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Work package 7: Project Validation

Deliverable 7.3: Final EnMS adapted standard manual

EMSPI: Energy Management Standardization in Printing Industry

(D7.3 v02-EN, 22nd of February 2017)



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INTRODUCTION OF D7.3: FINAL ENMS ADAPTED STANDARD MANUAL

After a period of 0,5 till 1 year the consortium partners collected enough relevant work experience about the EnMS, to find relevant improvements. In the beginning of the translation of the quite technical orientated ISO 50001:2011 standard had some problems. The main question of the Work Package leader Factor CO2 and its consortium partners, was to find the right balance between the 'clean' translation of the standard and the practical usefulness of the materials. Based on our wide experience in the graphic media sector, we are well known about the fact that blue print materials (i.e. the standard EnMS manual) should be practical, easy to understand and easy to implement. Otherwise the barrier to start with the implementation would be too high for entrepreneurs and their employees.

During the implementation phase there were some national differences in the awareness level of entrepreneurs and their requests how the EnMS should be implemented in their own company. We could define the following differences:

- There were companies who were well known with the other ISO standards, i.e. ISO 9001, quality management and ISO 14001, environmental management. For these companies – especially the ones who implemented environmental management – the implementation of ISO 50001 was a logical next step;
- We located companies who were even actively stimulated by their most important stakeholders: their client, to start with sustainability improvement actions, i.e. ISO 50001;
- There were companies located in countries where the government is stimulating SME's to start with energy improvements, by changing their national law and/or intensifying their control programs;
- Some governments even provide tax deductions, when companies are doing well in energy management;
- And of course we have SME's located in countries where there is no or almost no stimulus from the local governments or clients.

In any case the SME's had to start with the implementation of the adapted EnMS. One can conclude that not in all cases the SME's were all that successful. The EU had foreseen this situation by allowing the consortium to create two kinds of implementation programs:

1. The EnMS FULL version: the complete implementation of the ISO 50001 in at least 75 companies (and if possible 15 per country);
2. The EnMS BASIC version, a simplified version of the ISO 50001, where companies only have to search for their energy improvement measures and a Action Plan to implement them in the (near) future. 25% of the 100 participating companies could make use of this simplified ISO 50001-system (= 25 companies and if possible 5 companies per country).

As said before, after implementing several management systems - FULL and BASIC – the consortium partners could find improvements. The EnMS adapted standard developed will therefore be assessed in terms of suitability to the actual reality of the printing industry. The main stakeholders related to the Energy Efficiency in the Printing Industry will be addressed in order to obtain a definitive feedback. In this case the main stakeholders are of course the SME themselves.

During the contacts with the SME's during the workshops, company visits and the validation period (especially of D7.1 and D7.4) the consortium partners collected enough information to improve the EnMS adapted manual standard.

In this deliverable the work package leader of WP4 (Factor CO2) will give an overview of the most relevant improvement advises from the stakeholders (collected mainly in D7.4, during the evaluation workshops with stakeholders).

1. PROPOSITIONS FOR ADJUSTMENTS IN THE ENMS MANUAL (FACTORCO2)

Based on the outcomes about the results of WP4 and WP6 of D7.1, done by the external stakeholders outside the consortium and the national evaluation workshops with stakeholders, especially the SME's, the consortium partners collected enough evaluation data to conclude the right propositions to adjust the EnMS manual.

The national stakeholders are mostly pleased with the final outcomes of the Energy Management System (Basic and Full Version). They propose to find new ways to digitalize the content in smarter applications, or make the system more user friendly. This will reduce the amount of work and increase the understanding of the system by SME's.

Another advise it to simplify the content even more, to make ISO 50001 or a simplified version of it. For that purpose, the basic version of the system was developed, specially focused in the "PLAN" and "DO" phases of the Deming Cycle, which include the energy planning, implementation and operation tasks. The development of a basic system targeted the small companies or companies with few resources for energy management is very good. The full system seems to be comprehensive for most companies. The creation of a basic system is emphasized as a positive initiative.

Another remark from stakeholders is that the EnMS seem to be very comprehensive, but It could probably be difficult for companies to use the materials without the help of external consultants. It would be useful to include examples and guiding text in the materials. However, for stakeholders it seems like that the materials covers all aspects of the energy management system, or even more than required.

In most of the aspects of the Energy Management System, feedback from stakeholders varies depending on the nationality of the SME's, mainly as a result of the previous knowledge on Energy Management, but a generalized feedback is that the system could be more user friendly in order to be implemented by the companies on their own. The registries were separated excel documents developed as control documents for setting goals, writing records of implementations undertaken, and proposing improvements. Available in the basic version and the full version of the EnMS. The aim is to achieve a much efficient and sustainable format for measuring potential energy efficiency improvements and the follow up of energy efficiency and consumption performance. As the registries are the main documents to be managed and updated by the participating companies during the entire process, a new layout for its completion is presented in the Excel file attached at the end of the document, which makes it more simple as all the registries are managed in the same document.

The index of the list of registries in the document for the full model implementation is presented in the following image:

Registries ENMs 50001 (FULL MODEL)

Tool for Energy Management



Furthermore, an Excel document (energy use and consumption) was specifically created by the Consortium with the objective of registering the energy diagnosis data and calculate emissions form energy, paper and waste. This document includes the following fields:

- Front page
- About
- Input
- Costs
- Space heating
- Electricity
- Energy in life cycle

DOCUMENTATION ATTACHED

<u>Full model</u>	<u>Basic Model</u>
  Registries_Full Model_20170207.xls Energy use and consumption_20170	  Registries_Basic Model_20170207.xls Energy use and consumption_20170