Nissan supports world's first fully commercial vehicle-to-grid hub in Denmark

29.08.2016 (Copenhagen) – The world's first fully commercial[1] vehicle-to-grid (V2G) hub is now operating in Denmark thanks to the collaboration between global automotive manufacturer Nissan, multinational energy company and smart grid technologies pioneer Enel, and California-based company Nuvve, a leading V2G services provider.

Gareth Dunsmore, Director of Electric Vehicles, Nissan Europe said: *"Tackling the environmental challenges that face societies around the world requires smart thinking and a new approach to traditional energy management and distribution models. Today's ground-breaking announcement in Denmark marks a major step in tackling these challenges head on. With V2G technology, electric vehicles will play an integral part in the energy management systems of the future. The fact that a company has commercially integrated this technology paves the way for the wider commercial roll out of this technology across Europe."*

Gregory Poilasne, Nuvve's Chairman and CEO said: *"Nuvve is excited to be part of the first ever commercial V2G fleet with both Frederiksberg Forsyning and Energinet.dk. In collaboration with Nissan and Enel, we plan to roll out many more V2G projects in Denmark and other countries in the near future, using commercial and standard vehicles and chargers linked with Nuvve's intelligent aggregation platform GIVe™".*

Becoming the first customer to commercially integrate and host V2G units at its headquarters in Copenhagen, utility Frederiksberg Forsyning has installed 10 Enel V2G units and purchased 10 zero emission, 100 percent electric Nissan e-NV200 vans that will join the company's fleet. When the e-NV200s are not in use, they can be plugged in to the new Enel V2G units on site and can receive energy from and provide energy back to the national grid on demand, effectively turning the vans into mobile energy solutions. The total capacity made available by the 10 kW Enel V2G chargers amounts to approximately 100 kW.

Nuvve is the provider of the platform that controls the power flow to and from the cars. The platform, initially developed by the University of Delaware and now supported and commercialised by Nuvve, ensures that the driver's mileage needs are always met and optimises the power available to the grid.

With Nissan electric vehicles, dual energy flow enabled by Enel V2G chargers and managed by Nuvve's aggregation platform, Frederiksberg Forsyning will become an active participant in Denmark's energy management system, helping to stabilise and balance demand on the grid.

By participating in this initial project, Danish grid operator Energinet.dk is keen to apply the findings from the commercial implementation of the V2G hub to adapt the national network in order to better integrate EVs and provide ancillary services to stabilise the grid.

[1] Fully commercial means that the project is entirely based on components and technologies that can be purchased by consumers, from the electric vehicles to the recharge units and the platform that manages the V2G system.