









# IEA – Demand Side Management an introduction

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# This presentation



-  Why energy?
-  A family of logo's
-  Directions of solutions
-  The way we organize IEA-DSM
-  How can you contribute?
-  More info

# Why energy?



Ⓜ There is more than enough energy to satisfy our needs...

Ⓜ If we can get the right quantity at the right place at the right time...

Ⓜ If we don't spill huge quantities for production and transport

Ⓜ If we take care on how efficient we use it


Ⓜ If we don't poison the planet during the process

\* ....

# A family of logo's




HOME
RESEARCH PROJECTS
PUBLICATIONS
STAFF
HIGHLIGHTS
DATA SHARING
EDUCATION RESOURCES



## ATMOSPHER

Air Pollution and Atmospheric Processes Group

### Global temperature could rise up to 6 degrees, warns OECD



By the end of this century, global temperatures could rise between 3 and 6 degrees centigrade if current trends continue, warns the OECD (Organization for Economic Cooperation and Development) on Thursday. But there is still time for this scenario with serious consequences to be avoided at a cost of limited actions.

This is the main content of a report on climate change released by the OECD on the eve of the Durban conference, which starts Monday (28) in Durban, South Africa. The ICRC calls on governments to engage around an international agreement.

"The economic costs and environmental consequences of the absence of political action on climate change are significant," warned the secretary, Angel Gurría, during the presentation of the study.

Specifically, measures to modify, especially the energy landscape is expected for 2050 and reducing greenhouse emissions by 70% would cost 5.5% of GDP (Gross Domestic Product) - a number that the authors of the report relativized in news conference to emphasize that mean that the world economic growth over the next four decades would be 3.3% per year instead of 3.5%, a cut of two-tenths.

The report highlighted that not changing current policies would lead to environmental damage that would affect the economy much more. The Stern report of 2006 had anticipated permanent losses of per capita consumption of over 14%.

The OECD warned that without new policies to contain emissions of greenhouse gases, fossil fuels will follow current while maintaining their relative weight, 85% of the total, which would lead to a volume of atmospheric concentrations of 685 parts of carbon dioxide (CO2) or equivalent per million, far from the 450 that scientists believe that would limit global warming to two degrees Celsius.

For the body, an important point is to establish "a significant price" of CO2 emissions to induce technological change but also setting targets for emissions reductions, "clear, credible and more restrictive" with which "all major emitters, sectors and countries" need to compromise.

More info: Folha.com - Ambiente

## Current membership

- |                         |                  |                          |                         |
|-------------------------|------------------|--------------------------|-------------------------|
| » <b>Australia</b>      | » <b>France</b>  | » <b>Korea</b>           | » <b>Slovenia</b>       |
| » <b>Austria</b>        | » <b>Germany</b> | » <b>Luxembourg</b>      | » <b>Spain</b>          |
| » <b>Belgium</b>        | » <b>Greece</b>  | » <b>Mexico</b>          | » <b>Sweden</b>         |
| » <b>Canada</b>         | » <b>Hungary</b> | » <b>Netherlands</b>     | » <b>Switzerland</b>    |
| » <b>Chile</b>          | » <b>Iceland</b> | » <b>New Zealand</b>     | » <b>Turkey</b>         |
| » <b>Czech Republic</b> | » <b>Ireland</b> | » <b>Norway</b>          | » <b>United Kingdom</b> |
| » <b>Denmark</b>        | » <b>Israel</b>  | » <b>Poland</b>          | » <b>United States</b>  |
| » <b>Estonia</b>        | » <b>Italy</b>   | » <b>Portugal</b>        |                         |
| » <b>Finland</b>        | » <b>Japan</b>   | » <b>Slovak Republic</b> |                         |



International  
Energy Agency

- ▶ Energy Security
- ▶ Environmental Protection
- ▶ Economic Growth
- ▶ Engagement Worldwide









⦿ [www.iea.org](http://www.iea.org)

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# The basic aims of the IEA are



-  To maintain and improve systems for coping with oil supply disruptions;
-  To promote rational energy policies in a global context through co-operative relations with non-member countries, industry and international organizations;
-  To operate a permanent information system on the international oil market;
-  To improve the world's energy supply and demand structure by developing
-  alternative energy sources and increasing the efficiency of energy use;
-  To assist in the integration of environmental and energy policies.

# A family of logo's



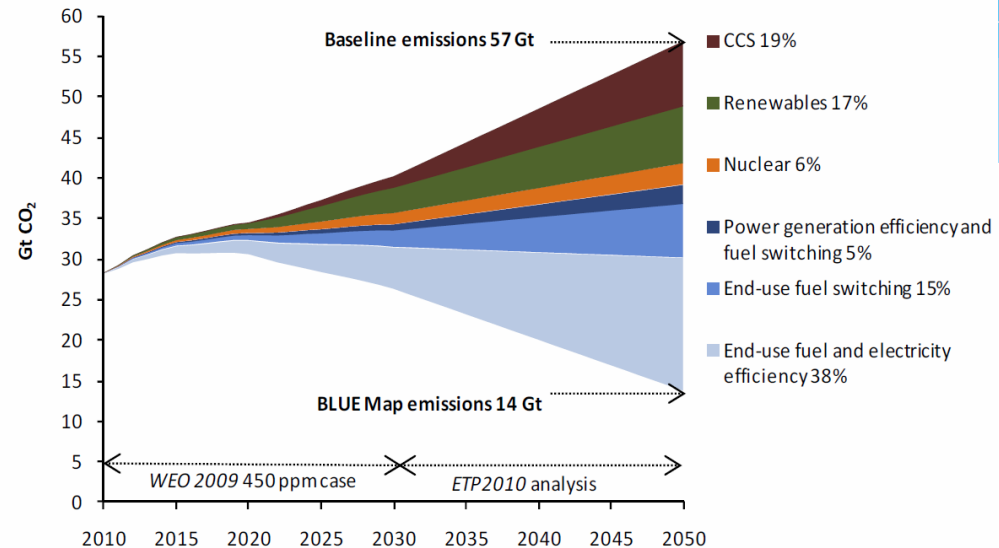
International Energy Agency



# Directions of solutions



Figure 4. Key technologies for reducing CO<sub>2</sub> emissions under the BLUE Map scenario, 2010



## Breakthrough technology

- ☒ Fusion
- ☒ Next generation nuclear
- ☒ Carbon Capture & Storage
- ☒ .....

## Improve technology

- ☒ Renewables in general
- ☒ Off shore wind
- ☒ Concentrated solar power
- ☒ Supercritical Coal-Fired Power Plants
- ☒ .....

## Drastic energy efficiency improvement

- ☒ Equipment
- ☒ Appliances
- ☒ Transport
- ☒ .....

## Energy Efficiency

Build Absolutely Nothing Anywhere Near Anyone




Not in my back yard



# Vision & Mission



 Programme Vision: In order to create more reliable and more sustainable energy systems and markets, demand side measures should be the first considered and actively incorporated into energy policies and business strategies.

 Programme Mission: To deliver to our stakeholders useful information and effective guidance for crafting and implementing DSM policies and measures, as well as technologies and applications that facilitate energy system operations or needed market transformations.

 The Programme's work is organised into two clusters:

 • The load shape cluster, and

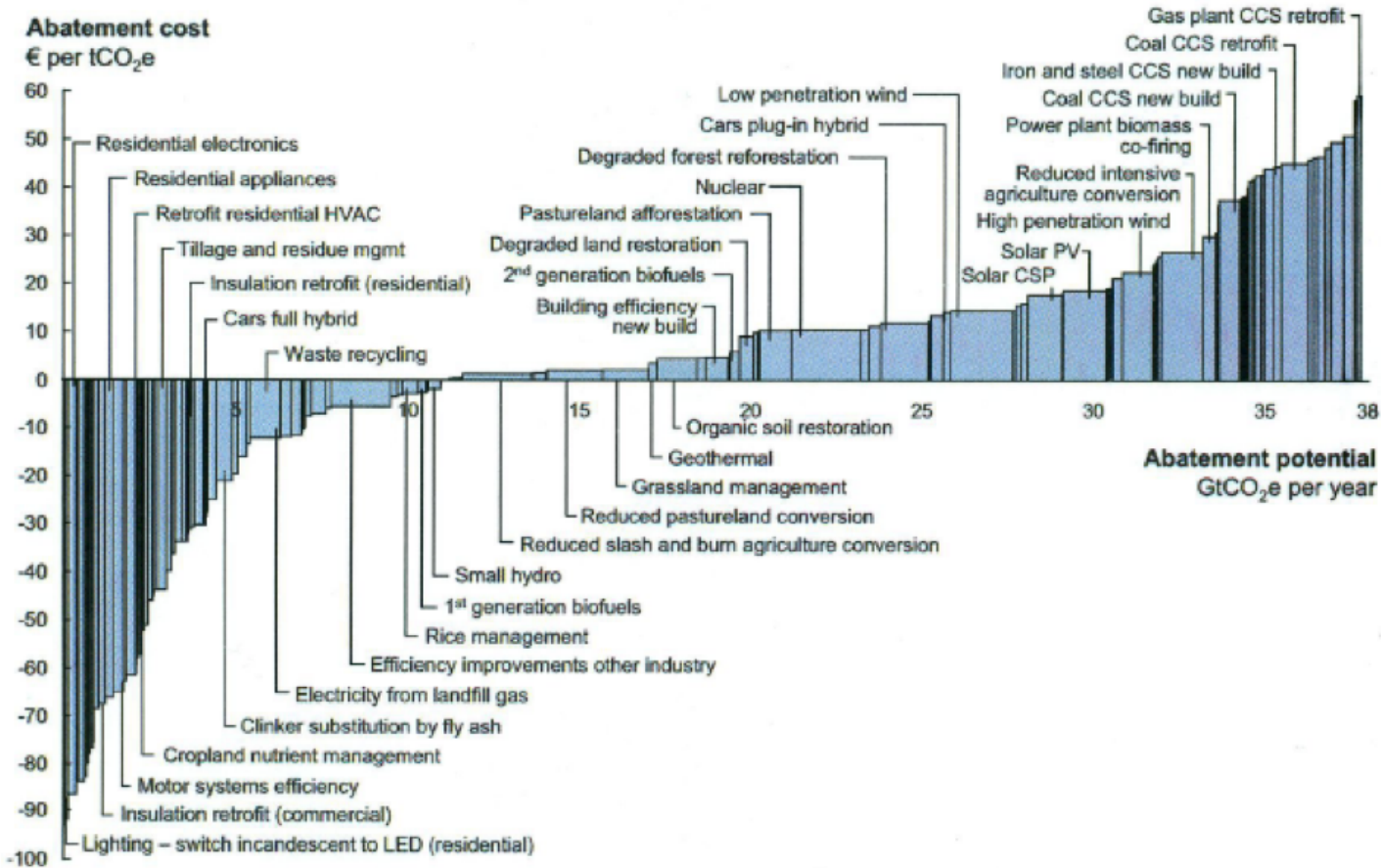
 • The load level cluster.

# Directions of solutions



Exhibit 1

## Global GHG abatement cost curve beyond business-as-usual – 2030



Note: The curve presents an estimate of the maximum potential of all technical GHG abatement measures below €60 per tCO<sub>2</sub>e if each lever was pursued aggressively. It is not a forecast of what role different abatement measures and technologies will play.  
Source: Global GHG Abatement Cost Curve v2.0

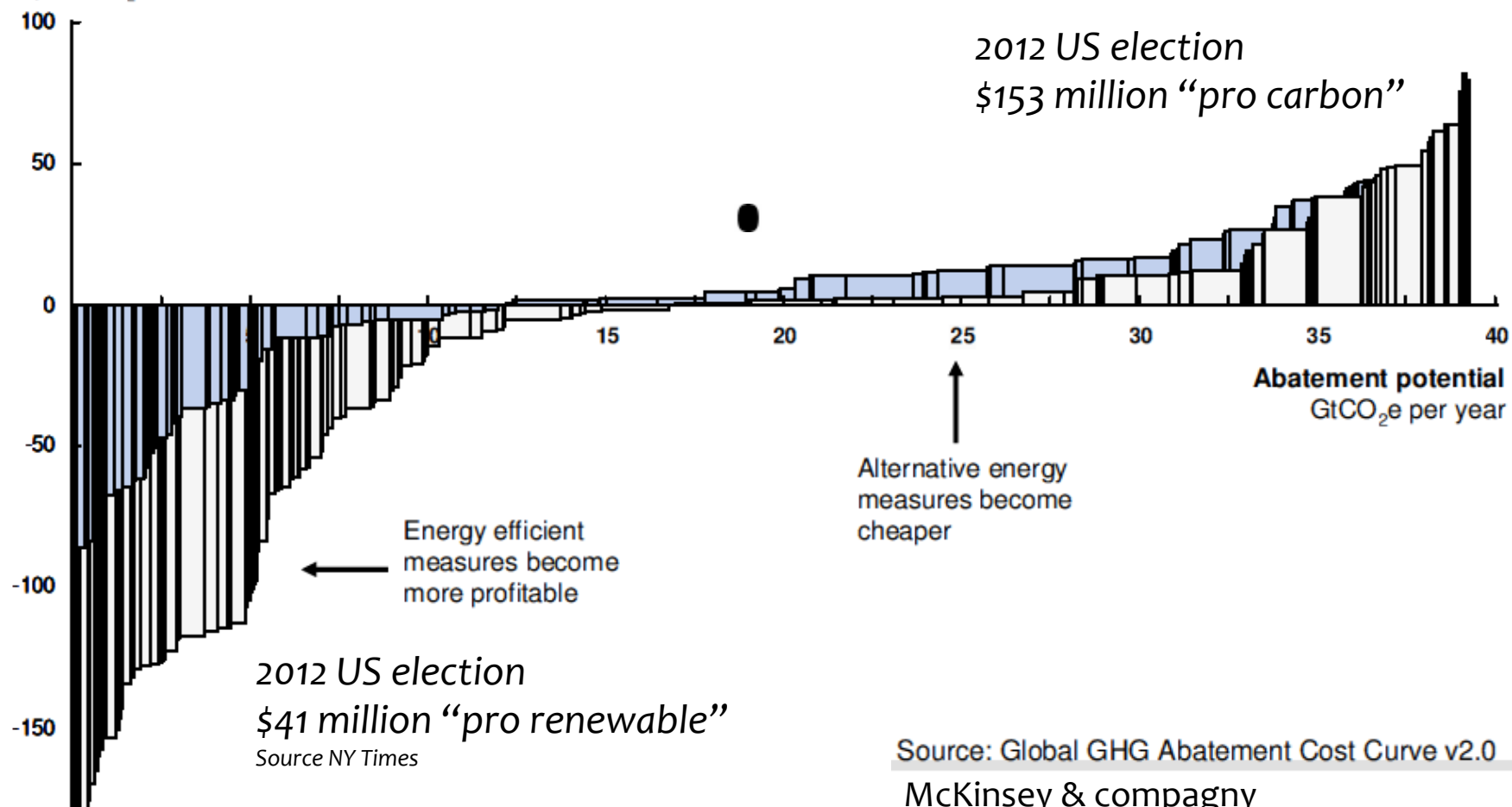
## Effect of high energy prices (oil price at \$120 a barrel)

Abatement cost

€ per tCO<sub>2</sub>e

BAU energy price – oil price at \$60 per barrel

High energy price – oil price at \$120 per barrel



# Directions of solutions



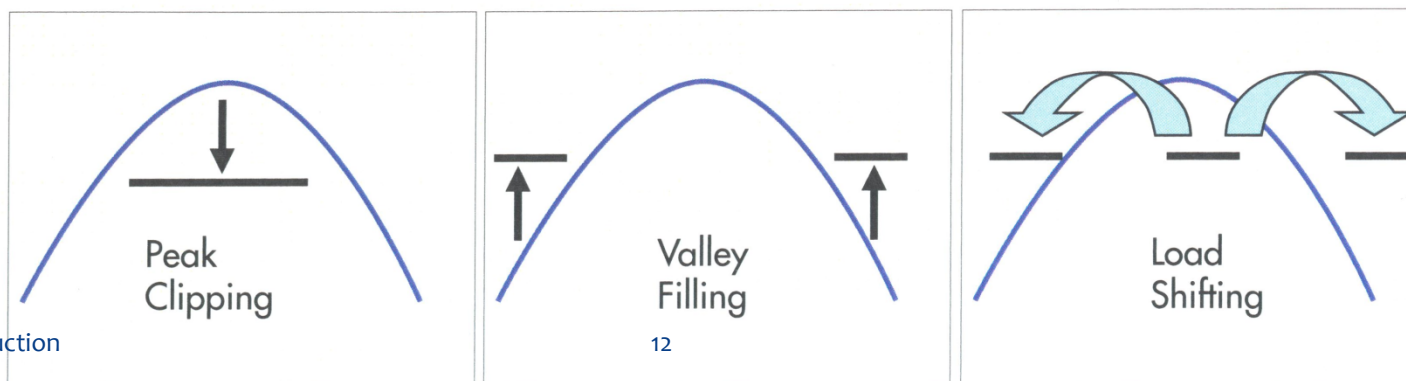
## Demand Side Management

 load management,

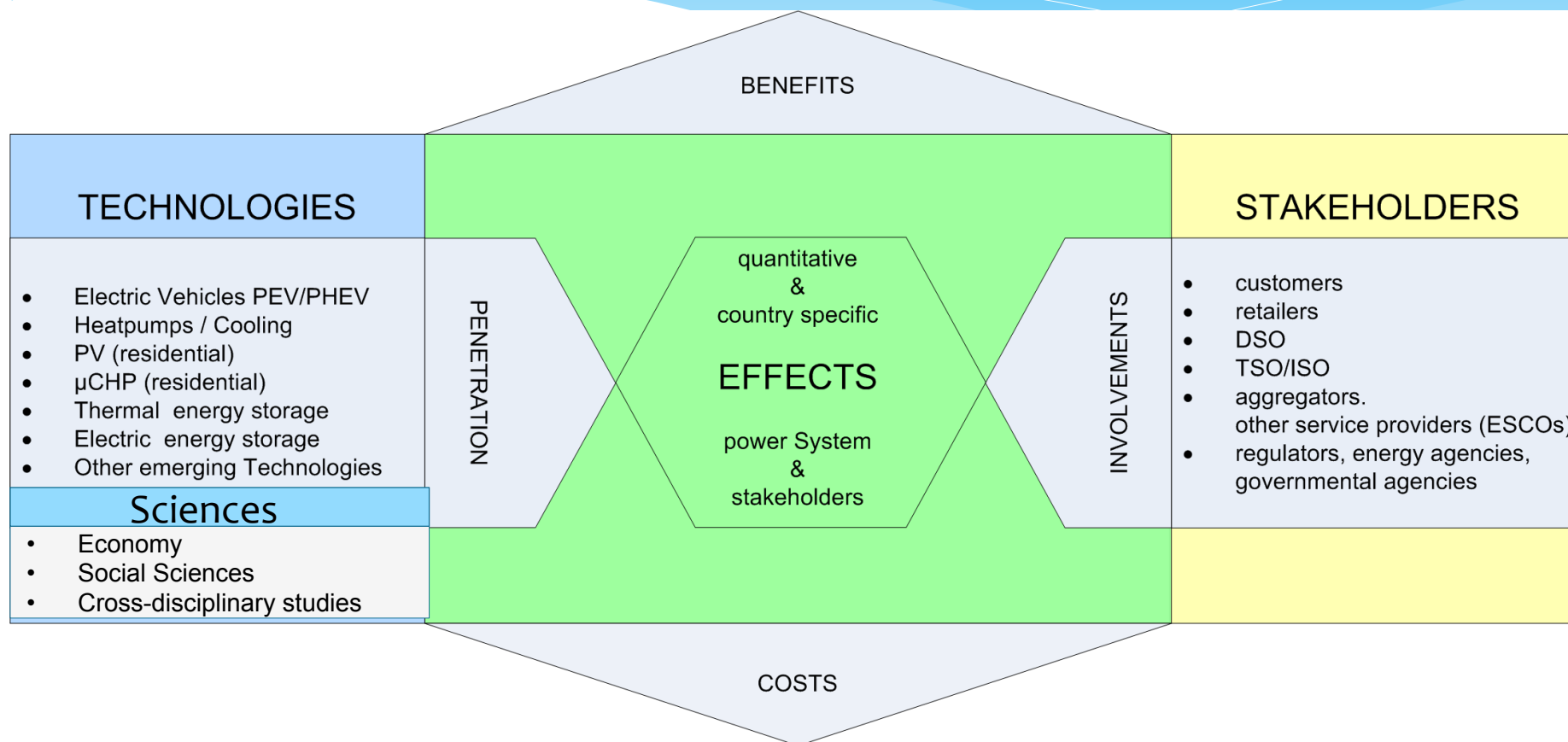
 energy efficiency,

 strategic conservation and related activities.

**Figure 1:** Load Shape changes. (Adapted from Clark Gellings, speech made 1982)<sup>5</sup>










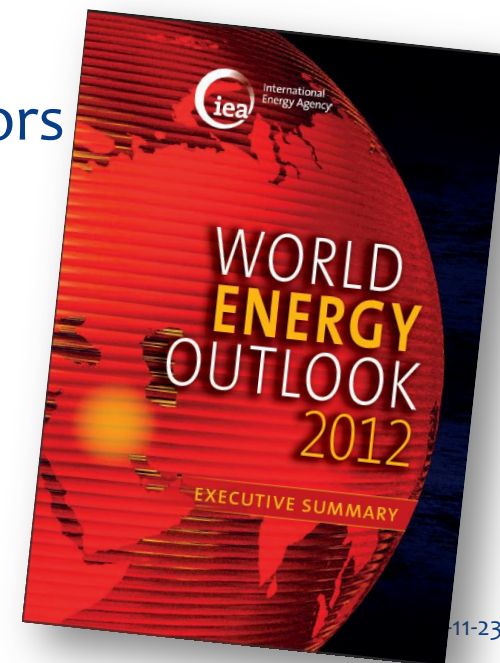
# Load Management: the model to work in IEA-DSM



# The way we organize IEA-DSM







-  Five year workplan
-  In collaboration with other implementing agreements and IEA secretariat.
-  Tasks with interested members and sponsors
-  Operating agent per task
-  Bi-annual Executive Committee
-  Lots and lots of phone calls
-  Facebook, linked in etc.



# How can you contribute?



-  Contact us, or your national ExCo member
  -  By social media
  -  By our website
  -  And in the upcoming presentations.

# More info

 [WWW.IEADSM.ORG](http://www.ieadsms.org)



The screenshot shows the homepage of the IEA Demand-Side Management Programme. The page features a navigation menu with links for Home, About Us, Participation, Tasks & Projects, Publications, Workshops, Member Login, New Visitor Registration, Links, Awards, and Contact Us. The main content area includes a welcome message, a description of the programme, and a poll. There are also sections for 'Join us', 'Latest News', 'Latest Reports', and 'Tasks'. The IEA DSM logo is visible in the top left corner of the page.

**Welcome to the IEA Demand Side Management Programme**

The IEA Demand-Side Management Programme is an international collaboration of 20 countries working together to develop and promote opportunities for demand-side management (DSM).

DSM offers solutions to problems such as load management, energy efficiency, strategic conservation and related activities.

The work of the programme is organized through a series of Tasks and reported in a number of publications. It is managed by an Executive Committee (ExCo). Visit the News page for the latest information on our activities.

**Poll**

How often do you visit this site?

- Every day
- Every week
- Every fortnight
- Every month

Vote!

**Join us**

If you'd like to take an active part in the activities of IEA-DSM, [click here to find out more](#).

If you'd like to download our publications and sign up for occasional news updates, [Please register here](#).

**Connect with us**

Please follow us [www.twitter.com/IEADSM](http://www.twitter.com/IEADSM)

EA DSM Spotlight Newsletter - Issue 44 - the Regulatory Assistance Project (RAP) joins the IEA DSM Programme: <http://it.co/nMluYvU> on the 30<sup>th</sup> Mar 2012 via LinkedIn.

Join our group [www.facebook.com](http://www.facebook.com)

Why not become our friend on Facebook? Join in with discussions with other members from around the world and keep up to date with news from other countries.

**Latest News**

14/02/2012  
**Behaviour Change & Energy News**  
Sea Rotmann, Task XXIV: Closing the loop - Behaviour Change in DSM - from theory to policies and practice

20/03/2012  
**IEA DSM Spotlight Newsletter - Issue 44 - March 2012**  
IEA DSM Spotlight Newsletter - Issue 44 - March 2012  
[Read more here](#)

**Latest Reports**

Task XVI Final Report  
This report is the Task XVI Final Task Report  
Click [HERE](#) to download the report  
1/07/2010

Annual Report 2011  
This report is the eighteenth Annual Report of the IEA Implementing Agreement on Demand Side Management Technologies and Programmes, summarising the activities of the eighteenth year.  
Click [HERE](#) to download the report  
Publ. 26/1/2011

**Tasks**

[More](#)



# Q&A

