CHAdeMO in Europe FY2015

1 June 2016

PRESENTATION PLAN

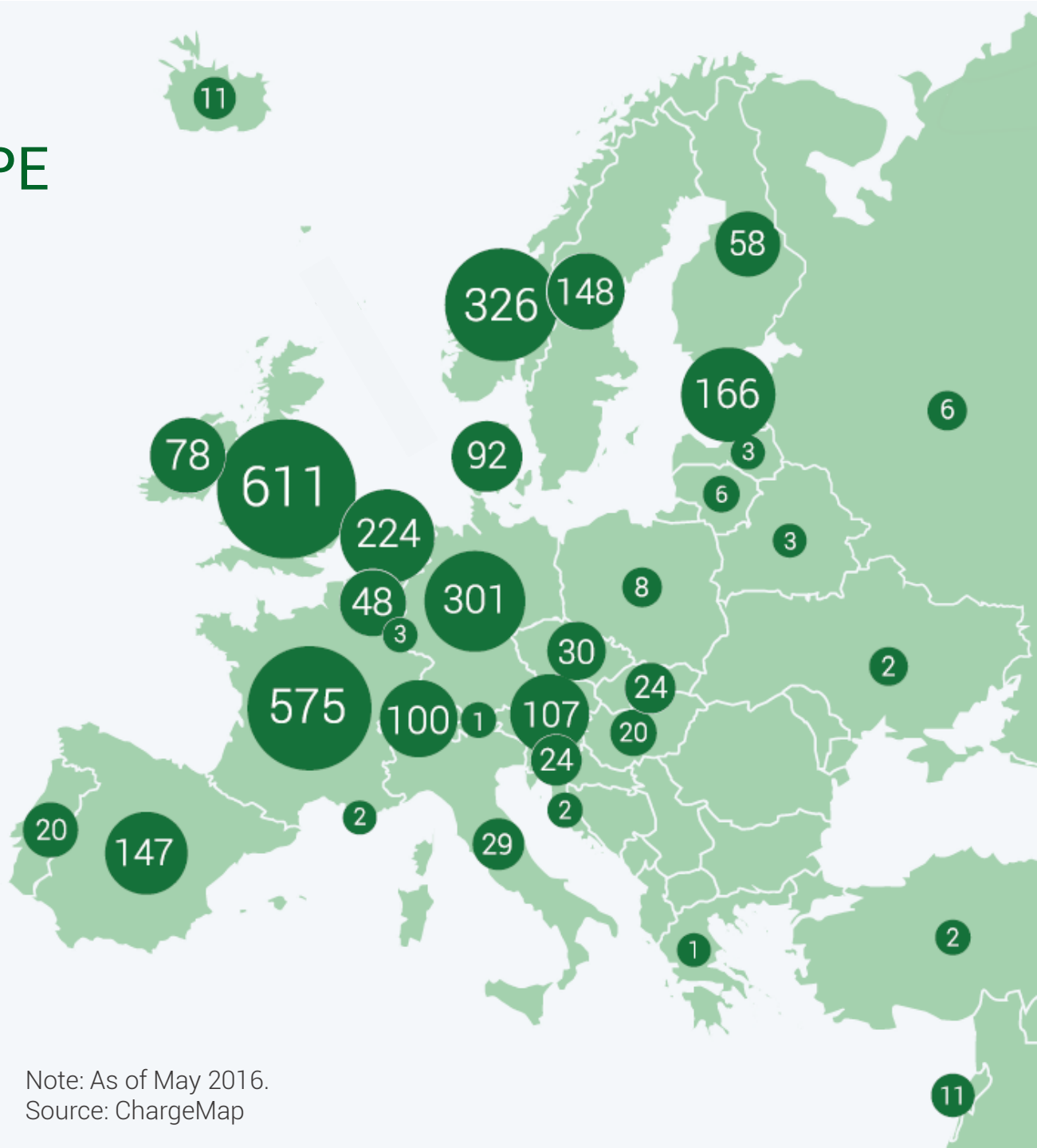
- European charger installation
  - Latest installation
  - Charger density evolution
  - Multi-standard chargers
  - European projects

- CHAdeMO Europe's activities
  - Trade shows
  - Member meeting
  - Communication tools

CHAdeMO CHARGERS IN EUROPE

3,178

TOTAL



Note: As of May 2016.
Source: ChargeMap

CHAdeMO

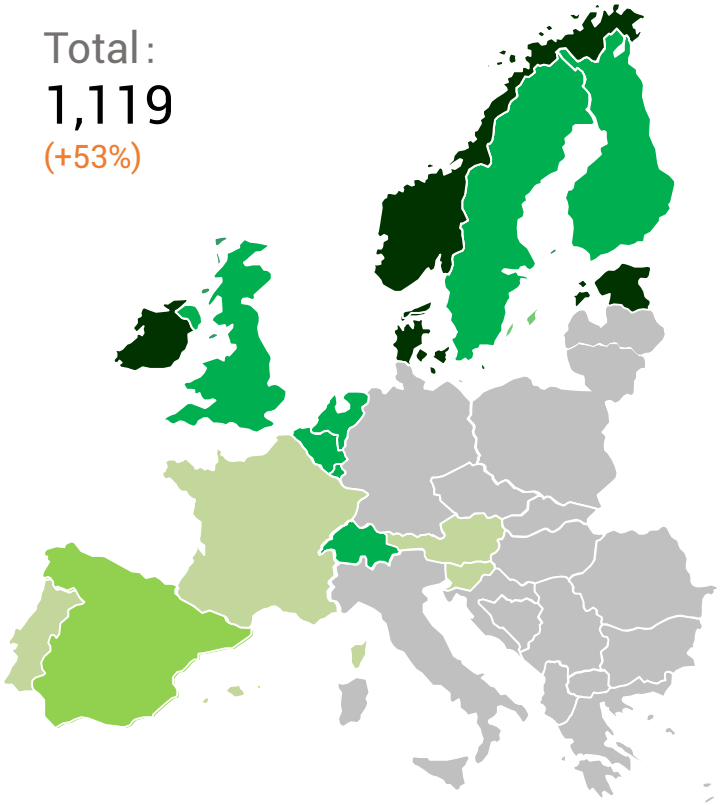
Charger density evolution

CHAdeMO density

- < 1 FC / 1 m residents
- < 2 FC / 1 m residents
- < 3 FC / 1 m residents
- < 4 FC / 1 m residents
- < 5 FC / 1 m residents
- <10FC / 1 m residents
- ≧10FC / 1 m residents

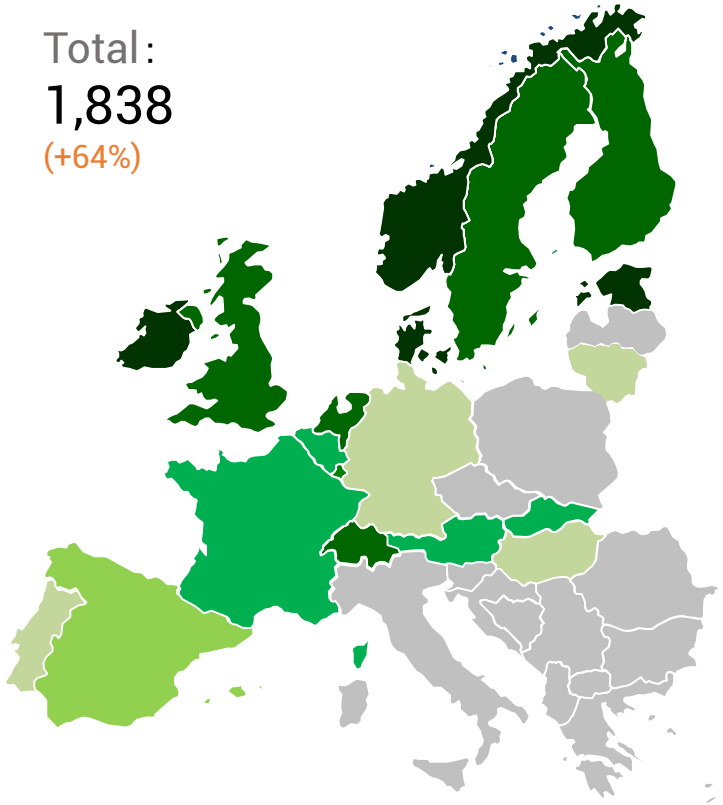
May 2014

Total :
1,119
(+53%)



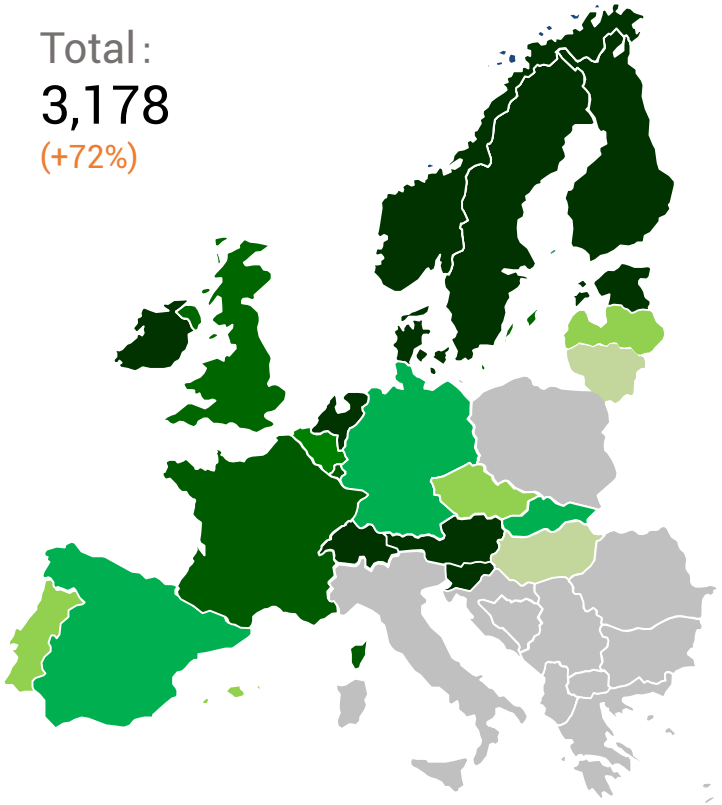
May 2015

Total :
1,838
(+64%)



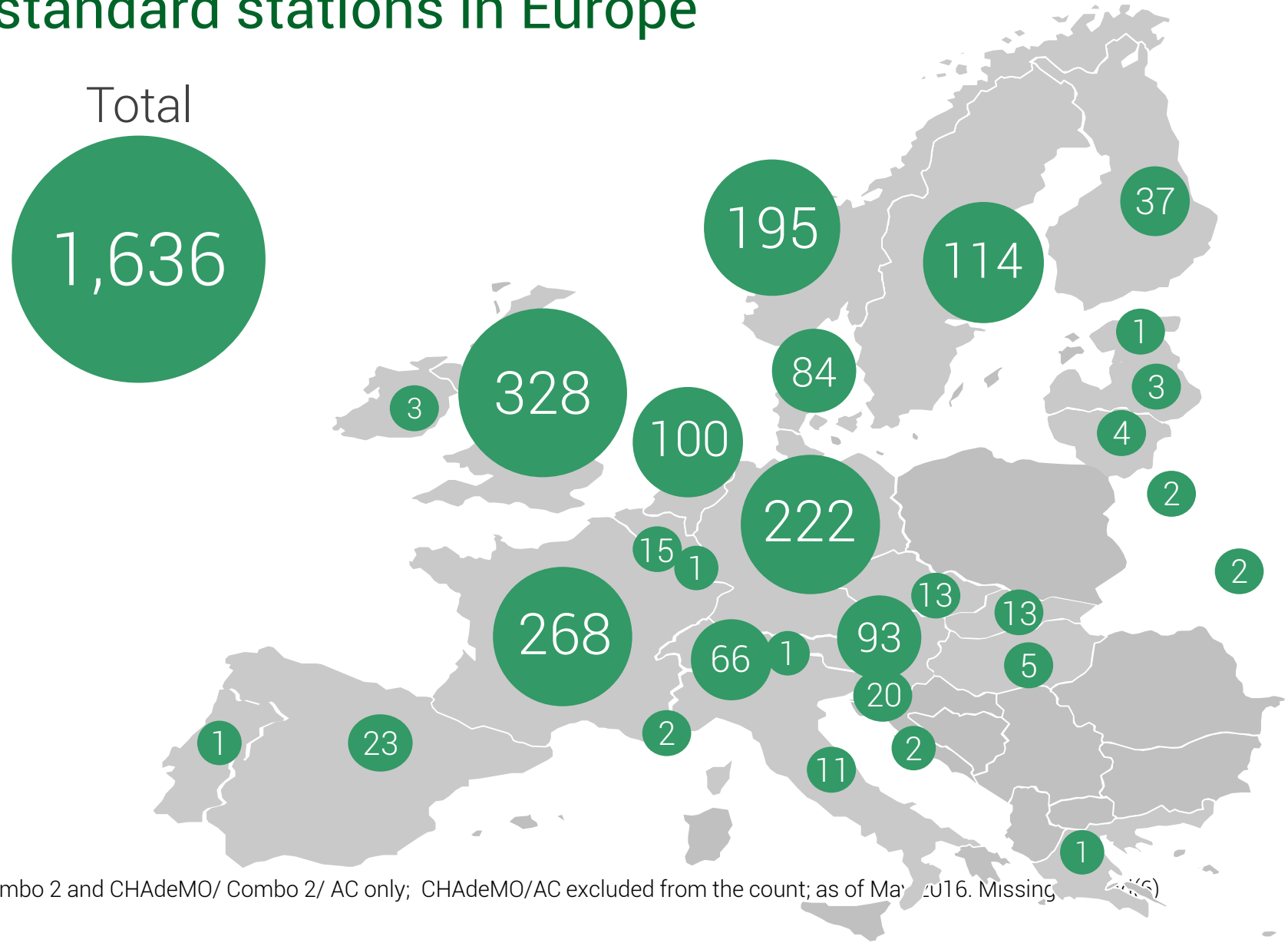
May 2016

Total :
3,178
(+72%)



Note: Missing Iceland and Belarus from the map.
Source: CHAdeMO Association

Multi-standard stations in Europe



Note: CHAdeMO/ Combo 2 and CHAdeMO/ Combo 2/ AC only; CHAdeMO/AC excluded from the count; as of Ma[illegible]2016. Missing [illegible](s)
Source: ChargeMap

The EU projects (TEN-T 2013-2015)

- **RCN** (74)
  The UK, Ireland
- **Greening NEAR** (53)
  Denmark
- **ELECTRIC** (155)
  Sweden, Denmark, Germany, The Netherlands
- **CEGC** (115)
  Austria, Slovakia, Slovenia, Germany, Croatia
- **CORRI-DOOR** (200)
  France

Co-financed by the European Union
Trans-European Transport Network (TEN-T)

Directive 2014/94/EU
(Recital 33)

*Interface to charge electric vehicles could include **several socket outlets or vehicle connectors** as long as one of them complies with the technical specifications set out in this Directive, so as to allow **multistandard recharging.***

Total multistandard chargers

597

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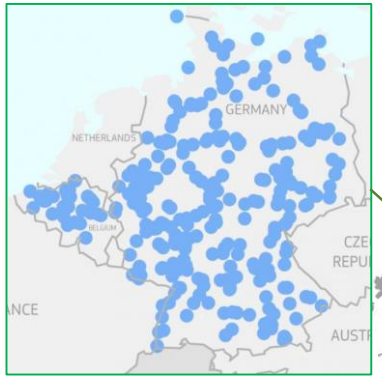
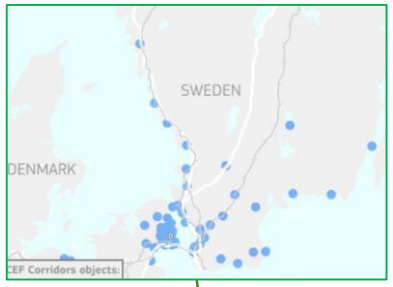
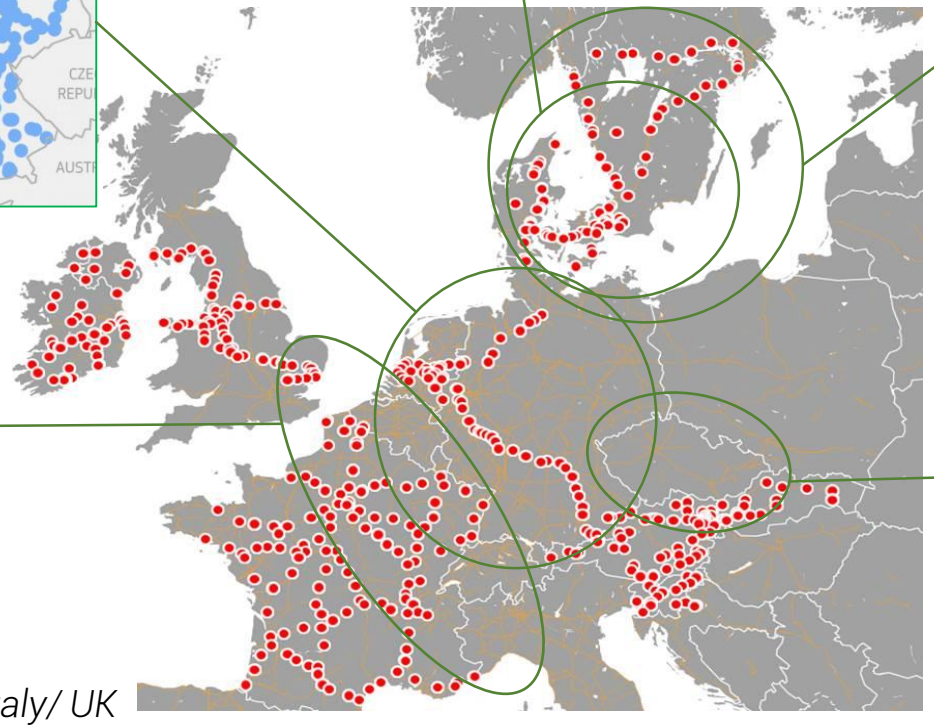
The EU projects (CEF 2014-2017)

- **FAST-E DE/BE** (278)
  Belgium/Germany

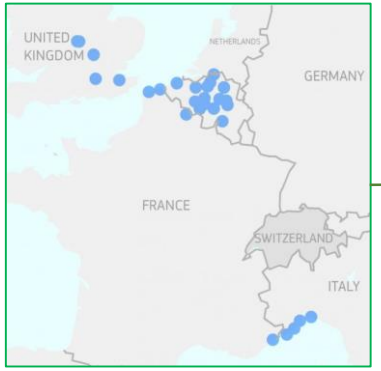




- **MECOR** (120)
  Denmark/Sweden



- **GREAT** (65)
  Denmark/Sweden/Germany



- **UNITE-E** (38)
  France/Belgium/Italy/ UK

- **FAST-E CZ/SK** (29)
  Czech Republic/Slovakia

Total multistandard chargers

530

CHAdeMO

Mobilitec / Hannover Messe

- Hannover, April 2015
- Biggest ever stand (85m2)
- 9 co-exhibitors

CHAdeMO

eCarTec

- Munich, October 2015
- 80m2 with 9 co-exhibitors
- 2EVs 3 multistandard chargers 2 V2XPCS 1 connector 1 BMS

CHAdeMO

Member Meeting 2015:10/20 @ Munich

34 Participants AM

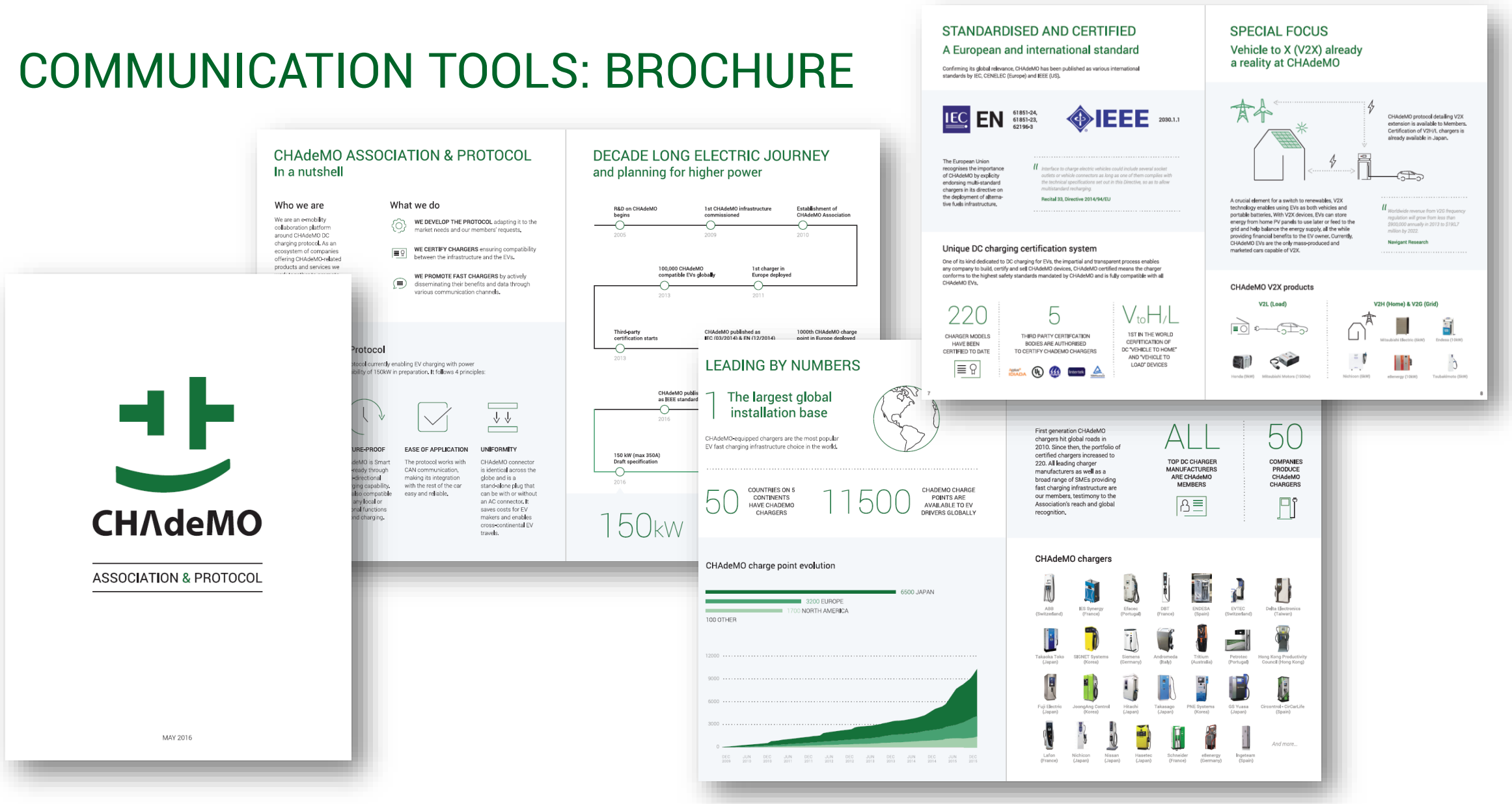
54 Participants PM

11 Presentations

4.3 Overall satisfaction

Note*: Not at all satisfied = 1, Extremely satisfied = 5. 93% rated 4 or 5 for overall satisfaction.
Sample: 22

COMMUNICATION TOOLS: BROCHURE



Note: new brochure can be downloaded/viewed from: http://www.chademo.com/wp/wp-content/uploads/2016/04/brochure_04.2016.compressed.pdf

COMMUNICATION TOOLS: NEWSLETTERS/ARTICLES

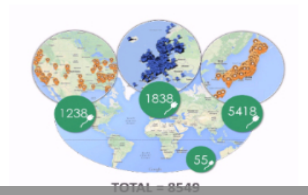
Newsletter

CHAdeMO Powered

NEWSLETTER #3
July 2015

Dear CHAdeMO member,

Summer is finally here and, with all the e-mobility events that are happening in June, we can really feel the heat! You will actually see it in the newsletter - we prepared a lot of important updates and news for you. Without further delay, in this 3rd issue of CHAdeMO Europe 2015 newsletter we talk about:



TOTAL = 8549

CHAdeMO numbers continue to grow

While still a niche, fast charging market continues to grow - and a last year's over 100% growth of CHAdeMO charge points globally, from 3,740 to 8,549, is a testimony to that. Europe has just reached 1838, i.e. a 50% growth compared to 2014, Japan almost doubled its fast charging infrastructure reaching 5418 last month and the US saw 400 new chargers being added to their count since June 2014.

...'s representative ...ntly interviewed

Electrive.com, a leading e-mobility industry news provider, has interviewed Tomoko Blech, CHAdeMO's European representative, during Hannover Messe. Watch the video to find out what she has to say about the infrastructure developments in Europe and Germany!

Events

Last chance! Join CHAdeMO booth at eCarTec Munich 2015, 20-23 October 2015

Once again we are exhibiting at eCarTec, the biggest e-mobility faire in Europe. With 5 charger and 1 connector manufactuers and 2 car manufacturers we have secured an **80sqm booth** which is as big as our booth at Hannover Messe this year. Our booth will be in a very attractive location, along the main

Website

Information

...oaded on About us > General Assembly &

...r Clever shares its experiences of fast charging

...nbers: Circontrol, EVTEC, Fujikura, IES, JAE
...ver Messe 2016, 25-29.04.2016. Come and see
...ee ticket please follow this link)

...was published.

CHAdeMO

29/02/2016

CHADEMO PUBLISHED AS IEEE STANDARD

IEEE STANDARDS ASSOCIATION IEEE

CHAdeMO, the most widely deployed DC fast charging protocol in the world and already an IEC/EN standard, has gained another formal recognition last month as it was published as **IEEE Standard 2030.1.1TM-2015**, following the draft approval by the IEEE Standards Association Board in September 2015.

With an active portfolio of nearly 1,300 standards and projects under development, IEEE Standards Association is a leading developer of industry standards in a broad range of technologies, not just in the automotive sector.

IEEE Standard 2030.1.1TM-2015 is provided to assist developers for the reason of necessary interoperability and defines requirements for the designs of electric vehicles (EV) and DC fast chargers that promote efficient and rapid charging between EVs and chargers. The standard specifies the collaborative actions between EVs and fast chargers, referencing relevant international specifications including SAE Combo.

More concretely, Annex A of IEEE Standard 2030.1.1TM-2015 contains CHAdeMO specifications up to version 1.0.1. Amendment 1. This annex A gives detailed specifications for charging station and vehicle manufacturers, which conform to Annex AA of IEC 61851-23 and Annex A of IEC 61851-24. The detailed specifications include design and performance requirements not found in the IEC standards.

CHAdeMO as IEEE standard was published in 2014, following which CENELEC, the European standardization organization, recognized CHAdeMO as EN standard the same year. These publication marks another milestone in CHAdeMO's standardization effort, which has been one of the pillars of the work of the Association.

"We are delighted to have received an official recognition by IEEE, the world's largest technical professional association," Dave Yoshida, CHAdeMO Association's Secretary General, said. "With this US-based standard, CHAdeMO is now endorsed in the biggest EV market in the world, following the EN standards for Europe and the JIS standards for Japan. CHAdeMO shall continue to support EV expansion from the infrastructure side, in close collaboration with our Members and other e-mobility stakeholders."

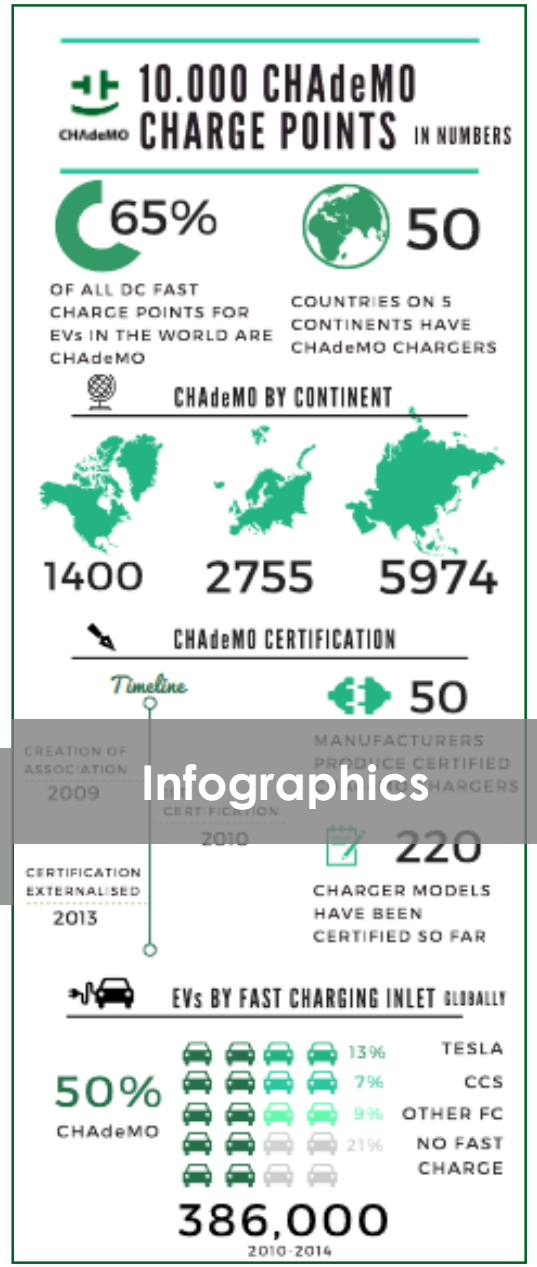
Headquartered in the U.S.A., IEEE (Institute of Electrical and Electronics Engineers) is the technical professional association "dedicated to advancing technology for the benefit of **Standards Association** is the globally recognized standards-setting body within IEEE consensus standards through an open process that engages industry and brings together a br community.

For more information, please contact: CHAdeMO Association Europe, www.chademo.com, mfr

CHAdeMO ver.1.0 Certified Chargers

1.0 chargers are certified interoperability, safty and quority based on CHAdeMO standard specification.

Infographics



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