



IEA Initiative on
Demand Side Management
Technologies and Programmes

Fourty Seventh Executive Committee Meeting
Pre-Meeting Document (PMD) – Part 1

17 – 18 March, 2016
Stockholm, Sweden



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MATTERS FOR THE EXECUTIVE COMMITTEE

Project Preparatory Committee (PPC) Report <ul style="list-style-type: none">➤ Approve the Report
Concept paper: Tracking flexibility in electricity systems with increasing renewables <ul style="list-style-type: none">➤ Discuss whether the objective is interesting and the way forward
Big Data <ul style="list-style-type: none">➤ To be discussed during the meeting, whether the objective is interesting➤ Decide on a start now or decide at the next ExCo
Task 17 - Integration of Demand Side Management, Distributed Generation, Renewable Energy Sources and Energy Storages – Phase 3. <ul style="list-style-type: none">➤ Approve the Task Status Report
Task 24 – Behaviour Change in DSM: Helping the Behaviour Changers – Phase 2 <ul style="list-style-type: none">➤ Approve the Task Status Report➤ We ask the ExCo to agree to have only one official Operating Agent for Task 24 (Dr Sea Rotmann) whereas Dr. Ruth Mourik would be a project partner. Due to Dr. Ruth Mourik's more considerate work and time commitments for Task 25, the two OAs decided that it would be easier to administrate the Tasks by a distinct division of OA duties for the two Tasks that reflect the 25% task sharing of Ruth Mourik. The division of budget and labour as laid out in the work plan remains similar, minus the administrative and official OA duties for Dr Mourik and concrete actions in countries other than the Netherlands. Our partnership and cooperation will continue to be close and Dr Mourik will be involved (to 25%, as per work plan for 4 countries) in Task 24, including as another National Expert for the Netherlands.➤
Task 16 – Phase 4 – Innovative Energy Services – Life-Cycle cost; ‘Deep Retrofit’; Simplifies M&V; (Crowd)-Financing & Energy Services Taxonomy <ul style="list-style-type: none">➤ Approve the Task Status Report
Task 25 – Business Models for a More Effective Market Uptake of DSM Energy Services <ul style="list-style-type: none">➤ Approve the Task Status Report➤ Approve definition of new Subtasks
Programme Visibility <ul style="list-style-type: none">➤ Approve the Status Report➤ Fill in list (at the ExCo meeting) of how many copies of the Annual Report you need
DSM University <ul style="list-style-type: none">➤ Approve the Status Report
Task Zero <ul style="list-style-type: none">➤ Approve the Task Zero proposal
Financial Report 2015 <ul style="list-style-type: none">➤ Approve the financial report 2015

AGENDA

**IEA Demand-Side Management Energy Technology Initiative
Forty Seventh Executive Committee Meeting**
16 – 18 March, 2065, Stockholm, Sweden

WEDNESDAY 16 March

- 09:00 – 17:00 Workshop
Clarion Hotel Sign, Östra Järnvägsgatan 35, Norra Bantorget
- 18:00 – 20:00 Operating Agents Meeting - Clarion Hotel Sign (see above address)
Visibility Committee Meeting – Clarion Hotel Sign (see above address)

THURSDAY 17 March

Venue: Clarion Hotel Sign, Östra Järnvägsgatan 35, Norra Bantorget

- 09:00 – 10:00 **1. GENERAL BUSINESS/WELCOME**
- 1a. Welcome – *Rob Kool*
 - 1b. **ExCo approval** of the Agenda DOC A
 - 1c. **ExCo approval** of the Forty Sixth ExCo meeting Minutes – Halifax, Nova Scotia Distributed earlier
 - 1d. Status of the Implementing Agreement
 - 1e. IEA Relations
 - Secretariat news DOC B
 - Contacts with possible sponsors/new participants
 - *Rob Kool*
 - IA relations, BCG and ECG, – *Rob Kool*
 - Report from the Project Preparatory Committee (PPC) DOC C
 - – *Rob Kool*
 - Operating Agents meeting report – *Rob Kool*
- 10:00 – 10:30 **Coffee break**
- 10:30 – 11:00 **2. NEW WORK**
- 2a. Task 26 on Multiple Benefits for Energy Efficiency DOC D
 - Catherine Cooremans, EcoDiagnostic, Switzerland
 - Thore Berntsson, Chairman, IETS Implementing Agreement
 - 2b. Concept paper on Tracking flexibility in electricity systems with increasing renewables DOC E
 - Diego García Carvajal, European Copper Institute
- 11:30 – 12:30 2d. Discussion on Big Data
 - *Svetlana Gross*, Swedish Energy Agency
 - *Matthias Stifter*, AIT Austria
 - (discussion to be continued at 16:00)
- 12:30 – 13:30 **Lunch**
- 13:30 – 14:00 **3. CURRENT TASKS – LOAD SHAPE CLUSTER**
- 3a. Task 17 – Integration of DSM with other Distributed Energy Resources – Phase 3 DOC F
 - *Réne Kamphuis/Matthias Stifter*

The proposed New Tasks discussion will aim at one of the following decisions:

1. Decide to initiate the new Task based on work done to date.
2. Decide to initiate the Task Definition for a new Task. Interested countries must be prepared to assign the appropriate expert(s) to participate in that process.
3. Decide that additional work is needed on the concept paper. Interested countries must be prepared themselves, or to assign the appropriate Experts to help further develop the concept.
4. Decide to pursue the subject in co-operation with other parties within the IEA or elsewhere
5. Rejection (or moth-balling)

14:00 – 14:30	3b. Task 24 Closing the Loop – Behaviour Change in DSM: Helping the Behaviour Changers – Phase II. Task Status Report – <i>Sea Rotmann, SEA - Sustainable Energy Advice, New Zealand</i> – <i>Ruth Mourik, DuneWorks, The Netherlands</i>	DOC G
14:30 – 15:00	4. CURRENT TASKS – LOAD LEVEL CLUSTER	
	4a. Task 16 – Phase 4 – Competitive Energy Services – Task Status Report – <i>Jan W. Bleyl, EnergeticSolutions, Austria</i>	DOC H
15:00 – 15:30	Coffee break	
15:30 – 16:00	4b. Task 25 Business models for a more effective market uptake of DSM energy services. Task Status Report – – <i>Ruth Mourik, DuneWorks, the Netherlands</i>	DOC I
16:00 – 17:00	Continued discussion on Big Data – <i>Svetlana Gross/Matthias Stifter</i>	
17:00	Adjourn	
19:00	Hosted Dinner – Old Town, Stockholm	

FRIDAY 18 March 2016

09:00 – 10:00	5. PROGRAMME VISIBILITY	
	5a. Programme Visibility Report <i>Sea Rotmann</i> – <i>Sea Rotmann</i>	DOC J
10:00 – 10:30	5b. Development of the DSM University – <i>Hans Nilsson</i>	DOC K
	5c. How to build more faculties within DSMU/Leonardo Energy – <i>Rob Kool, Hans Nilsson</i>	
10:30 – 11:00	Coffee break	

11:00 – 12:00

6. ADMINISTRATIVE MATTERS

6a. Task Zero PMD Part 2

6b. Financial Report 2015 – *Boris Papousek* PMD Part 2
Status Report
Status of Common Fund payments

6c. Decision on plans for the Forty Eighth ExCo meeting
October 2016

6d. Plans for the Forty Ninth ExCo meeting April 2017

12:00 – 13:30

Lunch

13:30 – 15:00

7. SPECIAL SESSION

7a. Discussion on how to develop and implement our strategy further
- *Rob Kool/Hans Nilsson/Maria Alm*

7b. Collaboration with the IEA
- *Tyler Bryant/Rob Kool*

8. OTHER ISSUES

Adjourn

APPENDIX TO THE AGENDA “Issues for the decisions and the process to reach decisions”

The delegates are URGED to prepare their responses to presentations carefully and primarily by contacting possible stakeholders before the meeting. The format for these proposed New Tasks will be a brief presentation that focuses on the:

- Motivation for the proposed work (what issues does it tackle?) what is it trying to achieve? Who is the target audience?;
- Objectives;
- Approach to accomplishing the proposed work;
- Expectations/Results and Deliverables
- Dissemination plan – what will need to be done to get the results adopted? Who will do it?
- Required resources

Concept and Task Definition Papers (Process and phases)

Before a new Task is starting the concept has to be defined and presented in order to attain the interest of possible participants.

PHASE 1: IDENTIFY NEW ACTIVITIES

Resulting in a **CONCEPT PAPER** (2-5 pages) containing

- Motivation
- Objectives
- Approach
- Expectations/Results

PHASE 2: DEFINE NEW ACTIVITIES

Requiring an **EXPERTS MEETING** to propose

Table 1. Task Work Plan Resource needs: Task or cost sharing

Table 2. Dissemination, Task Information Plan

CONTENTS OF PROPOSALS FOR NEW WORK

The document that will propose the new work to the Executive Committee could be organized and have the following contents:

1. Background and motivation
2. Objectives
3. Issues for the new work (scope)
4. Structure (sub-tasks)
5. Management (responsibilities of the Operating Agent, Subtask leaders and Experts)
6. Deliverables (for whom, target groups)
7. Time Schedule and milestones
8. Funding and Commitments (Resources needed)
9. Meetings plan
10. Information activities
11. Co-operation with other IA's, the Secretariat and other interested parties
12. Country contributions to funding and Tasks

Annexes: Detailed description of Subtask

REPORT FROM THE IEA SECRETARIAT

February 2016

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Information on recent developments within the IEA Secretariat

General IEA business

Introducing the new Energy Efficiency Division and new Division head Brian Motherway:

As of January 1, 2016, the Energy Efficiency Unit has been expanded to the Energy Efficiency Division (EEfD) and repositioned within the IEA. The EEfD has been moved from the Sustainable Technology and Outlooks Directorate to the Energy Markets and Security Directorate. Brian Motherway is the new Division Head and joins the IEA from the Sustainable Energy Authority of Ireland where he was the CEO. Brian recently sent an introduction email to IEA DSM and is keen to hear any feedback you may have.

IEA reorganization:

In addition to the changes to the Energy Efficiency Unit, the Sustainable Technology and Policy (STP) directorate (key output is the annual Energy Technology Perspectives publication) has merged with the Directorate of Global Energy Economics (GEE) (key output is the World Energy Outlook) to form the Sustainable Technology and Outlooks (STO) directorate with Kamel Ben Naceur as the director.

The IEA also created the Economics and Investment Office (EIO) headed by the new Chief Economist of the IEA, Laszlo Varro. The EIO will be responsible for an annual publication estimating investment in the global energy system.

Update on TCPs

Fourth quarter 2015 was a spectacular ending to the 40th anniversary year of the Implementing Agreement mechanism with a series of high-level events, each of which were historical “firsts” vis-à-vis the Implementing Agreements:

- On 18 September, under the theme “**Preparing the next 40 years of multilateral energy technology collaboration**” the Secretariat hosted a first-ever meeting led by the IEA Executive Director with representatives of more than 30 TCPs plus officials from the CERT and the WPs as well as Partner countries (China, Mexico and South Africa) to identify opportunities to expand and enhance IA activities.
- The 2015 IEA Ministerial meeting included a session dedicated to international collaboration with special focus on the TCPs. A short animated film portraying the TCPs was shown during the Ministerial meeting. Recognising the importance of multi-lateral collaboration to accelerate energy technology development, demonstration and deployment, faster cost reduction, and appropriate policies, Ministers asked the IEA to strengthen its energy technology outreach activities and expand participation of Member and non-Member countries, the science and research communities, industry partners and other stakeholders. Ministers endorsed the rebranding of the Implementing Agreements as **IEA Technology Collaboration Programmes (TCPs)** and asked the Secretariat, the Governing Board (GB) and the relevant Standing Groups and Committees to

strengthen the energy technology and innovation-related activities of the Agency. The choice of the new TCP brand, marking a 'new era of technology collaboration', reflects enhanced effort to strengthen the TCPs and to better communicate related outcomes to policy makers and external stakeholders.

- On Thursday 10 December at the 21st session of the Conference of the Parties to the United Nations Framework for a Climate Change Convention (COP 21) the IEA organised an event, **“Accelerating Innovation through Energy Technology Collaboration”**, in which four TCPs contributed thought provoking presentations on a range of collaborative initiatives and experiences in support of energy technology innovation.

This trend continued early 2016 with a number of further other important events, notably:

- More recently, on the margins of the Bali Clean Energy Forum 11-12 February 2016, a Ministerial-level event designed to announce creation of the Indonesian Centre of Excellence, six TCPs contributed to an expert level workshop **“Bridging the Gap, Promoting Global Partnership”**.
- At the CERT 16-17 February meeting the IEA Executive Director made the opening remarks, sharing his vision for making the IEA the leading international hub for clean energy technology and energy efficiency. He referred to the TCPs as the hidden gems of the IEA as they not only support the IEA's work, but they are also highly valued by many partners. He added that it is time these gems shine for all the world to see, and that we must strengthen their role in the work of the agency. A workshop was held on the margins of the meeting on the theme of **“Maximising the Impact of IEA's Technology Collaboration Programmes through Enhanced Co-operation in the Energy Technology Network”**. The event provided an opportunity for eight TCPs with end-of-term dates within the next 24 months to share recent activities and achievements with CERT delegates. The 16-17 February 2016 CERT meeting resulted in two important decisions concerning TCPs:
 - New, simplified procedures for TCP requests for extensions, effective for TCPs with end-of-term dates after 1 November 2016.
 - A new “communications framework” for enhanced communication between the TCPs (with guidance from the Working Parties) and the CERT.
 - The Secretariat will be providing details of the new RfE procedures, communications framework and use of the TCP name at each of the Working Party meetings March-July 2016.

Energy Efficiency Division Work

Division strategy, consultations, and outreach

The Executive Director has high ambition on the topic of energy efficiency and is looking to the EEfD to help craft the IEA's strategy on energy efficiency and to coordinate the IEA's work on energy efficiency across multiple directorates. To achieve this, Brian Motherway and the EEfD have been in a consultation internally at the IEA and externally to develop the new divisional strategy and to shape the Agency's strategy and work on energy efficiency.

No strategy has been formally adopted but a draft strategy is being circulated for comment and approval in the IEA. The draft strategy focuses on four main areas of work for the EEfD:

Table 1: Four focus areas for the EEfD (draft)

<p>Trends, indicators and analysis</p> <p>Monitoring overall usage and efficiency trends. Reporting on energy efficiency activity, investment, returns and all impacts. Measuring the effect of energy efficiency on demand and on progress towards targets.</p>	<p>Policy and implementation advice</p> <p>Advising on how to design, implement and evaluate successful EE policies and programmes. Building and sharing best practice case material and guidance. Helping countries understand what policies are best for them.</p>
<p>Enhanced data and tools</p> <p>Leading the development of better datasets and analytic tools to allow for a greater understanding of energy efficiency. Encouraging and supporting experts, NGOs and Countries to enhance their data collection and analysis, and working to foster best practice across all.</p>	<p>Capacity-building, training, convening</p> <p>Developing skills and knowledge among the EE policy community. Working directly with key countries to support policy design and implementation. Acting as a convenor of EE experts and policy makers to share best practice and encourage collaboration.</p>

Note: Table is draft and not for external circulation

External Consultations:

The EEfD is also holding a series of consultation meetings in March 2016:

- Energy Efficiency Working Party and core stakeholders
- Senior domestic policy makers from 15-20 key countries are invited to a workshop to hear views on what IEA's EE work should focus on.

This set will be followed up in September with our first major energy efficiency conference, and pitched at senior officials or Ministers.

Coordination opportunity: Provide feedback to EEfD on the Division's strategy program through Tyler or sent directly to Brian Motherway

Leveraging IEA contacts for new membership

Tyler has been working to leverage the IEA's work with its association countries to help recruit new members. Key association countries for the IEA include China, Thailand, Chile, Mexico and India. In coordination with Xie Xi a Ministry of Science and Technology secondee to the IEA and Kevin Tu, the IEA's China desk officer a number of invitation emails have been sent to possible partners in China. By recommendation of Xie Xi, we emailed the Deans of Chinese Universities for them to review and send to their faculties for interest. The hope is that accessing the Chinese government through the universities will create a more robust network and interest in IEA DSM. Kevin Tu will also help to develop better contacts with the NDRC in China. Emails of introduction were sent in the first half of February.

Additionally, Tyler has been working with the International Partnership for Energy Efficiency Cooperation to help build the profile of IEA DSM. IPEEC is working with the G20 on its energy efficiency work stream and this year, China is the chair of the G20. Tyler is meeting with IPEEC this week to discuss specific dates and avenues to bring up IEA DSM. Chinese involvement with the G20 is organized through the NDRC meaning we will have potentially greater access to officials. Benoit Lebot, director of IPEEC, will include IEA DSM in the briefing memo for IPEEC's policy committee with will mewet in China in June 2016. This could be an opportunity for someone from IEA DSM to go and build contacts. IPEEC is having is ExCo March 7-8. Tyler will make a short presentation updating IPEEC membership on IEA DSM.

Coordination opportunity: Tyler is willing and able to discuss IEA DSM with potential partners. If you have recommendations please email him.

Energy Efficiency Analysis

The EEfD is working on a number of analytical outputs for 2016. The main projects are described below.

Energy Efficiency Market Report

The Energy Efficiency Market Report 2015 has been downloaded 20 000 times off the IEA website as of February 2016. Feedback on the report has been very positive from external sources. Specifically, stakeholders liked the greater focus on multiple benefits and thought key messages were sharper and more relevant to policy makers.

EEMR 2016 has finished the initial planning stages with contribution from around the IEA. The high-level focus - taking account of feedback on the EEMR 2015 - will be to streamline the publication, making the key messages and findings more visible, to broaden the scope outside of IEA countries, to strengthen the investment estimates, and to provide an outlook for the market to 2020. Publication date is planned for the second half of October 2016.

The Energy Efficiency Division is coordinating with and planning on substantive input from ETP, EDC, EIO, WEO, RED, GCP and EED allowing for the most cross-agency input and feedback on an EEMR to-date. Further, IEA DSM and 4E are planned to make substantive contributions to the report.

Coordination opportunity: The Market Report is interested in relevant EE market data and findings. We are currently collaborating with Task 25 to produce content but if you know of interesting research and data on energy efficiency markets, businesses, impact evaluations, etc. please let Tyler know.

WEO & ETP publications

The Energy Efficiency Division has been a leading agent for collaboration across the agency and has successfully been working with WEO and ETP on analysis and publications. The WEO team is now working with the Energy Efficiency in Emerging Economies (E4) team on an outlook for India, which is similar to the work done last year on the outlook for South Africa. In this process, the Division is involved in reviewing analysis and messages in the report. In addition to this report, the Division has been collaborating on the Tracking Clean Energy Progress and Energy Technology Perspectives publications from ETP. This has included writing sections in each publication and supporting the analysis and messages. The EEfD also authored Chapter 7: Policy and finance mechanisms for sustainable urban energy systems, lead by Tyler Bryant.

ETP 2017 is in the design stages with the publication focusing on the 1.5 degree scenario. Some key areas of research relevant to IEA DSM are behavioural policy and change and grid integration of renewables and disruptive electricity futures.

Coordination opportunity: There is an opportunity to consult on ETP 2017 along the behaviour analysis and content. Daniele Poponi is the project manager.

Policy Mapping, Pathways and Roadmaps

The EEfD is building its capacity to map and track energy efficiency policy developments around the world. The aim is to produce a regular publication tracking policy developments to provide an up-to-date assessment for policy makers. The effort would attempt to systematize a process that began with the IEA policy databases. We are currently entering into a contract to develop the tracking methodology and the presentation of the policy mapping exercise.

The IEA policy databases that are administered by the Energy Efficiency Division includes the Energy Efficiency portion of the Policy and Measures Database (PAMS) and the Building Energy Efficiency Policies database (BEEP). Each of these databases have had incremental updates through a two

part process, but still lack comprehensiveness. The two part process is (1) receiving feedback from country delegates and (2) conducting research on existing policies. While the databases lack comprehensiveness, they both represent best available policy information globally and will be the basis for policy mapping.

Tentative plans are to review market based instruments such as obligations, auctions, and portfolio standards to assess their role to achieve energy efficiency savings in 2016-17. This work would complement the IEA's work with the G7.

Coordination opportunity: Could IEA DSM help contribute to a piece on market instruments for energy efficiency?

Country in-depth Reviews of Energy Policies

Approximately every four years, the energy related policies of individual IEA member countries are reviewed in-depth by a team of peers led by the IEA. The Energy Efficiency Division is responsible for reviewing the energy efficiency chapters of the IEA's IDRs prepared by the Countries Studies Division (CSD). Latest countries reviewed by Energy Efficiency Division since September 2015 include Czech Republic, Belgium and Portugal. For the Czech Republic, Energy Efficiency Division was part of the IDR peer reviewer team in November 2015.

As a result of the Energy Efficiency Division's ongoing activities in Mexico, we are currently supporting the Office of Global Energy Policy (GEP) in preparation for their IDR peer review mission to Mexico in April 2016.

Behaviour

The Energy Efficiency Division has held two workshops on energy efficiency and behaviour. The first on energy efficiency, behaviour and buildings (March 2015), and the second on energy efficiency and decision making (November 15). 10-11 May 2016, the Energy Efficiency Division will host a workshop on energy efficiency, behaviour and transport. The agenda is ambitious and covers the following themes: i) driving more efficiently (eco-driving, feedback instruments, ICT and route management), ii) purchasing more efficient vehicles, iii) innovating business models, iv) promoting public transport (carrots and sticks) and v) fuel switching. We welcome your participation!

Energy Efficiency Impact Assessment & Strategies: Evaluating Policies in Southeast Asia and Latin America

Energy efficiency policy evaluation has emerged as an area of particular interest to Indonesia. The Energy Efficiency Division hired a consultant to conduct an 18 month programme of work to assess the impact of Indonesia's existing energy efficiency programmes and build long term evaluation plans. Outputs will include impact assessment of existing programmes (including for social and economic benefits), recommendations for enhancements, design guidelines for building evaluation into new programmes and capacity-building exercises.

Similar to Indonesia, the Energy Efficiency Division will be conducting evaluation of one or two energy efficiency policies for a country in Latin America (e.g. Mexico, Brazil). The consultancy firm whom will be leading this work was selected by Energy Efficiency Division in February 2016. The consultant will also be responsible for providing recommendations for improved policy evaluation design, data collection and analysis processes as well as build the policy evaluation capacity of government staff. The project will be completed no later than June 2017.

Multiple Benefits, Energy Efficient Prosperity

The Energy Efficiency Division has organised two events on the topic of Energy Efficient Prosperity. The first event, organised during the UNFCCC 21st Conference of Parties (COP21) in Paris sought to move beyond discussions about the energy savings benefits of energy efficiency to showcase the social and economic outcomes of policies implemented around the world. More than a dozen speakers from countries including China, Ghana, India, Ukraine and South Africa, and from

organizations such as CLASP, the World Health Organization and the European Bank for Reconstruction and Development explored economic development, productivity, safety, health, comfort, access and other benefits resulting from energy efficiency policies.

The IEA again hosted an event on Energy Efficient Prosperity as part of the Clean Energy Forum in Bali 11-12 February 2016. Speakers from Indonesia, India, regional efforts such as ASEAN Shine and research centres like the Lawrence Berkeley Lab presented on the benefits of energy efficiency for electricity security (lowering peak demand), economic development, access, climate change and other topics. The findings from these workshops will be published in March 2016.

Coordination opportunity: The Secretariat is looking forward to research and outputs from Task 26 with the potential for cross-promotion and partnerships on disseminating findings from the Task.

Implementing Energy Efficiency

Appliances

21st Century Energy Efficiency Standards and Labelling (EESL) Programmes

An International Workshop on 21st Century EESL Programmes was jointly organised on 15-16 December 2015 by the IEA, 4E and the Super-efficient Equipment and Appliance Deployment (SEAD) initiative of the Clean Energy Ministerial and the International Partnership for Energy Efficiency Cooperation (IPEEC). The workshop explored the opportunities that information communication technologies and network connectivity can bring in improving the development, implementation and evaluation of EESL Programmes. Energy Efficiency Division is currently exploring with the workshop partners on what should be the next steps based on feedback received from participants.

Electricity Security, Thailand

The Energy Efficiency Division is advising Thailand on the role energy efficiency can play in meeting its electricity security goals. EEfD wrote a chapter on energy efficiency in the upcoming Thailand Electricity Security Assessment 2016 report. In January 2016, EEfD travelled to Thailand to present and discuss the draft analysis, findings, and recommendations from the Thailand Electricity Security Assessment with Thai government officials and other stakeholders.

Standards and Labelling Programme, Ukraine

In December 2015, the Energy Efficiency Division published a report titled Energy Efficiency Policy Priorities in Ukraine. The findings in this report are the basis of a draft United States Congressional bill to provide aid to Ukraine to scale up energy efficiency.

One of the recommendations that came out of the Energy Efficiency Policy Priorities in Ukraine report was for Ukraine to increase the stringency and coverage of minimum energy performance requirements for energy-using products and to require that these products have energy labels.

To begin cooperation in this area, in December 2015, the IEA invited two Ukrainian officials, including the Head of Standards and Labelling at SAEE to a workshop on 21st Century Standards and Labelling (S&L) Programmes. Following this event, SAEE and the IEA discussed potential further cooperation to strengthen Ukraine's S&L Programme.

The IEA is now proposing to work closely with SAEE to develop i) a step-by-step roadmap for Ukraine to harmonize with EU standards and labelling systems, ii) analysis of the likely benefits to the economy of implementing the S&L roadmap and (iii) a baseline to enable future evaluations. A concept note is under development and will soon be shared with SAEE officials for their comments and input.



Buildings

District Heating Strategy

EEfD is developing a strategy for improving the energy efficiency of district heating systems in China. This strategy aims to understand market structures, remove policy barriers and create effective business models, which are essential to develop technically and economically feasible alternatives to coal. A special focus is to support the national pilot programme of promoting use of low-grade waste heat in district heating systems of 150 cities. A workshop organised jointly with Chinese authorities took place in January 2016. We will help design business models, establish industry standards, and support an integrated urban energy system analysis.

Space Cooling Strategy

The Division continues to enable collaboration across the Agency on space cooling, which started with a concept note in 2014 looking at the growing concern for increasing energy use in developing and emerging economies as population, wealth and comfort continue to increase. In the year ahead, we will continue to collaborate with ETP and WEO on space cooling analysis that is examining cooling degree days, population shifts and the potential growth of space cooling.

Roadmap for Building Energy Code Harmonisation

The EEfD team is working to support both Mexico and the ASEAN region on building energy codes. This work includes the analysis of existing policies and developing roadmaps that will enable improved energy efficiency. At the same time, in a region like ASEAN, this roadmap process will enable harmonisation across multiple countries creating a single market for products and services that are used to make buildings energy efficient. This work builds on other successful building energy code efforts by IEA member countries.

PROJECT PREPARATORY COMMITTEE (PPC) REPORT

January 2016

The PPC consists of the Chair and Vice Chairs, the Advisor, the Chair of the Visibility Committee and the Executive Committee Secretary. The IEA Desk Officer attended the meetings as well. The PPC had two teleconference meetings since the last ExCo meeting. On top of that there were a number of bilaterals and lots of emails to run the Implementing Agreement.

Topics discussed were:

Next ExCo's

- The ExCo in Sweden will start with a National DSM day in Stockholm: DSM workshop to be held at Carion Sign Hotel, Norrabantorget.
- Possible ExCo in the Fall: Belgium. ExCo members Hans de Keulenaer and Francois Brasseur are looking at options.
- Spring 2017: Netherlands

Consequences of new strategy of Fatih Birol, who took over as Executive Director

- This will be explained in more detail in the secretariat report.
- Birol wants to improve collaboration between IA's and between IA's and the secretariat.
- He also wants to mine the results of the IA's.
- It's clear Tyler is supporting this policy firmly.
- One option is collaboration between the IA's on "universities". Tyler will discuss this within the secretariat and EUWP, we will write to CERT.
- Rob has participated in an IEA conference in Indonesia and promoted DSM there.

Membership

- Ireland will be our newest member once the signature page is signed.
- China: The secretariat advises us to talk to a university. Anne will send the info as requested and an invite for the next ExCo. Sea is contacting researchers in the field of behavior in China
- Spain: Hans de Keulenaer will ask his Spanish colleague to try to get them more involved.
- India: We lost all contact as all former national representative contacts have left BEE, but we try to restore the link, in collaboration with the secretariat.

(New) Tasks

- Multiple Benefits: IETS hasn't approved the proposal yet. They keep negotiating the details based on task sharing. We propose to start our part.
- Big data proposal: Mathias is working on it.

- Task Zero: Hans will write a summary for the PMD, the webinars are working well.
- Flexibility: the idea for a Task proposal by the Copper Institute has been sent around to the ExCo. We think this is good and timely, if Hans de Keulenaer works on a two pager.

EUWP/BCG

- Rob has given a general presentation at the BCG, and we will share the BCG matrices on collaboration etc.
- Reporting: we delivered the requested annual two pager to the EUWP, Michael Moser, head of the ECG promised to give us feedback.

Finances

- Anne will finalize the transition of work (and responsibilities) of the financial matters to the new Vice Chair before the next ExCo. The transition of the matrix and thereby the financial reporting is the most important final item.
- Other financial issues will be dealt with under the financial report

Website

- The new website is up and running
- A lot of background work is still going on.

Communication

- In line with the communication plan we work on a well-developed house style & outreach.
- Our Annual Report has been sent to all participants. The number of hardcopies keeps decreasing.
- Other communication issues will be mentioned in other parts of this PMD.

Collaboration

- We collaborated with numerous parties in the Tasks, and the joined efforts with the secretariat are already mentioned.
- We are in good contact with IPEEC, which has led to a webinar by Benoit Lebot.

TASK 26 – ANNEX 19: THE MULTIPLE BENEFITS OF ENERGY EFFICIENCY

Operating Agent: Catherine Cooremans, Eco'Diagnostic, Switzerland

cooremans@ecodiagnostic.ch

Co-operating Agent: Maja Dahlgren, Swedish Energy Agency

maja.dahlgren@energimyndigheten.se

Duration: 3 years, starts February 2016 – 31 January 2019

Total Budget: €22,000 per country per year (in case of 7 participating countries)

Task sharing (experts time): 10.5 months over 3 years (3.5m p.a)

The DSM IA is well situated to take on the supervisory Task “Multiple Benefits in Action” and to do so in co-operation with other relevant IEA Energy IAs (in particular IA IETS, with regard to process industries in the business segment).

Interested countries (DSM members who attended the Halifax ExCo meeting in October, 2015):

Austria, Finland, New Zealand, Norway, Sweden, Nova Scotia (Canada)

Other possible interested countries (DSM members who did not attend Halifax ExCo meeting):

Belgium, Great-Britain, Italy, Switzerland

Objectives

Task 26 will be run jointly with the IETS Implementing Agreement.

The objectives (deliverables) of the proposed Task 26 are the following:

1. **Toolbox conception – Subtask 1.** The first main objective is to provide businesses’ internal staff (energy managers, facility managers) as well as the external consultants advising them and public programmers, with an analytical tool to be used upstream to better identifying and assessing the MBs.
2. **Toolbox delivery – Subtask 2.** The second main Task objective is double: 1) to develop templates for workshops, webinars and MOOC (Massive Open Online Course) in collaboration with DSM University; 2) to communicate on the MB of energy efficiency to public programmers and policy-makers, as well as to the energy efficiency and climate change financial community.
3. **Database – Subtask 3.** The third main Task objective is to provide practitioners and policy-makers with a Multiple Benefits database, which will contain data collected in the participating Member States, organized by business activity & municipality type, energy-efficiency measure type and geographical location.
4. **Dissemination & reporting – Subtask 3.** The fourth main objective regards the organization of
 - one-day “Toolbox Training Sessions” in each participating Member State to enable engineers to take ownership of the MB toolbox;
 - webinars and MOOCs, in collaboration with DSM University.Task 4 is also dedicated to updating and delivering the Database to Member States and to a final report on the Multiple Benefits project and on its possible further steps.

NB: subtasks 2 and 3 have been switched compared to earlier versions of the documents, for clarity and coherence purposes.

Scope, division of work & coordination

The overall work will cover the three following MB categories:

- **MB for municipalities:** impact on local public budget of energy-efficiency projects in public buildings and facilities, heating installations, sewage treatment plants, municipal lighting, transport, etc.
- **MB for business sector,** with an enlarged perspective on businesses including process and non-process industries, as well as commercial and administrative activities and SME. This approach would enable to cover, in an integrated perspective, all for-profit activities.
- **Health & well-being benefits for organizations** (i.e. municipalities and businesses).


NB: In the project, the business sector is conceptually divided, for analytical purposes, between Industrial, Commercial and Administrative sectors and the Industrial sector is divided between Process, Non-process and SMEs (see table 1 – MB categories and sectors, below). However this categorization is not always easy to apply in the real world (since some companies are at the same time industrial and commercial, or process industries and SMEs).

Table 1 - Identification of MB categories and responsibilities

Catherine Cooremans - Annex 26 - Multiple benefits of energy efficiency : categories/sectors - August 31, 2015			
MULTIPLE BENEFITS CATEGORIES			
IMPACTS ON:	TARGETS/FOCUS	MAIN RESPONSIBILITY	PARTNERS
LOCAL PUBLIC BUDGET	MUNICIPALITIES	DSM	ETI EBC Annex 63 (Implementation of Energy Strategies in Communities) ETI DHC (District Heating & Cooling)
BUSINESS SECTOR	INDUSTRIAL SECTOR:		
	- Process industries (eg food & beverage, pulp & paper, foundries)	IETS	DSM
	- Non-process industries	DSM	IETS
	- SME	DSM	IETS
	COMMERCIAL SECTOR (eg general stores, hotels, parking lots)	DSM	
ADMINISTRATIVE SECTOR (eg banks, insurances, data centers)	DSM		
HEALTH & WELL-BEING	Impacts on businesses & municipalities	DSM	IEA Secretary (IEPPEC)

The work sharing would be the following:

- **Subtask 1:** The operating agent will provide the main contribution to sub-task 1, with support of the co-operating agent. Deliverable (i.e., the Analytical Toolbox) includes an in-depth literature review, definition and categorization of MBs, and development of a harmonized analytical framework to analyse MBs ex ante or ex post. This Toolbox would be submitted to the first Expert Meeting for discussion, modifications and approval. The co-operating agent could also be one of the two National experts for Sweden.
- **Subtask 2:** operating and co-operating agents jointly collaborate to this subtask.

- 
- **Subtask 3:** The co-operating agent would be mainly dedicated to collecting data on process industries in participating countries (i.e. contact with National experts), while the operating agent would be responsible for other businesses sectors and municipalities.
 - **Subtasks 4:** operating and co-operating agents jointly collaborate to this subtask.

It is proposed that Task 26 would be conducted over a period of 36 months, from May 1st, 2016 to April 30, 2019. The corresponding work plan and time schedule (new versions) are presented in the next two tables.

Time Schedule & Work plan

Table 2 - Catherine Cooremans - Annex 26 - Multiple benefits of energy efficiency : Time Schedule - V2 - 17 Feb. 2016

Time Schedule		2016	2017	2018	2019
I	Taks 1 - Toolbox Conception				
1.1	Literature review + analytical framework				
1.2	Methodology for MB identification, analysis & marketing				
1.3	Core Team meeting (Sept. 2016)				
1.4	MB Toolbox				
1.5	Experts workshop (Nov. 2016) + Core Team meeting	 			
1.6	Report Task 1				
II	Task 2 - Toolbox Delivery				
2.1	Marketing plan definition				
2.2	MB (DSM-EITS) webpage / website				
2.3	Social networks MB webpage				
2.4	MB Toolbox packages				
2.5	Experts workshop (Sept. 2017) + Core Team meeting		 		
2.6	MB Toolbox delivery				
2.7	Evaluation of the MB toolbox				
2.8	Report Task 2				
III	Task 3 - Database				
3.1	Database design				
3.2	Experts workshop (May 2017) + Core Team meeting		 		
3.3	MB Data collection				
3.4	Statistical analysis of the data collected				
3.5	Report Task 3				
IV	Task 4 - Dissemination & Reporting				
4.1	Training				
4.2	Report Task 4 (January 2019)				
4.3	Statistical analysis of the data collected				
4.4	Core Team meeting (March 2019)				
4.5	Updated database (April 2019)				
4.6	Final report (April 2019)				
	Milestones		 M1	 M2	 M3
	Meetings of Project Core Team	 	 		
	Meetings of experts		 		

Table 3 - Catherine Cooremans - Annex 26 - Multiple benefits of energy efficiency : Workplan/Dissemination plan - V2 - Feb. 17, 2016

		Why?	What?	When?
WORKSTEPS		OBJECTIVES	DELIVERABLES	Deadline
I	TASK I - TOOLBOX CONCEPTION	OBJECTIVES	DELIVERABLES	SCHEDULE
1.1	Literature review + analytical framework	Deepening the knowledge	Taking into account sectors categories and sub-categories, companies and municipalities.	May 2016 -
1.2	Methodology for MB identification, analysis & description			Sept. 2016
1.3	Core Team meeting			Sept. 2016
1.4	MB Toolbox	Operationalizing knowledge	MB Toolbox for industries & municipalities including: - Analytical concept for MBs - Case studies - Communication tools	Oct. 2016
1.5	Experts workshop + Core Team meeting	- Discuss & validate methodology for MB identification/categorization/quantification - Finalize & approve Toolbox - Setting expert networks in participating countries	- Toolbox approval - Experts networks definition & approval	Nov. 2016
1.6	Report on Task 1	Reporting on achievements	Synthesis & report on Task 1	Jan. 2017
II	TASK II - TOOLBOX DELIVERY	OBJECTIVES	DELIVERABLES	SCHEDULE
2.1	Marketing plan definition	Getting in contact with potential customers in Member States (energy engineers, public programmers, academics, energy-consuming companies, etc.)	Target customers list and access channels	April - June 2017
2.2	MB (DSM-EITS) webpage / website containing: - Toolbox - Database access - Questionnaire template access - Infos on workshops and webinars - Template for training & seminars - Story telling (case studies, success stories, etc.)		MB Website / Webpages Access free (but user registration and login) up to a certain level of use Community - Co-creation	April - July 2017
2.3	Social networks MB webpage - Content similar to MB webpages/website			June - August 2017
2.4	MB Tools packages. - Toolbox package - Training packages (for workshops & webinars)		Analytical tool, user's manual Templates workshop and webinar training	June - August 2017
2.5	Experts workshop + Core Team meeting	- Evaluation & approval of Toolbox & training packages - Planning training in participating countries		Sept. 2017
2.6	MB Toolbox delivery		MB Toolbox to networks (national experts and customers identified in 3.1)	Oct. - Dec. 2017
2.7	Evaluation of the MB toolbox:	Refine and improve initial concept (3.4)		Janv. 2018 - feb. 2018
2.8	Report on Task 2		Synthesis & report on Task 3	March 2018
III	TASK III - DATABASE	OBJECTIVES	DELIVERABLES	SCHEDULE
3.1	Database design - Categories, sub-categories - Templates for data collection - Pre-testing of questionnaire	MB Database	- Database structure - Questionnaire for data collection	Janv. 2017 - April 2017
3.2	Experts workshop + Core Team meeting	- Setting networks for collecting examples & figures - Database design approval - Questionnaire template approval	Networks for collecting examples & figures (data)	May 2017
3.4	MB Data collection	- Data collection	MB database based on methodology approved in Task 1, analysable by industry/municipality type, measure type, geographical location. High quality data.	June 2017 - Feb. 2019
3.4	Statistical analysis of the data collected	Analysis of data	Improving MB knowledge	July - Aug. 2018
3.5	Report on Task 3		Synthesis & report on Task 2	Oct. 2018

IV	TASK IV - DISSEMINATION & REPORTING	OBJECTIVES	DELIVERABLES	SCHEDULE
4.1	Training: - Workshops - Webinars - MOOCs (DSM University)	MB Toolbox and Database training for end-users, industry leaders, policy-makers, academics, Escos.	2-4 workshops in each participating country 2-4 webinars a year in each participating country	Oct. 2017 - Nov. 2018
4.2	Report on Task 4		Synthesis & report on Task 4	31 Jan. 2019
4.3	Statistical analysis of the data collected	Analysis of data	Improving MB knowledge and analysis of the database	Feb. 2019
4.4	Core Team meeting	Evaluation of Task 26 and of next possible steps		March 2019
4.5	Database		Updated Database	April 2019
4.6	Final report		Synthesis & report on Annex 26 achievements and next steps	April 2019

Funding

(a) Working Meetings. The working meetings shall be hosted in turn by the Participants. The costs of organizing and hosting meetings shall be borne by the host Participant.

(b) Publications: The cost of publishing the Final Report and summary assessments described in paragraph 6 above shall be equally shared by all the Participants.

(c) Individual Financial Obligations. Each Participant shall bear all the costs incurring in carrying out the Task activities, including reporting and travel expenses. Additionally, each Participant shall make a direct financial contribution to the Operating Agent to cover co-ordination and report preparation expenses and other Annex-related (e.g. workshop) costs.

The table below shows in more details Individual Financial Obligations mentioned under point c), i.e. the fees per participating country, based upon varying numbers of participating countries. Fees cover the work of the operating agent and co-operating agent (Maja Dahlgreen from the Swedish Energy Agency), central DSM administration, IT expert (data basis) and statistical analysis (of the Multiple Benefits figures collected), and DSM University (development and organization of webinars, MOOC, training sessions). Each Participant's fee shall be paid in 3 annual instalments over the 3 years of Task 26.

Table 4. No of participants - Participants' fees – Global project cost for each participating country:

No of participants	Participants' fees – Global project cost (including travel costs) for each participating country:		
	2016	2017	2018
2	--	--	--
3	--	--	--
4	--	--	--
5	20'800 euros	24'600 euros	24'600 euros
6	20'800 euros	24'600 euros	24'600 euros
7	18'900 euros	22'400 euros	23'600 euros
8	17'000 euros	20'200 euros	21'400 euros

In addition to the costs above, two experts per country are necessary; each of them would be working on the project 10% of their time during year 1 and 20% of their time during year 2. During year 3, one expert would be working 10% of his/her time and one expert would be working 5% of his/her time. Travel should cover 3-4 meetings for each expert over the duration of the project.

It must be emphasized that current budget is the worst case scenario and some improvements seem possible, especially with regard to the co-operating agent (who could be partially paid by the Swedish Energy Agency) and to the development of MOOC (online courses) and webinars in collaboration with DSM university (which could be partially sponsored).

Matters for the ExCo

Approve the Task Status Report and Launch Task 26

FLEXIBILITY TRACKER: A FRAMEWORK FOR RAISING GLOBAL AWARENESS ON FLEXIBILITY

Dr. Georgios Papaefthymiou. ECOFYS

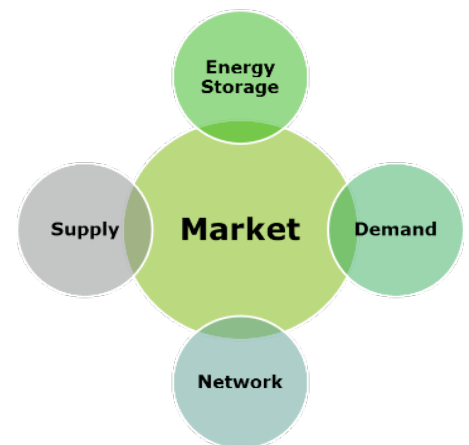
Background: Power system flexibility as the pillar towards higher vRES shares

The last decade has seen advances that have made variable renewable energy sources (vRES), such as wind and solar energy, almost cost competitive with conventional energy sources under many circumstances. On the other hand, delivering low carbon energy when and where it is needed presents a very different challenge, bringing the issue of flexibility in the forefront of system design. The key question for the transition to low carbon energy systems is: “how can we ensure that future power systems have the flexibility needed in order to match variable demand with variable supply?”.

Policies should enable harnessing as much flexibility out of the existing system as possible

Power systems were designed to use flexible generation and power networks to meet variable demand and are not optimally designed in the case when also supply is variable and distributed. As vRES penetration levels increase, changes are needed, to enable harnessing as much flexibility out of the existing system as possible. The policy actions needed can be mapped to five key categories:

1. **Supply:** Key actions are needed to increase flexibility of existing fleet and to integrate distributed and variable resources to the system.
2. **Demand:** DSM constitutes a key potential of low-cost flexibility. Key actions are needed to promote the participation of demand in system operation, and harness its flexibility potential.
3. **Grids:** Key actions are needed on leveraging the full potential and expand transmission systems, and on transforming today’s passive distribution grids into smart grids.
4. **Storage:** Key actions are needed to promote distributed energy storage technologies and prepare bulk energy storage options needed for seasonal balancing in high penetrations.
5. **Markets:** markets is the overlaying area of actions needed to enable the needed transformation, as all regulations and incentives emerge from here. Key actions are needed to enable wholesale markets to more optimally integrate vRES, expand and adapt balancing markets, link retail markets to flexibility and adapt grid codes.



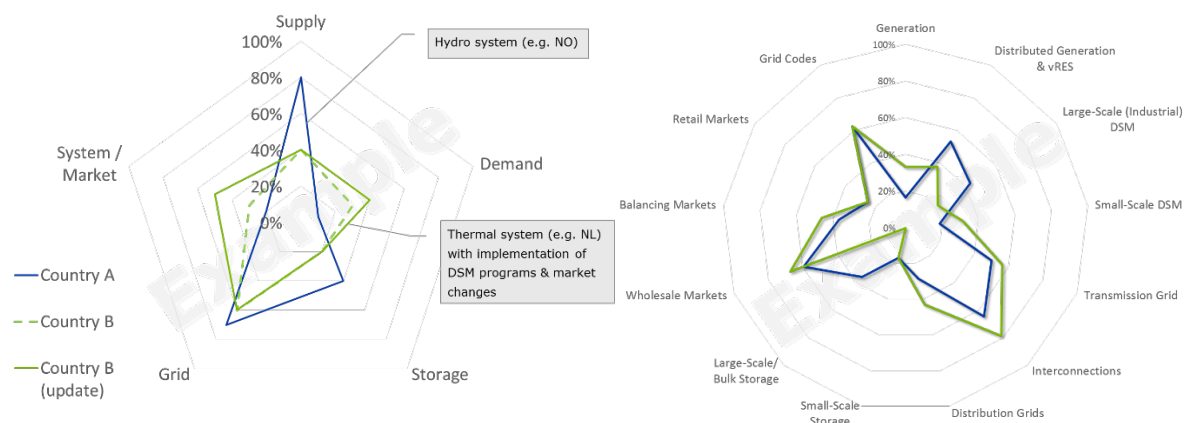
Although the best mix of policies needed for a specific system derive from the inherent system characteristics and flexibility economics, this categorization allows the creation of clear checklists of policies for the promotion of system flexibility.

Since 2013, Ecofys and European Copper Institute have been working together on the development of a flexibility roadmap which includes an assessment tool for testing the readiness of a power system on the road towards near 100% renewables. The results of this work can form the foundations for IEADSM for further development as well as integration with the IEADSM knowledge base (in particular task 17).

Creating a tool to assess the system readiness to higher vRES shares

The vision for this Task is to further develop and test an assessment tool (the Flexibility Tracker) that a) informs policy makers on the policies needed for the transition to low carbon energy systems, and b) monitors the readiness of the system towards higher vRES shares. An advanced prototype of such tool already exists and is currently being tested in 8 EU markets. In this proposed task, we will develop a systematic assessment of the compliance of different systems to the needed policies and to allow the identification of the respective policy gaps. The idea will be to apply the methodology to a broader set of countries, including countries outside the EU, and develop it to a framework for organising the key information of the flexibility and on tracking how planned policies support this vision. This could provide an invaluable tool for tracking the best practices and actions needed for preparing the power systems of the future. An online platform is foreseen in this task to organise and share the results and help raising awareness.

The methodology is based on combining a set of flexibility KPIs that refer to the needed policy actions. The KPIs are accompanied by explanatory texts that will educate users on the need and background for each policy. On rating a system, each KPI is assessed based on a set of clear questions on the a) current situation (answer based on statistics) or on b) compliance with policies (based on Y/N questions). In a current prototype version, the tool comprises approx. 60KPIs, organised in the 5 key categories mentioned above and 13 subcategories. The assessment is done based on a set of 100 questions. The figure below shows example assessments.



Creating global awareness on flexibility

The ultimate goal of this Task is to create a policy setting tool aiming to synthesise, communicate and promote results from related IEA tasks and to educate and raise global awareness on the topic of flexibility and energy transition in power systems. In a nutshell the tool will allow:

- **Ranking** of the vRES readiness (flexibility) of different systems
- **“Educate”** on key challenges of flexibility
- Develop a **global database** on policies on how systems comply to the flexibility challenge
- Identify **best practices**, investigate regional issues, raise awareness

TASK 17 – INTEGRATION OF DSM, DISTRIBUTED GENERATION, RENEWABLE ENERGY SOURCES AND ENERGY STORAGE – PHASE 3

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1. Summary

Phase 3 of IEA-DSM Task 17 addresses the current role and potential of flexibility in electric power demand and supply of systems of energy consuming/producing processes in buildings (residential, commercial and industrial) equipped with DER (Electric Vehicles, PV, storage, heat pumps, ...) and their impacts on the grid and markets. The interdependence between the physical infrastructure of the grid, governed by momentary power requirements, and the market side, governed by energy requirements, will also be looked upon. The scalability and applicability of conducted and ongoing projects with respect to specific regional differences and requirements will be explored (see <http://www.ieadsm.org/task/task-17-integration-of-demand-side-management/>).

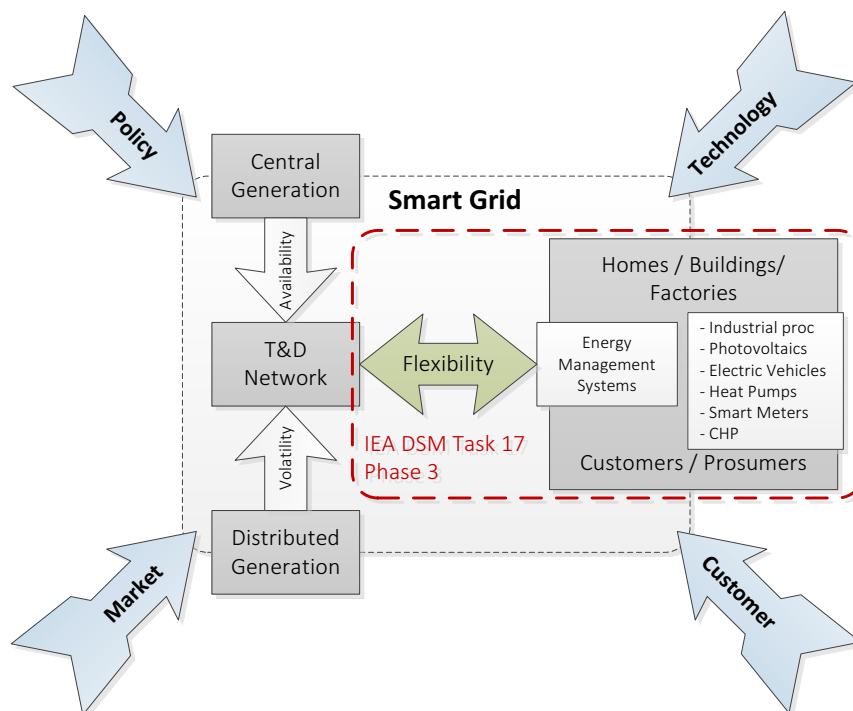


Figure 1 Focus of the IEA DSM Task 17 Phase 3 on enabling the consumption and production flexibility of electricity delivery

2. Objectives for the last six months

Subtask 10 Role and potentials of flexible consumers

Assess the concepts and implementations of customer and home energy management systems (CEMS/HEMS), possibly linked to the smart meter, in different (participating) countries in relation to flexibility of demand and supply.

Progress towards Subtask objectives

The final structure of the ST-10 deliverable (Residential Demand Response: Roles and Interactions of Flexible Consumers and Prosumers; subtitle: Potentials of Distributed Energy Resources and Distributed Demand in Households and Buildings) now has been composed after a number of consultation rounds with the country experts. The contents are also settled now and the parts where the final input from CEs are necessary until 1 week before the expert meeting. A near-to-final draft version of the deliverable has been prepared together with the experts giving the view on the objectives and a discussion on overall developments in the field.

Subtask 11 Changes and impacts on grid and market operation

Assess the impact on grid and market operation based on technology penetration scenarios developed in subtask 5 and 9 (developed in phase 2) by investigating the following areas of interest

Progress towards Subtask objectives

A lay-out of the planned deliverable and first content has been prepared together with the experts; this will be further developed during the expert meeting in March 2016 in Stockholm.

Cost benefit analysis (CBA) framework has been developed to be fed with results from the analytical framework for assessing the projects with respect to a CBA (from ST 12).

Subtask 12 Sharing experiences and finding best practices

Based on the collected pilots and case studies from the previous subtasks, the results and findings of the finished projects in term of successful implementations, barriers and effectiveness are analysed.

Progress towards Subtask objectives

This activity is a parallel activity and has been started from the beginning by the OAs and expert during the workshops and expert meetings. 2 web conferences with experts have been organized.

An analytical framework for assessing projects with respect to the CBA has been developed.

Subtask 13 Conclusions and recommendations

Recommendations will arrived at in close interaction with the experts' opinions and will at least provide a ranking based on impacts, costs and likely future penetration of the technologies.

Progress towards Subtask objectives

This will be the final recommendations from the task and are deduced from the other deliverables.

Experts meetings/seminars/conferences held in past six months

Experts meetings

Date	Place	# of Experts	Type of meeting	Government	Industry	Academic
09-02-2016	Webmeeting	8	Web	1	2	5
14/15-3-2016	Stockholm	12	Real	1	2	9

Seminars/Conferences

Date	Place	Participants	Type of meeting	Government	Industry	Academic
22/23-10-2015	Paris	15	Exchange meeting with IEA/DESIRE task	6	3	6
12-02-2016	Graz	50	Conference	10%	50%	40%

Reports produced in the past six months

- Master Thesis: Lessons learned from European pilot projects: Recommendations on market access requirements for electricity consumers (Julia Schmidmayer, Vienna University of Technology)
- ST 10: Final Draft
- ST 11: Draft Structure including CBA Methodology
- ST 12: Analytical Framework for ST 12 input on ST11

3. Objectives for the next six months

Subtask 10 Role and potentials of flexible consumers

This subtask will be closed with the delivery of the ST-10 report. Deadline is March 15 2016.

Subtask 11 Changes and impacts on grid and market operation

Prepare final version of the ST-11 deliverable. Deadline is May 15 2016.

Subtask 12 Sharing experiences and finding best practices

- Collect project evaluations for CBA
- A symposium and experts meeting will organized.

Subtask 13 Conclusions and recommendations

This subtask will be finalized.

Experts meetings/seminars/conferences planned in the next six months

Example:

Planned Experts meetings

Date	Place
May 10 th 2016	Linz, Austria

Planned seminars/conferences

Date	Place
May 9 th 2016	Linz workshop with other IEA-tasks parallel to Smart grids week

Reports/Publications planned for the next six months

Subtask 10 Deliverable
Subtask 11 Deliverable
Subtask 12 Deliverable
Subtask 13 Deliverable

4. Outreach

Bilateral meetings and conversations with other related implementing agreements and tasks. These are in particular:

- ISGAN – Annex 2
- PVPS – Task 14 – Integration of High PV Penetration
- EBC – Annex 58 / Annex 52
- ECES-DESIRE Annex

Publication and contribution to Energy Innovation Conference at Technical University Graz

- *Lessons Learned from European Pilot Projects – Recommendations on Market Access Requirements for Electricity Consumers*

Furthermore a session in Linz is planned on May 9th 2016.

5. Ideas for new work

Evaluation, measurement and verification of DR.

Forecast for DR

Big data for Energy Efficiency and consumer market profiling.

6. Finance

AIT:

- Realization AIT (total/spent): 55k/~45k Euro
- OA contribution (total/spent): 45k€/ ~35k Euro

TNO: 62 kEuro; progress is on track; total budget 81 kEuro (3x27 kEuro)

7. Activity Time Schedule

IEA-DSM TASK XVII - Phase 3	Q2 14	Q3 14	Q4 14	Q1 15	Q2 15	Q3 15	Q4 15	Q1 16	Q2 16
Subtasks									
Subtask 10 - Role and potentials of flexible consumers									
Subtask 11 - Changes and impact on the grid and market operation									
Subtask 12 - Sharing experiences and finding best practices									
Subtasks 13 - Conclusion and recommendations									
Expert meetings									
Biannual country expert meeting									
Workshops									
Workshops with stakeholders and experts									
Reports									
Subtasks reports									
Final report									

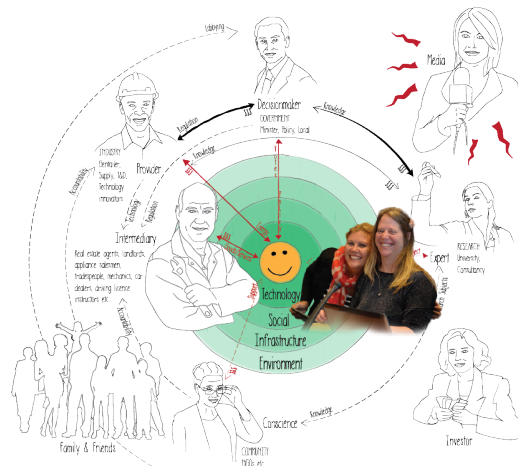
8. Matters for the ExCo

Recommend the ExCo to approve the Task Status Update Report.

9. Participating countries

Austria, Netherlands, Sweden, Switzerland, United States, ECI

TASK 24 – PHASE II: BEHAVIOUR CHANGE IN DSM – HELPING THE BEHAVIOUR CHANGERS



1. Summary

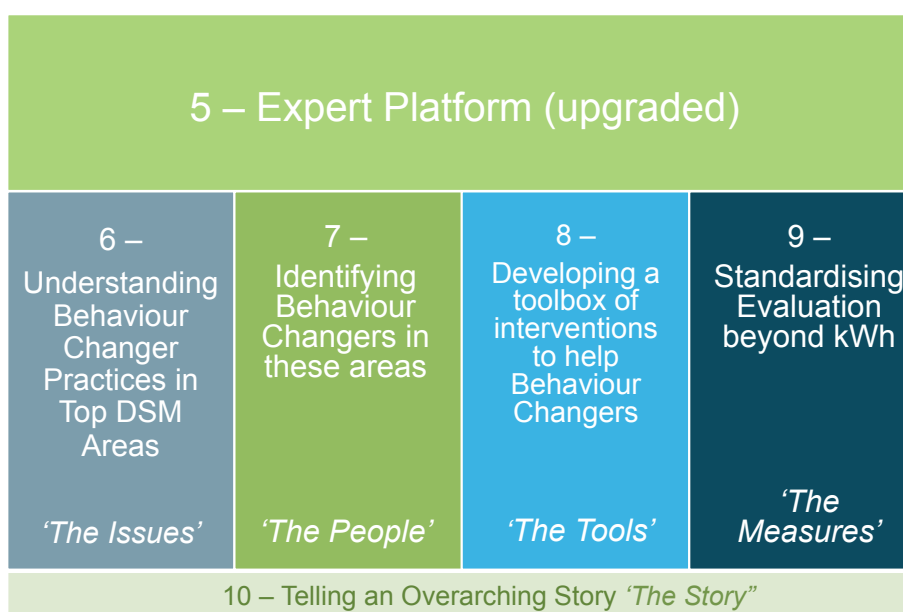
There is no behaviour change ‘silver bullet’, like there is no technological silver bullet that will ensure energy efficient practices. Designing the right programmes and policies that can be measured and evaluated to have achieved lasting behavioural and social norm change is difficult. We believe that this Task, and its extension, helped address these difficulties by developing guidelines, recommendations and examples of best (and good) practice and learnings from various cultures and contexts. We rely on a large, global network of sector-specific experts (researchers, implementers and policymakers) from participating and interested countries to engage in an interactive, online and face-to-face expert platform and contribute to a comprehensive database of a variety of behaviour change models, frameworks and disciplines; various context factors affecting behaviour; best (and good) practice examples, pilots and case studies; and guidelines and examples of successful outcome evaluations. This Task (Phase I) had several Deliverables, including the expert network and platform for continued exchange of knowledge and successes, the large-scale analysis of the helicopter overview and case studies, several reports, factsheets and guidelines on how to evaluate behavioural interventions and the country reports with specific to do’s and not to do’s, future research questions and re-iterated case studies following our best practice recommendations. Phase I of this Task is now finalised and Phase II (How to help the Behaviour Changers) has commenced.

Phase II of Task 24 takes the theory into practice. Building on the solid theoretical foundations of [Phase I](#), we now look at the:

- What?
- Who?
- How?
- Why? and
- So What?

We use a *Collective Impact Approach* methodology and *storytelling* as the overarching language and bring together Behaviour Changers from all sectors (industry, government, research, middle actors and the third sector) with the end users whose behaviour they are ultimately trying to change.

The Subtasks of Phase II



For more information, visit www.leadsm.org



2. Objectives for the last 6 months

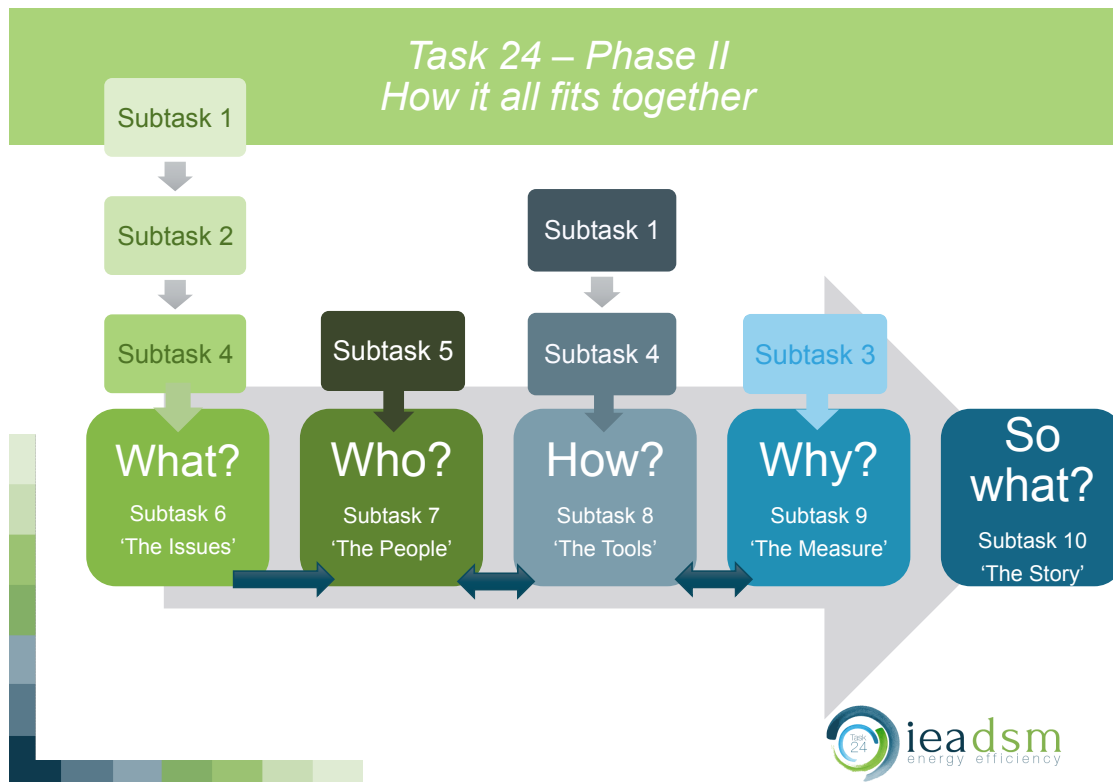
Subtask 5

Objectives

- Expert platform continually growing and getting used
- New content including presentations, videos and reports uploaded
- Continue publicising and dissemination of Task 24, including at international conferences

Progress towards Subtask objectives

Progress in last six months was satisfactory, we now have >235 experts on the expert platform and updated the visual branding to the new IEA DSM brand. All other final reports are on the IEA DSM website, which has been updated for both Phase I and Phase II. Google Analytics show continued strong utilisation of the ning website, especially after broadcast emails with links to all new content are sent. We continue having great successes in matchmaking experts, with several spending time at each others' Universities, for example, or developing new research collaborations. The dissemination of the Task is going very well, we have been invited to hold Task 24 workshops in collaboration with two very large international conferences this year – the Energy Cultures conference in July in Wellington and the BEHAVE conference in September in Portugal. In addition, we had a paper accepted for the ACEEE summer study for the first time and were asked to provide a poster as well. We will also hold informal sessions there. We have published our first paper in the high-impact Journal of *Energy Efficiency* and were chosen to be editors for a special edition on storytelling in energy on the highly respected Journal of *Energy Research and Social Science*.



Subtask 6

Objectives

- Building on work from Subtasks 2 and 4, develop lists of common top 3 DSM *implementable* issues and their potentials in each country
- Use the *Collective Impact Approach* and the Task 24 Expert Platform to research and review current approaches and practices, nationally and internationally, on these top issues and provide feedback from the different disciplinary perspectives and their collaborative discussions and negotiations from available case studies and narratives that could illuminate some of the approaches (based on work in Subtask 1, 2 and 7)
- Feed these cases, and the ones analysed in Subtask 1 and 2 into a *Toolbox of Interventions* (ST 8)

Progress towards Subtask objectives

Subtask 6 has been kicked off in 2015 with workshops in Toronto in May and October, Stockholm in June and New Zealand in September, as well as workshops at the ECEEE summer study and the BECC conference. More workshops will happen in New Zealand and the Netherlands in February 2016 and Ireland, Austria and Sweden in March and April. We have started collecting lists of DSM interventions and energy efficiency and behaviour priorities in most of these countries and have created a report template. We have discussed the top 3 issues during workshops and have decided on the following main interventions: Powering tomorrow's neighbourhoods via smart grid sharing in New Zealand; supporting building management operators in hospitals to produce better documentation and communication of energy savings in Canada; landlords and tenants co-designing green leases in commercial buildings in Sweden and promoting better use of ICT in Universities in the Netherlands. We are still waiting to develop our issues with Ireland and Austria.

Subtask 7

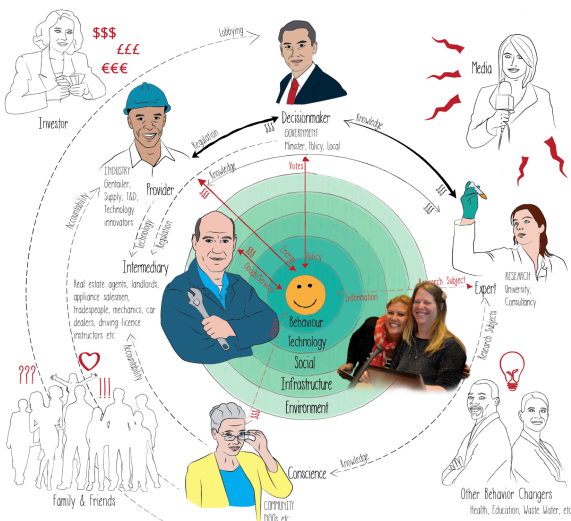
Objectives

- Identify, with help of the ExCo, National Experts and existing Expert Platform the most appropriate Behaviour Changers focusing on at least one of the top 3 DSM issues chosen by each participating country (can include the residential, business and transport sectors)

- Collect detailed information on their specific interests, organisations and past and current work, get each to tell their ‘Sector Story’
- Use the Collective Impact Approach to initiate discussions between different disciplinary perspectives and sectoral contexts. An explicit focus will be on deepening the understanding of the political-institutional context Behaviour Changers are operating in and what it means for their capacity to take a more systemic approach to behavioural change
- Develop national Behaviour Changer dialogues in each participating country by holding (bi) annual workshops (1-2 days per country per year, all up maximum of 6 days per country - note some of this time includes work from ST 6 and 8)
- Foster mutual engagement, collaboration and shared learning amongst Behaviour Changers, enable them to build relationships on neutral, trusted ground
- Backbone support to set a common agenda, measurement systems, mutually reinforcing activities and ongoing communication between the Behaviour Changers
- Evaluate Behaviour Changers’ impressions on the effectiveness of the Collective Impact Approach and use of narratives as a common language to overcome barriers
- Collect examples of successful matchmaking stories.

Progress towards Subtask objectives

Behaviour Changers have been identified for the top issues decided on in Subtask 6 for Canada, Sweden, the Netherlands and New Zealand. Their sector stories have been told during workshops and we have initiated deep discussions around relationships, mandates, stakeholders, restrictions and value propositions for each of the Behaviour Changers using the ‘Behaviour Changer Framework’.



Subtask 8 Objectives

- Use the **Collective Impact Approach** to unite Behaviour Changers from all 5 sectors on a specific DSM issue (both chosen in ST 6 & 7) and develop, in collaboration, a common agenda, shared measurement indices, mutually reinforcing activities (a ‘roadmap’), continuous communication and the backbone support function necessary to make it happen. Evaluate this approach continually via stakeholder analyses
- Collect information for a **Decisionmaking Tree** to pick the most appropriate case studies and models of understanding analysed by Task 24 (ST 1, 2 and 6) and test its usability with the Behaviour Changers
- Develop the **common language of storytelling** further and provide different examples of using storytelling and narratives in practice and how to best do it in the specific areas of focus and each of the Behaviour Changers’ sectors

- Identify all the tools in each Behaviour Changer's *Toolbox of Interventions*, analyse their pros and cons, risks and opportunities, where they fall short and how another tool from another Behaviour Changer could overcome this deficit
- Continued testing and development of the *Evaluation Tools* (ST 3) that can prove if a (toolbox of) intervention/s leads to actual, ongoing behaviour changes in practice. The Behaviour Changers will feed back on its potential applicability, risks and additional needs by working through (hypothetical or real life) examples chosen in ST 6 and using double-loop learning approaches to assess multiple benefits of interventions
- Collaborative development of a testable *Toolbox of Interventions* for each top DSM focus area, where each Behaviour Changer sector has clearly identified and measurable roles and responsibilities. This intervention may then be taken into a real-life setting and trialled in practice (either as ST 11 or outside of Task 24)
- The toolbox is built on *national and sectoral context specificities* but will be synthesised and tested (eg in the international conference (ST5)) for the general aspects that are of international validity (ST10 - the overarching story).

Progress towards Subtask objectives

Some work on continued development of the evaluation tools from Subtask 3, Deliverables 3A and B has taken place. We are currently working on a Special Edition Issue on Storytelling for the Journal of Energy and Social Science Research.

Subtask 9

Objectives

- The goal of this research is to develop and validate a set of tools and metrics that can be used consistently for the evaluation of behaviour-based energy programmes including but not limited to eco-feedback, home audits, information and rebate programmes, and social games
- An in-depth assessment of current (best) practice, cultural and disciplinary idiosyncracies, country drivers and needs and the best possible international standard (along the lines of psychometric tools like the IQ test - arguably not a perfect indicator of intelligence, but valuable in terms of enabling measurement and comparison).

Progress towards Subtask objectives

Karlin (the Principal Investigator of this Subtask) et al have published a paper at the IEPPEC conference in August that outlines the basics of the Beyond kWh toolkit they are developing for Subtask 9. It is co-funded to the tune of US\$100,000 by PG&E and Southern California Edison and will be tested and validated in our Task 24 countries in 2017.

Subtask 10

Objectives

- Collate, analyse and distil all information collected in Subtasks 6-9. Develop an international, interactive handbook with guidelines and recommendations including:
- Evidence of the usefulness of following a Collective Impact Approach to solve complex whole-system, societal energy problems in practice.
- A decisionmaking tool from 75+ cases collected in Subtasks 1, 2 and 7.
- A practical guide on storytelling with the many examples and stories collected here.
- Overview of countries' and sectors' toolboxes of interventions, common findings and learnings.
- Overview of usefulness of the evaluation tools for each country and sector (as developed in ST 3 and ST 9).

Progress towards Subtask objectives

This Subtask will not start until end of 2017.

3. Objectives for the next 6 months

Subtask 5

Continue attracting experts to expert platform. Update Wiki with latest case studies, rebrand. Use TEAMWORK project management tool to project manage national experts (Subtask 0). Work on special edition on storytelling and start organising International Task 24 workshops in line with the Energy cultures and BEHAVE conferences.

Subtask 6

Continue with issues definition including in countries we haven't started in yet (Austria and Ireland). Start writing issues reports and collate DSM lists in New Zealand, Sweden, the Netherlands and Canada.

Subtask 7

Will hold another 5 workshops at least in next 6 months (New Zealand, Netherlands, Sweden, Austria and Ireland). Will pull together most relevant Behaviour Changers in each participating country. Workshop notes all written up, workshop protocol finalised, all Behaviour Changer Frameworks (BCFs) animated in prezis.

Subtask 8

Continue working on storytelling and evaluation guidelines. Start working on decisionmaking tree for Subtask 1 and 2 case studies and models of understanding behaviour.

Subtask 9

Continue working on 'Beyond kWh' toolkit.

Subtask 10

Not until 2017.

4. Outreach

Outreach of this Task was successful and manifold. We helped the IEA Secretariat organise a behaviour change workshop in November, gave more seminars and lectures in Australia, Ireland and the Netherlands, and made contact with 4E in Australia and the Queensland Government to discuss potential collaborations. We were also contacted by the Department of Energy in the US, Chinese Operating Agents from ECB Annex 66 and a German University interested in participating in the Task. We will present a paper and poster at the ACEEE summer study and run two international workshops at some of the largest behaviour change conferences this year.

Experts meetings/seminars/conferences held in past six months

Experts and stakeholder meetings

Date	Place	# of Experts	Type of meeting	Government	Industry	Academic
Nov 2015	Paris, France	40	Experts	15	15	10
Nov 2015	Dublin, Ireland	>60	SHM	20	20	20
Dec 2015	Brisbane, AUS	10	SHM	7	3	
Feb 2016	Eindhoven, NL	25	SHM			25
Feb 2016	Wellington, NZ	12	SHM	3	6	3
Mar 2016	Stockholm, SE	10	SHM	4	3	3

TASK 16 – INNOVATIVE ENERGY SERVICES – PHASE IV LIFE-CYCLE COST; ‘DEEP RETROFIT’; SIMPLIFIED M&V; (CROWD)-FINANCING & ENERGY SERVICES TAXONOMY

Operating Agent:

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1. Summary

In Task 16 “Innovative Energy Services”, energy service experts and partners from countries around the world join forces to advance know how, experiences and market development of performance-based energy services.

Main subtasks are country-specific National Implementation Activities, an Energy Services Expert Platform for mutual exchange and support as well as national & international dissemination activities including the DSM University. Furthermore national & international stakeholder workshops are organized to discuss energy service topics relevant to the host country and to present and disseminate results of Task 16.

The Think Tank is the common research platform with previous publications such as the ‘Integrated Energy-Contracting’ business model, the ‘Facilitator’ concept, ‘Simplified Measurement & Verification’ of energy savings, Demand Response Services: Economic Pre-Feasibility Model and Case Studies for Austria or Comprehensive Refurbishment (‘deep retrofit’) business models.

In Phase IV, which started in July 2015 and will end in June 2018, the Think Tank is working on Life-Cycle Cost appraisals, ‘Deep Retrofit’ of buildings; Simplified Measurement & Verification of savings (M&V); (Crowd)-Financing for EE & RE projects and a journal paper on energy services taxonomy.

For more information or to explore options how to collaborate, please feel free to contact the Operating Agent Jan W. Bleyl under +43 650 7992820 or EnergeticSolutions@email.de.

2. Objectives and Accomplishments since last report

Subtask 19 – Energy Service Expert Platform

Objective: The platform is the internal and external communication hub of Task 16. It consists of the national experts, the operating agent, invited guests and cooperation partners. The platform hosts the internal experts meetings as well as public stakeholder workshops and other seminars.

Progress towards Subtask objectives

- Preparation of the 19th experts meeting, to be held in Brussels February 22-24 2016.
The main agenda items will be presentation and discussion and coaching of national implementation activities, discussions on current Think Tank topics and dissemination activities as well as participation in the Building Deep Retrofit - Investors Day.
- Preparations started for the 20th experts meeting, to be held in Fall 2016 (exact date and location tbd)

Subtask 19 + 23 – Stakeholder workshops (national & international)

Objective: The expert platform hosts a series of public national or international stakeholder workshops. They are held either back to back with expert meetings or as national stand alone events to discuss energy service topics relevant to the host country of the meeting and to present and disseminate results of Task 16.

Progress towards Subtask objectives

- Contribution to a national stakeholder workshop “Einsparcontracting in öffentlichen Gebäuden” held in Ittingen near Bern, Switzerland on 25 November 2015
- Execution of a national stakeholder workshop “Bankable Calculation & Financing of Energy Efficiency Projects” during the GIZ Renewable Energy Week in Berlin, Germany held on 14 October 2015
- Preparation of a life-cycle cost contribution for the Building Deep Retrofit - Investors Day (Stakeholder workshop organized by Building Performance Institute Europe (BPIE); Investors Confidence Project Europe; KEA and IEA ECB-Annex 61)

Subtask 20 - Think Tank for innovative Energy Services

Objective: Applied research, development and testing of innovative, performance-based energy service models and support tools => publication of the results.

Progress towards Subtask objectives

1. **Life-cycle costing & ‘Deep Retrofit’:** Submission of an abstract for ECEEE Industrial Summer Studies: *Economic Pre-Feasibility Life-Cycle Cost Methodology for Decision Makers and ‘Deep Retrofit’ Case Study* Paper submission in cooperation with IEA ECB Annex 61
2. **Life-cycle costing & ‘Deep Retrofit’:** Application of pre-feasibility and bankable life-cycle cost tools to Annex 61 case studies. Work in close cooperation with IEA ECB Annex 61
3. **Simplified measurement & verification:** Research started for a peer-reviewed journal publication. Working title: *Simplified measurement & verification + quality assurance instruments for energy, water and CO₂ savings. Methodologies and examples*. In close cooperation with EfficiencyOne, Nova Scotia, Canada
4. **Crowd-Financing for Energy efficiency and renewable investment:** Identification, analyses and modeling work of 2–3 cases studies. In close cooperation with GIZ

Subtask 21 - Coaching of individual National Implementation Activities (NIA)

Objective: Support implementation of country specific national activities to develop know how and energy service markets

Progress towards Subtask objectives

- Implementation of the individual NIA plans to develop know how and energy service markets were followed up, the experts gave presentations and exchanged experiences and good practices during the last platform meeting and through teleconferences in between meetings

Subtask 22 – Dissemination and cooperation

Objective: Dissemination of Task 16 results and experiences through presentations, stakeholder workshops, publications, cooperation with other ES projects and the DSM University

Progress towards Subtask objectives

Publications and presentations at various national and international conferences and seminars were given, e.g.:

- ESCo and investor trainings in Morocco, Germany, Jordan, Thailand: *Investment grade Calculation, Analyses & Financing of ESCo Projects (for EPC and ESC Business Models)*. Introduction & hands-on training in cooperation with GIZ
- Life-cycle cost analyses presentation for IG Lebenszyklus (October 2015)

- JRC workshop Energy Services Market in the EU:
Economic Pre-Feasibility Check: Life-Cycle Cost and –Savings. ,Facilitators‘ as EE + RE Project Enablers (October 2015)
- Chairing of finance session during European Utility Week 2015 in Vienna (November 2015)
- Contribution to a national stakeholder workshop “Einsparcontracting in öffentlichen Gebäuden” held in Ittingen near Bern, Switzerland (November 2015)
- Task 16 Leonardo ENERGY IEA DSM University webinar on Simplified M&V (16/12/2015)
- Continuation of know how transfer and supervision for a start-up ESCo in Croatia
=> 1 MW_{el} wood chip gasification + CHP for heat & green electricity supply project (5,5 Mio EUR investment) (ongoing)
- Co-operation with other ongoing energy service projects and institutions:
 - ECB Annex 61 => ‘Deep retrofit’ business models
 - Linköping University => ES taxonomy and other topics
 - FH Pinkafeld - applied science university => Master class on energy services

Subtask 23 - Management and Reporting

Objective: Project management and reporting

Progress towards Subtask objectives

- Preparation of Task 16 Phase IV accomplished
- Otherwise no particular activities in addition to regular work

Experts meetings/seminars/conferences held in past six months

Experts meetings

Date	Place	# of Experts	Type of meeting	Government	Industry	Academic
22-24/02/16	Brussels, Belgium	7	Experts meeting	3	4	0

Seminars/Conferences/Workshops

Date	Place	Participants	Type of meeting	Government	Industry	Academic
13/10	Graz, Austria	25	Workshop	5	20	0
14/10	Berlin, Germany	35	Workshop	25	5	5
22/10	Brussels, Belgium	35	Workshop	10	25	0
02/11	Vienna, Austria	14	Seminar	2	12	0
03-05/11	Vienna, Austria	300	Conference	40	250	10
25/11	Bern, Switzerland	80	Nat. Stakeholder WS	50	25	5
19/12 ff	Pinkafeld, Austria	40	Lecture	0	1	40
16/12	webinar	70	webinar	30	30	10

Reports produced in the past six months

- No reports published yet in Phase IV

3. Objectives for the next six months

Subtask 19 – Energy Service Expert Platform

- Preparation of the 20th experts meeting, to be held in Fall 2016 (exact date and location tbd; preliminary plans for the Netherlands or Berlin back to back with ECEEE)
The main agenda items will be presentation, discussion and coaching of national implementation activities, discussions on current Think Tank topics and dissemination activities
- Expert platform teleconferences on demand

Subtask 19 + 23 – Stakeholder workshops

- Preparation of the 20th stakeholder workshop, to be held in Fall 2016 (exact date and location tbd; preliminary planning for the Netherlands)

Subtask 20 - Think Tank for innovative energy service models and support tools

1. **Life-Cycle Cost & 'Deep Retrofit'**: Preparation of a paper for ECEEE Industrial Summer Studies *Economic Pre-Feasibility Life-Cycle Cost Methodology for Decision Makers and 'Deep Retrofit' Case Study*. Paper will be written in close cooperation with IEA ECB Annex 61
2. **Life-Cycle Cost & 'Deep Retrofit'**: Application of a pre-feasibility and a bankable life-cycle costing tool to case studies. => Further case studies from Task 16 participants. Comparison of different LCC Tools (e.g. RETSCREEN).
Analyses in close cooperation with IEA ECB Annex 61
3. **Simplified measurement & verification**: Finalize research for a peer-reviewed journal publication on *Simplified measurement & verification + quality assurance instruments for energy, water and CO₂ savings. Methodologies and examples*. In close cooperation with EfficiencyOne, Nova Scotia, Canada (and others?)
4. **Crowd-Financing for Energy efficiency and renewable investments**: Analyses of cases studies: Can Crowd-Financing contribute to solve financing bottlenecks for EE and RE projects? E.g. through access to equity or (cheaper) debt financing? In particular for smaller projects in SME and communities? Bridge the mezzanine financing gap? Reduce risks and transaction cost? Analyses based on detailed LCC modeling of 2–3 cases studies. In close cooperation with GIZ and KRITTER Advisory Services
5. **Energy Services Taxonomy paper**: Literature research continued for a *Taxonomy paper on Performance-based Energy Services* to be published in a peer-reviewed journal in cooperation with Linköping University

Subtask 21 - Coaching of individual National Implementation Activities (NIA)

- Continue implementation of individual NIA plans to develop energy service know how and markets.
- To follow up, experts will give detailed presentations and exchange experiences and good practices during the next platform meeting and through teleconferences in between meetings

Subtask 22 – Dissemination and cooperation

Publications, presentations or workshops planned:

- **From NWh to Cash Flows: 1. Pre-feasibility and 2. Bankable LCC Analyses. Taking Building Deep Retrofit as an Example** - @Investors Day (Stakeholder workshop organized by Building Performance Institute Europe (BPIE); Investors Confidence Project Europe; KEA and IEA ECB-Annex 61 (Brussels, February 2016)
- Life-Cycle Cost workshop for evaluation of energy efficiency and renewable projects - an introduction (Vienna, April and October 2016)
- **Economic appraisals to communicate between technicians and management. Methods, calculation and examples – an introduction**. Seminar for energy technicians in industry (Gmunden, June 2016)
- Continuation of know how transfer and supervision for a start-up ESCo in Croatia => 1 MW_{el} wood chip gasification + CHP for heat & green electricity supply project (5,5 Mio EUR investment) (ongoing)
- European Utility Week 2016 in Barcelona (November 2016)

- Another Task 16 Leonardo ENERGY IEA DSM University webinar (???)
- Continue Co-operation with other ongoing energy service projects and institutions:
 - ECB Annex 61 => Deep retrofit pre-feasibility and bankable project analyses
 - Linköping University => ES taxonomy and other topics
 - University Reutlingen => Guest lecture on energy services

Subtask 23 - Management and Reporting

- in addition to regular management and reporting activities: Continue preparation of phase IV One or two more countries needed.

Experts meetings/seminars/conferences planned in the next six months

Planned Experts meetings

Date	Place
Oct./Nov. 2016	Netherlands (tbd)

Planned seminars/conferences

Date	Place
22-23/02/	Brussels (Stakeholder WS with A61)
20+21/04	Vienna, Austria (Seminars)
Fall 2016	Tbd
30 June 2016	Gmunden, Austria (Seminar)
03+04/11	Vienna, Austria (Seminars)
fall (tbd)	Netherlands (Stakeholder WS)
Dec. 2016 Jan. 2017	FH-Pinkafeld, Austria (Lecturing)

Reports/Publications planned for the next six months

- *Simplified measurement & verification* together with EfficiencyOne (and others?) to be published in a peer-reviewed journal
- 3rd edition of *Simplified measurement & verification + quality assurance instruments for energy, water and CO₂ savings. Methodologies and examples. Including examples and national perspectives Task 16 experts*. Amended version 2016
- *Life cycle cost pre-feasibility model with 'Deep Retrofit' case studies* in cooperation with IEA ECB Annex 61
- Second draft for a *Taxonomy paper on Energy Services Taxonomy paper on Energy Services* paper to be published in a peer-reviewed journal in cooperation with Linköping university for internal discussion
- Contributions to IEA DSM Spotlight and other shorter formats

Overview of Think Tank topics and research questions (Phase IV)

1. Life-cycle Costing and economic rationale of EE and RES:

- **3 Methodologies how to perform Life-Cycle Cost appraisals:**
 1. Pre-feasibility, 2. Comparisons, 3. „Bankable“ incl. financing
- Comparison of tools: Own tools, RETScreen ...
- **Communication with** financial decision makers
- **Case studies** from different DSM applications: Re-lighting, PV, CHP, HVAC, deep retrofit ...

2. ‚Deep Retrofit‘ of buildings (Comprehensive refurbishment, NZEB) through Energy Services (in coop. with EBC Annex 61):

- **Economic pre-feasibility and opportunity cost to wait** (case studies)
- **Investment-grade calculation & financing** (case studies)
- **Business model advancement** with stakeholders including financiers
- How to factor in **Multiple Energy Benefits?**

- **Policy implications & recommendations**
- 3. **Simplified M&V** (continued):
 - Deepening & more examples
 - Adaption and publication of national versions + academic journal
 - Dialogue with IPMVP + other stakeholders
- 4. **Financing: Crowd-financing** for EE and RES investments, e.g.
 - What can Crowd-Financing contribute? Access to CAPEX for smaller projects in SME, communities? Bridge the mezzanine financing gap? Reduce risks and transaction cost?
 - Building on a study in cooperation with GIZ: National perspectives ...
- 5. **Energy Services Taxonomy** for an **academic journal paper**
- 6. **Knowledge exchange + transfer to developing markets + DSM-University**
 - Simplified M&V, Lessons learned for project & market development (e.g. 'Facilitators') ... other topics on demand

4. Outreach of the Task – Success stories

In November 2015, the Swiss Federal Office of Energy SFOE organized a national stakeholder workshop on Energy Performance Contracting, which attracted some 80 stakeholders from the public sector on national, provincial and communal levels as well as service providers and facilitators in order to foster demand side market development. Follow-ups on concrete model projects are currently discussed for implementation.

As an example from the industrial sector, a large-scale energy savings project for a steel mill based on a performance-based ESCo business model is currently being facilitated in Northern Africa.

As another example of practical outreach, hands-on trainings for 'bankable project calculation and financing' were continued in a number of countries (Morocco, Pakistan, Jordan and for GIZ staff), which were particularly appreciated by the audiences. They were also appreciated by national and international finance corporations (CDB, IFC, IDC, State Bank of Pakistan) participating in these trainings and may possibly result in further co-operation.

Also the cooperation with Linköping University and other universities has potential for mutual benefit and is a good opportunity to get Task 16 results into Academia.

5. Ideas for new work

Currently no ideas for new work

6. Finance

An overview of the current budget situation (total budget, cumulative spending and remaining budget) is displayed in the following table:

(Budget and cost accumulation by item in EUR excl. VAT as of 12 February 2016)

Subtasks <i>unit</i>	Total budget EUR	Cumulative spending EUR	% spent %	Remaining EUR
19 Energy Services Expert Platform	24.640	3.696	15%	20.944
20 Think Tank for innovative Energy Services	77.440	7.040	9%	70.400
21 Coaching of National Implementation Activities	15.840	5.280	33%	10.560
22 Dissemination & Cooperation (international + national)	13.200	1.980	15%	11.220
23 Management & Reporting (to ExCo)	44.000	5.720	13%	38.280
Subtotals	175.120	23.716	14%	151.404
Travel costs	17.700	1.770	10%	15.930
Other costs	3.880	0	0%	3.880
Totals	196.700	25.486	13%	171.214

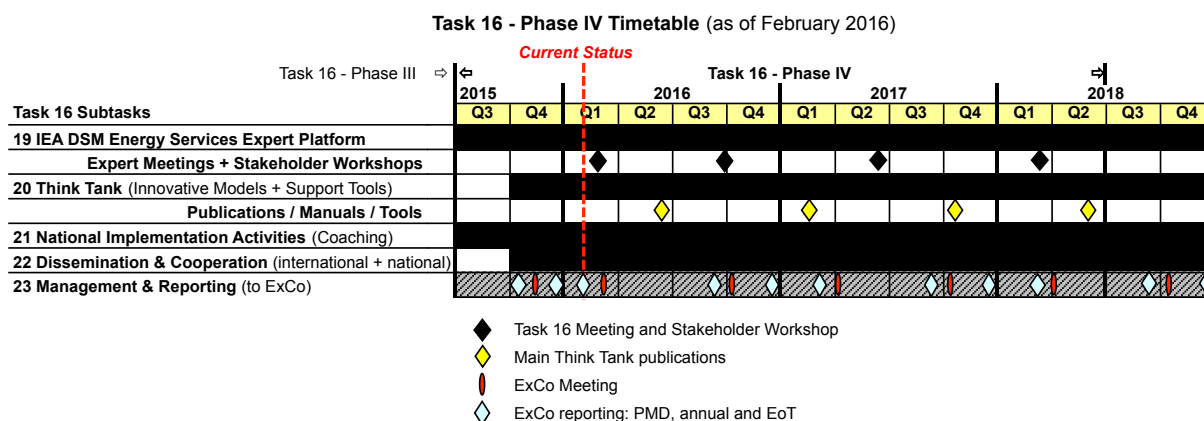
The current Task 16 – Phase IV budget - based on 4,3 participants - is **196,700 EUR** (comprised of 4 participants x 3 years x 15,000 EUR/year) + 1st year from GIZ (15,000,- EUR) + surplus from Phase III (1,700 EUR).

The spending of the last reporting period was 25,486 EUR adding to a total expenditure of 25,486 EUR, which equals 13 % of the total budget.

The income during last reporting period was 1,700 EUR (against 1,700 EUR billed). This adds to a total income of 1,700 EUR.

7. Activity Time Schedule

Task 16 Phase IV has started operation on 01 July 2015 and will end 30 June 2018



All scheduled events and reporting targets have been met.

8. Matters for the ExCo

Recommend the ExCo to approve the Task Status Update Report

9. Participating countries

Phase IV (as of Feb. 2016): Canada (Nova Scotia), GIZ (until April 16), Norway, Switzerland, The Netherlands (*in alphabetical order*).

At least one more country expected: 'Maybes' from Austria, Belgium ... ?

TASK 25 – BUSINESS MODELS FOR A MORE EFFECTIVE MARKET UPTAKE OF DSM ENERGY SERVICES

Operating Agent

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1. Summary

This Task will focus on identifying existing business models and customer approaches providing EE and DSM services to SMEs and residential communities, analysing promising effective business models and services, identifying and supporting the creation of national energy ecosystems in which these business models can succeed, provide guidelines to remove barriers and solve problems, and finally working together closely with both national suppliers and clients of business models. The longer term aim of this Task is to contribute to the growth of the supply and demand market for energy efficiency and DSM amongst SMEs and communities in participating countries.

2. Objectives for the last six months

This Task started November 1st 2014.

Subtask 0: Pre-scoping: completed before last six months

Subtask 1

This subtask is dealing with all management issues.

Progress towards Subtask objectives

- Overall project coordination and management, including contact relationship management: **ongoing**
- 1.2 Attendance of ExCo meetings, conferences and reporting to IEA DSM ExCo: **ongoing**
- 1.3 Set-up Task Advisory Board (AB) of stakeholders (ExCo, IEA, intermediaries from research, industry, government, community sectors): **ongoing**

Subtask 2: Identify proven and potential business models for energy services

There are many energy service business models “out there” and often they are closely linked to existing market structures and policies. In other words, business models are often country and context specific. We will start with an inventory of different existing business models, both in the participating countries and also including global examples of successful business models. In the different participating countries we will analyse what business models exist, and what frameworks (market and policy) accompany them.

Progress towards Subtask objectives

1. Identifying country specific suppliers, clients, and their stakeholder networks and trying to establish national advisory expert networks to continue working with throughout the task: stakeholder lists are being set up and will have been completed before the EXCO meeting in

Canada. **Completed for Netherlands, Austria, Switzerland and Sweden. Completion Norway ongoing (entered task only at Exco meeting Canada).**

2. Narrowing down the focus of both services, target groups and typology of business models in close cooperation with national experts and other relevant stakeholders: initiated and translated into what information to collect in longlist, narrowing down took place during first expert workshop March 9-10th 2015. **Completed before Exco meeting Canada.**
3. Clarifying how the different parameters of success of business models and services will relate to each other in the analysis – economic profitability, scale of impact and real savings, business creation, growth rate, synergies with other values, adoption rate etc. Discussed during workshop March 10th, and through literature review being conducted. **Completed before Exco meeting Canada.**
4. Developing a task specific typology or categorisation of business models and services for EE. **Completed before Exco meeting Canada.**
5. Developing an overview of existing energy service business models in the participating countries and their frameworks/ecosystems and how they meet and incorporate client needs.
 - a. Longlist overview of existing services and business models **completed** for all countries
 - b. Shortlist overview of services **completed** for all countries
6. Reviewing global existing business models and their frameworks/ecosystems with a clear focus on quantifying and qualifying effectiveness (e.g. amount of customers reached, market share, savings aimed for, other outcomes, ROI). **Completed**
7. In-depth comparative analysis of around 4 similar business models in different countries and around 12 per country. Determining patterns, drivers and pitfalls. **Ongoing. Completed for the Netherlands, almost complete for Switzerland and Austria, Sweden. Norway to start.**
8. Identifying key factors that make services (and their vendors) succeed in the participating countries through an in-depth analysis of country specific markets and policies for energy services and their influences on business models; **Ongoing. Completed for the Netherlands. Ongoing for the other countries**
9. Organising country workshops with service providers and clients. Workshops performed in:
 - a. Sweden: 7-8 December
 - b. Switzerland: 18-19 January
 - c. Austria: 20-21 January
 - d. Netherlands: multiple smaller meetings with stakeholders.

Subtask 3

Not yet started

Subtask 4

- Set up a stakeholder communication and engagement plan. **Completed.**
- Traditional dissemination to external stakeholders and academia. **Ongoing**
- Creating and facilitating a good connection to existing digital and off-line expert platforms within the IEA, e.g. the expert platforms of Tasks 16, 24 and other relevant tasks and the expert platforms for other Implementing Agreements. This connection is meant to provide a 'matchmaking' service to enable trans-national, inter-disciplinary teams of experts and end users to collaborate and learn. **Ongoing through Website for Task 25 on IEA DSM and through DSM IA expert meeting in Linz.**

Experts meetings/seminars/conferences held in past six months

Experts meetings so far

- January 8th 2015 Online webinar kick off Task 25
- March 10th 2015 Eindhoven Netherlands, Subtask 2

- Many telco and skype meetings with individual experts
- Expert meeting Sweden December 2015
- Expert meeting Switzerland January 2016
- Expert meeting Austria January 2016

Seminars/Conferences

Date	Place	Participants	Type of meeting	Government	Industry	Academic
30-03-2015	Cape Town	mixed	Conference	>20	>40	>40
October 2015	Halifax Nova Scotia	mixed	workshop	>10	>10	
12-13 November 2015	Paris, France	mixed	IEA workshop on influencing business behaviour	>15	>15	>15
November 2015	Dublin-Ireland	mixed	Short meeting To entice Ireland to participate in Task 25	2		
19-11-2015	Webinar Task 25 DSM University	mixed	webinar	>50	>50	>50
December 2015	Stockholm Sweden	mixed	workshop	4	8	4
January 2016	Bern Switzerland	mixed	workshop	5	10	5
January 2016	Graz Austria	mixed	workshop	2	12	1

Reports produced in the past six months

- Literature review user centric design in business models
- Presentation of Task 25 as a webinar (online publication)
- Presentation of Task 25 at IEA workshop on influencing business behaviour and decision making towards increased energy efficiency
- Presentation at IEA DSM EXCO Canada DSM day
- Thesis with analysis of Dutch shortlisted cases and impact of user centered design and service orientation on business models
- First Task 25 newsletter
- Global analysis of business models, longlist and shortlist (confidential for now, distributed amongst partners only)
- Spotlight issue on results of analysis

3. Objectives for the next six months

Subtask 1 Task management

- Overall project coordination and management, including contact relationship management
- Attendance of ExCo meetings, conferences and reporting to IEA DSM ExCo
- Set-up Task Advisory Board (AB) of stakeholders (ExCo, IEA, intermediaries from research, industry, government, community sectors)

Subtask 2: Identify proven and potential business models for energy services

1. Creating a draft report with all the national examples, the best practices and the analysis including useful tips and tricks etcetera.
2. Organising country workshops with service providers and clients In Sweden (March), Norway (tbc April), Switzerland (fall), Austria (fall), Netherlands (fall), Korea (fall).

Subtask 3: Creating country specific business models and guidelines for upscaling

- Start with development of frameworks for potentially effective business models and services in co creation with national stakeholders, e.g. suppliers and clients. We will do so in face to face workshops, with the national experts and other relevant stakeholders.
- Start with creating policy guidelines with necessary policies and strategies of different stakeholders, and their timing, to encourage market creation and mainstreaming of selected business models in participating countries
- Start with contributing to the setting up of piloting activities in each participating country. This activity will be initiated on the basis of the lessons learnt that we would like to turn into practice. The aim is to support one or two relevant stakeholder in the participating country to set-up a business model and service for EE based on the key success factors identified in this task, and support the set-up of a pilot or deployment strategy for this service and business model.

Subtask 4 expert platform

- Link to existing DSM IA expert platforms and experts and maintain a section for Task 25.

Experts meetings/seminars/conferences planned in the next six months

Planned Experts meetings

Date	Place
tbc	Brussels Belgium, ECI conference
May 2016	Linz-Austria, coinciding with Smart Grid Week
September 2016	Behave conference in Portugal

Reports/Publications planned for the next six months

- Article in the Swedish Magazine Energy Efficiency on the Task 25 work in Sweden.
- D2: report with typology and description of existing services and business models in each participating country and their framework/ecosystem;
- D3: report with review of global business models and services in non-participating countries and their framework/ecosystem;
- D4: DRAFT report with comparative analysis and key factors for success, including overview of success parameters to assess effectiveness of business models and services.
- **Chapter in the Energy Efficiency Market Report of the IEA!**
- Presentation Task 25 at DSM Day Stockholm March 2016
- Presentation of Task 25 at Linz symposium May 2016
- Spotlight issues on results of analysis
- National publications in sectoral journals

4. Outreach

- We plan to disseminate a newsletter every month or two to a group of several hundred stakeholders internationally.

- Together with the Leonardo Academy we have decided to create a series of web presentations for the different business models we investigate.

5. Ideas for new work

- There is a new Horizon 2020 call, opening in March 2016, closing in the fall of 2016, where our task 25 work would fit fantastically and we could expand to other countries with very good financing from the European Commission. Several exco members have expressed their interest in participating. We will initiate the effort:
- EE 25 – 2016: Development and roll-out of innovative energy efficiency services:
 - Scope: Proposals aiming at developing, demonstrating and standardising new types of energy efficiency services and business models in all sectors (incl. mobility), which could better monetise the multiple benefits of energy efficiency¹.

6. Finance

- Austria, Sweden and Switzerland and Norway have paid the first 50% of their contribution.
- Sweden and Switzerland have paid the second and last invoice
- Copper institute is delivering in-kind and has decided to extend its participation in the Task
- A pre-seed payment of 7500 euro was received in 2014.
- Netherlands has secured 50% funding.
- Korea is joining the task, we expect a first payment before summer of 2016.
- At the Canada 2015 Exco it was decided to extend the Task with 1 year, with no additional payments required, but to accommodate later entries.

7. Activity Time Schedule

Subtask 1: Management of the task	Nov-dec 2014	Jan-feb	Mar-may	June-july	Aug-sep	Oct-nov	Dec-jan 2016	Feb-mar	Apr-may	Jun-jul	Aug-sep	Okt-nov
1.1 Set-up of an advisory board (AB)												
1.2 Annual Advisory Board (AB) meetings, exco meetings												
1.3 Overall project management and financial and administrative duties												
Subtask 2	Nov-dec 2014	Jan-feb	Mar-may	June-july	Aug-sep	Oct-nov	Dec-jan 2016	Feb-mar	Apr-may	Jun-jul	Aug-sep	Okt-nov
2.1 Identifying relevant stakeholders and establishing national advisory expert networks												
2.2 Narrowing down the focus												
2.3 Clarifying parameters of successful business models and services												
2.4 Developing a typology of existing energy service business models												
2.5 Identifying existing business models and frameworks in participating countries												
2.6 reviewing global business models and services and frameworks												
2.7 In-depth comparative analysis												
2.8 Identifying key factors on national level												
2.9 organising regular workshops												

¹ International Energy Agency (2014), Capturing The Multiple Benefits of Energy Efficiency

2.10 reporting results													
Subtask 3	Nov-dec 2014	Jan-feb	Mar-may	June-july	Aug-sep	Oct-nov	Dec-jan 2016	Feb-mar	Apr-may	Jun-jul	Aug-sep	Okt-nov	
3.1 Developing potentially effective business models/services for each country													
3.2 creating policy guidelines/ roadmaps for policy makers and stakeholders													
3.3 contributing to setting-up piloting activities													
Subtask 4	Nov-dec 2014	Jan-feb	Mar-may	June-july	Aug-sep	Oct-nov	Dec-jan 2016	Feb-mar	Apr-may	Jun-jul	Aug-sep	Okt-nov	
4.1 Design of a Stakeholder Engagement Plan													
4.2 Dissemination to academic journals, participation in conferences, creation of outreach material													
4.3 Connection to and utilisation of IEA expert platforms													

8. Matters for the ExCo

- Approval of Task Status Update Report.
- Approval of definition of new subtasks.

9. Participating countries

1. Switzerland
2. European Copper Institute
3. Austria
4. Sweden
5. Norway
6. Netherlands
7. Korea has initiated participation
8. Canada would like to participate and is in the process of securing budget

VISIBILITY COMMITTEE REPORT

Submitted by Dr Sea Rotmann, Visibility Committee Chair

Annual Report

The 2015 Annual Report, including a Theme Chapter on “DSM stories in participating countries” was made available electronically to Executive Committee members, Operating Agents and the EUWP and EEWP by the end of January 2015 and was uploaded to the IEA DSM website. Printed copies will be sent out to the EUWP, EEWP, Executive Committee Members and Operating Agents in March 2016. Executive Committee Members and Operating Agents should ensure that copies are distributed widely to all interested parties.

Website

The website has been updated and has been operational since July 2015. All ExCo delegates and Operating Agents are strongly encouraged to review the whole website regularly, particularly areas relevant to their activities. It is very easy for information to become out-dated. Operating Agents have considerable freedom to keep their own Task areas up to date, but other feedback, reporting of functions that appear not to work and suggestions for further improvements should be made via Anne Bengtson anne.bengtson@telia.com and/or the Visibility Committee. In particular, we would be interested to know how useful the social network links are.

Statistics

Total website hits:

December 1, 2015 – February 14, 2016: 1894 sessions, 5125 page views

Hits per day:

December 1, 2015 – February 14, 2016: 25

Average time on website:

December 1, 2015 – February 14, 2016: 2min 44 sec

Google Analytics

GA from December 1, 2015 – February 14, 2016 show 5125 sessions (up from 5022) with 1327 users (down from 3386) who spent an average of under 3 minutes per session on the website. 68% of them were new visitors and only 14% (previously just under 50%) of all visitors came from the US (9% from Sweden, and 7% from the UK). These stats are not very good and are significantly tracking down (most likely due to the Christmas break). There was a large spike of almost 150 site views on the 3rd of December.

Downloaded reports for Tasks – we had 91 total downloads since Dec 1, 2015 of which 56 were unique files (including legal texts but excluding Spotlight newsletters which do not show up in this analysis). Most files were downloaded from three Tasks (Tasks 13, 17 and Task 24).

Website Solstice and Weber Web

Solstice has handed over the original website and all its data to Weber Web (Australia/NZ) and the new website has been operational since July.

Issues

Members should review the website regularly and update their own work/interests, especially reports, any filmed workshops for YouTube, presentations for Slideshare etc.

Spotlight Newsletter

In 2015 four DSM Spotlight newsletters were published in total.

To date, the following 2015 newsletters have been published and are posted on the DSM website:

- Issue 56/published March 2015
- Issue 57/published June 2015
- Issue 58/published September 2015
- Issue 59/published December 2015

Articles in Issue 56: – March 2015

- Task 25: Beware! Energy Efficiency Services in the Making!
- Note from the Chairman: We got a new logo
- DSM University
- Task 24: Did you behave as we designed you to?
- South Korea – Energy Paradigm Shifts from Supply to Demand
- Italy – IEA National Day

Articles in Issue 57 – June 2015

- Task 15: Network-Driven DSM
- Note from the Chairman: We don't G1äoogle!
- Task 17: Demand Flexibility – Dream or Reality?
- Task 16: Facilitators

Articles in Issue 58 – September 2015

- Task 24: Helping the Behaviour Changers
- Note from the Chairman: Is DSM getting old?
- Task 26: The multiple benefits of energy efficiency
- Task 16: New Partners welcome in next phase of EE work
- Facilitators: A role for facilitators to play – national perspectives

Articles in Issue 59 – December 2015

- IEA: Energy Efficiency reducing bills
- Note from the Chairman: Which way are we heading?
- Bright Business: Showcases best in class for energy efficiency
- DSM University
- Nova Scotia: Energy efficiency – a source and a solution
- New publication: Austria – Task 24 the Energy Hunt

Schedule for newsletter articles

Issue 60/March 2016

Issue 61/June 2016 – articles due May15

Issue 62/Sept 2016 – articles due Aug 15

Issue 63/Dec 2016 – articles due Nov 15

We are grateful to all the Executive Committee members and Operating Agents who have contributed articles to the Spotlight Newsletters in 2015 and hope they will continue to do so in 2016. In 2016, the Editor looks forward to highlighting not only the Task work, but also DSM work in the Member countries and any other articles of interest that our ExCo or Operating Agents are involved in. The newsletter is currently being reviewed to be shorter and in a more concise, electronic format that incorporates hyperlinks.

The Programme has tremendous news to share so please continue to think about, suggest and submit future articles. The Editor is happy to work with you on an article in any form – completed article by you or someone else, information for an article that you would like for the Editor to write, a conference paper that the Editor can convert into a newsletter article or just an idea that you think would make an interesting article. If you have an article to contribute, please email it to Pamela Murphy [pmurphy@kmgp.net].

Issues

With four newsletter issues published in 2015, it is proposed that the same be done in 2016.

Brochure

The brochure and inserts have been updated with the new logo and branding.


Task Flyers

Task flyers for are up to date?

Social Media

The Implementing Agreement is getting more traction on social media. We now have a presence on:

- Facebook (IEA DSM Group) with 171 members and growing. Even though most posts are by Anne Bengtson, Rob Kool and Hans Nilsson, there are regularly posts and questions by other participants;
- LinkedIn (IEA DSM Group) with 33 members and reducing. Most posts are by Anne Bengtson and Sea Rotmann. We would need to actively invite people into this group in order to achieve the professional reach that LinkedIn could afford.
- Twitter (@IEADSM) with 337 followers and 1073 tweets. This is the fastest growing social media platform and has fostered a lot of good engagement, re-tweets and mentions. Especially the Academic and Industry sectors seem to respond to this medium. Dr Sea Rotmann is posting for this group.
- IEA DSM Youtube Channel with 54 videos – 35 are Task 24 videos and 19 are DSM University webinars. We need more content from other Tasks. If we start filming some Executive Committee workshops, this would be a great channel to distribute visual information fast.
- Slideshare IEA DSM Programme Bengtson: only recently launched (Dec 2014) and already highly successful. 142 slideshares, 16 followers and we are in the top 5% most viewed slide shares.

- 
- IEA DSM Task 24 Expert Platform - 235+ members, invite-only (www.ieadsmtask24.ning.com). Very successful multi-media platform to distribute findings from Task 24. The platform is also linked to a dropbox, a Wiki (www.ieadsmtask24wiki.info) and a Twitter account and includes 145 videos and presentations, 125 photos, 6 blog posts, over a dozen discussions, all events associated with the Task, 4 Subtask Groups and member chat and email functions and all expert's short biographies and interests.

Communications Plan and Dissemination Strategies

The Visibility Committee Chair has drafted a communications plan for the Implementing Agreement and it has been presented to the ExCo. In it, we analyse in detail our communications history, what works and what doesn't, who our audience is and how well we service them and how we can improve our plan going forward. It should ultimately include individual Task Dissemination Strategies to ensure that the website, Spotlight newsletters and social media channels are utilised well by all Tasks to report their findings and other relevant events. The communications plan has been updated and signed-off by the ExCo in 2015.

Dr Sea Rotmann

Visibility Committee Chair

DSM UNIVERSITY

1. Summary

The DSM University develops largely according to plan and in a steady pace where we can deliver in a way that creates confidence from users and interested parties. The “Heartbeat” of the DSM-U is the webinars that are delivered once a month.

Contacts are developing with IPEEC, the IEA secretariat and parts of GIZ but also local actors to promote and make use of the webinars and associated material.

A process has started to deliver more formal “certificates” (badges) showing that participants have received and made use of the lectures and printed material.

2. Objectives for the last six months

Webinars

There has till 2016-02-18 been arranged 20 webinars. Approximately 3500 registrations have been made for participation. Every webinar draws an audience of between 60 and 150 attendants and roughly 1800 have attendants have been participating altogether, listening in to the presentations.

For the latest webinar (#20) there have been >270 registration from 59 countries!

The webinars are recorded and both slides and supporting material is made available for registered users.

Webinars and their distribution over the different themes are shown in the appendix1 that also contains hyperlinks to the websites where the recorded material and further reading material can be retrieved.

“Partner” organisations are alerted about the webinars and asked to promote them in their own circles. Among them eceee (who distributed the calls to several thousands), IRENA, EBRD, IPEEC (G20) and Life Academy. Our contacts with IRENA and EBRD have however changed jobs and we have not been able to establish new ones.

Contacts with the IEA Secretariat and GIZ (Tanzania) were established during the eceee summer study and will be further developed.

The web-platform

Is available on <http://www.leonardo-academy.org/course/index.php?categoryid=50>

Contents and sources

The material for the webinars has been structured to fit a more formal e-learning format where, webinars can serve as mini-courses. Each course will have standard 5 elements:

1. description
2. course materials - basically the narrated presentation

3. assessments (optional) - a test to measure learning impact. We've not done this so far in DSMU, but we do it quite often for other e-learning. If we want to go for certification, testing is needed.
4. feedback (optional) - an exit questionnaire on the course content
5. further reading materials (optional) - links & pdf's

3. Objectives for the next six months

Webinars

The webinars will be arranged and announced in a rolling 6 months plan. The following webinars are suggested

Other guest opportunities

- a) Guest IAs: 4E, ISGAN
- b) Policy issues: Club of Rome (Wijkman), Municipalities (Mayor NN), EE in buildings (Joyce)
- c) Planning and integration: Peter Lund (Helsinki University)

21	Advancing Utility Sector Energy Efficiency in the U.S.: Highlights of the ACEEE National Conference on Energy Efficiency as a Resource	ACEEE
22	Energy savings and greenhouse gas emissions: international standards & harmonised savings calculations in practise	21
23	(Related to task 26 development)	26
24	IPEEC G20	IPEEC G20
CANDIDATE LECTURES FOR The autumn 2016		
	Demand Side Management and Climate Change	18
	Certificate Trading (The Italian experience)	14
	Incentives Mechanisms for Promoting DSM and Energy Efficiency in Changing Electricity Businesses	6
	Regulation (cf eceee)	
	Applications in growing economies	
	Municipalities	

The web-platform

Under development. In particular how contents can be edited and channelled for different target groups.

We need to develop links and repositories so there are entries to the material in a more distinct way than presently

Promotion

Problem: speakers take a long time to fill in the template; as a result, promotion cycles are sometimes very short

Solution: once agreed, fill in the template within a week; minimum 8-week promotion cycle

- DSMU22: Apr 14 (latest date to complete preparation Feb 14 2015)
- DSMU23: May 12 (latest date to complete preparation Mar 12 2015)
- DSMU24: Jun 16 (latest date to complete preparation Apr 16 2015)

Attraction-knowledge

Problem: Rather few registrations for the webinar post-event; high quality content remains underexploited.

Solution: develop short policy briefs (~2 pages) post-webinar to re-promote content.

“Tracks, programmes and Certification”

Tracks: DSM for regulators, DSM for utility engineers

Immediate: Add badges of completion per learning unit (can be exported to Mozilla's OpenBadges backpack)

Future: Organising webinars into learning programs leading to certification
 DSM 101: Basic elements of DSM and energy efficiency explained in short presentations that can be downloaded at any time

4. Outreach

The next issue is to find “outlets” willing to engage in making use of the material and put it into use in their regular activities. The organisations mentioned above have all shown interest but could be prompted further in particular now when our substance mass has reached some maturity.

The webinars will be more actively promoted on Facebook and LinkedIn.

5. Ideas for new work

See above but it is also time to make courses a bit more formal. Such would however best be made in co-operation with some to ensure that there is also at least a trial test of how suitable it would be.

6. Finance

	3m	6m	9m	12m	15m	18m	21m	24m	Budget (days)
Developing Products									
A. Webinars.	One every month (Scheduling by Chairs and secretary)								Moderation and communication by ECA (32)
B. 1. Task reports. 2. WEB-casts	Exists								
			1	1	1	1	1	1	Duty of OAs (6)
C. Issue-reports.		1	1	1	1	1	1	1	Editing (7)
D. Theme-Summaries.			2	2	2	2	2	2	Compilation (12)
E. Blogs.	1	1	1	1	1	1	1	1	Writer (8)
F. Key messages.			1	1	1	1	1	1	Writer (6)
G. E-learning.						x	x	x	-
H. Expert advice.						x	x	X	-
I. DSM-U Café.	1	1	1	1	1	1	1	1	Moderation (8)
Management	2	2	2	2	2	2	2	2	(16)
Reporting	2	2	2	2	2	2	2	2	(16)
SUM									111 days at 1k\$

8. Matters for the ExCo

‘Recommend the ExCo to approve the Task Status Update Report’.

9. Participating countries

NA

Appendix 1

DSM –U Webinars

DSMU- #	Title	Task	Operating Agent/Presenter	Theme					
				<i>1- The Logic of DSM</i>	<i>2 - Governance</i>	<i>3 - Energy efficiency - Load level</i>	<i>4 - Flexibility (load shape)</i>	<i>5 - Integrati on</i>	<i>6 - Business models</i>
1	ESCo market development: A role for Facilitators to play	16	Jan Bleyl			X			
2	ISGAN Annex 2 Spotlight on Demand Management	ISGAN	Laura Marretta				X		
3	Using Demand-Side Management to Support Electricity Grids	15	David Crossley (RAP)				X		
4	Best Practices in Designing and Implementing Energy Efficiency Obligation Schemes	22	David Crossley (RAP)			X			
5	Impact evaluation of Energy Efficiency and DSM programmes	1/9	Harry Vreuls		X				
6	Managing Variability, Uncertainty and Flexibility in Power Grids with High Penetration of Renewables	-	Lawrence Jones, Alstom					X	
7	Customized, Systemic, Strategic – the way to succeed with energy efficiency in industry	-	Catherine Cooremans, Business School of Geneva			X			
8	Taking Stock – 40 years of Industrial Energy Audits	(ecee)	Peter Mallaburn, UCL			X			
9	Behavioural changes are necessary to get the full impact on energy efficiency. What works and what doesn't (part 1)	24	Ruth Mourik	15-01-14					
10	How to make the best technology even better, BAT becomes BAT+	3	Hans Nilsson						15-02-11
11	Capturing the Multiple Benefits of Energy Efficiency	New	Nina Campbell	15-03-11					
12	Consequences of learning curves for energy policy	-	Clas-Otto Wene						15-04-15
13	„Do not take away their steering wheel!“ How to achieve effective behavioural change in the transport and SME domain	24-2	Ruth Mourik	15-05-13					
14	Improving energy efficiency in SMEs – an interdisciplinary perspective	-	Patrik Thollander			15-06-10			
15	Smart Grid Implementation – how to engage consumers?	23	Yvonne Boerakker				15-09-17		
16	Integrating renewables and enabling flexibility of households and buildings – results and experiences from successfully implemented projects	17	Rene/Mathias					15-10-14	
17	What job is Energy Efficiency hired to do? A look at the propositions and business models selling value instead of	25	Ruth Mourik						15-11-19



	<u>energy or efficiency</u>								
DSMU-#	Title	Task	Operating Agent/Presenter	<i>1- <u>The Logic of DSM</u></i>	<i>2 - <u>Governance</u></i>	<i>3 - <u>Energy efficiency - Load level</u></i>	<i>4 - <u>Flexibility (load shape)</u></i>	<i>5 - <u>Integration</u>²</i>	<i>6 - <u>Business models</u></i>
18	<u>Simplified Measurement & Verification for Energy Savings – the Task 16 approach</u>	16	Jan Bleyl			15-12-16			
19	<u>Energy Efficiency Labels. What can be learnt from the European Success Story</u>	IPEE C	Benoit Lebot		2016-01-14				
20	<u>Involving people in Smart Energy: A toolkit for utilities, energy agencies and smart city developers</u>	S3C	Luwdwig Karg		2016-02-18				
21	Advancing Utility Sector Energy Efficiency in the U.S.: Highlights of the ACEEE National Conference on Energy Efficiency as a Resource	ACE EE	Martin Kushler		2016-03-17				
22	Energy savings and greenhouse gas emissions: international standards & harmonised savings calculations in practise	21	Harry Vreuls		2016-04-14				
23	?	26	Catherine Cooremans						2016-05-12
24	IPEEC G20	IPEE C G20	Benoit Lebot	2016-06-16					

² (with RES and distributed generation)

MISCELLANEOUS

Action items resulting from the 46th Executive Committee Meeting

WHO	ACTION	WHEN
India Korea Spain	Pay Common Fund invoice for 2015	ASAP
Anne Bengtson	Keep reminding those who have outstanding payments to the Common Fund	On-going
ExCo members	Let Anne, and Joe Miller know when an invoices is paid	On-going
Rob Kool	Maintain contacts with China (NDRC), Saudi Arabia, South Africa, Kuwait, Thailand, IBM (Germany), Australia, Ireland, Portugal	ON-GOING
Hans Nilsson Hans de Keulenaer	Move forward with the DSM University according to plan – as well as continue to plan/hold webinars the first weeks of every month	ON-GOING
Rob Kool	Contact ACEEE and eceee and CCEEE about joint conferences. Also contact organisers of Renewable Conference and other relevant conferences in the planning stages.	ASAP
Operating Agents	Update a more clear definition in Legal Annex text of their Task	ASAP
Anne Bengtson Maria Alm Svetlana Gross	Prepare administrative details for the Forty Seventh Executive Committee Meeting in Stockholm, Sweden	DONE
Seppo Kärkkäinen	Write two articles for the Spotlight Newsletter highlighting the results of Task 17 Phase 2, and write a column for the DSM website	On-going
ExCo members	Review website regularly and suggest further developments	On-going
ExCo members	Suggest topics for the Spotlight Newsletter and provide input for those articles	On-going
All	Follow Visibility Committee Chair recommendations to update the website	On-going
Catherine Cooremans	Adjust financial structure and distribute to Executive Committee members after consultation with IETS IA	On-going
Operating Agents	Prepare Task Information Plans and include in each Task Status Report.	On-going
Pam Murphy	Distribute issues of the DSM Spotlight Newsletter	December 2015 March 2016
Operating Agents	Include 1-2 slides in their presentation, highlighting the main findings to date in their respective Task(s).	Present at next ExCo meeting
Tyler Bryant	Send around minutes from the IEA hosted IAs meeting 18 September	DONE
Ruth Mourik	Contact European Commission and find out more about their co-operation scheme.	DONE
Harry Vreuls Matthias Stifter Svetlana Gross	Further develop paper on Big Data	ONGOING
Matthias Stifter René Kamphuis	Continue development of proposal for potential follow-up activities in Task 17	ONGOING
Jan W. Bleyl	Task 16 Phase IV: Continue Talks with interested countries	On-going

Cont. Action Items

Hans Nilsson	Task Zero: Provide and more formal detailed Work Plan including defining activities, deliverables, milestones, responsibilities, information plan and budget breakdown.	Present at the next ExCo meeting
Harry Vreuls Matthias Stifter Svetlana Gross	Work together and develop the concept paper further on Big Data.	Present at next ExCo meeting
PPC	IEA proposed 2-pager to replace Annual Report: PPC to prepare proposal on future needs of an extended Annual Report for the DSM IA, incl. purpose, target, cost of the report.	To be presented at next ExCo
Hans Nilsson Hans de Keulenaer	Prepare Status Report on the development of the DSM University and send to Anne Bengtson for inclusion in the Pre-Meeting Document (PMD).	Friday 12 February 2016
Jan Bleyl-Androschin	Prepare a Task Status Report for Task 16 Phase 4 and send to Anne Bengtson for inclusion in the Pre-Meeting Document (PMD).	Friday 12 February 2016
Matthias Stifter René Kamphuis	Prepare Task Status Report for Task 17 and send to Anne Bengtson for inclusion in the Pre-Meeting Document (PMD).	Friday 12 February 2016
Rob Kool	Prepare PPC progress report and send to Anne Bengtson for inclusion in the Pre-meeting Document (PMD).	Friday 12 February 2016
Matthias Stifter René Kamphuis	Prepare further developed proposal on further activities in task 17 and send to Anne Bengtson for inclusion in the PMD.	Friday 12 February 2016
Sea Rotmann Ruth Mourik	Prepare Task Status Report Task 24 Phase II and send to Anne Bengtson for inclusion in the Pre-Meeting Document (PMD).	Friday 12 February 2016
Ruth Mourik	Prepare Task Status Report for Task 25 and send to Anne Bengtson for inclusion in the Pre-Meeting Document (PMD).	Friday 12 February 2016
Catherine Cooremans	Prepare Task Status Report for Task 26 and send to Anne Bengtson for inclusion in the Pre-Meeting Document (PMD).	Friday 12 February 2016
Boris Papousek Anne Bengtson	Prepare Financial Report and send to Anne Bengtson for inclusion in the Pre-Meeting Document	Friday 12 February 2016
Sea Rotmann	Prepare Visibility Committee Report for inclusion in the Pre-Meeting Document.	Friday 12 February 2016
Weber Web	Provide statistics for every Task every six months, send to Anne Bengtson for inclusion in the Pre Meeting Document.	Friday 12 February 2016
Harry Vreuls Matthias Stifter Svetlana Gross	Prepare further development of Big data and send to Anne Bengtson for inclusion in the Pre-Meeting Document	Friday 12 February 2016
Anne Bengtson	E-mail pdf file of Pre-meeting Document for the Forty Sixth ExCo meeting to the Executive Committee members and Operating Agents.	Monday 22 February 2016

Participation Table

As per ExCo meeting 22 – 23 October in Halifax, Nova Scotia

Participant	In force						Proposed Tasks / extension	16 Ext. Phase 4
	16 Ext. Phase 3	17 Phase 3	24	24 Phase 2	25	26		
	Competitive Energy Services Phase 3 – Energy Efficiency and Demand Response Services	Integration of DSM, Distributed generation, Phase 3	Closing the Loop: DSM From Theory to practice	Closing the Loop: DSM From Theory to practice	Business models and the effective market update of DSM Energy Services	Multiple Benefits of Energy Efficiency	DSM University	
Australia			◆					
Austria	X	X	X	X	X	◆	◆	◆
Belgium	X		X		◆			◆
Finland			◆	◆	◆		◆	
India		X						
Ireland				◆				
Italy			X					
Korea	X				◆	◆	◆	◆
Netherlands	X	X	X	X	X	◆	◆	X
New Zealand			X	X		◆		
Norway			X	◆	◆	◆	◆	
Saudi Arabia							◆	
South Africa			◆	◆				
Thailand								
Spain								
Sweden	X	X	X	X	◆	◆	◆	
Switzerland	X	X	X	◆	X	◆		X
United Kingdom			◆	◆	◆	◆	◆	
United States		X						
RAP *			◆				◆	
European Copper Institute*		⊖			⊖	◆	⊖	
OPERATING AGENT (OA)	Jan W. Bleyl- Androschin	Matthias Stifter & René Kamphuis	Sea Rootmann & Ruth Mourik	Sea Rootmann & Ruth Mourik	Ruth Mourik	Catherine Cooremans	Hans Nilsson, Hans de Keulenaer	Jan W. Bleyl- Androschin

X = participant

◆ = interested

* = Sponsors

⊖ = in-kind

Glossary

Abbreviation	Explanation
APEC	Asia-Pacific Economic Cooperation
BCG	Buildings Co-ordination Group (consists of 7 Implementing Agreements)
CERT	Committee on Energy Research and Technology in the IEA
CIGRE	International Council on Large Electric Systems
CTI	Implementing Agreement on Climate Technology Initiative
DHC	Implementing Agreement on District Heating and Cooling
DSM	Implementing Agreement on Demand-Side Management
EC	European Commission
ECEEE	European Council for an Energy Efficient Economy
ECES	Implementing Agreement on Energy Storage
ECI	European Copper Institute
EEWP	Energy Efficiency Working Party in the IEA
ENARD	Electricity Networks Analysis, Research & Development
EOT	End of Term
ESD	Energy Services Directive in the European Commission
ETE	Energy Technology Essentials (3-4 page briefs)
ETSO	European Transmission System Operators
EU	European Union
EUWP	End-Use Working Party in the IEA
FBF	Implementing Agreement on Future Buildings Forum
GHG	Green House Gas
HPC	Implementing Agreement on Heat Pump Centre
ICLEI	International Council for Local Environmental Initiatives
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
ISGAN	International Smart Grid Action Network (ISGAN)
JFS	Japan Facility Solutions (Japanese Sponsors participating in Task XVI)

KIER	Korea Institute of Energy Research
NEET	New and Emerging Environmental Technologies (IEA networking project - Gleneagles G8)
NDRC	National Development and Reform Commission, China
PMD	Pre-Meeting Document
PVPS	Implementing Agreement on Photovoltaic Power Systems
REEEP	Renewable Energy and Energy Efficiency Partnership
SANEDI	South African National Energy Development Institute
SANERI	South African National Energy Research Institute
SHC	Implementing Agreement on Solar Heating and Cooling
TSO	Transmission System Operators

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*Participants at the Executive Committee meeting 22-23 October, 2015, Halifax, Nova Scotia

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Executive Committee Meetings of the IEA DSM Energy Technology Initiative

(table excludes the European Union)

Meeting #	Date	Country	Participants	Countries on ExCo
interim	1 – 2 April, 1993	Stockholm, Sweden	14	14
1	28 – 29 October, 1993	Kerkrade, Netherlands	13	14
2	24 – 25 March, 1994	Madrid, Spain	12	14
3	13 – 14 October, 1994	Washington D.C., USA	14	15
4	23 – 24 March, 1995	Schaffhausen, Switzerland	15	15
5	19 – 20 October, 1995	Fukuoka, Japan	14	15
6	21 – 22 March, 1996	Paris, France	14	15
7	31 Oct – 1 Nov, 1996	Sydney, Australia	12	15
8	10 – 11 April, 1997	Helsinki, Finland	14	15
9	10 – 13 September, 1997	Oslo, Norway	9	15
10	25 – 27 March, 1998	Seoul, Korea	10	15
11	7 – 9 October, 1998	Chester, United Kingdom	12	15
12	14 – 16 April, 1999	Copenhagen, Denmark	12	17
13	28 – 29 October, 1999	Amsterdam, Netherlands	14	17
15	3 – 6 April, 2000	Ankara, Turkey	12	17
16	12 – 13 October, 2000	Athens, Greece	13	17
17	3 – 4 May, 2001	Eskilstuna, Sweden	12	17
18	3 – 5 October, 2001	Barcelona, Spain	13	17
19	18 – 19 April, 2002	Milan, Italy	15	17
20	3 – 4 October, 2002	Graz, Austria	15	17
21	8 – 10 April, 2003	Canberra, Australia	9	17
22	14 – 15 October, 2003	Paris, France	15	17
23	15-16 April 2004	Trondheim, Norway	16	17
24	13-15 October 2004	Atlanta, United States	13	17
25	20-21 April 2005	Saariselkä, Finland	15	17
26	October 2005	Madrid Spain	14	17
27	April 2006	Copenhagen Denmark	14	17
28	October 2006	Maastricht Netherlands	9	17
29	April 2007	Seoul Korea	10	18
30	11-12 October 2007	Brugge Belgium	15	18
31	2-4 April 2008	New Delhi, India	11	19
32	October 2008	Milan Italy	13	19
33	April 2009	Vienna, Austria	11	20
34	September 2009	Chester, UK	11	20
35	April 2010	Paris, France	11	19
36	October 2010	Stockholm, Sweden	9	19
37	April 2011	Washington, USA	8	18
38	2 – 4 November 2011	Jeju Island, Korea	14	18
39	18 - 20 April, 2012	Trondheim-Tromsø, Norway	10	15
40	September 14-16 2012	Espoo, Finland	10	16
41	24 - 26 April, 2013	Utrecht, The Netherlands	11	17
42	16 – 18 October 2013	Lucerne- Rigi, Switzerland	11	17
43	17 – 21 March 2014	Wellington, New Zealand	9	16
44	15-17 October 2014	Graz, Austria	9	16
45	25 – 27 March 2015	Cape Town, South Africa	9	16
46	22 – 23 October, 2015	Halifax, Nova Scotia, Canada	9	17
47	17 – 18 March, 2016	Stockholm, Sweden		18

No's of Executive Committee meetings held in each country

Netherlands	4	Australia	2	Japan	1
Sweden	4	Denmark	2	Turkey	1
Austria	3	Italy	2	South Africa	1
France	3	Switzerland	2	Nova Scotia	1
Finland	3	UK	2		
Korea	3	Belgium	1		
Norway	3	Greece	1		
Spain	3	India	1		
USA	3	New Zealand	1		