

## Annex XI: Electric Two Wheelers

### **Tokyo Workshop**

October, 2005, 15:00 – 17:00

### **Minutes**

#### **1 Tokyo Motor Show**

The workshop was integrated in the Tokyo Motor Show, which includes a Motorcycle Show. Yamaha presented two electric Mopeds, the Passol and the EC-O2, which are available on the Japanese market. In addition, Yamaha showed several promising motorcycle prototypes with electric and hybrid drive trains. The other exhibitors didn't show any electric two wheelers.

#### **2 Symposium “Moving to sustainable mobility”**

JARI, the Japanese Automobile Research Institute, organized at the Tokyo Motor Show a half day Symposium with two connected workshops: one dealing with the state of the art of electric vehicles in general, the other one with electric two wheelers.

The first part was attended by some 400 attendees and covered presentations to the following subjects:

- Sustainable Mobility: Role of Electric Vehicles,
- Global Warming Countermeasures and Promotion of Clean Energy Vehicles,
- Fundamental Technology for the Diffusion of Fuel Cell Vehicles,
- Challenges of Battery Electric Vehicles: Development and Diffusion Efforts.

#### **3 Participants of the workshop**

More than 100 experts attended the following workshop on electric two wheelers, most of them coming from Japan.

## 4 Highlights of the workshop

Hisashi Ishitani (JP), professor at the Keio University and Chairman of the World Electric Vehicle Association WEVA, opened the workshop with a welcome address pointing out the importance of electric two wheelers in a sustainable transportation system.

Urs Muntwyler (CH), Chairman of the Implementing Agreement for Hybrid and Electric Vehicles of the IEA, explained the objectives and the work structure of the IEA. Actually, four Annexes are in operation:

- Information Exchange
- Hybrid Vehicles
- Electrochemical systems
- Deployment strategies

In addition to Annex XI on Electric Two Wheelers there are currently Annexes on the following subjects in preparation:

- Renewable energy for transportation
- Hybrid heavy duty vehicles
- Fuel Cell Vehicles
- Lessons learned
- Clean City Vehicles

Urs Schwegler (CH), the Interim Operating Agent of Annex XI, presented the draft Workplan. The overall goal is to provide authorities on all levels good arguments for justification governmental support for the market introduction of electric two wheelers.

Actually, there is an interest in the following positions:

- Operating Agent: Frederic Vergels (Secretary of AVERE, the European Association for Battery, Hybrid and Fuel Cell Electric Vehicles and European Section of WEVA),
- Subtask leaders: For three of the five subtasks there is an interest for a Subtask Leader:
  - 1 Market potentials Ed Benjamin, USA
  - 2 Market introduction Urs Schwegler, Switzerland
  - 5 Sharing experience Frederic Vergels, AVERE

The view of the industry side was presented in 4 speeches:

- Katsuhiko Matsuda (Yamaha, JP) described the market introduction of the electric Mopeds Passol and EC-O2. According to Yamaha's surveys and experience, customers are not willing to pay more than 10 % for a clean and energy efficient scooter. Therefore Yamaha communicate other user benefits as fun, fast, light, foldable. Yamaha has opened EV Gallerys as exclusive showrooms for its electric mopeds.

- Yu Shi Guang (Shanghai Cycle Association, CN) gave an insight in the market development of e-bikes in China. In the last decade, the sales numbers have doubled every year.
- Eric Marcel Misoe (Tokyo R&D, JP) showed the experience of Tokyo R&D over the last 20 years in the development of a lightweight electric scooter. During the years it became more and more clear that electric scooters are to be used for transportation over fairly short distance, hence demand for cruising range is less. Consequently, amount of onboard battery can be reduced. Less battery means less vehicle cost. The result is a high performance, lightweight scooter named Ele-Zoo.
- Frederic Vergels (AVERE, BE) gave an overview on the rest of the manufacturer's world.

In addition, two presentations were focussed on the policy side:

- Mo Hua Yang (ITRI, TW) reported on the promotion of electric scooters in Taiwan during the past 10 years.
- Urs Schwegler gave an overview on other political support for the market introduction of electric two wheelers.

The presentations of the workshop can be downloaded on [www.transportation.anl.gov/ia\\_hev](http://www.transportation.anl.gov/ia_hev) (> Annexes > Annex XI).

During contacts that were taken after the meeting it was a clear sign of interest by the Japanese, Chinese and Taiwanese representatives to participate in the Annex at the company level. They will also help relevant contacts to see if their respective country could become member country of Annex IX or even of the Implementing Agreement on Hybrid and Electric Vehicles.

## 5 Next steps

Dec 31, 2005	Expression of Interest for Subtask Leader
Jan 15, 2006	Approval by the Executive Committee of the Implementing Agreement on Electric and Hybrid Vehicles of the IEA
Feb 15, 2006	Confirmation Subtask Leaders
	Draft task description for Subtasks
	Application for Full and Associated Partners
Feb 28, 2006	send out revised workplan to partners (Operating Agent)
Mar 8-11, 2006	Taipei Cycle Show: Kick-off meeting: <ul style="list-style-type: none"> <li>. Signing cooperation agreement</li> <li>. Discussing and approving workplan</li> </ul>

The planned workshop at the EDTA conference in Vancouver on December 6 – 8, 2005, won't take place due to the fact that relevant partners have already been identified and will be contacted and secured directly.

## **6 How to participate in Annex XI**

Deadline for application is February 15, 2008. However, an expression of interest by a lot of important representatives from policy and industry will make it easier for the Executive Committee to launch Annex XI officially.

Fischingen / Switzerland, November 10, 2005

Urs Schwegler

Interim Operating Agent