IEA – Demand Side Management an introduction

Rob Kool - Chair

This presentation

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

A family of logo's

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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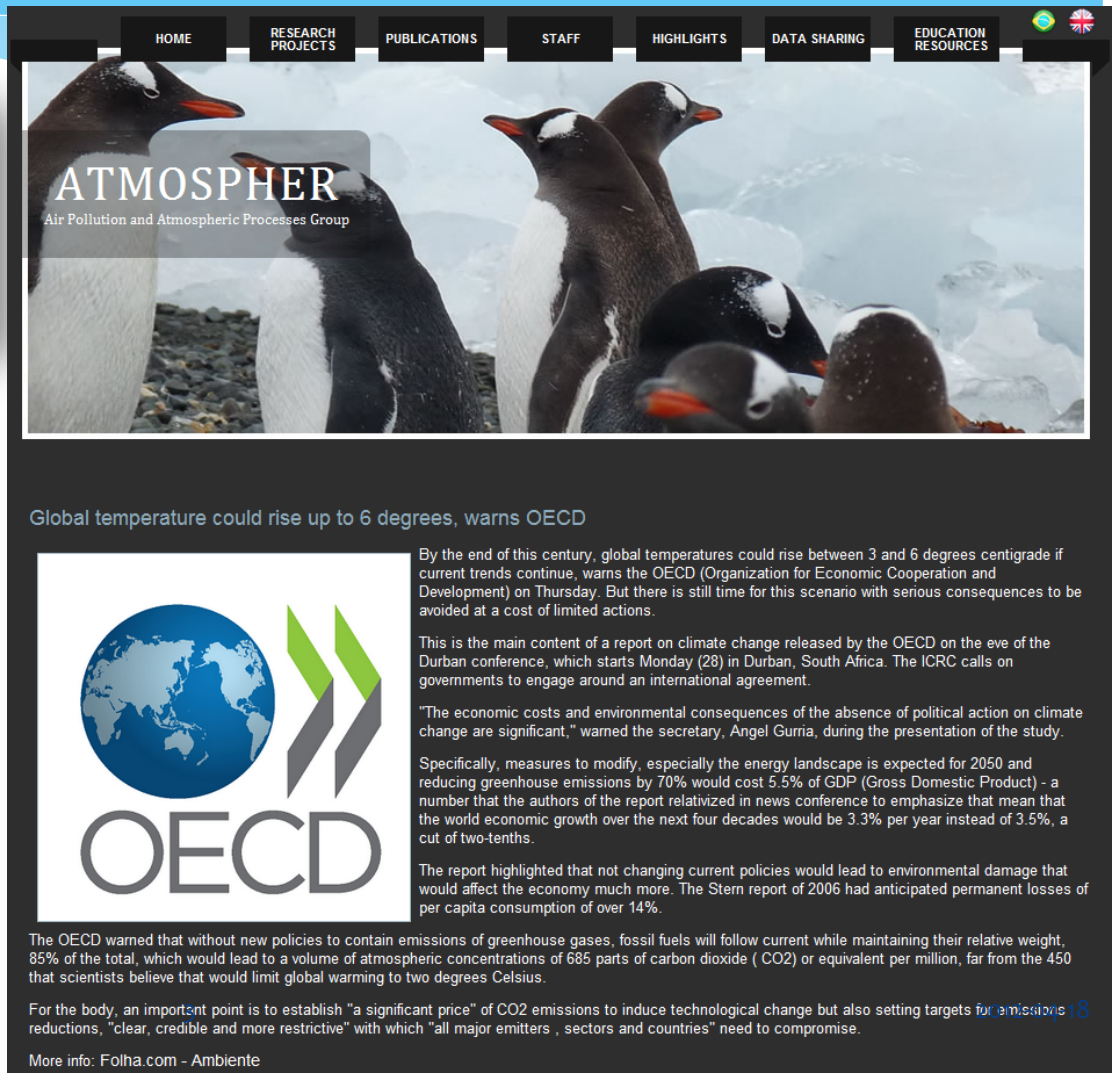


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A family of logo's

Why energy?

* There is more then 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
          * ….

Why energy?

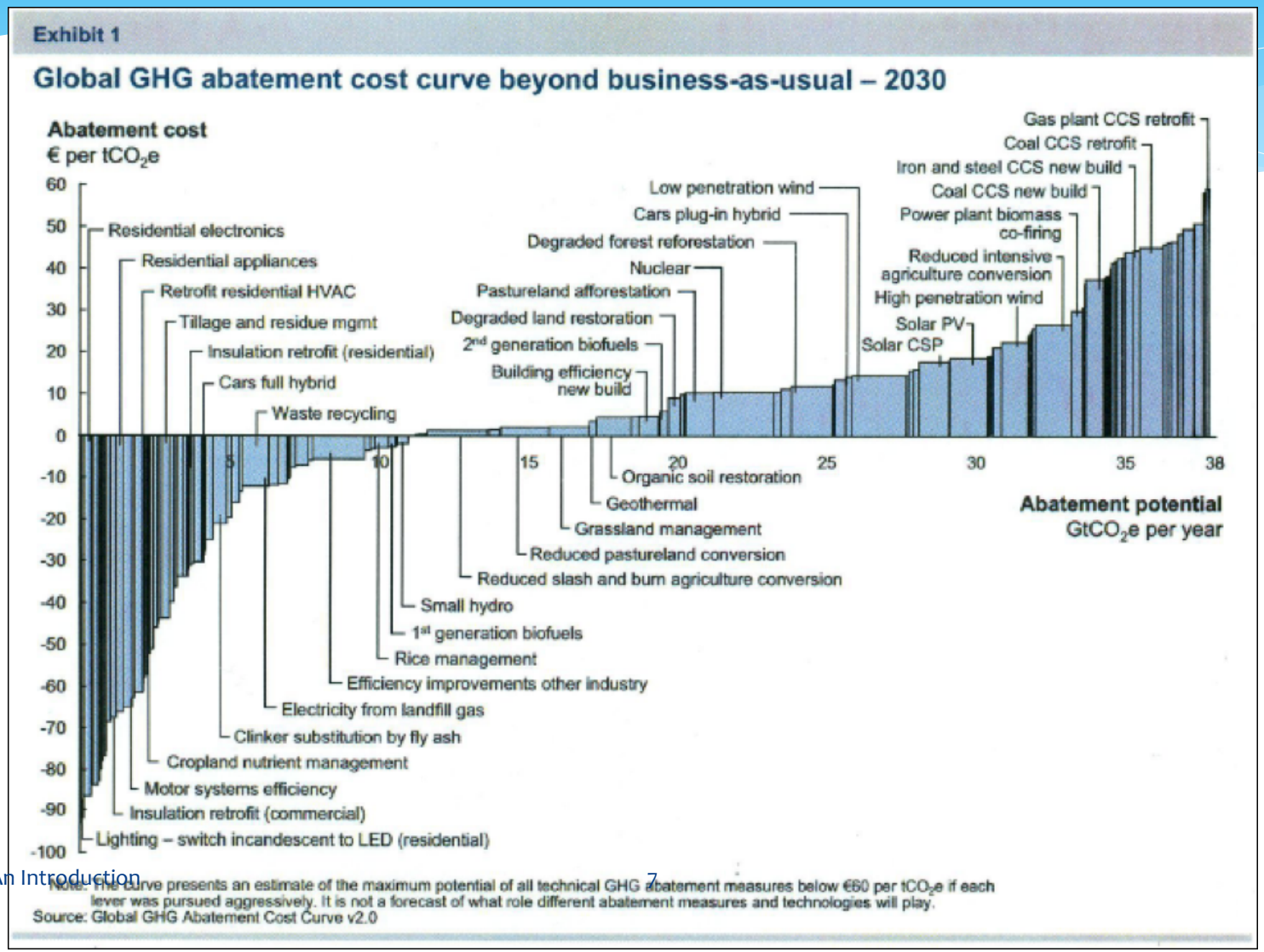


Exhibit 1
Global GHG abatement cost curve beyond business-as-usual – 2030
Abatement cost
€ per tCO2e
60
50
40
30
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
Residential electronics
Residential appliances
Retrofit residential HVAC
Tillage and residue mgmt
Insulation retrofit (residential)
Cars full hybrid
Waste recycling
Lighting – switch incandescent to LED (residential)
Insulation retrofit (commercial)
Motor systems efficiency
Cropland nutrient management
Clinker substitution by fly ash
Electricity from landfill gas
Efficiency improvements other industry
Rice management
1st generation biofuels
Small hydro
Reduced slash and burn agriculture conversion
Reduced pastureland conversion
Grassland management
Geothermal
Organic soil restoration
Building efficiency new build
2nd generation biofuels
Degraded land restoration
Pastureland afforestation
Nuclear
Degraded forest reforestation
Cars plug-in hybrid
Low penetration wind
Solar CSP
Solar PV
High penetration wind
Reduced intensive agriculture conversion
Power plant biomass co-firing
Coal CCS new build
Iron and steel CCS new build
Coal CCS retrofit
Gas plant CCS retrofit
5
10
15
20
25
30
35
38
Abatement potential
GtCO2e per year
Note: This curve presents an estimate of the maximum potential of all technical GHG abatement measures below €60 per tCO2e 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

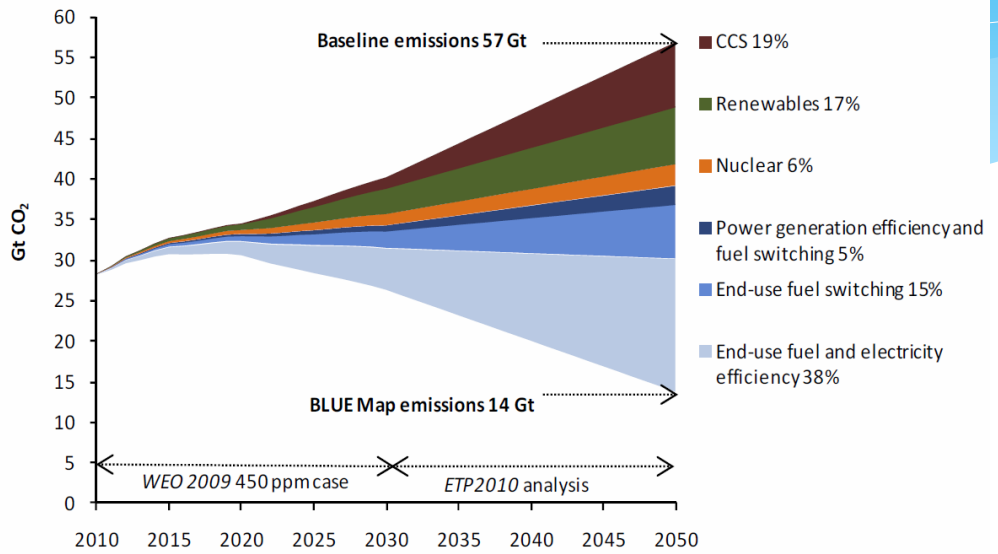
The half empty kind of guy?

* If you're not satified?

* Look for the tap!

Directions of solutions

Figure 4. Key technologies for reducing CO_2 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

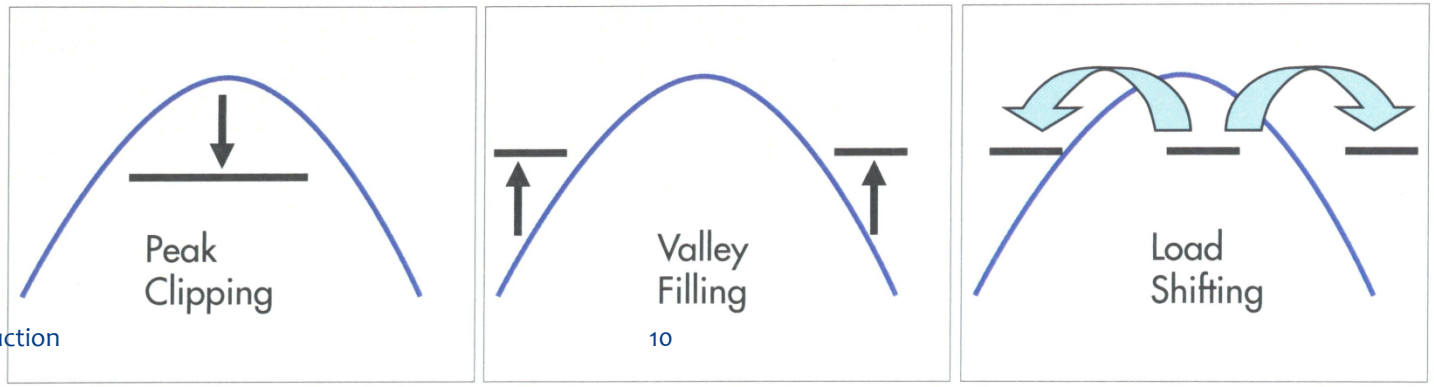
Build Absolutely Nothing Anywhere Near Anyone

Not in my back yard

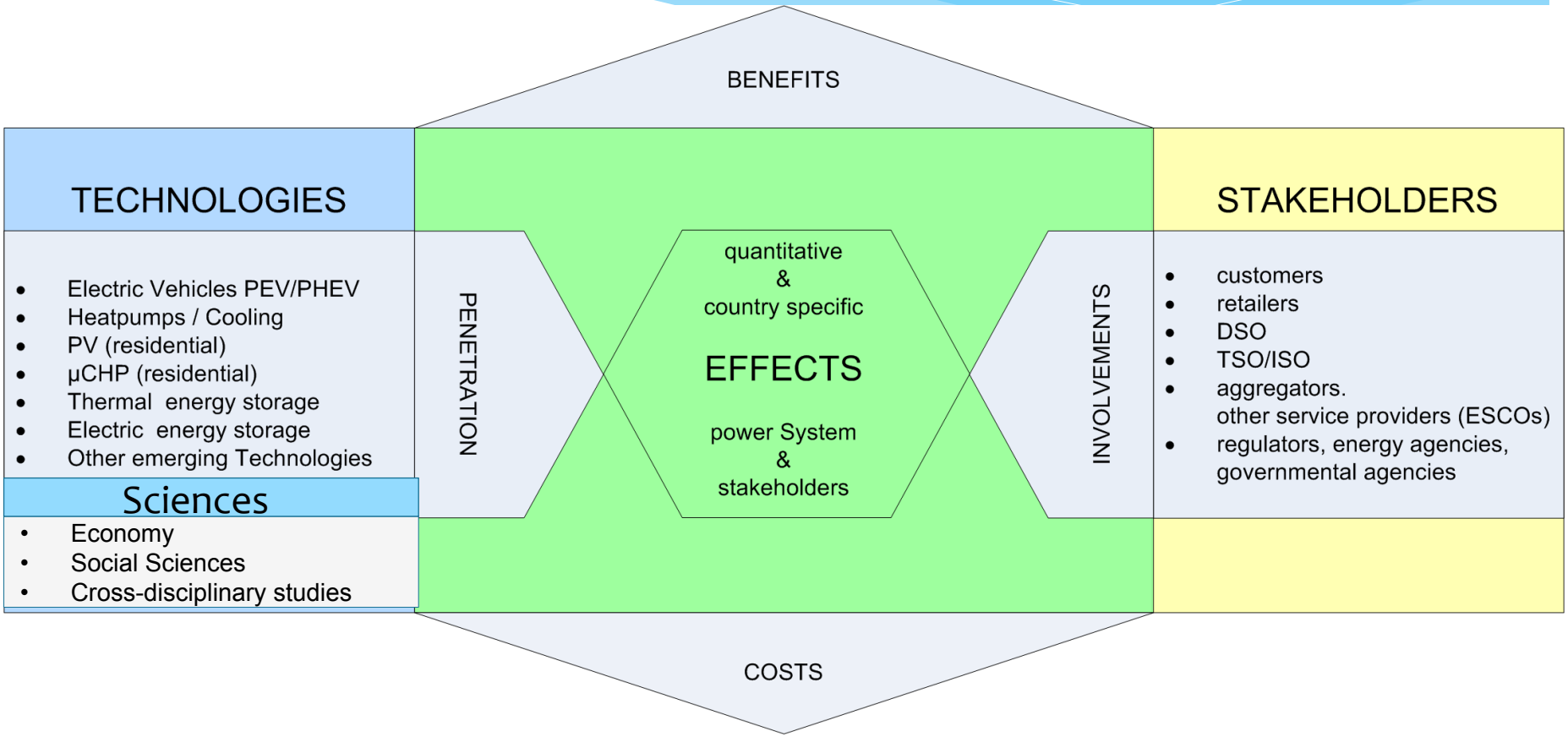
Directions of solutions

* Demand Side Management
  * load management,
  * energy efficiency,
  * strategic conservation and related activities.

Figure 1: Load Shape changes. (Adapted from Clark Gellings, speech made 1982)[5]



Load Management: the model to work in IEA-DSM



The way we organize IEA-DSM

* Five year workplan
* In collaboration with other implementing agreements
* 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
  * Keep in mind that we're writting a new programme

More info

* WWW.IEADSM.ORG

Q&A