



IEA DSM-Programme Task Participation

Demand Side Management (www.ieadsm.org)
2009-01-30

Basic Requirements

All participants in the IEA DSM-Programme have to participate actively in at least one of the Tasks that have been jointly defined. They also have to contribute to the common fund, described below.

This list below gives a brief overview of the current and proposed work in the Tasks and states the total budget that has to be shared among the participants. Participation will further require that experts are provided to the Tasks and that these deliver an agreed amount of work, normally by presenting their own country's situation.

Common Fund

The DSM-Programme has a common fund to which all countries pay an equal sum annually. This fund is used for the Executive Secretary, the web, the information material and for assistance to the chair to handle administrative issues and provide the necessary reports to the IEA-secretariat.

Presently the sum paid is 8000 US Dollars per country and calendar year.

Overview

	Task	Status	Page
XVI	Competitive Energy Services (ESCO, Energy-Contracting)	A new phase begins mid 2009	3
XVII	Integration of Demand Side Management, Energy Efficiency, Distributed Generation and Renewable Energy Sources	Phase 1 is about to be completed. A second phase is in preparation to begin late 2009	4
XVIII	Demand Side Management and Climate Change	October 2008 - September 2010	5
XIX	Micro Demand Response and Energy Saving	January 2009- March 2010	6
XX	Branding of Energy Efficiency	January 2009- January 2011	7
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Task XVI: Competitive Energy Services

<http://www.ieadsm.org/ViewTask.aspx?ID=16&Task=16&Sort=0#anc1113>

Operating Agent: Jan W. Bleyl, Grazer Energieagentur, Austria Phone: +43 650 7992820, bleyl@grazer-ea.at

Co-operating agent: Mr. Pertti Koski, Motiva Finland

Duration: July 1 2009-June 2012 (3 years)

Total Budget: 210 000 Euro budgeted for 5 participants (42 000 Euro each)

Task sharing (experts time): 1-2 personmonths per year

Synopsis

Expert Platform, National Implementation activities, Development of Innovative Energy Services and International Dissemination

The work will contribute to the market development of Energy Contracting / Services by:

1. establishing an IEA DSM energy services expert platform to disseminate information and provide services (e.g., coaching and training) in the field of energy services,
2. designing, elaborating and testing innovative energy services and financing models to publish as a series of manuals,
3. developing and following up on country specific activities for implementing energy services in the market with a focus on selected market segments, such as public buildings and private service buildings, and
4. offering expertise and initiating joint projects and services with other international organisations.

PARTICIPANTS

Austria

Belgium

Finland

India

Japan

Netherlands

Task XVII - Integration of Demand Side Management, Energy Efficiency, Distributed Generation and Renewable Energy Sources (Phase 2)

<http://www.ieadsm.org/ViewTask.aspx?ID=16&Task=17&Sort=0>

Operating Agent: Seppo Kärkkäinen, VTT, Finland

Duration: 2009-2011

Total Budget: 200 000 Euro for 5-8 participants

Task sharing (experts time): 1 personmonth per year

Synopsis (Phase 1)

Problems caused by the intermittent nature can be solved with energy storages, flexibility in electricity consumption (demand response DR). In this sense distributed generation (DG), distributed energy storages (DS) and demand response (DR) can be seen as an integrated distributed energy resource (DER). This task investigates how to motivate smaller customers to modify demand and provide mechanisms for their participation in the Demand Side of competitive energy markets.

As countries implement energy policies that promote energy efficiency, distributed generation and renewable energy resources, the share of distributed energy increases, particularly the intermittent type such as wind, solar, small hydro and combined heat and power (small and micro-CHP). Due to the fact that intermittent types of electricity generation are difficult to predict, electrical networks—both local and transmission—are turning to integrated distributed energy resource. By combining distributed generation with energy storage and demand response, countries can decrease problems caused by distributed generation and increase the value of intermittent energy in the market.

The main objective of the proposed Task is to study how to achieve the optimal integration of distributed generation, energy storages and flexible demand, and thus increase the value of distributed generation and demand response and decrease problems caused by intermittent distributed generation (mainly based on RES) in the physical electricity systems and at the electricity market. The Task deals with distributed energy resources both at local (distribution network and customer) level and at transmission system level where large wind farms are connected.

PARTICIPANTS IN PHASE 1

Austria

Finland

Italy

Korea

The Netherlands

Spain

United States

Task XVIII - Demand Side Management and Climate Change

<http://www.ieadsm.org/ViewTask.aspx?ID=16&Task=18&Sort=0>

Operating Agent: Dr David Crossley, Australia

Duration: October 2008 - September 2010

Total Budget: 246 300 Euro budgeted for 4 participants (62 000 Euro each)

Task sharing (experts time): 2 person-months per participant

Synopsis

On a global basis, electricity production is estimated to contribute about 25% of the human-induced increase in greenhouse gas (GHG) emissions. Creating sustainable energy systems with minimum levels of GHG emissions requires the deployment of both renewable energy and other low emission technologies on the supply side and measures that increase energy efficiency on the demand side.

The fourth IPCC Working Group III Report "Mitigation of Climate Change" identified demand side management programs as a mechanism that may be effective in reducing emissions.

Task XVIII is investigating the potential contribution to mitigating GHG emissions that can be made by demand side management measures. Task XVIII is also examining the extent to which GHG emissions mitigation measures can provide benefits to electricity systems.

Tasks and Reports:

PARTICIPANTS

Australia,

France,

India

Spain

Task XIX Micro Demand Response and Energy Saving

<http://www.ieadsm.org/ViewTask.aspx?ID=16&Task=19&Sort=0#ancPublications3>

Operating Agent: Barry Watson, EA Technology, United Kingdom

Duration: 15 months beginning January 2009

Total Budget: 338 000 Euro budgeted for 8 participants (42 000 Euro each)¹

Task sharing (experts time): 8 weeks per participant

Synopsis

The domestic and SME sectors consume up to 50% of electricity in developed countries and are attractive for the implementation of energy saving measures based on providing customers with information and also automatic/remote switching of demand.

The results are delivered from influencing millions of micro loads to save energy in the customer premises and a fast response to price and control signals from the energy markets or system services markets.

To approach consumers to integrate their energy use in a complex net of energy optimisation is a new and expensive task. Any approach should simultaneously attack all the opportunities for customers to save money and volunteer environmentally friendly behaviour.

Greater participation of the demand side is a very important mechanism for addressing the issues of improving overall system balance and increasing the utilisation of wind generation capacity. If end-use demand can be reduced and profile shape changed for smaller and SME customers in response to financial and other stimuli, it can be used to reduce peak generation capacity and spinning reserve, enable demand participation in balancing and reserve markets and the full potential for wind generation to be exploited, particularly in off-peak times. It can also save energy and CO₂ as well as money for customers.

With the growth of embedded generation, there are also strong financial motivators for local areas to become “self-balancing” in terms of local demand and local generation.

Tasks and Reports:

- Subtask 1 (DR and Energy Saving Products)
- Subtask 2 (End Use Demand Changes)
- Subtask 3 (DR and Energy Saving Delivery Mechanisms)
- Subtask 4 (SME Customer Costs and Benefits)
- Subtask 5 (Residential Customer Costs and Benefits)
- Subtask 6 (Business Case Estimation)

PARTICIPANTS

Finland
France
Greece
India
Spain
UK

¹ If necessary the budget will be revised to fit the number of actual participants

Task XX: Branding of Energy Efficiency

<http://www.leadsm.org/ViewTask.aspx?ID=16&Task=20&Sort=0>

Operating Agent: Balawant Joshi, India

Duration: Jan 15, 2009 – Jan 14, 2011

Total Budget: 330 000 Euro to be divided between 5 participants

Task sharing (experts time): 60 person days over two year period

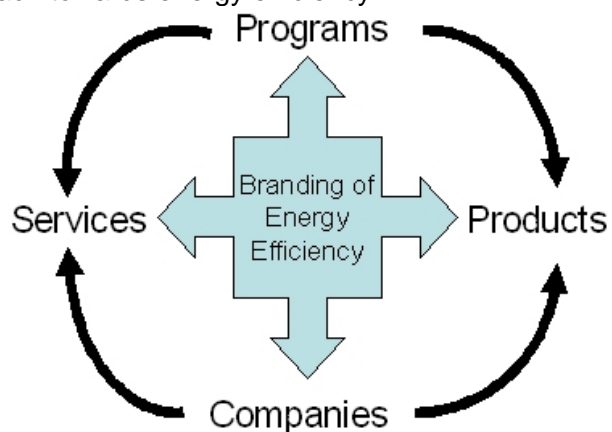
Synopsis

This Task will '**Develop cogent and comprehensive framework for promotion of branding of energy efficiency in electricity markets at different level of maturity**', which could be used by the government and industry to develop the market for energy efficient products. Specifically, need for research in the following areas:

1. Capability of Energy Efficiency suppliers in the market
2. Knowledge and attitude of private households in developing electricity markets
3. Best practices in definition of suppliers of energy efficiency products and services
4. Potential for energy efficiency products and services in other energy consuming sectors such as agriculture, industrial and commercial, etc.
5. Potential for programmatic approach towards energy efficiency
6. Barriers to branding of energy efficiency.

Analysis of these issues is likely to throw light on the rather poor state of energy efficiency branding, which holds significant promise of transforming the market, which has not yet been penetrated by the traditional approach of sales and marketing. This could also lead to explosion of market which has not yet been visualized by the conventional products and services. While

'Branding' may not be the only answer to the problem of energy efficiency, it certainly is a key to development of the energy efficiency market.



Tasks and Reports:

Sub-task I: Energy Efficiency Offerings Analysis

Sub-task II: Energy Efficiency Consumer Analysis

Sub-task III: Assessment of relationship between EE product pricing and maturity of electricity market

Sub-task IV: Review of branding strategies in similar areas

Sub-task V: Identification of Best Practices in Branding of EE

PARTICIPANTS

India

Spain

US

Task XXI: Standardisation of Energy Savings Calculations

<http://www.ieadsm.org/ViewTask.aspx?ID=16&Task=21&Sort=0>

Operating Agent: Harry Vreuls, Senter Novem, The Netherlands

Duration: February 2009- April 2011

Total Budget: 335 000 Euro budgeted for 8 participants (42 000 Euro each)

Task sharing (experts time): 12 weeks per participant

Synopsis

What are the most important elements for the quantitative evaluation of the energy savings impacts of policies and measures and can these be organised in a broader agreement on the basic concepts, rules and system borders in IEA member states?

The European Commission wants to harmonise bottom-up monitoring and (in a later phase) evaluation work within the 27 Member States for reporting progress in energy efficiency improvements. The International Partnership for Energy Efficiency Cooperation (IPEEC) stimulates improvements in among others methodologies of energy measurement, auditing and verification procedures and certification protocols.

With this Task the IEA DSM Agreements wants to provide a framework of the basic concepts, rules and system borders to stimulate the development of standards on energy savings calculations and related greenhouse gas emissions one hand and ensure global comparability of these standards.

Tasks and Reports:

- Subtask 1: Existing energy savings calculation (ESC) standards and standards under development, and use of most relevant reports for ESC
- Subtask 2: Basic concept, rules and systems for ESC standards
- Subtask 3: Potential for use and continue development and maintenance of ESC standards
- Subtask 4: Communication and information

PARTICIPANTS

Austria

France

India

Schneider Electric

Spain,

United States

Canada (under discussion)

Suggested new task: Utility Carbon Offset Toolkit

Operating Agent:

Duration:

Total Budget:

Task sharing (experts time):

TaskXIII, Demand Response Resources. DSM Task XIII identified and developed a DR Toolkit, which includes the Demand Response Valuation Methodology, the DR Market Potential Calculator and the DR Guidebook (a methodical process that can help assess and launch DR products), that helps educate those interested in demand response products.

The IEA DSM Programme is considering plans to do similar work, but this time for carbon offset markets. This suggested DSM Task will focus on creating a Utility Carbon Offset Toolkit for utilities to use as they develop carbon offset strategies.

Proposed Objectives and Structure

The Utility Carbon Offset Toolkit work will focus on identifying and developing business models, retail-level product offerings, and infrastructure requirements needed to manage the portfolios. The proposed Task objectives are:

- Identify and classify business models used to sell carbon offset products. Identify and classify ways the electric industry uses carbon offset products as part of their overall DSM strategy.
- Identify consumer motivations for purchasing retail carbon offset products.
- Develop a list of retail carbon offset product best practices.

The proposed Task structure:

- Subtask A: General review of current carbon rules in each country
- Subtask B: Identify & classify retail carbon offset products
- Subtask C: Interview utilities to identify how they are using carbon offset products to support their business and regulatory requirements
- Subtask D: Methods for pricing retail carbon offset products
- Subtask E: Interview consumers to understand motivations for purchasing carbon offset products
- Subtask F: Develop a list of best practices, with case studies, related to the marketing and selling of retail carbon offset products

Task Definition Meeting

Paris, France **March 5-6, 2009**

The Country Experts attending will help to shape the final structure of the Task.

The IEA DSM Programme is a great forum to help evaluate, assess, and educate the energy industry by creating tools that utilities can use.

We hope to see you in Paris. If interested in participating contact Pete Scarpelli, pete.scarpelli@us.schneider-electric.com.

Task Participation 2008-12-31

Country	TASKS								
	In Force						Initiated	Pro- posed	
	XVI		XVII		XVIII	XIX	XX	XXI	
	Competitive Energy Services	Extension	Integration of DSM, Distributed generation, etc...	Extension	DSM and Climate Chngae	Micro Demand Response	Braning of Energy Efficiency	Energy Standards	Utility Carbon Toolkit
Australia,					X				
Austria,	X	X	X					X	
Belgium	X	?							
Canada,								?	
Denmark,		?					?	?	
Finland,	X	?	X			?	X		
France,					X	X	X	X	
Greece,						X			
India	X	X			X	X	X		
Italy,			X						
Japan Facility Solutions	X								
Korea,			X				?	?	
Netherlands,	X	?	X			?		X	
New Zealand									
Norway,								?	
Schneider Electric		?				?	X	?	
South Africa								?	
Spain,		?	X		X	X	X	X	
Sweden,		?					?	X	
United Kingdom,						X	?		
United States, NRDC			X				X	?	
							?		
NUMBER	6	3-10	7		4	5-8	6-11	5-12	
OPERATING AGENT (OA)	Jan Bleyle		Seppo Kärkkäinen		David Crossley	Berry Watson	Balawant Joshi	Harry Vreuls	Pete Scarpelli

Task		Yearly financial contribution per participant (Euro) Under assumptions mentioned above
XVI	Competitive Energy Services (ESCO, Energy-Contracting)	14 000
XVII	Integration of Demand Side Management, Energy Efficiency, Distributed Generation and Renewable Energy Sources	Not decided
XVIII	Demand Side Management and Climate Change	31 000
XIX	Micro Demand Response and Energy Saving	34 000
XX	Branding of Energy Efficiency	33 000
XXI	Standardisation of Energy Savings Calculations	21 000
NEW	Utility Carbon Offset Toolkit	Not decided