

Z E P

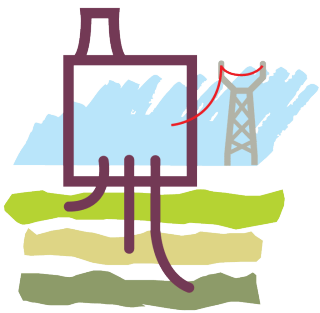
Technology Platform
Zero Emission Fossil Fuel Power Plants

ZEP

Co-ordination Group Update

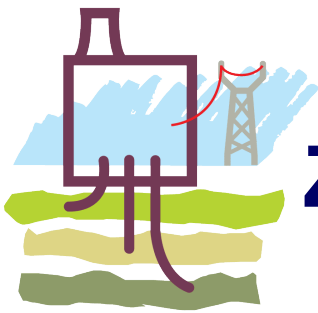
Nick Otter

AC#10 Brussels on 14th March 2007

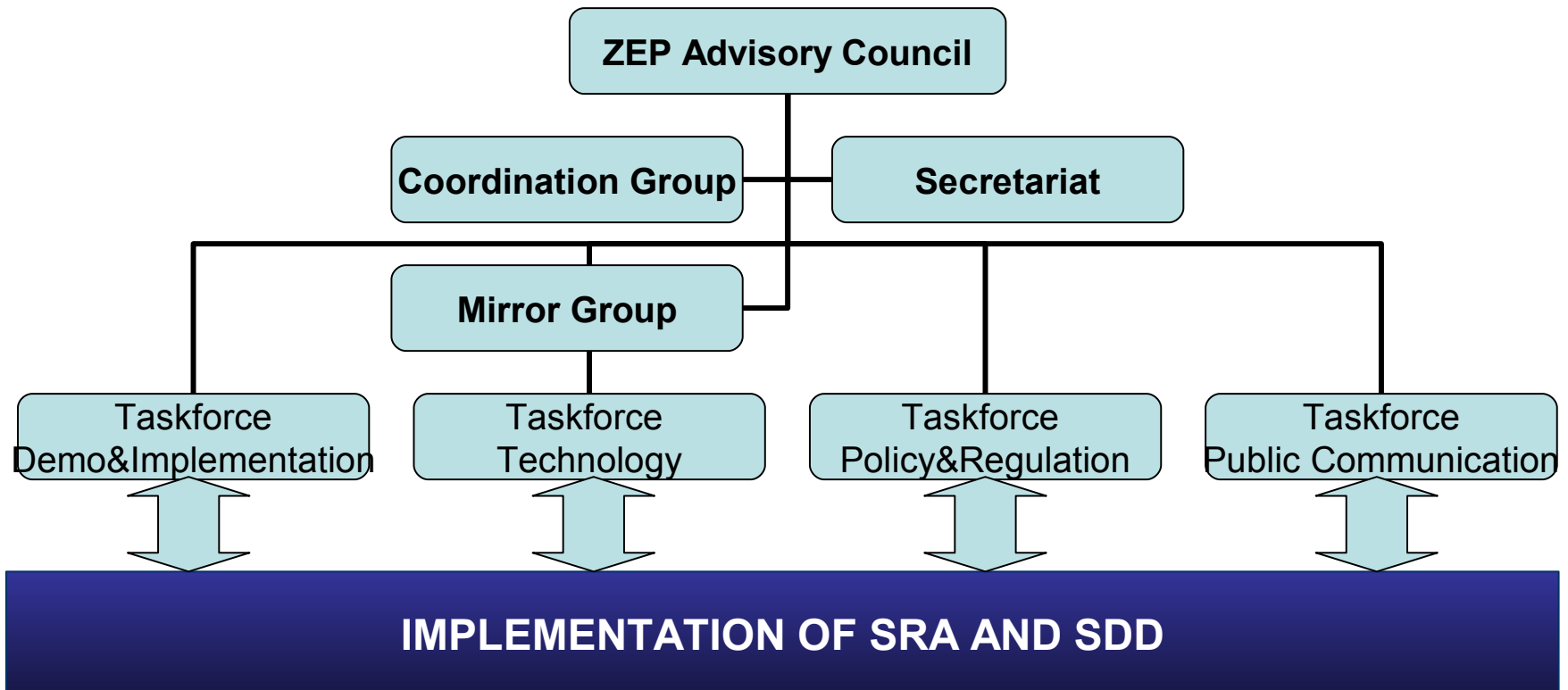


CG Meetings since last AC in Nov06

- **CG#11 : Frankfurt Workshop 5th December 2007**
 - Agreement of how to organise to address implementation of SRA/SDD
 - Open process of requesting Eols of individuals to be involved
 - Use of ZEP Newsletter
 - Selection of `acting` co-leads to take initiative forward
- **CG#12 : Brussels 23rd January 2007**
 - Agreement of make-up of Task Forces
 - Identification of key actions to be addressed
 - Setting of Task Force meetings
- **CG#13 : Berlin 5th March 2007**
 - Definition of initial action plans
 - Need further development but aim is to have an `integrated plan`

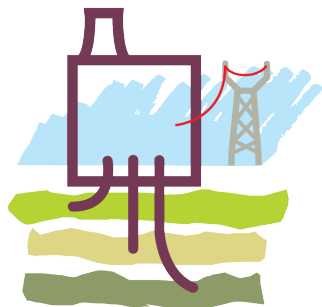


ZEP: Organisational Structure



SRA : Strategic Research Agenda

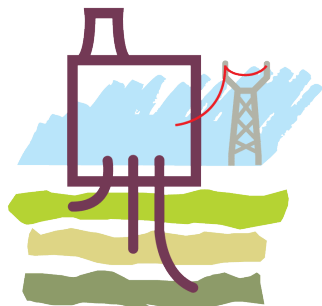
SDD : Strategic Deployment Document



ZEP : Task Force Formation

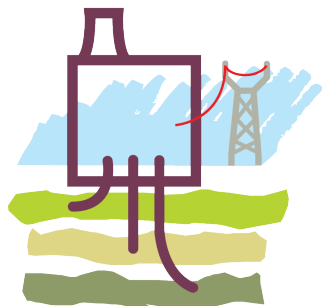
- **Guidelines**

- ❑ Balance of Country, Type of Organisation,
 - 3 co-leads per TF
 - 1 person per organisation per TF
 - EU organisation defined as one that contributes to EU GDP
 - Consultants, government people on `as need` basis
 - Non EU people to give international perspective on invitation
- ❑ Structure
 - No upper limit on people involved
 - Sub-groups where appropriate
 - Recognition that there will be a `core` group of key individuals



ZEP : Task Forces Actions

- **Technology**
 - ❑ Set technology agenda : advise/recommend priorities for FP7
- **Implementation and Demonstration**
 - ❑ Set Matrix of Key projects to help define “EU Flagship Programme”
 - ❑ Definition of appropriate incentives for demonstrations
 - ❑ How to work with China and other Emerging Market Economies
 - ❑ How to co-operate with USA
- **Policy and Regulation**
 - ❑ EU Energy
 - DG/ENV : Safety of Storage
 - DG/COMP : Revision of State Aid Rules
 - DG/TREN : Sustainable Fossil Fuel Power Generation
 - DG/RES : Strategic Energy Technology Plan
 - ❑ Longer term fiscal framework to encourage continued investment
 - ❑ Member State Actions and Interactions
- **Public Communication**
 - ❑ Establish Public Awareness Strategy



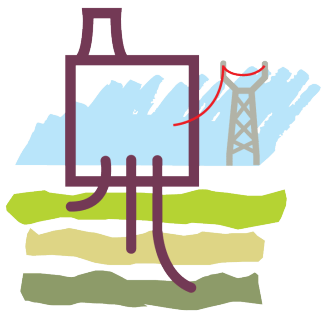
ZEP : Task Forces

ETP ZEP TASK FORCES

27th February 2007

Task Force	Co-leads		Meetings		
			1	2	3
Technology	Lars Stromberg Dirk Goldschmidt Niels Peter Christensen	Vattenfall Siemens GEUS	23-Feb-07	Stockholm	
Demonstration and Implementation	Graeme Sweeney Johannes Heithoff Philippe Paelinck	Shell RWE ALSTOM	02-Mar-07	The Hague	
Policy and Regulation	Arve Thorvik Paal Frisvold Francois Giger	STATOIL Belona EDF	01-Mar-07	Brussels	
Communication and Public Awareness	Philippe Lacour-Gayet	Schlumberger	01-Mar-07	Paris	

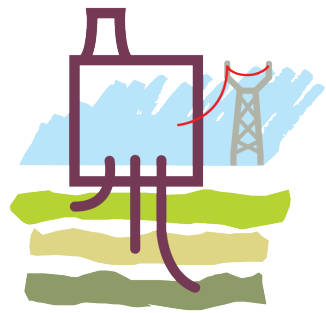
Wide involvement of stakeholders following engagement process in January 2007



EU Actions : early 2007

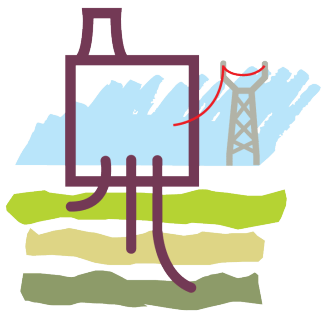
- **Some very positive signals**

- EU Energy Package of 10th January 2007
 - Sustainable Fossil Fuel PG Communication adopted ZEP ideas
 - need for demo/FOAK plant
 - necessity of incentives to encourage investment
 - CCS to be included in EU ETS
 - need for longer term fiscal, regulatory and legal framework
 - importance of public communication and acceptance
- EU Energy and Environment Councils both supportive
 - Some big open issues as yet unresolved
 - CCS `capture ready` for 2010?
 - CCS potentially mandatory` from 2020?



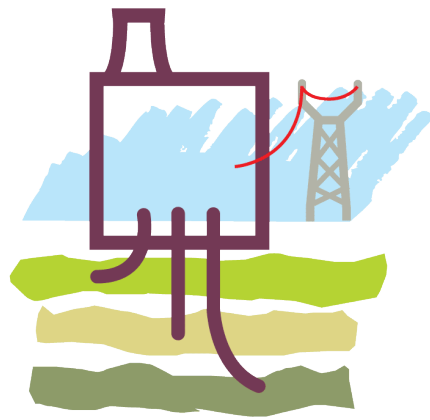
EU Outcomes : Spring Council

- **EU Strategic Energy Technology [SET] Plan**
 - priority item for Spring 2008
 - specific reference to CCS as part of plan
- **EU Energy Policy for Europe 2007-2009**
 - 'underlines importance of substantial improvements in generation efficiency and clean fossil fuel technologies'
 - 'urges Member States and EC to work towards strengthening R&D and developing the necessary technical, economic and regulatory framework to bring environmentally safe CCS to deployment with new fossil-fuel power plants, if possible by 2020'
 - 'welcomes intention of EC to establish a mechanism to stimulate the construction and operation by 2015 of up to 12 demonstration plants of sustainable fossil fuel technologies in commercial power generation.'



ZEP : Impact and Next Steps

- **Raised ZEP to highest level in EU with some success**
- **Increased visibility and acceptance of `clean fossil` issue**
- **Now important for ETP ZEP to deliver**



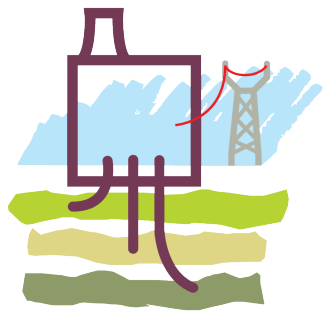
Z E P

Technology Platform
Zero Emission Fossil Fuel Power Plants

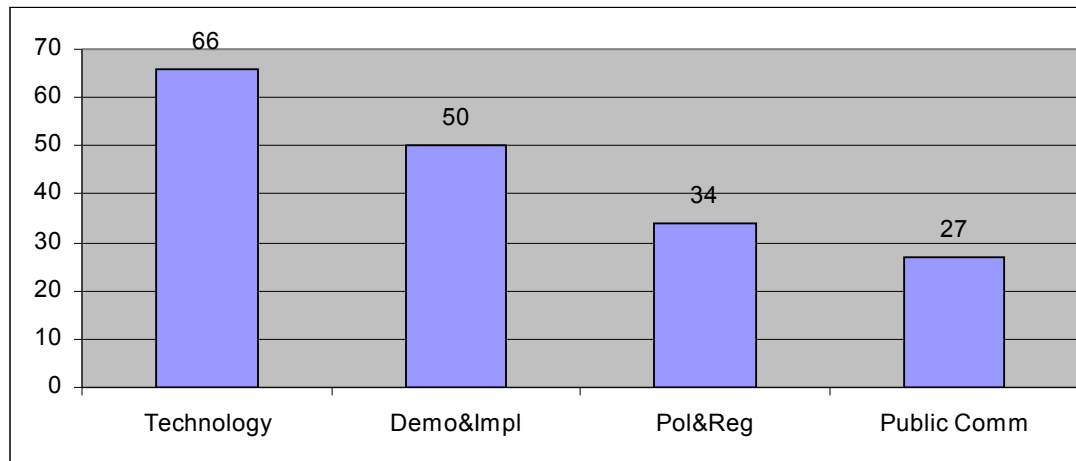
ZEP

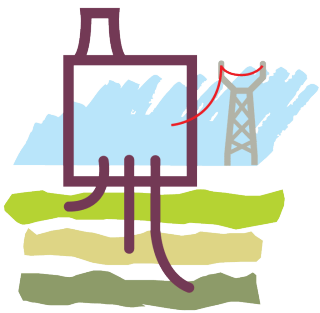
Balance of taskforces

Discussion paper
For AC10, 14 March 2007

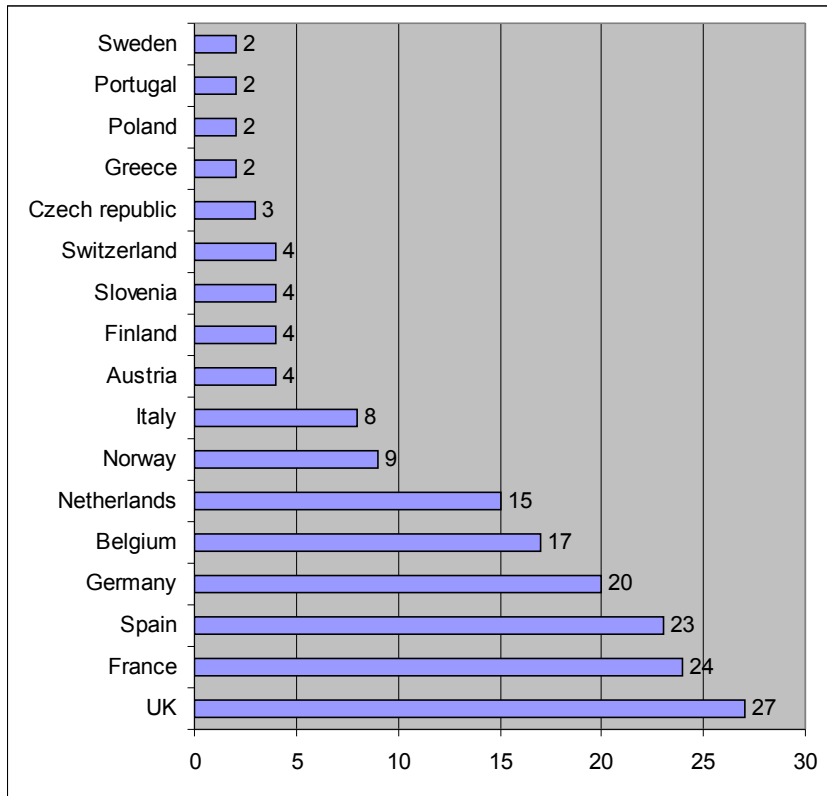


All taskforces: accepted Taskforce members

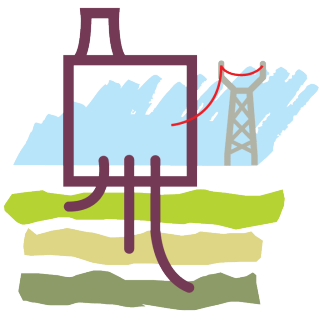




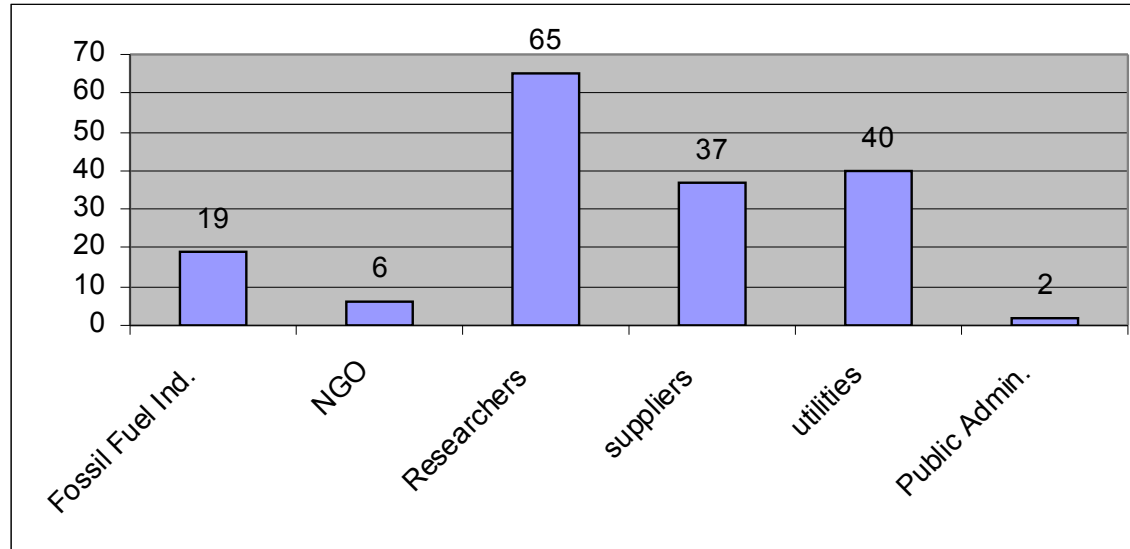
All taskforces: geographical distribution



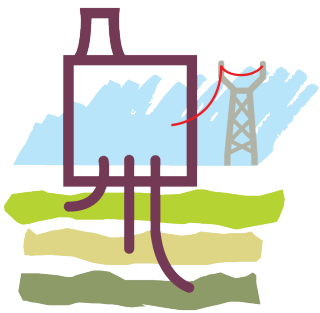
1. Members by office-address causes slight distortion
2. Broad participation: 23 nationalities
3. Well represented:
 - Large member states
 - Close to brussels
4. Lower representation:
 - New member states
 - Small member states



All taskforces sectoral distribution



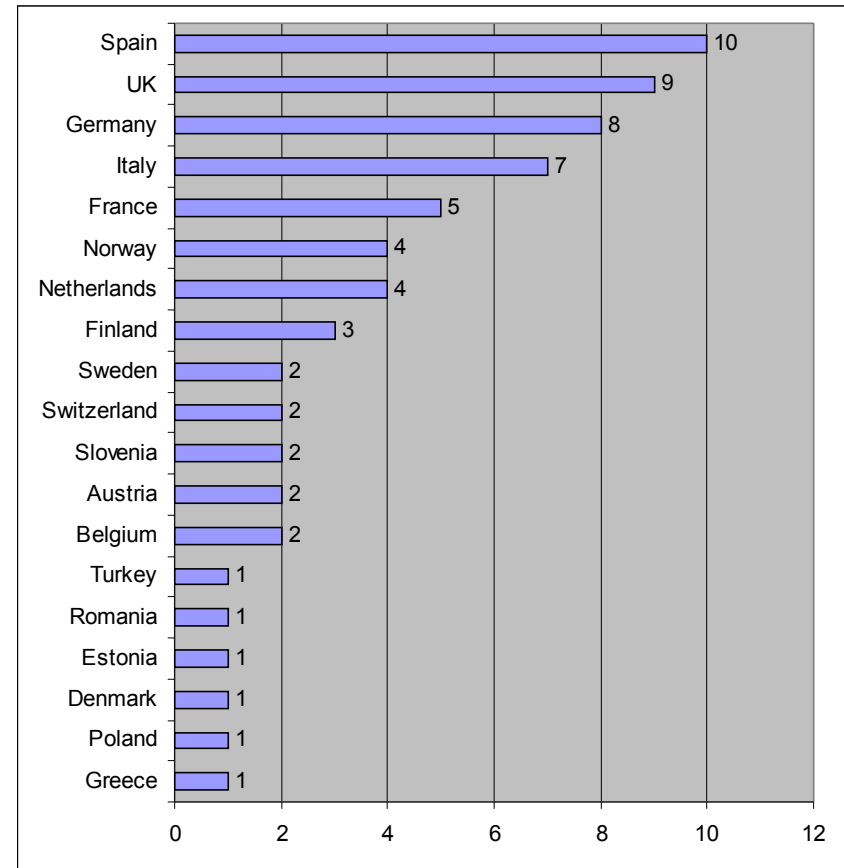
1. Sufficient sectoral spread
2. Strong representation of research community
3. Public administration only as observers (TPReg)

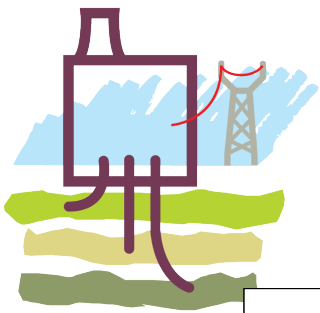


Taskforce Technology

Geographical distribution

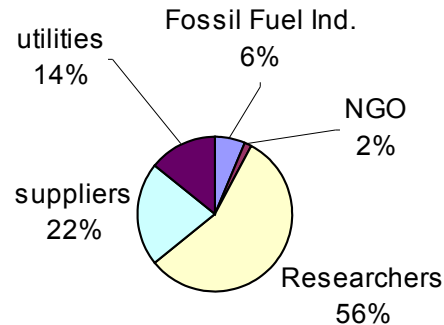
1. Broad participation: 19 Nationalities.
2. Good representation: Spain
3. This taskforce contains most of the Italians (7 out of 8)



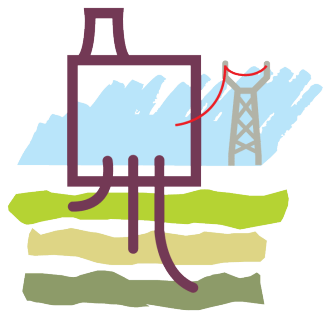


Taskforce Technology Sectoral distribution

TASKFORCE TECHNOLOGY

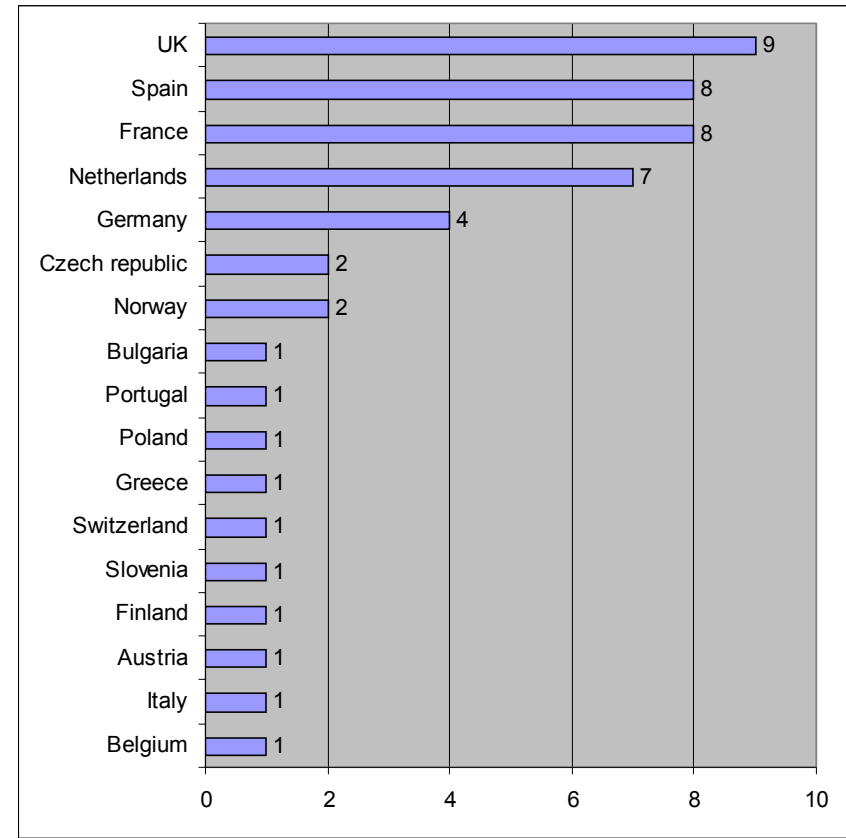


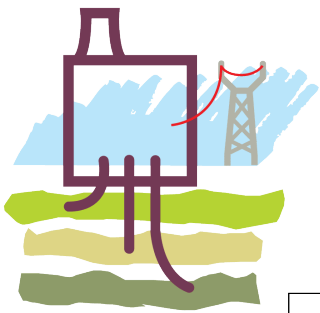
1. Large R&D-presence, as can be expected
2. But other communities also sufficiently present



Taskforce Demo&Implementation geographical distribution

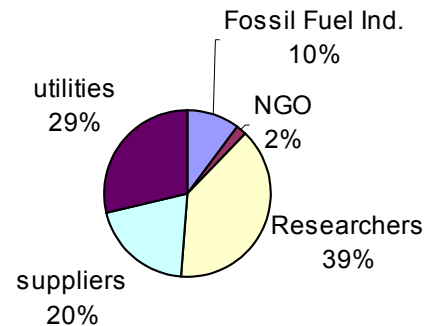
1. Broad participation: 17 nationalities
2. Good representation: Spain, Netherlands
3. Low representation: Italy, new member states (Romania, baltic states)



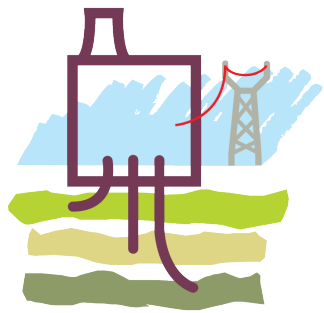


Taskforce Demo & Impl. Sectoral distribution

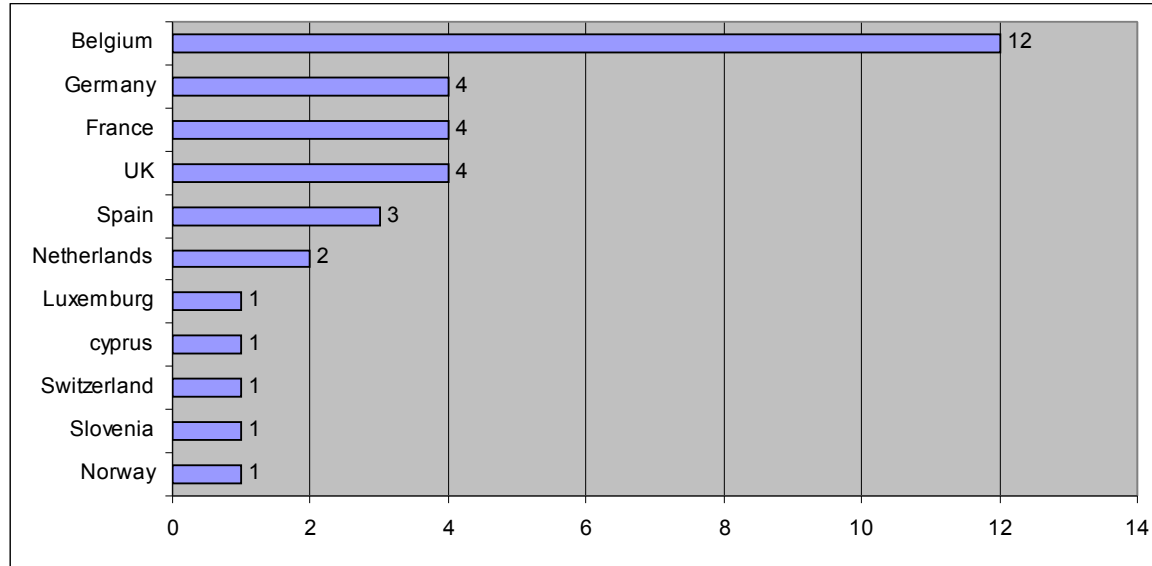
Taskforce Demo&Implementation



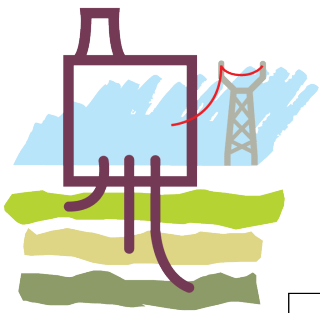
1. Well balanced taskforce



Taskforce Policy&Regulation geographical distribution

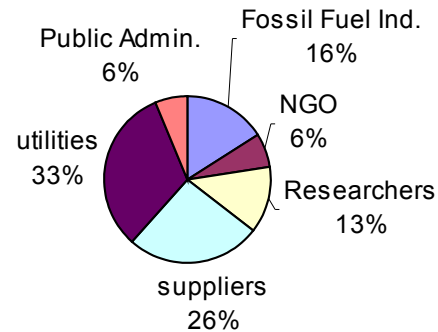


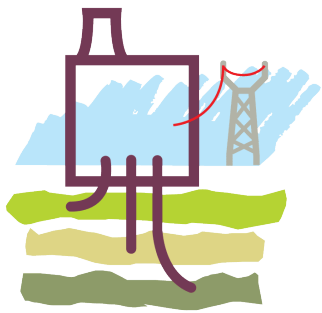
1. Smaller geographical spread, due to demand to have Brussels presence
2. Many “Belgians” are representatives of other countries in Brussels



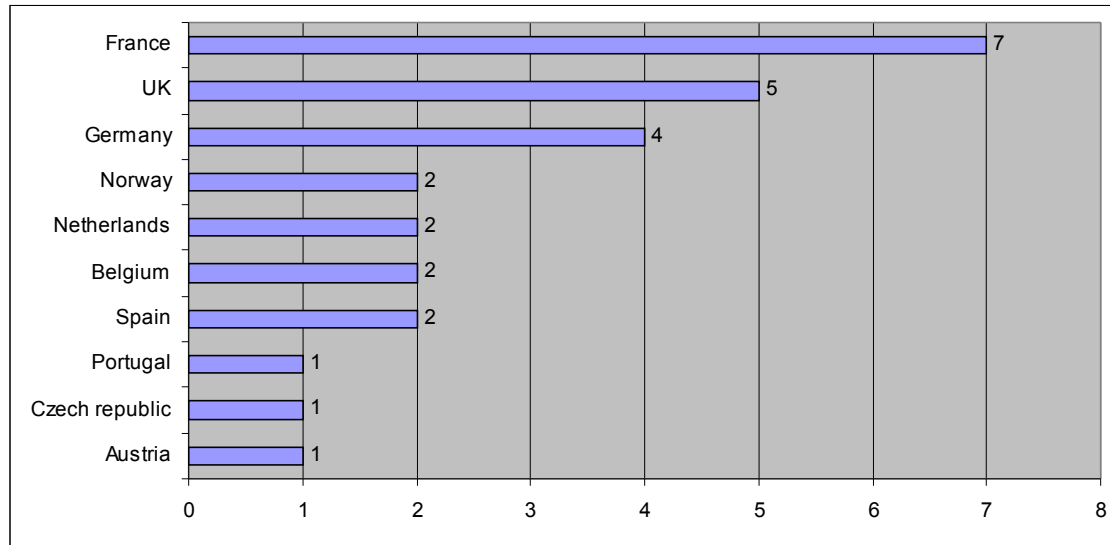
Taskforce Policy&Reg. Sectoral distribution

Taskforce Policy&Regulation

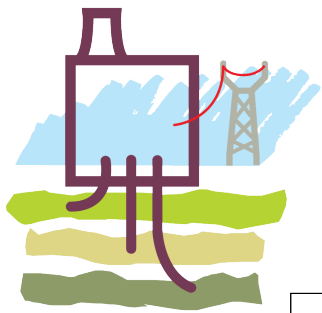




Taskforce Public Communication geographical distribution



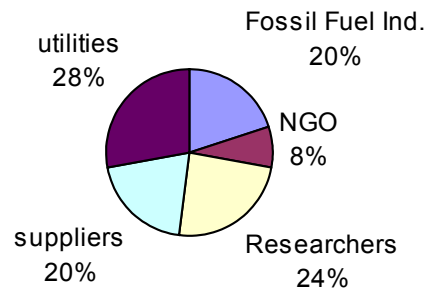
1. Smaller group, hence smaller geographical spread



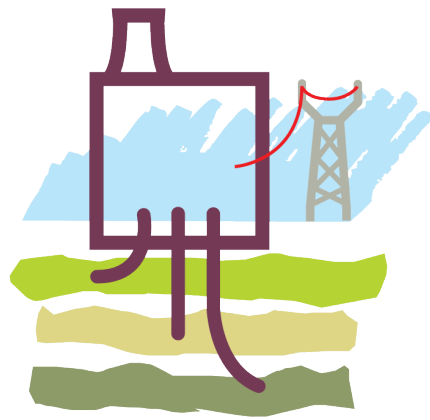
Taskforce Public Communication

Sectoral distribution

Taskforce Public Communication



1. Good sectoral spread
2. NGO-presence is significant



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Technology Platform
Zero Emission Fossil Fuel Power Plants

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Co-ordination Group Update

Nick Otter

AC#10 Brussels on 14th March 2007