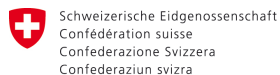
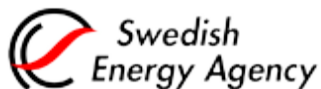




Task 16
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**ENERGETIC
SOLUTIONS**

JAN W. BLEYL

IEA-DSM, Task 16: "Competitive Energy Services" (ESCo-Services, Energy-Contracting)

Task Status Report to ExCo March 18th 2014, New Zealand

**Jan W. Bleyl – Energetic Solutions,
Austria and Germany**

Executive Summary

- 1. Participation:** 5+1 countries in phase III “EE and DR-Services”:
Belgium, Korea, the Netherlands, Sweden, Switzerland.
New **Austria:** e7 for the DR-subtask + GEA.
- 2. Outreach:** **DSM-Webinar, Belgium** (Task 16 ESCo workshop May ‘14), **Croatia** (Industrial ESCo development), **South Africa** (ESCo training for bankable project calculation 3rdQ.), **Pakistan** (general ESCo training)
- 3. Think Tank:**
 - ⇒ “**ESCo Market Development: A Role for ‘Facilitators’ to play**” published. Discussion paper with national perspective on the way.
 - ⇒ **Practical guidance for ‘Change Management’** by Task 24 underway
 - ⇒ **Simplified measurement & verification** submitted for publication
 - ⇒ **Demand Response Services:** Austria and Korea are in, work initiated
- 4. Budget:** 47% spent after 19 month (out of 36 month)
- 5. Mid-term evaluation:** Thank you very much for the appreciation

Accomplishments since last meeting

Energy Service Expert Platform (subtask 13)

- ✓ **15th expert platform meeting**, held near Graz, Austria from October 23rd-25th 2013. Main agenda items: Discussion of national implementation activities, Think Tank topics and dissemination activities.
- ✓ Preparation of the **16th expert platform meeting**, planned to be held in Belgium May 7th-9th 2014

Accomplishments since last meeting (cont'd)

Energy Service Expert Platform + Dissemination (subtasks 13+16)

- ✓ **15th Task 16 stakeholder workshop**, near Graz, Austria on October 24th 2013. The topic was “**SmartEPC'- an Energy-, Comfort- + Maintenance Performance Contract**”.
- ✓ Preparation of the **16th Task 16 stakeholder workshop** to be held in Antwerp Belgium on May 7th:
 - ⇒ Morning session: “**How to overcome the barriers for retrofitting large private and public building stocks**” in cooperation with Belesco, the Belgium ESCo association.
 - ⇒ Afternoon session: “**Project and market facilitation**” to be held jointly with the European ‘**EESI 2020**’ and ‘**Transparens**’ project

Accomplishments since last meeting (cont'd)

Think Tank (subtask 14)

- ✓ ***ESCo project and market development: A role for 'Facilitators' to play. Including national perspectives of Task 16 experts.***
To be published as IEA DSM Task 16 discussion paper in March 2014
- ✓ Initiation of a joint Task 16 + 24 paper on ***Practical guidance for Change Management for comprehensive energy service projects*** to be published as IEA DSM discussion paper (and where else?) in April 2014

Accomplishments since last meeting (cont'd)

Think Tank (subtask 14, cont'd)

- ✓ ***Simplified measurement & verification + quality assurance instruments for energy, water and CO₂ savings. Methodologies and examples*** accepted for publication at ECEEE Industrial Summer Study, paper ID 1-088-14, Arnhem, the Netherlands June 2014
- ✓ Work started on **Comprehensive building refurbishment ('deep retrofit')** – in cooperation with IEA ECB in their new Annex 61. Task 16 will contribute business models and develop them further, building on our previous publication on the topic.

Task 16 paper on Simplified Measurement and Verification (M&V) of savings

Bleyl, Jan W. et.al
Simplified measurement & verification + quality assurance instruments for energy, water and CO₂ savings. Methodologies and examples accepted for publication at ECEEE Industrial Summer Study, paper ID 1-088-14, Arnhem, the Netherlands June 2014
by Bareit; Bleyl; Sattler and with inputs from Task 16 experts

Bleyl et al., paper ID # 1-088-14

Simplified measurement & verification + quality assurance instruments for energy, water and CO₂ savings. Methodologies and examples

Jan W. Bleyl
IEA DSM Task 16 c/o Energetic Solutions
Lendkai 29, 8020 Graz, Austria or Frankfurterstr. 12, 76344 Leopoldshafen, Germany
EnergeticSolutions@email.de

Markus Bareit
Swiss Federal Office of Energy (SFOE)
3003 Bern, Switzerland
markus.bareit@bfe.admin.ch

Peter Sattler
sattler energie consulting gmbh
Krottenseestraße 45, 4810 Gmunden, Austria
Sattler@energie-consulting.at

1. Abstract

Measurement & Verification (M&V) is a prerequisite to assess the quantitative outcomes of energy, water or CO₂ saving measures and to translate these into savings cash flows for energy efficiency financing and other purposes.

In practice M&V - if pursued at all in the case of in-house implementations - is often complicated by limited data availability or accuracy, a limited comparability between 'Baseline' and 'Reporting' periods or a lack of a clear M&V plan and having the resources to follow it up. If accomplished, understanding M&V reports requires expertise, which is not necessarily available on the facility owner side. To make things worse, exercising M&V is a rather boring topic - even within the professional energy community.

At least in many European countries, commonly acknowledges methods for M&V of energy, water or CO₂ savings are mostly based on utility meters and invoices - whereas in Anglo-Saxon influenced markets 'retrofit isolation techniques' for individual saving measures are accepted as good practice for the verification of energy savings cash flows (e.g. IPMVP Options A or B).

All of the aforementioned adds to the inherently complex nature of energy efficiency projects. And it often results in insecurity for energy managers, project developers, ESPs and their (potential) ESP customers and financiers on verifiable future energy savings cash flows, which may lead to risk surcharges or no project implementation at all. Yet a full scale M&V plan is often not applicable or desired, due to its (perceived) complexity, lack of resources or its cost is prohibitive for smaller projects.

As a possible solution and feasible compromise between no M&V at all and the (perceived) accuracy of a full scale M&V approach, this paper will introduce simplified M&V approaches for individual or groups of electricity, heat, water or CO₂ saving measures (ECM), which can

Accomplishments since last meeting

(cont'd)^

Demand Response Services business models (subtask 15)

- ✓ Good news - **resources and experts to implement subtask 15 identified**: 1. Austria: e7 + Energetic Solutions, 2. Korea, 3. **'VPP4DSO'** (a “hybrid virtual power plant for distributions system” in Austria + Slovenia).
- ✓ Austrian kick-off meeting with e7 for feasibility of DR-Services business models in January 2014.

Coaching of individual National Implementation Activities (subtask 16)

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

Accomplishments since last meeting (cont'd)

International Dissemination (subtask 17)

- ✓ Presentation of an '**ESCo university**' as a pre-conference workshop to the **ESCo Europe conference 2014** in Madrid in January 2014
- ✓ **2nd Energy manager training for State Grid China** on behalf of GIZ Germany: Investment grade calculation of energy service projects including provision of a detailed Excel tool, in November 2013
- ✓ Continue know how transfer and supervision for start-up ESCo in Croatia

Accomplishments since last meeting (cont'd)

International Dissemination (subtask 17 cont'd)

- ✓ **Leonardo-Energy Webinar:** 1st IEA DSM University webinar February 4th with some 80 attendees around the world
- ✓ Co-operation with other ongoing energy service projects (**IEA ECB Annex 61** – Mr. Rüdiger Lohse and **IEA IETS Annex 16** Energy Efficiency in SMEs – Mr. Patrick Thollander, Linköping university, **EESI 2020** – lead by BEA and '**Transparence**' – lead by sEV-EN) to share information and join forces

Leonardo ENERGY Webinar: Role of 'Facilitators' for ESCo Project Development

ESCO MARKET DEVELOPMENT: A ROLE FOR FACILITATORS TO PLAY

By [Jan Bleyl](#) 19/12/2013

Channel: [webinar](#)

Sector: [industry, non-residential buildings](#)

Purpose: [energy efficiency, energy management](#)

Rating: ★★★★★ Average: 5 (2 votes) ☆☆☆☆☆ Your rating: None



Information

Date & time: Tue, February 4, 2014 - 15:00

Duration / timezone: 1 hour / Central European Time ([check here your local time](#))

Moderators: Jan Bleyl (Energetic Solutions, IEA DSM Task 16)

Content:

This webinar will introduce the 'Facilitator' concept and discuss its added value for the development of comprehensive, performance based demand side EE and RE projects and ESCo markets. Besides enabling project development, another important feature of the buyer-led project facilitation approach is to foster competition between ESCos, other EE suppliers but also financiers on a fair and supportive playing field.

During the webinar we will discuss questions such as: What challenges and barriers does a (potential) client encounter, when setting out to procure comprehensive, performance based energy service packages or EE projects? Which know-how, procedures and organizational change processes are needed? And how can clients be enabled to do so?

The webinar builds on a recent ECEEE publication by IEA DSM Task 16.

▶ [Register](#)

▶ [Video](#)

▶ [Presentation](#)

About the speaker



[Jan W. Bleyl](#)

Job title: Senior consultant and owner

Company: Energetic Solutions

Country: Austria

[More about this speaker](#)

<http://www.leonardo-energy.org/webinar/esco-market-development-role-facilitators-play>

Activities + goals for next 6 month

Energy Service Expert Platform (subtask 13)

- ✓ Execution of the **16th experts meeting**, planned to be held in **Belgium May 7th-9th 2014**. The main agenda items will be discussion of national implementation activities, discussions on current Think Tank topics and dissemination activities.
- ✓ Preparation of **the 17th experts meeting**, planned to be held in **Seoul, Korea** in fall 2014 (exact date tbd)

Activities + goals for next 6 month (cont'd)

Energy Service Expert Platform + Dissemination (subtasks 13+16)

- ✓ Preparation of the 16th Task 16 stakeholder workshop to be held in Antwerp Belgium on May 7th:
 - ⇒ Morning session: “**How to overcome the barriers for retrofitting large private and public building stocks**” in cooperation with **Belesco**, the Belgium ESCo association
 - ⇒ Afternoon session: “**Project and market facilitation**” to be held jointly with the European ‘**EESI 2020**’ and ‘**Transparens**’ project
- ✓ Preparation of the **17th Task 16 stakeholder workshop** to be held in **Seoul, Korea in fall 2014** (exact date and topic tbd)

Activities + goals for next 6 month (cont'd)

Think Tank (subtask 14)

- ✓ Finalization of paper on ***Simplified measurement & verification + quality assurance instruments for energy, water and CO2 savings. Methodologies and examples*** to be published at ECEEE Industrial Summer Study, paper ID 1-088-14, Arnhem, the Netherlands June 2014
- ✓ Publication of ***ESCo project and market development: A role for 'Facilitators' to play. Including national perspectives of Task 16 experts*** as IEA DSM Task 16 discussion paper in April 2014
- ✓ Finalization of a joint Task 16 + 24 discussion paper on ***Practical guidance for Change Management*** to be published in April 2014

Activities + goals for next 6 month (cont'd)

Think Tank (subtask 14 cont'd)

- ✓ Continue work on **business models for comprehensive building refurbishment** ('deep retrofit') in cooperation with IEA ECB Annex 61

Demand Response Services business models (subtask 15)

- ✓ DR-Services: Identification of Korean experts and subtask kick-off in Korea. Data collection on DR-potentials in selected end-use sectors, implementation cost and balance power market products in preparation of DR-ES business models
- ✓ *Ideas for other resources or cooperation opportunities from ExCo members are still welcome.*

Activities + goals for next 6 month (cont'd)

Coaching of individual National Implementation Activities (subtask 16)

- ✓ Implementation of the individual national activity plans to develop energy service markets will be followed up, the experts gave detailed presentations and exchanged good practices during the last platform meeting and through teleconferences in between meetings.

Activities + goals for next 6 month (cont'd)

Dissemination (subtask 17)

- ✓ **ESCo introduction training in Lahore, Pakistan** (March 2014)
- ✓ Publication of a Task 16 discussion paper on '**Facilitators**' including national perspectives (April 2014)
- ✓ Publication of a joint Tasks 16 + 24 discussion paper on '**Practical guidance for Change Management**' (April 2014)
- ✓ Publication of '**Simplified M&V + QAI**' (Industrial ECEEE)
- ✓ Know how transfer and supervision of a **start-up ESCo in Croatia**

Activities + goals for next 6 month (cont'd)

Dissemination (subtask 17 cont'd)

- ✓ 1st **ESCo manager training for South Africa** on behalf of GIZ
Germany: **Investment grade calculation** of energy service projects including provision of a detailed Excel tool (3. quarter 2014)
- ✓ Continue co-operation and exchange with
 - **ECB Annex 61 => Deep retrofit business models**
 - **'EESI 2020' – lead by BEA and 'Transparens' – lead by sEVEN**
 - **IEA IETS Annex 16 Energy Efficiency in SMEs => IEC model**
- ✓ Another **Leonardy ENERGY IEA DSM University webinar?**

Activities + goals for next 6 month (cont'd)

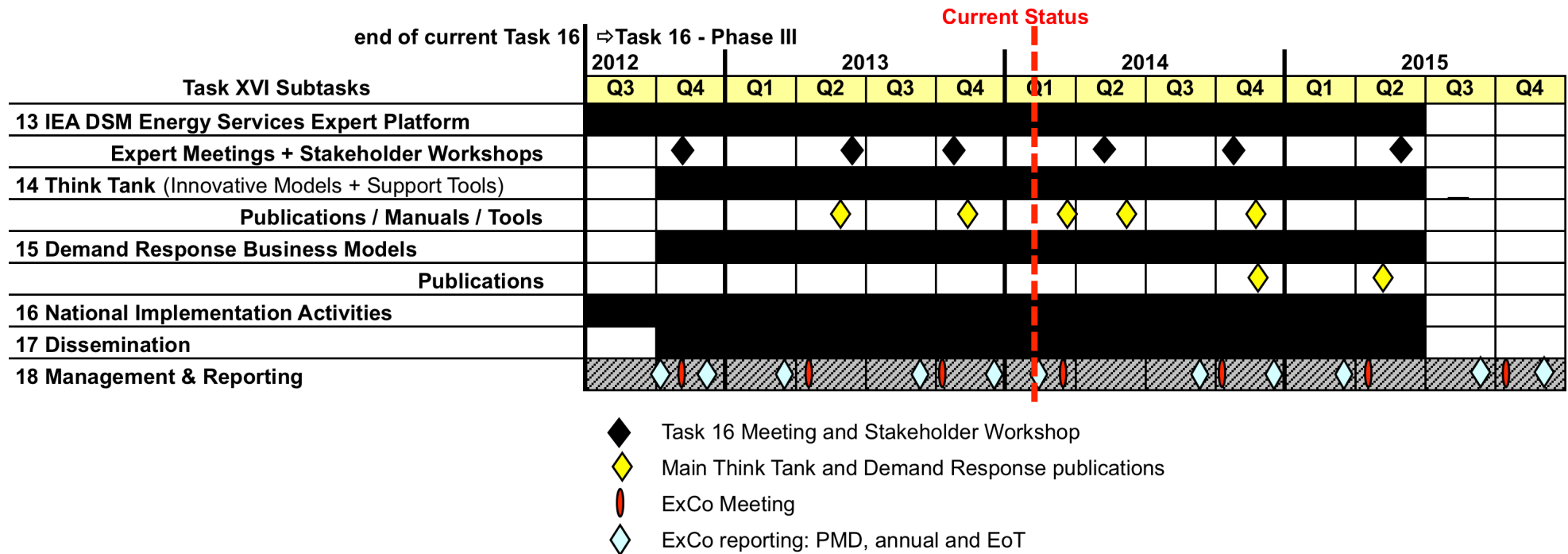
Dissemination (subtask 17)

More Dissemination on an academic level?

- ✓ Energy Policy special issue?
- ✓ IEA DSM books?
- ✓ IEA secretariate books
- ✓ DSM university

Task 16 Schedule

Task 16-Phase III Timetable (as of January 2014)



Time wise we have spent 19 months out of the 36 month project duration.

Task 16 Budget vs. Expenditures (adapted)

(as of January 2014 and based on 5.7 participating countries, excl. VAT)

Subtask	Total budget €	Cumulative spending €	% spent	Remaining €
13 Energy Services Expert Platform	36.000	21.200	59%	14.800
14 Energy Services Think Tank	87.000	42.000	48%	45.000
15 Demand Response ES Business Plans	27.200	4.800	18%	22.400
16 Coaching of National Implementation Activities	12.800	6.800	53%	6.000
17 Dissemination (Internat. + Nat.)	13.000	6.000	46%	7.000
18 Management & Reporting	42.000	19.200	46%	22.800
Subtotal	218.000	100.000	46%	118.000
Travel costs	28.000	15.200	54%	12.800
Printing&other	9.000	4.700	52%	4.300
Total	255.000	119.900	47%	135.100

**=> After 19 months (out of the 36 month project duration)
47% of the budget has been spent.**

Looking ahead ...

Task 16 to be continued after June 2015?

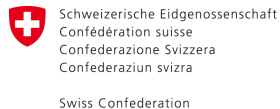
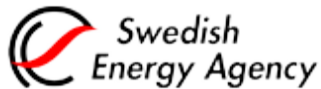
Not to be decided now, unless ...

**But if interested in participating and funding,
early budget planning and allocations is an opportunity.**

Any dis- or encouragements or other remarks?



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**ENERGETIC
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JAN W. BLEYL

**Thank you for your
continued support
of IEA DSM Task 16!**

PS: IEA DSM Task 16 - Phase III builds on work,
which was previously led by Graz Energy Agency.
Thank you GEA!

ExCo Vote: (Task 16 needs ≥ 5 countries)

Country	Vote	Country	Vote
Australia		Norway	Maybe (WS)
Austria	Yes	Saudi Arabia	?
Belgium	maybe	Schneider	?
Canada		South Africa	
Finland		Spain	maybe
France	No	Sweden	Strong maybe
India	maybe	Switzerland	maybe
Italy		UK	No
Korea	Yes	US	?
Netherlands	Yes	Eurelectric	
New Zealand	No	RAP	support
Totals:	Yes: 3	> Maybe: 2	< Maybe: 4