INTERNATIONAL ELECTRIC VEHICLE SYMPOSIUM & EXHIBITION

EVS 32

A world of E MOTION

EUREXPO - LYON, FRANCE

2019 MAY 19th 22nd

EVS 50th anniversary 1969-2019

PROGRAM

Hosted by :

AVERE

In collaboration with :

EDTA

EVA

EMA

Organized by :

AVERE FRANCE

live!

RÉPUBLIQUE FRANÇAISE

MINISTÈRE DE LA TRANSITION ÉCOLOGIQUE ET SOLIDAIRE

www.evs32.org

#EVS32

CONTENT

Espen HAUGE
President of WEVA, AVERE and Norwegian Electric Vehicle Association

Dear friends,

Welcome to the 32nd International Electric Vehicle Symposium and Exhibition (EVS) in Lyon!
This year EVS celebrates 50 years of existence, but the event is more vibrant and relevant than ever.

EVS32 is the place to take part in innovation, collaboration and synergies of power, grids, cars and IT coming together. Together this will create a lot of value both in terms of cash and jobs, and in terms of smart, green solutions.

EVS32 is the place to discuss how to deliver on the expectations set by policymakers, specifically in terms of emission levels. But even higher expectations come from striking schoolchildren, our kids, to do everything we can to reach full transition to zero emissions as fast as possible. Greta Thunberg said “Once we start to act, hope is everywhere”.

EVS is the place to be filled with hope for the future. Because here we come together from across the globe, from across policymakers, academia and consumers, across industries and competing companies that are part of the solution. We are all key parts of the EV ecosystem and despite our inherent differences we drive the future together.

EVS is the place to enjoy the company of people with unique skills, knowledge and insight into the key solutions for the pressing issues of our time. In Lyon the long lasting tradition and spirit of EVS will be celebrated. I can’t think of a better place to celebrate than the gastronomy capital of Europe, in the Region Auvergne-Rhone Alpes - home to many pioneering companies in electromobility, and in France - the European leader in EV production.

The local team helping to bring EVS32 to life consist of Live*!* by GL events and AVERE France. Together with our sponsors and other partners they have done a great job, and set a new record in terms of making such a big event in almost half the time normally required.

The future will bring big and fast changes, and people are right to be concerned. Let’s make the future great again by investing our efforts into sustainable business – in financial, ecological and social terms.

Enjoy EVS32!

EVS32 CHAIR

Espen HAUGE, President of WEVA, AVERE and Norwegian Electric Vehicle Association, Norway

EVS32 BOARD

Thiago ARAUJO, Live*!* by GL events, France
Joseph BERETTA, AVERE France, France
Florence GUYON, Live*!* by GL events, France
Espen HAUGE, President of WEVA, AVERE and Norwegian Electric Vehicle Association, Norway
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Philippe VANGEEL, AVERE, Belgium

SCIENTIFIC PROGRAM CHAIR

Joeri VAN MIERLO, Vrije Universiteit Brussel – MOBI, Belgium

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Joeri VAN MIERLO, Vrije Universiteit Brussel - MOBI, Belgium
Philippe VANGEEL, AVERE, Belgium

EVS32 REVIEWERS

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Dimitrios MARGARITIS
Claudia MARTIS
Maarten MESSAGIE
James MILLER
Paul MINCIUNESCU
Urs MUNTWYLER
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Henk NIJMEIJER
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Lucian PARVULESCU
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Claudio PFISTER
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Tobias PLACKE
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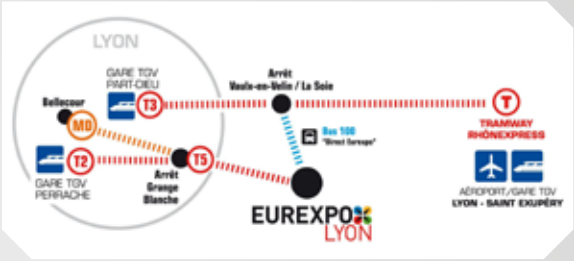
Burghard VOSS
Art WAGNER
Toshiaki WATANABE
Susanne WEGMANN
Harm WEKEN
Xuhui WEN
Alfons WESTGEEST
Joerg WIND
Bert WITKAMP

50 YEARS ANNIVERSARY EXHIBITION

The first edition of EVS began in 1969. Today, EVS is celebrating 50 years of existence for its 32nd edition in Lyon.

To celebrate its fifty years, EVS32 is proposing a special exhibition from the oldest to the most modern electric vehicle in the world Formula E Gen2. This exhibition will be a huge moment to share together the story of the electric mobility world.

ACCESS



The exhibition centre is located halfway between Lyon city centre and the Saint-Exupéry airport/high-speed railway station hub (20 km), and is easily accessible using any means of transport.

Venue Address:
Boulevard de l'Europe,
69680 Chassieu, France

AEC2019 PROGRAM

The AEC2019 program, with seven different sessions in total, will provide participants with a taste of how industry and policymakers are driving the global electromobility sector. The different high-level sessions cover all aspects of e-mobility.

CHARGING EXPERIENCE	**Monday, May 20th**	03:00 pm - 04:30 pm
URBAN MOBILITY	**Monday, May 20th**	05:00 pm - 06:30 pm
AUTONOMOUS VEHICLES	**Tuesday, May 21st**	11:00 am - 12:30 pm
MOBILITY AS A SERVICE	**Tuesday, May 21st**	03:00 pm - 04:30 pm
ELECTRIC HEAVY DUTY TRANSPORT	**Tuesday, May 21st**	05:00 pm - 06:30 pm
SMART CHARGING, V2X	**Wednesday, May 22nd**	09:00 am - 10:30 am
HYDROGEN ZEV	**Wednesday, May 22nd**	11:00 am - 12:30 pm

Room: Bocuse Plenary Room

AEC 2019
AVERE E-MOBILITY CONFERENCE

AVERE
Meet them at BOOTH B9

AVERE (The European Association for Electromobility) is the European association that promotes electromobility and sustainable transport across Europe. Our Members consist of National Associations supporting and encouraging the use of Electric Vehicles and electromobility across Europe. We currently have active members in 15 European countries, notably some of the most successful EV countries like Norway, France, The Netherlands and Belgium.

Within these Associations, there are close to 1000 members, ranging from SME's, OEM's, and other companies with a commercial interest in electromobility. Furthermore AVERE's network includes Users of Electric vehicles, NGOs, Associations, Interest Groups, Public Institutions, Research & Development Centres, Vehicle and Equipment Manufacturers and other relevant Companies.
AVERE is the only European association representing and advocating for electromobility on behalf of industry, academia, and EV users at both EU and national levels. You can find out more about our scope of work and added value here.

On top of advocacy, AVERE provides its members with a unique forum for exchanging knowledge, experience, and ideas on how to stimulate electromobility throughout Europe. Our Task Forces analyse of the most important EV themes. We engage in European projects promoting sustainable transportation across the EU and we have often joined other international initiatives to support electromobility.
The Association is a non-profit organization governed by the Belgium law.

AVERE FRANCE
Meet them at BOOTH B7

AVERE - France is the e-mobility national association created in 1978 under the impetus of the European Commission. It is the centre of information, exchange and national expertise that brings together all the players in the ecosystem of electric mobility, such as OEM, industries, service providers of electro mobility, public institutions, cities, energy suppliers, research institutes or associations.
The main tasks of the association are to encourage the acquisition and use of electric, plug-in hybrids, hybrids and fuel cell vehicles (two wheelers, cars, LDV, bus, trucks and boats). Beyond the promotion and information on electric mobility Avere-France is the representative of this sector in front the French government though actions of advocacy. It also carries out actions such as analysis of the electric vehicle markets, proposition of legislative or regulatory evolution, activities on Web and social networks, organisation of e-mobility events, development and management of e-mobility cities network and club of regional e-mobility associations. The deployment of electric refuelling infrastructures it supported thought Avere-France ADVENIR program that finances private and public charging infrastructures.
For more information please visit the website: www.avere-france.org

BADGES

After registering, named badge will be provided. For security and regulation purposes, your badge has to be worn at all time.
In case of loss, the renewal of your badge will be done at the reception and will be charged 15 € excl. VAT.

DELEGATES BAGS

Participants with a delegate badge can pick up the official EVS32 bag at the cloakroom in the Welcome Area.

CERTIFICATE OF ATTENDANCE

Certificate of attendance will be delivered by email to all participants after the symposium is done. If you do not receive your certificate of attendance a week after the symposium, please contact evs32@gl-events.com

CLOAKROOM

A free cloakroom is at your disposal during all symposium days located at the entrance next to the Welcome Area. Please, make sure that no personal belongings are left after the closing.

CLUSTER ZONE

The detailed program of the EDF Agora is avalaible on the EVS32 App.

The EDF Cluster Zone is sponsored by EDF. This area groups together competitive companies and start-ups, enabling them to increase their productivity by facilitating contacts and building relations.

COFFEE BREAKS

Available in the Exhition hall

Monday, May 20th	10:30 am - 11:00 am 04:30 pm - 05:00 pm
Tuesday, May 21st	10:30 am - 11:00 am 04:30 pm - 05:00 pm
Wednesday, May 22nd	10:30 am - 11:00 am

DIALOGUE SESSIONS

Monday, May 20th	01:00 pm - 03:00 pm
Tuesday, May 21st	01:00 pm - 03:00 pm
Wednesday, May 22nd	12:30 pm - 02:30 pm

Location: Posters Area, between EVS32 Restaurant and the National French Pavilion.

DISTRIBUTION OF PUBLIC TRANSPORTATION PASS

Distribution at the Cloakroom. Each ticket is a 1 day pass and each person will get up to 3 tickets depending on the attendance (subject to availability). Only for full delegates and first come, first served basis for AEC delegates.

EVS32 AGORA

EVS32 Agora is located in the Hydrogen Zone. The detailed program is available on the EVS32 App.

EVS32 APP

EVS32 mobile application will enhance your experience while you will be attending the symposium. EVS32 mobile application will provide you with all EVS32 information such as: news, program, speakers' list, abstracts, venue access, practical information, conference rooms & venue floor plans, partners…

EVS32 GALA

EVS32 Gala will take place at at the core of the Exhibition hall 7 on Tuesday, May 21st from 07:30 pm. Discover the exquisite Lyonnaise cuisine while gathering with worldwide e-mobility actors. Registration is mandatory to access the gala. **Fees:** €96 / per person

EVS32 WELCOME RECEPTION

EVS32 has the pleasure to invite you to the Welcom Reception on Sunday May 19th, from 06:00 pm to 08:00 pm. The Welcom Reception will take place at GL Events Head Quarters: 59 Quai Rambaud, 69002 Lyon (access on registration only, subject to availability).

HYDROGEN ZONE

The Hydrogen Zone groups together various new technologies and innovations linked to hydrogen power. The area has been set up in partnership with La Région Auvergne-Rhône-Alpes, Michelin and Engie.

LUNCHES

Monday, May 20th	12:30 pm - 02:30 pm
Tuesday, May 21st	12:30 pm - 02:30 pm
Wednesday, May 22nd	12:30 pm - 02:30 pm

Location: EVS32 Restaurant

Fees: €36 incl. taxes. Tickets available at the Welcome Area "subject to availability".

MEDICAL ASSISTANCE

Medical assistance is available at the Welcome Area.

NATIONAL PAVILIONS

Discover the national pavilions at the 32nd Electric Vehicle Symposium:

- **French Pavilion By** Enedis
- **National German Pavilion** Booth F15
- **National Chinese Pavilion** Booths B9 BIS, C12, C12A, C12B, D27
- **National Dutch Pavilion** Booth G49
- **National American Pavilion** Booth F35
- **National United-Kingdom Pavilion** Booth F13
- **National Canadian Pavilion** Booth C20
- **National Norwegian Pavilion** Booth E19

NETWORKING

The EVS32 App is the network application where you can find the contacts that interest you and send them private messages. Connect with EVS32 participants now!

OPENING HOURS

EXHIBITORS:

Sunday, May 19th	09:00 am - 08:00 pm
Monday, May 20th	07:30 am - 07:00 pm
Tuesday, May 21st	07:30 am - 07:00 pm
Wednesday, May 22nd	07:30 am - 04:30 pm

VISITORS:

Sunday, May 19th	10:30 am - 08:00 pm
Monday, May 20th	08:00 am - 07:00 pm
Tuesday, May 21st	08:00 am - 07:00 pm
Wednesday, May 22nd	08:00 am - 04:30 pm

OVERFLOW AREA

Overflow area is located on level 1 next to Mezzanine Room.

POWER ZONE

A power zone is available next to the Posters Area.

PRESS ROOM

Press room is located on the ground floor next to the Posters Area.

PREVIEW ROOM

Preview room is located on the ground floor close to the Bocuse Plenary Room.

OPENING HOURS:

Sunday, May 19th	11:00 am - 05:00 pm *(Free entrance)*
Monday, May 20th	08:00 am - 07:00 pm
Tuesday, May 21st	08:00 am - 07:00 pm
Wednesday, May 22nd	08:00 am - 01:00 pm

Room: Bocuse 2

RIDE&DRIVE

The Ride&Drive Zone is an area in which you can try out all the latest electric vehicles on the market. From scooters to cars and bikes, all you have to do is to push the button start!

The Banque des Territoires Groupe Caisse des Dépôts is a partner of EVS32. The bank supports regional projects and development, prioritising ecological and energy transition in France.

POWERED BY: izivia & EVBOX

Electric vehicle charging stations are available on Ride&Drive

OPENING HOURS:

Sunday, May 19th	11:00 am - 06:00 pm *(Free entrance)*
Monday, May 20th	12:30 pm - 07:00 pm
Tuesday, May 21st	08:30 am - 06:30 pm
Wednesday, May 22nd	08:30 am - 12:30 pm

Fees: Adult entry: From €25 / per day Child entry: From €15 / per day

SCIENTIFIC PROGRAM

The EVS32 scientific program includes more than 140 lecture sessions spread across the three different days covering various complex topics presented by leading global e-mobility researchers.
In addition to the lecture sessions, the Posters area is here to allow scientists to present their papers through the dialogue sessions.

LECTURE SESSION

A lecture session allows selected panel of speakers to present their paper with a PPT presentation in front of an audience in a conference room during 20 minutes. Q&A from the audience will be held at the end of the lecture session.

DIALOGUE SESSION

A dialogue session gathers selected presenters and their posters in a designated poster area at a specific time to more informally discuss and answer questions from fellow experts and interested delegates.

Here are the official topics proposed to the authors:

- TOPIC A The Evolution of Electric Vehicles & Digitalisation of Transport
- TOPIC B Electric Power Train - A Deep Dive
- TOPIC C Inside the EV: Component Technologies at the Forefront of the Sector
- TOPIC D The Development of EV Charging / Infrastructure
- TOPIC E EV Market Trends, Consumer Insight, And Strategies
- TOPIC F Understanding E-Mobility From An Energy & Environmental Perspective
- TOPIC G The Future of Mobility

SCIENTIFIC SECRETARIAT

For all the speakers of the Scientific Program, if you have any question regarding your lecture or dialogue session please refer to the Scientific Secretariat. The Scientific desk is located in the Welcom Area.

CONTACT:
Phone: +33 (0)6 80 82 49 69
Mail: audrey.eliezer@gl-events.com

The Scientific Secretariat is open during the following hours.

Sunday, May 19th	10:30 am - 08:00 pm
Monday, May 20th	08:00 am - 07:00 pm
Tuesday, May 21st	08:00 am - 07:00 pm
Wednesday, May 22nd	08:00 am - 04:30 pm

SE SIDE EVENTS

Monday, May 20th
Please, refer to the program page 35.

Tuesday, May 21st
Please, refer to the program page 51.

Wednesday, May 22nd
Please, refer to the program page 65.

SMOKING POLICY

Please note that smoking and e-smoking are prohibited by law in the venue.

TECHNICAL VISITS

Find on page 67 the detailed program of the technical visits.

Registration is mandatory and nominative (register before the Congress on www.evs32.org or at the EVS32 Welcome Area). Subject to availability.

VEHICLES CHARGING AREA

Stations are available at Eurexpo visitors' parking.

WIFI

A free public wifi access is available during all symposium days.

Download the official EVS32 mobile app to enhance your visit!

Available on :

NOTES

RIDE & DRIVE

OPENING HOURS:

Sunday, May 19th 11:00 am - 06:00 pm
Monday, May 20th 12:30 am - 07:00 pm
Tuesday, May 21st 08:45 am - 06:30 pm

The Ride&Drive Zone is an area in which you can try out all the latest electric vehicles on the market. From scooters to cars and bikes, all you have to do is to push the button start!

The Banque des Territoires Groupe Caisse des Dépôts is a partner of EVS32. The bank supports regional projects and development, prioritising ecological and energy transition in France.

POWERED BY: izivia & EVBOX

Electric vehicle charging stations are available on Ride&Drive.

EXHIBITORS:

ALPMARS
Electrics scooters are available on Ride&Drive
alpmars.com

CYCLABLE ENTREPRISES
cyclable-entreprises.com

E4V
e4v.eu

ECCITY
eccity-motocycles.com

GEEBEE
Electrics scooters are available on Ride&Drive
conceptgeebee.com

GLOBE 3T
Electrics scooters are available on Ride&Drive
globe3t.com

GROUPE RENAULT
Cars available on Ride&Drive Zone:
Renault Zoé - Twizy - Kangoo
group.renault.com

HYUNDAI
Cars available on Ride&Drive Zone:
Ionic - Kona - Enxo (hydrogen vehicle)
www.hyundaiusa.com

JAGUAR
jaguar.com

KIA
kia.com

MOOV-ELEC
Electrics scooters are available on Ride&Drive
moov-elec.fr

NISSAN
Cars available on Ride&Drive Zone:
Leaf - E-NV200
nissanusa.com

SAS LED'S GO
sasledsgo.com

SILENCE URBAN ECOMOBILITY
silence.eco

SMART
smart.com

TESLA
Cars available on Ride&Drive Zone:
Model X - Model S - Model 3
tesla.com

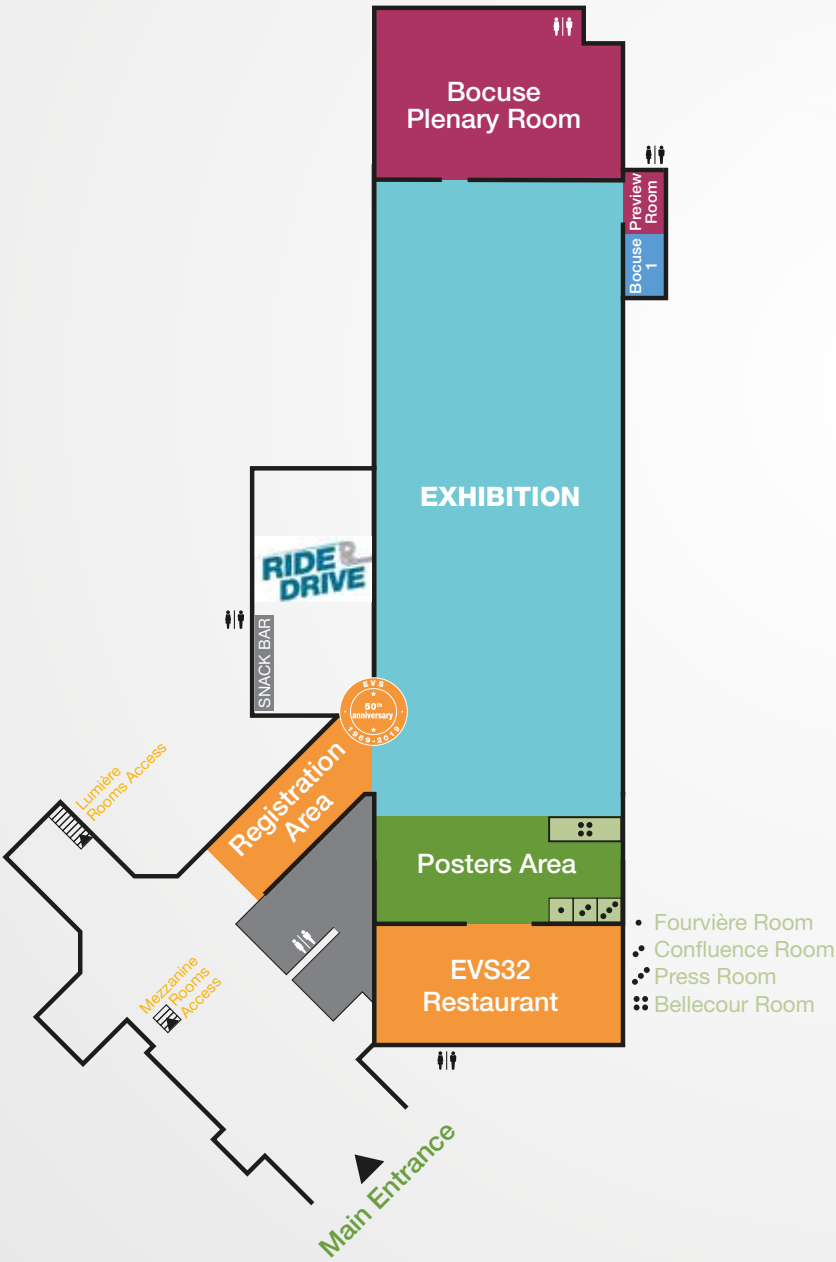
TOYOTA
Cars available on Ride&Drive Zone:
Mirai
toyota.com

VALEO
Cars available on Ride&Drive Zone:
Volkswagen Golf PHEV 48V
eCity Car 48V 100% Electric
valeo.com

WHEEL'E
Electrics cargo bikes are available on Ride&Drive
wheele.fr

ZE COMBI
zecombi.com

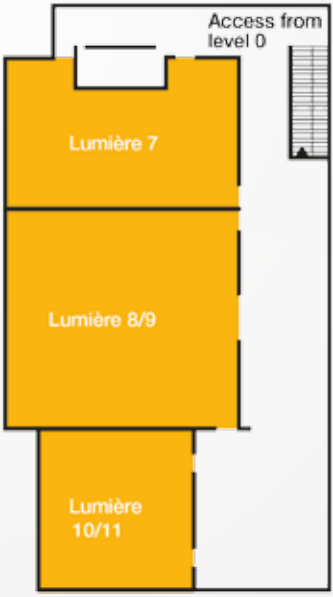
VENUE FLOORPLAN



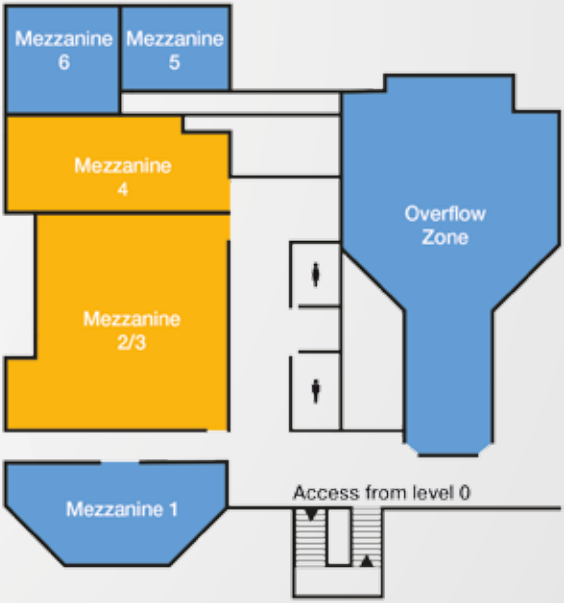
Bus 100
Tramway T5
Arrêt : Eurexpo

Visitors Parking
P3/P4/P5

LUMIÈRE ROOMS
LEVEL 1



MEZZANINE ROOMS
LEVEL 1



SUNDAY, MAY 19TH

10:30 am – 11:00 am	Visitors' & public opening
11:00 am – 6:00 pm	Exhibition
11:00 am – 6:00 pm	Ride&Drive
06:00 pm – 8:00 pm	Welcome reception

MONDAY, MAY 20TH

08:30 am – 07:00 pm	Exhibition
08:30 am – 12:30 pm	Ride&Drive (VIP/press only)
12:30 pm – 07:00 pm	Ride&Drive
09:00 am – 10:30 am	Opening ceremony
10:30 am – 11:00 am	Coffee break
11:00 am – 12:30 pm	Lecture sessions
12:30 pm – 02:30 pm	Lunch
01:00 pm – 03:00 pm	Dialogue sessions
03:00 pm – 04:30 pm	Lecture sessions + AEC session: Charging experience
04:30 pm – 05:00 pm	Coffee break
05:00 pm – 06:30 pm	Lecture sessions + AEC session: Urban mobility

TUESDAY, MAY 21ST

08:30 am – 07:00 pm	Exhibition
08:30 am – 06:30 pm	Ride&Drive
09:00 am – 10:30 am	Plenary session
10:30 am – 11:00 am	Coffee break
11:00 am – 12:30 pm	Lecture sessions + AEC session: Autonomous vehicles
12:30 pm – 02:30 pm	Lunch
01:00 pm – 03:00 pm	Dialogue sessions
03:00 pm – 04:30 pm	Lecture sessions + AEC session: Mobility as a service
04:30 pm – 05:00 pm	Coffee break
05:00 pm – 06:30 pm	Lecture sessions + AEC session: Electric heavy duty transport
07:00 pm – 01:00 am	EVS32 Gala

WEDNESDAY, MAY 22ND

08:30 am – 04:45 pm	Exhibition
08:30 am – 12:30 pm	Ride&Drive
09:00 am – 10:30 am	Lecture sessions + AEC session: Smart charging, V2X
10:30 am – 11:00 am	Coffee break
11:00 am – 12:30 pm	Lecture sessions + AEC session: Hydrogen, ZEV
12:30 pm – 02:30 pm	Lunch + Dialogue sessions
02:30 pm – 04:00 pm	Closing ceremony
04:45 pm – 06:30 pm	Technical visits

Lecture Sessions | Dialogue Sessions | AEC Sessions | Plenary Sessions

PROGRAM

10:30 am	Visitors' & public opening
11:00 am - 06:00 pm	Exhibition
11:00 am - 06:00 pm	Ride&Drive
06:00 pm - closing	Welcome Reception *Registration required*
Venue:	**GL EVENTS HEADQUARTERS** *59, quai Rambaud,* *69002 Lyon,* *France*


ENEDIS
L'ELECTRICITE EN RESEAU
Une voiture électrique, c'est facile quand on peut la recharger n'importe où.
Avec 7 millions de bornes de recharge raccordées au réseau de distribution d'électricité d'ici 2030, Enedis favorise l'usage des véhicules électriques, au service de la transition énergétique et d'une mobilité plus responsable, quel que soit votre fournisseur d'énergie.
Retrouvez-nous sur Internet
L'ÉNERGIE EST NOTRE AVENIR, ÉCONOMISONS-LA !

TIMING						
09:00 am 10:30 am	**OPENING CEREMONY** Bocuse Plenary Room					
10:30 am 11:00 am	COFFEE BREAK					
11:00 am 12:30 pm		**E1** Lumière 8/9 Market development strategies for electric vehicles	**A1** Mezzanine 4 Innovations in vehicle developments	**B1** Lumière 10/11 Vehicle energy managment optimisation	**D1** Mezzanine 2/3 Where are we with Smart charging and V2G?	**C1** Lumière 7 Innovations in electric motor developments
12:30 pm 02:30 pm	LUNCH					
01:00 pm 03:00 pm	DIALOGUE SESSIONS					
03:00 pm 04:30 pm	**AEC 2019** Bocuse Plenary Room Charging experience AEC 2019 AVERE E-MOBILITY CONFERENCE	**E2** Lumière 8/9 Market development stratégies for chargiong intrastructure	**A2** Mezzanine 4 Batteries for passenger cars and heavy duty vehicles	**B2** Lumière 10/11 Innovations in vehicle drive trains	**D2** Mezzanine 2/3 Where are we with Smart charging and V2G?	**C2** Lumière 7 Power electronics and motor technology
04:30 pm 05:00 pm	COFFEE BREAK					
05:00 pm 06:30 pm	**AEC 2019** Bocuse Plenary Room Urban mobility AEC 2019 AVERE E-MOBILITY CONFERENCE	**E3** Lumière 8/9 Electric mobility education and dissemination	**A3** Mezzanine 4 Light electric vehicles and e-bike mobility solutions	**B3** Lumière 10/11 Electric vehicle energy consumption optimisation in real world driving conditions	**D3** Mezzanine 2/3 Where are we with Smart charging and V2G?	**C3** Lumière 7 Battery developments

Last minute changes are possible. Feel free to consult EVS32 mobile App.

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Renault is proud to have sold over
200 000 electric vehicles in Europe.

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*More than 200 000 vehicles sold from January 2011 to end of February 2019 in Europe.
Source AAA-DATA (Association Auxiliaire de l'Automobile)

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09:00 AM – 10:30 AM

OPENING CEREMONY

Room: Bocuse Plenary Room *Chairman session: Espen HAUGE, President of WEVA and AVERE*

09:00 am - 09:10 am

Espen HAUGE, President of WEVA, AVERE and Norwegian Electric Vehicle Association, Norway

He has been engaged on the EV scene for 15 years. Under his leadership the Norwegian Association has grown exponentially, AVERE has celebrated successful international events like EVS30 in Stuttgart 2017, AEC2018 in Brussels, and WEVA has launched the World Electric Vehicle Journal - the first scientific journal for electric vehicles. His career also includes project management, engineering, and research and development, with management experience from the oil and energy industry, and in construction, working for global companies such as ABB and GE, as well as for the City of Oslo.

09:10 am - 09:20 am

Etienne BLANC, 1st Vice-Governor of the Auvergne-Rhone-Alpes Regional Council, France

Originally a lawyer, expert in criminal and social law, and a former Member of Parliament, in January 2016, Etienne BLANC was elected First Vice-governor of the Auvergne-Rhône-Alpes Region, led by Laurent WAUQUIEZ, in charge of the merger of the former regions Auvergne and Rhône-Alpes, and budgetary savings. After 3 years of mandate, it is 300 million € of operating savings that can be registered to his credit, and the return of the Region, as a large local investment organization, with more than 900 million € registered in 2019.

09:20 am - 09:30 am

Yannick DUPORT, EDF Group Electric Mobility Director, France

Yannick DUPORT (50), a graduate of the INSA Engineering School with a Master's in Physics, joined EDF in 1994 where he had a wide range of responsibilities in the Distribution and Commercial Division. Just prior to appointment 2018, Yannick DUPORT was Director at EDF Corporate Business Division Île-de-France, leading a team of 1 210 sales (B2B&B2C), marketers and customer service agents, P&L responsible with a yearly turnover of 5.6 Bio €, serving more than 4.6 Mio customers (B2C&B2B) with energy services.
Since 1st November 2018 Yannick DUPORT is EDF Group Electric Mobility Director and reports directly to the Executive Committee. He is in charge of the Electric Mobility Plan, with the aim of becoming the leading electricity company for electric mobility by 2022 on its 4 main European markets: France, United Kingdom, Italy and Belgium. He is also member of the board of Izivia, a wholly-owned subsidiary of the EDF Group.

09:30 am - 09:40 am

Philippe MONLOUBOU, Chairman of the board management of Enedis, France

After a long career in the EDF environment, in January 2014, Philippe Monloubou is the Chairman of the Management Board of Enedis, the major Electricity Distribution System Operator in France and a wholly-owned subsidiary of EDF Group, independently operated in accordance with the European and French power market regulation. Since April 2018 Philippe Monloubou is 1st VP of the French Think Smartgrids association, which promotes the French smart grids Sector in France, Europe and around the world. Enedis is also member of EDSO4SG and the G3-PLC Alliance.

09:40 am - 09:50 am

Florent MENEGAUX, Chief Executive Officer, Groupe Michelin, France

In 1997, Florent Menegaux joined Michelin as Commercial Director for truck tires in The United Kingdom and the Republic of Ireland. In January 2006, Florent Menegaux became responsible for the Group's Passenger Car and Light Truck Tire Replacement Business Unit for Europe, before being appointed Executive Vice President for the Passenger Car and Light Truck worldwide activities, becoming a member of the Group Executive Committee, in 2008. He was appointed Senior Executive Vice President of the Michelin Group in 2017. In January 2018, he also supervises the Group's Business Directions, and the Manufacturing, Supply Chain and Customer Experience Operational Directions.
On May 18, 2018, Florent Menegaux is named General Managing Partner of the Group and in May 2019, he became President..

09:50 am - 10:00 am

Gilles NORMAND, SVP, Electric Vehicle Business Groupe Renault, France

Gilles Normand started his career at Renault, in 1988, at Product Planning department before moving to Sales & Marketing Division. In 1998, he was appointed Vice President, Commercial Coordination, for Renault Mercosur. From 1999 to 2012, he occupied different position at Nissan, from President of Nissans Motor Espana to Corporate Vice President of larger region world wide, until he became in April 2012, Senior Vice President, Chairman of Asia-Pacific Region of Groupe Renault. Since 1st of January 2017, Gilles Normand has been Senior Vice President, Electric Vehicle Business Groupe Renault. He is a member of the Renault Management Committee.

10:00 am - 10:10 am

Laurent MICHEL, General Manager of the DGEC, France

10:10 am - 10:25 am

His Serene Highness Prince Albert II, Prince of Monaco

Born in 1958 in Monaco, H.S.H. Prince Albert II is the Sovereign Prince of the Principality of Monaco, one of the smallest but most prosperous countries in the world. He is the son of Prince Rainier III and American actress Grace Kelly. In 2006, he launched His foundation "Prince Albert II of Monaco Foundation" dedicated to fight climate change, preserve water and defend biodiversity. Earlier that year He traveled by dog sled to the North Pole raising public awareness on the danger of climate change and global warming. As Head of State and President of His Foundation, Prince Albert II has been honored by numerous prizes from organizations around the world for His contribution and actions in favor of the protection of our environment.

AEC SESSIONS

03:00 PM – 04:30 PM

CHARGING EXPERIENCE

Room: Bocuse Plenary Room

Chairman session: Erik LORENTZEN, Head of Analysis and Consultancy, Norwegian EV Association

KEYNOTE SPEAKER

Dominique LAGARDE,
Director of Electric Mobility Program, Enedis, France

Dominique Lagarde is Senior Executive VP Electric Mobility within ENEDIS.
Dominique Lagarde took diverse operational and corporate responsibilities, in the nuclear field within Nuclear Safety Authority and Atomic energy Commission.
Within EDF Group, he was in particular Executive VP for Strategy and Chief HR and Communication Officer. He was a member of the Supervisory Board of ERDF (which is now ENEDIS) and had been previously CEO of EDF GDF Services Seine-et-Marne.

ROUNDTABLE

Juliette ANTOINE-SIMON,
General Manager, Izivia - SODETREL, France

is a fully owned subsidiary of EDF which operates charging infrastructure and mobility services such as car sharing services with full electric vehicles.
Graduated from Supélec, the Institut d'Etudes Politiques de Paris and a degree in law, Juliette has had the opportunity to collaborate as a project engineer and contract manager on major projects of production and trading for the EDF Group. Juliette joined the Electric Mobility Division in April 2012, in charge of project development.

Dawid ZAJKOWSKI,
Sales Director, KEBA, Austria

Dawid Zajkowski is International Sales Director at KEBA's E-Mobility division. The Austrian-based electronics company has sold 150,000 charging stations worldwide. Thus, KEBA is now among the top 3 manufacturers in the world. Dawid joined the team in January 2018 and accelerates at KEBA E-Mobility the advent of accessible and smart electric mobility infrastructure. Before he held leading sales positions at several renowned companies such as Fronius, Prillinger and Newave.

Pierre CLASQUIN,
Vice President EV Charge, TOTAL, France

Vice President EV Charge of TOTAL, co-founded G2mobility in 2009, a pure player in EV charge solutions, with the conviction that it is necessary to react to an unsustainable mode of the world's development, and moreover that the mature and reliable technology makes it possible to offer accessible and relevant solutions to address this challenge. Since the acquisition of G2mobility by Total in 2018, his main role is to drive the group's electric mobility strategy, a key element of the major transformation that Total is implementing.

Kristof VEREENOOGHE,
CEO, EVBox, Denmark

Kristof Vereenooghe is the CEO of EVBox, the global market leader in charging solutions for electric vehicles and related cloud services. Mr. Vereenooghe is a proven technology executive with deep SaaS-Cloud software expertise and a track record in transforming startups into key players in their industry. Before joining EVBox, mr. Vereenooghe had a leading role within different startups that have become key players in their industry such as Bynder, LUMA Marketing Technologies and Xeikon.

Jacques BORREMANS,
Asia Managing Director, CharIN, China

- CharIN Managing Director in Asia since 2016. Promotion of the rollout of the Combined Charging System in Asia, Australia and New Zeeland
- Managing Director Wyatt & Wang Ltd in Greater China
- Consulting & Business Development: Advising Western companies on their Asia market entry strategy and implementing sales & market strategies for Western companies in Asia
- MBA Rutgers University
- Master degree in Engineering with a specialization Nuclear Physics and simultaneously gained a specialization in Electronics at the University of Brussels, Belgium

CHAIRMAN

Erik LORENTZEN,
Head of Analysis and Consultancy, Norwegian EV Association, Norway

Erik Lorentzen is head of Analysis and Consultancy at the Norwegian EV Association. He works closely with policy development and the EV market with a special focus on charging infrastructure. Lorentzen has a master's degree of Political Economy, and has several years of experience working with climate and transport related issues for the Ministry of the Environment, the public funding agency Transnova and for the Norwegian Directorate of Public Roads.

05:00 PM – 06:30 PM

URBAN MOBILITY

Room: Bocuse Plenary Room

Chairman session: Alister HAMILTON, Director and Chair, EVA, Scotland

KEYNOTE SPEAKER

Stéphane MARTINOT,
Product Marketing Director, Valeo Powertrain Systems, France

Stéphane MARTINOT got a Ph. D in Physics at the INSA ROUEN in 2002.
He started his career at PSA PEUGEOT-CITROEN in 2001. During 12 years, he held different positions in the Powertrain R&D domain.
He joined FAURECIA Emissions Control Systems in 2013 as Global Marketing and Communication Director.
Since 2016, he is Product Marketing Director for VALEO Powertrain Systems.
He is an active member of PFA and of the Industrial Committee of IFP Energies Nouvelles.

ROUNDTABLE

Anja VAN NIERSEN,
CEO, Allego Group, The Netherlands

Anja van Niersen has worked in the field of energy since 2010 when she started working at one of the largest Dutch energy operator networks, Alliander. Experienced in product development and management she felt right at home in the upcoming innovative world of electro mobility. She became CEO of Allego in 2013. Allego provides smart charging solutions for cities, companies and EV drivers to enable zero emission mobility.

Muriel BARNEOUD,
Director of Societal Engagement,
La Poste, France

Muriel Barneoud has been managing director of Le Groupe La Poste Societal Engagement department since January 2017.
Previously, she held the position of Mail Deputy Director in charge of industrial processes. She carried out the modernisation of the industrial mail processing unit and the launch of the French electric cars joint buying organisation.
Between 2010 and 2017, she was CEO of Docaposte, the Groupe La Poste subsidiary specializing in digital transition.

Sharon DIJKSMA,
Deputy Mayor Traffic, Transport and Air Quality, City of Amsterdam,
The Netherlands

Sharon Dijksma (1971) is a Dutch politician and member of the 'Partij van de Arbeid' (Labour Party). Besides her function as Secretary of State Infrastructure and Environmental affairs she was asked in 2018 to join the Amsterdam city council as deputy major; an opportunity for her and her to help the city with it's challenges regarding traffic transport and air quality. One of the main focus therein is the transition to an emission free Amsterdam.

Mathieu BERNASCONI,
Business Development Manager
France & Belgium, SHARE NOW, France

Mathieu Bernasconi has joined ShareNow as Business Development Manager for French-speaking markets in 2017. He started his career in China, supporting the engineering department in the context of the start of a local production line. He then worked several years as an automotive engineer in the field of EV development, before discovering the world of car sharing, for which he worked the last 10 years, developing or managing car sharing operations (incl. 100% EV), in France, Belgium and the UK.

Sytse ZUIDEMA, CEO, NewMotion, France

In 2015 Sytse Zuidema became CEO of NewMotion. Before joining NewMotion, he was managing director of investment firm Alternaty, which specialises in healthcare and sustainable energy investments. Before that he held several leading positions at Casema/Zesko (now Ziggo), such as vice president of Marketing. He graduated in Mechanical Engineering at the TU Delft.

CHAIRMAN

Alister HAMILTON,
Director and Chair, EVA Scotland, Scotland

Alister Hamilton is chair of the Electric Vehicle Association Scotland, a membership association founded circa 2009 and formally constituted as a Community Interest Company in 2017. EVA Scotland has over 1,000 members and is currently growing at over 50% per annum. Dr Hamilton has academic research interest in neuromorphic engineering and was previously involved in promoting car clubs in his home city of Edinburgh.

LECTURE SESSIONS

11:00 AM – 12:30 PM

E1: MARKET DEVELOPMENT STRATEGIES FOR ELECTRIC VEHICLES

Room: Lumière 8/9	*Session Chair: Patrick PLOETZ, Fraunhofer ISI, Germany*	
11:00 am	Revenue management for electric road systems	*Martin GUSTAVSSON, RISE, Sweden*
11:20 am	Sales and market potential through autonomous and automated driving: Case study of Baden-Wuerttemberg	*Sven LIERZER, BridgingIT GmbH, Germany*
11:40 am	New Zealand Electric Vehicle Charging Infrastructure Rollout - A Technical	*Dianna (Dee) WEST, ChargeNet NZ, New Zealand*
12:00 pm	Willingness to pay for electric vehicles and their attributes: the impact on electric vehicles market diffusion in France	*Franck PERNOLLET, EDF, France*

A1: INNOVATIONS IN VEHICLE DEVELOPMENTS

Room: Mezzanine 4	*Session Chair: François BADIN, IFP Energies Nouvelles, France*	
11:00 am	Transmission oil filters for innovative drivetrains and e-axles - Compact, Efficient, Reliable	*Richard BERNEWITZ, Mann & Hummel GmbH, Germany*
11:20 am	Development of the Vehicle Concept - Safe light regional vehicle (SLRV) within the DLR project Next Generation Car (NGC)	*Michael KRIESCHER, German Aerospace Center, Germany*
11:40 am	Design of lightweight electric bus in thailand using composite materials	*Pathawee KUNAKRON-ONG, King Mongkut's University of Technology Thonburi,Thailand*
12:00 pm	Coupling Human Models, Virtual prototypes of heated Seats and HVAC fluid behavior to both improve the passenger thermal comfort and reduce the energy	*Christian MARCA, ESI GROUP, France*

B1: VEHICLE ENERGY MANAGEMENT OPTIMISATION

Room: Lumière 10/11	*Session Chair: Alan JENN, University of California, Favis, The United States*	
11:00 am	Smart regenerative control based on reinforcement learning algorithm to reflect individual driver characteristics	*Min KYUNGHAN, Hanyang University, South Korea*
11:20 am	Electrification of agricultural tractors	*Antti LAJUNEN, University of Helsinki, Finland*
11:40 am	Predictive Vehicle Control with Geographic Information	*Hamai SHOTARO, HInoMotos, Japan*
12:00 pm	Optimized energy management strategy for a hev equipped with an electrical variable transmission system	*Majid VAFAEIPOUR, Vrije Universiteit Brussel - MOBI, Belgium*

D1: WHERE ARE WE WITH SMART CHARGING AND V2G?

Room: Mezzanine 2/3	*Session Chair: Wen XUHUI, Chinese Academy of Sciences, China* *Lonneke DRIESSEN, ElaadNL, The Netherlands*	
11:00 am	Quo vadis smart charging? An expert survey on technicalpotentials and user acceptance of smart charging systems	*Julian HUBER, Forschungszentrum Informatik, Germany*
11:20 am	The value of vehicle-to-grid (V2G) for distribution system congestion management	*Sjoerd MOORMAN, EVConsult, The Netherlands*
11:40 am	Evaluation of economic and environmental superiority of ev battery in power systems: development of multiobjective optimized model for v2h	*Ryosuke KATAOKA, Toyota Central R&D Labs., Inc., Japan*
12:00 pm	Multi-objective optimization of combined peak shaving and frequency regulation in Vehicle-to-Building/Grid	*Yeong YOO, National Research Council Canada, Canada*

C1: INNOVATIONS IN ELECTRIC MOTOR DEVELOPMENTS

Room: Lumière 7	*Session Chair: Omar HEGAZY, Vrije Universiteit Brussel - MOBI, Belgium* *Gil TAL, University of California, Davis URS, Muntwyler - Berner, The United States*	
11:00 am	Advanced experimental NVH analysis of electric motors under electromagnetic excitations	*Karine DEGRENDELE, Eomys, France*
11:20 am	Design, production & verification of a switched-reluctance wheel hub drive train for battery electric vehicles	*Martin VOSSWINKEL, Germany*
11:40 am	Performance analysis of hybrid excitation flux switching permanent magnet motor for phev application	*Sid Ali RANDI, VEDECOM, France*
12:00 pm	Progress in Maximizing Electrified Powertrain Efficiency	*Caiyang WEI, Eindhoven University of Technology, The Netherlands*

03:00 PM – 04:30 PM

E2: MARKET DEVELOPMENT STRATEGIES FOR CHARGING INFRASTRUCTURE

Room: Lumière 8/9	*Session Chair: Sven LIERZER, BridgingIT GmbH, Germany*	
03:00 pm	EV charging data management, five issues to solve	*Simone MAASE, Amsterdam University of Applied Science, The Netherlands*
03:20 pm	Charging stations for electromobility: from regional to nationwide - use-case of a german energy supplier	*Amadeus REGERBIS, EnBW AG, Germany*
03:40 pm	Fast charging - evidence from a full scale laboratory	*Erik FIGENBAUM, Institute of Transport Economics, Norway*
04:00 pm	Design of business models for the operation of the charging infrastructure according to the german calibration conformity - development of an automated tco-tool	*Christian GEHRING, P3 Automotive GmbH, Germany*

LECTURE SESSIONS

A2: BATTERIES FOR PASSENGER CARS AND HEAVY DUTY VEHICLES

Room: Mezzanine 4	*Session Chair: Till GNANN, Fraunhofer Institute for Systems and Innovation Research ISI, Germany*	
03:00 pm	High nickel nmc cathode materials for xev: what is the price to pay?	*Arnaud NAESSENS, Umicore, Belgium*
03:20 pm	Fast charging method for a lithium ion batteries suppressing side reaction and lithium plating	*Song-Yul CHOE, Auburn University, The United States*
03:40 pm	Evaluation of the benefits of lithium-titanate based batteries for heavy-duty vehicles	*Ronny PETERSOHN, HOPPECKE Advanced Battery Technology GmbH, Germany*
04:00 pm	An overview of the u.s. doe batteries & electrification program r&d for fy 2018-19	*Steven BOYD, US Department of Energy, The United States*

B2: INNOVATIONS IN VEHICLE DRIVE TRAINS

Room: Lumière 10/11	*Session Chair: Sten KARLSSON, Chalmers Univ of Technology, Sweden* *Catherine KARGAS, Electric Mobility Canada, Canada*	
03:00 pm	Innovative and highly integrated modular electric drivetrain	*Jonas HEMSEN, ika - RWTH Aachen University, Germany*
03:20 pm	H-ram: hybrid rear axle modulean innovative hybrid differential for p3 and p4 applications	*Sergio DE SANTIS, Dana Incorporated, Italy*
03:40 pm	Super capacitor electrical and lifetime model development for low frequency current applications	*Mahdi SOLTANI, Vrije Universiteit Brussel - MOBI, Belgium* *Tom TURCKSIN, Vrije Universiteit Brussel - MOBI , Belgium*
04:00 pm	Influential Factors on the Type Approval Electric Driving Range of Electric Vehicles	*Kim SEIHO, IHS Markit, South Korea*

D2: WHERE ARE WE WITH SMART CHARGING AND V2G?

Room: Mezzanine 2/3	*Session Chair: Baerte DE BREY, Stedin, The Netherlands*	
03:00 pm	Pinpointing the smart charging potential for electric vehicles at public charging points	*Nazir REFA, ElaadNL, The Netherlands* *Youssef EL BOUHASSANI, ElaadNL, The Netherlands*
03:20 pm	Dc v2x systems: advantages and evolution	*Tomoko BLECH, CHAdeMO Association Europe, France*
03:40 pm	Preparing charged vehicles in the prosumers ecosystem	*Stefan PETTERSON, RISE Viktoria, Sweden*
04:00 pm	Electric vehicles as power and energy provider for the european electricity system - an electricity systems modelling study	*Maria TALJEGARD, Chalmers University of Technology, Sweden*

C2: POWER ELECTRONICS AND MOTOR TECHNOLOGY

Room: Lumière 7	*Session Chair: Peter VAN DEN BOSSCHE, Vrije Universiteit Brussel - MOBI, Belgium*	
03:00 pm	Lifetime analysis of electronics and power electronic components in electric vehicles	*Martin BRUELL, Continental, Germany*
03:20 pm	Scalable and accurate modelling of a wbg-based bidirectional dc/dc converter for electric drivetrains	*Sajib CHAKRABORTY, Vrije Universiteit Brussel - MOBI, Belgium*
03:40 pm	Gallium nitride (gan) enables high-efficient and bidirectional auxiliaries? An on-board charger case study	*Philip BROCKERHOFF, Continental, Germany*
04:00 pm	Update available on EVS32 App	

05:00 PM – 06:30 PM

E3: ELECTRIC MOBILITY EDUCATION AND DISSEMINATION

Room: Lumière 8/9	*Session Chair: Philippe LEBEAU, Vrije Universiteit Brussel - MOBI, Belgium*	
05:00 pm	Consumer Engagement Best Practices	*Jeanette SHAW, Forth, The United States* *Zach HENKIN, Forth, The United States*
05:20 pm	Consumer electric mobility education-evolution and atravel	*Yan ZHOU, Argonne National Laboratory, The United States*
05:40 pm	The World's First Electric Vehicle Discovery Centre - A Game Changer for Electric Vehicle Market Transformation	*Davorka CVITKOVIC, Plug'n Drive, Canada*
06:00 pm	Key factors driving electric vehicle disseminaton and use in jeju island, south	*Sanghoon SON, Jeju Research Institute, South Korea*

A3: LIGHT ELECTRIC VEHICLES AND E-BIKE MOBILITY SOLUTIONS

Room: Mezzanine 4	*Session Chairs: Jan RENS, Arcelor Mittal Global R&D Gent, Belgium* *Aymeric ROUSSEAU, Argonne National Laboratory, The United States*	
05:00 pm	Light electric vehicles in baden-württemberg? Potential for industry and new mobility solutions?	*Katja GICKLHORN, e-mobil BW, Germany* *Amelie EWERT, German Aerospace Center (DLR) , Germany*
05:20 pm	Can speed pedelecs really fulfil the mobility needs of daily commuters?	*Nikolaas VAN DEN STEEN, KU Leuven, Belgium*
05:40 pm	Ped-elec: development of a new value chain approach to the provision of an urban mobility solution	*Huw C. DAVIES, Coventry University, The United Kingdom*
06:00 pm	How e-bikes changed the mood and mode: the norwegian e-bike experience	*Hulda TRONSTAD, Norwegian EV association, Norway*

LECTURE SESSIONS

B3: ELECTRIC VEHICLE ENERGY CONSUMPTION OPTIMISATION IN REAL WORLD DRIVING CONDITIONS

Room: Lumière 10/11	*Session Chairs: Abhishek DAS, WMG, The University of Warwick, The United Kingdom Kevin LIM, Singapore*	
05:00 pm	Model-Predictive Eco-Driving for Electrified Connected and Automated Vehicles	*Dominik KARBOWSKI, Argonne National Laboratory, The United States*
05:20 pm	Efficiency analysis on electric & hybrid vehicles - results out of real-drive tests	*Bernhard GRASEL, Austria*
05:40 pm	Predicting electric vehicle consumption: a physical model that fits	*Anthony DESCHENES, Laval University, Canada*
06:00 pm	Connecting electrification with eco-driving: using real-world driving data for assessing potential energy savings	*Patricia BAPTISTA, Portugal*

D3: WHERE ARE WE WITH SMART CHARGING AND V2G?

Room: Mezzanine 2/3	*Session Chairs: Egil Falch PIENE, DEFA Erik Lorentzen, Norway Robert EVANS, Cenex, United Kingdom*	
05:00 pm	Lessons learnt - a cross-case analysis of six, real-time smart charging and v2x operational pilots in the north sea region	*Jorden VAN DER HOOGT, Cenex NL, The Netherlands Robert VAN DEN HOED, Amsterdam University of Applied Sciences, The Netherlands*
05:20 pm	Mass charging electric vehicles using flexible charging speeds in Amsterdam. Making optimal use of our electric grid and solar energy	*Frank GEERTS, ElaadNL, The Netherlands*
05:40 pm	Vehicle-to-grid developments in the UK	*Marco LANDI, Innovate UK, The United Kingdom*
06:00 pm	Smart charging, v2g and second life batteries experimentation	*Marine ASTORG, Groupe Renault, France*

C3: BATTERY DEVELOPMENTS

Room: Lumière 7	*Session Chairs: James MILLER, Argonne National Laboratory, The United States Duong TRAN, Vrije Universiteit Brussel - MOBI, Belgium*	
05:00 pm	Development of a self-adaptive cycle ageing model for li-ion batteries using machine learning methods	*Mattin LUCU, IK4-Ikerlan Technology Research Centre, Spain*
05:20 pm	Understanding and modeling the thermal runaway of lithium-ion batteries	*Thi Thu Dieu NGUYEN, IFP Energies Nouvelles, France*
05:40 pm	Material characterization and analysis on the effect of vibration and nail penetration on lithium ion battery	*Ajeet BABU, The Automotive Research Association of India, India*
06:00 pm	Challenge battery safety - solutions by multifunctional battery housings? b:house?	*Jobst KERSPE, TEB Dr. Kerspe, Germany*

01:00 PM – 03:00 PM

Location: Posters Area

P1: VEHICLES & TRANSPORTATION SYSTEMS

P1M01	Load analysis of ground-powering systems for electric vehicles	*Ali SALEH, Newcastle University, The United Kingdom*
P1M02	Supported by better-than-expected battery performance upon unlocking the full potential of li-ion process, extreme fast charging (XFC) era may arrive a decade earlier than US doe projected	*BJ PERNG, NiveauUp, Taiwan*
P1M03	To what extent do electric car drivers utilize the flexibility options in two-car households?	*Sten KARLSSON, Chalmers Univ of Technology, Sweden*
P1M04	Transition from ICEV to BEV: how do personal usage patterns change?	*Christian WEBER, Institute of Transport Economics, Norway*
P1M05	A green dream: municipal cars driving on electricity	*Inga Margrete YDERSBOND, The Institute of Transport Economics (TØI), Norway*
P1M07	What is the design of a potential hdv hrs network in Germany in 2050?	*Philipp KLUSCHKE, Fraunhofer ISI / KIT Germany*
P1M08	Electric trolley trucks - a techno-economic assessment for Germany	*Till GNANN, Fraunhofer Institute for Systems and Innovation Research ISI, Germany*
P1M09	Lightweight components for light electric vehicles based on textile exterior	*Fabian EDEL, Fraunhofer IAO, Germany*
P1M11	Use of data for electric transport network optimization. Optimal charging at bus depots	*Renaud GUYOT, EDF, France*
P1M12	Battery weight optimization for hovering aircraft	*Tom TURCKSIN, Vrije Universiteit Brussel - MOBI, Belgium*
P1M13	Electric boats market, environment impact, challenges and projects	*Xavier DE MONTGROS, Electric Boat Association, France*
P1M14	A speed profile optimization for automated electric vehicles based on dynamic programming	*Namwook KIM, Hanyang University, South Korea*

P2: ELECTRIC POWER TRAIN AND APPLICATION

P2M16	Functional safety of dc charging, traction battery and electric powertrain	*Thomas GERNERT, AVQ, Germany*
P2M17	Hardware in the loop bench design for electrified working vehicles simulation	*Francesco MOCERA, Politecnico Di Torino, Italy*
P2M19	Optimal speed synchronization control with disturbances compensation for a hybrid dual-clutch transmission	*Huang WEI, Shanghai Jiao Tong University, China*
P2M20	Iavs powerhybrid - mastering complexity of future dedicated hybrid powertrains	*Jens LIEBOLD, IAV GmbH, Germany*
P2M21	Noise radiated by electric motors: simulation process and overview of the optimization approaches	*Henri SAUCY, Vibratec, France*
P2M22	Planning for a system wide electrification of the transport sector in Norway	*Hampus KARLSSON, SINTEF, Norway*
P2M23	Methodology applied to couple 1D & 3D models on hpc in context of electric vehicle fiat 500e thermal management design	*Matthieu PONCHANT, Siemens, France*
P2M24	Demobase project: numerical simulation for seamless integration of battery pack in light electric vehicle	*Martin PETIT, IFPEN, France*
P2M25	Comparison of tab-to-busbar ultrasonic joints for electric vehicle li-ion battery	*Abhishek DAS, WMG, The University of Warwick, The United Kingdom*

P3: COMPONENT TECHNOLOGIES

P3M27	Fault diagnosis and prognostics of ev power battery based on data mining	*Luping WANG, North China University of Technology, China*
P3M28	Ev-battery-recycling and second-life-use: why it should be considered now for a?green? Battery value chain	*Jan-Hinrich GIESCHEN, Institute for Innovation and Technology, Germany*
P3M29	Balanced model-order reduction technique of lithium-ion battery-cell internal electrochemical transfer functions	*Albert RODRIGUEZ, EURECAT, Spain*
P3M30	Characterization of dual stator induction machines	*Moritz HAUSSMANN, Daimler AG, Germany*
P3M31	Vehicle thermal management system capable of balancing the need of multiple electric vehicle subsystems that may require thermal energy for start-up procedures	*Fabrice CHOPARD, Hutchinson, France*
P3M32	Analysis of necessary sensors in city e-buses for observing the environment for each level of autonomy	*Bartosz PATKOWSKI, Solaris Bus & Coach, Poland*

P4: CHARGING/FUELING INFRASTRUCTURE

P4M33	Siting optimal locations for the electric vehicle supply equipment (evse): A case study of oxford county, Ontario, Canada	*Anahita JAMI, Canadian Urban Transit Research % Innovation Consortium, Canada*
P4M34	Demand-driven expansion of charging infrastructure for international markets by the example Germany	*Johanna HECKMANN, P3 Automotive GmbH, Germany*
P4M35	Energy storage to reduce the power requirements and operating costs of fast charging stations	*Yorick LIGEN, EPFL, Switzerland*
P4M36	Isolation transformer system for v2g bi-directional charging with safety and efficiently	*Kim KYOUNGJIN, Vehicle Manufacture, South Korea*
P4M37	The Versailles-satory charging infrastructure for dynamic wireless power transfer systems testing	*Stéphane LAPORTE, VEDECOM, France*
P4M39	Combined solution of v2g vehicle control circuit application for mass production EV	*Kim KYOUNGJIN, Vehicle Manufacture, South Korea*
P4M40	Smart charging strategies for ev-ready buildings: a case study based on various office buildings	*Tim VAN BEEK, EV Consult, The Netherlands*
P4M41	Conductive charging of electric vehicles: developments at the low and high end of the power spectrum	*Peter VAN DEN BOSSCHE, Vrije Universiteit Brussel - MOBI, Belgium*

P5: ENTERING MASS MARKET & DEMAND ISSUES

P5M42	Scenario-based analysis of electrification effects on value creation and employment structures for the automotive cluster in baden-wuerttemberg, Germany	*Stephan SCHMID, German Aerospace Center (DLR), Germany*
P5M43	Plug in for growth: how electrification can boost profits of automotive suppliers	*Tobias STAHL, Strategy Engineers GmbH & Co. KG, Germany*
P5M44	US taxi company: the 90 year old start-up	*Katherine ZEHNDER, HNTB, The United States*
P5M48	After sales service strategies for HV battery diagnosis and repair	*Norbert SCHREIER, Esslingen University of Applied Sciences, Germany* *Ludwig SEIBT, Esslingen University of Applied Sciences, Germany* *Aljoscha EINSPIEGEL, Esslingen University of Applied Sciences, Germany*

P6: ENERGY & ENVIRONMENTAL ANALYSES

P6M60	Life Cycle Assessment of Li-Sulfur of Batteries for Electric Vehicles	*Lluc CANALS CASALS, IREC, Spain*
P6M50	Assessing demand side management opportunities through dynamic ev charging pricing strategy	*Nathan DUNLOP, Tritium, Australia*
P6M51	Smart grid, smart home, smart car? Technology development leads to the many new opportunities	*Adam PIOTROWSKI, Eaton, Czech Republic*

P7: MOBILITY CONCEPTS

P7M53	Electric mobility and smart mobility concepts? Restrained uptake in german cities	*Doris JOHNSEN, Institute for Innovation and Technology, Germany*
P7M54	Lessons learned from deploying EVS in remote and rural areas	*Kate PALMER, Urban Foresight, The United Kingdom*
P7M55	Greenmobility: car sharing, electric vehicles and the future of green urban mobility	*Anders WALL, Green mobility, Denmark*
P7M56	Innovative carsharing system: Esprit project	*Julien DAUCHY, CEA, France*
P7M57	How carsharing supports the breakthrough of e-mobilty in cities	*Mathieu BERNASCONI, ShareNow, France*
P7M58	A highly innovative on-the-road modular vehicle and operation concept to solve today traffic issues	*Christian ULRICH, Deutsches Zentrum für Luft- und Raumfahrt e.V., Germany*

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SIDE EVENTS

03:30 pm - 04:00 pm	Kick-off municipality of Amsterdam
06:00 pm - 07:00 pm	Norwegian Cocktail

KICK-OFF MUNICIPALITY OF AMSTERDAM

From: 03.30 pm - 04:00 pm
Location: Dutch Pavillion

The municipality of Amsterdam together with partners invite you to witness the kick-off of a cooperation between market parties and municipalities in the region around the (commercial) roll-out of V2X (Vehicle to Anything) application. The intention of the cooperation is to connect the energy transition with the storage capacity that electric vehicles provide in order to enable and accelerate these crucial developments in both the energy and mobility transition.

Deputy mayor Sharon Dijksma and Johan Cruijff ArenA CTO Henk van Raan will explain how the Amsterdam region will become the V2X hotspot in the coming years.

NORWEGIAN COCKTAIL

From: 06:00 pm - 07:00 pm
Location: Norwegian Pavilion

The Royal Norwegian Embassy to France and Innovation Norway have the great pleasure of inviting to a networking cocktail at the National Norwegian Pavilion on Monday, 20th May.

(Invitation required to attend the event)

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TIMING						
09:00 am 10:30 am	**PLENARY SESSION E-MOBILITY OUTLOOK** Bocuse Plenary Room					
10:30 am 11:00 am	COFFEE BREAK					
11:00 am 12:30 pm	**AEC 2019** Bocuse Plenary Room Autonomous Vehicles	**E4** Lumière 8/9 Best practices for e-Mobility adoption	**A4** Mezzanine 4 How to electrify heavy duty vehicles?	**B4** Lumière 10/11 Research and testing processes and procedures	**D4** Mezzanine 2/3 Where are we with Smart charging and V2G?	**C4** Lumière 7 Batteries and capacitor developments
12:30 pm 02:30 pm	LUNCH					
01:00 pm 03:00 pm	DIALOGUE SESSIONS					
03:00 pm 04:30 pm	**AEC 2019** Bocuse Plenary Room Mobility as a service	**E5** Lumière 8/9 Innovative incentive schemes for Electric Vehicles	**A5** Mezzanine 4 How to electrify heavy duty vehicles as well as Maritime transport?	**B5** Lumière 10/11 Fuel cell drive train, regenerative breaking and battery research	**D5** Mezzanine 2/3 Charging, standardi-zation and services	**D9** Lumière 7 New developments in charging infrastructure
04:30 pm 05:00 pm	COFFEE BREAK					
05:00 pm 06:30 pm	**AEC 2019** Bocuse Plenary Room Electric Heavy Duty Transport	**E6** Lumière 8/9 Innovative incentive schemes for Electric Vehicles	**G1** Mezzanine 4 The road to Autonomous and electric vehicles	**F1** Lumière 10/11 Environmental impact assessments for electric vehicles	**D6** Mezzanine 2/3 Electric Vehicle Charger developments	**D10** Lumière 7 Smart charging and smart buildings

Last minute changes are possible. Feel free to consult EVS32 mobile App.

09:00 AM – 10:30 AM

E-MOBILITY OUTLOOK, FROM LOCAL IMPLEMENTATION TO INTERNATIONAL COORDINATION

Room: Bocuse Plenary Room

ROUNDTABLE

Takafumi ANEGAWA, President of Research Institute of Tokyo Electric Power Company Holdings, Inc. TEPCO, Japan

He is the President of Research Institute of TEPCO, the 8th largest amongst the global top utilities, and leads all of its R&D, including Vehicle-to-Grid and a variety of EV-related business innovations. He initiated the E-Mobility business team in 2002 and his team were the driving force for the creation of the world's first DC rapid charging technology, CHAdeMO, for the new wave of electric vehicles. He concentrated in the recovery efforts of Fukushima accident for 7 years as the Chief Nuclear Officer, Managing Executive Officer of TEPCO.

Allan ELLINGSEN, State Secretary of The Norwegian Ministry of Transport

Allan Ellingsen is a Norwegian politician from the Progress Party. He was appointed State Secretary of the Ministry of Transport on 22 January 2019. He has studied political science and organisational management.
Ellingsen was appointed Deputy Mayor of the City of Bodø from 2014 to 2015. He served as a member of the Vågan Municipal Council from 2003 to 2011. Ellingsen has served as a member of the Bodø Municipal Council since 2015 and the Nordland County Council since 2003.

Winfried HERMANN, Minister of Transport, State of Baden Württemberg, Germany

Mr. Hermann has been a member of the party Bündnis 90/Die Grünen since 1982. Two years later his political work began; he was a member of the state parliament. From 1992 to 1997 he was state chairman of Bündnis 90/ Die Grünen in Baden-Württemberg and from 1998 onwards he had a seat for thirteen years as a member of the German Bundestag.
Since 12 May 2011 Winfried Hermann has been Minister of Transport of the State of Baden-Württemberg.

Michal KURTYKA, COP24 President, State Secretary, Ministry of Environment, Poland

Michal is responsible for the technological development and introduction of innovations to the energy sector, implementation of climate and energy policy in the fuel and gas sector, conducting international relations with states and international organizations. He was appointed as the Plenipotentiary for the Presidency of the December 2018 United Nations Climate Change Conference in Katowice. He created the governmental programme for the development of electro-mobility in Poland. He is graduated from Paris École Polytechnique and Warsaw School of Economics.

Daniele LA PORTA, Senior Mining Specialist, The World Bank, Brazil

Daniele La Porta is a Senior Mining Specialist with the World Bank, where she works on mineral sector governance and sustainable development in mineral rich developing countries. She manages projects in Africa and Latin America. She also co-leads the Bank's knowledge products on innovative areas, such as Climate Smart Mining and Deep-Sea Mining. Daniele is a Brazilian with degrees in Geology and Environmental Management

Ruslana LYZHYCHKO, Ukrainian singer - Ambassador of Renewable Energy, Ukraine

Ruslana Lyzhychko is the famous Ukrainian singer, Eurovision Song Contest and World Music Award winning artist, a former MP serving as deputy in the Ukrainian parliament for the Our Ukraine Party, UNICEF Goodwill Ambassador in Ukraine (2004-2005), Ambassador of Renewable Energy and famous social activist. In 2017, Ruslana launched an initiative of organizing events in Europe and all over the world to promote the idea of transition towards 100% renewable energy. Ruslana's musical project Wild Energy «translates» the mission and idea of the renewable energy initiative into the most universal and understandable language of all people - the language of pop music and show. In 2018 Ruslana founded the «Office of the Ambassador of Renewable Energy» NGO, to facilitate the transition of Ukraine and the world to 100% of renewable energy. In 2019, "Office of the Ambassador of Renewable Energy" NGO plans to implement 10 big projects and media events, aimed to follow the purpose of the organization. Regarding to the electromobility Ruslana is sure: «An electric car is an integral part of the transition of all people to 100% of clean energy sources. The delivery of energy to unique places can give a powerful impetus to the most unforgettable intentions».

Alexandre PAQUOT, Head of Road Transport Unit, DG CLIMA, European Commission, France

A. Paquot currently heads the Road Transport Unit in DG CLIMA at the European Commission, in charge of the CO_2 emission standards from cars and heavy-duty vehicles. Previously, he was the Head of Unit on Monitoring, Reporting & Verification, supporting the evaluation of climate policy. He also served as an assistant to the Director-General. Prior to this, he occupied several functions in DG ENV in the field of industrial emissions and waste management.

CHAIRMAN

Cécile GOUBET, General Secretary, AVERE France, France

Cécile is General secretary of the French association for electric mobility. For more than ten years she worked on delivering solutions to decarbonize the economy at international, European and national level. After working in various public and private companies, she chose to focus on one aspect of the energy and climate transition: the transport sector. Electric mobility is an absolute key driver to achieve the goal of developing a low carbon and competitive economy.

AEC SESSIONS

11:00 AM – 12:30 PM

AUTONOMOUS VEHICLES

Room: Bocuse Plenary Room

Chairman session: Frank RIECK, Applied Research Professor Smart e-Mobility, Rotterdam University

KEYNOTE SPEAKER

Jan VAN DEN OETELAAR,
Head of TASS Business Unit, Siemens, The Netherlands

Jan is CEO of TASS International since 2012 and since 2017 part of Siemens PL STS. He was responsible for the acquisition and integration of several companies that united into TASS International. Between 2004 and 2011 Jan managed as President the European division of Inergy Automotive Systems as well as the Global Supply Chain. Before that he held positions of VP Business Development & Sales and VP Supply Chain at Textron Inc./Collins & Aikman.

ROUNDTABLE

Olav MADLAND,
CEO, Applied Autonomy AS, Norway

Olav introduced self-driving vehicles to Norway in 2016. He performed more than 20 demonstrations of autonomous minibuses at several locations. He has been a motivator for Autonomous transport solutions at many levels: Government, universities, ITS Norway. He coordinates the National Test arena in Kongsberg with autonomous transport integrated with Public Transport, with the city, county administration and NRPA. He works with ITS Norway and national key players as Innovation Norway and the Research Council of Norway, being an expert evaluator.

Nicolas DE CREMIERS,
Head of marketing, NAVYA Tech, France

Nicolas de Cremiers is NAVYA Head of Marketing. He and his team are dedicated to present, promote and demonstrate NAVYA technology and vehicles worldwide. After working at Bouygues Telecom, Nicolas specialized in mobility by working during five years as Head of Marketing of Coyote Systems, the leading provider of community-based driving assistant systems. Before joining NAVYA, he launched Drop don't park which provides an innovative on-demand parking and concierge service for urban drivers.

Puneet SINHA,
Automotive Manager in Mechanical Analysis Division, Mentor, The United States

Puneet Sinha is the Automotive Manager in Mechanical Analysis Division of Mentor, a Siemens business. In this role, Puneet is responsible for his division's business strategy and product development for vehicle autonomy and electrification thrusts. He is also leading vehicle electrification program for Siemens Software division.
Puneet has more than 10 years of experience working on various aspects of vehicle electrification. Prior to joining Mentor, he has worked at General Motors where he led global R&D teams to solve wide range of issues with fuel cells and battery electric vehicles and at Saft, a Li-ion battery manufacturer. Puneet has done his PhD in Mechanical Engineering from The Pennsylvania State University, has authored more than 20 highly-cited journal articles and has been awarded 7 patents on fuel cells and battery system design and operational strategies.

Jean-Luc BROSSARD,
Innovation Director, PFA, France

Jean-Luc Brossard, 57 years old, started at Matra Automobile in 1986, to become Technical Director. In 2003, he joined Ferrari, as Project Manager, then Maserati as Technical Director, and VLE Fiat. In 2007, he became VP Engineering Pininfarina. At the end of 2008, he joined PSA Peugeot Citroën as Advanced Engineering Director. Since January 2015, he is R & D managing Director PFA (French Automotive and Mobility Association) and programm Director for Low Environmental Footprint Vehicles.

Jan MOLEMA,
Director, BENELUX General Secretariat, Belgium

Beginning of 2017 Jan Molema was promoted to the position of Director responsible for all economic and sustainability issues within the Benelux General Secretariat. Before this Jan Molema was heading up the internal market department at the Benelux Union since 2012.
The Benelux Union is an intergovernmental organization that aims at increasing prosperity and welfare for its citizens, through better cooperation between its member states Belgium, The Netherlands and Luxemburg.

CHAIRMAN

Frank RIECK,
Applied Research Professor Smart e-Mobility, Rotterdam University, The Netherlands

Professor Future Mobility at the Research Centre Sustainable Port Cities of the Rotterdam University of Applied Science. Educated as Mechanical Engineer and Industrial Designer. Frank Rieck has a background in innovation, marketing and management in the Automotive Industry. He is currently responsible for the research and innovation regarding Future Mobility.
He is chairman of Dutch-INCERT, a Dutch network of knowledge centres regarding eMobility and is representing The Netherlands as vice president of EU organization AVERE.

03:00 PM – 04:30 PM

MOBILITY AS A SERVICE

Room: Bocuse Plenary Room

Chairman session: Maciej MAZUR, Managing Director, Polish Alternative Fuels Association

KEYNOTE SPEAKER

Corinne PAKEY,
Deputy Program Director Mobility GROUPE RENAULT, France

Corinne held various positions within Group Renault. In 2011, she was Twizy Way Project Manager leading design, development & operation of the Group's first car-sharing service. In 2013, she became Program Manager for Mobility Services. In 2015 she acted as Twizy Vehicle and Car Sharing Program Director. Since 2017, she's Program Director of Mobility Services at Group Renault. She oversees the development of adapted vehicles and enablers for all mobility services including car access tech, data management, on-board experience and customization.

ROUNDTABLE

Christophe ARNAUD,
CEO Blue Systems Smart Mobility, France

Christophe Arnaud is the CEO of Blue Systems Smart Mobility, a Bolloré Group Division. He is responsible for the development of Mobility and Infrastructure as a Service (MAAS & IAAS) solutions for cities around the world. In addition to that, he is the President of Blue Solutions smart charging and shared mobility operations in the UK and US since July 2014.

Jochen DE SMET,
Senior Energy Consultant, The New Drive, Belgium

Jochen is senior Energy Consultant for The New Drive, a consultancy firm on mobility, electric vehicles and energy issues. He has expertise in electric and hydrogen applications, embedded in smart grids. He is president of AVERE Belgium and former advisor of Ministers in the Flemish government where he worked on the energy efficiency policy, integration and the roll-out of smart meters. He advised the Flemish minister in the creation of the first action plan "Clean Power for transport", focussing on the roll-out of battery electric cars.

Javier CONTIJOCH,
Sales Vice President, BYD Europe, The Netherlands

Javier Contijoch has extensive experience in worldwide logistics, both in the field of material handling equipment made in China, as well as in the automotive sector out of Germany and Japan, not only in vehicle but also in parts logistics. He has launched the BYD Forklift brand in Europe, successfully overcoming the challenges of shortening the supply lead time for both parts and new units and meeting the high standards required by this demanding B2B market.

Anders WALL,
Chief International Officer, GreenMobility A/S, Denmark

Anders Wall aims to turn GreenMobility into the preferred partner within sustainable urban mobility on a global scale. He leverages his 25 years of successfully building international partnerships within customer centric industries. Standing up for the climate and livable cities comes easy to him as the father of three and the quest for making a real difference in life. Our first partner is up and running, do you want to be the second?

Pierre SOULARD,
Head Urban Mobility Department of Lyon Métropole, France

Pierre Soulard, head Urban Mobility Department of Lyon Métropole, is in charge of traffic management, actives modes enhancement, and new mobility services supervision (carpooling, car-sharing, electromobility, AV, multimodal trip planner and ticketing)

CHAIRMAN

Maciej MAZUR,
Managing Director, Polish Alternative Fuels Association, Poland

Managing Director of the Polish Alternative Fuels Association - the largest expert organization (NGO) building and helping grow the e-mobility market in Poland. Business practitioner with many years of experience in the energy sector. Since 2012, he has been working in the alternative fuels industry, in particular in the e-mobility and natural gas sectors. He has worked, among others, on the implementation of the largest infrastructural projects carried out in Poland and advised companies from the fuel and automotive sectors.

AEC SESSIONS

05:00 PM – 06:30 PM

ELECTRIC HEAVY DUTY TRANSPORT

Room: Bocuse Plenary Room

Chairman session: Ivo TSACHEV, E-Mobility Operations, E.ON

KEYNOTE SPEAKER

François SAVOYE,
Alternative Energies Development Director, Europe RENAULT TRUCKS, France

Mr. Savoye started his career in the Volvo Group in 2008 as a Li-ion battery expert. After several years of research on ageing and performance optimization of energy storage systems in embedded applications, he took the lead of research programs dedicated to the development of electric and hybrid vehicle technologies. From 2015 to 2018, he led Renault Truck's Energy Efficiency Strategy. Since 2018, he is responsible to develop Renault Trucks alternative energies business across Europe, being in charge of the new Z.E. range sales launch in 2019.

ROUNDTABLE

Anne DE BAGNEUX,
Director of Strategy and Transformation, Transdev Group, France

She began her career at Veolia Water where she held operational positions in France and then in Asia, developing and managing activities in China. She joined SAUR to hold operational positions in France, before joining SUEZ where she was the director of Public Authorities and Director of Performance for the recycling and recovery businesses. She has been Deputy General Manager of Transdev France, in charge of the Southern area for more than 2 years. In 2019 she was appointed CSO and CTO as well as Executive Committee Member in Transdev Group.

David THACKRAY,
Sales & Marketing Director, TEVVA, England

David Thackray has dedicated his career to the freight industry. His conviction that freight has the possibility to make a real impact in the fight against carbon emissions and transport related climate change was a key driver to him joining Tevva Motors Ltd as Sales and Marketing Director. Tevva develops electric commercial vehicles that deliver, without compromise, in 3 key areas: operationally, economically and environmentally, enabling faster uptake of low carbon, urban freight vehicles by fleets. Tevva is exhibiting in the UK Pavilion.

Hans BEKKERS,
Business Development Manager Public Transport, VDL Bus & Coach bv, The Netherlands

Hans Bekkers started at VDL Bus & Coach bv in 2014. Since then, he's been active in numerous E-Bus projects and has played an active role in VDL Bus & Coach's ambition to become a leading E-bus manufacturer. He currently holds the positon of Business Development Manager Public Transport, putting him at the forefront of new technologies such as electric, hydrogen and autonomous buses as well as the development of new markets and business models.

Stéphane CHAMBON,
General Manager Sustainable Mobility and Transport, TOTAL, France

He began his career in 1992 as business developer for the network of service stations for Total France. In 1997 he joined the Fuel Division as controller. In 1999, he joined the Lubricant Division as B2B Regional Manager. In 2002, he became Lubmarine zone manager. In 2008, he joined Total Energie Gaz as Marketing & Communication Director where he became Sales Director in 2011.In 2015, he came back to the Marketing & Services branch as Professional Markets & Services Director. Since 2017, he's General Manager Sustainable Mobility and Transport.

Marc GOHLKE,
CEO, CARA, Germany

41 years old, German citizen

- 2016 - today: CEO of CARA European Cluster for Mobility Solutions
- 2014 - 2016: Head of the regional automotive Cluster
- 2007 - 2014: Groupe PSA Peugeot Citroën at Research Departement
- 2004 - 2007: PhD in fluid mechanics (Groupe PSA Peugeot Citroën, Université Aix-Marseille)
- Diploma in aeronautics engineering (TU Braunschweig, Germany and UT Compiègne, France

CHAIRMAN

Ivo TSACHEV,
E-Mobility Operations, E.ON, Germany

Ivo has over 10 years of experience in building and operating of charging infrastructure for EV and developing of customised solutions for, charging of logistics and urban mobility fleets. Based on his experience from the utilities and renewable energy sectors, Ivo is working on new business models for charging as a service and cost efficient charging through optimising the electricity costs. Ivo is board member of AVERE.

LECTURE SESSIONS

11:00 AM – 12:30 PM

E4: BEST PRACTICES FOR E-MOBILITY ADOPTION

Room: Lumière 8/9	*Session Chair: Eva SUNNERSTEDT, City of Stockholm, Sweden*	
11:00 am	Update available on EVS32 App	
11:20 am	Tools for accelerating ev adoption	*Jordan DAVIS, Columbus Partnership, The United States*
11:40 am	Electromobility and energy transition: a review	*Yannick PEREZ, CentraleSupélec, France*
12:00 pm	Accelerating beyond early adopters to achieve equitable and widespread electric vehicle use in the san francisco bay area	*Karen SCHKOLNICK, Bay Area Air Quality Management District, The United States*

A4: HOW TO ELECTRIFY HEAVY DUTY VEHICLES?

Room: Mezzanine 4	*Session Chairs: Manel SANMARTI, IREC, Spain Hahn CHANG SU, South Korea*	
11:00 am	Developing a roadmap for the introduction of overhead catenary trucks in Germany	*Julius JOEHRENS, ifeu-Institute for Energy and Environmental Research, Germany*
11:20 am	Benefits of electrified powertrains in medium and heavy duty vehicles	*Aymeric ROUSSEAU, Argonne National Laboratory, The United States*
11:40 am	Designing and demonstrating an electric road system for efficient and sustainable road freight	*Gerrit STUMPE, Siemens Mobility GmbH, Germany*
12:00 pm	Experiences from trials with battery electric buses in Norway	*Inger Beate HOVI, Institute of Transport Economics, Norway*

B4: RESEARCH AND TESTING PROCESSES AND PROCEDURES

Room: Lumière 10/11	*Session Chair: Joeri VAN MIERLO, Vrije Universiteit Brussel - MOBI, Belgium*	
11:00 am	Development and validation of a test procedure for determining the system power of hybrid and plug-in hybrid electric vehicles	*Michael SAFOUTIN, US Environmental Protection Agency, The United States*
11:20 am	Development of a Real-Time Mobility Control and Visualization System with Predictive Vehicle Speed Control for Connected and Automated Vehicles (CAVs)	*Tim LACLAIR, Oak Ridge National Laboratory, The United States*
11:40 am	Performance monitoring and optimization of an electric vehicle charging station	*Gregorio FERNANDEZ AZNAR, CIRCE Foundation, Spain*
12:00 pm	Silencing the future? A system level approach to NVH reduction	*Michael FURNESS, Drive System Design Ltd., The United Kingdom*

LECTURE SESSIONS

D4: WHERE ARE WE WITH SMART CHARGING AND V2G

Room: Mezzanine 2/3

Session Chair: Ralf WOERNER, University of Applied Science Esslingen, Germany

11:00 am	Impact of smart charging on evs charging behaviour assessed from real charging events	*Nazir REFA, ElaadNL, The Netherlands*
11:20 am	Cloud-based big data platform for vehicle-to-grid (v2g)	*Florent GREE, AVL Powertrain UK, The United Kingdom*
11:40 am	Optimal energy management system for v2g chargers combined with PV and ESS in a real environment	*Cristina CORCHERO, IREC, Spain*
12:00 pm	Battery health estimation in a vehicle-to-grid scenario	*Maitane BERECIBAR, Vrije Universiteit Brussel - MOBI, Belgium*

C4: BATTERIES AND CAPACITOR DEVELOPMENTS

Room: Lumière 7

Session Chair: Andrew BURKE, University of California, Davis, The United States
Mohamed EL BAGHDADI, Vrije Universiteit Brussel - MOBI, Belgium

11:00 am	48 v high-power battery pack for mild-hybrid electric powertrains	*Mike BASSETT, MAHLE Powertrain Limited, The United Kingdom*
11:20 am	DC-link-capacitor packaging and thermal management for 48-v hybrid passenger vehicles	*Yuya TAMAI, Nippon Chemi-Con Corporation, Japan*
11:40 am	Use of the advanced x-ray sources to accelerate the development of batteries and fuel cells for mobile applications	*Jakub DRNEC, ESRF, France*
12:00 pm	Lithium-ion batteries second-use lifespan prognosis	*Eddy CORON, CEA LITEN, France*

03:00 PM – 04:30 PM

E5: INNOVATIVE INCENTIVE SCHEMES FOR ELECTRIC VEHICLES

Room: Lumière 8/9

Session Chair: Norbert SCHREIER, Esslingen University, Germany

03:00 pm	Moving a taxi sector to become electric an innovative incentive programme in Amsterdam	*Robert VAN DEN HOED, Amsterdam University of Applied Sciences, The Netherlands*
03:20 pm	A model to evaluate coupled driving-and-charging incentives for electric vehicles	*Benoît SOHET, EDF Lab Paris-Saclay, France*
03:40 pm	Effectiveness of financial incentives for stimulating BEV uptake	*Harm WEKEN, FIER Automotive, The Netherlands*
04:00 pm	Increasing the effectiveness of electric vehicle purchase incentives	*Aivars RUBENIS, Lesla Latvia, Latvia*

A5: HOW TO ELECTRIFY HEAVY DUTY VEHICLES AS WELL AS MARITIME TRANSPORT?

Room: Mezzanine 4	*Session Chair: Huw C. DAVIES, Coventry University, The United Kingdom* *Norbert SCHREIER, Esslingen University, Germany*	
03:00 pm	Life cycle assessment of electrification of heavy duty vehicle	*Anas SYED, Vrije Universiteit Brussel - MOBI, Belgium*
03:20 pm	Experiences from battery-electric truck users in Norway	*Inger Beate HOVI, Institute of Transport Economics, Norway*
03:40 pm	Electrifying freight transport in Europe	*Harm WEKEN, FIER Automotive, The Netherlands*
04:00 pm	Governance in transitioning maritime passenger transport towards sustainability	*Hampus KARLSSON, SINTEF, Norway*

B5: FUEL CELL DRIVE TRAIN, REGENERATIVE BREAKING AND BATTERY RESEARCH

Room: Lumière 10/11	*Session Chair: Patricia BAPTISTA, IN+ Center for Innovation, Portugal* *Genevieve CULLEN, Electric Drive Transportation Association, The United States*	
03:00 pm	Model-based system optimization for fuel cell hybrid commercial vehicle	*Bill KIM, AVL Powertrain UK, The United Kingdom*
03:20 pm	Evaluation of efficiency-enhancing measures for fuel cell vehicles using optimization algorithms	*Florian UHRIG, Continental Automotive GmbH, Germany*
03:40 pm	Impact of ambient temperature and battery activity on internal battery temperatures of electric vehicles	*Hajo RIBBERINK, Natural Resources Canada, Canada*
04:00 pm	Deceleration planning algorithm for smart regenerative braking reflecting a driver's characteristics through online learning algorithm	*Gyubin SIM, Hanyang University, South Korea*

D5: CHARGING, STANDARDIZATION AND SERVICES

Room: Mezzanine 2/3	*Session Chair: Peter VAN DEN BOSSCHE, Vrije Universiteit Brussel - MOBI, Belgium*	
03:00 pm	How a dso can use a flexibility market to economically maintain power quality in the local electric grid	*Frank GEERTS, ElaadNL, The Netherlands*
03:20 pm	Business potential and impact of the iso 15118 standard	*Reha TOEZUEN, BridgingIT GmbH, Germany*
03:40 pm	Future digital e-mobility services	*Christoph ULUSOY, EnBW Energie Baden-Württemberg AG, Germany*
04:00 pm	Charin e.v - high power charging and harmonization for a global ev charging standard	*Claas BRACKLO, CharIN e.V., Germany*

LECTURE SESSIONS

D9: NEW DEVELOPMENTS IN CHARGING INTRASTRUCTURE

Room: Lumière 7	*Session Chair: Steven WILKINS, TNO, The Netherlands*	
03:00 pm	Multiphysics investigation of sandwich-lightweight design for vehicular wireless power transfer modules	*Steve ZIMMER, Daimler AG, Germany*
03:20 pm	Exploring the complex systems approach to charging infrastructure: implications for researchers and policy makers	*Jurjen HELMUS, hogeschool van Amsterdam, The Netherlands*
03:40 pm	A comparison of the influence of ev charging on different types of low-voltage grids	*Lukas HELD, Karlsruher Institut für Technologie, Germany*
04:00 pm	Simulating Electric Vehicle Diffusion and Charging Activities in France and Germany	*Axel ENSSLEN, Karlsruhe Institute of Technology, French-German Institute for Environmental Research (DFIU), Germany*

05:00 PM – 06:30 PM

E6: INNOVATIVE INCENTIVE SCHEMES FOR ELECTRIC VEHICLES

Room: Lumière 8/9	*Session Chair: Robert VAN DEN HOED, Amsterdam University of Applied Sciences, The Netherlands*	
05:00 pm	Designing ppp contracts for public charging. Evaluating 10 years of procurement of public charging infrastructure in The Netherlands	*Tim VAN BEEK, EV Consult ,The Netherlands*
05:20 pm	The effect of reducing electric car purchase incentives in the european	*Jonatan GOMEZ VILCHEZ, European Commision, Joint Research Centre (JRC), Italy*
05:40 pm	Comparative concept study of passive hybrid energy storage systems in 48 v mild hybrid vehicles varying lithium-ion battery and supercapacitor technologies	*Thorsten GRUEN, University of Twente, Germany*
06:00 pm	Painting the EV incentive landscape? A review and visualization of how EV incentives are affecting EV uptake	*Steven HAVEMAN, University of Twente, The Netherlands*

G1: THE ROAD TO AUTONOMOUS AND ELECTRIC VEHICLES

Room: Mezzanine 4	*Session Chair: Jeff ALLEN, Forth, The United States*	
05:00 pm	Connected and shared x-in-the-loop technologies for electric vehicle design	*Valentin IVANOV, Automotive Engineering Group, TU Ilmenau, Germany*
05:20 pm	Project smartload - increased reliability for highly automated electric vehicles	*Christian SCHYR, AVL Deutschland GmbH, Germany*
05:40 pm	Update available on EVS32 App	
06:00 pm	International cooperation as a component for successful industrialisation of future transport technologies	*Stefan BUECHELE, e-mobil BW GmbH, Germany*

F1: ENVIRONMENTAL IMPACT ASSESSMENTS FOR ELECTRIC VEHICLES

Room: Lumière 10/11	*Session Chair: Joeri VAN MIERLO, Vrije Universiteit Brussel - MOBI, Belgium*	
05:00 pm	Water footprint of the manufacturing of a traction lithium ion battery pack	*Maeva PHILIPPOT, Vrije Universiteit Brussel - MOBI, Belgium*
05:20 pm	Impact analysis of mass ev adoption and low carbon intensity fuels scenarios	*Nikolas HILL, Ricardo Energy & Environment, The United Kingdom*
05:40 pm	Evaluation of the environmental benefits of the global ev-fleet in 40 countries? A ICA based estimation in IEA HEV	*Gerfried JUNGMEIER, JOANNEUM RESEARCH, Austria*
06:00 pm	Demand and potential recovery of rare earths for a more sustainable development of electric mobility in Europe	*Marta IGLESIAS EMBIL, SEAT SA, Spain*

D6: ELECTRIC VEHICLE CHARGER DEVELOPMENTS

Room: Mezzanine 2/3	*Session Chair: Auke HOEKSTRA, Eindhoven University of Technology, The Netherlands*	
05:00 pm	Electric vehicle charge in collective housing	*Olivier TERRAL, ENEDIS, France*
05:20 pm	Learning from worldwide fast charger deployments	*Dale HALL, International Council on Clean Transportation,The United States*
05:40 pm	Smart columbus kickstarts EV charging development in multi-unit dwellings: a case study on multi-unit dwelling charging infrastructure priority	*Norman BRAUGHTON, City of Columbus, The United States*
06:00 pm	Multilayered thin type lightweight coil for wireless power transmission for ev and leakage magnetic field suppression effect	*Masato OKABE, Dai Nippon Printing, Japan*

D10: SMART CHARGING AND SMART BUILDINGS

Room: Lumière 7	*Session Chair: Wolfgang FISCHER, e-mobil BW, Germany* *Kitchanon RUANGJIRAKIT, King Mongkut's University of Technology Thonburi, Thailand*	
05:00 pm	Smart public charging in The Netherlands. An experience-based approach to stimulating electric driving	*Maarten LINNENKAMP, MRA-Electric, The Netherlands*
05:20 pm	Norm for new buildings referring to plug-in vehicles: an example from switzerland (sia 2060)	*Giorgio GABBA, Protoscar SA, China*
05:40 pm	Development of an energy managing strategy and sizing algorithm for a nanogrid parking lot for electric vehicles	*Boud VERBRUGGE, Vrije Universiteit Brussel - MOBI, Belgium*
06:00 pm	Vehicle-to-grid optimisation to reduce energy bills in buildings	*Claire WEILLER, Nuvve, The United Kingdom*

DIALOGUE SESSIONS

01:00 PM – 03:00 PM

Location: Posters Area

P1: VEHICLES & TRANSPORTATION SYSTEMS

P1T01	Adaptive cabin air filter system for energy efficient filtration for e-vehicles	*Jérôme MIGAUD, Mann & Hummel GmbH, Germany*
P1T03	Large scale ev charging in all parking spaces; how to accelerate the electric disruption	*Heikki SUONSIVU, Parking Energy Ltd, Finland*
P1T04	Consumer choice of electric vehicle infrastructure: what are the drivers and their importance?	*Debapriya CHAKRABORTY, Plug In Hybrid Electric Vehicle (PHEV) Research Center, The United States*
P1T05	High-speed radial shaft sealing solution for emobility drivetrains	*Konstantin REMPEL, KACO GmbH + Co. KG, Germany*
P1T07	Constructing a corridor-based model for estimating the cost of electric vehicle charging infrastructure on highways	*Emilia SUOMALAINEN, VEDECOM, France*
P1T08	The modular concept of building an adaptive system of thermostating for hybrid and electric vehicles	*Rinat KURMAEV, FSUE NAMI, Russia*
P1T09	Battery electric trucks in night-time delivery - the future of city logistics?	*Cornelius MOLL, Fraunhofer ISI, Germany*
P1T10	National energy impacts of heavy electric truck adoption for freight	*Yan ZHOU, Argonne National Laboratory, The United States*
P1T11	Electrification of buses and trucks: battery and fuel cell powertrains	*Andrew BURKE, UC Davis,The United States*
P1T12	Ultra-compact electric vehicle behaviors in Japan	*Hideki KATO, Toyota Transportation Research Institute, Japan*
P1T13	Fostering small electric vehicles on a municipal level	*Amelie EWERT, German Aerospace Center (DLR), Germany*
P1T14	Evaluation of a battery electric bus system through computational simulations	*Mikko PIHLATIE, VTT, Finland*
P1T15	Overview of electric buses deployment and its challenges related to the charging? The case study of transdev	*Adnane HOUBBADI, IFSTTAR, France*
P1T16	Optimization of opportunity charged bus operation - a case study	*Mikaela RANTA, VTT, Finland*
P1T18	Re-plannable parking path planning for real driving based on utility-guided sampling method	*Lee SEONGJIN, Hanyang University, South Korea*
P1T19	Impact of cav technologies on energy consumption of advanced electrified vehicles	*Aymeric ROUSSEAU, Argonne National Laboratory, The United States*

P2: ELECTRIC POWER TRAIN AND APPLICATION

P2T20	Current measurement of electric & hybrid vehicles? Influence of shielded hv motor & battery cable	*Bernhard GRASEL, Austria*
P2T22	Is france now ready to switch to electric mobility?	*Cécile GOUBET, Avere-France, France*
P2T23	Investigation of the necessity of methodical support of the developer to combine the advantages of two hybrid electric topologies in order to increase the number of realizable functions	*Sebastian RUOFF, Karlsruhe Institute of Technology (KIT), Germany*
P2T25	Methodology for modeling a plugin hybrid electric vehicle based on data logging	*Tobias BURGERT, Fraunhofer ICT, Germany*
P2T26	Improving fuel cell system robustness with ion exchange technology	*Simon LEININGER, MANN+HUMMEL, Germany*
P2T27	Electrifying bus rapid transit systems: a canadian case study	*Anaissia FRANCA, CUTRIC, Canada*
P2T28	Automatic power flow generation algorithm for automotive transmission powertrains	*Shin DAEKEON, Hayang University, South Korea*

P2T29	Electric vehicles charging infrastructure: data-driven strategic network analysis rollout	*Pjotr SILLEKENS, EVConsult B.V., The Netherlands*
P2T31	Impact of traffic stops on energy consumption of electric vehicles	*Anatole DESREVEAUX, University of Lille, France*
P2T32	Fuel consumption prediction and validation using real-world cycle data and oem vehicle data	*Aymeric ROUSSEAU, Argonne National Laboratory, The United States*
P2T33	Modelling and simulation of electromechanical actuators for a dual clutch transmission	*Kyuhyun SIM, Sungkyunkwan University, South Korea*
P2T69	Ev thermal management: model based design	*Guillaume BRUNIQUEL, SHERPA ENGINEERING, France*
P2T34	An evaluation of electric bus energy consumption in bangkok traffic conditions	*Kitchanon RUANGJIRAKIT, King Mongkut's University of Technology Thonburi, Thailand*

P3: COMPONENT TECHNOLOGIES

P3T35	Evolution of the safety behavior of li-ion battery after aging	*Pierre KUNTZ, CEA Grenoble, France*
P3T36	Peak power calculation based on least square method	*Zhou YUXIN, North China University of Technology, China*
P3T37	Comparisons of the useable power characteristics of lithium batteries and supercapcitors for vehicle applications	*Andrew BURKE, UC Davis, The United States*
P3T38	Influence of different charging rates on li-ion battery lifespan: experimental validation	*Jorge NAJERA, Universidad Politécnica de Madrid, Spain*
P3T39	Advanced solutions in over-current protection of hvdc circuit of battery-powered electric vehicle	*Mitja KOPRIVSEK, ETI Elektroelement d.o.o., Slovenia*
P3T40	Design, analysis and control of a double-rotor motor with magnetic differential for electric vehicles	*Cao LIBING, The University of Hong Kong, China*
P3T41	Comparison between permanent magnet and wound field synchronous machines for traction application: efficiency and energy consumption	*Lamya BELHAJ, PSA, France*
P3T42	Research on high power density control board of permanent magnet synchronous motor	*Wen XUHUI, Chinese Academy of Sciences, China*
P3T43	Assessment of immersion cooling fluids for electric vehicle battery thermal	*Rémi DACCORD, EXOES, France*

P4: CHARGING/FUELING INFRASTRUCTURE

P4T44	A public key infrastructure for smart charging solutions for safe and seemless charging in an open market for electric vehicles	*Baerte DE BREY, Stedin, The Netherlands*
P4T45	Eborn, a leading public charging infrastructure in France	*Fabien CHALLEAT, SYANE France*
P4T46	Analysis of the potential of stationary batteries to reduce the grid connection power and costs of high power charging (hpc) parks for battery electric vehicles (xevs)	*Roman SCHOLDAN, P3 group, Germany*
P4T48	Prediction on future electric vehicle market shares in urban areas and related consequences for energy delivery & grid stability? Investigation of Stuttgart	*Ralf WOERNER, university of applied science Esslingen, Germany*
P4T49	Static public inductive charging in Germany	*Ilona FRIESEN, TÜV Rheinland Consulting GmbH, Germany*
P4T50	Architecture of electric road system	*Håkan SUNDELIN, RISE, Sweden*
P4T51	The role of standardization in premium ev charging and how plug&charge in compliance to iso15118 can support	*Jonel TIMBERGEN, Hubject GmbH, Germany*
P4T52	Analysis of intelligent charging strategies to reduce the need of grid reinforcement measures caused by the market ramp-up of electric vehicles	*Detert BRACHT, Germany*

P4T53	Finding the sweet equilibrium between societal interest and business opportunities for smart charging EVS	*Frank GEERTS, ElaadNL, The Netherlands*
P4T54	Coordination interest in electric vehicles long distance trips	*Jean HASSLER, GeePs - Groupe PSA, France*

P5: ENTERING MASS MARKET & DEMAND ISSUES

P5T55	Energy provider actions on electric transportation	*Kelly YEARICK, Forth, The United States*
P5T56	Hydrogen valleys? A blueprint for large-scale hydrogen rollout across european regions	*Alex STEWART, Element Energy, Finland*
P5T57	Key factors defining the mobility of tomorrow - a focus on the ev charging infrastructure ecosystem and emerging business models	*Florent ANDRILLON, Capgemini Invent, France*
P5T58	Who is the ev customer? ?Early adopter? Customer segmentation.	*Alexander LEWIS-JONES, Delta Energy & Environment, The United Kingdom*

P6: ENERGY & ENVIRONMENTAL ANALYSES

P6T70	Measuring performance metrics of a smart city	*Katherine ZEHINDER, HNTB, The United States*
P6T60	The Enedis fleet of electric vehicles: an asset for air pollution control	*Jean DUPLEX, Enedis, France*
P6T61	Second life application scenarios of a lithium iron phosphate (lfp) electric vehicle battery: a life cycle assessment approach	*Konstantinos GENIKOMSAKIS, Research Institute for Energy, University of Mons, Belgium*
P6T62	Smartcharge rewards: encouraging better charging behavior with price signals to shift demand to off-peak times	*Mallia ERIC, FleetCarma, Canada*
P6T64	Comprehensive raw material assessment for battery and fuel cell electric vehicles	*Cécile QUERLEU, Thinkstep, Germany*

P7: MOBILITY CONCEPTS

P7T65	The city of stockholm experinces with charging infrastucture for evs	*Eva SUNNERSTEDT, City of Stockholm, Sweden*
P7T66	Relative effectiveness of electric vehicle vs. Car sharing in reducing transport energy consumption	*Angkee SRIPAKAGORN, Chulalongkorn University, Thailand*
P7T67	Adopting corporate car sharing as a mobility service	*Tommi LINNANKOSKI, Virta Ltd., Finland*

SIDE EVENTS

AVERE EV USER ASSOCIATION WORKSHOP

From: 01:00 pm - 02:00 pm
Room: Salon d'honneur

The aim of the workshop is to present AVERE's EV User Association umbrella network which connects individual EV User Associations across the world.
Limited places available, access only through registration.

SIEMENS WORKSHOP – ACCELERATING XEV ENGINEERING WITH THE DIGITAL TWIN

From: 01:00 pm - 02:30 pm
Room: Lumière 10/11

Siemens Digital Industries Software is glad to invite you to attend this free 90 minute workshop where our experts will describe how engineering processes have to evolve to cope with challenging requirements, and how a complete, integrated and accurate digital twin approach can enable car OEMs and suppliers to bridge the gap to achieve a significant competitive edge and optimize hybrid and electric vehicles performance.
Limited places available, access only through registration.

GERMAN COCKTAIL

From: 02:00 pm - 03:00 pm
Location: German Pavilion

Be our guest: Baden-Württemberg Reception with a welcome note of Winfried Hermann MdL, Minister of Transport of the State of Baden-Württemberg.
Join us at booth F15. Meet German and Baden-Württemberg industry experts for casual networking while enjoying some beer and snacks

POWERED BY NATURE – PIONEERING ELECTRIC MOBILITY - WORKSHOP

From: 11:00 am - 02:00 pm
Room: Mezzanine 6

- PART I: How Norway made it happen – conditions for a successful EV transition
- PART II: Autonomous transport and green shipping
- PART III: Hydrogen as an EV range extender

OPEN IEA HEV TASK 40 - WORKSHOP - CRITICAL RAW MATERIALS FOR ELECTRIC VEHICLES

From: 11:00 am - 06:00 pm
Room: Bocuse 1
Open day workshop in collaboration with the AEC (AVERE European Conference)
Format: short keynotes (10 or 15 minutes each depending on # speakers per session) and 30 minutes moderated panel discussion around the 3 topics.

- 11:00 am - 11:15 am **WELCOME AND INTRODUCTION**

Welcome from the hosts AVERE / ADEME
Bert WITKAMP
→ Introduction of the IEA HEV Task 40 CRM4EV "objectives and status"

- 11:30 am - 01:00 pm **SESSION 1**

Environmental and social sustainability of raw materials for EV batteries
Xiao LIN (Chinese Academy of Sciences
→ Metal recovery from Lithium ion-battery waste streams and end-of-life

Andreas BITTNER (European Lithium Institute, tbc)
→ Sustainable Lithium in Europe

Daniele LA PORTA (The World Bank)
→ Sustainable mining in Africa: ethical and economic challenges

Task 40 speaker
→ Life Cycle approach & impacts of Li-ion batterie

12:30 pm - 01:00 pm
Panel discussion with speakers with moderator and questions "online and onscreen"

- 01:00 pm - 02:00 pm **LUNCH BREAK**

- 02:00 pm - 03:45 pm **SESSION 2**

EVs current status, outlook and transition: "current and future demand for raw materials"
Prof. Dr. Ocktaeck LIM (Ulsan University)
→ EV policies and industry in South Korea

Prof. Ir. Frank RIECK (AVERE)
→ Potential impacts of autonomous and shared driving on types and number of vehicles

Jose PONTES (EV Volumes)
→ EV market developments and battery technologies market shares

Marine SIMOEN (IFPEN)
→ Development of transport fleet up to 2050 in 2D and 4D scenarios

Christina BU – (The Norwegian EV Assoication)
→ How (and why) has the rapid transition in Norway happened, lessons learned?

03:15 pm – 03:45 pm
Panel discussion with speakers with moderator and questions "online and onscreen"

- 03:45 pm - 04:15 pm **REFRESHMENTS BREAK**

- 04:15 pm - 06:00 pm **SESSION 3**

Raw materials for EVs 2020 – 2030 – 2050 "current and future supply of raw materials"
Barry JACKSON (AngloAmerican)
→ Bridging the supply gap for Nickel

Vincent LEDOUX PEDAILLES (Infinity Lithium)
→ Lithium mining and refining, Bridging the gap

Diego GARCIA CARVAJA (Copper Alliance)
→ E-motor concepts and impacts on the Bill of Materials (Copper/Rare Earths)

Tony SOUTHGATE (Stratton Metals)
→ Cobalt market dynamics and outlook

- 05:30 pm – 06:00 pm
Panel discussion with speakers with moderator and questions "online and onscreen"

- 06:00 pm **CLOSING OF DAY 1 WORKSHOP CRM4EV**

DAY 2 -
CLOSED WORKSHOP FOR PARTICIPANTS AND INVITED EXPERTS ONLY

TIMING						
09:00 am 10:30 am	**AEC 2019** Bocuse Plenary Room Smart charging, V2X	**E7** Lumière 8/9 Plug-in hybrid vehicle consumer demand	**G2** Mezzanine 4 Smart and shared Electromobility	**F2** Lumière 10/11 Environmental impact assessments for electric vehicles	**D7** Mezzanine 2/3 Public policies and strategies for charging electric vehicles	**C5** Lumière 7 Battery developments
10:30 am 11:00 am	COFFEE BREAK					
11:00 am 12:30 pm	**AEC 2019** Bocuse Plenary Room Hydrogen, ZEV	**CS1** Lumière 8/9 The latest developments from China	**G3** Mezzanine 4 The Future of Mobility	**F3** Lumière 10/11 Reducing energy demand and CO^2 emissions	**D8** Mezzanine 2/3 Smart grid and smart home how can EV contribute?	**C6** Lumière 7 Innovations in electric motor developments
12:30 pm 02:30 pm	LUNCH			DIALOGUE SESSIONS		
02:30 pm 04:00 pm	**CLOSING CEREMONY** Bocuse Plenary Room					

Last minute changes are possible. Feel free to consult EVS32 mobile App.

CHANGE IS IN THE AIR.

Thanks to innovative offers and new high-performance EV charging stations throughout Europe, EDF group wants to enable 4 times more vehicles to run on electric power in upcoming 4 years. And since our electricity is already low in CO_2*, there will be a change in the air.
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*In 2017, the EDF energy mix was 77% nuclear, 10% renewable, 8% gas, 4% coal and 1% fuel. It is 87% CO_2 free (direct emissions excluding the life-cycle analysis (LCA) of production facilities and fuels) – Source: EDF 2017 Financial and extra financial performance indicators.

09:00 AM – 10:30 AM

SMART CHARGING, V2X

Room: Bocuse Plenary Room

Chairman session: Cristina CORCHERO, Head of the Energy Systems Analytics Group at IREC

KEYNOTE SPEAKER

Hervé RIVOALEN,
Strategic Marketing and Smart Charge Director, Electrical mobility EDF, France

Hervé RIVOALEN has graduated in ENSAM - Arts & Métiers Engineering School. He joined EDF group in 1991 as a Research Engineer for Industry. Later he joined EDF Sales Department as Key Accounts Manager for Electro-intensive customers and in 2010 as Deputy Marketing BtoB Director. In 2013, he was Regional Managing Director of EDF Commerce, for East French Region, until 2018. In 2019, he joined the Electrical Mobility Department of EDF as Head of Marketing and smart Charging Department.

ROUNDTABLE

Eduardo MASCARELL,
Head of Vehicle to Grid and Energy Aggregation NISSAN, France

Eduardo belongs to the Energy and Battery services unit at Nissan Europe. He is developing businesses in the energy markets all around Europe. His background is related to the energy sector as he has previously worked for several utilities, mainly in Spain, but also with responsibilities not only in Europe, but in Central and South American countries. Specialized in energy storage, he gives Nissan the chance to face the energy challenges of our society through the battery business that comes from the Electric Vehicle (Nissan Leaf and eNV200).

Ghanim PUTRUS, Professor of Electrical Power Engineering, Faculty of Engineering and Environment, Northumbria University, England

Professor of Electrical Engineering at Northumbria University, UK. He has over 30 years' experience with over 185 publications. He has led several R&D projects. Currently, he leads WP5 in SEEV4-City Interreg project with focus on the development of business models for V2X. He served on the executive committee of the IET Power Trading and Control PN 2001-2009 and was the Chairman of IET Northumbria branch 2004/2005. He is Associate Editor of the Elsevier Renewable Energy journal.

Marcel BRZANK,
Senior Business Development Professional for EV Charging Infrastructure, Germany

Marcel Brzank was born in 1981. He is an electrical engineer with a postgraduate degree focused on business administration and management from Macquarie Graduate School of Management, Sydney. Marcel joined Siemens in 2008 and served in multiple positions in Germany and Australia. Today he's part of the new eMobility Team of Siemens as Senior Business Development Professional for EV Charging Infrastructure.

Nouredine HADJSAID, Smart Grids Institute, Director of G2Elab, France

Nouredine Hadj-Said received the Ph.D. His main research interests are in the area of Smart-Grids. He is currently the Director of G2ELAB, Chairman of the Industrial Enedis Chair of Excellence on Smart Grids, and the Chairman of the Scientific Council of Think Smart Grids, the industrial Smart Grids ecosystem in France. He has published over 200 scientific papers in international conferences and journals, has authored/co-authored and directed seven books on power systems and smart grids.

Eric MEVELLEC, CEO of the joint-venture between EDF & Nuvve, France

Eric MEVELLEC is CEO of the joint venture between EDF and Nuvve: a V1G and V2G solutions provider. Its mission is to enhance the potential of flexibility of the Electric Vehicle. Eric is graduated from Arts et Métiers. He had different positions in automotive and climatic engineering industries before joining EDF Group in 2010 to develop smartgrid and IT offers. He was one of the founders of Sowee in 2016, in charge of the connected solutions department.

Yasmine ASSEF, Program Director, New Business Energy GROUPE RENAULT, France

Dr Yasmine Assef obtained her electrical engineering MS degree and her PhD degree in electrical engineering from University Paris VI, France in 1997. Yasmine joined Alstom Grid (Formerly Alstom T&D, Areva T&D) in 1998, as Power System engineer. In 2011, Yasmine was appointed Deputy CEO in the newly funded joint venture between Alstom Grid and Bouygues, Embix, specialized in Smart grid services for Smart cities. She joined the Groupe Renault in 2016. Yasmine is Program Director New Business Energy, within the Electric Vehicle Business Unit.

Maria Laura CORALLINI - V2G Business development Manager, Nissan Energy, The United Kingdom

Maria Laura is managing the operational and business deployment of Vehicle-to-Grid activities within the Nissan Energy business, a new structure within Nissan commercializing stationary energy storage solutions and energy services based on the vehicle-to-grid functionality of Nissan electric vehicles.
She has 10-year experience in the power electronics and energy industry, taking responsibilities in innovation, R&D and business operations.

CHAIRMAN

Cristina CORCHERO, Head of the Energy Systems Analytics Group at IREC, Spain

Dr. Corchero is Group Leader of the Energy Systems Analytics Group at IREC. She holds a doctorate degree in Statistics and Operation Research (UPC, 2011), with focus on the application of advanced optimization models and tools to electricity markets, smart grid, smart communities, electric vehicle and hybrid systems. She leads Vehicle-Grid-Integration in tasks 28 "Home Grids and V2X Technologies" at the Hybrid and Electrical Vehicle TCP from the IEA. She participated in 68 research works published.

AEC SESSIONS

11:00 AM – 12:30 PM

HYDROGEN, ZEV

Room: Bocuse Plenary Room

Chairman session: Nicolas BRAHY, COO of Hydrogen Europe, Belgium

Roundtable - Part 1: At a regional level. The Zero-Emission Valley Project: first feedbacks
Roundtable - Part 2: At a national level. A comparison between France and other countries
Roundtable - Part 3: At an European and international level – The key role of transnational projects to boost hydrogen mobility

"Building hydrogen ecosystems to accelerate the deployment of zero-emission mobility: main challenges and success factors"

Introduction by Valerie BOUILLON-DELPORTE,
President of Hydrogen Europe and Chair of the governing board of the FCHJU

SPEAKERS

AT A REGIONAL LEVEL. THE ZERO-EMISSION VALLEY PROJECT: FIRST FEEDBACKS

Etienne BLANC,
1st Vice-President, AURA Region

Michèle AZALBET,
Chief Executive Officer, ENGIE renewable hydrogen Business Unit

Thierry MARTIN LASSAGNE,
Head of Public Affairs – Group Michelin, France

Gautier CHATELUS,
Deputy Director, Infrastructure and Transport Department, Caisse des dépôts

AT A NATIONAL LEVEL. A COMPARISON BETWEEN FRANCE AND OTHER COUNTRIES

Fabio FERRARI,
1st VP of AFHYPAC, in charge of mobility topics, AFHYPAC

Luc BODINEAU,
H2 Activities Coordinator, ADEME

Jean-Luc BROSSARD,
R&D Strategy Director, PFA

Thorsten HERBERT,
Head of Programme NIP, Divisional Head Transport and Infrastructure, NOW

Bart BIEBUYCK,
Executive Director, Fuel Cell Hydrogen Joint undertaking

AT AN EUROPEAN AND INTERNATIONAL LEVEL – THE KEY ROLE OF TRANSNATIONAL PROJECTS TO BOOST HYDROGEN MOBILITY:

Bart BIEBUYCK,
Executive Director, Fuel Cell Hydrogen Joint undertaking

Bernard FROIS,
Vice-President, IPHE (International Partnership for Hydrogen and Fuel Cells in the Economy)

Elise RAVOIRE,
Principal Consultant- Element Energy, JIVE (Joint Initiative for hydrogen Vehicles across Europe)

Katsuhiko HIROSE,
Professional Partner, Hydrogen and FCV promotion Group, Toyota Motor Corporation

LECTURE SESSIONS

09:00 AM – 10:30 AM

E7: PLUG-IN HYBRID VEHICLE CONSUMER DEMAND

Room: Lumière 8/9

Session Chair: Peter VAN DEN BOSSCHE, Vrije Universiteit Brussel - MOBI, Belgium

09:00 am	Hybrid powertrain technology roadmap	*Mike BASSETT, MAHLE Powertrain Limited, The United Kingdom*
09:20 am	Utility factor (uf) and charging preferences of plug-in hybrid electric vehicles (phevs): insights from real world data	*Seshadri SRINIVASA RAGHAVAN, UC Davis Institute of Transportation Studies, The United States*
09:40 am	Electrification of vehicle miles travelled within the household context	*Ahmet MANDEV, Chalmers University of Technology, Sweden*
10:00 am	Understanding use patterns of partially automated electric vehicles	*Scott HARDMAN, UC Davis, The United States*

G2: SMART AND SHARED ELECTROMOBILITY

Room: Mezzanine 4

Session Chair: Katja GICKLHORN, E-mobil BW, Germany
Erik LORENTZEN, Norway

09:00 am	Business models in the shared mobility and multimodal transport fields: a market analysis towards (electric) mobility as a service	*J. Roberto REYES GARCIA, University of Twente, The Netherlands*
09:20 am	State of the art of electric mobility as a service (emaas): an overview of ecosystems and system architectures	*J. Roberto REYES GARCIA, University of Twente, The Netherlands*
09:40 am	Impact of smart mobility on electrified powertrain benefits	*Aymeric ROUSSEAU, Argonne National Laboratory, The United States*
10:00 am	Determining the size and number of shared autonomous vehicles in a virtual pilot in The Netherlands	*Auke HOEKSTRA, Eindhoven University of Technology, The Netherlands*

F2: ENVIRONMENTAL IMPACT ASSESSMENTS FOR ELECTRIC VEHICLES

Room: Lumière 10/11

Session Chair: Joeri VAN MIERLO, Vrije Universiteit Brussel - MOBI, Belgium

09:00 am	Integrating EVS into the grid: a global review of promising	*Julia HILDERMEIER, RAP, Belgium*
09:20 am	Vehicle electrification: An impetus towards vehicle longevity and circular economy principles?	*Derek DIENER, Rise Viktoria, Sweden*
09:40 am	How many electric vehicles can one wind turbine charge? A study on wind energy generation and electric vehicle demand correlation	*Zongfei WANG, Karlsruhe Institute of Technology, Germany*
10:00 am	The integration of renewable energy sources, stationary batteries and vehicle-to-grid assets: a distributed energy case study for a municipal depot in the UK	*Matthew KNIGHT, Cenex,The United Kingdom*

LECTURE SESSIONS

D7: PUBLIC POLICIES AND STRATEGIES FOR CHARGING ELECTRIC VEHICLES

Room: Mezzanine 2/3	*Session Chair: Pietro MENGA, CIVES, Italy*	
09:00 am	Evaluating the top electric vehicle markets in the world	*Dale HALL, International Council on Clean Transportation,The United States*
09:20 am	Expanding charging infrastructure for large scale introduction of electric vehicles	*Rick WOLBERTUS, Amsterdam University of applied Sciences, Finland*
09:40 am	Learnings from the roll-out of public charging infrastructure in The Netherlands	*Harm-Jan IDEMA, APPM management constultants, The Netherlands*
10:00 am	Socioeconomic analysis of electric road systems	*Martin GUSTAVSSON, RISE, Sweden*

C5: BATTERY DEVELOPMENTS

Room: Lumière 7	*Session Chair: Fernando ANTUNES, Brasilia Marketing School, Brazil*	
09:00 am	Electric vehicle range and battery lifetime: a trade-off	*Eduardo REDONDO-IGLESIAS, Univ Lyon, IFSTTAR, France*
09:20 am	Using a second-life battery to optimize the levelized cost of electricity in CO_2 neutral microgrid	*Mikel ARRINDA, CIDETEC, Spain*
09:40 am	Evaluation of the end-of-life of electric vehicles according to the state-of-health	*Nick CHAPMAN, IREC, Spain*
10:00 am	Alcunnect - a new bimetal combination of aluminium and copper	*Daniel SCHINDLER, DODUCO Solutions GmbH, Germany*

11:00 AM – 12:30 PM

CS1: THE LATEST DEVELOPMENTS FROM CHINA

Room: Lumière 8/9	*Session Chair: C.C. CHAN, University of Hong Kong, China*	
11:00 am	Demand-oriented innovation on development mode of logistics electric	*Xiaoyuan WU, Tongji University, China*
11:20 am	Multi-scale modeling of a high performance pem fuel cell powered highway bus	*Marion GEORGES, Tsinghua University,China*
11:40 am	Feedforward-feedback shift control with disturbance compensation of a two-speed transmission for electric vehicles	*Jianfeng HUANG, Shanghai Jiao Tong University, China*
12:00 pm	Study on evaluation method of aging degree of lithium-ion batteries	*Ai QINGHUI, North China University of Technology,China*

G3: THE FUTURE OF MOBILITY

Room: Mezzanine 4	*Session Chairs: Tim LACLAIR, Oak Ridge National Laboratory, The United States Antti LAJUNEN, University of Helsinki, Finland*	
11:00 am	Equitable e-mobility	*Jeff ALLEN, Forth, The United States*
11:20 am	Large scale public agency fleet electrification in the The United States, facilitated through aggregate and cooperative purchasing	*Benjamin PROCHAZKA, Electrification Coalition, The United States*
11:40 am	The integration of used electric vehicles into fleet operations	*Dahlia GARAS, UC Davis, The United States*
12:00 pm	Innovative Procurement for Fleet Electrification	*Norman BRAUGHTON, City of Columbus, The United States*

F3: REDUCING ENERGY DEMAND AND CO_2 EMISSIONS

Room: Lumière 10/11	*Session Chair: Harm WEKEN, FIER Automotive, The Netherlands*	
11:00 am	Contribution of light and heavy vehicles to reducing energy demand and CO_2 emissions by 2035 worldwide	*Jean-Luc BROSSARD, PFA, France*
11:20 am	The electric highway: an innovative project to abate CO_2 emissions in heavy-goods transport	*Aurélien SCHULLER, Carbone 4, France*
11:40 am	Potential adoption of plug-in electric vehicles by the uk mass-market	*George BEARD, Transport Research Laboratory, The United Kingdom*
12:00 pm	CO_2 fleet targets and electric vehicle market diffusion	*Patrick PLOETZ, Fraunhofer ISI, Germany*

D8: SMART GRID AND SMART HOME: HOW CAN EV CONTRIBUTE?

Room: Mezzanine 2/3	*Session Chair: Peter VAN DEN BOSSCHE, Vrije Universiteit Brussel - MOBI, Belgium*	
11:00 am	The road toward electric vehicles as flexibility providers for distribution systems. A techno-economic review	*Felipe GONZALEZ VENEGAS, PSA Groupe - Centrale Supélec-GeePs, France*
11:20 am	Innovation needs for the integration of electric vehicles into the energy system	*Stefan WOLF, Institute for innovation and technology (iit), Germany*
11:40 am	The value of EV forecasts for microgrid energy management? A case study	*Peter PFLAUM, Schneider Electric, France*
12:00 pm	Effects on the self-consumption and self-sufficiency for household solar producers when introducing an electric vehicle	*Emil NYHOLM, Chalmers University of Technology, Sweden*

LECTURE SESSIONS

C6: INNOVATIONS IN ELECTRIC MOTOR DEVELOPMENTS

Room: Lumière 7

Session Chair: Edwin BESTEBREURTJE, FIER Automotive, The Netherlands
Yoshinori KONDO, Natl Inst. for Env. Studies, Japan

11:00 am	Iron loss modelling of electrical traction motors for improved prediction of higher harmonic losses	*Jan RENS, ArcelorMittal Global R&D Gent, Belgium*
11:20 am	Development of a integrated motor controller for a plug-in parallel two wheeler hybrid vehicle	*Dipanjan MAZUMDAR, TVS Motor Company, India*
11:40 am	Holistic approach to noise reduction in an in-wheel electric motor drive	*Martin STROJNIK, Elaphe propulsion technologies, Slovenia*
12:00 pm	Gearing up for lower cost electric drives: accelerating the development of optimal electrified powertrain architectures	*Michael BRYANT, Drive System Design Ltd., The United Kingdom*

12:30 PM – 02:30 PM

Location: Posters Area

P1: VEHICLES & TRANSPORTATION SYSTEMS

P1W01	Investigating the use of electric vehicles in new mobility services	*Alan JENN, University of California, Davis The United States*
P1W02	A framework to compute electric vehicles charging tariffs	*Fanny VANRYKEL, ULiege, Belgium*
P1W03	Experiences from Norwegian bev owners? Using the bev for all purposes	*Synnove GRONDAHL, Norwegian EV association, Norway*
P1W04	Agent-based model for electric vehicle adoption in Brussels	*Quentin DE CLERCK, Vrije Universiteit Brussel - MOBI, Belgium*
P1W05	Where are used electric vehicles and who are the buyers?	*Jae Hyun LEE, University of California, Davis, The United States*
P1W06	Ecult: a concept study of a lightweight, affordable 48v urban vehicle	*Wolfgang KRIEGLER, Fachhochschule Joanneum UAS, Austria*
P1W07	Co-design approach and optimization for plug-in hybrid buses	*Duong TRAN, Vrije Universiteit Brussel - MOBI, Belgium*
P1W08	Impact of increasing diesel prices: will electric vehicles become an economic solution for freight transport?	*Philippe LEBEAU, Vrije Universiteit Brussel - MOBI, Belgium*
P1W09	Smile first project - verification tests in real world for multi-purpose mobility (mpm) - (3rd report)	*Yoshinori KONDO, Natl Inst. for Env. Studies, Japan*
P1W10	Simple detecting method of turning radius using geomagnetism sensor for light electric vehicle	*Naoki KOGAI, National Institute of Technology, Ibaraki College, Japan*
P1W11	Forecasting battery soc for electric buses with dynamic route information and neural networks	*Steven WILKINS, TNO, The Netherlands*
P1W12	Methods to evaluate the quality of a remaining range algorithm	*Lisa BRAUN, Evobus GmbH, Germany*
P1W13	Viability of traction battery for battery-hybrid trolleybus	*Abhishek Singh TOMAR, HAN Automotive Research, The Netherlands*
P1W15	Analysis of driver's characteristics in driving control authority transition period	*So-Yeon JEON, Sungkyunkwan University, South Korea*
P1W16	Implementation of integrated generation unit simulation platform with power electronic load and engine simulator	*Wen XUHUI, Chinese Academy of Sciences, China*

P2: ELECTRIC POWER TRAIN AND APPLICATION

P2W17	Big challenges and bigger opportunities for electric powertrain with vehicle autonomy	*Puneet SINHA, Mentor, a Siemens Business, The United States*
P2W19	Analysis of optimal battery state-of-charge trajectory for blended regime of plug-in hybrid electric vehicle	*Branimir SKUGOR, Faculty of Mechanical Engineering and Naval Architecture, Croatia*
P2W20	Energy management control for electric drivetrains with multiple energy storage units	*Mohamed EL BAGHDADI, Vrije Universiteit Brussel - MOBI, Belgium*
P2W22	Electric and conventional vehicle performance over eco-driving cycles: energy benefits and component loss	*Tim LACLAIR, Oak Ridge National Laboratory, The United States*
P2W24	Design and simulation of n1 class range extended electric road cleaner vehicle	*Karaoglan MUSTAFA UMUT, Dokuz Eylul University, Turkey*
P2W26	Simulation of free-floating vehicle charging behaviour at public charging points	*Vincent GORKA, Amsterdam University of Applied Sciences, The Netherlands*
P2W28	A study of testing and evaluation method of energy consumption for plug-in hybrid electric vehicle	*Peng WANG, China Automotive Engineering Research Institute CO., LTD, China*

P3: COMPONENT TECHNOLOGIES

P3W29	Automotive batteries in hybrid energy systems	*Denise SCHLEISING, ACTARON, Germany*
P3W30	Analysis of degradation mechanisms of electric vehicle batteries using driving data	*Tomohiko IKEYA, CRIEPI, Japan*
P3W31	Real-world mobility data for the assessment of the capacity fade of lithium-ion automotive batteries	*Elena PAFFUMI, European Commission Joint Research Centre, Italy*
P3W32	Simultaneous comparison of internal electrical characteristics of various 18650 rechargeable cells under excessive half-sine shock for railway application	*Jonghoon KIM, Chungnam National University, South Korea*
P3W33	Comparison of methods for obtaining model parameters of lithium ion batteries	*Jing YUANBIN, North China University of Technology, China*
P3W34	Shaft grounding solution(s) for bearing protection	*Isabell ADAMSKI, KACO GmbH + Co. KG, Germany*
P3W35	Design of a 200 kw pm synrm motor without rare-earth for electric vehicle	*Abdenour ABDELLI, IFP Energies nouvelles, France*
P3W36	Hybrid powertrain control based on the prediction of driver's acceleration intention	*Joonyoung PARK, Hyundai Motor Company, South Korea*
P3W37	Modular solution for rotary shaft cooling seals for electric engines	*Matthias PODESWA, KACO GmbH + Co. KG, Germany*

P4: CHARGING/FUELING INFRASTRUCTURE

P4W39	Selfplug: conductive automatic charging for electric vehicles	*Antoine GRATIA, GULPLUG, France*
P4W40	Scope and total investment for a charging infrastructure for 100% market share of bevs in germany by 2050	*Judith AUER, Karlsruher Institut für Technologie (KIT), Germany*
P4W41	Future proofing ac & dc charging of mhd fleets	*Jay GOLDMAN, EVgo, The United States*
P4W42	Generalizing electric vehicle and building energy system for smart energy management	*Heikki SUONSIVU, ParkingEnergy, Finland*
P4W43	Energy-encrypted wireless power transfer for electric vehicle dynamic charging	*T. W. CHING, University of Hong Kong, China*
P4W44	Comparison of full h-bridge and cascaded multilevel h bridge inverter for wevcs	*Sakly JIHEN, VEDECOm, France*
P4W45	V2G-AC? Grid codes compliancy, from lab testing to field experiment	*Arnaud SZEWCZYK, Groupe Renault, France*
P4W46	Dotac charging technology: a way for automotive and energy industries to jointly reduce ev?s total cost of ownership and turn them into a grid balancing asset	*Jorg VAN HEESBEEN, Jedlix, France*
P4W47	Putting the ev driver first; the importance of roaming, open networks, and feature standardization	*Mark BRABY, ChargePoint, The Netherlands*
P4W48	Strategies in deploying grid-compatible EV infrastructure	*Scott FISHER, Greenlots, The United States*

P5: ENTERING MASS MARKET & DEMAND ISSUES

P5W49	Potentials for all-solid-state cell manufacturing in Europe	*Robert STANEK, P3 automotive GmbH, Germany*
P5W50	V2GO: a V2G demonstrator designed to develop business cases for fleets	*Marie-Lou PICHERIT, EDF Energy, he United Kingdom* *Camille ROUX, EDF Energy, France*
P5W51	Measuring customer benefits of full electric vans: an extended compositional approach for commercial applications	*Daniel GUTH, Karlsruhe Institute of Technology (KIT), Germany*
P5W52	Examining the impact of costing to use government-owened chargers: a case study in jeju, south korea	*Sanghoon SON, Jeju Research Institute, South Korea*
P5W53	Assessing customer experience improvements and resulting impacts of? plug and charge?	*Nathan DUNLOP, Tritium, Australia*

P6: ENERGY & ENVIRONMENTAL ANALYSES

P6W55	Load profile generator for electric vehicle home charging	*Georg GOEHLER, University Stuttgart IAT, Germany*
P6W56	The flovesol project: electric mobility charging synergy with pv solar panels equipped housing	*Alain LE DUIGOU, CEA, France*
P6W57	Network tariff design with electric vehicles and distributed energy resources	*Quentin HOARAU, University Paris-Sud, France*
P6W58	Recycling of lithium-ion electric vehicle batteries	*James MILLER, Argonne National Laboratory, The United States*

P7: MOBILITY CONCEPTS

P7W59	Assessment of demand-oriented charging infrastructure at city-regional level? A gis and model based approach	*Tamer SOYLU, KIT - Institut für Verkehrswesen, Germany*
P7W60	Smart fleet management solutions for clean urban mobility	*Christophe ARNAUD, Blue Solutions, France*
P7W61	Electrification of corporate passenger car fleets -a case study after 3m ev-kms	*Steffen BUCHER, BridgingIT GmbH, Germany*

PLENARY SESSIONS

02:30 PM – 04:00 PM

CLOSING CEREMONY

Room: Bocuse Plenary Room

02:30 pm - 02:45 pm		*Thure TRABER, EWG's Chief Reseach Officer, Germany*
02:45pm - 03:00 pm		*Christina BU, Norwegian EV Association, Norway*
03:00 pm - 03:05 pm	EVS32 in numbers	*Joeri VAN MIERLO, AVERE / Vrije Universiteit Brussel - MOBI, Belgium*
03:05 pm - 03:10 pm	Best Papers Awards	*Joeri VAN MIERLO, AVERE / Vrije Universiteit Brussel - MOBI, Belgium*
03:10 pm - 03:15 pm	EVS32 Best-of movie	
03:15 pm - 03:25 pm	About EVS32	*Joseph BERETTA, AVERE France*
03:25 pm - 03:45 pm	E-Visionary Awards	*Espen HAUGE, WEVA, Norway* *Genevieve CULLEN, EDTA, The United States* *Professor C.C. CHAN, Founding President WEVA & EVAAP, China*
03:45 pm - 03:50 pm	Passing of the baton to EVS33	*Espen HAUGE, WEVA, Norway* *Genevieve CULLEN, EDTA, The United States*
03:50 pm - 03:55 pm	Teasing EVS33	
03:55 pm - 04:00 pm	Closing remarks	*Joseph BERETTA, AVERE France*

KEYNOTE SPEAKERS

Thure TRABER, EWG's Chief Research Officer, Germany
Dr Thure Traber gained in-depth expertise in the field of energy transition at various research institutions including the DIW Berlin and the DTU in Denmark and published his work in numerous renowned journals. He supervises the scientific content of official documents of the Energy Watch Group, releases and pursues own research, initiates projects, and provides support for information campaigns. His central motivation is to promote a successful climate policy and a fast transition towards renewable resources and decentralised systems.

Christina BU, General Secretary, Norwegian Electric Vehicle Association, Norway
Christina has led the Norwegian EV Association for the last four years. As an expert on electric mobility Christina is frequently meeting with OEMs and advising politicians and governmental bodies from different countries. With an EV market share close to 50 % Norway is leading the way. The Norwegian EV Association is an NGO and the worlds' largest EV owner organisation with 30 employees and over 70.000 paying members.

SPEAKERS

Joeri VAN MIERLO, Prof. Dr., AVERE - Vrije Universiteit Brussels, Belgium
Prof. Dr. ir. Joeri Van Mierlo is a key player in the Electromobility scene. He is professor at the Vrije Universiteit Brussels, one of the top universities in this field. He leads the MOBI – Mobility, Logistics and automotive technology research centre (http://mobi.vub.ac.be). A multidisciplinary and growing team of 100 staff members. He is Vice-president of AVERE, the European Electric Vehicle Association and Vice-president of its Belgian section. He is the author of more than 500 scientific publications. He is editor in chief of the World Electric Vehicle Journal.

Joseph BERETTA, President, AVERE France
Joseph Beretta engaged for a long time in electric mobility in an active way, is from 2012 Avere-France president and AVERE vice president.
He is INSA Lyon electrical engineer with a DEA of energy. He has 14 years' experience in power electronics and 20 years in PSA Peugeot Citroën where he was in charge R&D on electric, hybrid, fuel cells vehicles and embedded electronic. Then he was delegate energies/technologies to PSA's public Affairs. He also spent 4 years to the French Ministry of Research to represent France in the field of land transport.

SIDE EVENTS

09:00 am - 01:00 pm	European Innovation funding for Road Transport Electrification Achievements, Impacts and Identification of White Spots in R&D
02:30 pm - 05:30 pm	IEA HEV Task 28: Project Closing Workshop

EUROPEAN INNOVATION FUNDING FOR ROAD TRANSPORT ELECTRIFICATION - ACHIEVEMENTS, IMPACTS AND IDENTIFICATION OF WHITE SPOTS IN R&D

From: 09:00 am - 01:00 pm

Room: Mezzanine 6

Under Horizon 2020 and the previous European Research and Innovation Framework Programme, more than 140 projects on road transport electrification have been funded by the European Commission in the context of the European Green Cars/Vehicles Initiative EGVI cPPP. In this workshop, an insight into the achievements as well as the mid- and long term impacts of those projects is given. In order to tackle existing challenges towards the implementation of a sustainable and competitive Transport System in Europe and to achieve the European climate targets in the transport sector, further research and innovation is needed. A useful tool for the identification of future research needs is the European Roadmap Electrification of Road Transport edited by the European Technology Platforms ERTRAC, EPoSS and ETIP SNET. Matching results and contents of closed and ongoing funded projects with the topics of the roadmap can reveal white spots and therewith priorities as well as new topics, for which research needs still exist. The identification and specification of research topics priorities is essential for the planning of future funding policies in the area of road transport electrification and the decarbonization of the European transport system.
The workshop will be embedded in the EVS-32 conference and is organized by the EU funded project FUTURE-RADAR, support action for the European Green Vehicles Initiative cPPP.

AGENDA

- 09:00 am: Registration – Welcome Coffee
- 09:30 am: Welcome and Outlook Innovation Funding in Horizon Europe, European Commission, DG Research and Innovation (tbd)
- 09:45 am: Keynote: User Centric Design of Electric Vehicles, Riccardo Groppo, Ideas & Motion
- 10:15 am: European Roadmap Electrification of Road Transport – Overview of objectives and key focus areas, Gereon Meyer, Roadmap Rapporteur
- 10:30 am: Assessment of Achievements and Impacts of EU funded projects in the field of road transport electrification and Best Practices, Frauke Bierau-Delpont, VDI/VDE Innovation + Technik (FUTURE-RADAR)
- 10:45 am: Introduction to Interactive Workshop
- 10:55 am: Short introduction to roadmaps: EV's in urban environment, FUTURE-RADAR (tbd), Affordable EV passenger car + infrastructure, FUTURE-RADAR (tbd), Electric Urban Bus System, FUTURE-RADAR (tbd), Long-distance trucks and coaches, FUTURE-RADAR (tbd)
- 11:00 am: Matching with European Roadmap Electrification of Road Transport – Status of Implementation of roadmap topics in research projects – what is missing? What needs to be done next? Parallel Breakout Sessions: Achievements and impacts of research projects on road transport electrification
- 12:25 pm: Presentation: Results of the Sessions (Session Chairs)
- 12:45 pm: Summary and Concluding Remarks, Jochen Langheim, ST Microelectronics
- 13:00 pm: Lunch break and End of Workshop

Subject to availability. Prior registration available at frauke.bierau-delpont@vdivde-it.de

1IEA HEV TASK 28: PROJECT CLOSING WORKSHOP

From: 02:30 pm - 05:30 pm

Room: Salon d'honneur

After 4 years, 8 international workshops spanning 3 continents and nearly 100 presentations, "Task 28: Home Grids and V2X Technologies" comes to a close. This event will provide insight on the key lessons learnt along the way and reflect on the main issues facing V2X technology moving forward. We will begin with presentations by some of the leading members of Task 28 and finish with discuss and debate on the future for bi-directional charging technology.
We will also unveil plans for the follow-on Task 43: Vehicle-Grid Integration.

For further details, please e-mail iea-hev@irec.cat

NOTES

WEDNESDAY, MAY 22ND

Enedis is delighted to welcome you to attend the technical visits by electric bus.
Our experts will show you the fleet and smart charging points of Enedis or you may want to discover « Confluence smart mobility quarter » with the Navya autonom shuttle. The technical visits will finish with the discovering of Lyon Miniworld park where the « Fête des Lumières » is shown in a fun way.

TRACK#1

04:15 pm: Departure from Eurexpo
→ Discover the hyper-realistic 3D models
05:30 pm - 06:00 pm – Discover Navly's shuttle - Confluence
→ Discover the Navya autonom shuttle

Duration: 60 minutes / **Fees:** €30 incl. VAT
Limited places. Registration at the welcome desk.

TRACK#2

04:15 pm: Departure from Eurexpo
05:00 pm - 05:30 pm – Discover «Confluence smart mobility quarter»
→ The urban e-mobility project
05:00 pm - 06.00 pm – the fleet and smart charging projects of Enedis:
→ Smart Charging in vivo with EcoFlot technology
→ E-mobility and smart metering Linky
→ Enedis smart grid e-mobility projects

FOR ALL, VISIT OF THE LYON MINIWORLD PARK – THE BIGGEST ANIMATED MINIATURE PARK IN FRANCE

Discover the mythical « FÊTE DES LUMIÈRES » AND LYON METROPOLIS: from Bellecour's square to the Terreaux's, passing by the Célestins theatre and the Fresque des Lyonnais, every emblematic place in Lyon is there!

ON WEDNESDAY, MAY 22ND, *the electric bus will drop the participant off at Part-Dieu railway station and at Eurexpo arount 07:30 pm (direct shuttle to the airport)*

Fees: €30 incl. VAT - Limited places. Registration at the Welcome Desk.

H&HIL: a tool to test control strategy with Human and Hardware In the Loop
IFSTTAR (Institut Français des Sciences et Technologies des Transports, de l'Aménagement et des Réseaux - French Institute of Science and Technology for Transport, Development and Networks) is working on optimization of hybrid electric vehicles. Energy management is a central topic of researches and different tools have been developed like models and test benches. One of them, an engine test bench is currently used in a HIL configuration with predefined drive cycles to assess energy and pollutants compromise.

IFSTTAR try to make HIL simulation more realistic with the introduction of the Human driver in the loop. To make this objective works, a set of tools was designed in order to connect easily a wide variety of real or virtual devices together: of course the driver in a simulator, a real engine with a virtual drivetrain, traffic simulation software... A limited number of participants (max 10 persons) would enable to visit the installation and demonstrate the different parts of the platform.

SCHEDULE

04:15 pm: Departure from Eurexpo
04:30 pm - 06:00 pm – Visit and demonstration of the platfom
06:15 pm: Arrival at Eurexpo

Fees: €5 incl. VAT - Limited places. Registration at the Welcome Desk.

THURSDAY, MAY 23RD

Enter L'Aventure Michelin and discover the history of a fabulous adventure.
A novel, interactive presentation will take you back through the amazing epic begun in 1889 by two visionary brothers, André and Edouard Michelin. From the first detachable tire, and from maps and guides to the legendary Michelin Man, enter a remarkable, one-of-a-kind world!

SCHEDULE

08:15 am: Departure from Eurexpo
08:30 am - 11:00 am: Travel to Clermont-Ferrand by bus
11:00 am - 01:00 pm: Guided tour of the Adventure Michelin
01:00 pm - 04:00 pm: Go back to Lyon by bus
A lunch bag will be provided
04:00 pm: Arrival at Eurexpo

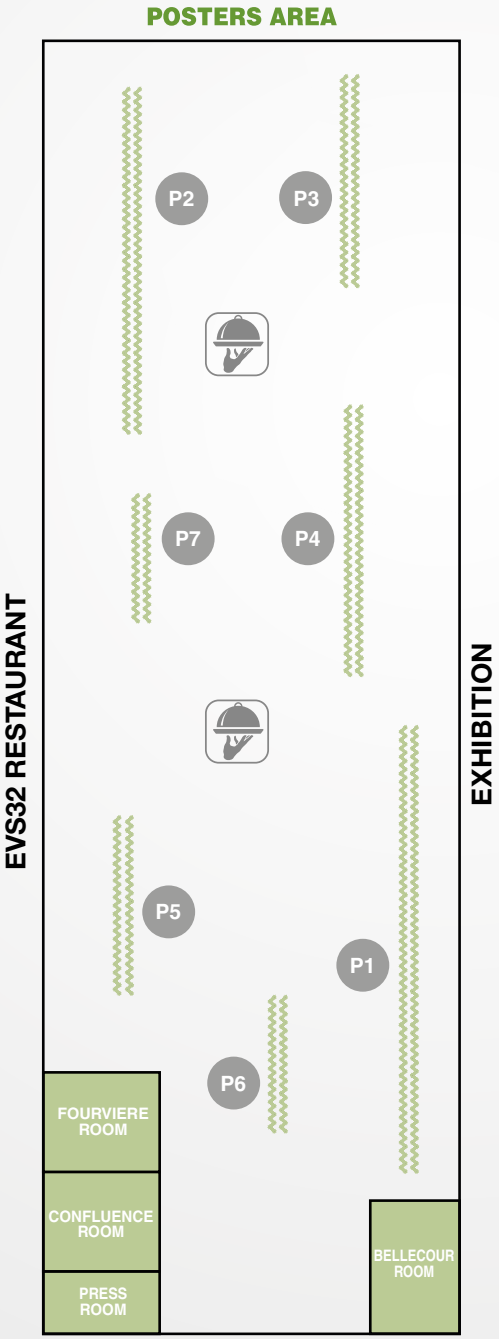
Fees: €30 incl. VAT - Limited places. Registration at the Welcome Desk.

DIALOGUE SESSIONS

Monday, May 20th 01:00 pm - 03:00 pm
Tuesday, May 21st 01:00 pm - 03:00 pm
Wednesday, May 22nd 12:30 pm - 02:30 pm

Hall 6, Posters Area,
between EVS32 Restaurant and National French Pavilion.

	THEMES	POSTER #
	Monday, May 20th	
P1	Vehicles & Transportation Systems	P1M01 to P1M14
P2	Electric Power Train and Application	P2M16 to P2M25
P3	Component Technologies	P3M27 to P3M32
P4	Charging/Fueling infrastructure	P4M33 to P4M41
P5	Entering Mass Market & Demand Issues	P5M42 to P5M48
P6	Energy & Environmental Analyses	P6M51 to P6M60
P7	Mobility Concepts	P7M53 to P7M58
	Tuesday, May 21st	
P1	Vehicles & Transportation Systems	P1T01 to P1T19
P2	Electric Power Train and Application	P2T20 to P2T69
P3	Component Technologies	P3T35 to P3T43
P4	Charging/Fueling infrastructure	P4T44 to P4T54
P5	Entering Mass Market & Demand Issues	P5T55 to P5T59
P6	Energy & Environmental Analyses	P6T60 to P6T70
P7	Mobility Concepts	P7T65 to P7T67
	Wednesday, May 22nd	
P1	Vehicles & Transportation Systems	P1W01 to P1W16
P2	Electric Power Train and Application	P2W17 to P2W28
P3	Component Technologies	P3W29 to P3W37
P4	Charging/Fueling infrastructure	P4W39 to P4W48
P5	Entering Mass Market & Demand Issues	P5W49 to P5W53
P6	Energy & Environmental Analyses	P6W54 to P6W58
P7	Mobility Concepts	P7W59 to P7W61



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AGORA

The EVS32 Agora is located on the Hydrogen Zone.
The detailed program is available on the EVS32 App!

MONDAY, MAY 20TH

02:00 pm - 05:00 pm	Deployment of Fuel Cell Buses - Infrastructure & Hydrogen Regions Organised by
05:00 pm - 06:00 pm	Engie Meeting Organised by

TUESDAY, MAY 21ST

09:00 pm - 12:00 pm	Fuel Cell Electric Vehicles & Hydrogen Refuelling Stations Organised by
12:00 pm - 02:00 pm	Integration of electromobility in the electrical system, RTE study - Avere France Organised by
02.00 pm - 05.00 pm	Fuel Cells in Heavy Duty Transport & FCH Research Organised by

WEDNESDAY, MAY 22ND

10:00 am – 11:00 am	Engie Meeting Organised by

The EDF Agora is located on the EDF Cluster Zone.
The detailed program is available on the EVS32 App!

MONDAY, MAY 20TH

11:00 am - 12:30 pm	Presentation of **CARA, EMOBIL** and **MOVEO**'s members
12:45 pm - 01:15 pm	The ultra light, modular and affordable Lithium-ion battery for automotive and home storage applications, **TYVA-ENERGIE**
01:45 pm - 02:00 pm	Project ALLFRATECH, **CARA, E-MOBIL**
02:00 pm - 02:45 pm	Innovative and Predictive High Efficient Thermal Management System, **SAINT JEAN INDUSTRIES & EFFICIENT MODULAR CONVENIENT CHARGING SYSTEM, CENTUM ADENEO**
03:15 pm - 03:45 pm	EV recharge infrastructure & Gap Analysis in Catalonia, **CATALONIA TRADE & INVESTMENT, CEEC, CIAC**
03:45 pm - 04:15 pm	Electric Autonomous Shuttles and public transport electrification: 101 lessons learnt, **AVAIRX**
04:30 pm - 05:00 pm	NVH assessment and optimization for EVs and HEVs; Modal analysis to assess an automotive chassis part reinforced with composite material, **OROS**
05:15 pm - 05:45 pm	Vision of connected and green vehicles with 2 major focus on aerodynamism and hydrogen system, **PLASTIC OMNIUM**

TUESDAY, MAY 21ST

11:00 am - 12:00 pm	Conference Hydrogen, Hynamics,**EDF**
12:15 pm - 12:45 pm	Embedded and stationary battery charging, **ALPHEE/ERCTEEL**
01:00 pm - 01:30 pm	Electric vehicle charging: manual vs automatic, conduction vs induction, **GULPLUG**
02:00 pm - 03:00 pm	Smart Charging Conference, **EDF**
03:15 pm - 04:00 pm	Batteries recycling & 2nd life cycle, **IFP ENERGIE NOUVELLES, DOCT INNOVATION, LANCEY**
04:00 pm - 04:30 pm	Electric minibuses & motorcycles in Catalonia: Success stories of collaborative projects, **CLUSTER MOTO, EURECAT, IDIADA**
04:45 pm - 05:15 pm	Bidirectional chargers: enabling a clean energy revolution, **WATT&WELL**
05:30 pm - 06:00 pm	Robot T5-37: from concept to realization, **MOB-ENERGY**
06:15 pm - 07:00 pm	Automation and A.I. for Insurtech, **JOLTEE**

WEDNESDAY, MAY 22ND

09:00 am - 09:30 am	EV Charging in Multi-family housing, **ZE-PLUG**
09:45 am - 10:15 am	Hutchinson engineered materials, for battery dynamic thermal management, **HUTCHINSON**
10:30 am - 11:00 am	Play to perform, **CESI**
11:15 am - 11:45 am	France Automobile and Mobility, overview of the Research council roadmap and needs, **PLASTIC OMNIUM**
12:00 pm - 12:30 pm	How AI and Big-Data support Electrical Vehicles customer-centric development, **BETTER WORLD**
12:45 pm - 12:50 pm	The Insurtech company rewarding mobility solution best practices, **JOLTEE**
12:50 pm - 01:15 pm	Need to Protect Access, Applications, Accounts, Or… Objects? **INWEBO**
01:15 pm - 01:40 pm	Blockchain security for IoT trust, Digital Security **(ECONOCOM)**
01:40 pm - 02:00 pm	From an Insurance product to a fully digitalized embedded process, **SINOPTI COURTAGE**

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· Enedis
· Geebee
· Globe 3t
· Groupe Renault
· Hyundai
· Jaguar
· Kia
· Moov-Elec
· Nissan
· SAS Led's Go
· Silence Urban Mobility
· Smart
· Synbio
· Tesla
· Toyota
· Valeo
· Wheel'e
· ZeCombi
1 NATIONAL FRENCH PAVILION SPONSORED BY enedis
2 NATIONAL CHINESE PAVILION
3 NATIONAL NORWEGIAN PAVILION
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AUVERGNE-RHÔNE-ALPES, A LEADING REGION FOR HYDROGEN MOBILITY

INNOVATING FOR MOBILITY OF THE FUTURE

In launching the **Zero Emission Valley** project in 2017, the Auvergne-Rhône-Alpes Region, Michelin, Engie and Symbio were already forerunners in creating an unprecedented public-private partnership involving a local authority and two major industrial companies dedicated to mobility and energy. Having won the European Transport Blending Call, a budget totalling **€70m, comprising €10.1m from Europe and €15m from the Region** has been earmarked for hydrogen mobility.

In 2019, the Auvergne-Rhône-Alpes Region, Engie and Michelin have created a joint stock company SAS HYMPULSION with the Banque des Territoires and Crédit Agricole capitalised at €40m. By 2023, this company is set to install **20 stations, 1,000 vehicles and 15 electrolysers** throughout the region. Two stations have already been scheduled for this year in Chambéry and Clermont-Ferrand.

The hydrogen mobility market is now up and running on a regional scale.

Companies and local authorities in Auvergne-Rhône-Alpes, you too can become an H2 mobility ambassador!

Come and meet us at
EVS32 at LYON EUREXPO
from 19 to 22 May 2019, on our 1,200 m² hydrogen stand

Cofinancé par le mécanisme pour l'interconnexion en Europe de l'Union européenne

La Région Auvergne-Rhône-Alpes

Région Auvergne-Rhône-Alpes – Design: WANTED!