissemination.

Task 7.4 is focused in the direct exchange of information with the main stakeholders involved in the Energy Management of Printing Industry. This action will include the participation of national associations outside the target countries. They will attend the workshops or will attend through videoconference. In specific cases, they will be individually contacted and interviewed (i.e. when they cannot attend the planned workshop). The Consortium will receive feedback and the national associations will know the project results on order to boost the transferability to other countries. The official reports to the EASME (Task 1.4), will contain an annex with a record of the feedbacks (= D7.0):

- list of national associations from countries outside the consortium invited to the workshops;
- list of national associations from countries outside the consortium that have participated in the workshop;
- Summary of the feedback received from national associations from countries outside the consortium.

These associations will be identified through INTERGRAF, the European Federation which supports the project and established contacts of the Consortium within different projects and/or networks, like the partnership of ClimateCalc where the National Associations of United Kingdom, France and Belgium are members together with The Netherlands and Denmark, already participants in the project.

Especially for the dissemination within the Intergraf network, GRAKOM did a first general presentation in the Environmental Work Group of Intergraf and later on the project coordinator Dienstencentrum did a more thorough presentation of the final results and outcomes with the responsible employee of Intergraf in the field of environmental en energy management. These two presentations makes it possible to spread the relevant information about the EMSPI results to the 24 national members of Intergraf.

The evaluation actions will be done by the creator of the specific guidelines. In this report we will give a validation of the following aspects:

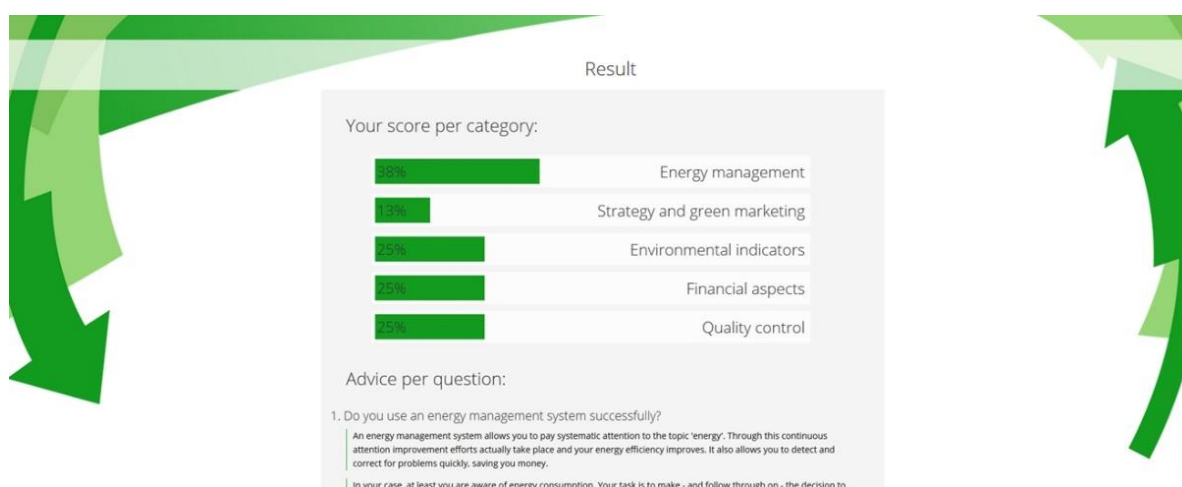
- D7.4a: General overview of the awareness level in SME's (based on the extra deliverable 5.7: the EMSPI Self-Assessment), chapter 1
- D7.4b: Validation result of the national workshop(s), chapter 2

1. VALIDATION D7.4a: GENERAL OVERVIEW OF THE AWARENESS LEVEL IN SME'S

EMSPI is the international energy project where about 100 companies of the printing industry in Europe are participating in. One of the most important outcomes of this project is the increase of the awareness level of entrepreneurs of the printing industry. Due to the fact that energy is (still) not a 'hot topic' for the management, a reduction of energy - and therefore greenhouse gases - is not really happening so far. On the contrary: the production of greenhouse gases is continuously rising in Europe, and the highest at the moment in The Netherlands. A serious change is needed to stop this contribution to global warming. EMSPI – with its tailor made energy management system - could be the answer for the print media sector.

But energy reduction will only occur when the awareness level of entrepreneurs of SMEs increases. The 'small captains of industry' should see the relevance and added value of energy management for their company. This in fact is one of the main goals of the EMSPI project: raising the awareness level in SMEs.

To get a general overview of the awareness level of SME's per country about the relationship between EnMS and other management topics (defined in WP5), a Self-Assessment System (www.self-assesment.eu/emspi/) was created by Dienstencentrum as an extra deliverable with 15 general orientated questions about all the management issues of energy management. Find under here a screen shot:



The results of this tool provides the consortium a clear viewpoint on the level of integration of energy management in the present organisation level of the SME's. The conclusions can be reached by analyse the results from the first stage (0-assessment or Baseline-assessment) with the final results of the last measurements.

This internet application contains 15 specific multiple choice questions about EnMS and the other management topic. Per question the respondent can win 0, 25, 50, 75 or 100 point. Due to the fact that all the questions are divided over the 5 topics, the computer will provide the respondent a specific figure per category and an over-all figure at the end of this assessment. The respondent also gets an general advise how to increase his/her score in the future.

In the following tables you may find the assessment results per country. The first table shows the first level of general awareness in the beginning of the implementation. We call it the *BASELINE Assessment*. The second measurement is called the *FINAL Assessment* and shows us the possible attitude change, after implemented (the first steps) of energy management ISO 50001. Per country a general conclusion is given on the achieved results:

The Netherlands:

| Results of the EMSPI Self-Assessment tool: BASELINE assessments (2 nd quarter 2016) | Companies in THE NETHERLANDS | | | | | | | | | | | | | | | | | | | |
|---|------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | 88 | 6 | 31 | 13 | 19 | 50 | 88 | 50 | 75 | 63 | 38 | 38 | 19 | 13 | 31 | 25 | 50 | 6 | 50 | 69 |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | 50 | 50 | 50 | 13 | 13 | 50 | 88 | 88 | 75 | 25 | 25 | 13 | 13 | 13 | 75 | 13 | 75 | 13 | 75 | 100 |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | 58 | 42 | 58 | 17 | 8 | 58 | 75 | 83 | 92 | 33 | 75 | 25 | 8 | 33 | 25 | 8 | 58 | 8 | 58 | 83 |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | 58 | 42 | 58 | 17 | 8 | 58 | 75 | 83 | 92 | 33 | 75 | 25 | 8 | 33 | 25 | 8 | 58 | 8 | 58 | 83 |
| Level of awareness in QUALITY CONTROL in relation to energy management | 58 | 42 | 58 | 17 | 8 | 58 | 75 | 83 | 92 | 33 | 75 | 25 | 8 | 33 | 25 | 8 | 58 | 8 | 58 | 83 |
| AVERAGE 0-SCORE (per company): | 62 | 36 | 51 | 15 | 13 | 56 | 80 | 77 | 85 | 37 | 58 | 25 | 13 | 25 | 41 | 12 | 60 | 9 | 60 | 84 |
| AVERAGE 0- SCORE in The Netherlands: | 45 out of 100 | | | | | | | | | | | | | | | | | | | |

| Results of the EMSPI Self-Assessment tool: FINAL assessments (4 th quarter 2016) | Companies in THE NETHERLANDS | | | | | | | | | | | | | | | | | | | |
|--|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | 75 | 63 | 69 | 56 | 81 | 100 | 94 | 94 | 75 | 81 | 44 | 56 | 50 | 69 | 88 | 38 | 75 | 100 | 69 | 88 |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | 75 | 50 | 75 | 50 | 50 | 88 | 88 | 88 | 100 | 75 | 25 | 25 | 25 | 88 | 88 | 25 | 75 | 88 | 50 | 88 |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | 75 | 58 | 67 | 67 | 33 | 92 | 83 | 83 | 83 | 75 | 75 | 58 | 67 | 67 | 83 | 33 | 92 | 42 | 50 | 93 |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | 75 | 58 | 67 | 67 | 33 | 92 | 83 | 83 | 83 | 75 | 75 | 58 | 67 | 67 | 83 | 33 | 92 | 42 | 50 | 93 |
| Level of awareness in QUALITY CONTROL in relation to energy management | 75 | 58 | 67 | 67 | 33 | 92 | 83 | 83 | 83 | 75 | 75 | 58 | 67 | 67 | 83 | 33 | 92 | 42 | 50 | 93 |
| AVERAGE FINAL SCORE (per company) | 75 | 57 | 69 | 61 | 46 | 93 | 86 | 86 | 85 | 76 | 59 | 51 | 55 | 72 | 85 | 32 | 85 | 63 | 54 | 91 |
| AVERAGE FINAL SCORE in The Netherlands: | 69 out of 100 (till 2017-01-24) | | | | | | | | | | | | | | | | | | | |

Based on the collected results for the Netherlands we can generate the following conclusions:

Although not all the FINAL assessments are realized, based on the first results given by the participants of the Dutch Validation Workshop on the 8th of November 2016, we can conclude a clear increase of the energy management awareness within the group of SME's. Based on the mainly positive reactions during the meeting (including the results from the validation schemes), we can give a safe first conclusion that the content and approach of the EMSPI project in The Netherlands creates an increase in the awareness in energy management: from a 4.5 (BASELINE value) to a 7.1 (FINAL measurement with an increase of the awareness of 53%).

Czech Republic:

| Results of the EMSPI Self-Assessment tool: BASELINE assessments (2nd quarter 2016) | Companies in CZECH REPUBLIC | | | | | | | | | | | | | | | | | | | |
|---|------------------------------------|-----------|-----------|-----------|-----------|---|-----------|-----------|---|-----------|----|-----------|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | | 44 | 38 | 19 | 63 | | 50 | 63 | | 75 | | 50 | | 13 | 38 | 25 | 13 | 38 | 50 | 75 |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | | 50 | 13 | 50 | 13 | | 13 | 50 | | 63 | | 13 | | 50 | 50 | 13 | 25 | 13 | 25 | 13 |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | | 25 | 42 | 58 | 33 | | 0 | 8 | | 83 | | 8 | | 42 | 75 | 33 | 58 | 8 | 50 | 50 |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | | 25 | 42 | 58 | 33 | | 0 | 8 | | 83 | | 8 | | 42 | 75 | 33 | 58 | 8 | 50 | 50 |
| Level of awareness in QUALITY CONTROL in relation to energy management | | 25 | 42 | 58 | 33 | | 0 | 8 | | 83 | | 8 | | 42 | 75 | 33 | 58 | 8 | 50 | 50 |
| AVERAGE 0-SCORE (per company) | | 34 | 35 | 49 | 35 | | 13 | 27 | | 77 | | 17 | | 38 | 63 | 27 | 42 | 15 | 45 | 48 |
| AVERAGE 0-SCORE in Czech Republic | 38 out of 100 | | | | | | | | | | | | | | | | | | | |

| Results of the EMSPI Self-Assessment tool: FINAL assessments (1st quarter 2017) | Companies in CZECH REPUBLIC | | | | | | | | | | | | | | | | | | | |
|--|------------------------------------|-----------|-----------|-----------|-----------|---|-----------|-----------|---|-----------|----|-----------|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | | 81 | 69 | 50 | 88 | | 50 | 75 | | 94 | | 75 | | 75 | 69 | 50 | 44 | 81 | 75 | 75 |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | | 50 | 25 | 75 | 50 | | 25 | 50 | | 88 | | 38 | | 50 | 50 | 13 | 75 | 50 | 38 | 50 |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | | 58 | 58 | 75 | 58 | | 17 | 42 | | 92 | | 58 | | 58 | 75 | 58 | 75 | 58 | 58 | 83 |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | | 58 | 58 | 75 | 58 | | 17 | 42 | | 92 | | 58 | | 58 | 75 | 58 | 75 | 58 | 58 | 83 |
| Level of awareness in QUALITY CONTROL in relation to energy management | | 58 | 58 | 75 | 58 | | 17 | 42 | | 92 | | 58 | | 58 | 75 | 58 | 75 | 58 | 58 | 83 |
| AVERAGE FINAL SCORE (per company) | | 61 | 54 | 70 | 62 | | 25 | 50 | | 92 | | 57 | | 60 | 69 | 47 | 69 | 61 | 57 | 75 |
| AVERAGE FINAL SCORE in Czech Republic | 61 out of 100 | | | | | | | | | | | | | | | | | | | |

Based on the collected results for the Czech Republic we can generate the following conclusions:

Based on the results given by the participants of the Czech Validation Workshop on the 24th of January 2017 (and final visits at printing companies between November 2016 and January 2017), we can conclude a clear increase of the energy management awareness within the group of SME's. Based on the mainly positive reactions during the meeting (including the results from the validation schemes), we can give a safe first conclusion that the content and approach of the EMSPI project in the Czech Republic creates an increase in the awareness in energy management: from 3.8 (BASELINE value) to 6.1 (FINAL measurement with an increase of more than 60%).

Spain:

| Results of the EMSPI Self-Assessment tool: BASELINE assessments (2nd quarter 2016) | Companies in SPAIN | | | | | | | | | | | | | | | | | | | |
|---|---------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | 31 | 50 | 38 | 50 | 75 | 44 | 31 | 50 | 38 | 38 | 38 | 50 | 38 | 38 | 38 | 38 | 38 | 50 | 50 | 50 |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | 25 | 0 | 13 | 13 | 25 | 25 | 25 | 13 | 0 | 25 | 25 | 0 | 13 | 13 | 13 | 25 | 25 | 25 | 25 | 25 |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | 8 | 8 | 0 | 8 | 42 | 8 | 8 | 8 | 8 | 17 | 17 | 8 | 8 | 8 | 8 | 17 | 0 | 17 | 20 | 17 |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | 58 | 50 | 42 | 58 | 83 | 42 | 42 | 75 | 50 | 75 | 75 | 83 | 58 | 42 | 83 | 83 | 33 | 67 | 83 | 83 |
| Level of awareness in QUALITY CONTROL ¹¹ in relation to energy management | 0 | 25 | 0 | 0 | 50 | 8 | 0 | 0 | 0 | 25 | 25 | 25 | 25 | 8 | 0 | 25 | 0 | 25 | 25 | 25 |
| AVERAGE 0-SCORE (per company) | 25 | 27 | 18 | 26 | 55 | 25 | 21 | 29 | 19 | 36 | 36 | 33 | 28 | 22 | 28 | 38 | 19 | 37 | 41 | 40 |
| AVERAGE 0-SCORE in Spain | 30 out of 100 | | | | | | | | | | | | | | | | | | | |

| Results of the EMSPI Self-Assessment tool: FINAL assessments (4th quarter 2016) | Companies in SPAIN | | | | | | | | | | | | | | | | | | | |
|--|---------------------------|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | 69 | 88 | 81 | 88 | 94 | 69 | 50 | 75 | 75 | 75 | 75 | 75 | 50 | 63 | 63 | 63 | 63 | 75 | 81 | 75 |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | 75 | 25 | 50 | 50 | 75 | 50 | 50 | 25 | 25 | 75 | 50 | 25 | 25 | 50 | 25 | 50 | 50 | 75 | 75 | 50 |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | 42 | 42 | 25 | 42 | 83 | 33 | 42 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 42 | 50 | 42 |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | 92 | 75 | 83 | 92 | 100 | 58 | 42 | 75 | 58 | 75 | 75 | 92 | 75 | 42 | 83 | 83 | 42 | 67 | 92 | 83 |
| Level of awareness in QUALITY CONTROL ¹¹ in relation to energy management | 25 | 50 | 25 | 25 | 83 | 25 | 17 | 0 | 8 | 42 | 42 | 33 | 25 | 8 | 25 | 42 | 17 | 42 | 42 | 42 |
| AVERAGE FINAL SCORE (per company) | 60 | 56 | 53 | 59 | 87 | 47 | 40 | 40 | 38 | 58 | 53 | 50 | 40 | 38 | 44 | 53 | 39 | 60 | 68 | 58 |
| AVERAGE FINAL SCORE in Spain | 52 out of 100 | | | | | | | | | | | | | | | | | | | |

Based on the collected results for Spain we can generate the following conclusions:

An important increase in the results of the Self-Assessment has taken place in every aspect in Spain: (1) Energy Management, (2) Strategy and green marketing, (3) Environmental indicators, (4) Financial Aspects and (6) Quality control. The level of awareness has increased a total of 2.207 points based on data from the 2nd quarter. This increase reflects an average final score 22 points above data from the 2nd quarter of last year.

Germany:

| Results of the EMSPI Self-Assessment tool: BASELINE assessments (2nd quarter 2016) | Companies in GERMANY | | | | | | | | | | | | | | | | | | | |
|---|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----|----|----|----|----|----|----|----|----|----|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | 50 | 56 | 50 | 38 | 38 | 38 | 38 | 63 | 38 | 75 | | | | | | | | | | |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | 50 | 25 | 50 | 50 | 50 | 50 | 75 | 75 | 13 | 50 | | | | | | | | | | |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | 58 | 42 | 25 | 58 | 25 | 17 | 42 | 42 | 33 | 58 | | | | | | | | | | |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | 58 | 42 | 25 | 58 | 25 | 17 | 42 | 42 | 33 | 58 | | | | | | | | | | |
| Level of awareness in QUALITY CONTROL in relation to energy management | 58 | 42 | 25 | 58 | 25 | 17 | 42 | 42 | 33 | 58 | | | | | | | | | | |
| AVERAGE 0-SCORE (per company) | 55 | 41 | 35 | 52 | 33 | 28 | 48 | 53 | 30 | 60 | | | | | | | | | | |
| AVERAGE 0-SCORE in Germany | 43 out of 100 | | | | | | | | | | | | | | | | | | | |

| Results of the EMSPI Self-Assessment tool: FINAL assessments (4th quarter 2016) | Companies in GERMANY | | | | | | | | | | | | | | | | | | | |
|--|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----|----|----|----|----|----|----|----|----|----|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | 63 | 69 | 63 | 63 | 50 | 63 | 75 | 81 | 63 | 81 | | | | | | | | | | |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | 50 | 25 | 50 | 50 | 50 | 25 | 75 | 75 | 50 | 75 | | | | | | | | | | |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | 75 | 75 | 58 | 75 | 58 | 58 | 42 | 75 | 75 | 83 | | | | | | | | | | |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | 75 | 75 | 58 | 75 | 58 | 58 | 42 | 75 | 75 | 83 | | | | | | | | | | |
| Level of awareness in QUALITY CONTROL in relation to energy management | 75 | 75 | 58 | 75 | 58 | 58 | 42 | 75 | 75 | 83 | | | | | | | | | | |
| AVERAGE FINAL SCORE (per company) | 68 | 64 | 57 | 68 | 55 | 52 | 55 | 76 | 68 | 81 | | | | | | | | | | |
| AVERAGE FINAL SCORE in Germany | 64 out of 100 | | | | | | | | | | | | | | | | | | | |

Based on the collected results for Germany we can generate the following conclusions:

A positive impact of the EMSPI Project can be recognized by evaluating the table above. We can conclude an increase of the awareness in energy management (went up from a 45 overall average to a 65 overall average). A same impact can be recognized for the other categories. The overall impact is very positive too. It becomes clear by comparing the final score (average). It went up from 42 out of 100 to 64 out of 100. But nevertheless there are still plenty of hidden potentials in the companies. Especially in the categories “Strategy and Green Marketing” and “Awareness in Energy Management” a lot of work still has to be done.

Denmark:

| Results of the EMSPI Self-Assessment tool: BASELINE assessments (2 quarter 2016) | Companies in DENMARK | | | | | | | | | | | | | | | | | | | |
|---|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | 19 | 50 | 25 | 38 | 38 | 50 | 6 | 13 | 50 | 50 | 50 | 50 | 13 | 63 | 38 | 50 | 50 | 13 | 50 | 13 |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | 13 | 75 | 13 | 13 | 13 | 25 | 13 | 25 | 13 | 13 | 13 | 13 | 0 | 25 | 13 | 13 | 13 | 25 | 25 | 0 |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | 17 | 100 | 50 | 92 | 58 | 67 | 92 | 25 | 58 | 58 | 58 | 58 | 67 | 92 | 0 | 50 | 50 | 58 | 50 | 8 |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | 17 | 100 | 50 | 92 | 58 | 67 | 92 | 25 | 58 | 58 | 58 | 58 | 67 | 92 | 0 | 50 | 50 | 58 | 50 | 8 |
| Level of awareness in QUALITY CONTROL in relation to energy management | 17 | 100 | 50 | 92 | 58 | 67 | 92 | 25 | 58 | 58 | 58 | 58 | 67 | 92 | 0 | 50 | 50 | 58 | 50 | 8 |
| AVERAGE 0-SCORE (per company) | 17 | 85 | 38 | 65 | 45 | 55 | 59 | 23 | 47 | 47 | 47 | 47 | 43 | 73 | 10 | 43 | 43 | 42 | 45 | 7 |
| AVERAGE 0-SCORE in Denmark | 44 out of 100 | | | | | | | | | | | | | | | | | | | |

| Results of the EMSPI Self-Assessment tool: FINAL assessments (4th quarter 2016) | Companies in DENMARK | | | | | | | | | | | | | | | | | | | |
|---|----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| EnMS aspect in relation to ISO 50001: | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| Level of awareness in ENERGY MANAGEMENT: | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 81 | 100 | 100 | 88 | 94 | 100 | 100 | 88 | 88 | 100 | 100 | 100 | 81 |
| Level of awareness in STRATEGY & GREEN MARKETING in relation to energy management | 25 | 88 | 75 | 100 | 25 | 50 | 100 | 50 | 75 | 75 | 75 | 75 | 75 | 88 | 50 | 50 | 25 | 88 | 75 | 75 |
| Level of awareness in ENVIRONMENTAL INDICATORS in relation to energy management | 100 | 100 | 100 | 92 | 100 | 100 | 92 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 100 | 100 | 100 | 100 | 92 |
| Level of awareness in FINANCIAL ASPECTS (ESCO'S) in relation to energy management | 100 | 100 | 100 | 92 | 100 | 100 | 92 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 100 | 100 | 100 | 100 | 92 |
| Level of awareness in QUALITY CONTROL in relation to energy management | 100 | 100 | 100 | 92 | 100 | 100 | 92 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 100 | 100 | 100 | 100 | 92 |
| AVERAGE FINAL SCORE (per company) | 85 | 98 | 95 | 95 | 85 | 90 | 95 | 86 | 95 | 95 | 93 | 94 | 95 | 98 | 77 | 88 | 85 | 98 | 95 | 86 |
| AVERAGE FINAL SCORE in Denmark | 91 out of 100 | | | | | | | | | | | | | | | | | | | |

Based on the collected results for Denmark we can generate the following conclusions:

There has been a significant increase in the energy management activities in the companies as well as an increase in the awareness of the benefits of working with management systems at the strategic level of the companies. During the project period most of the companies has experienced that the energy efficiency activities can be the step stone for other strategic initiatives in relation to marketing, environmental and quality management.

2. VALIDATION D7.4b: VALIDATION OF THE EMSPI WORKSHOP RESULTS FROM THE MAIN STAKEHOLDERS: THE SME'S

Task 7.4 (= D7.4) is focused in the direct exchange of information with the main stakeholders involved in the Energy Management of Printing Industry. This action will include the participation of national associations outside the target countries.

These associations will be identified through INTERGRAF, the European Federation which supports the project and established contacts of the Consortium within different projects and/or networks, like the partnership of ClimateCalc where the National Associations of United Kingdom, France and Belgium are members together with The Netherlands and Denmark, already participants in the project.

Outputs of this work package (apart from deliverables):

- Feedback from actual implementation from 5 EU countries;
- Energy managers final assessment;
- Awareness and feedback from stakeholders, including national industry associations from countries outside the consortium and energy agencies.

2.1 Validation of the SME’s (during the evaluation workshop in The Netherlands): KVG0 DC

2.1.1 General overview of the coaching period

In The Netherlands the EMSPI project had some setback by the bankruptcy of our original Project coordinator: AIDO. Nevertheless, the companies were early 2015 recruited by KVG0 DC, Royal KVG0 and also SCGM in a joint venture. The present network from the sector organization and the biggest certification body in the sector seemed to be very helpful for finding enough enthusiastic entrepreneurs to participate in this project.

An extra motivation for SME’s beginning 2015 was the start-up of a new way of doing an energy analyses in The Netherlands. This idea came from the Dutch government, who needed to find new ways to motivate the smaller SME’s in The Netherlands, to start with energy savings. KVG0 DC could use this new way of politics during their recruitment. Therefore it was not too hard to find enough SME’s for the project. Once again it proves that some extra stimulation from the controlling government is necessary to stimulate entrepreneurs to act on a certain management aspect, i.e. energy management. In total there were 35 companies who undersigned the official notification of the EMSPI-project.

After the translation, optimization and integration of the EMSPI-materials in present knowledge platforms in the graphic media sector in The Netherlands, KVG0 DC started in the period mid 2015 – end 2015 with the creation of an implementation plan: a practical growth path for SME’s to implement step-by-step an ISO 50001 management system. In this step-by-step-approach every SME was offered the possibility to participate in:

- 1 introduction workshop, and
- 5 different content workshops, and
- 2 company visits (in many cases even 3), and
- 1 evaluation workshop

The participating companies had at least four workshops for the implementation of the Energy Management System according to the ISO 50001:2011. Due to the feedback of the SME’s on the developed EMSPI-materials, KVG0 DC altered for the Dutch market the original blueprint materials of Spain. The base of this alteration lays in the introduction of ISO in 2015 of the High Level Structure. This new over-all management system makes it very easy for SME’s to click several management topics (like quality or environmental management) on to one system: the HLS. This alteration in the Dutch blueprint materials created a boost in the motivation of entrepreneurs to start with ISO 50001. Even if they didn’t had any ISO-management system at all.

To create the most effective roadmap for the participating SME’s, the step-by-step-approach mentioned above, was planned as followed during the years 2015 and 2016:

| Step | Type of advice/coaching | Planned date |
|------|---|-------------------------|
| 1 | EMSPI Introduction workshop (<i>WS No. 1</i>): the official kick-off of the project for the Royal KVG0 – 2 groups | 18-02-2015 & 25-02-2015 |
| 2 | EMSPI Workshop (<i>WS No.2</i>): starting with the energy analyses in the company (energy measure list + energy consumption) – 1 group | 19-05-2015 |
| 3 | Homework for the SME’s (<i>HW No. 1</i>): completing the energy analyses (measure list + action plan) | Period May-June 2015 |
| 4 | Company visit (<i>CV No. 1</i>): during this company visit the energy advisor coaches the SME’s with energy monitoring and checked the created measure list and action plan and completed it. | Period May-July 2015 |
| 5 | Homework for the SME’s (<i>HW No.2</i>): completing the energy analyses (measure list + action plan after the feedback from the energy advisor. | Period May-June 2015 |

| Step | Type of advice/coaching | Planned date |
|------|--|--|
| 6 | EMSPI Workshop (<i>WS No.3</i>): explanation of the implementation phase ISO 50001 (including the first hand outs of the EMSPI materials) - 3 groups | 25-11-2015 & 27-01-2016 & 05-04-2016 |
| 7 | EMSPI Workshop (<i>WS No.4</i>): implementation ISO 50001/part 1 - 2 groups | 27-01-2016 05-04-2016 |
| 8 | EMSPI Workshop (<i>WS No.5</i>): implementation ISO 50001/part 2 - 2 groups | 09-03-2016 01-06-2016 |
| 9 | EMSPI Workshop (<i>WS No.6</i>): implementation ISO 50001/part 3 - 2 groups | 13-04-2016 28-06-2016 |
| 10 | Homework for the SME's (<i>HW No.3</i>): translation of the blue print materials for the creation of their own ISO 50001-system. | Period March- August 2016 |
| 11 | Company visit (<i>CV No.2</i>): during this company visit the energy advisor coaches the SME with the translation work of the blue print materials and the creation of thorough energy consumption data over the period 2010 till 2016 (present date). | Period July- September 2016 |
| 12 | Homework for the SME's (<i>HW No.4</i>): further implementation work. | Period July- November 2016 |
| 13 | EMSPI Evaluation workshop (<i>WS No.7</i>): the final evaluation workshops with all the stakeholders – 1 group planned. | 08-11-2016 |

In addition to the workshops, there were several visits on locations, in order to note to what level energy management within the business is actually carried out. It was striking how many companies still were surprised with the amount of work required for the realisation of the objectives for EMSPI-project. That was not all to the translation work of the written blueprint material to their own business operations, but many more to find the right energy data. Collecting energy data turned out to be the real challenge. Especially for smaller companies, which until recently, did nothing with energy monitoring. For the big companies – in particular the MJA companies – it seemed something simpler since they keep track of energy data from the legal framework.

Nevertheless the monitoring collection problems, in The Netherlands we decided to start the over-all Dutch energy monitoring from the year 2010, to get a better insight in the reduction of energy sources. Also for later on, it is wise to collect information per decade. In almost all cases we could collect the necessary data from the SME's, after giving them the helping hand during our company visits.

2.1.2 Validation result from the national workshop(s) and interviews with SME's

The validation phase in The Netherlands was done in two phases, due to the fact that the implementation phase took place much earlier than the other participating countries. Therefore sometimes the coaching was done in a slightly different way. Therefore the Dutch validation defines the following two phases:

1. 1-to-1 validation of WP4 and WP 6 during personal interviews in the companies, during the implementation period July – September 2016
2. Final validations of WP4 + WP5 + WP6 during the national workshop on the 8th of November 2016

In addition of presenting the results to the SME's, we exchanged experiences. These validation gave us valuable information about possible changes in the EMSPI blueprint materials and/or the approach. Companies indicate that it sometimes turned out by financial circumstances technical energy measures to be possible to implement. Companies indicate also they would like more insight into the payback periods (ROI). On the other side companies indicated that by many energy saving measures were implemented, that it was no longer certain that some more savings can be achieved. Taking part in the

EMSPI project made sure for internal increase in energy awareness among colleagues and the topic 'Energy' is back on the boardroom making it again as a serious management issues.

Recently we had organized the final meeting with participating companies. At the meeting, we have presented the interim results based of all data collected. On the positive side, the target for energy savings achieved are pretty good. As regards the potential CO2 reduction the result so far to call itself particularly well: the goal was 880 tons of CO2 reduction per year and it seems to be heading for more than 3,000 tons. The companies found this a good result and eventually see in practice how the effort over the last few months results in a success.

Under here one may find the collected validation results:

| Stakeholder A6: 24 Dutch SME's (28 validations) | | | | | | |
|--|--|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Summary of the feedback received from the Dutch SME's collected during the national workshops and personal interviews | | | | | | |
| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| Overall validation of WP4: the EMSPI blue print materials | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1 | To which degree are you satisfied with the outcomes/quality of the Manual for Energy baseline diagnoses (D4.2)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2 | To which degree are you satisfied with the outcomes/quality of this EMSPI-blueprint materials (D4.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | To which degree can you put the EMSPI-materials into practise for your own company (D4.2 + D4.3)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Overall validation of WP5: the specific guidelines development | | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4 | To which degree are you personally satisfied with the outcome of the material about the STRATEGIC GUIDELINES (green marketing) of EnMS (D5.1)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5 | To which degree are you personally satisfied with the outcome of the material about QUALITY CONTROL GUIDELINES of EnMS (D5.2a + D5.2b)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6 | To which degree are you personally satisfied with the outcome of the material about the ENVIRONMENTAL INDICATORS GUIDELINES of EnMS (D5.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7 | To which degree are you personally satisfied with the outcome of the material about ESCO'S GUIDELINES of EnMS (D5.4)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Overall validation of WP6: the implementation of EnMS | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8 | To what degree are you satisfied with the support of your consult from your advising company, as part of the EMSPI Work Package 6: the implementation phase? Was the advice/support suitable and understandable? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9 | To what level will the EMSPI-concept support/stimulate your company actually to implement ISO 50001 and save energy? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10 | In what degree would you recommend (the outcomes of) this EMSPI project to other colleagues in the business? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Stakeholder A6: 24 Dutch SME's (28 validations)

Summary of the feedback received from the Dutch SME's collected during the national workshops and personal interviews

| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
|-----|----------|--|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |

Relevant REMARKS & SUGGESTIONS from the Dutch SME's (combined overview):

- Most likely the SME's prefer to have an energy management system with less amount of texts (if possible);
- Sometimes it seems that the (Dutch version of the) EMSPI materials have too much text. SME's prefer to have less amount of content (if possible);
- During the creation of the EMSPI blue print materials the content was upgraded to many times. This created for the SME's more 'translation work' than expected;
- Due to financial issues it is not that realistic to think that technical investments are that easy to realize;
- Due to the fact we already implemented many energy measures, it is not yet clear if there is more energy savings possible in the (near) future;
- It is important that possible energy measures are well economical calculated before they are being implemented (ROI calculations).
- Enforcement from Government is different in each municipality on energy savings
- It was not that easy for SME's to define the most likely of energy indicators for the production process
- It's still very difficult to get data from suppliers for examples 'Paper Profiles' for footprint calculation

Relevant COMPLIMENTS from the Dutch SME's (combined overview):

- The coaching from KVGGO DC was as expected as always very good/professional;
- The created materials were clear and first class organized and very well connectable to the new ISO High Level Structure. This is a real great advantage of the EMSPI materials in The Netherlands
- After really using the EMSPI blue print materials the awareness effect in the company increased. In fact the materials supported the energy expert to promote energy management in the company. This the entrepreneurs could identify after some months of implementing EMSPI.
- The given workshops were clear in structure and content;
- Our company would suggest the EMSPI materials to other colleagues if it is obliged by law, due to the fact that the support by KVGGO DC (the adviser Rand Hamam) is very good;
- Due to the EMSPI project energy management is back on the management table.
- Developed energy monitoring Excel has helped SME's to bring structure to data collection
- SME's had many benefits due to the integration of Energy with health and Safety tool by implementing the energy measurement list (EPK) in the already used risk assessment tool (RIE).

Based on the result from the validation schemes from the SME's, we may conclude the following issues:

1. The participants had during the whole EMSPI implementation period the feeling that they were well supported by the KVGGO DC. The organization of the workshops, the power point presentations and the coaching in the companies was positively.

2. They are overall positive about the created EMSPI content. Especially due to the fact that in The Netherlands the materials were well connected to the new ISO-standard High Level Structure. Most of the participating SME's had in some sort of way another management system running.
3. The critical note most of the smaller SME's was play and simple: can you make the blue print materials more practical/small/etc. for the smaller companies. At the moment – although the total concept is very good – it is most likely still too complex for other SME's were the entrepreneur don't have a high level of awareness.

We can therefore conclude that the EMSPI project in the Netherlands has been successful. A big contribution to this success, is the positive attitude of the participating companies. Together with them we created a thorough ISO 50001-management system in their companies. They now have a strategic management tool at hand to start working continuously on energy saving.

2.2 Validation of the SME's (during the evaluation workshop in the Czech Republic): ENVIROS

2.2.1 General overview of the coaching period

In the Czech Republic, the recruitment of printing companies in the EMSPI project had some setbacks due to the change in management in the national printing association.

The original chairman, Mr. Sochurek, which whom ENVIROS had a long working relationship died in spring 2015. The new chairman replacing him (Mr. Sobota) showed less interest in energy management. We met him for the first time in July 2015.

Therefore, ENVIROS could not rely on the cooperation of the printing association and choose to do direct recruitment among printing companies starting end of 2015.

Unfortunately, printing companies had no other (external) motivation to carry out energy management according to ISO 50001. Therefore, it was hard to find enough SMEs for the project. However, eventually during face-to-face meetings with company representatives it was possible to convince 20 printing companies to join the EMSPI project.

As most SMEs are understaffed in relation to maintenance, environment and energy issues, it was not possible to invite the companies to an introductory workshop, explaining the EMSPI project. The objectives of EMSPI were explained during the first introductory meeting with the companies between February and June 2016.

After that, all companies were visited two additional times:

- Between June and August 2016 – main objective was to collect data, carry out a walk through audit and explain the basics of energy management
- Between November 2016 and January 2017 – present our report on energy saving recommendations and training on the spot

By the end of January 2017, a training workshop for highly motivated companies was held in Prague. For those companies, not attending the workshop, the training was finalized on the spot.

To create the most effective roadmap for the participating SME's, the step-by-step-approach mentioned above, was planned as followed:

| Step | Type of advice/coaching | Planned date |
|------|---|--|
| 1 | First introductory meeting with the companies (replacing the introductory workshop) | Period February – June 2016 |
| 2 | First technical company visit – walk through audit, data collection | Period June - August 2016 |
| 3 | Second technical company visit – energy management training on site | Period November 2016 – January 2017 |
| 4 | Final training workshop | 24 January 2017 |

Based on the coaching of the SMEs, it appeared that collecting the necessary energy data was the most difficult task for the Czech SMEs. Only the larger companies had already a certain level of energy consumption monitoring. Even for them it was not easy to collect data for earlier years (e.g. 2013, 2014).

2.2.2 Validation result from the national workshop(s) and interviews with SME's

The validation was basically carried out at the end of the project (November 2016 – January 2017) with some information collected in the earlier phase of 2016.

Below one may find the collected validation results:

| Stakeholder B5: Czech Republic SME's (20x) | | | | | | |
|---|--|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Summary of the feedback received from the Czech Republic SME's collected during the national workshops and personal interviews | | | | | | |
| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| Overall validation of WP4: the EMSPI blue print materials | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1 | To which degree are you satisfied with the outcomes/quality of the Manual for Energy baseline diagnoses (D4.2)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2 | To which degree are you satisfied with the outcomes/quality of this EMSPI-blueprint materials (D4.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | To which degree can you put the EMSPI-materials into practise for your own company (D4.2 + D4.3)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Overall validation of WP5: the specific guidelines development | | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | To which degree are you personally satisfied with the outcome of the material about the STRATEGIC GUIDELINES (green marketing) of EnMS (D5.1)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | To which degree are you personally satisfied with the outcome of the material about QUALITY CONTROL GUIDELINES of EnMS (D5.2a + D5.2b)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | To which degree are you personally satisfied with the outcome of the material about the ENVIRONMENTAL INDICATORS GUIDELINES of EnMS (D5.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | To which degree are you personally satisfied with the outcome of the material about ESCO'S GUIDELINES of EnMS (D5.4)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Overall validation of WP6: the implementation of EnMS | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8 | To what degree are you satisfied with the support of your consult from your advising company, as part of the EMSPI Work Package 6: the implementation phase? Was the advise/support suitable and understandable? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 9 | To what level will the EMSPI-concept support/stimulate your company actually to implement ISO 50001 and save energy? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10 | In what degree would you recommend (the outcomes of) this EMSPI project to other colleagues in the business? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Stakeholder B5: Czech Republic SME's (20x)

Summary of the feedback received from the Czech Republic SME's collected during the national workshops and personal interviews

| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
|---|----------|--|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| <p>Relevant suggestions/remarks from the Czech Republic SME's (based on the final open question in the validation scheme):</p> <ul style="list-style-type: none"> • The information provided within the EMSPI project is very relevant. The documents provided are of good quality. • It helps to structure decisions related to energy savings. However, it may not directly lead to more savings as these are investment decisions that cannot be made directly. • The project supports the efforts of our printing company to save energy, but apart from optimisation of the production process, no new saving measures could be identified for our company. • I would recommend the advice from the EMSPI project to other printing companies, but I would say that it is relevant for mainly mid-size to large companies that have more complex energy management. And for companies that really would like to go for certification of ISO 50001. • The measure list of possible measures to be taken by printing companies to be extended by real case studies of printing companies (could be anonymized) • Satisfied with the advice from EMSPI, but it would have been even better to have money available for renting of measurement equipment and not be purely document oriented. | | | | | | |

Based on the results of from the validations schemes from the SMEs, we may conclude the following issues:

- The SMEs were satisfied with the materials provided in the framework of the EMSPI project
- The SMEs were very satisfied with the support provided on site. The score for this part was between 4 to 5, while the score for the materials was between 3 to 4.
- Although the companies were satisfied with the assistance provided, they less certain that the assistance would really help them in reducing energy costs
- In general, the companies would recommend ESMPI to other printing companies. Some announced that they would do so, but at the same time mentioned that the advice is more relevant for mid to large companies than for small printing companies.
- The materials are most relevant to those companies that are considering ISO 50001 certification.
- What was missing were some practical good practice examples of implemented energy saving measures in printing companies.

2.3 Validation of the SME's (during the evaluation workshop in Spain): FACTOR CO2

2.3.1 General overview of the coaching period

The coaching in Spain started in the first period of 2016, with the development of 2 workshops. 20 companies were very enthusiastic about participating in the development of the Energy Management System and decided to implement it and started performing reductions. Therefore, a number of 20 Companies, with the assistance from the specialized international firm Factor, have developed an analysis of their sources and energy consumption, which allows them to design a series of energy measures to reduce their energy consumption. In order to standardize and to continue with the energy plan, they are concluding with the implementation of an Energy Management System based on the ISO 50001 standard adapted to the Industry.

During the process, a step by step approach was developed by Factor CO2, including:

- 2 introduction workshops, and
- 3 company visits per company
- 1 final workshop per company

To create the most effective roadmap for the participating SME's, the step-by-step-approach mentioned above, was planned as followed:

| Step | Type of advice/coaching | Planned date |
|------|---|---------------------------------|
| 1 | EMSPI Introduction workshop for northern companies in Bilbao, Basque Country (CEBEK - Business Confederation of Vizcaya). | 03/05/2016 |
| 2 | EMSPI Introduction workshop for southern companies in Seville, Andalusia. (Environment Department of Junta de Andalusia). | 03/05/2016 |
| 3 | Presentation meeting: first approach to the project for the 20 companies. | April 2016 |
| 4 | Kick off meeting with the 20 companies, visit to the facilities and presentation of the materials | Period April – May 2016 |
| 5 | Homework for the SME's: energy and paper consumption and waste. | Period June – August 2016 |
| 6 | Second visit to the 20 companies, first approach energy diagnosis and measures. | Period June – August 2016 |
| 7 | Homework for the SME's: completing the energy analyses (measure list + action plan) | Period June – September 2016 |
| 8 | Final visit to the companies: presentation and comments of delivered materials and validation of the materials. | Period November – December 2016 |

2.3.2 Validation result from the national workshop(s) and interviews with SME's

The validation took place at the final workshops in the participating companies were the responsible presented their feedback about the final structure of the Energy Management System.

Under here one may find the collected validation results:

| Stakeholder C1: Spain SME's (20x) | | | | | | |
|---|--|---|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Summary of the feedback received from the Spanish SME's collected during the national workshops and personal interviews | | | | | | |
| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| Overall validation of WP4: the EMSPI blue print materials | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1 | To which degree are you satisfied with the outcomes/quality of the Manual for Energy baseline diagnoses (D4.2)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2 | To which degree are you satisfied with the outcomes/quality of this EMSPI-blueprint materials (D4.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | To which degree can you put the EMSPI-materials into practise for your own company (D4.2 + D4.3)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Overall validation of WP5: the specific guidelines development | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | To which degree are you personally satisfied with the outcome of the material about the STRATEGIC GUIDELINES (green marketing) of EnMS (D5.1)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | To which degree are you personally satisfied with the outcome of the material about QUALITY CONTROL GUIDELINES of EnMS (D5.2a + D5.2b)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | To which degree are you personally satisfied with the outcome of the material about the ENVIRONMENTAL INDICATORS GUIDELINES of EnMS (D5.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | To which degree are you personally satisfied with the outcome of the material about ESCO'S GUIDELINES of EnMS (D5.4)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Overall validation of WP6: the implementation of EnMS | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8 | To what degree are you satisfied with the support of your consult from your advising company, as part of the EMSPI Work Package 6: the implementation phase? Was the advise/support suitable and understandable? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 9 | To what level will the EMSPI-concept support/stimulate your company actually to implement ISO 50001 and save energy? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10 | In what degree would you recommend (the outcomes of) this EMSPI project to other colleagues in the business? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>Relevant suggestions/remarks from the Spanish SME's (based on the final open question in the validation scheme):</p> <ul style="list-style-type: none"> The generalized feedback is that the system could be more user friendly in order to be implemented by the companies on their own. Companies find the excel file created by the consortium for energy diagnosis very useful. | | | | | | |

| Stakeholder C1: Spain SME's (20x) | | | | | | |
|--|---|--|---|---|---|---|
| Summary of the feedback received from the Spanish SME's collected during the national workshops and personal interviews | | | | | | |
| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| | <ul style="list-style-type: none"> Companies find the results of emissions from energy consumption, paper consumption and paper waste very helpful. Companies find important to register indicators such as energy consumption per consumed paper, in order to track the energy performance of the company. Companies would like to receive real data from measures implemented in the sector. | | | | | |

Based on the results of from the validations schemes from the SMEs, we may conclude the following issues:

The generalized feedback is that the system could be more user friendly in order to be implemented by the companies on their own. The implementation period of WP6 has been short, taking into account the high amount of standard work in their companies. Companies find it good that the materials are adapted to their own reality. They don't find the specific guidelines very useful as they don't have enough time to understand them and they prefer to focus on the Energy Management System Implementation.

2.4 Validation of the SME's (during the evaluation workshop in Germany): INNOWISE

2.4.1 General overview of the coaching period

In Germany the EMSPI project had some setback due to the change of the project coordinator and the more or less obscurity of the future of the project. Nevertheless, the recruiting of the companies started around September / October 2015 by planning announcements and introduction workshops in cooperation with our Stakeholders: Fogra, BVDM and VDMNW. Even though the workshops were planned and announced in cooperation with the sector organization, they didn't attract any companies. That is why we started a more or less direct recruiting via direct mailing and/or phone calls. The contacts of VDMNW were very useful during this phase of the recruiting and we were able to reach a lot of interested companies, of which at least 18 took part in the EMSPI Project.

In contrast to other countries (e.g. The Netherland), in Germany there are very little incentives for SME's to implement an ISO 50001 or to engage in the subject of energy efficiency. That is why, we had to walk down the way of persuading the entrepreneurs that saving energy means saving money and eventually creating new customers. This meant a lot of extra work and time.

After overcoming all stumbling blocks, we started implementing the systems step by step. Due to the (at the same time) still ongoing recruitment there have been some deviations from the original/planned schedule. Furthermore the unwillingness of the companies to take part in workshops with other companies meant that we had to create another form of coaching (as you can see in the table below).

To create the most effective roadmap for the participating SME's, the step-by-step-approach mentioned above, was planned as followed:

| Step | Type of advice/coaching | Planned date |
|------|--|---------------------------------|
| 1 | Company Visit: EMSPI Introduction "workshop" on company level | Starting around Feb 2016 |
| 2 | Homework (always supported by the consultant if needed): Energy analyses in the company (energy consumption/data) | Starting around Apr / June 2016 |
| 3 | Homework (always supported by the consultant if needed): Creating the first measure list by the companies (What measures do they identify for themselves? Did they already start implementing some actions to save energy? etc.) | Starting around May / Aug 2016 |
| 4 | Company visit/Skype call: during this company visit/ Skype call the energy advisor checked the created measure list and action plan and completed it. | Starting around May / June |
| 5 | Company Visit: EMSPI Implementation "workshop" on company level | Starting around Aug / Sep |
| 6 | Homework (always supported by the consultant if needed): adjusting and filling in the blue print materials for the creation of the management-system. | Starting around Sep/Oct |
| 7 | Company visit/Skype call: during this company visit/Skype call the energy consultant coaches the companies how to work with the blue print materials | Starting around Oct/Nov |
| 8 | Homework (always supported by the consultant if needed): implementing the systems. | Starting around Oct/Nov |
| 9 | EMSPI Evaluation: the final evaluation | |

2.4.2 Validation result from the national workshop(s) and interviews with SME's

The validation in Germany mostly took place in a 1- to -1 interview situation with the energy managers of the companies. These interviews were executed during or at the end of the implementation period. This approach was chosen due to the fact, that it was not possible (unwillingness of the companies) to organize a workshop on which all the companies (or even more than one company) took part.

Under here one may find the collected validation results:

| Stakeholder D5: German SME's (10x) | | | | | | |
|---|--|--|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Summary of the feedback received from the German SME's collected during the national workshops and personal interviews | | | | | | |
| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| Overall validation of WP4: the EMSPI blue print materials | | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 1 | To which degree are you satisfied with the outcomes/quality of the Manual for Energy baseline diagnoses (D4.2)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2 | To which degree are you satisfied with the outcomes/quality of this EMSPI-blueprint materials (D4.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3 | To which degree can you put the EMSPI-materials into practise for your own company (D4.2 + D4.3)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Overall validation of WP5: the specific guidelines development | | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | To which degree are you personally satisfied with the outcome of the material about the STRATEGIC GUIDELINES (green marketing) of EnMS (D5.1)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | To which degree are you personally satisfied with the outcome of the material about QUALITY CONTROL GUIDELINES of EnMS (D5.2a + D5.2b)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | To which degree are you personally satisfied with the outcome of the material about the ENVIRONMENTAL INDICATORS GUIDELINES of EnMS (D5.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7 | To which degree are you personally satisfied with the outcome of the material about ESCO'S GUIDELINES of EnMS (D5.4)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Overall validation of WP6: the implementation of EnMS | | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8 | To what degree are you satisfied with the support of your consult from your advising company, as part of the EMSPI Work Package 6: the implementation phase? Was the advise/support suitable and understandable? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9 | To what level will the EMSPI-concept support/stimulate your company actually to implement ISO 50001 and save energy? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10 | In what degree would you recommend (the outcomes of) this EMSPI project to other colleagues in the business? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Stakeholder D5: German SME's (10x) | | | | | | |
|--|----------|--|---|---|---|---|
| Summary of the feedback received from the German SME's collected during the national workshops and personal interviews | | | | | | |
| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| Relevant suggestions/remarks from the German SME's (based on the final open question in the validation scheme): <ul style="list-style-type: none"> SME's prefer to have less amount of content and text The material has a certain "homework character" which does not really foster the motivation to work with it. The EMSPI Measure list was very helpful but the most measures are, due to financial issues not that realistic to realize; but the more "simple" measures are very helpful and inspiring. WP5: Too much materials and text. A lot of companies recognize these inputs as extra work and didn't see the added value. Others liked it very much and are planning to integrate these materials in their daily work. Most of the companies were satisfied with the work of Innwise. Some companies, especially the smaller companies, would have preferred a higher level of support and would have liked the materials to be more practical. | | | | | | |

Conclusion:

- The overall feedback with the the work of Innwise has been positive. The support has been sufficient and the materials were clear in their structure and good to understand.
Most of the companies were positive about the created EMSPI content. Especially companies who already worked with other ISO standards such as 9001 and 14001 said the EMSPI standard is a well organized and a "good-to-work-with" standard.
- The smaller SME's weren't that enthusiastic. For them the materials weren't practical enough and they would have preferred a higher degree of support. To implement an ISO standard is a quite ambitious and complex project for them.

2.5 Validation of the SME's (during the evaluation workshop in Denmark): GRAKOM

2.5.1 General overview of the coaching period

The coaching period for Grakom began in November 2015 and lasted until December 2016 for the last company. The first companies visited served as test companies where the methods for training was developed and carried out in practice. Based on the experiences from the first companies the final method for training and consultancy was decided.

The introduction of the EMSPI-project to the printing companies in Denmark was planned to take place at two introduction workshops in Odense and Copenhagen. All members of Grakom was invited to the workshops but only very few companies showed interest in participating in workshops together with other companies. As a consequence of this the strategy was changed and the companies was contacted individually and introduced to the EMSPI-project.

The introduction workshops resulted in commitment from 20 companies from the start of the project. One company later informed Grakom that they didn't have the time for participation in the project and a new company was contacted and signed for participation.

Based on the experiences of the introduction workshops it was decided to carry out the training workshops in the participating companies. A questionnaire was developed and sent to the participating companies prior to the training workshops. The questionnaire made it possible for the consultants to target the workshop to the status and needs of the individual companies.

The training workshop in the companies was separated in two separate parts. First part focusing on the energy mapping, energy analysis and the energy efficiency potentials followed by the second part targeting the strategic level of the company and the implementation of the EnMS. Training materials, tools and presentations was created for the workshops.

After the training workshops the consultancy of the companies took place and the EnMS system manual was developed. Hereafter the companies started the implementation of the EnMS.

The final workshop was carried out as company visits on 19 out of the 20 participating companies. The workshop focused on the status of the energy improvement activities in the companies and the status of the implementation of the EnMS. Furthermore the experiences from the other participating companies were shared.

To create the most effective roadmap for the participating SME's, the step-by-step-approach mentioned above, was planned as followed:

| Step | Type of advice/coaching | Planned date |
|------|---|------------------------------------|
| 1 | Invitation to introduction workshops in Odense and Copenhagen | November 2015 |
| 2 | Individual introduction workshops were carried out as company meetings or telephone meetings. | Period December 2015 - May 2016 |
| 3 | Questionnaire was sent to the participating companies and used for the planning of the training workshops | Period December 2015 - August 2016 |
| 4 | Training workshop in the companies: Energy mapping, energy analysis and the energy efficiency potentials | Period April 2016 – December 2016 |
| 5 | Training workshop in the companies: Energy strategy and implementation of the EnMS | Period April 2016 – |

| Step | Type of advice/coaching | Planned date |
|------|--|---------------------------------------|
| | | December 2016 |
| 6 | Consultancy and development of the EnMS system manuals | Period May 2016 – December 2016 |
| 6 | Final workshops in the companies: Status on energy improvement activities and the implementation of the EnMS. Sharing of experiences from the other participating companies. | Period September 2016 – December 2016 |

2.1.2 Validation result from the national workshop(s) and interviews with SME's

The validation of WP4 + WP5 + WP6 took place at the final workshops in the participating companies where the Energy Manager filled in the questionnaire or was interviewed by the consultant.

Under here one may find the collected validation results:

| Stakeholder E4: Danish SME's (20x) | | | | | | |
|---|--|--|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Summary of the feedback received from the Danish SME's collected during the national workshops and personal interviews | | | | | | |
| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| Overall validation of WP4: the EMSPI blue print materials | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1 | To which degree are you satisfied with the outcomes/quality of the Manual for Energy baseline diagnoses (D4.2)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2 | To which degree are you satisfied with the outcomes/quality of this EMSPI-blueprint materials (D4.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | To which degree can you put the EMSPI-materials into practise for your own company (D4.2 + D4.3)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Overall validation of WP5: the specific guidelines development | | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4 | To which degree are you personally satisfied with the outcome of the material about the STRATEGIC GUIDELINES (green marketing) of EnMS (D5.1)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5 | To which degree are you personally satisfied with the outcome of the material about QUALITY CONTROL GUIDELINES of EnMS (D5.2a + D5.2b)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6 | To which degree are you personally satisfied with the outcome of the material about the ENVIRONMENTAL INDICATORS GUIDELINES of EnMS (D5.3)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7 | To which degree are you personally satisfied with the outcome of the material about ESCO'S GUIDELINES of EnMS (D5.4)? Will the content be suitable and understood by the management of a SME? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| Stakeholder E4: Danish SME's (20x) | | | | | | |
|--|--|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| Summary of the feedback received from the Danish SME's collected during the national workshops and personal interviews | | | | | | |
| No. | Question | SCORE: 1 means not satisfied at all and 5 means very satisfied | | | | |
| | | 1 | 2 | 3 | 4 | 5 |
| Overall validation of WP6: the implementation of EnMS | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8 | To what degree are you satisfied with the support of your consult from your advising company, as part of the EMSPI Work Package 6: the implementation phase? Was the advise/support suitable and understandable? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9 | To what level will the EMSPI-concept support/stimulate your company actually to implement ISO 50001 and save energy? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10 | In what degree would you recommend (the outcomes of) this EMSPI project to other colleagues in the business? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>Relevant suggestions/remarks from the Danish SME's (based on the final open question in the validation scheme):</p> <ul style="list-style-type: none"> The EMSPI materials are in general very useful but companies already certified has many of the EnMS system elements already implemented in the management system. The EMSPI EnMS system manual must be adapted in the existing structure of the company management system. As a supplement to the basis and full EnMs system manual it could have been a benefit for companies with an existing ISO management system to have a system manual with only the extra energy management procedures. The short training and implementation period in the companies makes it difficult for the companies to show specific energy efficiency improvements. Even though the potentials are significant it takes time to plan the specific actions and to have the projects financed. All companies have made targets and action plans for improvements but only few companies have completed the projects at the final workshop. It would have been better if the project period in the companies was longer. Energy improvements projects are funded by government subsidies and ESCO's as business model is not very well known in Denmark. The benchmark presented at the final workshop is very useful and should be kept updated by Grakom. There has been a general surprise regarding the often short payback time of energy reduction measures. In general the project has increased the awareness in the companies of potential energy reductions as well as the financial savings resulting from this. | | | | | | |

In general the participating companies are satisfied with the EMSPI project, the developed materials and the consultancy. The period of WP6 with activities in the companies is in general too short for the companies to show realized energy improvements. Some of the developed tools could have been better targeted companies with an existing management system.