



## **A word from the Chair**

Dear reader,

Our Implementing Agreement started its first year of the 3rd phase very actively. The Electric Vehicle Symposium (EVS-21) in Monaco was a good impetus. We took the opportunity to contact worldwide specialists by undertaking the following activities at EVS-21:

- Annex VII “Hybrid vehicles” co-organised a well-attended workshop focusing on ‘plug-in’ hybrid vehicles, together with Electricité de France (EDF), Electric Power Research Institute (EPRI) and Southern California Edison.
- Our planned Annex XI “Electric two-wheelers” organised a workshop that attracted specialists from 17 different countries.
- We made oral and poster presentations about the Implementing Agreement, Annex I “Information exchange”, Annex VII “Hybrid vehicles”, Annex VIII “Deployment strategies” and the planned Annex XI “Electric two-wheelers”.
- For the first time we had a booth at the EVS exhibition in order to contact as many delegates as possible. This is part of our efforts to find additional member countries for our Implementing Agreement.
- The first awarding ceremony of our “Clean vehicles award” was held on Sunday April 3rd, 2005, in Monaco. We could honour three winners of outstanding merits.
- We published a very interesting annual report that includes our goals for the 3rd phase (2004–2009) of our Agreement. This report was distributed in large numbers at EVS-21.

At our Executive Committee (ExCo) meeting in April we discussed new programmes on “Heavy Duty Hybrid Vehicles”, “Renewable Energies

for Electric Vehicles and Plug-in Hybrids”, and the re-organisation of Annex I “Information Exchange”. All these activities at EVS-21 and the ExCo meeting have asked more efforts from our ExCo members, Operating Agents and the new secretary than ever before. I hope that the new topics and the increasing interest in hybrid vehicles will attract new member countries to the work of our 3rd phase. If you are interested or when you can help us addressing government officials, please contact our secretary.

Urs Muntwyler, Chairman

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## ***New plans on electrochemical systems***

During the IA-HEV Executive Committee meeting last month, the new Operating Agent of Annex X, Mr. Barnes, unfolded his plans for continuing this Annex. It is scheduled to be in the form of small work packages that would take typically 6 to 12 months to complete, each addressing one topic and resulting in an up-to-date report. Ideas for the first topics to address are the following:

- Power density of battery packs.
- The influence of the load cycle on battery life.

New topics will emerge in the future, resulting from developments in governmental policies or from R&D on technical components. The work packages will be executed by a team of internal and external experts, to the benefit of all participants. For each topic a dedicated team of specialists will be formed for an efficient and effective execution of the task. This also means that participation in this Annex is per work package, and for each new topic to address a new team will be formed.

People who would like to join one of the work packages to profit from the co-operation in an international team of experts are most welcome to contact Mr. Barnes. Do not hesitate to contact him to discuss which topics you would like to see being addressed in a new work package.

The Operating Agent of Annex X, Mr. Barnes, can be contacted by e-mail at: [james.barnes@ee.doe.gov](mailto:james.barnes@ee.doe.gov)

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## ***The role of plug-in hybrid electric vehicles***

On Sunday, April 3rd, 2005 during EVS-21 in the Grimaldi Forum in Monaco, IA-HEV Annex VII co-organised a workshop on 'plug-in' hybrid vehicles, together with the Electric Power Research Institute (EPRI), Southern California Edison (SCE) and Electricité de France (EDF). The workshop was designed to provide the

attendees with a complete understanding of the latest technologies, commercialization projects and market transformation efforts.

Presentations made by experts from DaimlerChrysler, EPRI, EDF, SCE and the International Energy Agency focused on the following topics:

- Plug-in hybrid electric vehicle (PHEV) technical design and attributes.
- Global climate change - facilitating near-term action with PHEV technologies.
- Energy security - a gateway to transportation fuel diversity and effective use of alternative fuels.
- Energy and infrastructure requirements of plug-in hybrid electric vehicles.
- PHEV costs, market potential, and customer preference.
- Links to fuel cells and a hydrogen economy.
- Commercialization efforts and future challenges.

The workshop combined informative expert presentations with a high degree of dialogue and interaction with the 48 participants.

It was concluded that plug-in hybrid electric vehicles intelligently combine the use of grid electricity with conventional or alternative fuels to deliver many of the benefits of both pure electric vehicles and hybrid electric vehicles. Their use is complementary to that of pure electric vehicles in urban areas. PHEVs address many of the actual environmental and sustainability concerns in the transportation sector by dramatically reducing fuel consumption -and thus reducing CO<sub>2</sub> emissions- and providing an efficient pathway for the utilization of renewable electricity and other alternative fuels.

If you are looking for more information, please contact the Operating Agent of Annex VII, Mr. Rob Winkel, by e-mail at: [rob.winkel@tno.nl](mailto:rob.winkel@tno.nl)

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## **First IA-HEV ‘Clean Vehicle Award’ ceremony in Monaco**

On Sunday April 3rd, 2005, the Implementing Agreement for Hybrid and Electric Vehicles of the International Energy Agency (IEA) has presented three ‘Clean Vehicle Awards’. The ceremony took place at the exhibition of the Electric Vehicle Symposium EVS-21 in Monaco.

Since 1993 -when the IEA Implementing Agreement for Hybrid and Electric Vehicle Technologies and Programmes (IA-HEV) was established- clean vehicle technologies and their components have gone through a remarkable development process. Today, the first series vehicles have achieved their market breakthrough. This progress is driven by committed people, teams and manufacturers. It fits the information dissemination goals of IA-HEV to make this commitment public. For this reason three awards have been granted:

- The ‘Clean Vehicle Award’ for the Japanese Toyota Prius hybrid passenger car.
- The ‘Best Practice Award’ for the clean vehicle fleet in the city of Reggio Emilia in Italy.
- The ‘Personal Award’ for the Swiss professor René Jeanneret, for his lifetime career dedicated to clean vehicles.

More details on the background of the awards and on the winners of this year will soon be available on our website: [www.ieahev.org](http://www.ieahev.org)



The 2005 IA-HEV award winners from Japan, Switzerland and Italy (from left to right).

## **Technology challenges and marketing strategies for electric two-wheelers**

A promising selection of electric two-wheelers – ranging from power-assisted bicycles up to high performance fuel cell motorcycles- was one of the highlights of EVS-21. These vehicles face new technology challenges and require new marketing strategies, so the international collaboration proposed in IA-HEV Annex XI on electric two-wheelers is justified and highly relevant.

Following EVS-21, on Wednesday afternoon April 6th, an IA-HEV workshop to finalise the goals and work plans of Annex XI was organised. 34 international experts from industry, universities, governmental bodies and the media participated. Presentations from Yamaha, WaveCrest, the city of Rome and from Taiwan gave an overview of current activities and barriers for the introduction of electric two-wheelers in city traffic and on the commercial market.

The work programme of Annex XI will include among others: assessment of energy consumption and environmental benefits, joint research on customer needs and distribution strategies, homologation and emission standards, demonstration projects, infrastructure and information exchange.

Benefits of participating in this Annex are:

- Learning from each other by sharing experiences.
- Co-operation on technical topics and policy issues.
- Gain insight in worldwide technology state-of-the-art and trends.
- Learn about market success factors.
- Extend ones network with worldwide experts.

People who are looking for more information and parties that consider participation in Annex XI “Electric two-wheelers” may contact the interim Operating Agent, Mr. Urs Schwegler, by e-mail at: [urs.schwegler@bluewin.ch](mailto:urs.schwegler@bluewin.ch)

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## **IA-HEV annual report 2004**

The IA-HEV annual report 2004 is now available. This year's annual report is also the final report of phase 2 of the agreement. Besides the achievement of phase 2 it contains the plans for phase 3. The report further describes the Annexes and presents the activities on hybrid and electric vehicles in each IA-HEV member country. You can order your paper copy from the IA-HEV secretary Mr. Martijn van Walwijk at [secretariat.ieahev@wanadoo.fr](mailto:secretariat.ieahev@wanadoo.fr) supplying your postal address.

is needed. The workshop aims to identify what measures are needed for the deployment of energy efficient technologies to make them available on the commercial market. Both technical specialists and policy makers are needed to establish such measures. However, it is recognised that these two groups do not always 'speak the same language'. This workshop is an experiment meant to bring them together around the table, to learn from each other and to make a start with formulating possible measures.

People who are interested in participating can find more information on the internet:

[www.iea.org/Textbase/work/workshopdetail.asp?WS\\_ID=212](http://www.iea.org/Textbase/work/workshopdetail.asp?WS_ID=212)

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## **USA energy storage R&D**

The Annual Report on Energy Storage R&D for the fiscal year 2004, published by the US Department of Energy is now available and can be downloaded from the Office of FreedomCAR and Vehicle Technologies website at <http://www.eere.energy.gov>



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## **Agenda**

September 22 & 23, 2005  
Annex VII, Hybrid vehicles.  
Expert meeting in Argonne (Chicago), USA.

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## **Oil production expected to peak in 2008**

### **IEA announces 'Policies & technologies' workshop**

The IEA EUWP (End Use Working Party) organises a workshop "Policies for the Diffusion of Innovative and Sustainable Transport Technologies", in Zürich, Switzerland, June 1-3, 2005.

Crude oil production is expected to peak around the year 2008 and worldwide oil demand is expected to increase, so a gap will be opening between production and demand. Urgent action

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## **Colophon**

The electronic IEV Newsletter is produced by IEA's Implementing Agreement on Hybrid and Electric Vehicle Technologies and Programmes (IA-HEV). For information about the agreement and for contributions to this Newsletter, please contact the IA-HEV secretary Mr. Martijn van Walwijk at [secretariat.ieahev@wanadoo.fr](mailto:secretariat.ieahev@wanadoo.fr)