

Presentation to California Air Resources Board Regarding ACC II DC Fastcharging Requirement

June 9, 2022

CHAdemo Association



CHAdemo Association



Our
members:

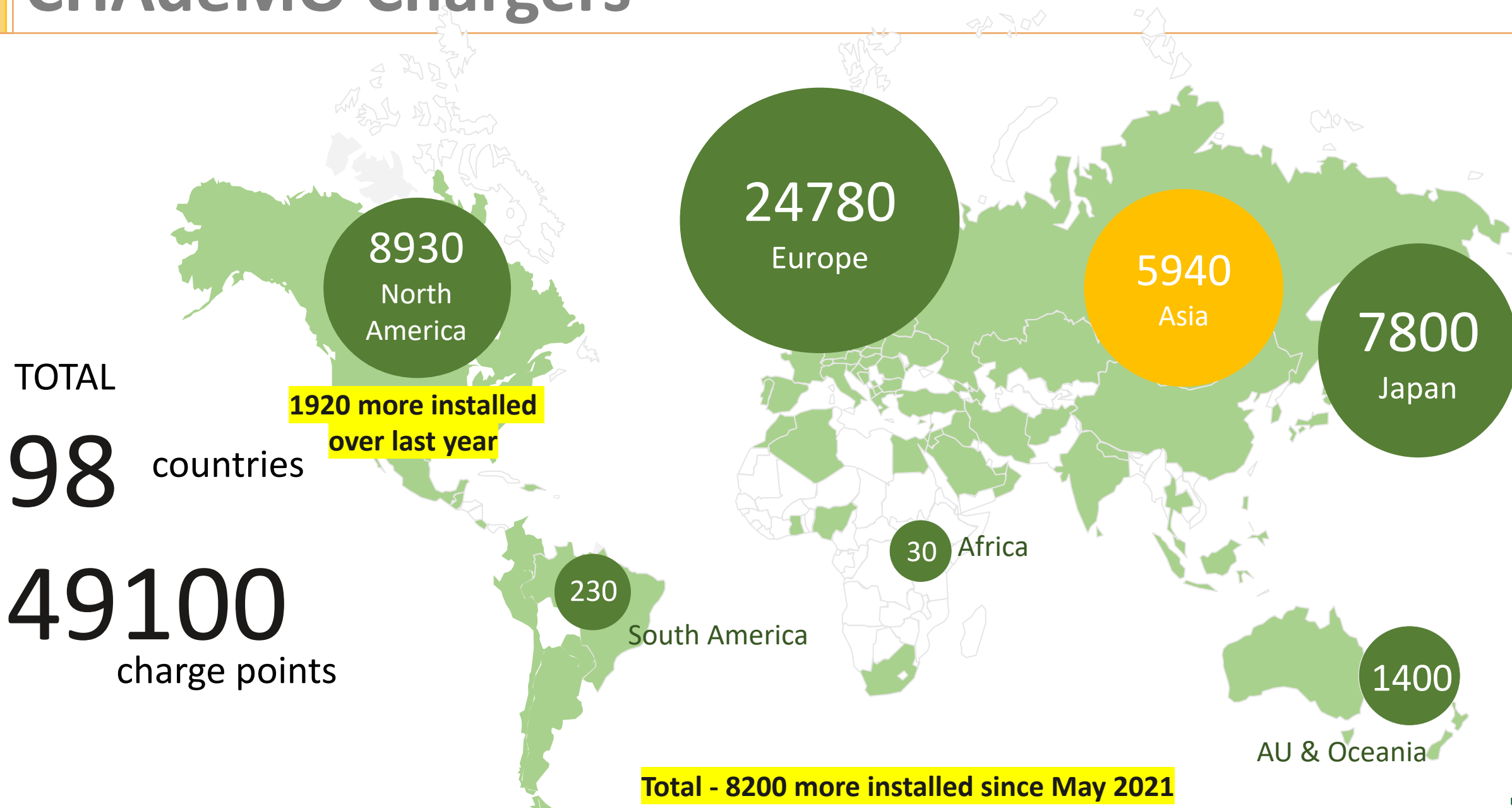
517

entities
from

47

countries

CHAdemo Chargers



Request

Regarding Staff's Proposal for Standardization of Fast Charge Electric Vehicle Supply Connectors:

CHAdEMO supports Staff's proposal to require all battery electric vehicles to be DCFC capable. [Performance Standard]

However, CHAdEMO strongly opposes Staff's proposal to require all 2026 and subsequent model year vehicles to use Combined Charging System (CCS) 1 Standard (also known as SAE1772 standard). [Prescriptive Standard]

State of DCFC Technology

CHAdemo agrees with Staff:

*“Even as staff’s proposal is under consideration, technology is rapidly developing, battery costs are coming down, and charging behavior is being studied —**and is changing** —as the BEV market grows.” (ISOR p.46)*

Charging Standard not a Problem

Staff justification for the requirement - EV consumers confused by three different DCFC systems creating *“inconsistent and complex charging experiences for consumers”*. (ISOR p.55)

But, according to CARB’s February 2022 *Electric Vehicle Supply Equipment Standards Technology Review*, CARB staff stated, “inoperable stations and payment issues continue to be barriers for drivers.”

Table 1: Barriers Drivers Experience at Public Charging Stations













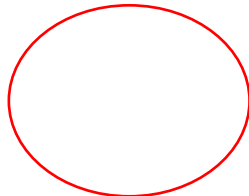


Barriers to Using Public Charging	Number of Drivers
Membership requirements	575
Charging station operability issues	439
Too Expensive	224
Payment Issues	209
Too complicated	164
Finding Charging Stations	121
Lack of Charging Station Availability	39
Declined to State	35
Cell Service/Wi-Fi Availability	2

Table 2: Why PEV Drivers Contacted Customer Service

Reasons for Contacting Customer Service	Number of Drivers
1. Charging station unit not working	261
2. Vehicle connector on charging station was broken	105
3. Charging station shut off during charging session	69
4. No way to pay with my credit card on charging station	66
5. Not a member of the network	45
6. Insufficient cell service to download mobile app	35
7. Billing and Payment Issues	10
8. Technical Issues	5
9. Membership Issues	6
10. Cell Service	1
11. Assistance with Charging Station	7
12. General Assistance	3
13. File a complaint	1
14. Miscellaneous Statement	1
15. Declined to state	2
Total	617

This report makes no mention of EV consumer issues with the DCFC Charging Connectors.

Recommendations – VGI and Conformity

	CHAdemo (Global)	CCS 1 (US, Korea)	CCS 2 (EU)	TESLA (PROPRIETARY)
				
 	✓	✓	✓	
 	✓			
 	✓		✓	
 	✓	✓	✓	
Conformity Assessment/ Certification	✓ (EVSE)			This is the problem with Public DCFC Charging - incompatibility
Bi-directional Energy Flow (VGI)	✓		Over 40,000 EVs in California are capable today!	

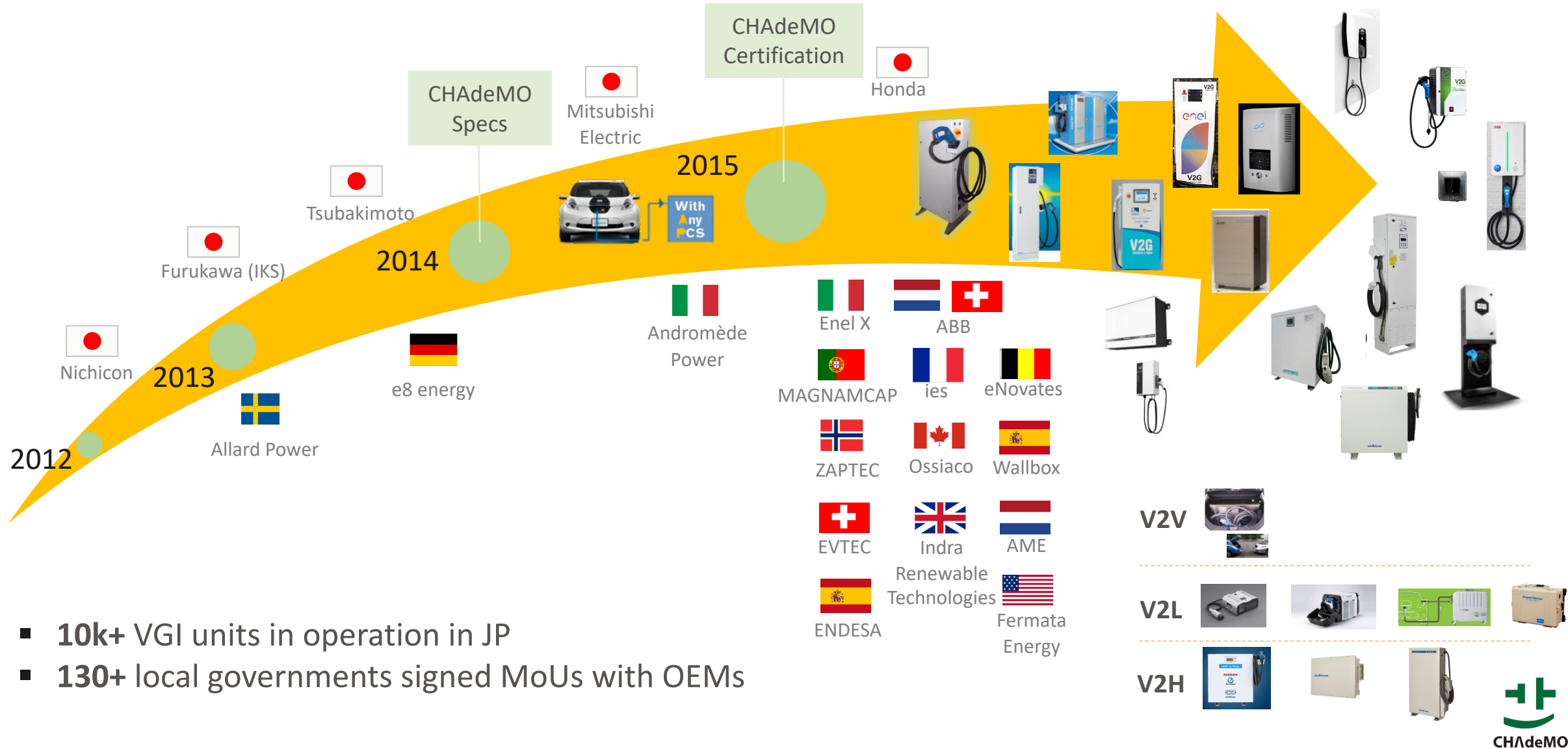
CPUC Goals to Demonstrate “VGI”

FINAL REPORT OF THE CALIFORNIA JOINT AGENCIES VEHICLE-GRID INTEGRATION WORKING GROUP, June 30, 2020, California Public Utilities Commission DRIVE OIR Rulemaking (R. 18-12-006)

Policy recommendation #5 - Pilot funding for EV backup power to customers not on microgrids, including state-wide goals for at least 100 EVs by 2021 and 500 EVs by 2022; utilities to consider the feasibility of EVs for emergency backup generation in PSPS plans and resiliency solutions

Today, this is only possible using existing vehicles with the CHAdeMO Standard.

VGI/V2G products in the market since 2012



Summary

1. **It is clearly not time to force DCFC standardization** – instead, let the pioneering spirit of charging and vehicle manufacturers select the proper DCFC charging solution.
2. Competition is good – let the Automakers decide the useful technology – not a prescriptive regulatory mandate.
3. Consumers are not confused about DC charging connectors – let's give the driving public credit for common sense.
4. Consumers ARE CONFUSED where they can SUCCESSFULLY charge. Need is for true compatibility between vehicle and charger.

Thank you

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