

# INTERNATIONAL ENERGY AGENCY

## IMPLEMENTING AGREEMENT ON TECHNOLOGIES AND PROGRAMMES FOR DEMAND SIDE MANAGEMENT

***Task 24: Closing the Loop - Behaviour Change in DSM: From Theory to Practice***

### **7th Task Status Report February 2015**

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## 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 about to be finalised and Phase II (How to help the Behaviour Changers) is about to commence.

## 2. OBJECTIVES FOR THE LAST SIX MONTHS

### Subtask 1

- All information from the 'Monster' to be put on a wiki ([www.leadsmtask24wiki.info](http://www.leadsmtask24wiki.info))
- Further case studies to be collected and added to the Wiki
- Complete missing case studies for Belgium (done) and Italy (not done, due to limited expert time)

### Progress towards Subtask objectives

Progress in last six months was very satisfactory, as we now have almost 60 case studies from 16 countries around the world. The Wiki especially should be useful to experts and ExCo to be able to more quickly find the parts that are of specific interest to them. One deliverable that hasn't been met is to bring together the Advisory Board - it has been pulled together, but not yet been used to provide collective input into the Task. We suggest to get a final comment from the AB with the completed package of reports. The [energy experts video](#) was received very well at workshops is seen as a strong tool to bring the message across in the words of the experts (who also show themselves to be very human in their energy use). The Wiki and the 'Monster' will be living documents and we will continue to collect and add case studies in Phase II.

### Subtask 2

- Collection of detailed case studies and best practice in four overarching themes
- Includes (filmed) interviews in Italy
- Analysis of case studies so far collected (Fully completed: NL, NZ, SE, NO. Draft: CH, AT. Missing: BE, IT)

### Progress towards Subtask objectives

Progress in last six months has been good - SE and NO have now completed their detailed ST2 country case studies. CH (on the 2000 Watt Society) and AT (on €CO2 Management and the Energy Neighbourhoods 2) are nearing completion and will hopefully be finalised by the ExCo meeting. Italy's case study interview has been conducted in the October Milan workshop but there is no national resource available to analyse the case in depth. The findings from the interview will flow into the ST4 report for Italy (also truncated due to lack of expert input). Belgium will not have an ST2 report due to lack of a dedicated national expert.

### **Subtask 3**

- Tool to enable better evaluation of successful behaviour change outcomes
- Built on Methodological Review of the literature by Karlin and Ford called 'What do we know about what we know' (Deliverable 3)
- Positioning Paper called 'Did you behave as we designed you to?' (Deliverable 3A)
- Guidelines and Factsheets called 'From "I think I know" to "I understand what you did and why you did it" Deliverable 3B.

### **Progress towards Subtask objectives**

Progress in last six months has been excellent and this Subtask has been finalised in the scope of what Phase I permitted. The 'Beyond kWh' methodological review has been completed in kind by researchers at the Universities of California Irvine (USA) and Victoria (NZ). Their report clearly shows that there is indeed no standard way of evaluating behavioural interventions, or collecting behavioural data in the feedback and building retrofit areas. This included all the case studies from the Subtask I 'Monster' that fit the coding criteria. We will build on the findings and recommendations of this report in Subtask 9 of Phase 2.

We have also undertaken a detailed review on evaluation and discussed their issues with experts at the Oxford and Graz Task 24 workshops (Sept/Oct, 2014), where valid expert insights have led to a strong framework for the final positioning paper. It became obvious that this work is extremely difficult and needs more in-depth attention. The report delves in-depth into definitions around monitoring and evaluation (M&E) of behavioural interventions; how the 3 disciplinary approaches (economics, psychology and sociology) differ in their M&E methods; the many challenges we are facing when M&E behavioural interventions and recommendations of how to overcome them by changing from a single- to a double-loop learning approach.

The final report delves into how to deliver such double-loop learning approaches on different behavioural elements (the individual, the social, the political and the infrastructural), on different behaviours (investment vs habitual) and on different intervention tools. Three tools in the building retrofit domain were chosen to show how the factsheets for Behaviour Changers outlining both single- and double-loop learning and M&E would look like (Energy Performance Certificates, Mass Marketing Campaigns and Subsidies and Loans). We will develop further factsheets with the relevant Behaviour Changers in other intervention tools in all of our domains (Phase 2 - Subtask 8).

### **Subtask 4**

- Country stories
- Country-specific recommendations, to do's and not to do's

### **Progress towards Subtask objectives**

Progress in last six months was excellent, we have now collected all country stories. Country-specific recommendations have been collected, in part, via stakeholder feedback questionnaires (both during workshops and as part of SurveyMonkey after) and been pulled together into country-specific reports. We have completed three reports (NL, NZ and SE) and hope to have completed NO, CH and AT by the ExCo meeting. BE and IT will have truncated versions, due to limited national expert input.

### **Subtask 5**

- 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 highly satisfactory, we now have >225 experts on the expert platform and professional films from all presentations of the Wellington storytelling workshop, as well as the experts' energy story short film and the Graz workshop. All other final reports also on the ning site and the IEA DSM website. Google Analytics show continued strong utilisation of the website, especially after broadcast emails with links to all new content are sent (time spent on site usually around 10 minutes). 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 great, there were another 2 Spotlight articles, the German Energy Association translated our ESCo Facilitator report into German and publicised it and Ruth was invited to give a talk at a large ESCo conference in Milan in January. We held the first of a series of seminars in Sheffield Hallam University (October 2014), another lecture to the International Energy Center in Queensland (Australia) and a stakeholder workshop in Wellington (February 2015). In addition, Ruth gave our first Task 24 webinar for the IEA DSM University, which had over 300 registrations. We have been accepted for two Task 24 papers at the eceee summer study (June 2015), one on storytelling and one on evaluation and continue to be invited to give keynotes (e.g. in South Africa at the Capetown workshop) and talks around the world.

## Experts meetings/seminars/conferences held in past six months

### Experts meetings

Date	Place	# of Experts	Type of meeting	Government	Industry	Academic
24/10/14	London, UK	12	SHM	4	2	6
17/2/15	Wellington, NZ	10	SHM	8	2	

### Seminars/Conferences

Date	Place	Participants	Type of meeting	Government	Industry	Academic
26/10/14	Sheffield, UK	40+	Seminar		1	40
21-22/1/15	Milan, Italy	100+	Conference			
14/1/15	DSM University	300	Webinar			

## Reports produced in the past six months

- 2 IEA DSM Spotlight Issues
- Filmed presentations and minutes from Graz workshop
- Oxford workshop official UKERC report
- Three ST2 country case study reports (SE, NO, CH)
- Three ST3 reports (Deliverables 3, 3A and 3B)
- Three ST4 reports (NZ, NL, SE)
- 2 eceee peer-reviewed papers
- [Summary presentation](#) of all collected findings and recommendations of Task 24

## 3. OBJECTIVES FOR THE NEXT SIX MONTHS

### Subtask 1

Finalise the 'Monster' and wiki with remaining case studies and analysis, run past AB.

### Subtask 2

Finalise country reports from Austria, Switzerland.

### Subtask 3

Collect feedback from ExCo/experts and finalise 3 reports.

### Subtask 4

Finalise country-specific feedback for AT, CH, NO, BE, IT (truncated).

### Subtask 5

Continue expert platform and dissemination efforts for Task 24 extension.

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

### Planned Experts meetings

Date	Place
February 2015	Wellington, NZ
March 2015	Capetown, SA
April 2015	Wellington, NZ
May, 2015	Toronto, CA
June, 2015	eceee, FR
June, 2015	Graz, AT
July, 2015	Stockholm, SE
August, 2015	San Diego, USA
September, 2015	Eindhoven, NL

### Planned seminars/conferences

Date	Place
March 2015	Capetown, SA
May, 2015	London, UK
June 2015	eceee summerstudy, FR

### Reports planned for the next six months

DSM University webinar; 2 more country-specific case study ST2 reports; Monster Wiki finalised; 5 more ST4 recommendations; Spotlight article; at least one blog for IEA DSM

## 4. OUTREACH

The Task is particularly good at outreach and dissemination and is incredibly well known, globally, as attested by the many experts on our network who know us or the Task from various international behaviour and energy conferences (such as BECC, BEHAVE, ECEEE, IEPPEC). We often get invited to chair sessions, give keynote addresses and be part of plenaries and panel discussions. Our social media reach is very wide - tweets by @DrSeaRotmann usually reach an audience of several 10000s. Our slideshare channel with all of our presentations has been viewed and downloaded over 10000 times. We just got asked to be part of international University lecture series in Brisbane and Belgium. Several respected academics want to co-author scientific publications with us, specifically on storytelling and evaluation, where we are seen to have broken real ground. The idea of the Behaviour Changers and the diagrams used to present the 'human aspect' of energy use (as seen in our Task 24

extension proposal) have been met with really strong support and very positive feedback. We continue to talk to, and visit countries not currently in the DSM network (eg Canada, South Africa and Australia) in order to engage them with our work (and join 'the family').

## 5. IDEAS FOR NEW WORK

Our Task 24 extension work programme is ready to go and has been financed (so far) by Sweden, Austria, New Zealand and the Netherlands. We hope to also attract the UK, US, Canada, South Africa, Switzerland and Norway to join the extension programme.

## 6. FINANCE

Budget is on track, although Austria's second payment and all of South Africa's are still outstanding. We had to assume, without further contact, that the South African participation would shift to Phase 2. We need to make a point, yet again, that small business owners such as both Duneworks and SEA Ltd seriously suffer from any delayed (or not

Income	Cost
Country participation: NL €40,000 (finished) SE €40,000 (finished) NZ €40,000 (finished) NO €40,000 (finished) CH €40,000 (finished) BE €40,000 (finished) IT €40,000 (finished) AT €20,000 <b>(20K outstanding)</b> SA all outstanding  <b>€300,000</b>	Person months Sea Rotmann 36pm Ruth Mourik 18pm  <b>€243,000</b>
<b>In-kind:</b> UKERC Meeting Place Oxford Workshop contribution €40,000  NZ Workshop contributions (x2) NZ\$3600 NZ\$5000  Energy Savers Dubai Workshop contribution Approx €1000  In-kind expertise from non-participating countries: Over 20 weeks expert time	Travel and web development, video, incidentals:  Sea Rotmann €62000 Ruth Mourik €15000  <b>€77,000</b>

## 7. ACTIVITY TIME SCHEDULE

Task 24 started its operation in January 2012, although its final work programme was not officially balloted by the ExCo until July 2012. The ExCo has agreed in Espoo Nov 2012, to take the official Task starting date as July 2012, which will mean it will finish in January 2015 as there are now 8+ countries participating (at no extra cost to participating countries). Due to delays from national experts (whose inputs into country reports and case studies was an imperative part of task sharing), we hope to have Phase I fully completed by the ExCo meeting in March 2015. A 3-year Task extension will turn theory into practice by more in-depth work with experts from participating countries. Particular emphasis will lie on evaluation methods of ongoing, long-term behaviour change outcomes which can be linked back to specific DSM interventions.

Subtasks	2012	2013	2014	2015
Subtask 0 - Admin				
Subtask I - Helicopter Overview				
Subtask II - Case Studies				
Subtask III - Evaluation Template				
Subtask IV - Recommendations				
Subtask V - Expert Platform				

## 8. MATTERS FOR THE EXCO

*Recommend the ExCo to approve the Final Phase I Task Status Update Report.*

Please note that we had serious issues getting a final contract and payment from South Africa. It is still thus unclear if SA will actually be part of Task 24, including in Phase II. Lack of engagement and serious resourcing limitations from some national experts have meant a lot of extra (unpaid) work for the OAs and time delays that were completely out of our hands.

## 9. PARTICIPATING COUNTRIES

Austria  
Belgium  
Italy  
Netherlands  
New Zealand  
Norway  
Sweden  
Switzerland  
UK (in kind only)