

The Demand Side Management Implementing Agreement: Strategies, results and highlights

Rob Kool Chair Implementing Agreement Rob.Kool@RVO.NL







This presentation

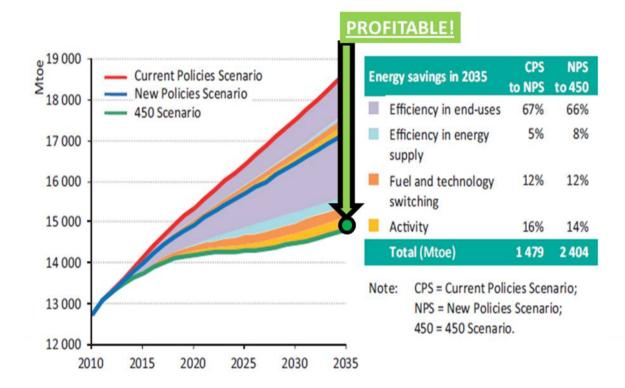
- A quick overview of IA DSM
- The strategy
- Present collaboration and tasks
- About our performance



- Established in early nineties (1993)
- 14 Members
 - Austria, Belgium, Finland, India, Italy, Netherlands, Norway, New Zealand, Korea, Spain, Sweden, Switzerland, United Kingdom, USA
 - European Copper Alliance, R.A.P.
 - Interest from China, South Africa, (Thailand), Nova Scotia & Middle East
- 24 Tasks (18 finished, 1 not realised, 5 current)



Energy Efficiency is Core Business

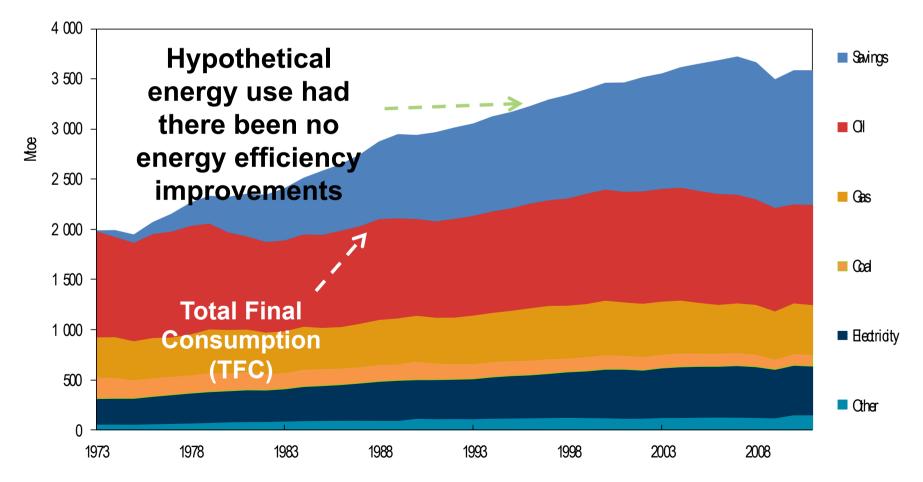


WEO 2012





Output - Energy efficiency: the 'first fuel' savings larger than the contribution of any other fuel to TFC in 2012



^{*}IEA-11: Australia, Denmark, Finland, France, Germany, Italy, Japan, Netherlands, Sweden, United Kingdom, United States

And this core business has to be:

- Visible (The energy performance of each energy end-use and service needs to be made visible to the market.)
- **Priority** (*The profile and importance of energy efficiency needs to be raised*.)
- Affordability (Create and support business models, financing vehicles and incentives to ensure investors in energy efficiency reap an appropriate share of the rewards)
- Normal (Energy efficiency needs to be normalized if it is to endure. Resulting benefits from learning and economies of scale help make the most energy-efficient option the normal solution.)
- **Real** (Monitoring, verification and enforcement activities are needed to verify claimed energy efficiency.)
- Realisable (Achieving the supply and widespread adoption of energy efficient goods and services depends on an adequate body of skilled practitioners in government and industry.)



The DSM Strategic Plan – 2014 - 2019

- Brand new
- Based on input members
- Positive feedback from advising committee
- Decision in December



Vison of IEA DSM

• Demand side activities should be active elements and the first choice in all energy policy decisions designed to create more reliable and more sustainable energy systems

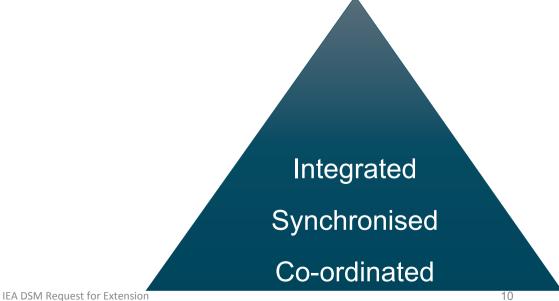




Integrated Demand Side Management

 Maximum impact will be realised if distributed generation, demand response and energy efficiency are not only synchronised, but even integrated in a coherent approach





Within this vision the main issues of the DSM Programme are:

- Security of supply
- Reduction of green-house gas emissions
- Cost of supply



Research areas

Distributed Energy Resources in (smart) cities

• With a higher degree of decentralisation more of the crucial developments in the building of systems will take place in municipalities, cities, regions. (follow-up of the IEA DSM Task 9).

Market Design to enable DER-systems (IDSM)

 Institutional settings are important to improve and make use of the flexibility of systems and the integration of resources depends on how responsibilities and incentives need to be designed.

Market design to incentivise industry compliance

 Both utility and industrial customers will be more active in dissemination of DER systems. This deals with both business models and rules for trading of obligations.

Utilities' best practices to develop DER business

 Utilities develop new business activities that may be very different and would be worth to analyse and compare



Running Tasks and Runing of Tasks: Present work

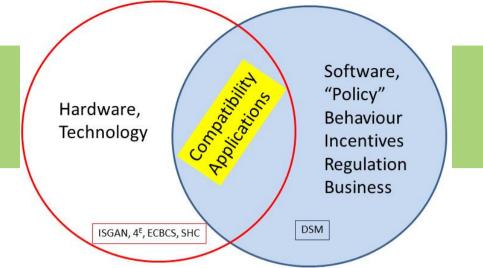
- Competitieve Energy Services (Energy Contracting, ESCo Services)
- Integration of Demand Side Management, Energy Efficiency, Distributed Generation and Renewable Energy Sources
- The Role of Customers in Delivering Effective Smart Grids
- Closing the Loop Behavior Change in DSM: From Theory to Policies and Practice
- <u>Business Models for a more effective uptake of DSM</u> <u>energy services</u>



Creating tasks

- Members or OA's are invited to scope an idea (2 pager) within the boundaries of the research area's.
- Two pagers can be:
 - On specific invitation of the EXCO, based on gaps in the research portfolio
 - Idea's form EXCO members or OA's based on the results of running tasks.
- Potential OA's are invited to write a proposal based on an agreed
 2 pager proposal





• 4E:

Collaboration

- The 4E Implementing Agreement will specifically focus on electrical end-use equipment. Industrial and commercial equipment as well as equipment mainly used in households is included.
- ISGAN:
 - ISGAN creates a mechanism for multilateral government-to-government collaboration to advance the development and deployment of smarter electric grid technologies, practices, and systems. It aims to improve the understanding of smart grid technologies, practices, and systems and to promote adoption of related enabling government policies.
- ECB:
 - Sharing the ESCO options and explore the further use within the build environment.
- IEA secretariat. (WEO / Coordination Groups / Workshops)
- EUWP: We participate in "The matrix"



Outreach

Results have to:

- Contribute to Technology Evaluation/Progress
- Contribute to Technology Deployment/Market Facilitation
- Contribute to Organisational and Behaviour Change
- Have Policy Relevance



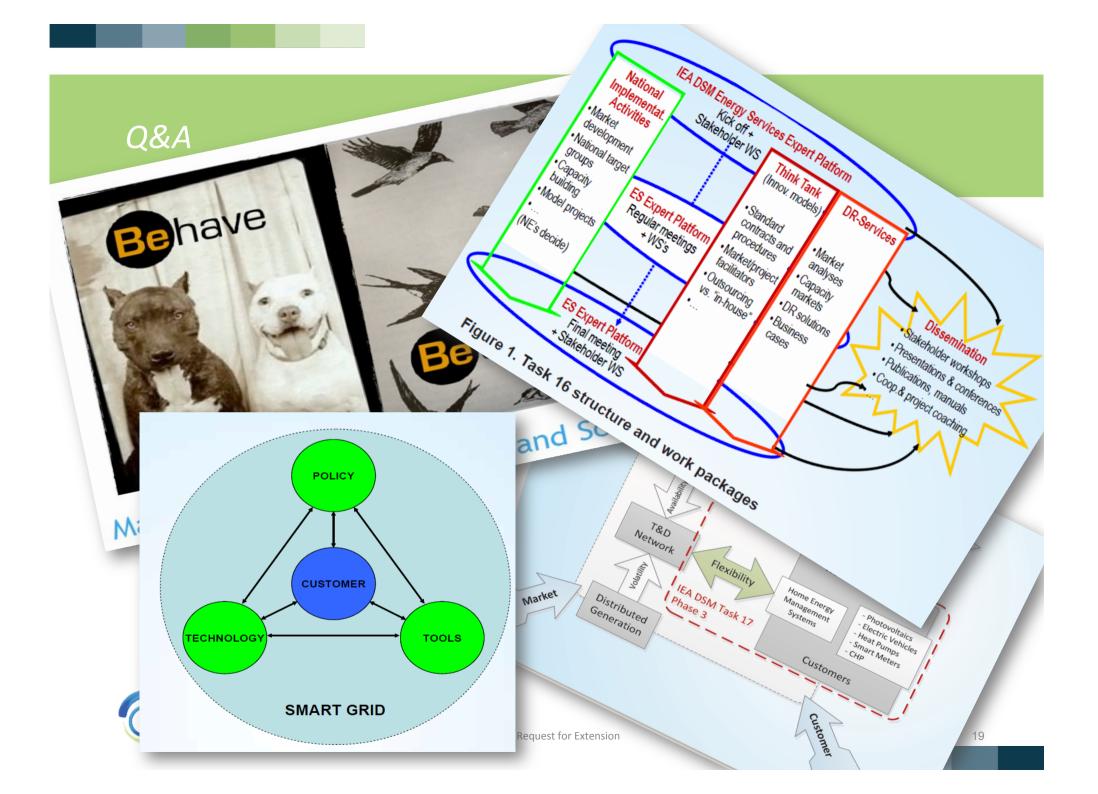
About our performance

- Financially sound (like last year)
- Board:
 - Rob Kool Chair (Netherlands)
 - Andreas Enge Vice Chair (Norway)
 - Paul Atkins Vice Chair (New Zealand)
 - Sea Rotmann Chair Visibility Committee
- Advisor: Hans Nilsson (previous chair)
- Executive Secretary Anne Bengston (Sweden)
- Publications (Newsletter etc.) Pam Murphy (USA)



- We were among the first to own a website...
- So last year it was outdated, and it still is.
- Nevertheless it contains a lot of valuable information, attracts a lot of visitors, which download terabytes of data.
- And by the end of the year website and house style will be renewed (complete redesign), contract is signed.

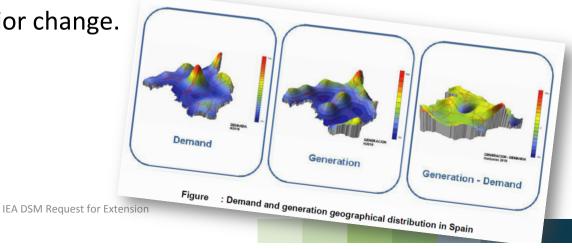




Results this term

Main Publications:

- Best Practices in Designing and Implementing Energy Efficiency Obligation Schemes Research Report (With RAP)
- Integration of Demand Side Management, Distributed Generation, Renewable Energy Sources and Energy Storages Final report
- Comprehensive Refurbishment of Buildings through Energy Performance Contracting
- Interactions between Demand Side Management and Climate Change
- Report on Energy savings calculation final version
- The Monster: Book on behavior change.





Products (Short list)

Products as result of the work in the several tasks:

- publications of results (analysis, overviews and conclusions)
- articles for professional journals, including peer-reviewed academic literature.
- workshops and presentations at workshops and conferences
- forums for dissemination and/or discussion with possible users, customers, decision-makers, etc.
- growing pool of individuals and organisations in each country that develop new expertise in DSM issues and solutions
- training seminars and courses
- expert platforms
- social media presence



