

IEA DSM Task 16 'Innovative Energy Services'
Phase IV Life-Cycle Costing;
'Deep Retrofit'; Simplified M&V;
Crowd-Financing for EE & RE projects
& Energy Services Taxonomy

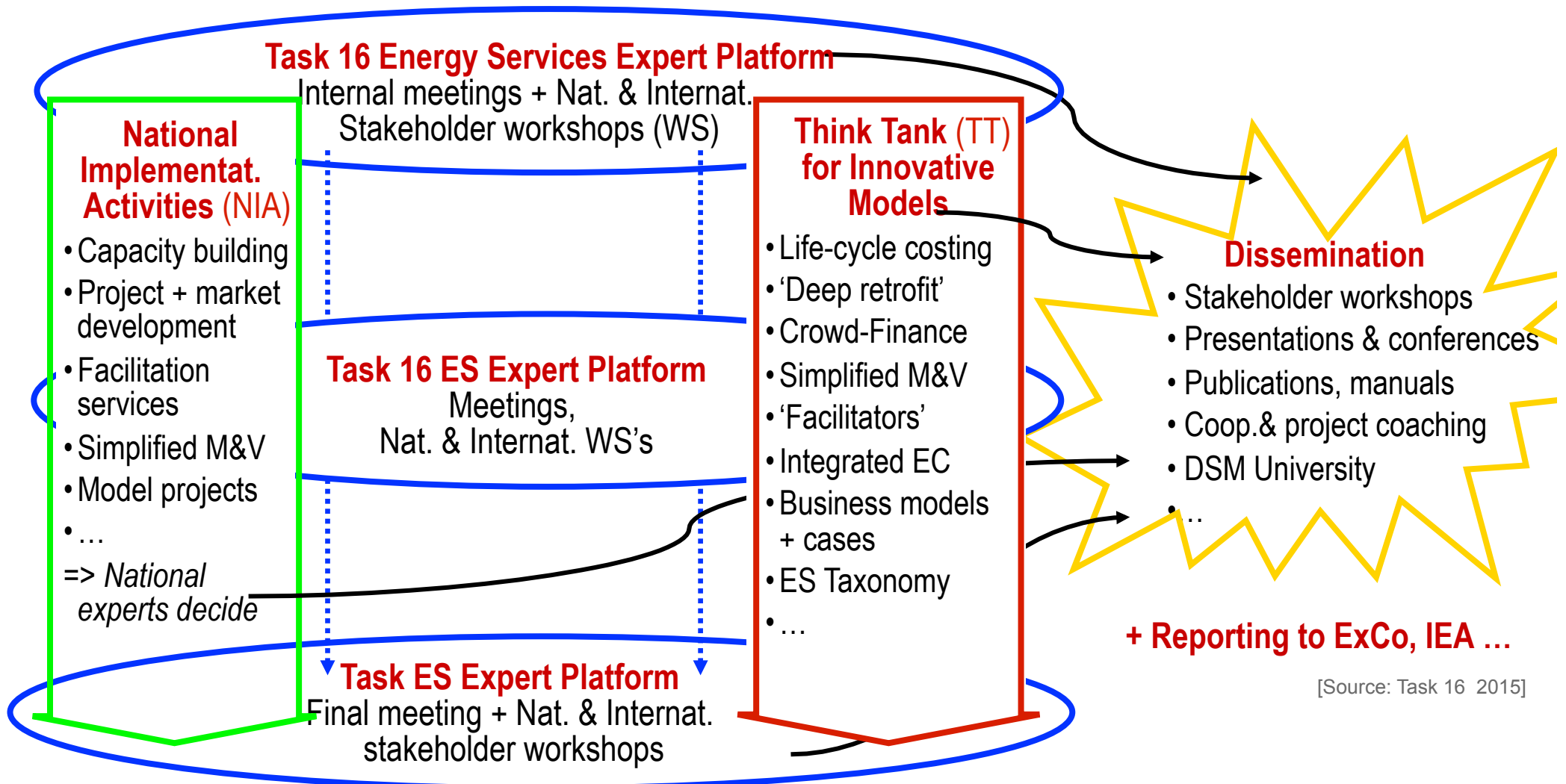
Task Status Report
48th IEA DSM ExCo meeting
Brussels, Belgium, October 11-13, 2016

Jan W. Bleyl, Task 16 Operating Agent

Task 16 in a nutshell

- 1. Innovations in performance-based Energy Services (ES):**
=> Think Tank, e.g. sM&V, Facilitators, IEC ...
- 2. Task 16 Energy Services Expert Platform:**
=> Meetings, mutual coaching & invite guests ...
- 3. National implementation activities (NIA)**
=> Individual ES market development in each country
- 4. Dissemination of results:**
=> Publications, stakeholder workshops, DSM-University ...

Continue in well established structure. With new Think Tank and NIA topics



[Source: Task 16 2015]

Executive Summary

- 1. Participants:** Belgium?, Canada (*in kind*), Germany (*coop. Annex 61*), GIZ (*for 9 m*), Netherlands, Norway, Switzerland
'Maybes': Sweden?, Austria, ...?
- 2. Budget: 3,3 (+0,7?) countries => 151.700,- (+30.000?) EUR**
- 3. Think Tank key accomplishments in last 6 month:**
 - ⇒ **sM&V** (simplified M&V): Journal submission with efficiency 1
 - ⇒ **Crowd-Financing feasibility study** (in coop. with GIZ)
 - ⇒ **Life-Cycle Cost-Benefit & Deep Retrofit & Multiple Benefits to convince investors:** Joint abstract submission
- 4. Dissemination: Netherlands Gemeentelijk Vastgoed Dag 2016 (Municipal Property Day) 2016: ~150 participants**

Task 16 **Accomplishments since last meeting**

Accomplishments since last meeting

Energy Service Expert Platform (subt. 19)

- ✓ Execution of several **expert platform teleconferences** on life cycle cost analyses through RETSCREEN and Life-cycle cost–benefit analysis (LCCBA)
- ✓ **Joint submission** of an abstract for ECEEE summer studies
- ✓ **Initial preparations for the 20th experts meeting**, to be held on **28 - 29 May 2017 in France** (back to back with ECEEE summer study 2017) – thank you Anne for your support

Accomplishments since last meeting

ES Expert Platform + Dissemination (subt. 19 & 23)

- ✓ Presentation at **Dutch national stakeholder workshop** “**Gemeentelijk Vastgoed Dag 2016**” (Municipal Property Day 2016) held in Nyenrode Business Universiteit te Breukelen near Amsterdam, Netherlands on 04 October 2016 (organized by RVO and Instituut voor Vastgoed & Duurzaamheid)

- 1. Lessons learned for ESCo market development,**
- 2. Facilitators to support clients**

~ 150 participants from Dutch communities

Energy Service Expert Platform + Dissemination (subtasks 19 & 23)

Internationaal ESCO deskundige Jan Bleyl gastspreker op Gemeentelijk Vastgoeddag

DOOR REDACTIE - 15 SEPTEMBER 2016



Op 4 oktober is Jan Bleyl, internationaal expert op gebied van Energieprestatiecontracten, ESCo's en ESCo Project Facilitators, gastspreker op de Gemeentelijk Vastgoeddag op Nyenrode, Breukelen. Hij presenteert een overzicht van Energieprestatiecontracten en ESCo's in Europa en gaat in op de rol van 'EPC-facilitators'.

Door: [Irma Thijssen](#), RVO.nl

Accomplishments since last meeting

Think Tank (subtask 20)

(1/3)

1. *Simplified Measurement and Verification Using Quality Assurance Instruments: A Proposed Concept for Energy, Water and CO₂-Saving Projects*

=> submitted for peer-review and (hopefully) publication to the journal *Renewable & Sustainable Energy Reviews* journal.

In close cooperation with EfficiencyOne, Nova Scotia, Canada (meaningful in-kind contribution!)

Accomplishments since last meeting

Think Tank (subtask 20)

(2/3)

- 2. Crowd-Financing for Energy efficiency and renewable investments:** 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 case studies.

=> Report finalized in cooperation with GIZ and KRITTER Advisory Services

Accomplishments since last meeting

Think Tank (subtask 20)

(3/3)

3. Life-Cycle Cost & 'Deep Retrofit' & Multiple Benefits:

Submission of an abstract for ECEEE Summer Studies '17:

Deep Energy Retrofits: Using Dynamic Cash Flow

Analysis and Multiple Benefits to Convince Investors

=> *Joint Task 16 abstract submission (in cooperation with IEA ECB Annex 61): => **11 co-authors!***

Accomplishments since last meeting

Coaching of NIAs (subtask 22)

Coaching of individual National Implementation Activities (NIA) (subtask 22)

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

Dissemination and cooperations

(subtask 22, selection)

- ✓ **Investor and ESCo manager training** in St. Kitts: Investment-grade Calculation & Analysis of Energy Projects (*Focus on Savings Model & Cooling Projects*). Introduction & hands-on training in cooperation with GIZ
- ✓ Facilitation continued for an **industrial-scale Energy Efficiency Performance contract** for a steel manufacturer in North Africa
- ✓ **Co-operation** with other ongoing energy service projects and institutions:
 - ECB Annex 61 => 'Deep retrofit' business models
 - Linköping University => ES taxonomy and other topics
 - TU-Vienna, FH Pinkafeld - applied science university
=> Master class on energy services

Task 16 **Activities + goals for next 6 month**

Activities + goals for next 6 month

Energy Service Expert Platform (subtask 19)

- ✓ Preparation of the **20th experts meeting**, to be held on 28-29 May 2017 in France (back to back with ECEEE summer study 2017)

The main agenda items will be presentation and discussion of national implementation activities, discussions on current Think Tank topics (Deep Energy Retrofit, Life cycle cost appraisals, crowd funding for EE and RE projects) and dissemination activities

- ✓ Continue to hold **Expert platform teleconferences** (on selected Think Tank topics, e.g. life cycle cost analyses for Deep Energy Retrofit => ECEEE paper)

Activities + goals for next 6 month

Think Tank (subtask 20)

1. Life-Cycle Cost & 'Deep Retrofit' & Multiple Benefits:

Submission of an abstract for ECEEE Summer Studies '17:

Deep Energy Retrofits: Using Dynamic Cash Flow Analysis and Multiple Benefits to Convince Investors

=> Draft paper for peer review (in cooperation with IEA ECB Annex 61) => 11 co-authors!

Activities + goals for next 6 month

Think Tank (subtask 20)

(cont'd)

2. *Simplified Measurement and Verification Using Quality Assurance Instruments: A Proposed Concept for Energy, Water and CO₂-Saving Projects*

=> Finalize submission for peer-review and (hopefully) publication to the journal *Renewable & Sustainable Energy Reviews* journal

In close cooperation with EfficiencyOne, Nova Scotia, Canada (meaningful in-kind contribution!)

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

Coaching of NIAs (subtask 22)

Support and coaching of individual National Implementation Activities (subtask 21)

- ✓ Continue support and coaching of individual National Implementation Activities (NIA plans to develop energy service know how and markets)
- ✓ To follow up, experts will give presentations and exchange experiences and good practices during the next platform meeting and through teleconferences in between meetings

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

Dissemination & cooperation (subtask 22)

Publications, presentations or workshops planned:

- ✓ **Vietnam:** Fact Finding Mission: Demand Side Energy (in cooperation with Electricity of Vietnam (EVN), October + November 2016)
- ✓ **Life-Cycle Cost-Benefit** workshop for evaluation of energy efficiency and renewable projects - an introduction (Vienna, October 2016)
- ✓ **Economic appraisals** to communicate between technicians and management. Methods, calculation and examples – an introduction. Seminar for energy technicians in industry (Gmunden, November 2016)
- ✓ Another Task 16 Leonardo ENERGY IEA **DSM University Webinar**

Activities + goals for next 6 month (cont'd)
Dissemination & cooperation (subtask 22)

✓ *Next Task 16 IEA DSM Webinar:*

**Deep Energy Retrofits: Using Dynamic Cash Flow
Analysis and Multiple Benefits to Convince Investors**

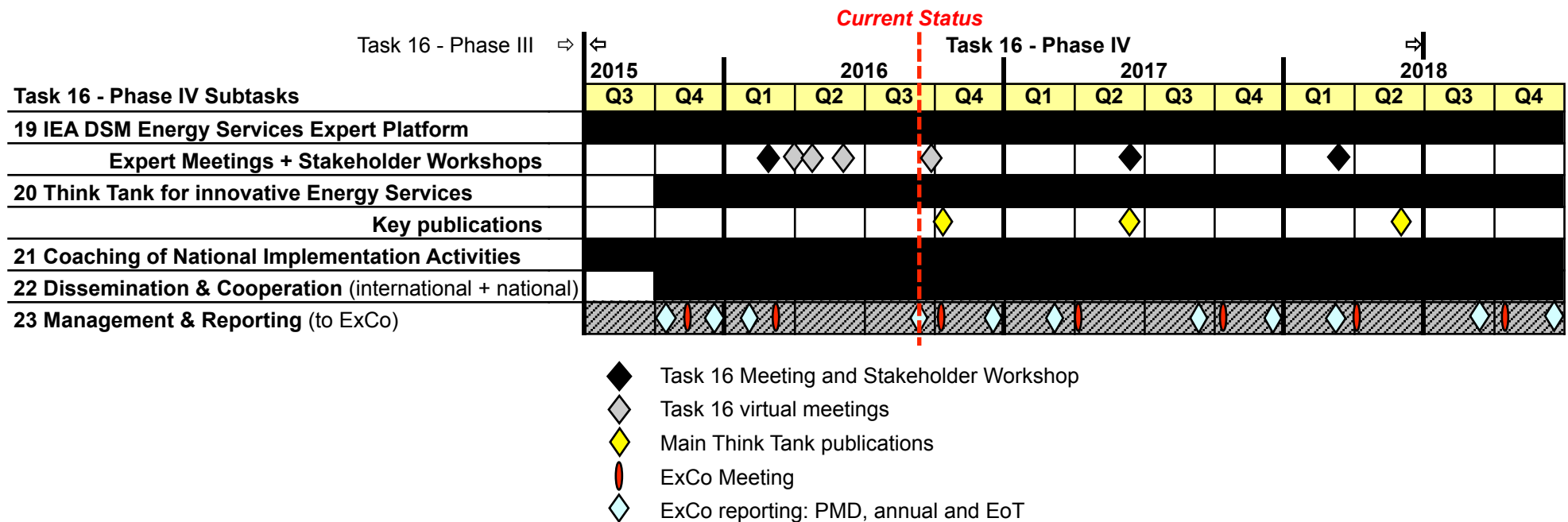
=> When would be a good time, Hans²: (2. Q 2017)?

Task 16 - Phase IV

Activity time schedule update

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

Task 16 - Phase IV Timetable (as of September 2016)



All scheduled events and reporting targets have been met

Task 16 Budget vs. Expenditures

(as of 6 September 2016 excl. VAT)

Subtasks <i>unit</i>	Total budget <i>EUR</i>	Cumulative spending <i>EUR</i>	% spent <i>%</i>	Remaining <i>EUR</i>
19 Energy Services Expert Platform	18.480	6.600	36%	11.880
20 Think Tank for innovative Energy Services	58.080	22.000	38%	36.080
21 Coaching of National Implementation Activities	11.880	5.280	44%	6.600
22 Dissemination & Cooperation (international + national)	10.560	2.640	25%	7.920
23 Management & Reporting (to ExCo)	35.000	11.000	31%	24.000
Subtotals	134.000	47.520	35%	86.480
Travel costs	14.700	3.381	23%	11.319
Other costs	3.000	0	0%	3.000
Totals	151.700	50.901	34%	100.799

⇒ **Spending** of last reporting period: **25,415** EUR, adding to a **total expenditure of 50,901** EUR (= 34 % of total budget)

⇒ **Income** during last reporting period: **45,000** EUR (against **47,997** EUR billed), **Total income: 46,700** EUR (= 31 % of total budget)

Participants Task 16 Phase IV: 3,3+0,7 ,Yes`, 2 `in kind`, 1 Maybe => Any ExCo news?

- **Belgium?** (NE: B. De Bruyn, J. Coolen, L. Vanstraelen, M. Casas)
- **Canada** (*in kind*) (NE: Sarah Mitchel, Mark Robertson)
- **GIZ** (*for 9 month*) (NE: Simon Zellner)
- **Netherlands** (NE: Albert Hulsfhoff)
- **Norway** (NE: Emma Julie Otervik, Forsvarsbygg)
- **Switzerland** (NE: Markus Bareit, Gabriela Weiss Di Spirito)
- **Germany** (*in kind cooperation with Annex 61 ,Deep Retrofit`)*

,Maybes`:

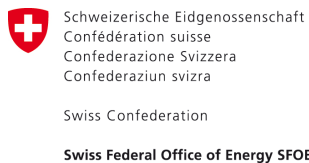
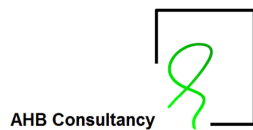
- **Sweden** (NE Lotta Bangens ...?)
- **Austria**—...?

Matters for the ExCo

1. Approve the Task Status Update Report

**ENERGETIC
SOLUTIONS**

JAN W. BLEYL



Task 16 'Innovative Energy Services'

**Thank you very much
for your continued support!**

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