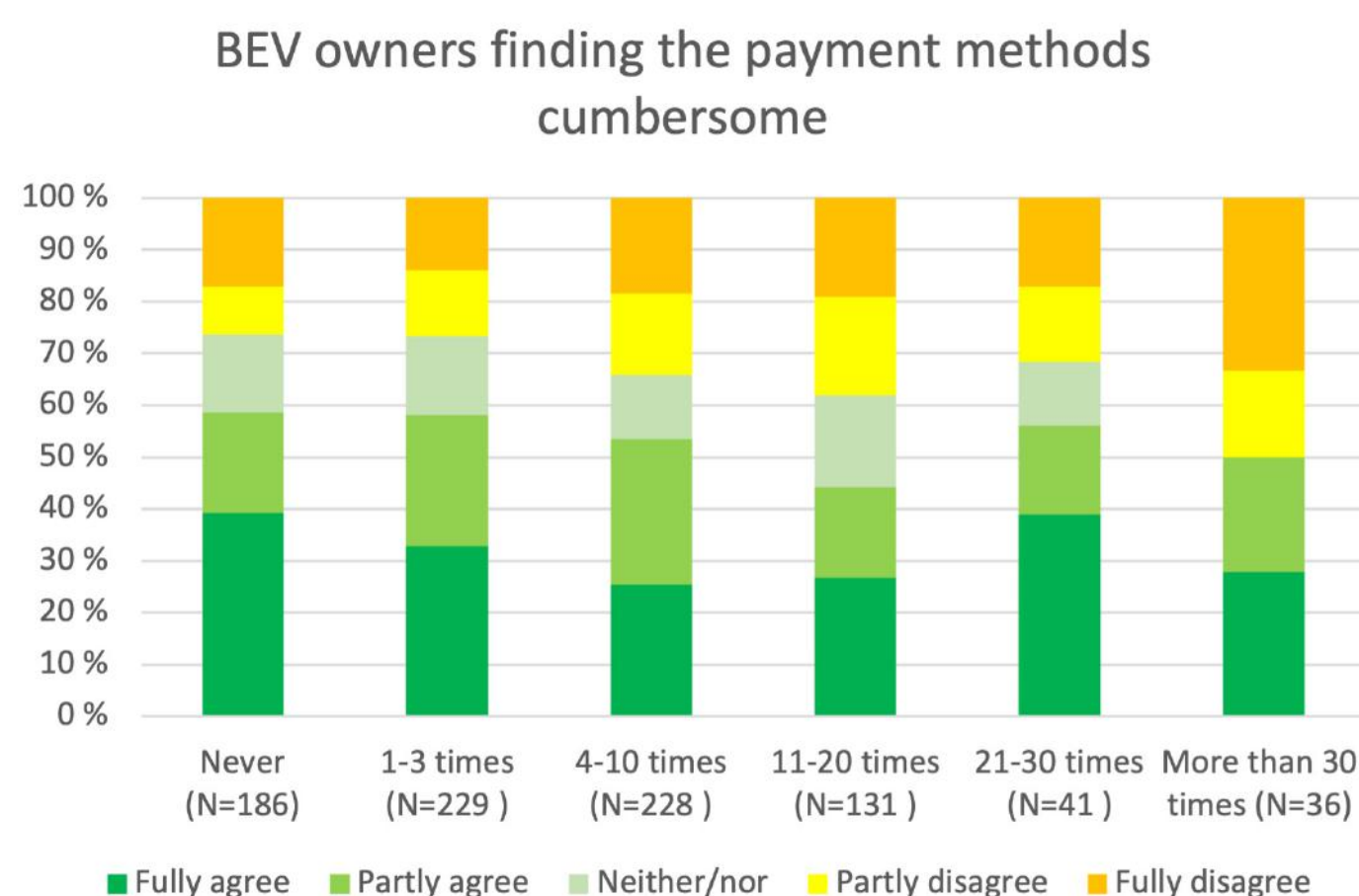


Astrid H. Amundsen, Vibeke Milch

Institute of Transport Economics, Oslo, Norway, aha@toi.no

*"To charge a BEV should be just as simple as filling petrol at a petrol station. Drive to the station, insert the cable, and pay with credit card. I have never experienced that this succession differs between different petrol stations. It should be alike to use all public charging stations; it should be simple". (Quote from BEV owner)*



**Figure:** BEV owners finding the payment methods cumbersome, depending on number of public charging's

### Need for increased user friendliness of public (+50 kW) chargers

- One common app
- Possible to use bank card
- One common pricing system (visible to customers)
- Universal design (charging method, cables etc.)
- User friendly information
- Basic amenities (toilets, shelter, food etc)

### Complicated to use

- > 20 Charging operators
- > 20 APPs to access all
- Bank cards not usable
- Different pricing system
- Different chargers/cables

*"It should have been a common method for payment at all public charging stations, without having to download an app to the phone. Should be possible to pay with debit or credit card. Not everybody is comfortable with apps, especially the elderly". (Quote from BEV owner)*

*"The problem is lacking information about how fast I'm charging; how much I'm charging and how much it costs. These three things tend to be hidden for most operators. It's normal when you're finished charging that you know how much you've spent, unless you've brought a calculator and do the math yourself". (Quote from BEV owner)*

