Report of the 15th Annual Conference of European Environmental and sustainable Development Advisory Councils

Évora, 10th -13th October 2007

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1. INTRODUCTORY NOTE

The *Network of European Environment and Sustainable Development Advisory Councils (EEAC)* held its 2007 Annual Conference from 10th to 13th October, in Évora, Portugal, hosted by the Portuguese National Council on Environment and Sustainable Development/CNADS and co-organized with the German Advisory Council on the Environment/SRU.

The Conference theme was **"Energy Efficiency - Key Pillar for a Competitive, Secure and Sustainable Europe"** which addressed the implications of the new energetic paradigm, climate changes and the *EU Energy Efficiency Action Plan*. Enhancing energy efficiency contributes to a whole range of European policy targets including the *Lisbon Growth Agenda*, the European energy security strategy and the European strategy to fight climate change. Enhanced energy efficiency provides competitive advantages, reducing energy costs supported by European consumers and businesses and opens new opportunities for innovative products. In addition, higher energy efficiency enables European businesses to cope with rising energy prices on increasingly volatile international energy markets. Furthermore, energy efficiency is the least-cost option to reduce greenhouse gases in order to comply with the *Kyoto Protocol* and go beyond. Exploiting the synergies of enhanced energy efficiency is the road to deal with these new challenges. It enables the European Union to play the necessary proactive role in the international climate change regime after 2012 and simultaneously to enhance its prospects for growth and welfare.

The multiple benefits of enhanced energy efficiency range across many societal groups and reach far into the mainstream of business. The aim of the conference was to bring together stakeholders from European businesses, the EEAC member Councils, the European Commission and national public administration. It gave the opportunity to analyse and discuss the implementation of the recent EU energy and climate policy and of its targets for 2020. Furthermore the relatively high-energy intensity paradigm of Europe in the context of global energy sustainability and climate change mitigation was addressed. The Conference also addressed decision makers from governments, businesses and civil society.

A Statement on **Energy Efficiency Key Pillar for a Competitive, Secure and Environmentally friendly European Energy Policy** was adopted in the EEAC Annual

Plenary Session (13th October), and subsequently addressed to all EU Governments and European Commission.

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2. PARTICIPANTS LIST

EEAC Members

1st Name	Family Name	Orzanization		Country
Andrea	Kollmann	Energieinstitut an der JKU Linz AUSTRIA	OEVAF	Austria
Horst	Steinmüller	Energieinstitut an der JKU Linz AUSTRIA	OEVAF	Austria
Martin Maria	Krachler	Energieinstitut an der JKU Linz AUSTRIA	OEVAF	Austria
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Rosario	GOMEZ	EEAC Office	EEAC Office	Belgium
Francesca	GIOLA	EEAC Office	EEAC Office	Belgium
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Kimmo	Tiilikainen	Finnish Council for Natural Resources	FNCR	Filand
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Michel	Ricard	Conseil National du Développement Durable	CNDD	France
Angelika	Zahmt	German Council for Sustainable Development	RNE	Germany
Guenther	Bachmann	German Council for Sustainable Development	RNE	Germany
Dorothee	Braun	German Council for Sustainable Development	RNE	Germany
Christian	Hey	Germany Advisory on the Environmental	SRU	Germany
Patrick	Matschoss	Germany Advisory on the Environmental	SRU	Germany
Martin	Jänicke	Germany Advisory on the Environmental	SRU	Germany
Peter	Zerle	Germany Advisory on the Environmental	SRU	Germany
Meinhard	Schulz-Baldes	German Advisory Council on Global Change	WGBU	Germany
Rainer	Griesshamme	WBGU/Oeko - Institute	WGBU	Germany
Miklós	Bulla	National Council on the Environment	OKT	Hungary
Piroska	Guzli	National Council on the Environment	OKT	Hungary
Thomas	Legge	Sustainable Development Council	COMHAR	Ireland
Frank	Convery	Sustainable Development Council	COMHAR	Ireland
Jean	Stoll	Sustainable Development Council	COMHAR	Ireland
Noel	Casserly	Sustainable Development Council	COMHAR	Ireland
Frans	Evers	EEAC Steering Committee / RMNO	EEAC / RMNO	Netherlands
Roeland	in ‘t Veld	Advisory Council for research on spatial planning nature and	RMNO	Netherlands
Jelle	Blaauwbroek	Advisory Council for research on spatial planning nature and	RMNO	Netherlands

Frederik	de Boer	Advisory Council for research on spatial planning nature and	RMNO	Netherlands
Louis	Meuleman	Advisory Council for research on spatial planning nature and	RMNO	Netherlands
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Bram	van de Klundert	The Netherlands Council for Housing, Spatial Planning and the Environment	VROM-Raad	Netherlands
Roel	S. Cazemier	Wadden Sea Council	WSC	Netherlands
Fred	Fleurke	Wadden Sea Council	WSC	Netherlands
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Herma	de Wilde	Council for the Rural Area	RLG	Netherlands
Huib	Silvis	Council for the Rural Area	RLG	Netherlands
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Isabel	Mertens	Conselho Nacional do Ambiente e do Desenvolvimento Sustentável	CNADS	Portugal
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Peter	Novak	Council for Environmental Protection	CEPRS	Slovenia
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Ramon	Arribas-Quintana	Advisory Council for the Sustainable Development of Catalonia	CADS	Spain
Ignacio	Huertas	Spanish Environmental Advisory Council	CAMA	Spain
D. Jose	Cruz	Spanish Environmental Advisory Council	CAMA	Spain
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Pernilla	Knutsson	Swedish Environmental Advisory Council	MVB	Sweden
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Jon	Freeman	Royal Commission on Environnemental Pollution	RCEP	UK
Nicholas	Cumpsty	Royal Commission on Environnemental Pollution	RCEP	UK
Andrew	Lee	Sustainable Development Commission	SDC	UK
Gavin	Purchas	Sustainable Development Commission	SDC	UK
Tim	O'Riordan	Sustainable Development Commission	SDC	UK
Marcus	Yeo	Joint Nature Conservation Committee	JNCC	UK
Jessica	Magnus	Joint Nature Conservation Committee	JNCC	UK
Roger	THOMAS	Countryside Council for Wales	CCW	UK
Richard	JARVIS	Countryside Council for Wales	CCW	UK
Peter	Pitkin	Scottish Natural Heritage	SNH	UK
John	Anderson	Council for Nature Conservation and the Countryside	CNCC	UK

Other European Councils

Jean	Stoll	Superior Council for Sustainable Development from Luxembourg	CSDD	Luxembourg
Josef	Zboril	European Economic and Social Committee	EESC	Belgium
Robert	Kaukewitsch	European Economic and Social Committee	EESC	Belgium

External Guests

Hannes	Böttcher	IIASA Forestry Program		Austria
Jörg	Malzon Jessen	Infineon Technologies Austria AG		Austria
Nebojsa	Nakicenovic	IIASA & Vienna University of Technology		Austria
Marzena	Chodor	DG EnvironmentEuropean Commission		Belgium
Grégoire	Wallenborn	Researcher of Université Libre de Bruxelles		Belgium
Françoise	Bartiaux	Institut de Demographie,	UCL	Belgium
Wolfgang	Feist	Passive House Institute		Germany
Udo	Schriever	Volkswagen AG		Germany
Edda	Müller	Professor University of Speyer		Germany
Harry	Verhaar	Senior Director Energy & Climate Change		Netherlands
Eduardo	Oliveira Fernandes	University of Porto		Portugal
Carlos	Marques	STEPs project team / EU		Portugal
Álvaro	Gomes	University of Coimbra		Portugal
Pedro	Martins barata	Euronatura		Portugal
Nuno	Ribeiro da Silva	ENDESA		Portugal
Thomas	Johannsson	Institute for Industrial Environmental Economics	Lund University	Sweden

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3. PROGRAMME

Wednesday, 10thOctober

EEAC participants arriving, internal and preparatory meeting

From **13.30** **Registration**

14:00 Working Groups may meetings (in parallel)

17:00 *EEAC Steering Committee meeting*

Evening: *Arrival of EEAC members and other participants*

Thursday, 11th October.

EEAC Internal Day

08:30 - 09:00 **Registration**

09:00 - 10:45 Three parallel EEAC **Working Group sessions**:

- Governance
- Biodiversity
- Agriculture

10:45 – 11:15 *Coffee/Tea break*

11:15 – 13:00 Three parallel EEAC **Working Group sessions**:

- Sustainable Development
- Marine
- Energy

13:00 – 14:00 *Lunch*

14:00 – 15:30 **Presentations** of selected EEAC members' recent advice and activity

15:30 – 16:00 *Coffee/Tea break; Transfer to the University of Évora*

16:00 – 18:00 **Special Session / Panel on Biomass** – *CCRAlentejo Auditorium*
Moderator: J.M. Lima Santos (CNADS)

Presentations:

Horst Steinmüeller(*Energy Institute,University of Linz, Austria*)

J.P. Almeida Fernandes (*University of Évora, Portugal*)

Hannes Böttcher *(Max Planck Institute, Germany)*

Christian Hey *(SRU)*

20:00 *Dinner - University of Évora /* Refeitório dos Frades

THEMATIC DAY – 12th October 2007

ENERGY EFFICIENCY –
KEY PILLAR FOR A COMPETITIVE, SECURE AND SUSTAINABLE EUROPE

Friday, 12th October.

Conference Day (open to external participation)

Morning Session

09:00 – 09:45 **Welcome and Conference Opening**:

António G. Henriques, Government Representative (Minister for Environement)

Mário Ruivo, CNADS Chairman

Christian Hey, SRU Secretary General / EEAC WG on Energy Chair

09:45 – 09:55 José Manuel Barroso, President of the European Commission (Video message): **Energy Efficiency for a competitive, secure and sustainable Europe**

09:55 – 10:15 Nebojsa Nakicenovic (*IIASA & Vienna University of Technology, Austria*): **The Potential of Energy Efficiency**

10:15 – 10:45 Thomas B. Johannsson (*International Institute for Industrial Environmental Economics, Lund University, Sweden*):
The multiple benefits of Energy Efficiency Policies

10:45 – 11:15 *Coffee/Tea break*

11:15 – 11:40 Nuno Ribeiro da Silva (*Endesa, Portugal*):
The Business Case for Energy Efficiency

11:40 – 12:05 Martin Jänicke (*SRU, Germany*):
Energy Efficiency a driver for innovation and competitiveness

12:05 – 12:30 Edda Müller(*Federation of German Consumer Organisations, vzbv*):

Energy Use and Consumer Choices

12:30 – 13:00 **Discussion & wrap up** by Viriato Soromenho-Marques (*Barroso HLG on Energy and Climate / CNADS, Portugal*)

13.00 – 14:30 *Lunch*

14.30 – 16:30 **Afternoon sessions (parallel working groups)**

A. Transport and Cars
Chair: Thomas Legge (Comhar, IRE)

Carlos Marques (*STEPs project team/EU*)
Peter Zerle (SRU, Germany)
Udo Schriever (Volkswagen AG)

B. Buildings
Chair: Peter Novak (CEPRS, SLO)

Jens H. Laustsen (*International Energy Agency*)
Wolfgang Feist (*Passive Institute, Germany*)
Eduardo Maldonado (*Concerted Action EBPD/Energy Performance of Buildings Directive, University of Porto*)

C. Products
Chair: Gavin Purchas (SDC, UK)

Rainer Griesshammer *(WBGU, Germany)*
Martin Jänicke (*SRU, Germany)*
Andreas Urschitz (*INFINEON, Austria*)
Harry Verhaar (*Philips Lighting, Netherlands*)
Andrew Lee (*SDC, United Kingdom)*

D. ETS and other market-based instruments
Chair: Hubert David (Minaraad, B)

Frank Convery (*Comhar, Ireland*)
Thomas Johansson (*Lund University, Sweden*)
Pedro Martins Barata (*Euronatura, Portugal*)

Piotr Tulej (*European Commission, DG Env*)

E. Demand-Side Management and Culture
Chair: Filipe Duarte Santos (CNADS, P)

Andrea Kollmann (*Energy Institute, University of Linz, Austria*)
Patrick Matschoss (*SRU, Germany*)
Álvaro Gomes / Aníbal T. Almeida *(University of Coimbra)*
Grégoire Wallenborn (*Université Libre de Bruxelles, Centre d'Etudes du Développement Durable, IGEAT-ULB, Belgium*) / Françoise Bartiaux *(SEREC Network, University of Louvain, Belgium)*

16:30 – 17:00 *Coffee/Tea break*

17:00 – 18:00 **Panel Discussion: From talk to action**
Chair: Christian Hey (SRU, D)

Frank Convery (*EEAC / Comhar, Ireland*)
Piotr Tulej (*European Commission, DG Env*)
Rainer Griesshammer (*WBGU, Germany*)
Eduardo Maldonado (*Concerted Action EBPD, Portugal*)
Andrea Kollmann (*Energy Institute, University of Linz, Austria*)

18:00 **Closing**

18:30 [*Press Conference]*

20:00 *Conference Dinner – Hotel da Cartuxa*

Saturday, 13th October

EEAC Internal Day

9.30 - 13:00 EEAC Annual Plenary Session (APS)

13:00 *Lunch (Serrinha Farm - Monfurado)*

14:00 – 17:30 **Study Visit (Monfurado Zone – protected area; rural development; cork wood; megalithic monuments).**

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4. E.E.A.C. INTERNAL DAY

4.1 WORKING GROUPS REPORT

4.1.1 Working Group on Sustainable Development

The Working Group on Sustainable Development, which coordinates the next EEAC 2008 Conference preparation agreed: to prepare a challenger report, as outlined in the Draft Conference Proposal and its time-plan until Bordeaux Conference.

4.1.2 Working Group on Governance

The Working Group on Governance welcomed the proposal to develop a background report and a challenger report (for the 2008 Annual Conference in Bordeaux), on the governance of long term decisions, which was accepted by the WG Sustainable Development which coordinates the preparation of the 2008 Conference. (Bordeaux).

4.1.3 Working Group on Agriculture

The Working Group on Agriculture decided: to continue its networking activities for one more year; the chair will stay with the Netherlands Council for the Rural Area (RLG), i.e. with Huib Silvis (chair) and Agneta Andersson (secretariat); and its coming annual working plans.

4.1.4 Working Group on Marine

The Working Group on Marine discussed the European Commission work on marine issues, the calendar events and the WG annual work plan.

4.1.5 Working Group on Biodiversity

The Working Group on Biodiversity highlighted: the actions developed 2007; its work plan; and CNADS (António D. Abreu) and CADS (Xavier Cazorla) will continue co-chairing the group.

4.1.6 Working Group on Energy

The Working Group on Energy, which coordinates the preparation of the 2007 Conference, is chaired by Christian Hey and during the meeting discussed its work plan and the energetic efficiency
problematic.

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4.2 Presentations of selected EEAC members' recent advice and activity

(*See the full presentations in power point in the CD)*

1. **Climate Change as a Security Risk** - ***Meinhard Schulz-Baldes*** (WBGU, Germany)

Meinhard Schulz-Baldes presented a study made in WBGU, Germany, on "*Climate Change as a Security Risk"*

2. **Global growth and the environment** - ***Siv Näslund*** (MVB, Sweden)

Siv Näslund made a presentation on the *"Growth and the environment in a global perspective"*

3. **Social -Cost Benefit Analyses for Environmental Policy Making** - ***Roel in't Veld*** (RMNO, NL)

Roel in't Veld presented an advice elaborated by RMNO, NL to the Dutch Environment Ministry on the *"Environment Social Cost Benefit Analysis for Environmental Policy Making"**.***

4. Tulips in Brussels - ***Ivette Meijerink*** (VROM-Raad, NL)

Ivette Meijerink made a presentation of a work developed by VROM-Raad, NL, on *"A perfect match for EU policy and regulation and Dutch habits in policy and regulation in the fields of environment, spatial planning and housing"*

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4.3 PANEL ON BIOMASS

Moderator: José Lima Santos (CNADS, Portugal) (*See the full presentations in power point in the CD*):

- **Horst Steinmüeller**(*Energy Institute,University of Linz, Austria*)

The presentation on *"Biomass Utilisation- the Austrian way"* summarized that: Austria uses already a large amount of renewables; heating is the main market in the energy sector bio-fuels are well established; R&D for second generation bio-fuels technologies is going on lignocelluloses (mainly harvest residues) and fodder from grassland will be the raw materials for tomorrow; and bio-refineries and biomass cascade use are the challenges in the future.

- **J.P. Almeida Fernandes** (*University of Évora, Portugal*)

The presentation on *"Biomass for energy production: implications for biodiversity and environment (the European scenario)"* approached the following issues: biomass for biofuel production in the EU: general problems; towards a sound biomass development policy for Europe; to ensure a sound and feasible biomass development policy for Europe; to improve the motivations of the individual farmers (or land owners) to invest or to allow particular activities in their properties according to integrated dynamic regionaly-adapted management systems.

- **Hannes Böttcher** *(Max Planck Institute, Germany)*

The presentation on *"Realizing the Potential of Land Management for Climate Change Mitigation"* concluded that: 1. forestry - ecosystem C stocks matter; fate of C in harvested products matters; risk of C loss by short-term economic considerations and other land pressures, and support of long term turnover of natural processes needed; 2. croplands - relatively small economic barriers; competition for land? new incentives for effective fossil carbon substitution; 3. efficiency frees land for conservation (or food); and 4. a land-only view of GHG mitigation is not effective

- **Christian Hey** (*SRU Secretary General / EEAC WG Energy Chair)*

The presentation on *"Climate Mitigation by Biomass"* spoke to the following issues: biomass is not an infinite resource; ambitious targets induce high imports; not even official targets for bio fuels by 2010 maybe achievable with domestic biomass; use of biofuels yields less energy than use for heat and electricity; even more distinct are the performance differences related to greenhouse gas reduction ; additional measures are needed to manage conflicts between bioenergy and biodiversity; this applies especially to grasslandconversion, which also is a source for greenhouse gases.

Following with a shared debate

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5. STATEMENT

Statement of the Network of European Environment and Sustainable Development Advisory Councils (EEAC)

ENERGY EFFICIENCY - ***Key pillar for a competitive, secure and environmentally friendly European Energy Policy***

This EEAC Statement is supported by the following EEAC Councils:

Austria Austrian Association for Agricultural and Environmental Research (OeVAF)
Forum Sustainable Austria (FORUM)
Belgium Environment and Nature Council of Flanders (Minaraad)[1]
France National Council for Sustainable Development (CNDD)
Germany Council for Sustainable Development (RNE)
Advisory Council on the Environment (SRU)
Advisory Council on Global Change (WBGU)
Hungary National Council on the Environment (OKT)
Ireland Comhar, Sustainable Development Council (COMHAR)
Portugal National Council on Environment and Sustainable Development (CNADS)
Poland Presidium of the State Environmental Council of Poland (PROS)
Slovenia Council for Environmental Protection (CEPRS)
Spain Advisory Council for the Sustainable Development of Catalonia (CADS)
United Kingdom Royal Commission on Environmental Pollution (RCEP)
Sustainable Development Commission (SDC)

1. Introduction

In times of growing global concern about climate change, energy prices and intensifying resource conflicts, the European Union has recently gained momentum for ambitious policies on energy and climate change. Energy efficiency plays a pivotal role in this new policy agenda.

At its spring summit on 8-9 March 2007, the Council of the European Union adopted the "Energy Policy for Europe", a comprehensive energy Action Plan for the period 2007-2009 (COM (2007) 1 final). The Council's conclusions and the Action Plan are based on the European Commission's Energy Review of January 2007, which laid out a comprehensive energy and climate-change strategy. The Network of European Environmental and Sustainable Development Advisory Councils (EEAC) welcomes the

[1] *The Minaraad does not subscribe the passage concerning ETS. The Council works on a recommendation concerning this topic, and prefers not to take any positions at this moment.*

renewed commitment of heads of state and government for unilateral action on greenhouse case mitigation and the overall targets for efficiency and energy from renewable sources. Now it will become important to convert commitment into action.

An important part of the new policy is the adoption of the Commission's Energy Efficiency Action Plan, which aims at saving 20% of the European Union's energy use compared to business-as-usual projections until 2020. More specifically, the Energy Efficiency Action Plan aims at accelerating the projected decline in energy intensity beyond the current trend of -1.8% per annum to -3.3% per annum. This, in turn, would lead to an absolute reduction of energy demand at a rate of -1% per annum, resulting in 20% additional savings until 2020. EEAC welcomes this target, as it would represent a significant acceleration of past trends and goes beyond many forecasts. However, we think that even more could be economically achievable: None of the forecasts mirrors the complete set of measures laid out in the Action Plan. In addition, most of the forecasts assume rather conservative energy price developments from today's point of view. Higher savings may be achievable through the combination of a proactive policy approach and high energy prices. Nevertheless, all forecasts regard energy efficiency as one of the largest ways to reduce greenhouse gases in the near and medium term.

In the field of energy efficiency policy there is a strong convergence between the Lisbon growth agenda, the EU sustainability agenda and the global security agenda, all of which effectively depend on urgent action to establish a more stable, secure and sustainable energy policy for the future. Fuel prices will most likely continue to be significantly higher and more erratic than during the 1990s as global energy demand continues to grow and to depend on politically volatile regions. Energy conservation is therefore an important means to enhance energy security. A policy approach pushing the European Union to become the most ecologically efficient world region would also place EU industry in a better position to meet future global demand for energy-efficient products. Without such a policy Europe would be in danger of eroding its own competitive position. A case in point are some car producers, who risk losing market shares by failing to meet growing global demand for clean and efficient vehicles.

It is crucial that Europe positions itself to become a credible negotiator in the discussions around a post-2012 international climate-change regime, which requires visible achievements at home. Energy efficiency can contribute at least half of the target

to reduce greenhouse gases by 30% by 2020 at low cost, as confirmed by the Spring Council. A policy to reduce energy use should be made sufficiently strong in order to be consistent with further reductions in greenhouse-gas emissions that will be necessary after 2020.

The next priority must be to use the current momentum of the political process in order to translate the EU-wide reduction target into a burden-sharing agreement among the 27 member states, taking into account their different reduction potentials. This would further increase commitment by the member states and enhance credibility of the agreed actions.

Taken as a whole, the Action Plan provides a reasonably achievable benchmark and therefore represents an indispensable contribution to the EU climate and energy strategy. However, it will require strong and decisive actions by governments to turn the Action Plan into reality. Following political support from the heads of state and government in the March 2007 EU Council, priority should now be given to innovation-driving policy design, further specification of instruments and effective implementation. Priority action is needed in the following areas.

2. Achieving Higher Energy Efficiency: Specific Policy Areas

2.1 Power Sector and EU ETS

The EU Emissions Trading Scheme (ETS) is the European Union's flagship instrument for a market-based climate policy. Provided that the reduction targets are set right, the ETS would be the most important driver for raising conversion efficiency on the supply side of the energy system and it would also provide incentives for increased end-use energy efficiency.

However the EU ETS Directive (2003/87/EC) and its national implementation need to be revised in order to fully exploit that potential. A major problem during the first phase (the first set of member states' "national allocation plans") was a lack of environmental integrity largely due to the widespread over-allocations of emission permits to participating entities, which resulted in a collapse of prices in the course of 2006. The economic integrity of the system was also strongly undermined by "grandfathering", the method of allocating emission permits for free to existing entities. Consequently, the

scheme had partially turned away from the underlying principle of providing a simple market-based framework where participants may compete for the most cost-effective emission reductions. Under a misguided competitiveness debate, where high allocations were wrongly associated with high competitiveness, "grandfathering" has led to heavy rent seeking and an overburdening of the system with energy policy objectives, such as energy security by the promotion of coal firing. The result was an overly complex and non-transparent system with over-allocations across Europe.

First priority should be given to a clear signal that the EU internal CO2-reduction target of 20-30% by 2020 and of up to 80% by 2050 as adopted by the Spring Council will be transformed into a stringent cap for the power sector. This cap should also take into account the above-average cost-effective reduction potential in that sector and reduced demand for electricity based upon fossil fuels as a consequence of the implementation of the Efficiency Action Plan and the planned growth of renewable energy technologies. In total, reductions to be achieved by the cap for the power sector should be higher than for the EU average.

Therefore, the European Commission merits full support for its rigorous approach that intends to prevent a second round of over-allocation and market distortions in many second national allocation plans.

Auctioning of emission permits represents the best remedy to the complexities and overburdening of the ETS. Auctioning would allow more trading. Market actors would reveal their needs and their willingness to pay. The system would become more efficient and transparent. Hence, the overall cost for a given cap could be considerably reduced. Environmental and economic integrity of the ETS would provide for strong incentives to reduce energy demand and to redirect some of the estimated €1.2 trillion investment (as estimated by the European Commission) in power-plant renewal by 2030 in a profitable and climate-friendly way. Since this massive investment will be fixed in the next generation of power plants, we must not lose this opportunity to invest in alternative strategies with better performance in terms of climate change.

EEAC encourages the Commission to base its preparations for the next allocation period on a stringent cap and a non-distorting allocation method. Member states should accept a stronger role for the Commission and more harmonisation in order to prevent a

further competitive race of over-allocations. EEAC welcomes the plans of the Commission to extend the ETS to other sectors (especially transport). Mechanisms to couple the different systems or even to move towards one single system should be considered. Furthermore, the need for a border-tax adjustment on very energy-intensive products in the view of maintaining the competitiveness of some industries under a stringent ETS should be further analysed.

2.2 Building Sector

A revision of the Buildings Directive (2002/91/EC) is needed to exploit better the huge potentials for energy efficiency in the European Union's building stock. The Buildings Directive foresees a labelling system for all buildings that are rented or sold. Furthermore, it sets energy efficiency standards for new buildings as well as major refurbishments. So far, the efficiency standards only apply to buildings larger than 1000m2. Lowering the threshold of 1000 m2 to 100 m2 would cover about 90% of the European Union's building stock and would double the Directives' saving potential. Therefore, the Action Plan's intention to revise the Buildings Directive with a view to include smaller buildings is highly welcome and necessary. Furthermore, the applied standards themselves are not stringent enough to exploit the existing economic potential. Therefore, the Action Plan's intention to introduce performance levels equivalent to "passive house" standards for new houses is necessary and welcome.

Furthermore, large-scale investment programmes to redesign the existing building stock are needed. The German investment programme of €1.4 billion for each of the years 2006–2009 targeted to energy efficient refurbishment of houses is a positive example. The emergence of Energy Service Companies (ESCOs) will be essential in overcoming financial barriers by supplying third party financing by contracting services. There is an overlap here with the Energy Service Directive (2006/32/EC) that aims at providing an enabling environment for energy services.

EEAC welcomes the Buildings Directive's proposal for an energy-labelling scheme to overcome the so-called split incentives problem (for instance, when the landlord invests in insulation for a house and the tenant benefits from lower heating bills). The Directive's obligation to provide information on the energy consumption of a building

when selling or renting it would trigger a competition for energy-efficient buildings. Unfortunately, there have been time-consuming discussions in some member states on how to implement the labelling scheme appropriately. Therefore, it is necessary to create a sense of urgency among those member states that have failed to implement the existing Directive in time.

2.3 Transport Sector

Transport growth and a shift towards less efficient modes of transport have contributed to an increasing share of the transport sector in energy use, its high energy intensity and its greenhouse-gas emissions. The EU internal market and liberalisation policies for freight and air transport that were not embedded in an appropriate environmental framework have reinforced these negative trends. These trends need to be reversed.

EEAC is optimistic that transport growth can be absolutely decoupled from economic growth, provided this overall strategic objective is transformed into a broad set of policies for demand-side management, ranging from a review of subsidies and economic development programmes, to spatial planning and pricing policies. We recall the OECD and the EEA work on those issues and recommend that decoupling becomes a priority issue for the Common Transport Policy. There is also much potential to strengthen the more environmentally friendly modes of transport, especially in urban agglomerations and for long-distance land transport. Many policy efforts in the past achieved a stabilisation of public transport; more needs to be done to create conditions for a renaissance of public transport. EEAC calls upon the Commission to address the competitive distortions created by the different tax regimes applied to air, road and rail transport.

There is an important role for speed limits for interurban and urban transport. Speed limits may have multiple benefits for safety, traffic flow and the environment, including less greenhouse-gas emissions. Speed limits, enforced by technical devices to control maximum speed, may be an important incentive to stop trends towards to over motorized heavier and faster cars. Speed limits also may help to maintain average speed at the most energy efficient levels.

EEAC welcomes the Commission Communication assessing the progress of Community strategy on CO2-emissions from cars as far as it officially confirms the limited workability of a voluntary agreement and as regards the necessity for binding legislation. There is considerable technological and economic potential to increase fuel efficiency and hence to reduce CO2-emissions in each segment of the EU car fleet. Any serious cost calculation also has to consider the fuel-cost savings that a more efficient car can deliver over its lifetime. In this perspective the level of ambition for the planned new legislative instrument is modest. The foreseen target for the average new car is set at 130g CO2 per km in 2012 (the EU target set in 1995 was 120g) plus another 10g stemming from accompanying measures (biofuels, air conditioning, tyres). In addition, emission reductions that are associated with biofuels may count for achieving the target as well. Since a continuation of business as usual would already result in 143g CO2 per km in 2012 this raises the question whether the new target goes beyond business as usual at all. Considering that new low-to–medium-class cars, consuming around 110g CO2/km, are already on the market and that cars consuming 100g CO2/km or less could be built using existing technologies, such a target is not sufficiently innovation driving. An ambitious target contributes not only to climate protection but also to security of energy supply.

The Spring Council decided to raise the mandatory share of biofuels from 5.75% (by 2010) to 10% (by 2020) – also as part of the so-called integrated approach to reduce CO2-emissions for cars. Furthermore, a Commission proposal suggests requiring fuel suppliers to cut 10% of their fuels' life-cycle greenhouse-gas emissions. The strategy to count emission reductions from fuels towards the compliance for the cars' emission reduction targets raises a number of critical issues. Not all biofuels significantly contribute to greenhouse-gas reductions, and some do considerably less than others. If land-use changes, methane and nitrous oxide emissions from biomass cultivation are accounted for, the greenhouse balance of some biofuels may even be negative. Reducing greenhouse gases by promoting biofuels is considerably more expensive than other means and other energy uses of biomass. Therefore other energy uses of biomass should be given priority when designing support schemes. Ambitious targets may not be achievable in all EU member states and hence will require considerable imports from third countries, where negative environmental effects are difficult to influence. Therefore more sophisticated instruments are needed to mobilise efficient greenhouse

gas reduction potentials by biomass and to avoid negative consequences on biodiversity. EEAC therefore calls upon member states to reconsider and revise the binding 10% target for biofuels. EEAC believes that the conditions upon which the Spring Council consider this target appropriate (that the production should be sustainable and second generation biofuels becoming commercially available, etc.) are not assured.

A serious debate on the appropriate instrument to reduce greenhouse-gas emissions from cars has not yet begun. Such an instrument must find a balance between the need to drive innovation towards fuel-saving cars, economic efficiency and with respect to the diversity of the car fleet, without compromising the overall target. In principle market-based as well as regulatory instruments may fit those criteria, although with a different profile of strengths and weaknesses.

The German Advisory Council on the Environment (SRU) has suggested the idea of an open trading system: a possible way forward would be to integrate the car fleets' emissions into the EU ETS and obligating the car manufacturers to surrender allowances for their respective car fleets. Using approximations of average kilometres driven, the producers' total car fleet emissions and associated averages per car can be estimated. This would create a responsibility for car producers to participate in efficient CO2-reduction. The target level should be 100g CO2 per km in 2012 and less thereafter in conjunction with the EU -30% target for 2020. In addition, other measures such as better labelling and a CO2-based vehicle tax should be used. Such an approach would have the advantage of efficient CO2-reductions and would create a financial responsibility of the sector for climate protection. However it might have limited effects on more fuel-efficient cars. For legal reasons such a system may only become effective in the course of the next decade.

Other options might be more targeted at driving fuel savings and become effective much faster, such as a trading system within the car industry or standards related to indicators such as weight, power, motor size or surface, which in average lead to the targeted performance of the fleet of new cars. Such approaches might only be achievable at a higher cost to car producers, however.

EEAC calls for an open debate on the performance of each of the instrument options but warns that the overall target for the performance level should not be compromised by that debate.

2.4 Appliances / Product Policy

2.4.1 Dynamic Labelling

A more dynamic approach for energy labelling plays a pivotal role in creating demand for energy efficient products and services. As with buildings mentioned above, labelling would allow for price differentiation with respect to energy use and would introduce competition for energy efficiency. This is true for the so-called "white ware" (fridges, washing machines etc.) as well as "brown ware" (TV, digital boxes, office appliances etc.) including additional information on stand-by and off mode as well. Furthermore, energy using systems in the (non-energy intensive) industrial sector (motor systems, air pressure systems, pumps etc.) need a similar labelling scheme as well.

The current scheme is static and does not contain all the necessary information that enables the average consumer quickly to assess break-even points when standing in front of an appliance in a retail market. The lack of periodic updates has led to the creation of ever-new efficiency classes (A+, A++) sending the message that class "A" is still good even though after an update of the scheme it would be "C" or less. In a regular update all appliances on the market must be regrouped so that only the most efficient products (for instance the top 10-20% on the market) are labelled with the class "A". In addition, for each product there should be not only information on energy (and water) requirements per use but also on *annual* energy (and water) *costs* using prices from the time of the most recent update.

The proposition of the Action Plan regularly to update the framework Directive on the energy labelling of household appliances (92/75/EC) and to expand it to more product groups is a step into the right direction However, it will also be necessary to give information on annual costs so that the consumer is able to make quick assessments.

2.4.2 Dynamic Standards for Energy-Using Products

Consumers may not make optimal choices despite the availability of adequate information. This is because energy efficiency does not belong to the core business of consumers and (non-energy intensive) manufacturers and energy-cost savings are often

dispersed, as in energy-using products. In light of this (and the political unwillingness/inability to internalise many external effects), product standards may be useful to realise some of the low/no-cost potentials of energy efficiency. In addition, under the assumption that global demand for energy efficient appliances will rise in the future (global needs) the creation of lead markets at home may provide additional benefits (such as the first-mover advantage).

The work plan of the Commission on implementing measures within the Energy Using Product (EuP) Directive (2005/32/EC) merits full support. Focusing on energy-using products is of strategic importance since they account for a high and growing share of energy requirements. Under the auspice of the EuP Directive studies are currently carried out for 19 key energy using product groups. The Action Plan foresees regular assessments and updates of the standards and intends to combine it with a view to raise the minimum standard in the next round of standard setting to the level of today's top performing product (Top Runner Approach). The Action Plan also intends to include more product groups and to use the studies for the above-mentioned improved labelling scheme.

3. Mainstreaming Energy Efficiency: Overall Incentives

3.1 Energy Service Directive & Mainstreaming

The full integration of energy efficiency policies in other relevant policy strategies and programmes such as the follow up to the EU Sustainable Development Strategy and the forthcoming Action Plan for Sustainable Consumption and Production is pivotal in reaching lasting efficiency improvements. The Energy Service Directive (2006/32/EC), if fully implemented and strengthened, will provide important steps towards mainstreaming energy efficiency. However, the goal of the Directive appears moderate and an earlier proposition to require the public sector for higher rates of improvements did not pass the legislative process.

The Directive contains a number of important measures for mainstreaming energy efficiency. These relate (i) to an exemplary role of the public sector, (ii) to an enabling environment for energy services and energy-service companies (ESCOs) and (iii) to

information mechanisms to overcome informational barriers in order to enable consumers to reap the economic potentials of energy efficiency.

EEAC notes that the creation of a viable market for energy services and ESCO's cannot be overestimated as it is a prerequisite for the successful implementation of the Buildings Directive. Therefore, the implementation of the Energy Services Directive by the beginning of 2008, the drafting of ambitious national efficiency action plans able to deliver at the very least its moderate reductions, and the correction of its technical difficulties will be pivotal. Together with the Action Plan's priority action 5, "better finance for energy efficiency for SME", this will play a crucial role for mainstreaming energy efficiency.

3.2 Energy Taxation

The Action Plan's priority action 7, "coherent use of taxation", merits full support. This is in synergy with the renewed EU Sustainable Development Strategy's (§23) suggestion of an active consideration of "further steps to shift taxation from labour to resource and energy use and/or pollution, to contribute to the EU goals of increasing employment and reducing negative environmental impacts in a cost-effective way". Historically, the level of energy prices has been one of the most important factors in explaining changing rates in energy intensity improvements. In the absence of an overarching EU ETS covering all sectors, energy/eco taxation is a most effective way to boost energy efficiency. In this context, EEAC welcomes the renewed discussion on market-based instruments by the Commission Green Paper (COM (2007) 140 final) and encourages the Commission to come forward with a proposal to revise the Energy Taxation Directive. The revision should introduce tax rates significantly above current levels and differentiate stronger according to the CO2-emissions of the different fossil fuels. Another important issue in this respect is the abolition of subsidies that have direct or indirect effects on increasing energy use, which are still prevalent in many member states. Subsidies for fossil fuels create perverse incentives in terms of enhancing energy efficiency as they reduce energy prices and maintain the illusion that we still live in a world of cheap energy. EEAC therefore welcomes the work of the EEA on transport and energy subsidies and recommends decisive action at EU and national levels to address the considerable price distortions against efficiency.

3.3 A new Paradigm to Energy-use

The immense challenges and also opportunities that Europe faces in meeting the overall goals of energy security and of competitiveness in the world arena, while pursuing a high level of environmental protection, can only be met if a shift takes place to a new energy-use paradigm based on energy efficiency and on energy-saving behaviours. The citizens and all stakeholders, not just governments and business, must be actively involved in this long-term process of transition to a more sustainable energy use, the success of which requires, alongside with technological innovation and the coherent use of economic incentives and market instruments, ambitious and persistent education, information and communication policies. The main target groups should be in this case the consumers, the municipalities, the non- governmental organisations and the media. EEAC proposes stronger actions at EU and member-state levels in raising public awareness on energy and climate-change issues and in mobilising citizens to search for adequate answers.

4. Conclusions

Energy efficiency is regarded as the largest factor in reducing emissions in the near and medium term. Increasing energy efficiency will therefore be pivotal in limiting global warming to 2°C above pre-industrial levels, a widely accepted threshold politically and scientifically. The Commission's Action Plan on energy efficiency, endorsed by the Spring Council, aims at raising energy efficiency by 20% until 2020. Even though we think that energy savings are potentially much larger the Action Plan provides a reasonably ambitious benchmark. Even still, the Action Plan will require strong and decisive actions by governments to turn it into reality. Crucial areas are the strengthening of the EU ETS, higher efficiency in the European building stock as well as higher efficiency of products sold in the European market, namely cars and electric appliances. Furthermore, a stronger mainstreaming of energy efficiency will be necessary through an enabling environment for energy services, economic incentives and a shift in paradigm in how we use energy. Only through continuous efforts will the European Union's economy manage the transition towards being the most energy

efficient and knowledge-based economy in the world, able to serve as an engine for well being while limiting climate change.

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6. E.E.A.C. CONFERENCE DAY – 12TH OCTOBER

6.1 Conference Opening

- **Message from the Minister of the Environment, the Spatial Planning and the Regional Development**

Prof. Gonçalves Henriques, Portuguese Agency for Environment General Director, read a message from the Minister of the Environment, the Spatial Planning and the Regional Development on Portuguese energy policies, focusing namely eco-efficiency and renewables energies, emphasizing the real importance of the Conference and welcoming such illustrious experts and all the participants.

- **Prof. Mário Ruivo,** CNADS Chairman**, Greeting to the Conference Participants:**

1. After welcoming the 15th Annual Conference of the EEAC, Prof. Mário Ruivo stated that CNADS wants to emphasize that this is the second time that the EEAC holds a meeting in Portugal. The first one was in Sesimbra under the theme of "Integrated Coastal Zone Management" (2000).

   He expressed a public gratitude to the CCDR, Regional Development Coordination Commission for Alentejo, the University of Évora, Municipality of Évora and the

Évora's Tourism Region, because without their support this Conference difficultly will be realised.

2. In collaboration and with the support of our German colleagues from SRU, and form the Brussels EEAC office, this year, in a climate change worried framing, the theme is "Energy Efficiency – Key Pillar for a Competitive, Secure and Sustainable Europe", evidently in a world context.

   A most timely subject, on the eve of Bali COP, the discussion of this theme, with its different and vast implications, aims to contribute to reach a new energetic policy paradigm.

   We want to emphasize the need to keep the course of EU leadership in the decisive period of transition to post-Kyoto Agreement, within the realm of the U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE. But we need not to neglect other domains on environment crisis, besides climate change.

3. The increasing importance of the EEAC network in the European context is reflected in the grateful attendance of recognized experts from the European Union and from prestigious European Universities and Scientific and Technological Institutes and Research Centres, within an open-mind atmosphere, in search of consensus for the decision-making processes.

   Having in mind the opening words addressed to this Conference by President José Manuel Barroso, in his special video message, the European Environment and Sustainable Development Advisory Councils network, bringing together near 30 associated National Councils, also as a kind of civil societies expression, wants to contribute in this Energy issue, like in other essential issues, to the decision-making process, within an european new governance, more environmental friendly, at last, more sustainable, respecting the independence, transparency and credibility principles.

4. To suit the European Presidency, and according to the importance of the energetic thematic, the EEAC network, by its Working Group on Energy, will confirm a statement pointing out on "Energy Efficiency, the Key Pillar for a Competitive, secure and environmentally friendly European Energy Policy", following our letter to Dr. Angela Merkel, Chancellor of Federal Republic of Germany, sent last December to be considered in the March European Summit.

   Once more welcome to Évora and have a good work!

- **Christian Hey, SRU Secretary General / EEAC WG Energy Chair**

Ladies and gentlemen,

I am very happy to welcome you here on behalf of the organising EEAC Energy Working Group.

We knew already 16 months ago, that "energy efficiency" is a strategic issue. But we did not anticipate that it made such a carrier as a top priority on the EU agenda.

Let me recall shortly some events of the last year:

- 19th October, 2006 "Action plan for Energy Efficiency –suggesting a 20% target, which effectively means an acceleration of energy efficiency by a factor 3 over past trends and a long list of measures. This was the reference document also for our preparations to this conference and the EEAC Statement
- 30th October 2006 the Stern Report showed the tremendous cost of non-action and the considerable benefits from effective climate mitigation: it helped to convert main stream policy thinking in the EU from a more defensive to determined Acivism and leadership. Early 2007 the 4th IPCC – Report confirmed and strengthened this message.
- .10th January 2007: The Commission launched its energy package with targets and timetables for climate change and renewables;
- 8th of March 2007 Heads of State widely endorsed this green energy and climate package

And in the forthcoming months a series of new proposals on the future of ETS, on CO2-Reduction of Cars on the Measures under the Eco-design Directive etc. is pending:

The efficiency agenda is also crucial in the national context. In July this year we had our national energy summit in Germany and one of the key issues was the future of nuclear energy. Preparatory studies had a clear message: if the EU target on energy efficiency is achieved, Germany will manage to reduce its greenhouse gas emissions by 40% while phasing out nuclear energy supply. It will not, if the efficiency only improves by 2% per year! That is the type of challenge and opportunities we are facing with the energy efficiency agenda.

The very reason behind is, that with energy efficiency we achieve security of supply, innovation and competitiveness as well as climate mitigation at the same time. It is up

to the speakers of this morning to illustrate this potential for a winning game – not only for the energy debate – but also for Europe. Credible homework is the very basis for Europe's global leadership aspirations on Climate Change and might bring Europe closer together.

However as usual – there is a long way to go from talk to action. To have understood something and to do it – is not the same. Therefore we take stock in the afternoon on progress, on barriers, shortcomings and hopes in the different action fields. And we will discuss this in our final panel.

Last not least – many thanks to the hosts of this conference for the perfect organisation and the careful choice of this wonderful location and also to a very committed working group. We managed to organize this conference based on decentralized and shared responsibility for the invitation of speakers and workshop organisation. And it the network-type of organisation of this conference worked!

I wish you excellent presentations and inspiring discussions. And I would love, if EEAC could help to strengthen the momentum of the forthcoming decisions on energy efficiency issues.

Thank you.

- **José Manuel Barroso, President of the European Commission (***the video message in the CD)*

Mr. Barroso sent a special video message on the ***Energy Efficiency*** *for a Competitive, Secure and Sustainable Europe*.

- **Nebojsa Nakicenovic** (IIASA & Vienna University of Technology, Austria): **(**See the presentations in power point in the CD)

The presentation was on **The Potential of Energy Efficiency** and highlighted the steps needed to move towards a more sustainable future: the magnitude of the change required is huge; the challenge is to find a way forward that addresses all the issues simultaneously; and a paradigm shift is needed: energy end-use efficiency, new renewables, advanced nuclear and carbon capture and storage.

- **Thomas B. Johannsson** (International Institute for Industrial Environmental Economics, Lund University, Sweden) **(**See the presentations in power point in the CD)**.**

The presentation was about **the multiple benefits of Energy Efficiency Policies** and pointed out that the overall energy systems challenge is to evolve the present portfolio of energy forms through establishing enabling conditions to support sustainable development locally and globally and refereed that the key sustainable development challenges are: social, incl. poverty; security, and peace; economic; environment - urban and rural; regional and global ; and major changes needed, incl. in energy systems.

- **Nuno Ribeiro da Silva** (*Endesa, Portugal*) **(***See the presentation in power point in the CD)*

The presentation was on **Energy Efficiency**, being presented in three angles: 1. a global context for the Energy Issue in Europe; 2.the Energy Efficiency –where we are now; and 3. the business case for Energy Efficiency in Europe.

- **Martin Jänicke** (*SRU, Germany*): **(***See the presentations in power point in the CD)*

The presentation was on **Energy Efficiency: A Driver for Innovation and Competitiveness** and focus on the following main points: high necessity; competition for innovation; technology forcing necessary and possible; Best practice: Top Runner programme (J), Eco-Design (EU), Climate-Change Agreements (UK); a hybrid

governance pattern: Specific regulation (detail steering) plus economic "tendency steering"; and a hare-and-tortoise-dilemma: Why should RWE support energy saving?

- **Edda Müller** (*Federation of German Consumer Organisations, vzbv*):

The presentation on **Energy Use and Consumer Choices:**

In the face of the dangers being posed by human-caused climate change and an obvious lack of effective counter-measures, energy policy has discovered the consumer. This is a good thing.

The measures that have to be taken to improve the energy efficiency of our economy and societies are well known. They have already been described in the late 80s in the reports of the Enquete-Commission of the German Bundestag. They were listed in the background paper for the first decision of the German Government on a CO2 reduction target from June 1990, which was prepared under my responsibility. They are again described in the last report of IPCC Working Group 3 and in the reports of the EU-Commission. To a large extent the technologies are also available.

So, what went wrong then in the past?

Are the consumers the guilty party?

Do we have to change consumers´ preferences and culture?

What are the right instruments for a successful energy efficiency and climate change policy?

These are the questions I would like to address in the next twenty five minutes. I will do that from my German background and my experience with German energy policy. It may differ from the situation in other European Union member states, but it may also illustrate existing perceptions that have to be changed.

What went wrong in the past?

Energy policy in the past was too concentrated on the wrong actors. These were the suppliers of primary and final energy such as electricity, gas and petrol. Relevant actors on the supply side are others. These include producers of energy efficient technologies, the suppliers of material for the construction of buildings, the producers of appliances, the providers of transport and other services – those who are commercially interested in a successful marketing of their energy efficient technologies and services.

The role of consumers is also different. They are no longer only energy users but also buyers of energy technologies and services or – in the case of renewable energies – they are changing from the position of energy consumers to the position of energy producers. Energy efficiency policy must recognise these shifts in the consumer position.

My message is the following:

Energy efficiency policy will only be successful once it develops instruments that are fit for the constellation of actors it needs to influence. Concerning the consumers it has to examine the concrete room for action different groups of consumers have, e.g. to influence the amount of energy they need for heating or for their mobility.

Do we have to change consumers´ preferences and culture?

I tend to say no. The consumer does not have an interest in the maximum use of forms of energy that are harmful to the environment. Consumers are interested in energy services in the sense that they want warm apartments. They want electricity to operate household devices. They want light and they want to be mobile. The challenges we face therefore do not involve changing the mindsets of consumers or compelling them to relinquish certain things.

What we need is a policy that enables consumers to be provided with the energy services they want as efficiently as current technology allows and in a way that is as climate-friendly as possible.

What are the right instruments?

Until now energy and climate policy has not correctly weighted the mix of instruments available to it. Policy has essentially been orientated to three types of instruments:

1. Economic instruments which can be used to make energy provision more expensive in order to persuade the consumer to save on energy use: In view of the development of prices on the world market for primary energy, in my opinion it no longer makes sense to argue about the need of a tax induced increase in energy prices. It has become clear to the consumer that primary energy will no longer be cheap in the future. If energy prices should be politically influenced it should be done more specifically. This can be via subsidies for renewable energies and incentives to increase the share of cogeneration in electricity production. Such economic instruments must go hand in hand with efforts to induce price reduction by increasing competition in the provision and distribution of gas and electricity.

2. So-called flexible instruments such as emissions trading, the clean development mechanism and joint implementation:

   Apart from leading to excessive bureaucratic and monitoring costs, such instruments are currently causing extreme insecurity among energy providers and the providers of energy efficiency technologies due to their effect on the capacity for long-term planning. Similar to the situation on the financial markets, such instruments have become subject to daily market rates, speculation and the pursuit of windfall profits. In my opinion this situation is exactly the opposite of what investors need to be able to make long-term decisions. This applies to investors in new forms of energy provision. But it applies even more to investment in technologies for increasing energy efficiency and the provision of renewable energies.

3. Informational instruments: Information and labelling regarding the energy consumption of devices, buildings and vehicles can of course help the consumer to assess the subsequent costs involved in a purchase. However, at least in Germany, the concrete implementation of EU regulations is not particularly illuminating. In general, informational instruments require an extensive process of consultation and communication, particularly with regard to less educated consumers. Such instruments do not therefore have – as energy policymakers seem to believe – a rapid effect at low cost.

   In addition, informational tools can only be helpful if consumers have the possibility to make room for action.

   The highest potential for CO2 reduction offers the building a heating sector. But more than 50 percent of German households live in rented houses and apartments.

   Nearly 60 percent of domestic heating is provided by gas.

   Tenants do not have any influence on the kind of heating appliances installed and the quality of insulation of their houses.

   Another example is the transport sector. In 2005, the share o new licences for commercially used cars or for cars used by public services in Germany was 53,99 percent of the total number of new licences. These users get tax benefits. The higher the price of the car the higher is the reduction of the income tax they have to pay. More and more average consumers need their private car to reach

their job because public transport is not available or too expensive. Many consumers, mainly those living in rural areas, even need a car for shopping due to the proliferation of shopping malls outside the cities or for reaching general services such as schools public libraries, banking and postal offices which are no longer close to their homes.

For these reasons I would advocate a tool mix that places higher value on regulation and the binding legal definition of standards and obligations. Positive approaches in this regard include the top-runner approach used by the EU-Eco-Design Directive. Electricity consumption must be reduced using a discerning and dynamic top-runner system. Devices using excessive amounts of electricity should be eliminated from the market. Stand-by modes should only be allowed when a continuous connection to the grid is necessary because of functional reasons. In the area of building, we should only allow buildings to be constructed according to the highest standards of energy efficiency. Obligations to modernize energy use in existing buildings must be standardized and promoted. In the area of motor vehicles, the industry's inefficient self-regulation needs to be replaced by standardized fleet consumption. Cars must be more fuel-efficient. In addition, a comprehensive tax reform has to abolish counterproductive incentives. Public transport should be promoted and if needed it should be subsidized. Reduction in parking space as a means of reducing the amount of driving by consumers or speed limits should be considered. Air transport also needs to be addressed. Infrastructure should not be allowed to continue to proliferate and the building of even more regional airports should be stopped.

It is thus imperative that we dovetail planning and building permission regulations relating to energy facilities and building projects and that we gear our transport infrastructure to stipulations regarding energy consumption.

This year the European Union has set clear goals for the introduction of an energy turnaround. By the year 2020, an average of 20 percent of the energy consumed by member states is to be derived from renewable sources. By 2020, member states should, overall, also be using 20 percent less energy than they were in 1990.

Implementing these targets requires concrete action. Given the immense hunger for energy in countries such as China and India, there can be little doubt that energy prices will remain high and even rise in the future. High energy prices will make world wide competition for energy intensive enterprises such as refineries and the aluminium, chemical and steel industries more difficult. They should, however, no longer be perceived as a barrier to competition but as a challenge. Given the persistence of high energy prices, the economic success of products and industrial processes on the world market will increasingly depend on their energy efficiency.

Given the explosion of energy prices, consumers also share this economic interest in more efficient products. In the last ten years alone, the price of gas used for heating in Germany has risen by 70 percent. In general, increasing energy prices over recent years have resulted in a significant increase in the energy-cost burden on the private consumer. Between 1996 and 2006, total expenditure rose from 69 billion euros to 100 billion euros.

High energy prices are increasingly also becoming a socio-political problem. Particularly for low-income groups, increasing costs for existential needs such as heating, mobility and electricity are becoming an onerous burden that these consumers are only able to bear at the expense of other needs.

Again, the time for a mostly macro-economic steering of the energy sector and the time for voluntary instruments is over. Taxation and emission trading are no longer appropriate instruments. Today we need instruments that specifically mobilize the contribution of numerous individual actors while also offering them planning security and building confidence in the viability of investing in increased energy efficiency. The horizon for action for energy policy now needs to be expanded beyond suppliers of primary and final energy. The future of Europe as a locus of economic activity will depend on the economic success of numerous providers of energy-efficient technologies and it will depend on consumer's and voter's acceptance.

The necessary paradigm shift requires energy policy-makers to focus on different target groups. The marketing and application of energy-efficient technologies is in the clear economic interest of the manufacturers of technologies, the suppliers of materials to the building industry, transport service providers, the appliance industry and service enterprises. Consumers´ demand is the precondition that efforts and innovation in supply will be successful.

Now, what kind of instruments could best serve consumers´ demand?

What we need is a proper mix of instruments. In the building sector and concerning the standards for the energy consumption of appliances binding regulation will be more efficient than informational tools. In the transport sector priority should be given to local and regional public planning activities. In addition informational tools should be more intelligent in the sense that they allow direct feed-back to consumers. Smart metering is a good example of these types of instruments. Smart metering facilitates a price-induced regulation of electricity demand. Consumers can schedule their consumption at times when supplier generation capacity is not being fully utilized and thus when electricity is cheaper. This will change the passive role of consumers in electricity use into a more active and conscious position.

Another interesting field for the use of informational tools is the "hidden energy content" of products such as paper, food or packages. For the production of recycled paper much less energy input is needed than for the fabrication of paper made from fresh fibre. Convenience food and all kinds of manufactured food will normally be much more energy intensive than food made from raw material. Energy can also be saved by using return bottles which can be refilled.

The interesting question is whether the political decision making process within the European Union is prepared to implement und enforce the necessary instruments. How much harmonized legislation is needed and how much freedom for national actions is necessary? The targets set for energy efficiency in Europe are not always very helpful for the decision making process of national governments and Council decisions. The CO2 burden sharing mechanism means that some countries can do less while others are obliged to do more. However, in the internal market stronger national energy-efficiency standards for tradable products are not allowed. National subsidies or other measures that could influence competition may violate EU-rules. The question is, do the member states in fact have the necessary scope for action at the national level to achieve higher reduction targets without coming into conflict with EU policies? I repeat, I am not sure that these contradictions can only be solved by using informational tools and by counting on consumer demand and the right consumer choices given the limited room for action of consumers and the general weakness and slowness of information policy.

Let me conclude with the following.

The threat of climate change is presenting us with the challenge of developing a truly sustainable energy policy that replaces the current sector-specific and provision-orientated approach with a cross-sectoral one. Above all this concerns technology policy which is orientated to the different sectors of energy need. It concerns policy on construction, on transport infrastructure, on the development and implementation of technologies used in household devices and not least consumer policy. A climate-friendly energy policy should also include the transformation of energy consumers into energy producers. This refers to consumers who make themselves independent of centralized energy providers by purchasing decentralized and integrated technologies, such as in the case of individual or collective investment in heating systems that are independent of energy providers. Maybe, we have first to change the mindsets and "culture" of energy policy makers before we will be able to successfully implement a strong energy efficiency policy. I thank you for your attention.

Discussion & wrap up by **Viriato Soromenho-Marques** (*Barroso HLG on Energy and Climate / CNADS, Portugal*)

The discussion focused on two questions:

What is the EU up to?

- Combining Energy and Climate Change in a crucial way,
- Post Kyoto targets for 2020,
- Combining Energy and Climate Change in a crucial way,
- Internal Electricity and Gas Markets,
- Energy Efficiency and renewable goals.

How huge is the task?

- To overcome European internal dissidence, different agendas, and strong tendency to fragmentation.
- To lead the international community into a new age within the UNFCCC after 2012.
- To re-engage the USA.
- To involve the new members of the coming World Directory (e.g. China and India).
- To mobilize citizens and social actors in a long-term steady strategy, mixing mitigation and adaptation.

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6.2 WORKSHOPS

A – Transport and Cars (*See the presentations in the CD)*

Chair: Thomas Legge (Comhar, Irland)
Key Note Speakers: Carlos Marques (STEPs project team/EU); Christian Hey (SRU, Germany); Udo Schriever (Volkswagen AG)

Thomas Legge, as Workshop Chair, opened the session by welcoming and thanking everyone for joining the workshop, which promised to be a useful and thought provoking discussion on the subject of Transport and Cars, particularly in the light of the overall conference theme of Energy Efficiency.
He outlined for the benefit of all present the main EU strategy for reducing carbon dioxide emissions from cars to 120g per kilometre by 2010 for all new cars, which is based around three so-called pillars. The first pillar concerns voluntary agreements with the car manufacturers to reduce emissions from cars primarily through the introduction of new technologies. The second pillar is to improve the availability of consumer information on the fuel-economy of cars, and was supported by an EU labelling directive in 2001. The third pillar seeks to use market-based measures to influence the choice of the motorist towards more fuel-efficient cars. With these initiatives in mind, the Workshop heard from the three invited Key Note speakers.

As key note speaker Carlos Marques, focused his presentation on "Transport Strategies Under the Scarcity of Energy Supply", a study conducted as part of the STEPS Project (Scenarios for the Transport system and Energy supply and their Potential effects). The study considered what the transport strategies of the future are likely to be if a situation develops where energy, and in particular fuel for cars, is less abundant or available only at a premium. The analysis was based on different geopolitical, environmental and geological constraints, allowing for potential developments in future technologies, and focussed on the effects of different levels of fuel price increases. Some of the core assumptions of the study are that the growth of the modern city has been borne out of mobility, and because transport has been cheap, commuting has been possible – the limits to mobility are determined by time and affordability.

The conclusions of the study are that the existing land use and mobility patterns of cities are not sustainable, and will become worse as income grows. A key measure for tackling this issue is to increase the cost of energy either through market forces as fuel becomes more scarce, or by political interventions such as taxes. The study predicts that fuel price increases will have significant economic impacts and will increase the general cost of living. The mobility of individuals will reduce and there will be a renaissance of walking and cycling, and there will be reduced social or leisure trips. The environmental impacts are forecast to be beneficial as there will be a reduction in greenhouse gas emissions. Cities will adapt to provide for more local ways of life, and high density mixed-use urban structures will be developed. There will need to be integrated strategies for land use and transport, with regional planning systems. In conclusion, the price of fuel could have a profound effect upon how people live, work and travel in the future.

As also a key note speaker, Christian Hey talk about "Carbon Dioxide Reduction from Cars – the Battle of Concepts". This was a discussion of the different kinds of voluntary agreement that could be reached with the automobile industry, and which of these are more likely to be successful. The key argument turns on open vs. closed trading systems, with some consideration also of uniform carbon dioxide emissions limits across all cars.

In general the principal of a closed trading system is widely preferred, with open systems being rejected by most parties. An open system would establish the financial responsibility of car producers for protecting the environment, but as manufacturers would be able to trade as part of the EU Emissions Trading Scheme, they could purchase their rights from other sectors. It is also widely recognised that a uniform limit for all cars has its own problems, such as the excessive cost for larger cars to reduce their emissions, and the political unacceptability of phasing out larger cars. The perceived benefits of a closed system are that the cap and trade approach will drive innovation for all car types. However, if there is a uniform limit for emissions, there is likely to be a scenario whereby producers of big cars trade significantly with their competitors, whereas if there is a scaled limit for emissions, there will be less trading between manufacturers. This latter scenario is proposed as the most likely and viable way ahead if there is to be a voluntary agreement with the car manufacturing industry.

Udo Schiever, as last key note speaker, gave a presentation on "Efficient Powertrain Technology" detailing the work that has been undertaken by Volkswagen for many years to improve the efficiency and effectiveness of their cars. The first significant milestone was 1981 with the first Formel E car with improved efficiency, and the innovation continues to this day with each model of car having a Blue Motion version developed to push further the efficiency envelope. Volkswagen have looked at all parts of the power train, from engine to transmission and fuel type. As a result, their modern cars have greater fuel efficiency at comparable, if not greater, performance levels. Furthermore, they believe that with their new particulate filter technology they will meet tough air pollution standards for their new diesel vehicles, although it should be noted that this particle filter increases fuel consumption. Udo also suggested that the potential of diesel drivetrains to meet emissions levels that are comparable with a hybrid vehicle should be achievable at less cost.

When considering what measures would suit the industry for driving further fuel efficiencies into their cars, Udo was clear that there should be no distortion of the market, and that all companies should be able to remain competitive on the global market.

Discussion:

It was suggested that it is still considered important for cars to be fun to drive (i.e. to have high performance) and that efficient cars perhaps equate with boring cars. In addition to this, part of the aspirational value of a car includes the expectation that it will have all possible amenities such as air conditioning, audio, heated seats etc. There is an argument instead for a re-focus on micro-transport solutions such as small motorcycles, which are common in India.

In response to these comments it was noted that the Prius has been very successful, and that there is a trend to install hybrid technology in more so-called fun to drive cars such as Lexus models. If a Porsche hybrid were developed then it is likely that hybrid technology would spread very rapidly. However, the results are in many ways more

important than the specific technology, and it may well be the case that clean diesel technology is a realistic option to hybrid technologies.

It was noted that the cost of fuel is not always considered against the considerable initial capital investment required to purchase a car. One of the concerns expressed over a non-uniform level of emissions for cars is the implication that the owners of large cars have a greater right to pollute the atmosphere, which is not the case. There was a suggestion that hydrogen should form a significant fuel option, not least because much of the technology could potentially be implemented very rapidly. There was speculation as to why electric cars are so far from the market, apart from a few limited models.

It was proposed that new technologies could have a significant part to play in the future, and not just automobile technologies. Communications technologies could reduce the need for people to travel, and perhaps a future metric should be accessibility rather than mobility – can people get what they need without having to travel so much?

With regards the uniform emissions level versus a curved profile (factored according to the size of the car), this is still an area of significant debate. Economists recommend a uniform level, but the car industry has obvious concerns. This is something for further work by the EU.

The use of hydrogen as a fuel has been postulated for a long time, having been mentioned by Jules Verne in 1870, presented to the US Congress as a serious option in 1970, and enjoying popular support at present. However, there are significant infrastructure costs associated with a change in fuel type, and industrial/consumer inertia, but maybe by 2070 there will have been significant progress.

The reason that electric cars have not yet become a major production item is that they did not enjoy major market success in the 1990s. However, the customer is now rather more interested in fuel and efficiency, and so the time for electric and hydrogen technologies may be closer than we think. Certainly, if there are further developments in battery technology (e.g. Nickel-Metal-Hydride) then there may be a niche market for rechargeable electric cars with limited range.

It was commented that to address emissions from transport, it will be very important to tackle road freight, as trucks are covering huge distances and emitting vast quantities of carbon dioxide. The external costs of transport need also to be considered, which can be related to vehicle size – some examples being heavy goods vehicles causing greater damage to roads, or the rehabilitation costs of someone hit by a small vehicle as compared to a larger one.

It was agreed that the issue of road freight must be addressed, and that it does not necessarily have a simple solution. One option would be to include road-freight as part of the emissions trading scheme. The cost of freight on different routes (road, rail etc) needs to be better understood as it is actually quite complex.

There are still many issues that need to be debated in order to achieve a clear way ahead within Europe in order to achieve greater efficiency from transport and cars – technology, governance, behaviours. It is clear that there is no shortage of technology solutions to support increased efficiency, be this through improvements in fossil fuel technology, or the implementation of novel technologies such as hybrid drive, electric or hydrogen powered cars. The big obstacles to progress are the construction of agreements that are acceptable to all parties, within which the consumers, manufacturers, regulators and environmentalists can achieve a balanced approach to their many requirements. It is important that this is progressed as an urgent area of work, as various studies show that fuel is likely to become more expensive, and this will necessitate a change in our behaviours. The aim of greater efficiency in transport is both laudable and challenging, and fortunately this target benefits from the dedicated attention of the key players that can make a change in this most important of areas.

B– Buildings (*See the presentations in the CD)*

Chair: Peter Novak (CEPRS, Slovenia)
Key Note Speakers: Jens H. Laustsen (International Energy Agency); Wolfgang Feist (Passive Institute, Germany); Eduardo Maldonado (Concerted Action EBPD/Energy Performance of Buildings Directive, University of Porto, Portugal)

Jens H. Lautsen, from the International Energy Agency, presented *"Global strategy for energy efficient buildings. On the track to zero energy buildings"*, an overview of the energy saving potentials through improving building energy efficiency worldwide.

Buildings (including appliances) account for 40% of world energy use. There are large potentials for energy efficiency in cooling and heating both in developed (around 50% in EU-15; up to 80% in new EU member states!) and developing countries. It is a win-win-win option for owners, industry and government. However, there are many barriers, acting at the same time, ranging from the distribution of costs and benefits, training, time-scales, personal decisions, etc, and also lifestyles and social perception.

Establishing building efficiency codes and standards is one of the mechanisms for improving efficiency, but a main problem is enforcement. Building codes and standards should be stricter (more ambitious). Very best practices (e.g. passive houses) "push" for higher codes and standards. A key issue is to improve energy efficiency in existing buildings. There is a need for standards for existing buildings (as included in EPBD). Buildings last long, so renovation should be used for improving energy efficiency.

In conclusion, there is a need for active policies for improving energy efficiency, through regulation and encouraging the building industry. This is both for new buildings (through codes and standards, and promoting the construction of very low energy use buildings) and existing buildings (information on energy performance, barriers, requirements to improve efficiency when refurbishment, etc.) IEA is performing a comparative study on energy efficiency standards in buildings. More results will follow in 2008.

Wofgang Feist, from **Passive house Institute, Germany,** spoke on *PassiveHouses– Deep Reduction Goals for the European Union.* In the future buildings should tend to become "near zero emitting", or passive houses. This is possible by high standards of energy savings, based on the idea of "not loosing energy". It is already possible to reduce heating energy demands by 90% in a building in central Europe, applying passive house technologies. From the end of the 1990s, passive houses are built in countries such as Germany and Austria.

A key issue is adaptation to the local climate. In central-north Europe, with an adequate insulation, triple-low e windows and ventilation with heat recovery (also improves indoor air quality), almost not heating is needed. Regarding costs, energy savings make up for construction costs. Low heating requirements mean simpler systems, therefore

cheaper. In residential buildings the extra costs in construction is around 3-5%. There are also non-residential passive buildings: schools, students' hostel, and even a chemical plant. It is possible also to include passive house technology in building refurbishment.

The keys for success are 1) adaptation to climate conditions and building traditions (people want their houses to look as normal houses), 2) start with demonstration projects – people has to see to believe, 3) Quality assurance and an additional planning effort. Research and demonstration projects: PEP (promotion of European passive houses) and *passive.on* (focused on Mediterranean regions).

The public made several questions on Passive houses. For example, someone asked about their performance in summer, and if they can fit with requirements in southern countries. The fear is that too much insulation could mean more cooling requirements. The answer was that it is very important to adapt to each climate conditions. For southern countries, passive houses should have good insulation in the ceiling, but not in the floor. Make use of shadowing in windows.

Eduardo Maldonado, from University of Porto, Buildings Concerted Action, presented "*The Advances from the Energy Performance of Buildings Directive (EPBD) and Future Perspectives: What has come out of it? What can we expect in the future?"*. The presentation focused on EPBD implementation and challenges. EPBD aims to promote the improvement of energy performance of buildings within the EU through cost-effective measures. It was approved in 2002, but still not fully transposed in half of EU member states, which can decide in how to implement it. Difficulties are due to many reasons: lack of consensus in technical solutions; some measures are not cost-efficient, it is a new legislation affecting millions of buildings, lack of technical experts.

According to EPBD, all buildings should have an *Energy certificate*: new ones, when built; old ones, when sold or rented out. The certificate should be revised every ten years (should be shorter). Public buildings are to set an example by being certified regularly and visibly. However, it is still necessary to work on a common methodology integrating various aspects (insulation, heating, cooling, ventilation, lighting, renewable energy installations, orientation of the building, etc), flexible enough for meeting the

standards in the most cost-effective way, and taking into account climatic differences. This is difficult at the technical level.

In each MS minimum standards should improve existing ones, and be revised at least every 5 years. Those standards would apply for existing buildings only larger than 1000 m^2 in case of major refurbishment. Most MS are adopting new, more demanding building regulations, which in overall show a 25% average increase in energy efficiency requirements. Moreover, some countries have introduced new requirements for better performance in summer, although with different approaches. As future perspectives, according to the Energy Action Plan, EPBD will be revised to increase mandatory energy efficient levels, towards passive building levels.

The final message was optimistic. Many estate regulations have improved and energy certification of buildings will become a reality in every EU country. This must be taken as a continuous process towards energy efficient and comfortable buildings.

Discussion:
Questions in the workshop programme:
What can be done to modernise the existing buildings stock?
Is the German investment programme for modernisation a model? Is it sufficient? What incentives could be built into the Energy Services Directive to reduce the energy needs of existing buildings?
How can we overcome other legal and also social barriers for profitable investments for less energy consumption at national and EU levels?

At the beginning of the session, Peter Novak posed two questions:
- How we can change EPBD for including small buildings?
- What for building stocks?

The first part of the discussion was about barriers, such as the differences in costs and benefits for tenants and owners. Owners might raise the price if the building is refurbished and energy efficiency improved. So this becomes a “negacentive” for improvement.

The answer to how to overcome this barrier was that total costs of the flat should be made more visible. Energy certificates should be used as information basis. There could be used programmes of sharing costs and benefits between owners and tenants.

Another barrier that was discussed was the shape of houses, and the use of big windows or small windows. All agreed that it is important that houses look like "normal" houses, therefore the design should adapt to the building tradition in each country.

Regarding incentives and how to promote more efficient buildings, economic incentives, financing, and regulation were issues discussed. It is interesting to note that in some regions in Austria, it is compulsory that new buildings are passive houses, which was considered very interesting by the workshop.

Following the third presentation, the workshop shared the feeling that EBPD is in the good direction and it is a good instrument for better regulation at national levels. However, it should be improved and include obligations for small existing buildings (smaller than 1000 m^2). Moreover, building standards should be revised every one or two years.

C – Products (*See the presentations in the CD)*

Chair: Gavin Purchas (SDC, United Kingdom)
Key Note Speakers: Rainer Griesshammer (WBGU, Germany); Martin Jänicke (SRU, Germany); Jörg Malzon - Jessen (INFINEON, Austria); Harry Verhaar (Philips Lightening, Netherlands); Andrew Lee (SDC, United Kingdom)

The Chair called for dynamic efficiency labels and standards for energy using products within the EuP directive. First implementation measures will be discussed in the forthcoming months. How do we assess implementation progress of the directive? What should be the benchmark for the dynamic standards – is the more pragmatic top-runner model or the less transparent least-life-cycle cost the better benchmark? Which incentives can be created to speed up consumer goods modernisation – which side effects have to be considered in the design of those measures?

D - ETS and other market-based instruments (*See the presentations in the CD)*

Chair: Hubert David (Minaraad, B)

Key Note Speakers: Frank Convery (Comhar, Ireland); Thomas Johansson (Lund University, Sweden); Pedro Martins Barata (Euronatura, Portugal); Piotr Tulej (European Commission, DG Env)

The Chair welcomed the current trend towards stricter and more harmonized caps, auctioning of emission rights and a broader scope of the system, which all make the system more effective and more efficient. With the proliferation of different sectoral emission trading systems however the question arises, whether a single upstream model at the level of fossil fuel importers and traders would be more efficient. Which problems need to be overcome to achieve such a single comprehensive ETS?

E - Demand-Side Management and Culture (*See the presentations in the CD)*

Chair: Filipe Duarte Santos (CNADS, Portugal)
Key Note Speakers: Andrea Kollmann (Energy Institute, University of Linz, Austria); Patrick Matschoss (SRU, Germany); Álvaro Gomes / Aníbal T. Almeida (University of Coimbra, Portugal); Grégoire Wallenborn (Université Libre de Bruxelles, Centre d'Etudes du Développement Durable, Belgium)/ Françoise Bartiaux (SEREC Network, University of Louvain, Belgium)

The Chair highlighted that this session has five speakers who presented three different approaches to views on energy: comparing economic, technological and sociological approaches to improve demand management:

- An economic approach (Kollmann and Matschoss)
- A technological approach (Gomes)
- A sociological and cultural approach (Bartiaux and Wallenborn)

Drawing conclusions from and reconciling these three points of view should enable us to propose more effective and more targeted policies, in particular in terms of the actors and activities concerned.

Andrea Kollmann and **Patrick Matschoss** presented on "*Energy: a product, a marked"*: Energy can be considered a product that is traded on a market and whose price results from the balance between supply and demand. The primary motivation for changing consumption levels is the economic interest, i.e. to reduce energy bills by using more energy-efficient devices, consuming more efficiently and so on.

This approach is probably especially relevant for economic actors, who perform economic and financial arbitrage operations with a view to adopting investment decisions. Directive 2006/32/EC on energy end-use efficiency and energy services specifically targets these actors. Andrea Kollmann nevertheless demonstrated that this directive has numerous inaccuracies and shortcomings, particularly in connection with its objectives, its definition of the concept of "efficiency" and the methodologies used to measure energy efficiency. What is more, one of the main weaknesses of the directive is that it does not apply to energy producers.

As Patrick Matschoss explained, there are a number of instruments available to encourage better energy efficiency by exercising constraint on energy demand or supply:

Information is intended to encourage the purchase and use of more energy-efficient products or services. The use of labels provides consumers with information on impacts. Making the use of labels compulsory should motivate producers in a competitive market to develop and sell more energy efficient products.

Based on the observation that consumers do not necessarily make the most rational choices in terms of energy consumption, there is clearly a need for instruments imposing stronger constraints. Standards, for example, can oblige producers to market only products meeting minimum energy-efficiency requirements.

Lastly, an increase in energy prices (especially through taxation) can increase the effectiveness of the other instruments. An action on energy prices is therefore an instrument of choice. However, two factors must be taken into account:

- The percentage of the "energy" heading in consumers' budgets is markedly higher for the poor than for the rich
- The poor have less capacity (particularly in terms of investment) to make their consumption modes more sustainable; when faced with higher prices, their action is essentially limited to consuming less.
- The surplus resulting from an increase in energy prices must be managed: it can be used either to finance energy transition (with special attention on the poorest), or to bring about an adjustment in state finances (from taxation of labour to taxation of energy)

Álvaro Gomes, from University of Coimbra spoke on "*DSM: more rational management is possible with technology"* "Demand side management" (DSM) is a concept that has been implemented in energy production for a long time. The aim is to spread out electricity demand over time in the most balanced way possible, because the units used to meet demand during peak periods are the costliest, the least profitable and often the most polluting. The aim is threefold:

- to optimise investments
- to contribute to network stability
- to lessen environmental impacts

The problem here too is to motivate actors and households, which are not necessarily trained in more rational management of energy consumption.

Françoise Bartiaux and **Grégoire Wallenborn** talk on "*The need for a socialogical to energy" :* A number of paradoxes justify this approach. According to the rational actor model, correct information should encourage awareness and subsequently lead to a change in behaviour. However, that is rarely the case for households: knowledge of the negative effects of excessive energy consumption has practically no impact on consumption levels. Paradoxically, those most aware of these impacts consume the most, because in many cases they are more affluent and because there is a clear correlation between the standard of living and the level of energy consumption. In fact, there is no automatic link between knowledge of a problem and a change in behaviour.

Energy can thus be seen as a mediator between needs and satisfaction of these needs. People only take into consideration the uses of energy: transport, heating, watching television, cooking, etc. Energy as such is a very abstract concept. It is mostly invisible, considered inexpensive, abundant and available at all times.

Rationality is first and foremost being capable of justifying one's behaviour and such justifications are varied. Most economic instruments target a specific rationality, namely economic rationality. Yet there are other forms of rationality, for example, saving time and the importance of social status. These are two key factors for understanding people's behaviour.

Behaviour and cultural practices are disseminated along two axes: vertical dissemination (from the richest to the poorest) and horizontal dissemination, created by imitation of one's fellows. At present, vertical dissemination encourages particularly non-sustainable models, in particular from the rich countries to the developing and emerging countries. The wish to see one's social status recognised almost always prevails over more rational energy consumption patterns. Horizontal dissemination is weak because people take the view that being the only one to change their behaviour is useless and will have no appreciable impact.

The dissemination of sustainable consumption models must therefore be encouraged along both axes:

- More sustainable consumption patterns need to be adopted and promoted by the more affluent classes, by policy makers and by public figures (actors, other well known figures) and the wealthy nations need to change their consumption patterns first, to influence the emerging and developing countries.
- Sustainable development and the sustainability of our consumption patterns must become real challenges for society, priorities defended by governments which must develop coherent and consistent policies. This framework should encourage governments to set the example and to take measures that might at first sight be considered unpopular. Ensuring that the new requirements apply to all is also a factor of success.

Those are the conditions under which an improvement of information on energy and energy efficiency may produce optimal results. Convergence, consistency and coherence between policies, speeches and information are keys to success. They will encourage the emergence of an action plan perceived as collective and creating social ties.

One of the essential instruments to be developed is a set of indicators comprehensible to the general public and clearly showing the link between:

- the challenges (climate change, depletion of natural resources and energy security),
- the policies adopted, and
- the results (energy consumption levels and greenhouse gas emissions).

Behind these different approaches to the energy problem, there are of course different conceptions of public action. Governments also often reflect the inconsistency between knowledge and concrete actions.

Panel Discussion: From talk to action

Chair: Christian Hey (SRU, D)
Speakers: Frank Convery (EEAC / Comhar, Ireland);Piotr Tulej (European Commission, DG Env) Rainer Griesshammer (WBGU, Germany); Eduardo Maldonado (Concerted Action EBPD, Portugal); Andrea Kollmann (Energy Institute, University of Linz, Austria).

The final Panel session brought together the key points from the workshop sessions. Some of the controversial points, such as the debate between emissions trading versus ecological tax reform were resumed. It was however concluded, that leaving the ETS trajectory now instead of investing in its reform, would leave the EU for considerable time without an effective instrument for climate mitigation. Also the difficulty to create political momentum for many, partly very technical issues around a powerful efficiency agenda was raised. But it was agreed, that only a combination of economic instruments, information tools, product regulation and market reform will be able to deliver the needed energy productivity increases.

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7. E.E.A.C. ANNUAL PLENARY SESSION (APS Report)

Saturday, 13th October – E.E.A.C. Internal Day

The Steering Committee Chair, **Frans Evers**, welcomes all attendants to the APS 2007 at the University Évora, the APS approved the agenda and the fowling:

A) Steering Committee Report

1. New EEAC members

A document with key information about the candidate councils was submitted prior to the meeting.

Mario Ruivo (Chair, CNADS, P) suggests that EEAC members should receive in future the statutes of the candidate councils in order to avoid lacks on legal documents, namely in legal statute terms. The tabled document is not sufficient, at least in legal terms. On procedure, **Frans Evers** (Steering Committee Chair) explains that **Ingeborg Niestroy** visits and checks the candidate councils and then she reports to the S.C. which, based on this assessment, takes the decision to submit the candidature to the APS. In the case of the CAMA, the former vice-chair of the Steering Committee, **Viriato Soromenho-Marques** (CNADS, P), joined this visit.

Louis Meuleman (RMNO, NL) adds that also examples of advice issued by the candidate councils should be included. **Frans Evers** (Steering Committee Chair) underlines that some councils do not produce written advice and this should be kept in mind.

Alain Mairesse from the Walloon Environmental Council for Sustainable Development (CWEDD, B) presented the council and made two remarks to the text provided (on mission and composition). There were not representatives from the French National Council for Sustainable Development (CNDD, F) and the Spanish Environmental Advisory Council (CAMA). **Aristides Leitão** (CNADS, P) and **Xavier Cazorla** (CADS, E) read an official letter from the latter apologising for its absence and designating its representatives.

Frans Evers (Steering Committee Chair) announces that the S.C. decided to also present the candidature of two other councils: the Luxembourg High Council for Sustainable Development (CSDD) and the Northern Ireland Council for Nature Conservation and the Countryside (CNCC), whose applications were received after the

APS documents, had been sent. The S.C. considers that they both fulfill the conditions for membership and there is no reason to further delay joining the network.

Jean Stoll (CSDD, L) presents his council and informs that so far, it has not issued any advice, but there are two requested advice on which the council has started working.

1	**Approval 2007** **New EEAC members**
	Reference: Steering Committee Report for the APS 13.10.07, section I.2
	The APS 2007 unanimously approves the membership (from 1.1.2007) of the: **- French National Council for Sustainable Development (CNDD),** **- Spanish Environmental Advisory Council (CAMA),** **- Walloon Environment Council for SD (CWEDD).** **The APS 2007 unanimously approves the membership (from 1.1.2008) of the:** **- Luxembourg High Council for Sustainable Development (CSDD),** **- Northern Ireland Council for Nature Conservation and the Countryside (CNCC).** **The APS asks the Steering Committee to deliver in the future key information about candidate councils prior to the APS, including statutes in English if available.**

2. Alterations to the Framework for EEAC

Frans Evers (Steering Committee Chair) introduces the subject explaining that there have been intensive reflections in 2007 on the question of agencies' membership in EEAC. This was triggered by the termination of English Nature in 2006 and merger into a new organisation (Natural England), and by concerns raised by some members.

Tytti Tuppurainen (FCNR, FIN) has one remark on the proposed rules for associate: If a council decides for an 'associate' status this should be respected, and this status is not terminated.

Hubert David (Chair, Minaraad, B) adds that the composition of the councils is very diverse and there must be flexibility regarding the kind of collaboration to be set up with the network.

Frans Evers (Steering Committee Chair) explains that the main question dealt here is how long the network should accept councils to remain as 'associates' if they fulfil all membership requirements.

Viriato Soromenho-Marques (CNADS, Pt**)** also believes that the freedom of choice should be respected and there must no be any obligation to become member. As for the

category 'partner' the main idea is to check if the councils have enough capacity to give independent advice.

Frans Evers (Steering Committee Chair) makes clear that the distinction between member/partner/associate is not solely based on the independence issue. The point is adapting membership in the network to embody organisations of a different institutional type and with different statutes and remits. Partners, however, give independent advice.

Marcus Yeo (JNCC, UK) ensures that the UK agencies are content to become partners and they would like to remain actively involved.

Mario Ruivo (CNADS Chair**)** suggests that the *'7 criteria for EEAC Councils' Independence'*, drafted by Viriato Soromenho-Marques (CNADS), should be considered as a fundamental assessment element in the Framework. **Jan de Smedt** (FRDO-CFDD, B) finds that the current text could be still improved. **Christian Hey** (SRU, D) states that the *''7 criteria for EEAC Councils' Independence''* are not the only criteria that define a council. **Günther Bachmann** (RNE, D) assures that his council would not fulfil all the criteria. **Viriato Soromenho-Marques** (CNADS, Pt) explains that this paper was not meant as a legal document but as a draft for discussion, with the idea to find a common ground and give a good insight on what is at stake when one talks about independence.

Angelika Zahrnt (RNE, D) suggests that councils should send their remarks to the *'7 criteria for EEAC Councils' Independence' to* the EEAC Office by the end of the year.

Frans Evers (Steering Committee Chair) wraps up the discussion saying that the FNCR asks to be less strict with the 'associates' category and that the S.C. will amend the draft Framework accordingly. 'Associates' who fulfil the membership criteria should however be encouraged to become members. All EEAC members are welcomed to send their comments on the *'7 criteria for EEAC Councils' Independence'*.

2	**Resolution 2007** **Alterations to the Framework for EEAC**
	Reference: Steering Committee Report for the APS 13.10.07, section I.3
	The APS 2007 is a quorate APS, as *21 of 29* members are present. **The quorate APS endorses the proposed alternations to the Framework for EEAC with one abstention, given that the section regarding 'associates' will be modified to allow for some more flexibility.**

3. EEAC strategy

Frans Evers (Steering Committee Chair) reports that two Dutch councils (RLG, WSC) sent letters with comments and amendments to the proposed strategy, and also Christian Hey and Jan de Smedt did. The S.C. suggests approving these amendments. The S.C. will include all amendments, finalise the strategy, try to shorten it again and include a summary. The final version will be sent to all members and will be uploaded on the EEAC website. He expects that it should be re-assessed after 3 or 4 years.

3	**Endorsement 2007** **EEAC strategy**
	Reference: Steering Committee Report for the APS 13.10.07, section II.1
	The APS endorses the proposed EEAC strategy, with the amendments received (RLG, WSC, Christian Hey and Jan de Smedt).

4. Forward Looking Paper

Agneta Andersson (RLG, NL) introduces the background of the Forward Looking Paper (FLP) drafted by the Forward Looking Group (FLG) composed of WG chairs. FE adds that the purpose of the FLP is to trigger a discussion at the APS.

Hubert David (Minaraad, B) asks if there is any hierarchy in the issues outlined in the paper, to which Agneta Andersson replies that there is none. Hubert David is of the opinion that the budget reform is the most crucial issue and since the EU budget is mostly devoted to the CAP, the WG Agriculture should consider working on this.

Pernilla Knutsson (MVB, S) suggests adding energy and climate issues to the FLP. **Jan de Smedt** (FRDO-CFDD, B) adds that Greening the Lisbon Agenda should be also included. **Günther Bachmann** (RNE, D) says that for the next paper the 'how to' should be addressed for all priorities set in the FLP, for example research policies, governance and communication style.

Debate on effectiveness of councils

At this point **Frans Evers** (Steering Committee Chair) opens a debate of the effectiveness of councils' activities and advice. **Günther Bachmann** (RNE, D) states that the RNE fosters political discussion and gives as example the advice on Corporate Social Responsibility. They also do some assessment of their activities, including

widening to more councils, as he did with commissioning the WG SD study 2007 [2] ("looping"). However, the 'how to' should be more considered (for example internal - external). **Angelika Zahrnt** (RNE,D) adds that the RNE made an evaluation of their first term, and she reminds that if we stress the importance of monitoring to governments, we should also do it ourselves. **Jan de Smedt** (FRDO-CFDD, B) says that his council assesses its work in the first assembly of the year and that they ask the cabinets for feedback on their advice. **Martin Krachler** (OeVAF, A) has seen that their advice is taken up in the political language.

Hubert David (Minaraad, B) reports that his council three times asked a University for an assessment on their advice, but was rather disappointed: They found it not very useful, as more questions were posed than recommendations made, besides the fact that it costs money. **Bram van de Klundert** (VROM-Raad, NL) confirms this experience. **Roel Cazemier** (WSC, NL) questions in general whether councils should check what happens with their advice. **Meinhard Schulz-Baldes** (WBGU, D) supports this, stating that we are advisory councils, and not NGOs, who would follow-up advice. **Angelika Zahrnt** argues that this might rather apply to more scientific councils. **Aristides Leitão** (CNADS, P) reports that his council follows how his recommendations and proposals are taken into account and return to his advices' matters to assess the implementation levels in order to notify the entities in charge or to suggest adjustments. CNADS promotes public meetings, often with NGO's, to debate the public policies assessment, namely in Parliament.

Bram van de Klundert (VROM-Raad, NL) assures that it is difficult to measure the effectiveness of councils' advice. FE reminds to **Susan Owens** (RCEP, UK) research and presentations in Copenhagen 2006, stating that it might take up to 10 years until a council's advice is "heard". **Günther Bachmann** (RNE, D) says that the criteria for effectiveness are not at all clear: if advice is taken up by government this could mean that it was too weak; and the other way round, an advice triggering a controversial debate in the public might be a success par excellence.

Frans Evers (Steering Committee Chair) suggests again that the issue could be interesting for the WG Governance.

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[2] *Stimulating informed debate – Sustainable Development Councils in EU Member States. A compilation of tasks, capacities, and best practice*, by Ingeborg Niestroy; Study commissioned by the German Council for Sustainable Development (RNE), http://www.nachhaltigkeitsrat.de/dokumente/eu-beitraege/index.html.

Viriato Soromenho-Marques (CNADS, P) suggests to reducing the FLP to one or two issues and targets for which the network can put all its energy together. Next year the FLG should look into some horizon scanning, and councils might then find allies for the different topics.

Meinhard Schulz-Baldes (WBGU, D) suggests keeping it the way it is, put it on the website and put tags to the paper, i.e. identify the topics on which councils are planning to work. **Jan de Smedt** (FRDO-CFDD, B) says the paper is a service to members and should be an inspiration to WGs. **Günther Bachmann** (RNE, D) asks which WG chair will take the initiative for a remake of the paper in 2008.

Frans Evers (Steering Committee Chair) in the context of agenda setting presents a proposal to bring all the councils' chairs together, as it was discussed earlier: The Gulbenkian Foundation had showed interest to sponsor such an event. At this event three topics of the FLP could be discussed:

> Educational systems in the context of SD; The WTO/free trade paradigm in the context of SD; Making the Lisbon Agenda more sustainable.

The perfect occasion could be the celebration of the 10th anniversary of the CNADS in Lisbon on 22nd April 2008, with the meeting of chairs starting with the dinner on 20th and the main meeting to take place on 21st. **Viriato Soromenho-Marques** (CNADS, P) states that the program for the CNADS celebration is still open and will be developed step by step. He will be in touch with the Gulbenkian Foundation regarding the proposed EEAC event, in articulation with CNADS, as co-host.

4	**Decision 2007** **Forward Looking Paper + meeting of councils' chairs**
	Reference: Steering Committee Report for the APS 13.10.07, section II.2
	The APS 2007 - **welcomes the Forward Looking Paper of 2007,** - **wishes that a group of WG chairs produces a similar paper in 2008,** - **encourages all EEAC members to take the analysis and proposals into account for the individual councils' work planning and to report to the EEAC Office, who should add this information to the paper and put it on the website,** -- **welcomes the proposal for a meeting of the councils' chairs in Lisbon (CNADS); the proposed date and arrangement will be checked. Viriato Soromenho-Marques should feed back on the interest of the Gulbenkian Foundation for sponsoring.**

5. Working Groups' work plans and chairs 2008

The WG chairs or representatives present their work plans for 2008:

	Work plan and status for 2008
Sustainable Development	
Chair: *outgoing*: Günther Bachmann (Secretary General, RNE, D) [presents] *incoming co-chairs*: **Michel Ricard** (Chair, CNDD, F), **Tim O'Riordan** (Council Member, UK SDC)	• Preparation of the next year's EEAC Annual Conference, which will look into challenges for the long-term policy making in Europe. • Follow-up on the WG study 07 (Stimulating informed debate), and further comment on the EU SDS progress reporting. • Follow up the Dutch experience of the peer review of the National Sustainable Development Strategy. • Next meeting: 22nd November 2007 in Paris.
Governance	
Chair: *contd*: **Roel in 't Veld** (Chair, RMNO, NL) [Louis Meuleman (RMNO, NL) presents on behalf of the chair]	• Contribution to EEAC's Annual Conference 2009. It concentrates on the following question: *"What can be learned from best practices and worst cases about the conditions under which governments may take wise decisions with a long term perspective?"*. The WG aims at producing a study/background report on this issue and a short 'challenger report' based on the former that focuses on the practical dimensions and provides recommendations. • Next meeting: end of November 2007.
Energy Policy	
Chair: *contd*: **Christian Hey** (Secretary General, SRU, D) [presents]	• Follow-up the EEAC Statement on Energy Efficiency with dissemination activities and establish better contact to DG TREN: an event is planned for end of January to cover energy efficiency and agrofuels. • Some WG members want to get involved in consultation process on the Buildings and Energy Services Directive. • The core topic for 2008 will be biomass; other concerned WGs (agriculture, biodiversity, SD) will be contacted for interest. • The WG wants to contribute to the EEAC conf. 2008 with energy-related issues.
Biodiversity	
Co-chairs: *Contd*: **Antonio Domingo Abreu**, (Council Member, CNADS, P) and **Xavier Cazorla**, (CADS, Catalonia) [presents]	• Follow-up of the implementation of the EU Communication *Halting the loss of biodiversity by 2010 and beyond* and its action plan published in May 2006. • Continue its participation in the EU BEG and focus on the compilation of case studies to illustrate the economic value of biodiversity. • On the international arena, the WG - will follow up the preparation and outcome of the 9th

	meeting of the COP of the Convention of Biological Diversity in Bonn, May 2008, - wants to participate in the IUCN World congress 2008. • The WG wants to appoint "ambassadors" for other WGs that are of concern for biodiversity.
Marine and Coastal Zones **Chair**: *Contd:* **Emanuel Gonçalves** (CNADS, P) [Mario Ruivo (Chair, CNADS, P) presents on behalf of the chair]	• Assess how the WG's input to the *Green Paper on a Future Maritime Policy for the European Union* has been embodied in the *"Blue Book" on an Integrated Maritime Policy in the European Union*. • Continue attending the stakeholder meetings on the European Marine Strategy, which will meet next on 8th November. • Cooperate with the WG Biodiversity.
Agricultural Policy and Rural Development	
Chair: *Contd:* **Huib Silvis** (Council Member, RLG, NL) [Agneta Andersson (RLG, NL) presents on behalf of the chair]	• Draft a report with the conclusions of the seminars organized in 2007 on *Global Economic Drivers on land use* and on *CAP monitoring/assessment of impacts*. • The WG also plans to give input to the WG's Energy biomass topic. • A meeting is planned for spring 2008.

5	Approval 2007 **Working Groups' work plans and chairs 2008**
	(Reference for reporting on 2007: Steering Committee Report for the APS 13.10.07, section III.10
	The APS 2007 approves the work plans and chairs of: **1. WG SD:** **Co-Chairs: Michel Ricard, (CNDD, F) and Tim O'Riordan (SDC, UK)** **2. WG Governance:** **Chair: Roel in 't Veld (RMNO, NL)** **3. WG Energy:** **Chair: Christian Hey (SRU, D)** **4. WG Biodiversity:** **Co-Chairs: Antonio Domingo Abreu, (CNADS, P) and Xavier Cazorla (CADS, Catalonia)** **5. WG Marine:** **Chair: Emanuel Gonçalves (CNADS, P)** **6. WG Agriculture:** **Chair: Huib Silvis (RLG, NL)**

6. EEAC Annual conference 2008

The French CNDD – absent in the APS - offers to host the EEAC Annual Conference 2008. FE presents the topic for the Conference and briefly informs on the initial organisational arrangements. Jan de Smedt reminds that the topic would be a contribution to Art. 27 of the EU SDS, which states that a long-term view will be developed.

6	**Decision 2007** **EEAC Annual Conference 2008**
	Reference: Steering Committee Report for the APS 13.10.07, section III.2
	The APS 2007 approves: **1. That the EEAC Annual Conference 2008 will be organised and hosted by the French CNDD in Bordeaux. The date will be 9. - 11. October 2008.** **2. The topic, working title: "*Europe in the longer view*", and gives the WG SD's co-chairs the mandate to prepare the content and a statement/advice.**

6. a) Annual Conference 2009

Franc Lobnik (CEPRS, SLO) reports about his visit to Croatia in July together with Frans Evers. The Croatian council SAZO is interested in organising the EEAC Annual Conference 2009 in Dubrovnik. The Croatian State Secretary for Environment supports this initiative. A problem could arise from the next elections in November, which might lead to a change of government. He however supports the proposal, as the conference will give a positive sign to the new member states and would help in capacity building. A topic envisioned by the S.C. is 'food and the environment'.

Agneta Andersson (RLG, NL) reminds that the general approach of EEAC for annual conferences is to look for the country, which holds the EU Presidency. In the second term of 2009 this will be Sweden, and the Swedish council MVB has done a lot of work on food and environment. **Pernille Knutsson** (MVB, S) replies that the current Scientific Council on Climate Change, operating under the umbrella of the MVB, will finish its activity in January and she will be able to respond to the request from March 2008. Personally she is in favour of the proposal. **Agneta Andersson** asks that the two options should be explored in parallel.

Frans Evers (Steering Committee Chair) asks the APS to allow the S.C. to explore further the two options, namely Croatia and Sweden. The APS confirms.

7. Steering Committee elections

7	**Elections 2007** **Steering Committee elections**
	Reference: Steering Committee Report for the APS 13.10.07, section IV.
	The APS 2007 **- elects as Steering Committee Vice-chair**: Angelika Zahrnt (RNE, D), **- co-opts the following members to the Steering Committee:** Christian Hey (SRU, D), Jan de Smedt (FRDO-CFDD, B), **- co-opts as representative from new member states:** Franc Lobnik (CEPRS, SLO) **- takes note that** Herma de Wilde (RLG, NL) will become S.C. member as future Office supervisor, and Henrique Schwarz (CNADS, P) will remain S.C. member for one year, and Michel Ricard (CNDD, F) becomes S.C. member for two years.

B) Stichting Board Report

8. Budget report 2006, Auditors' report, new rules for financial management

Frans Evers (Steering Committee Chair) reports that the change from being hosted by a Ministry to becoming an independent organisation has been performed incrementally, with a practice of managing the budget and personnel that delivered correct results, but was formally not satisfactory. The Board in 2007 has taken measures to adapt the financial and personnel management of the Stitching to the formal requirements under Dutch law, which will come into place from 2007.

Christian Baumgartner (FORUM, A) expresses the request of his council that the accounts need to be tabled in a proper way. **Roger Thomas** (CCW, UK) suggests that the budget 2006 can be approved as qualified accounts, meaning that substantially the accounts meet the criteria for an approval, but not all formal requirements are fulfilled.

8	**Approval 2007** **Budget Report 2006 and rules for financial management**
	The APS 2007: **1. Approves the budget 2006 as qualified accounts, having taken note of the report of the Auditing Committee;** **2. Approves the Board's proposals for rules for financial management, to be in place by 31.12.07, i.e. for the financial year 2007 and beyond;** **3. Discharges the Auditing Committee;** **4. Discharges the Board of the Stitching Management for EEAC.**

9. Budget Plan 2008 and long-term planning

Henrique Schwarz (CNADS, P) questions about the projections for 2010 onwards: The income should be higher than the expenses and if projections give a different picture measures have to be taken. FE confirms this view and explains that projections were made longer ahead than it is realistically possible to plan. There will be a new long-term planning for about 4-5 years, also taking into account the new rules and requirements for the reserve.

Regarding the budget planning for 2007 and beyond **Jelle Blaauwbroek** (RMNO, NL) is concerned that the main variable in allocating resources is the working time of the Secretary General, which is likely to have an impact on the functioning of the EEAC Office. He finds that this post should be fulfilled on full-time bases, given the increasing activities and demands of the network. IN explains that for 2007 the demand to reduce regular working hours coincided with the two projects of the WG SD (RNE and RMNO), where it was mutual beneficial that they were conducted by her. It however turned out that the combination of strong deadlines for the projects and no simultaneous replacement of lacking working time in peak phases of the project work did lead to burden on the Office. But the planned future project with the University has not such deadlines, and it is also planned that Rosario Gomez increases working hours.

Xavier Cazorla (CADS, E) suggests increasing the expenditure for the website.

9	**Approval 2007** **Budget Plan 2008, long-term planning**
	The APS 2007 **1. Approves:** **1.1 That the Office Supervisor (RLG) will cover around 50% of the salary costs of the administrative assistant post (up to the amount of 10.000 EUR),** **1.2 The planned working hour arrangements of the Secretary General and the Information Manager of 75% and 80% respectively;** **2. Aproves the Budget Plan 2008.**

10. Appointments for the Board of the Stitching/Foundation

The new vice-chairman of the Steering Committee, **Angelika Zahrnt**, will automatically become a Board member. The Dutch RLG has offered to take over the

role as Office Supervisor in 2008 and 2009. Their director, Herma de Wilde, will hence become Board member, secretary-treasurer for the Stitching, and in this function Office Supervisor and thus also a Steering Committee member. Two members of the Steering Committee need to be appointed as Board members.

10	**Appointments 2007** **Board of the Stichting/Foundation**
	The APS 2007 appoints the following Steering Committee members for the Board of the Stitching/Foundation: 1. **Christian Hey** **2. Franc Lobnik**

11. Appointments for the Auditing Committee 2008

The APS should appoint an auditing committee for auditing in 2008 the 2007 accounts.

Frans Evers asks for volunteers to carry out this task.

11	**Appointments 2007** **Auditing Committee**
	The APS 2007 appoints the following individuals to the auditing committee: **1. Jean Stoll (CSDD, LU)** **2. Roger Thomas (CCW, UK)** **Auditing to take place by 31 July 2008.**

C) Acknowledgements

Frans Evers (Steering Committee Chair) closes the meeting with a big "thank you!" again to the Portuguese CNADS, and the team of the secretariat, for being a wonderful host of the Annual Conference, for their splendid work, the choice of the places, and the well-ordered weather, which made it all an unforgettable event.

Warm thanks also go to **Tomasz Winnicki** (PROS, PL) whose term as S.C. members comes to an end, for enlightening the S.C. with perspectives from new member states and for having hosted a great conference in 2006.

A special thanking word is dedicated to the Minaraad for their generous hosting of the EEAC Office, providing services and facilities, their hospitality for all EEAC members

when there are meetings in the premises, and in particular to the Director of the secretariat, Dirk Uyttendaele, for all his inestimable support and cooperation in order to facilitating a good working environment for the EEAC Office.

Frans Evers (Steering Committee Chair) finally expresses his gratitude to the JNCC, for having provided administrative and financial support to the EEAC Office, and in particular to Marcus Yeo, who has taken on his shoulders the responsibility as treasurer of the Board, and the challenge of being responsible for the EEAC Office and staff as supervisor for altogether three years. He has also been an out standing collaborator and diplomat in the work on the Framework revisions in 2007.

Annexe : Attendance list EEAC APS 2007 Évora

EEAC Members		**Conf**	**APS**
A	**Austrian Association for Agricultural Research (OeVAF)**	**X**	Horst Steinmüller, CM Martin Krachler, SG
	Austrian Forum for Sustainable Development	**X**	Christian Baumgartner, SG
B	**Federal Council for Sustainable Development (FRDO-CFDD)**	**X**	Jan de Smedt, SG
	Environmental and Nature Council of Flanders (Minaraad)	**X**	Hubert David, Chair Dirk Uyttendaele, SG
FIN	**Finnish Council for Natural Resources (FCNR)**	**X**	Tytti Tuppurainen, CM Tiia Yrjölä
D	**Council for Sustainable Development (RNE)**	**X**	Angelika Zahmt Günther Bachmann, SG Dorothee Braun
	Advisory Council on the Environment (SRU)	**X**	Martin Jänicke, CM Christian Hey, SG
	Advisory Council on Global Change (WBGU)	**X**	Meinhard Schulz-Baldes, SG
E	**Advisory Council for the Sustainable Development of Catalonia (CADS)**	**X**	Xavier Cazorla Silvia Canellas
HR	**Croatian Council for Environmental Protection (SAZO)**	**-**	-
HUN	**National Council on the Environment (OKT)**	**X**	Miklos Bulla, SG
IRE	**The Heritage Council (HC)**	**-**	-
	Comhar – The National Sustainable Development partnership	**X**	-
NL	**Council for the Rural Area (RLG)**	**X**	Huib Silvis, CM Agneta Andersson
	Advisory Council for Research on Spatial Planning, Nature and Environment (RMNO)	**X**	Frans Evers, CM Louis Meuleman, SG Jelle Blaauwbroek

	Council for Housing, Spatial Planning and the Environment (VROM-Raad)	**X**	Bram van de Klundert, SG
	Wadden Sea Council (WSC)	**X**	Roel Cazemier, Chair
PL	**State Environmental Council of Poland (PROS)**	**X**	Tomasz Winnicki, Chair
P	**National Council on Environment and Sustainable Development (CNADS)**	**X**	Mario Ruivo, Chair Henrique Schwarz, CM Viriato Soromenho-Marques, CM Aristides Leitao, ES
SLO	**Council for Environmental Protection (CEPRS)**	**X**	Franc Lobnik, Chair Peter Novak, CM
S	**Environmental Advisory Council (MVB)**	**X**	Pernilla Knutsson, SG
UK	**Royal Commission on Environmental Pollution (RCEP)**	**X**	-
	Sustainable Development Commission (SDC)	**X**	-
Candidates for EEAC Membership			
B	**Walloon Environmental Council for Sustainable Development (CWEDD)**	**X**	Jean-Louis Canieau, Chair Alain Mairesse
E	**Environmental Advisory Council (CAMA)**	**-**	-
F	**National Council for Sustainable Development (CNDD)**	**X**	-
L	**High Council for Sustainable Development (CSDD)**	**X**	Jean Stoll, CM
UK	**Council for Nature Conservation and the Countryside (CNCC)**	**X**	-
EEAC Partners			
UK	**Joint Nature Conservation Committee (JNCC)**	**X**	Marcus Yeo
	Countryside Council for Wales (CCW)	**X**	Richard Jarvis, Board Roger Thomas
	Scottish Natural Heritage (SNH)	**X**	-
EEAC Associates			
CZ	**Government Council for Sustainable Development (RVUR)**	**-**	-
FIN	**Finnish National Commission on Sustainable Development (FNCSD)**	**X**	-
F	**Scientific Council on the Environment of Nord-Pas-de-Calais (CSENPC)**	**-**	-
Total councils attending the conference		**29**	
Total EEAC members (per council) at the APS			**21**
Total individuals at the APS			**38**

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8. MONFURADO VISIT – CROSSING A PROTECTED AREA

In the last day, after a typical lunch in a farm, a visit took place to Serra de Monfurado, a Protect Area, which is one of the Portuguese Natura 2000 sites and it is a very interesting example of "montado" – mediterranean wood composed by cork and holm oaks (*Quercus suber* and *Quercus rotundifolia*).

This protected area management attempts to harmonise conservation of ecosystems, heritage and cultural values with rural development of economic activities. Also occur oak groves of *Quercus faginea* and *Quercus pyrenaica* (Portuguese southern limit).

The zone of Serra de Monfurado (altitude max. 424 m) owns an exceptional concentration of archaeological and prehistoric testimonies, many megalithic – dolmens, menhirs and cromlechs. Many of these monuments are set on private properties, are hard to reach or have conditioned access. For its dimension, originality and antiquity some monuments of exceptional historic importance must be referred – Almendres menhir and cromlech, Anta Grande do Zambujeiro (one of most interesting and large dolmen in Europe) and Escoural grotto (cave pictures/paleolithic period).

The foot walk takes place in two properties (Serrinha and Defesa) - after eating a typical lunch in Serrinha farm - that are partners in the Project LIFE Nature that is going on in Monfurado Nature 2000 Site since 2004. The landscape is dominated by holm and cork oak tree stands (montado) mixed with pastures and fallows, where cattle and sheep

raising is the main economic activity. Well preserved riparian areas and small water reservoirs are common and provide water throughout the year. The extensive way the natural resources extensive way are used allow to a high biodiversity in these areas, including well preserved communities of amphibians, birds, bats, and small carnivore species. However, a tendency for grazing intensification that is taking place in the region over the last few years may threat this fragile equilibrium in a near future".

Genuineland is a new product based on the identity of traditional villages, valuing and upgrading their heritage, in direct contact with their inhabitants and the environment that surrounds them. This new product makes you travel around Europe Unseen places in Alentejo, Trentino, Lapland, Arad and Lomza. Information about Genuineland is available on the Internet at www.genuineland.com, a site where details about the regions, the villages and the range of services can be found. Genuineland offers you discovery tourism, a search for myth and for the things of the imagination: the signs wait to be discovered in these ancestral regions**.**

Escoural is an area with more than 50,000 years of history and has had the status of vila (town) since 1916. Arriving at Escoural is like entering a valley full of history and stories, a valley protected by pasture and wonderfully conserved cork oak and holm oak woodland, that is centuries old.

The Caves (grotto) of Escoural, discovered by chance after a collapse in a mine, allowed vestiges of Palaeolithic rock art to be identified for the first time in Portugal. There are paintings and engravings coloured in ochre and charcoal, with equine and bovine figures dominant.

Another place of great interest for tourists is the Dolmen-Chapel of Nª Sª do Livramento, situated on the road between Escoural and Valverde and easily reached by bicycle. It is possible to identify five of the standing stones and the capstone in their original position, but now plastered and whitewashed.

Almendres Cromlech it is one of the most important megalithic monuments in Iberian Peninsula, due to its dimension and conservation status. The cromlech formation is dated from the Neolithic age (6th millennium b.C.) and was revealed in 1964.

The Almendres Cromlech thus named is a megalithic enclosure for about 60 x 30m, which forms an assemblage of several enclosures of a hundred monoliths integrated into two gemelee enclosures.

Some of the monoliths (menhirs) are 3 meters higher and the greatest ellipsis axis (there are two different monoliths ellipsis) has 43, 6 meters (the smaller axis has 32 meters). Some of the internal menhirs are engraved (incised).

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