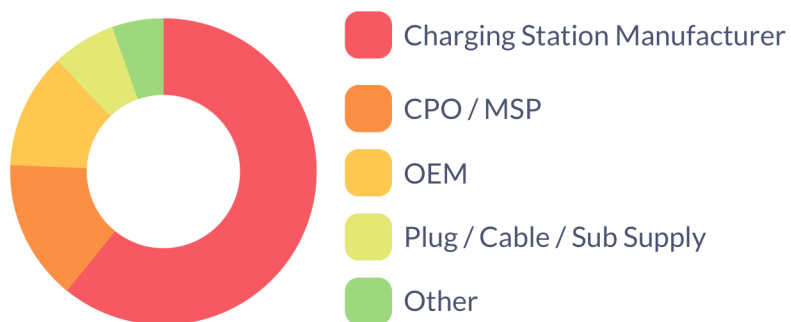


# CharIN BPT Survey

## Insight into CharIN expert view

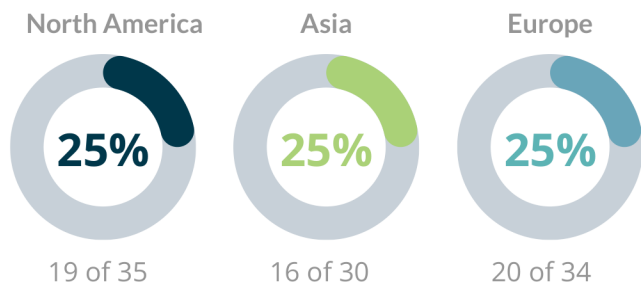
### Industry players participating

We conducted a survey within our community of industry expert to rate several aspects of the bidirectional charging (also called V2X). The following graphic shows the stakeholders of the survey participant.



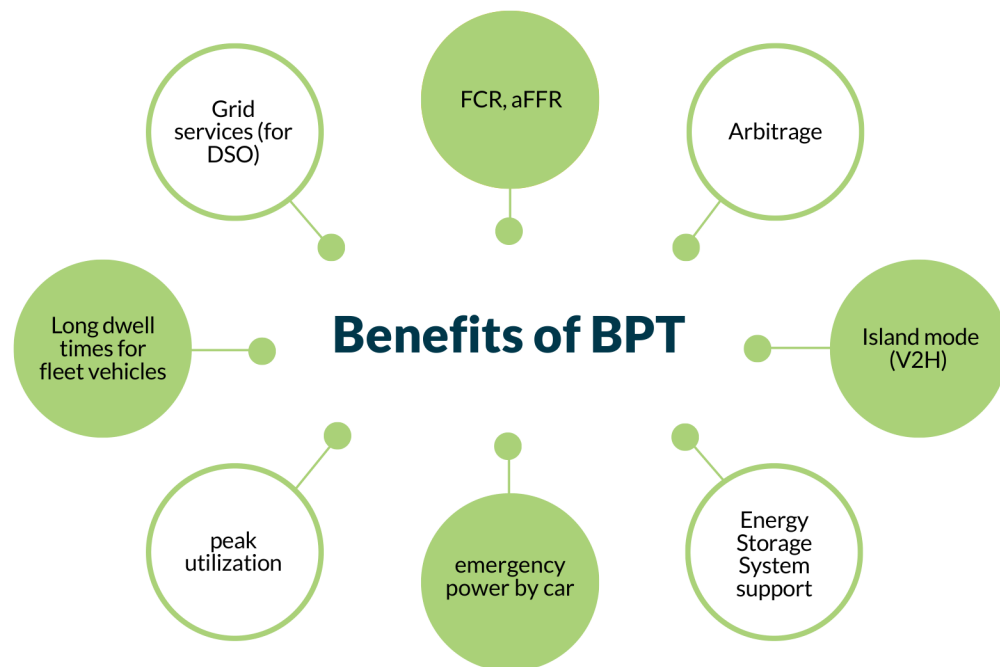
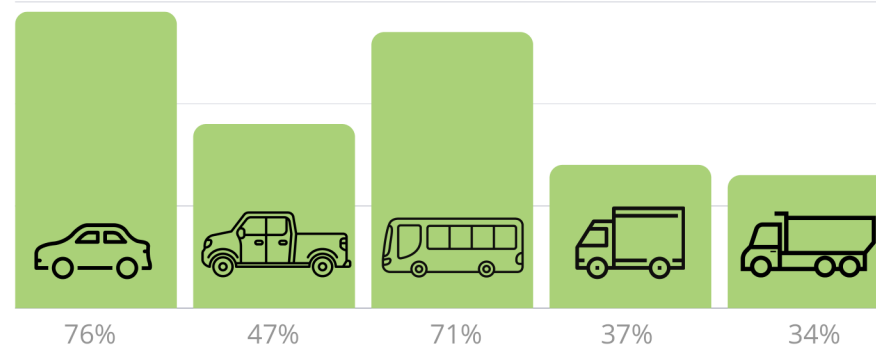
### Market readiness for BPT

The industry representatives think that the current implementation level of bidirectional charging per region seems similar like figured in the voting below



### Most relevant vehicle types for BPT

Our members rated the importance of the following vehicle types for V2G use cases

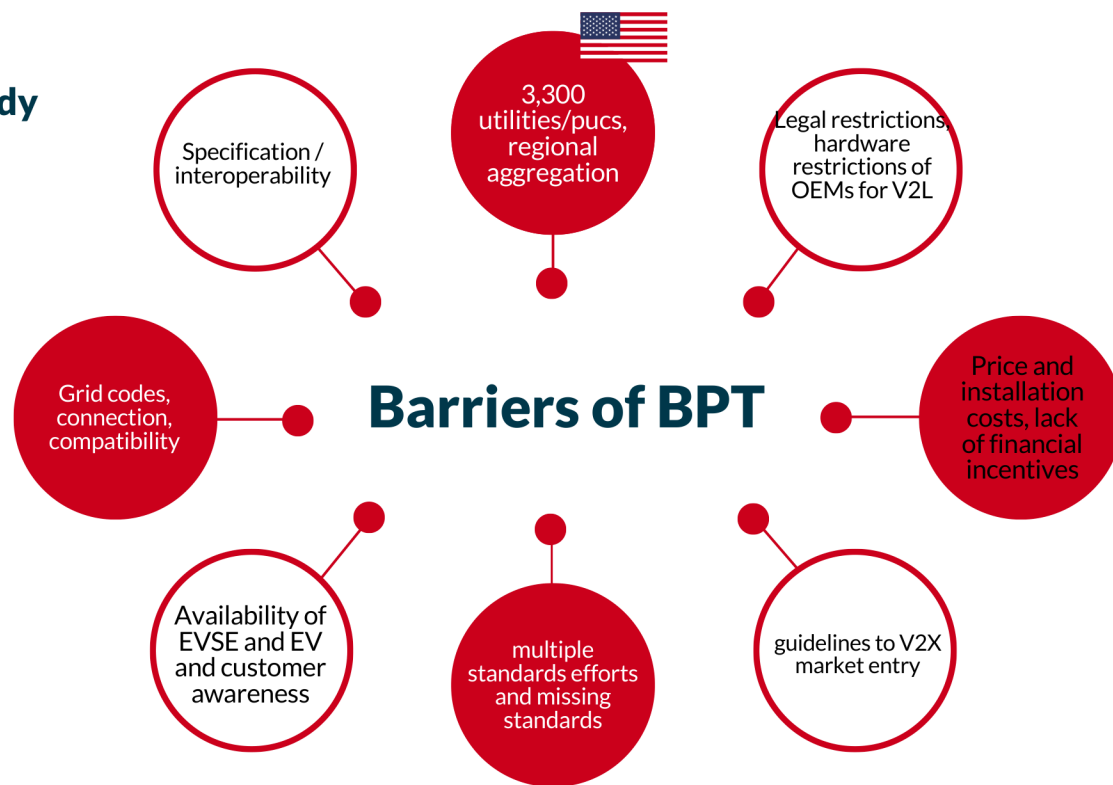
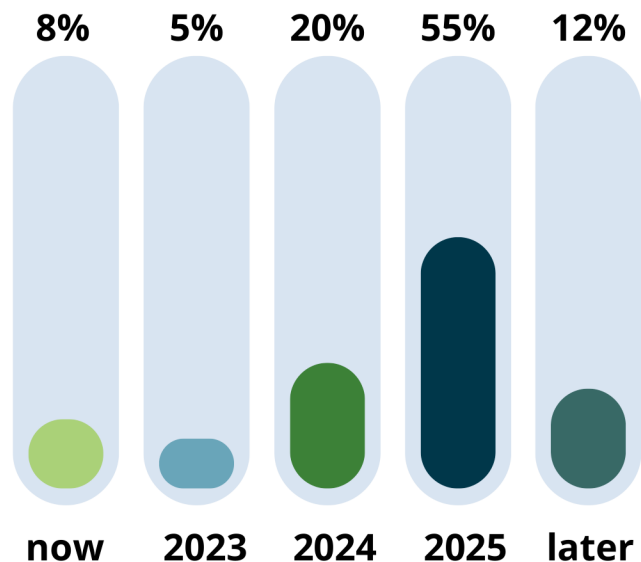


# CharIN BPT Survey

## Insight into CharIN expert view

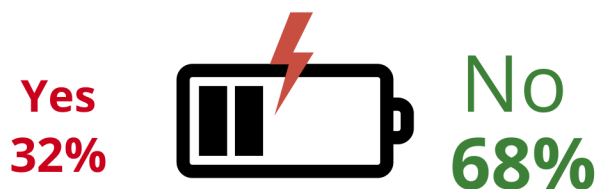
### Time expectation for BPT to be market ready

2025 seems to be the year where V2X will be commercial available from majority of stakeholders



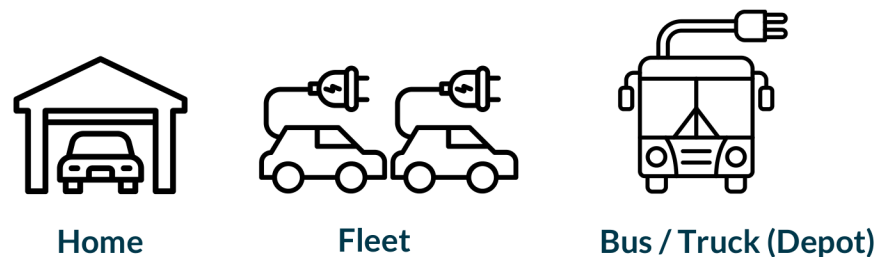
### Does discharging leads to significant battery degradation?

This was the result of asking our experts if discharging leads to battery degradation and impacts the battery life. The majority of the experts see no risk with battery degradation.



### Top 3 Use Cases for Bidirectional Charging

We think that these use cases will be the most important ones but many more to consider as well



# CharIN BPT Survey



Conformance & Interoperability Test



Grid Code compliance



EV owner reimbursement



Grid connection requirements

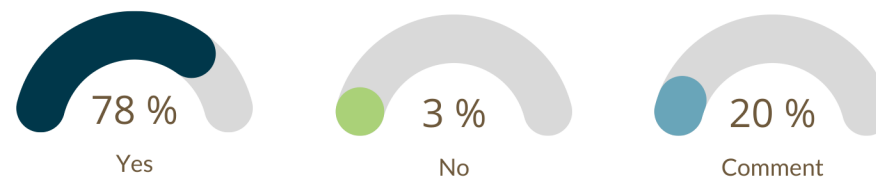


Coordination with OCA (OCPP 2.1) development

Enhance ISO15118-20

## Do you intend to implement ISO15118-20 for bidirectional charging?

Majority of our stakeholders are working on V2X using ISO 15118-20



- When ISO Conformance Test document (ISO 15118-21) is available
- Partly implementation of ISO15118-20

