

IARC 2014

14th International Automobile Recycling Congress IARC 2014

March 19 – 21, 2014, Brussels, Belgium



Patronage:

- Alliance of Automobile Manufacturers
- Association of European Automotive and Industrial Battery Manufacturers (EUROBAT)
- Automotive Recyclers Association (ARA)
- Confederation of European Waste-to-Energy Plants (CEWEP)
- European Association of Automotive Suppliers (CLEPA)
- European Group of Automotive Recycling Associations (EGARA)
- Institute of Scrap Recycling Industries (ISRI)
- Japan Automobile Manufacturers Association (JAMA)
- Japan Automotive Recyclers Association (JARA)
- Malaysia Automotive Recyclers Association (MAARA)
- PlasticsEurope



FOREWORD



MANFRED BECK

Chairman of
the Steering Committee
International Automobile
Recycling Congress

Now in its 14th year, the International Automobile Recycling Congress (IARC) has firmly established itself as *the* event for the international automotive recycling industries. IARC 2014 is expected to attract hundreds of car recyclers and a host of other interested parties. Attendees will converge on the Belgian and "European" capital of Brussels to hear about latest relevant developments from politicians, as well as from experts in the vehicle manufacturing and recycling arenas.

Today's "buzzword" seems to be E-mobility. People are asking for answers to some of the greatest challenges of our time. Is there a replacement for our scarce petroleum resources? How can CO₂ emissions be cut? Can we reduce the demand for energy? The answers lie in sustainable mobility. E-mobility therefore replaces oil with

renewable electricity, thereby reducing fuel consumption, CO₂ emissions and overall energy consumption. This means that, to cover the same distance, a car running on electricity requires only about one quarter of the energy of a combustion engine.

But E-mobility – including full electric vehicles and plug-in hybrids, as well as hydrogen fuel cell vehicles that convert hydrogen into electricity – also poses a challenge for the recycling of end-of-life-vehicles. In two of its sessions, IARC 2014 will address the E-mobility issue from different angles, including:

- E-mobility in road transport – European deployment strategy and action plans for E-mobility;
- Plug-in hybrid electric vehicles – recycling performance of a leading generation of environmental vehicles;

- MORE – a project on recycling components and strategic metals of electric drive motors;
- LIBRES – a new way of confronting the challenges of lithium-ion battery recycling.

Another important issue is the European Union's ELV Directive. As of January 1, 2015, this requires 85% reuse and recycling, as well as 95% reuse and recovery. Is that achievable? And if so, how can we reach these targets? Keynote speaker Artemis Hatzihull, Policy Officer of the European Commission's DG Environment, will shed light on the results of the ELV Directive Fitness-Check.

Other presentations will address issues such as: how to reach the 95% goal with a successful business model; development of ELV recycling in Germany; and the potential for a dismantler to reach the 95% target and to

be profitable without developing the market of reused parts.

During the three-day event, the following topics will also be addressed:

- The outlook for ELV recycling – modern cars and adapted recycling technologies;
- Innovative steel – effective solutions to comply with future regulations applying to vehicles;
- Post-shredder technology – lessons learned within the last 12 months;
- Recycling of complex precious metals materials for the automotive industry;
- Development and implementation of innovative and sustainable technologies for the use of scrap tyre rubber in road pavements.

During the congress, commercial presentations – so-called "Tool Box Talks" – will

be held in the exhibition area with a focus on the recycling industry. In addition, delegates have the opportunity to make a test drive in a BMW i3.

For the day after the congress, the organisers have planned interesting plant tours to: ARN's shredder residue processing plant at Tiel in the Netherlands; Toyota Motor Manufacturing France, Valenciennes, France; and the ferrous metal recycling plant of Groupe Comet in Obourg, Belgium.

And, of course, no congress can succeed without sufficient networking opportunities. For this purpose, IARC 2014 offers an attractive combination of coffee breaks, lunches, cocktail receptions, a free beer bar and a networking dinner.

I look forward to welcoming you at IARC 2014.

KEYNOTE SPEAKERS



PETER KRONSCHNABL

BMW Group Belux
President & CEO
Belgium

“BMW i3 – An example of efficient use of new materials for better performance and longer life cycle”

ARTEMIS HATZI-HULL

European Commission
DG Environment
Green Economy – Waste Management & Recycling
Policy Officer
Belgium

“The results of the ELV Directive Fitness-Check”



PROF. DUAN WENG

Tsinghua University
Institute for Energy & Environment Materials
Director
China

“How will China’s circular economy model develop?”



INTERNATIONAL STEERING COMMITTEE



MANFRED BECK
Chairman
Recycling International
Editor
Netherlands



JAN BOLLEN
ArcelorMittal Technology
Environment Product Manager
Belgium



PROF. WIJNAND DALMIJN
Emeritus Professor
Delft University of Technology
Netherlands



FERDINAND KLEPPMANN
CEWEP President
ITAD Chairman
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OLIVIER FRANÇOIS
Vice-Chairman
Group GALLOO Recycling
Market Development Officer
France



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FIAT Research Center
Materials and Process Technologies
Head of Interiors Materials &
Technologies Unit
Italy



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ARN Holding B.V.
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Committee
Honda Motor Europe Ltd.
Recycling Manager
Belgium



CORINE BUFFONI
Ecore Luxembourg SA
Assistant Director
Luxembourg



WOLFGANG HANG
BMW Group
Department Manager
Recycling
Germany



RICHARD PAUL
Environmental Management
Consultant
USA



DR RUGGERO ALOCCI
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Italy



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WILLY TOMBOY
RECHARGE
Chairman of the
Industrial Battery
Working Group
Belgium



DR MICHAEL BIDDLE
MBA Polymers, Inc.
President and Founder
USA



DANIEL CHRISTEN
Stiftung Auto Recycling Schweiz
Managing Director
Switzerland



STEVE HOPE
Toyota Motor Europe NV/SA
General Manager
Environmental Affairs and
Corporate Citizenship
Belgium

LOCATION & ACCOMMODATION

For the participants of the congress a number of rooms are held at a special rate if you register **before January 31, 2014**. If you wish, you may also extend your stay at this lovely hotel at the same special rate.



The 14th International Automobile Recycling Congress will be held from **March 19 – 21, 2014** in the hotel Dolce La Hulpe near charming Brussels.

The hotel Dolce La Hulpe, Brussels is located in the heart of the ancient Sonain forest only 15 km away from Brussels center and Brussels International Airport Zaventem and 40 km away from Charleroi Airport.

The hotel offers a premier on-site conference location with a lot of benefits: The hotel can easily be reached by car and there are enough parking spaces available at no charges. High speed WiFi is provided free of charge in the whole property.



Hotel Dolce La Hulpe Brussels****

135, Chaussée de Bruxelles
1310 La Hulpe, Belgium
Phone +32 2 290 98 00
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www.dolcelahulpe.com



ENTER THE CARBON AGE.

We had a bronze and then an iron age, followed by countless technological discoveries over the centuries. Now the BMW i3 is boldly introducing a new age in personal mobility, the carbon age. Enter carbon fiber components that offer greater solidity and less weight, countless technological innovations, a high-performance motor and energy management, **sustainable materials and responsible production techniques**. To see what this means in terms of dynamics and the sheer pleasure of driving, get behind the wheel of the avant-garde electric vehicle that offers up to 300 km* of genuine autonomy. **Find your BMW i Partner on www.bmw.be/i3 or book a testdrive at the IARC 2014 event.**

BMW i3. BORN ELECTRIC.

* Depending on the version you choose.

Environmental information (RD 19/03/04): www.bmw.be

0-0.6 L/100 KM • 0-13 G/KM CO₂

CONGRESS PROGRAM IARC 2014

TOOL BOX TALKS
Wednesday 14.00 – 15.30

TUESDAY, MARCH 18, 2014

17.00 – 19.00 Registration

WEDNESDAY, MARCH 19, 2014

08.00 – 09.30 Registration and welcome coffee in the exhibition area

Session 1: OPENING AND KEYNOTE SPEAKERS

09.30 – 11.00 "Welcome and Introduction"
Manfred Beck, Chairman of the Steering Committee

"BMW i3 – An example of efficient use of new materials for better performance and longer life cycle"
Peter Kronschnabl, BMW Group Belux, Belgium

"How will China's circular economy model develop?"
Prof. Duan Weng, Tsinghua University, China

11.00 – 11.30 Coffee break in the exhibition area

Session 2: E-Mobility I Session Chairman: **Julien Van Damme, Honda Motor Europe Ltd., Belgium**

11.30 – 12.00 "Electro-Mobility in road transport: European deployment strategy and action plans for Electro-Mobility"
Willy Tomboy, RECHARGE, Belgium

12.00 – 12.30 "Plug-in Hybrid Electric Vehicles – Recycling performance of a leading generation of environmental vehicles"
Ronny Denis, Toyota Motor Europe NV/SA, Belgium
Pierre-François Bareel, Groupe Comet, Belgium

12.30 – 14.00 Lunch in the exhibition area

Session 3: E-Mobility II Session Chairman: **Julien Van Damme, Honda Motor Europe Ltd., Belgium**

14.00 – 14.30 "MORE – A project on recycling of components and strategic metals of electric drive motors"
Dr Ulrich Bast, Siemens AG, Germany

14.30 – 15.00 "LIBRES – A new way of facing the challenges of Lithium-Ion battery recycling"
Hannes Rabitsch, MAGNA STEYR Engineering AG & Co. KG, Austria
Dr Cornelia Bayer, MAGNA STEYR Battery Systems AG & Co. KG, Austria

15.00 – 15.30 "Automotive Recycling: Product- versus Material-Recycling"
Dr Florian Finsterwalder, RD/RMP, Daimler AG, Germany

15.30 – 16.00 Coffee break in the exhibition area

Session 4: Innovative recycling technologies Session Chairman: **Richard Paul, Environmental Management Consultant, USA**

16.00 – 16.30 "Outlook on ELV-Recycling – Modern cars and adapted recycling-technologies"
Lutz Zur-Lage, Volkswagen AG, Germany

16.30 – 17.00 "Innovative steel: Effective solutions to comply with future regulations on vehicles"
Antoine Gauriat & Jan Bollen, ArcelorMittal, Luxembourg

17.00 – 18.30 "Bierfass" reception in the exhibition area
sponsored by  **maireg**
Precision Metals Recycling

19.30 Networking dinner in the castle "Château de La Hulpe"

TOOL BOX TALKS
Wednesday 14.00 – 15.30

TOOL BOX TALKS SCHEDULE

NETWORKING DINNER



THESE PRESENTATIONS ARE HELD IN THE EXHIBITION AREA

WEDNESDAY, MARCH 19, 2014

14.00 – 15.30

Tool Box Talks



"Processing of shredder light fraction from car recycling"
Markus Schmelz, Herbold Meckesheim GmbH, Germany



"Coin recovery and its commercialisation from shredder products and incineration bottom ashes"
Dr Ulrich Kohaupt, JOEST GmbH + Co. KG, Germany
Georg Schons, GS Gesellschaft für Umwelt- und Energie-Serviceleistungen mbH, Germany



"EV, HEV, P-HEV BATTERIES: Experience feedback: From craft to industrialization for battery recycling"
Eric Nottez, SNAM, France

"The economic optimization of the shredder process by improving the scrap quality and achieving a total metal recovery"
George Bond, Metal & Waste Recycling Ltd., United Kingdom

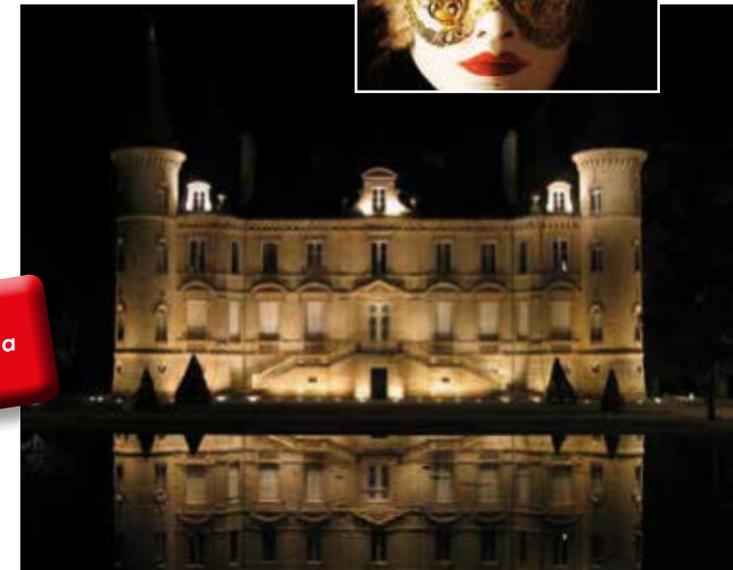


On Wednesday, March 19, 2014 a memorable networking dinner will be organized in the beautiful castle "Château de La Hulpe".

Do not miss this perfect possibility to meet your friends and business partners in a nice atmosphere and register to this evening now! Space is limited!



Meet friends and business partners in a nice atmosphere!



CONGRESS PROGRAM IARC 2014

THURSDAY, MARCH 20, 2014

08.00 – 09.00 Welcome coffee in the exhibition area

Session 5: Available recycling technologies
Session Chairman: Jan Bollen, ArcelorMittal Technology, Belgium

09.00 – 09.30 "PST plant lessons learned within the last 12 months"
Hans van de Greef, ARN, Netherlands

09.30 – 10.00 "Recycling of complex precious metals materials for the automotive industry"
Mikhail Khaimov, MAIREC Edelmetallgesellschaft mbH, Germany

10.00 – 10.30 "Development and implementation of innovative and sustainable technologies for the use of scrap tyre rubber in road pavements"
Prof. Ezio Santagata & Prof. Maria Chiara Zanetti, Politecnico di Torino, Italy

10.30 – 11.00 Coffee break in the exhibition area

Session 6: Update on the European ELV Directive
Session Chairman: Willy Tomboy, RECHARGE, Belgium

11.00 – 11.30 **KEYNOTE SPEAKER**
"The results of the ELV Directive Fitness-Check"
Artemis Hatz-Hull, European Commission, Belgium

11.30 – 12.00 "The new ELV Directive – A major challenge for the 28 EU member countries and the industry"
Dr Beate Kummer, Scholz AG/Kummer: Umweltkommunikation GmbH, Germany

12.00 – 13.30 Lunch in the exhibition area

Session 7: Challenges to reach recycling targets
Session Chairman: Willy Tomboy, RECHARGE, Belgium

13.30 – 14.00 "How to reach the 95% with a successful business model?"
Olivier Pitavy, Ecore-GDE, France

14.00 – 14.30 "Development of ELV-recycling in Germany"
Sebastian Will, bvse-Bundesverband Sekundärrohstoffe und Entsorgung e.V., Germany

14.30 – 15.00 "Is it possible for a dismantler to reach the 95% target and to be profitable without developing the market of reused parts?"
Olivier Gaudeau, INDRA SAS / Re-source Engineering Solution, France

15.00 – 15.30 Coffee break in the exhibition area

Session 8: How to succeed in the recycling economy
Session Chairman: Corine Buffoni, Ecore Luxembourg SA, Luxembourg

15.30 – 16.00 "Data holds the key to automotive recycling industry's bold transformation"
Michael E. Wilson, Automotive Recyclers Association (ARA), USA

16.00 – 16.30 "From car to car, Icarre 95: Car manufacturer's contribution to the 95% target through closed loops development and circular economy enhancement"
Cécile Fournier, RENAULT, France

16.30 – 17.00 "The processing of shredder residue in a market driven economy"
Mason Miller, Tenenbaum Recycling Group, USA

from 17.00 "Bierfass" reception in the exhibition area
sponsored by 

PLANT TOURS IARC 2014

FRIDAY, MARCH 21, 2014



ARN, TIEL (NETHERLANDS)

08.15	Departure by bus to ARN, Tiel (Netherlands)
11.00	Arrival at ARN, Tiel (Netherlands)
11.00 – 13.30	Visit of the post shredder technology plant
17.00*	Arrival at the Brussels International Airport (Zaventem), Belgium
18.15	Arrival at the hotel Dolce La Hulpe Brussels, Belgium

In 2015, 95% of End-of-Life vehicles must be recycled, in line with the EU directive 2000/53/EG. How can countries comply with this guideline? **ARN's** answer to the question includes the post shredder technology (PST) plant in Tiel, which should make an important contribution towards achieving 95%. ARN received financial contribution through Life+ for this solution, the intention is that ARN should be a role model for other countries.

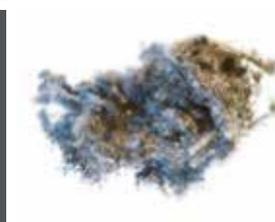
The Life+ financing programme is intended to promote the development and execution of European nature and environmental policy. The application for financing this extensive project was successful since the PST plant can make a real contribution to achieve the end-of-life vehicle recycling guideline.

In April 2011, ARN opened a new PST facility in Tiel, aiming at 95% recycling. The facility processes shredder residue to a further stage. Since July 2013 the plant is in full (24 hours) operation with 3 shifts a day, five days a week.

Shredder waste is transformed into useful material flows, using PST.

www.arn.nl

* No guarantee on arrival due to traffic conditions.



PLANT TOURS IARC 2014

FRIDAY, MARCH 21, 2014

GRUPE COMET, OBOURG (BELGIUM)



08.00	Departure by bus to Groupe Comet, Obourg, Belgium
09.30	Arrival at Groupe Comet, Obourg, Belgium
09.30 – 13.00	Visit of the ferrous metal recycling plant
15.15*	Arrival at the Brussels International Airport (Zaventem), Belgium
16.30	Arrival at the Hotel Dolce La Hulpe Brussels, Belgium

Groupe Comet specialises in collecting and processing ferrous and non-ferrous metals, plastics, tyres, end-of-life vehicles (ELV), electrical and electronic waste (EEW) and shredder residues and is involved in purchasing and sales at an international level.

The diverse nature of its activities, the geographical location of its sites, its Research and Development (R&D) department and above all its technological expertise and processing capacity have made Groupe Comet an environmental centre of excellence in its field.

His expertise enables to achieve a recovery rate for end-of-life vehicles (ELV) of over 95%. We aim to be a European and international leader in recycling technology, to contribute to developing industrial processes and making them more environmentally friendly and to produce new raw materials through recycling.

www.groupecomet.com

* No guarantee on arrival due to traffic conditions.



PLANT TOURS IARC 2014

FRIDAY, MARCH 21, 2014

TOYOTA MOTOR MANUFACTURING FRANCE (TMMF) **TOYOTA** VALENCIENNES (FRANCE)

07.30	Departure by bus to TMMF, Valenciennes (France)
09.00	Arrival at TMMF, Valenciennes (France)
09.00 – 13.00	Visit of the car manufacturing plant
15.00*	Arrival at the Brussels International Airport (Zaventem), Belgium
16.15	Arrival at the Hotel Dolce La Hulpe Brussels, Belgium

Toyota Motor Manufacturing France (TMMF) has been building the Yaris for 13 years. It remains committed to delivering vehicles with the highest levels of built-in quality in the B-segment. The Yaris has already established a reputation for outstanding levels of Quality, Durability and Reliability. Such quality can only be assured through its comprehensive integration into every facet of the Toyota manufacturing process.

Yaris production site in Onnaing (Northern France) was designed and built for environmental performance. The site is considering environment preservation as a major strategic development axis. In production terms, this involves saving natural resources and reducing the activities' impact on the environment.

One in five in the world, the Toyota Onnaing site was named "sustainable plant" by Toyota Motor Corporation (group headquarters in Japan) in December 2007. This makes the Onnaing site an industrial reference in environment performance in the eyes of TMC. This nomination comes as recognition for the Onnaing site's successive achievements in environmental matters.

As such, TMMF is committed to:

- 1 – Realizing groundbreaking environmental performance through the introduction of innovative technologies and kaizen (improvement) activities.
- 2 – Conserving the local ecosystem through afforestation at plant sites, and contributing to the local community, sharing good practices with employees and local community.
- 3 – Using renewable resources.

www.toyota-valenciennes.com

* No guarantee on arrival due to traffic conditions.



EXHIBITION AND POSTER PRESENTATIONS

EXHIBITORS
AS PER NOVEMBER 29, 2013



The exhibition area provides your company with the perfect opportunity to reach key industry decision makers. Promote your products to all congress attendees.

The fee for an exhibition booth (2m x 3m) is EUR 3'500.- and for a poster presentation EUR 350.- for the full time of the conference.

Space is limited, so take the chance and book your exhibition booth or your poster presentation today!



REGISTER BY
JAN. 31, 2014
TO RECEIVE
DISCOUNT RATE

WHO SHOULD ATTEND?



- Automobile manufacturers
- Automotive parts and materials suppliers
- Automobile importers and dealers
- Recycling and dismantling companies
- Shredding companies
- Ferrous and non ferrous metal traders
- Plastics industry
- Non ferrous metal industry
- Ferrous and stainless steel industry
- Collection and transportation companies
- Financing organizations for ELV recycling
- Environmental authorities
- Universities and research institutes
- Laboratories for material science



Registration for the congress should be made by means of the registration form or online. Participants registering and paying **before January 31, 2014** will benefit from a reduced registration fee. The registration fee includes congress, entrance to the exhibition, proceedings and luncheons.

REGISTRATION FEES

	before January 31, 2014	after January 31, 2014
Congress Fee		
Fee for participants	EUR 1'490.-	EUR 1'590.-
Fee for speakers	EUR 890.-	EUR 990.-
Fee for students	EUR 590.-	EUR 690.-
Networking dinner (March 19, 2014)	EUR 100.-	EUR 120.-
Networking dinner spouse (March 19, 2014)	EUR 120.-	EUR 140.-
Plant tours (March 21, 2014):		
- ARN	EUR 40.-	EUR 60.-
- Groupe Comet	EUR 40.-	EUR 60.-
- Toyota Motor Manufacturing France	EUR 40.-	EUR 60.-

Congress registration on site EUR 100.- surcharge

Online registration

You may also register online at: www.icm.ch/iarc-2014

Additional Proceedings

If it is not possible for you to attend the congress, you may purchase the complete proceedings at EUR 350.-. Participants will get the proceedings free of charge.

Payment

Payment should be made in EUR by bank transfer or by credit card. Wire payment to:

Beneficiary: ICM AG
 Bank: Neue Aargauer Bank, 5400 Baden, Switzerland
 IBAN: CH41 0588 1044 7941 7200 0
 Swift code: AHHBCH22XXX
 Currency: EUR

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Upcoming ICM Events:

www.icm.ch

13th International Electronics Recycling Congress IERC 2014

IERC
2014



January 22 – 24, 2014
Salzburg, Austria



19th International Congress for Battery Recycling ICBR 2014

ICBR
2014



September 24 – 26, 2014
Hamburg, Germany



Electronics Recycling Asia WRF 2014

WRF
2014



November 11 – 14, 2014
Singapore



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