On the first Pages some pictures of this week taken at Velocity Conference Nantes France - where electric bicycle sharing was THE hot topic


bicloo
1223


dans le monde
Grâce à Cyclocity, de plus en plus de villes peuvent offrir un service de déplacement doux à leurs habitants. Notre système de location de vélos en libre-service est facilement accessible au plus grand nombre car il bénéficie d'un dispositif monétique exclusif, d'un maillage optimisé des stations, de prix réduits et d'une disponibilité maximale. Participant à l'intermodalité, il s'intègre parfaitement dans le schéma de transports en commun de chaque ville et contribue à la préservation de l'environnement. Avec Cyclocity, JCDecaux, n°1 mondial du vélo en libre-service, est fidèle à ses valeurs fondamentales : innovation, qualité, design et développement durable.
We record 55 million bike rentals worldwide per year
Thanks to Cyclocity, more and more cities can offer green transport services to their residents.
Our bicycle sharing system is easily accessible to as many people as possible through its exclusive electronic payment system, optimised network of stations, reduced prices and maximum availability. As part of intermodal transportation, it blends in perfectly with the public transport plan of each city and contributes to the protection of the environment.
With Cyclocity, JCDecaux, world leader in self-service bicycles, is true to its core values: innovation, quality, design and sustainable development.
Vélam/Amiens
VéloCité/Besançon
CityCycle/Brisbane
Villo!/Bruxelles
Eco-bici/Cordoue
Dublinbikes/Dublin
Cyclocity/Toyama

SENS INSERTION


ALTER 2
GITANE


HELLO
GALWAY
THIS STATION
WILL OPEN AT
12 MIDDAY
Coca-Cola zero
bikes


Smoove
Facilitates sustainable mobility
71
Smoove
Smoove bike


BEWEGEN
ALABAMA
REGIONS


nextbike
99976
nextbike
Get the App!
99971


PBSC
RBAN SOLUTIONS
PBSC
Santander


1
2
3


Utilitaire
citybike
Liverpool
City Council

Light-Electric-Vehicles

Gwangju Korea ExCo Meeting 2nd of May 2015

Hannes Neupert / Operating Agent IEA HEV IA Task 23 LEV Parking & Charging infrastructure

Update on selected Activities 2014/2015

Content of this presentation:

- Update on activities within Task 23 „LEV Parking & Charging Infrastructure“ of the International Energy Agency Hybrid & Electric Vehicle Implementing Agreement to the Executive Committee meeting 1st and 2nd of May 2015 at Gwangju Korea
- Summary of panned output of Task 23
- Environmental correlations of Task 23
- Reached and scheduled future Milestones of Task 23
- Report on Progress of the Standardization group: IEC/ISO/TC69/JPT61851-3
- Past activities in correlation to Task 23 within 2014/2015
- Planned output of Task 23
- Future activities of Task 23 scheduled within 2015
- Task 23 current participating countries and partners
- Task 23 call for further participation
- Financial matters of Task 23 activities
- Task 23 contact data of the Operating agent and the cooperating agent

Planned global output of the task 23:

Create public procurement templates for local governments as well as companies to purchase:

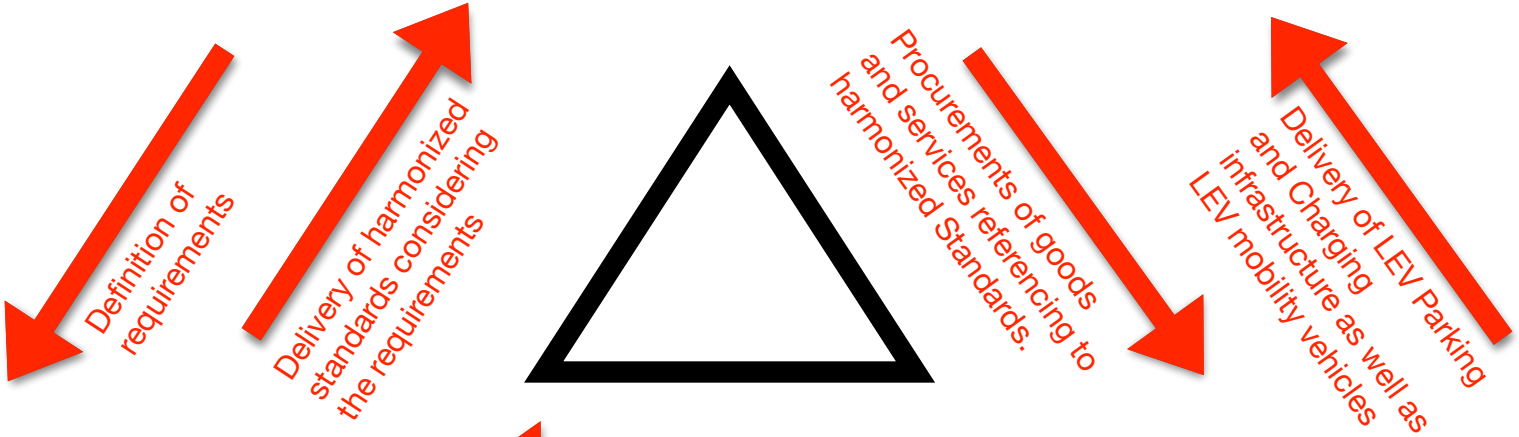
A) public parking and charging infrastructure
B) Pedelecs and other LEV's as part of public transport system and for fleet operation

As well as exchange informations on best practices especially on:

A) business models on profitable operation of parking and charging infrastructure for LEV's
B) business models on profitable operation of pedelecs and other LEV's as part of public transport

Environment and correlations of task 23 activities:

IEA Task 23 Defining requirements from the perspective of city and regional governments and organizations. Creating joint public procurement of Infrastructure and Public LEV mobility solutions



IEC/ISO/TC69/JPT61851-3 Creating the harmonized standards for LEV parking and charging infrastructure as well as swappable batteries

Participation in the Standardization process. What is possible to produce!

Delivery of harmonized standards as a base for product specifications

Industry producing LEV parking and charging infrastructure as well LEV mobility vehicles according to the Task 23 requirements and the IEC/ISO/TC69/JPT61851-3 standards

Reached and scheduled future Milestones of Task 23

2010 Mandate 468 of EU on EV infrastructure
2011 First discussion at ExCo at Portugal
2012 Presentation and discussion at ExCo Stuttgart and 2013 at ExCo Chicago
2013 Official launch of Task 23 at ExCo at Barcelona
2014 Definition of the key standard content
2015 first working prototypes and pre production
2016 Trial projects in several countries
2017 first procurement projects and upscale of application
2018 finalization of the standards and mass production as well as based on that refining of business models to allow as well profitable application in rural areas
2019 extension of global promotional activities to spread the news of the benefits generated by Task 23

Standardization within IEC/ISO/TC69/JPT61851-3:

The activities within this Joint Project Team 61851-3 which is a so called mode 4 collaboration under IEC leadership (International Electrotechnical Commission which is internationally governing all harmonized standardization on everything electrical) within the ISO TC 69 (International Standard Organization responsible for all mechanical standards - the TC 96 stands for Technical Committee 69 which is responsible for all type approved vehicles). But since it is a mode 4 collaboration under IEC rulership and IEC does not differentiate between type approved and non type approved vehicles (like bicycles which are falling at ISO under TC149). This means that the standards defied by the IEC/ISO/TC69/ JPT61851-3 group do apply for all kinds of LEV's including motorcycles and bicycles. Currently the most active members in the standardization are from the motorcycle Industry like Yamaha, Honda, Suzuki, Piaggio, KTM and BMW. From the bicycle Industry only Bosch eBike Systems is actively participating. Several bicycle industry players have been participating once ore twice but not on a regularly base. Within 2015 is is expected that the so called TS (Technical Specification) level will be reached which will give the industry actors quite some security that investments into products applying this standard are safe. A finalization of the Standard may be done within 2017/2018.

Standardization roadmap of IEC/ISO/TC69/JPT61851-3:

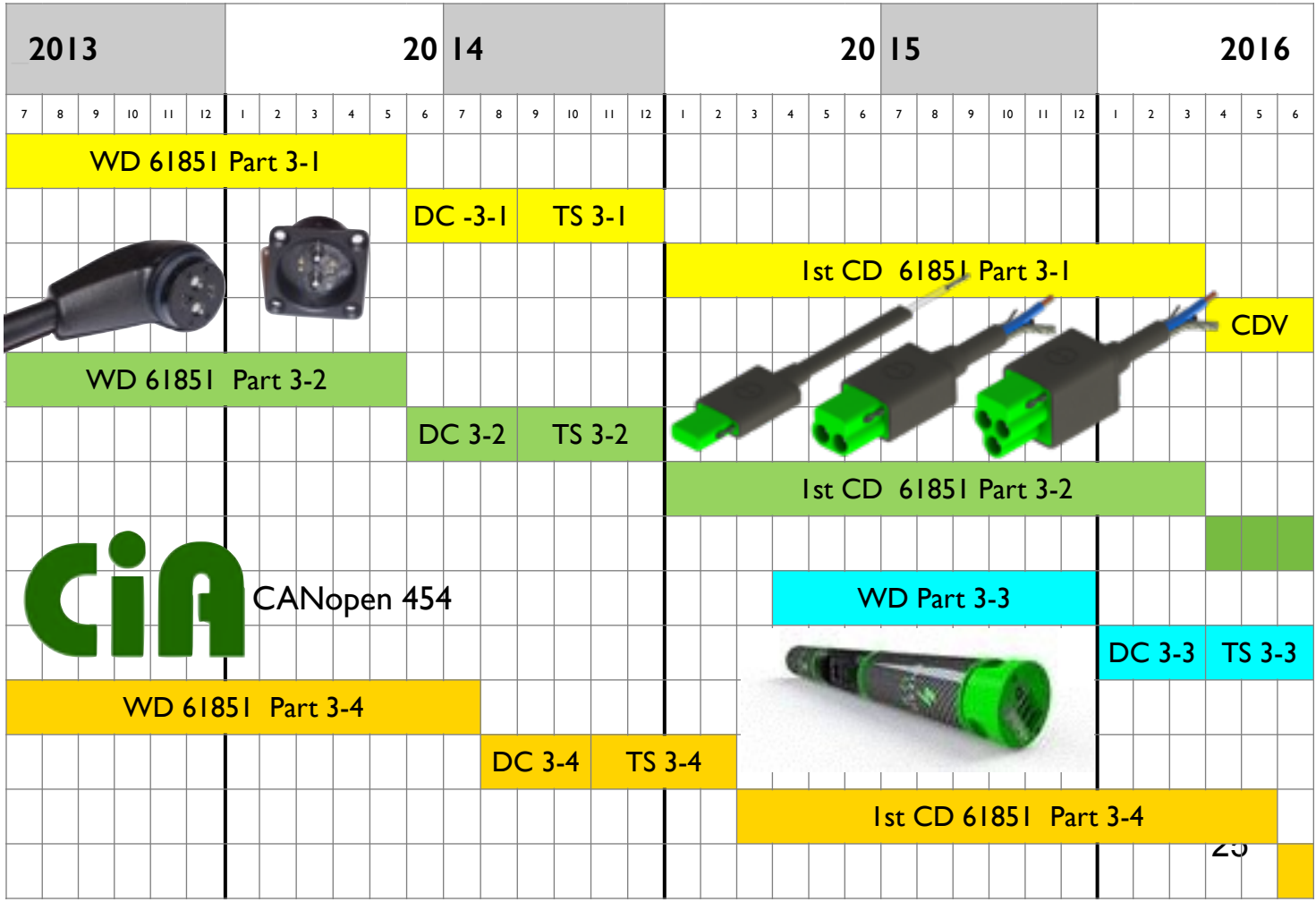
The standardization is clustered in 4 main subsections as shown on this graph:

WD 61851: Part 3-1 General Requirements for Light Electric Vehicles (LEV) AC and DC conductive power supply

WD 61851: Part 3-2 Requirements for Light Electric Vehicles (LEV) DC off-board conductive power supply systems

WD 61851 Part 3-3: Requirements for Light Electric Vehicles (LEV) battery swap systems

WD 61851 Part 3-4: Requirements for Light Electric Vehicles (LEV) communication



Standardization roadmap of IEC/ISO/TC69/JPT61851-3:

The Hardware proposal for LEV/Two-wheeler parking management and charging infrastructure developed by IEC/ISO/TC69/JPT61851-3: All LEVs should have a mandatory hardware for being able to use public parking/ charging spaces. It is part of the standardization process within the IEC/ISO/ TC69/JPT61851-3-2 activities.

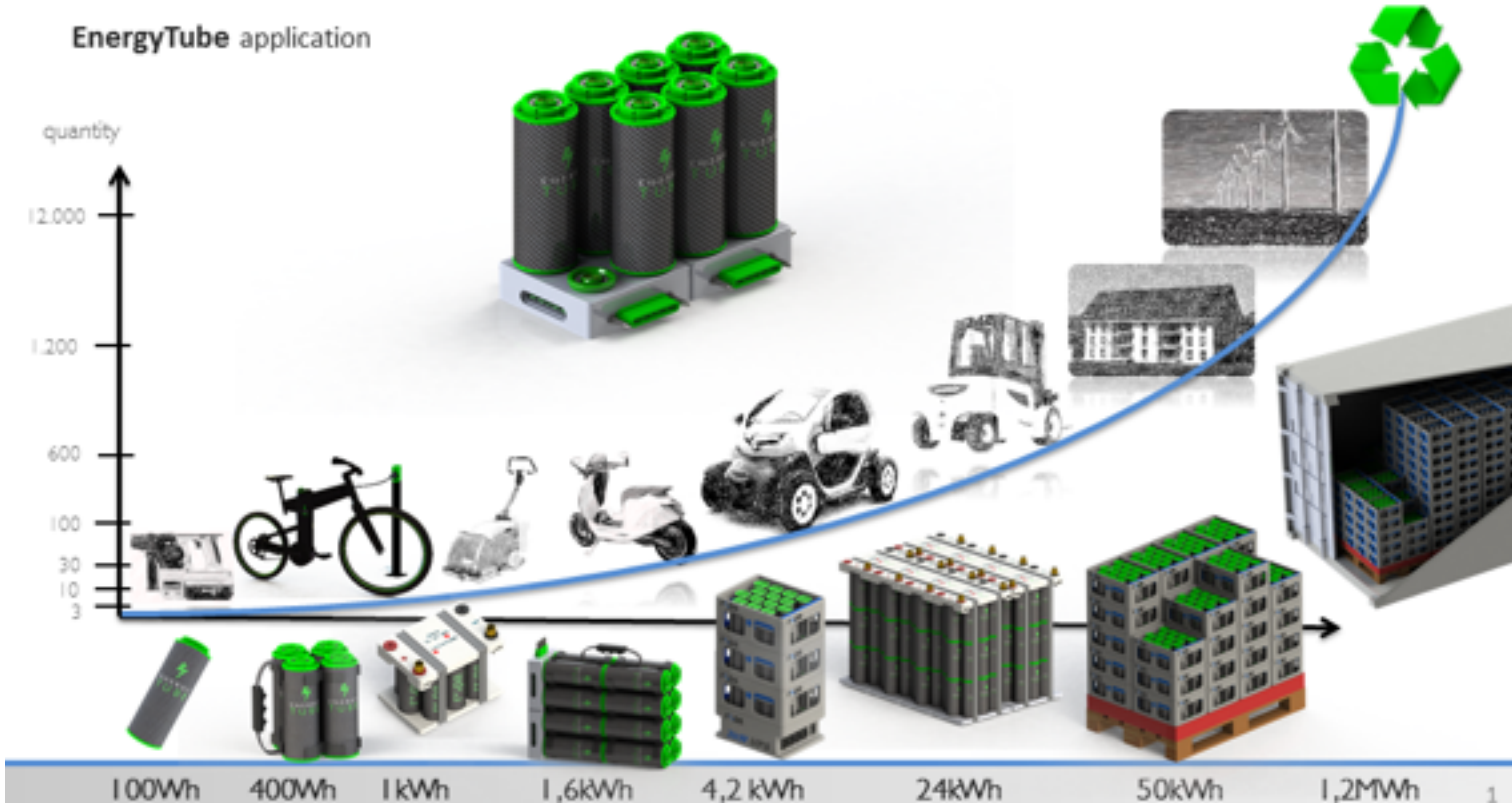
Only Lock and Park
No electricity necessary

Lock & Charge
LEV under low voltage directive
Max. 60V 60A 3kW

Lock & Charge
Large LEV utilizing the 3rd pin and charging at 120V, 60A with up to 6kW

Standardized universal energy storage device:

Standardized energy storage containers which are only payed by use, and which are universal in the application. Which will release the user from the initial investment into the energy storage devices as well in the worries on the natural degradation and necessary replacement during their lifetime. See more at: www.EnergyTube.de It is as well part of the Standardization process within the IEC/ISO/TC69/JPT61851-3-3 activities.



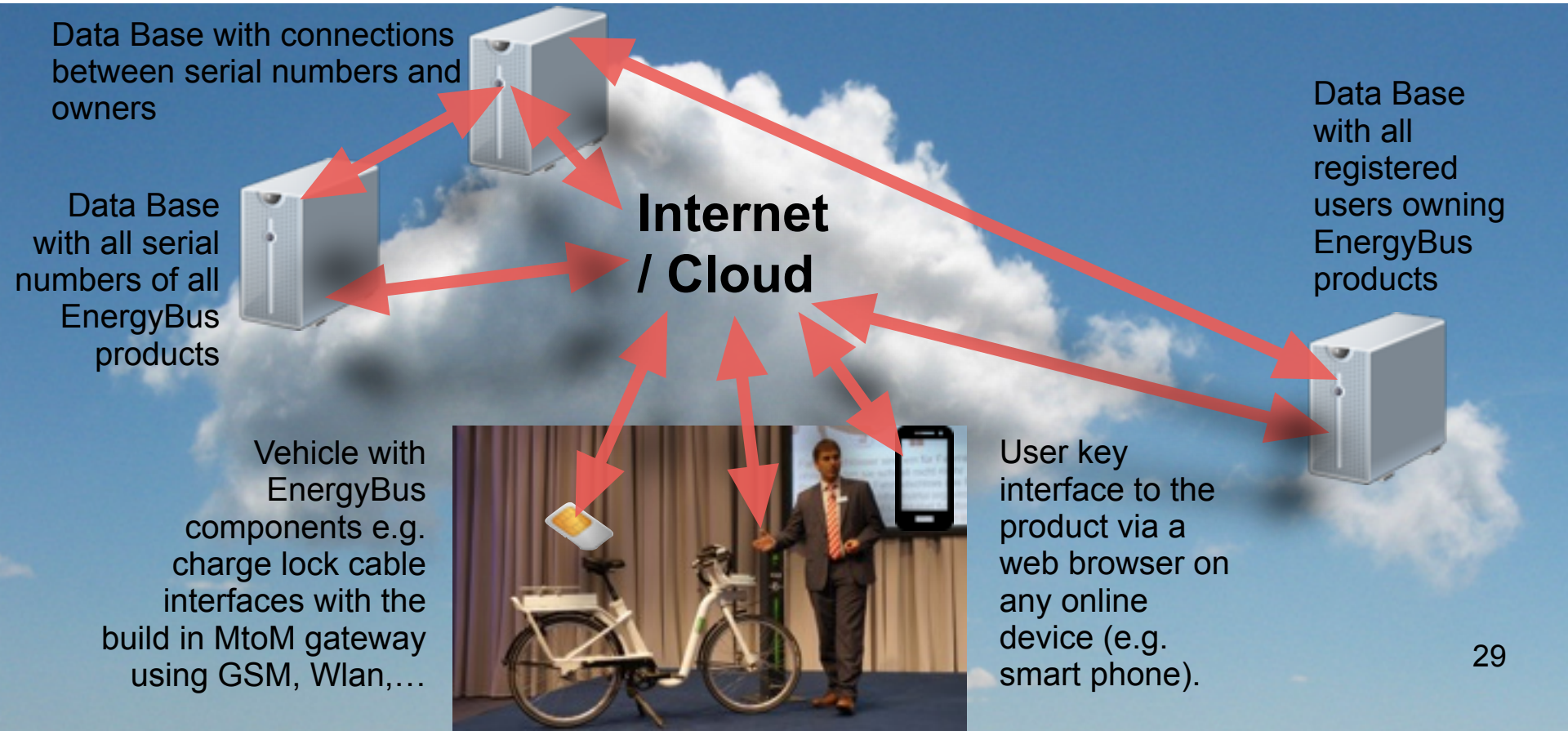
Other elements necessary to be established

The elements like the EnergyLock as well the EnergyTube do need a global database which will enable the usage for identification and the connection between the vehicle and the owner paying for the services.

The EnergyBus organization which is a industrial organization of global players in the LEV industry as well as other industries like energy and furniture has developed with some of th members the key elements of the EnergyLock IEC/ISO/TC69/JPT61851-3-2 and the EnergyTube IEC/ISO/TC69/JPT61851-3-3 and hold together with its members the key patents. They will be granted to any industries under so called FRAND (Fair and Reasonable) conditions. The target of EnergyBus is to make these technologies spread globally and become commodities just within a few years. EnergyBus want to establish as well the data back bone to host as a third party the serial numbers as well the user identities as described in the next slide.

Software solutions which will become necessary

A worldwide roaming system and connection of serial numbers and user information.The possibility to park any LEV at any public parking place is only possible if the vehicle information could be automatically brought in connection with the owner informations. To enable roaming as well check if this vehicle/owner is generally authorized to use this parking services.



Most important activities in 2014/2015

2014.01.14 GAK 353.0.9 meeting at Frankfurt
2014.01.27-31 IEC/ISO/TC69/JPT61851-3 meeting in cooperation with Hero Motorcycles at New Dehli India
2014.03. Taipei Cycle Show Exhibition and Workshop
2014.03. Presentation at CEBIT
2014.03. Presentation at Battery Conference and Exhibit Aschaffenburg
2014.04 Presentation at Shanghai Cycle Show as well as Lecture during the Technology conference of China Bicycle Association where the 5 year plan of the Chinese government on electric two wheelers was presented
2014.01.14 GAK 353.0.9 meeting at Frankfurt

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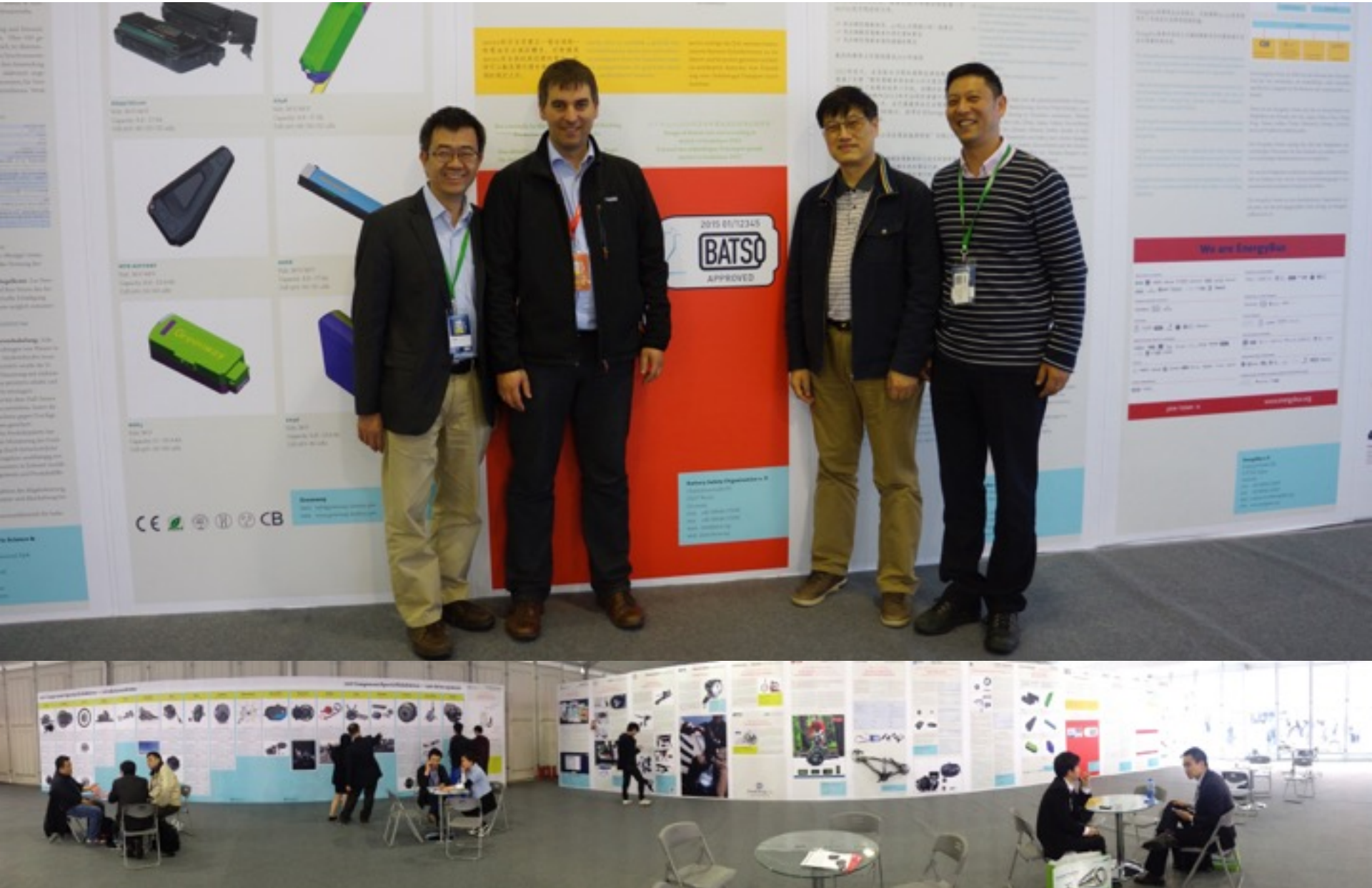
HYBRID & ELECTRIC VEHICLE IMPLEMENTING AGREEMENT

ISO IEC

Energy Bus

vito
vision on technology

2014.01.27-31 IEC/ISO/TC69/JPT61851-3 meeting in cooperation with Hero Motorcycles at New Delhi India


BATSO
APPROVED

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HYBRID & ELECTRIC VEHICLE IMPLEMENTING AGREEMENT

ISO IEC

ask 23 2014/2015

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FAHRRAD FREUNDLICH
KOMBINIEREN
ÖSTERREICHISCHER
RADGIPFEL 2014
Das Fahrrad im Mittelpunkt eines neuen Lebensstils
Punkt für Punkt zum Klimaziel.

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HYBRID & ELECTRIC VEHICLE IMPLEMENTING AGREEMENT

ISO IEC

Energy Bus

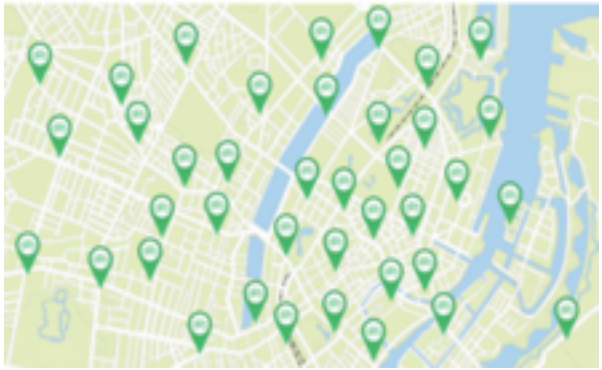
vito
vision on technology


E-BIKE
AWARD 2014
1. Platz
E-BIKE AWARD

Within the Project of IEA HEV IA Task 23 a jury has nominated 8 pedelec offerings from a wide ringe of systems as well as 3 winners.

GoBike Kopenhagen

Presented by:
Torben Dyrvig, GoBike International A/S, Kopenhagen – Dänemark



gobike

Denmarks most innovative city-and-commuter bicycle system

E-BIKE AWARD 2014

ExtraEnergy.org

As official Program of:
VORWEG GEHEN
INTERMOT e-motion
INTERMOT KÖLN

Supported by:
Energy Bus
ZIEGLER

Event within the Task 23 of „The Implementing Agreement for Hybrid & Electric Vehicles „ of the International Energy Agency::

IEA HYBRID & ELECTRIC VEHICLE IMPLEMENTING AGREEMENT

L+EV conference

Take the E-Bike to get to the local train

Presented by:
Christina Freitag, Energie Steiermark Mobilitäts GmbH, Graz, Österreich

As official Program of:

Supported by:

Event within the Task 23 of „The Implementing Agreement for Hybrid & Electric Vehicles „ of the International Energy Agency::

Ludwigsburg Bike

Presented by:
Lena Hörter, Stadt Ludwigsburg, Referat nachhaltige Stadtentwicklung, Ludwigsburg

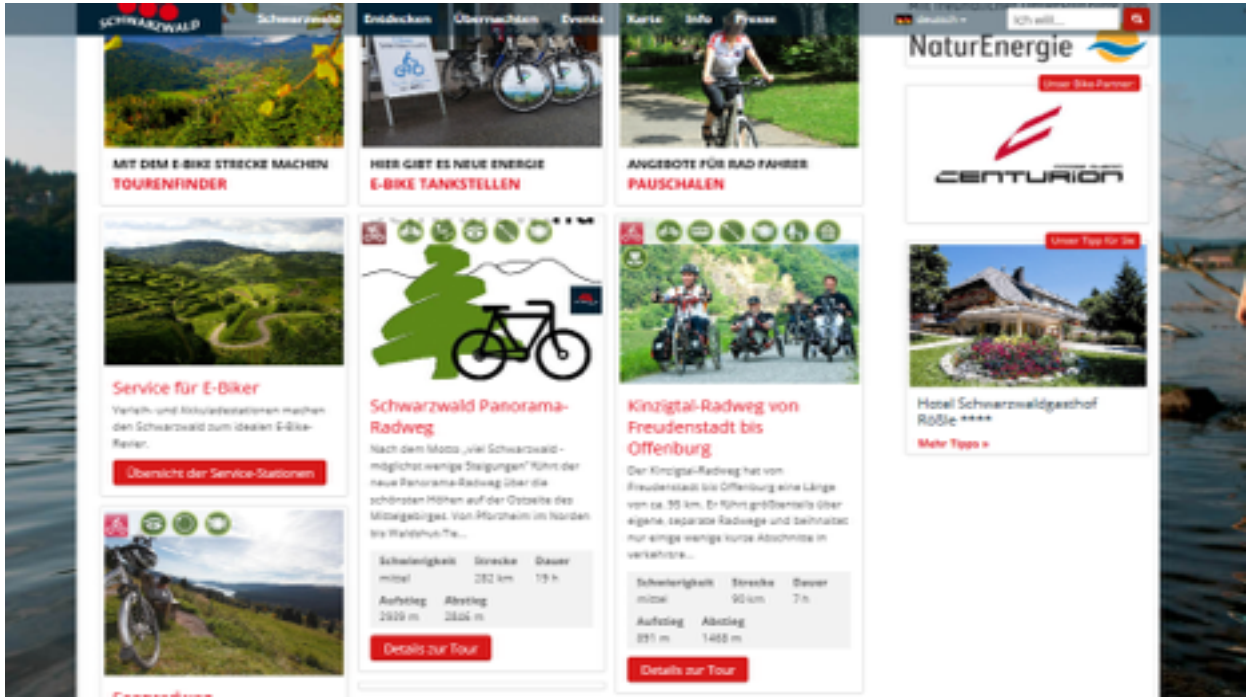
As official Program of:

Supported by:

Event within the Task 23 of „The Implementing Agreement for Hybrid & Electric Vehicles „ of the International Energy Agency::

E-Bike Region Black Forest

Presented by:
Schwarzwald Tourismus GmbH,
Freiburg



As official Program of:

Supported by:

Event within the Task 23 of „The Implementing Agreement for Hybrid & Electric Vehicles „ of the International Energy Agency::

elros – Electric mobiliy for Rostock

Presented by:
Janette Heidenreich Rostocker Straßenbahn AG, Rostock
Projektleiterin für das EU Projekt „ELMOS“

As official Program of:

Supported by:

Event within the Task 23 of „The Implementing Agreement for Hybrid & Electric Vehicles „ of the International Energy Agency::

e-velolink – Campus-e-Bike Sharing System

L+EV conference

Presented by:
Andreas Busa, Schatzmeister von e-velolink, Zürich, Schweiz

E-BIKE AWARD 2014

ExtraEnergy.org

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INTERMOT e-motion
INTERMOT KÖLN

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Charge & Lock Cable for Pedelecs

L+EV conference

Presented by:
Michael Götz, Tegernseer Tal Tourismus GmbH

E-BIKE AWARD 2014

ExtraEnergy.org

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INTERMOT e-motion
INTERMOT KÖLN

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Event within the Task 23 of „The Implementing Agreement for Hybrid & Electric Vehicles „ of the International Energy Agency::

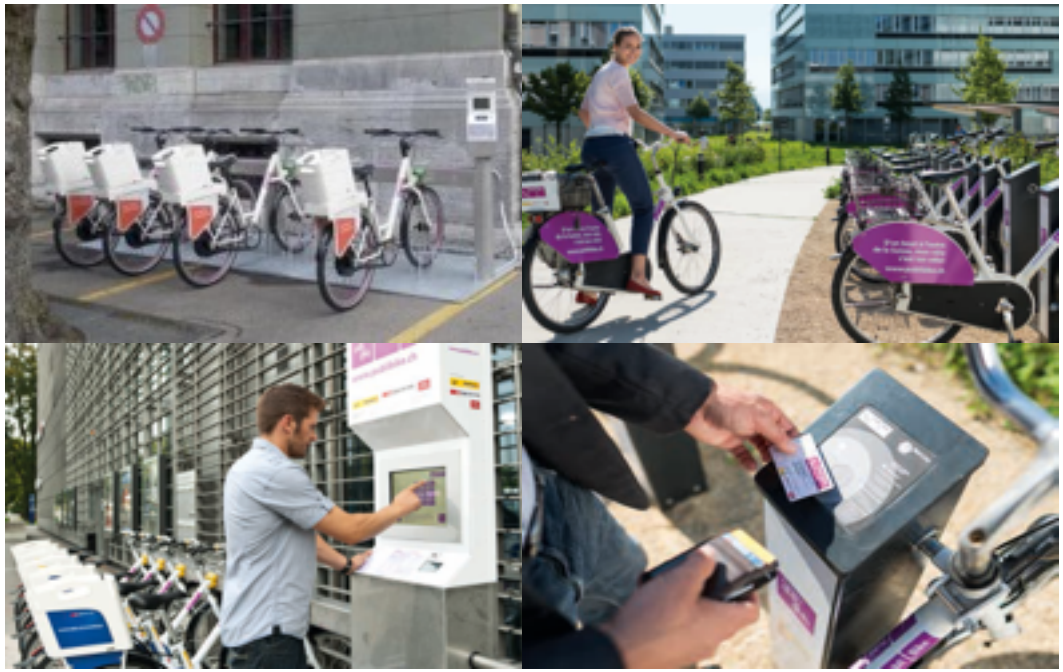
IEA HYBRID & ELECTRIC VEHICLE IMPLEMENTING AGREEMENT

One-Button-Use-e-Bike

L+EV conference

Presented by:

Andrej Emanuel Westermann, Technischer Leiter, PubliBike AG, Friburg - Schweiz



E-BIKE AWARD 2014

ExtraEnergy.org

As official Program of:

VORWEG GEHEN

INTERMOT e-motion

INTERMOT KÖLN

Supported by:

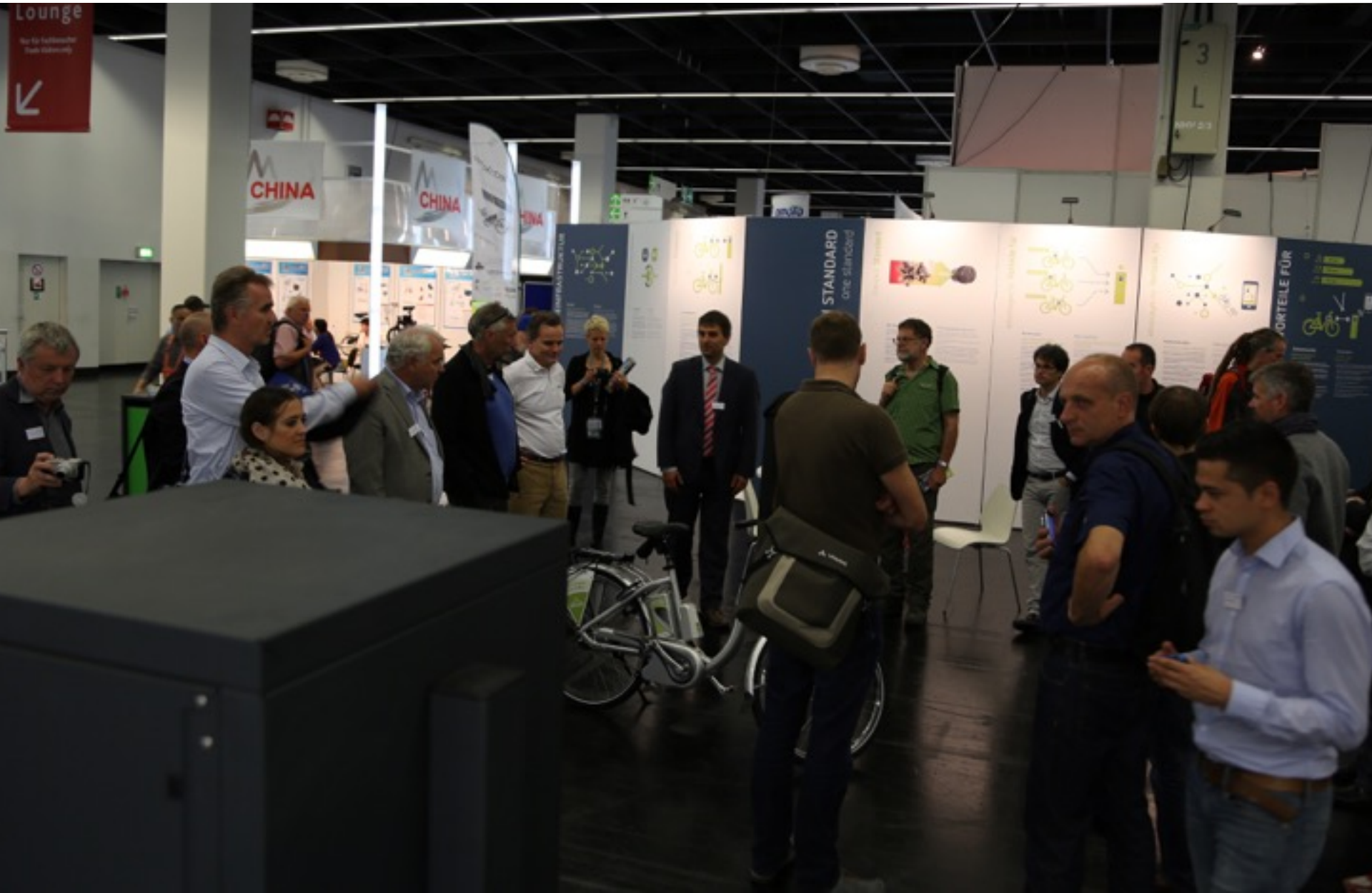
Energy Bus

ZIEGLER

Event within the Task 23 of „The Implementing Agreement for Hybrid & Electric Vehicles „ of the International Energy Agency::

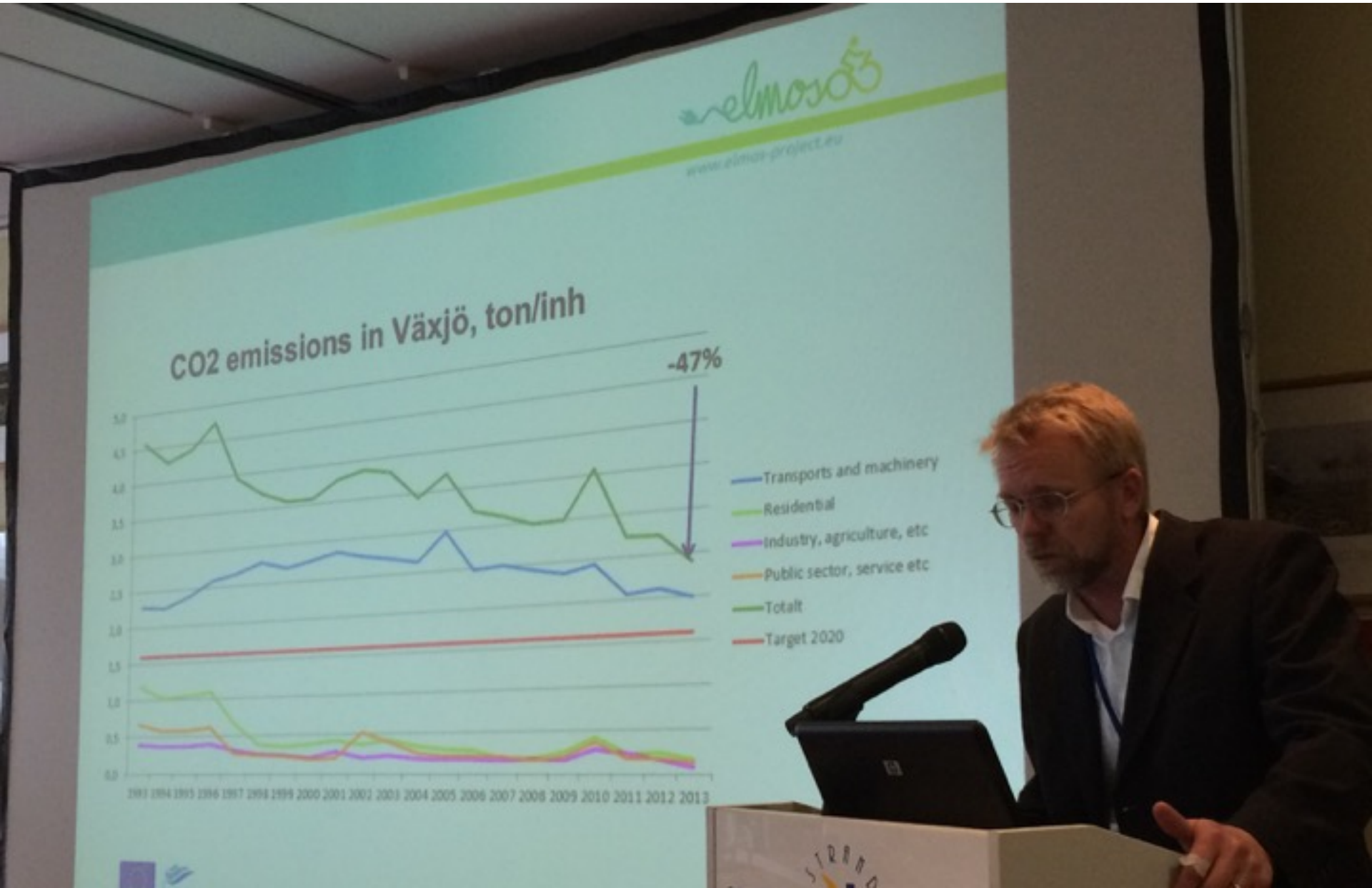
IEA HYBRID & ELECTRIC VEHICLE IMPLEMENTING AGREEMENT


E-BIKE
AWARD 2014
1. Platz
VORWEG GEHEN
ExtraEnergy.org
E-BIKE AWARD
Rückenwind für neue Ideen
VORWEG GEHEN
ExtraEnergy.org


Lounge
CHINA
CHINA
STANDARD
one standard


VELON

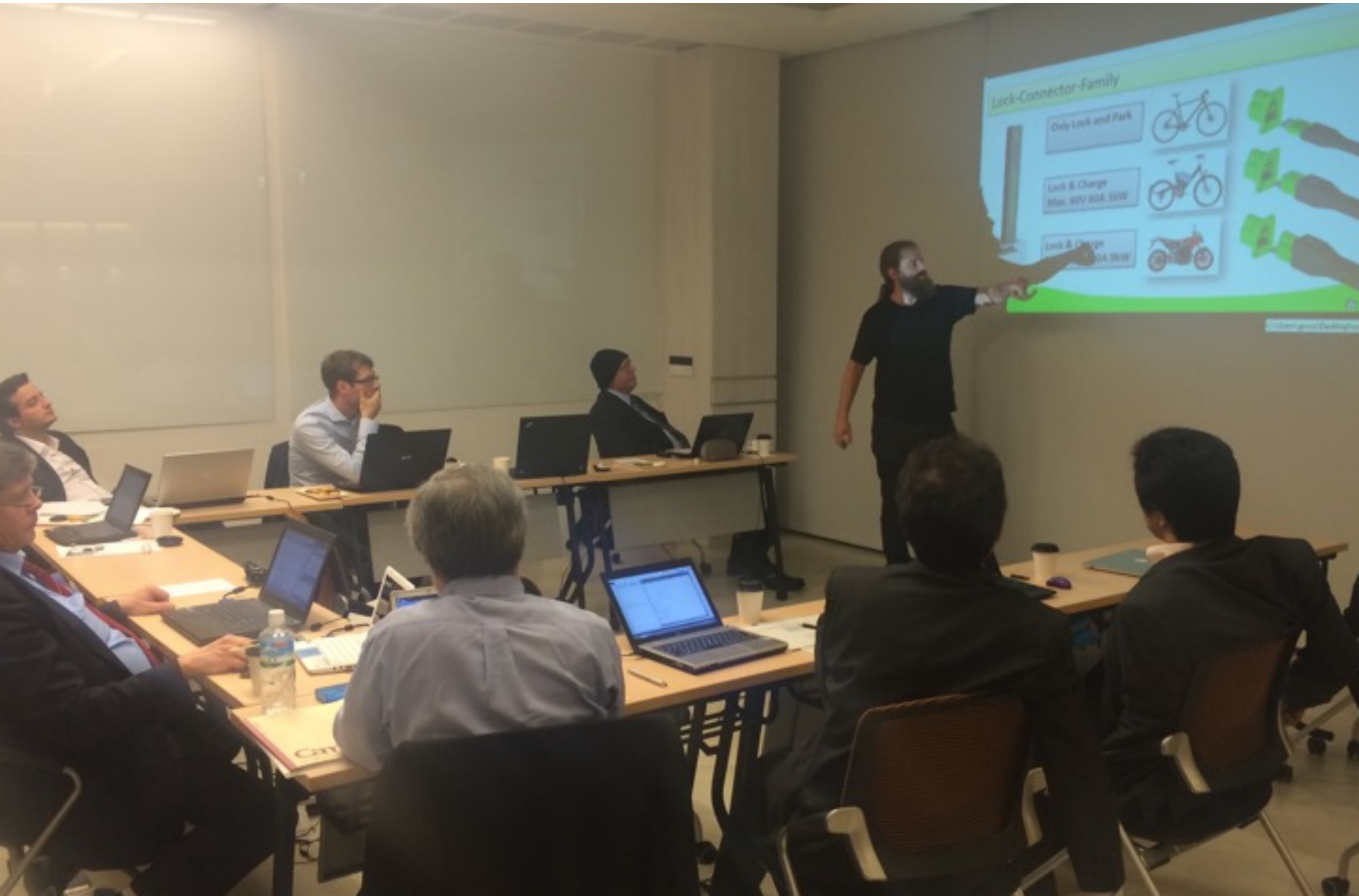

TAIWAN


elmos63
www.elmos-project.eu
CO2 emissions in Växjö, ton/inh
-47%
Transports and machinery
Residential
Industry, agriculture, etc
Public sector, service etc
Totalt
Target 2020
1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013


Cities as a mix of change and diversity
• Radical changes and removal of privileges provided for the private car use, may be necessary for creating an equitable transport system
• City governements need to have a clear and inclusive strategy and from there can cooperate with private developers and other actors.
HOTEL HÜBNER


ZIEGLER
www.ziegler-metall.de


SUZHOU BAFANG ELECTRIC MOTOR
SCIENCE-TECHNOLOGY CO. LTD.
苏州八方电机科技有限公司


Lock-Connector-Family
Only Lock and Park
Lock & Charge


14:41:26

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your turnkey solution

1-3 meeting in cooperation with Hero


雅迪


2015 天津. 国际
自行车电动车产业革命暨传统产业互联网思维高峰论坛

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LichtBlick
ettrak


Recycling
内循环
2015 天津.国际
自行车电动车产业革命暨传统产业互联网思维高峰论坛

Planned output of the task 23:

- Documentation of existing solutions for best practice sharing and make them available for local governments and companies.
- Create turnkey guidelines for local governments including samples for a public procurement by tender for rental pedelecs as well the parking and charging infrastructure.
- Biannual „E-Bike Award“ with international conference the next is scheduled in October 2014 (financed independent by sponsoring /RWE)
- Workshops for interested communities in local language for task-member countries with local language materials (expenses to be covered by member task member country).
- Biannual reports to be published in easy to read and understand format by local politicians without engineering background.
- Be present at key trade shows and conferences globally to contact relevant target groups like: Mayors, city planners, mobility managers, local politicians, bicycle industry, infrastructure industry.
- Organize joint excursions to visit best practice applications if applicable together with mini workshops.
- Cooperate with other projects on national and regional level

Planned activities task 23: May and June 2015

2015.05.6-9 Talks with Industry at China Cycle Show Shanghai
2015.05.11 GAK 353.0.9 meeting at Frankfurt
2015.05.12-13 SAFE Workshop in Dresden sponsored by the german ministry of research and Education
2015.05.13 IEC/ISO/TC69/JPT61851-3 Webconference
2015.05.18-19 National Bicycle Conference Germany
2015.05.21 Workshop at Germany Environmental Agency
2015.05.28-19 ISO IEC/ISO/TC69/JPT61851-3 Meeting Rome
2015.06.1-2 ECF Meeting of Bicycle Industry and EU Government officials in Nantes France
2015.06.06 Presentation of Task 23 during ExtraEnergy day of the open doors
2015.06.10 Lecture on Task 23 at a German government workshop organized by the ministry of transportation

Planned activities task 23: June-November 2015

2015.06.16-24 LEV Environment and Industry education trip with the president of the Asian Bicycle Industry association Mr. Ma and other represent-ants of the Industry, Task 23, and press. Visited countries will be Germany; Sweden, Denmark and Norway 2015.06.10 Task 23 presentation at eBike Conference Tirol Austria
2015.08.25.-29 Task 23 Presentation at Eurobike
2015.09.14-27 Presentation and workshops of Task 23 at IAA Frankfurt Germany (IAA= International Automotive Exhibition with 900.000 Visitors)
2015.09.14-18 Presentation of Task 23 at Interbike Las Vegas USA
2015.10.??-?? Presentation of Task 23 at Taichung Bike Week Taichung Taiwan
2015.10.1-31 Activities within the World Mobility Johannesburg South Africa
2015.11.2-7 Participation in IEA HEV IA ExCo Johannesburg South Africa

Task 23 current participating countries and partners

At the moment Spain, Germany, Belgium and Turkey are the official participants of the Task 23

Talks with projects which may join from the following countries are ongoing: Swenden, Poland, Danmark, Netherlands, France, Latvia, Austria, Hungary, Malta, Portugal, Italy, Indonesia, Taiwan, China and Japan.

The Participation in Task 23 does not require a participation fee. Just own travel costs must be covered by the participants in case of participation. And if events in the own country are organized the costs correlated with these events should be covered.

Task 23 call for further participation

Every participant is welcome for direct or indirect participation. Since as described in the section “Environment and correlations of task 23 activities“ the indirect way to participate would be for example to work in a national committee to mirror the IEC/ISO/TC69/JPT61851-3 activities and influence them down the finalization in 2017/2018 by active inputs. Another way for industry players to become active would be to create products such as infrastructure and vehicles which do fit in the urban environment described within the task 23 activities. Many good products will be necessary to fulfill the needs of all cities and counties around the globe to improve their public transport systems as well as managing their nine moving traffic by effective parking management systems. And create balanced or even profitable business of last mile public transport solutions as well as public city space management.

Financial matters of task 23 activities

Until now the costs of running task 23 have been covered by membership income of the EnergyBus organization, the initial financing of 5000 Euro by the common fund of the IEA HEV IA, the standardization activities have been financially supported by the german government which gave a grant of 65.000 Euro to the EnergyBus GmbH to cover travel expenses to IEC/ISO meetings as well as national mirror group meetings for the IEC convener as well as the german mirror group leader. In August 2014 a request for financial support was handed in at the German government agency the Umweltbundesamt within the „Verbändeförderung“ - but was not success full. Further attempts will be made down the road to get a substantial budget to be able to run with full power the plenty activities scheduled within the next years under the roof of task 23. The „E-Bike Award“ which is part of the task 23 activities was supported by ExtraEnergy e.V. and RWE Germany. All activities have been involving a lot of voluntary hours by the operating agents.

Contact data:

Interested parties are welcome to contact the task 23 operating agents for any further questions:

Operating agent:

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07922 Tanna
Germany

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