

PROTOTYPE - FACT SHEET

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WORKING GROUP: 4 – ENERGY EFFICIENCY
ORGANIZATION: QUALITY ENERGY SOLUTIONS

TITLE:

Efficiency Management 2.0 <http://www.qes-global.de/index.php/en/em2-0-africa>

Mission statement

Main Goal:

Increase Energy Efficiency with the consequence minimizing the carbon foot print in industry.

Additional Goals:

- Increase the capacities that decision makes in the industry have as regards total site energy management
- Create energy profiles in the industry to identify potentials in energy efficiency
- Minimize barriers for private investments
- Minimize barriers for energy performance contracts

Briefly describe your prototype idea

Resource efficiency is recognized as one of the most important strategies in climate change mitigation. However, despite the potentials and mostly because of financial and information obstacles, numerous companies and organizations don't implement the tools, concepts and technologies available in the market.

The current prototype is aiming to improve the energy efficiency in the Industries through capacity building for energy managers and process engineers in industries. By introducing a proven methodology and practical tools for measurement, monitoring, visualization, modeling and analysis of material and energy flows in a systematic and holistic manner



(total site energy management), the means to identify and evaluate energy efficiency potential will be provided.

Through on site and online trainings, held together with capacitated local partners in the respective regions, the EM 2.0 methodology and tools will be further adapted, propagated and multiplied. As a final part of the trainings, each participant develops a practical pilot project in a Company that includes the elaboration of an energy profile, a methodological analysis of efficiency optimization potentials and verification measurements after the implementation of technical or organizational improvements in terms of energy efficiency and carbon foot print.

Enabling the visualization and calculation of environmental and economic consequences of changes, the decision making will be easier, contributing to the development of energy performance contracts between the companies and ESCOs or technology providers and creating mechanisms to promote energy efficiency investments.

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Target group

Energy managers, process engineers, production manager of energy intensive industries and Energy Consultants

Potential partner(s) for implementation

Colombia Clean Production center and the Chamber of Commerce of Medellin para Antioquia (Cluster industries) in Colombia, Clean Production Centre of Peru, National Society of Industries and the Chamber of Commerce of Lima in Peru. Durán Municipality and the Chamber of Commerce of Durán in Ecuador. Geoumwelt, the Chamber of Commerce of Santiago and Prochile in Chile. Leitat Technological Centre and Mallorca Hotel Association in Spain. IFU Hamburg GmbH and Leuphana University of Lüneburg in Germany.

Key challenges and opportunities

Challenges

Participants must be of the target group. Availability to assist to the trainings. Choose the right Company to make the pilot projects (Final part of each training). Train the trainers that could stay for at least in the medium term in the market. Find technology providers that will be involve in the short term to provide solutions and financial offers. Create the instruments to support a consequently development of the prototype beyond the implementation.

Opportunities:

Find potentials that promote investments in a short term. Due to the potential findings in energy efficiency, invite other stakeholders in the sector to participate in future implementations. Leading cooperative actions with local and external technology providers and other stakeholders. Provide clearer information to the banking industry to encourage its participation with new credit models, minimizing the barriers of energy performance contracts in the sector.

Next steps

After the feedbacks of the interdisciplinary group and with the improve measurements, going to the partners and support the implementation of the project in a short term. At the same time with the support of the new stakeholders, find cooperation founds to do the implementation.

Such cooperation institutions of other countries to reply the initiative.



Prototype

EM 2.0

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EM 2.0 (Efficiency Management 2.0)
Energy and Materials Management for Sustainability

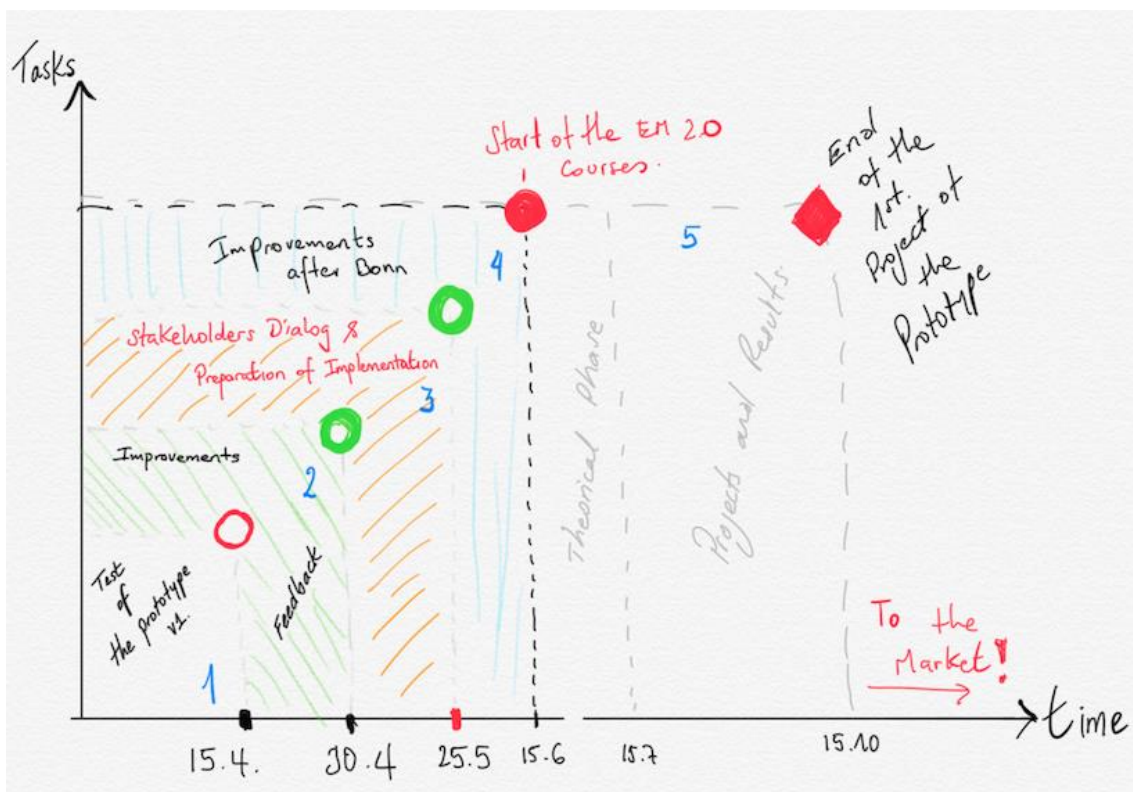
<http://www.qes-global.de/index.php/en/em2-0-africa>

Roadmap for implementation
V1

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1. Description: see prototype factsheet
2. Task for the pilot Project EM 2.0 and Roadmap



Task		Deadline
1	Test of the prototype (Live pilot)	15.04.2016

2	Feedback of the test and improvements through the advisors	30.04.2016
3*	Stakeholders Dialog and preparation for implementation	25.05.2016
4	Last improvements after Bonn and final tuning	15.06.2016
5**	Implementation	Start 15.06

Description task 3*		Deadline
1	Finding the local-regional financial institutions/investors	25.05.2016
2	Such of cooperation with another organizations of the region. (Clusters, Associations, etc.)	25.05.2016
3	Finding of local additional costs	25.05.2016
4	Development of flyers, landing pages, and agenda	25.05.2016
6	Finding the participants	25.05.2016

**** Gant of the Task 5 - Implementation**

	Task	Duration				
		Week 1	Week 2	Week 3	Week 4	Week 16
1	Introduction					
2	Acquisition, measurement and monitorization					
3	Umberto: modelling the materials and energy flows					
4	Finding the energy profiles (Base lines)					
5	Project (development of improvements)					