

T3.3. - Results: User preferences for charging schemes – a survey in eight EU countries

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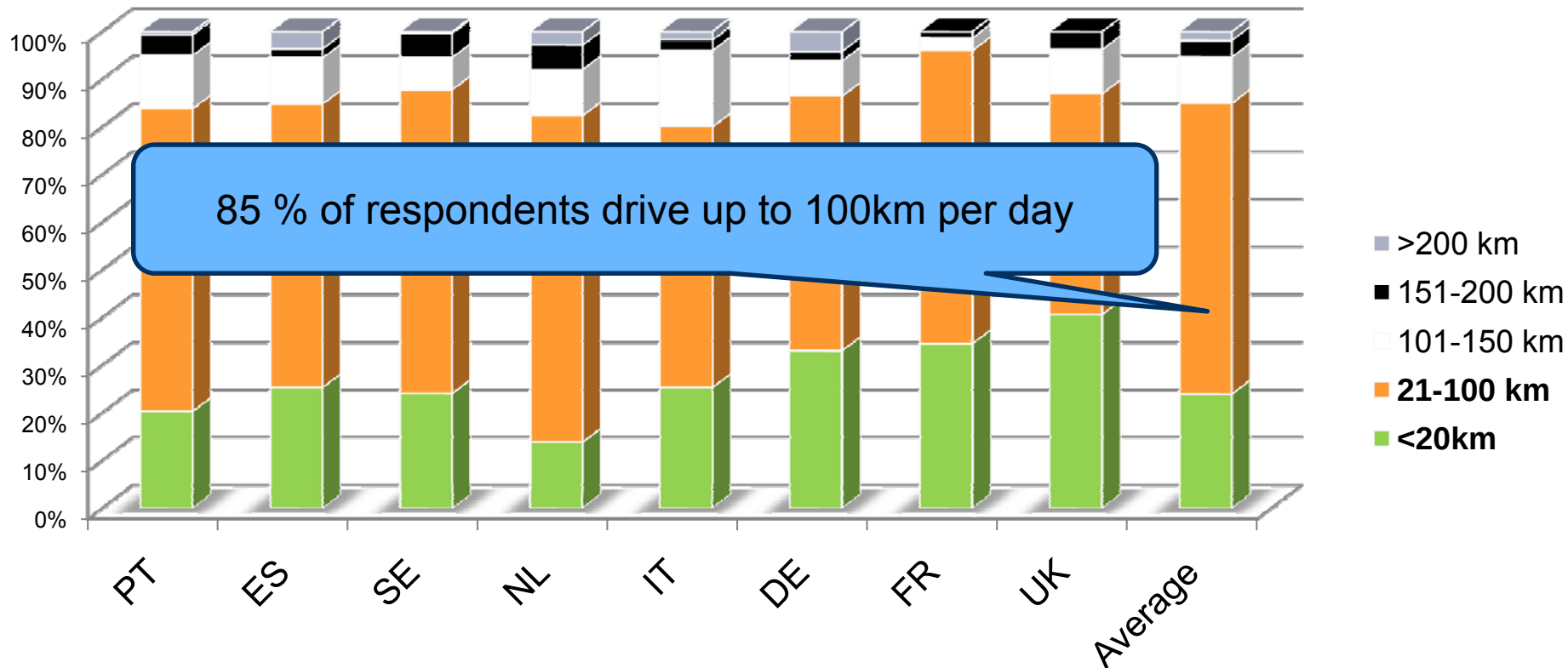
Today's presentation

- WP3.3. final outcomes of the charging behaviour survey
- Links and inputs for other WP's → WP7
- Dissemination activities
- Next steps

- Currently moderate interest of consumers to buy an EV
 - Not surprising because limited models & infrastructure available
- People willing to buy an EV in 2 years:
 - Live in smaller municipalities and have a private parking place
- Indicated EV driving range (120km) perceived as not sufficient
- Keep in mind: No perfect sample selection possible – results should be interpreted to provide directions

 - Public charging requested to cover larger distances
- Relatively high interest to join delayed (off-peak) charging scheme
 - Less interest to participate in V2G schemes → BUT €60 p.a. can make a difference
 - Leased battery: does not change the picture dramatically
 - High concerns about battery persists (seems odd)

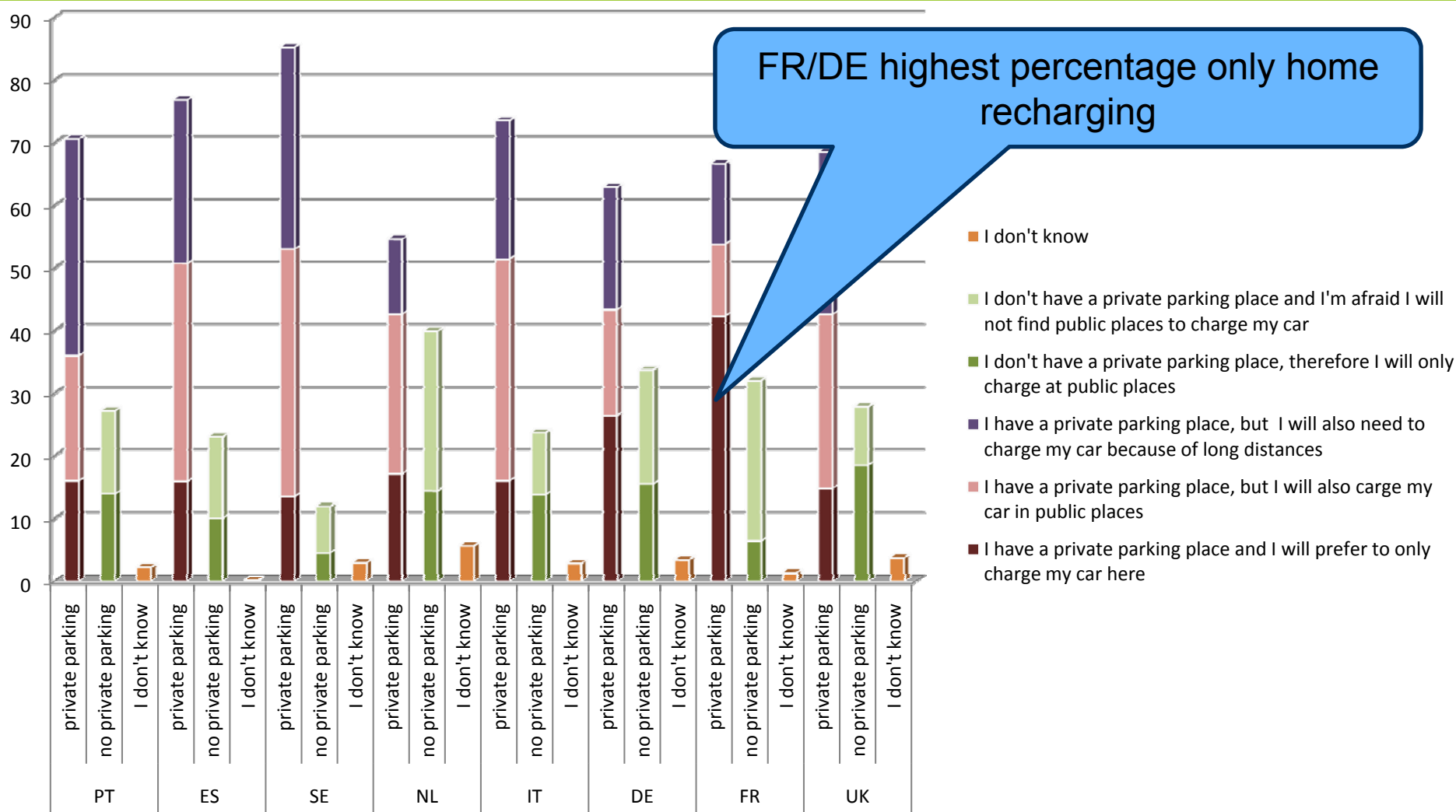
Survey results: current daily kilometers



BUT: required battery capacity to be interested in buying EV: 308km (NL 389km)!

People take into account the occasional longer trip

Preferred charging location



Survey results: preferred charging location

- 70% respondents has private parking place
 - 1/3 prefers to only charge at home/work
 - 1/3 also wants to charge at public places
 - 1/3 also needs to charge at public places because of long distances

30% without private parking place
Of these: 12% is afraid they will not find a place to charge

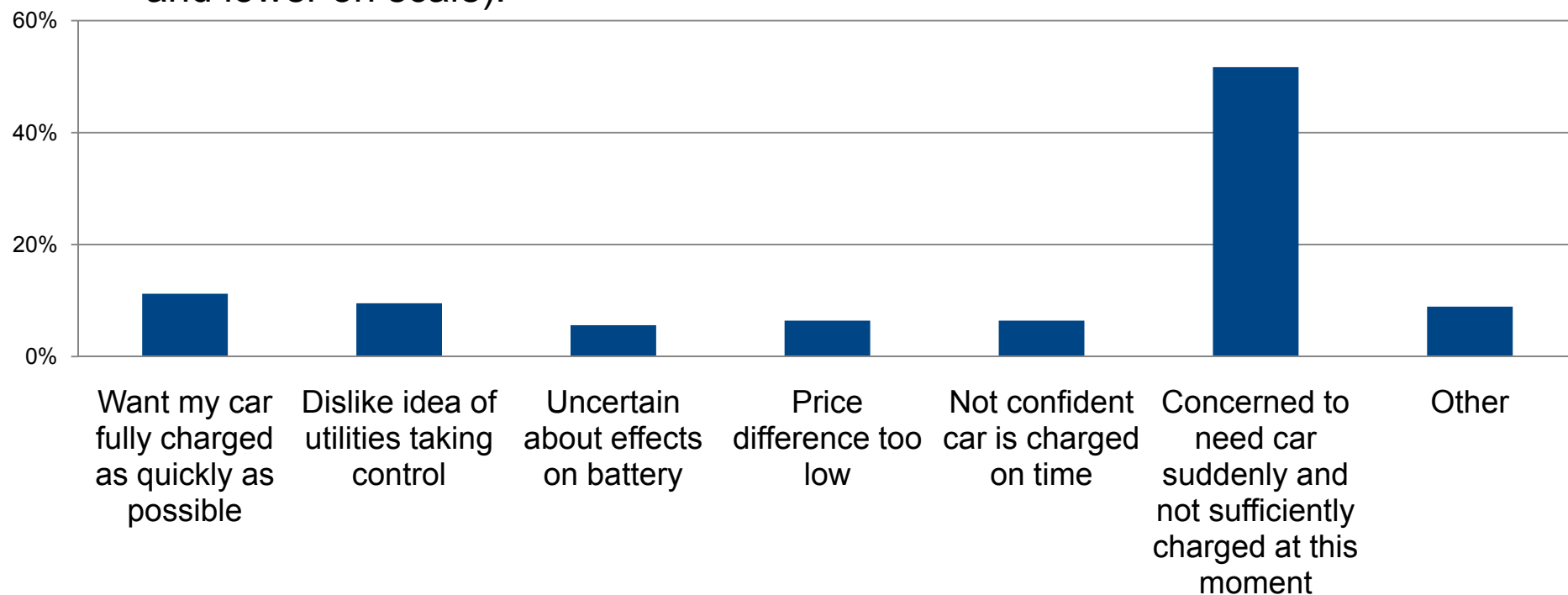
25% of these only want to charge at home with price incentive (!)

With price incentive (€ 5 vs 3)
53% will only charge at home or work

These people are also more interested in buying EV in coming 2 years

Survey results: interest in delayed charging (with price incentive)

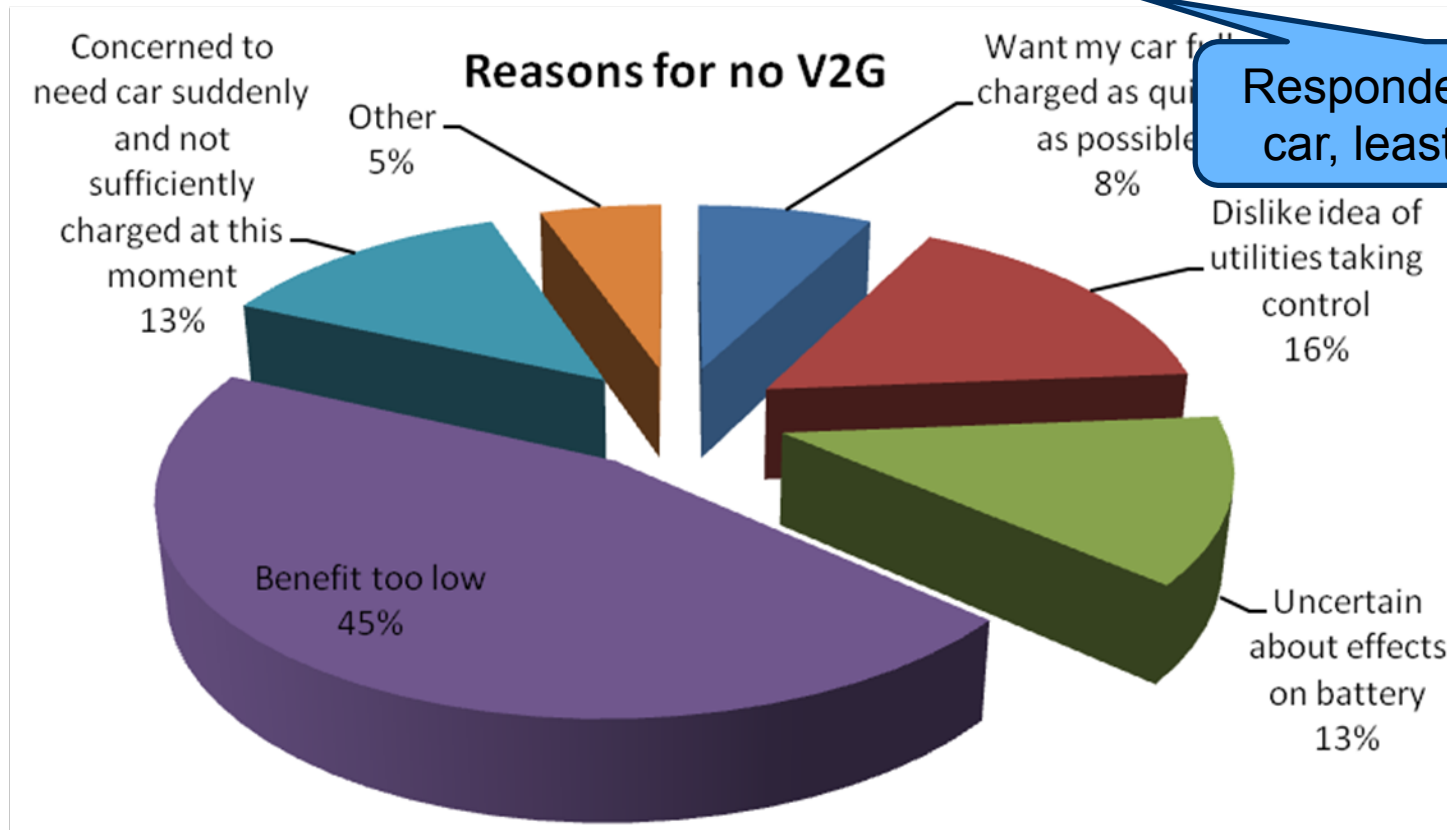
- Delayed charging = night charging, battery full in the morning, 2 vs 3 euro
- Average high interest in delayed charging (5.74 on 1-7 scale)
- Reasons for not being interested in delayed charging (everyone ticking 4 and lower on scale):



Results V2G

- V2G: unload & recharge whenever plugged in
- Least interest compared to delayed charging (4.4 on 1-7 scale)

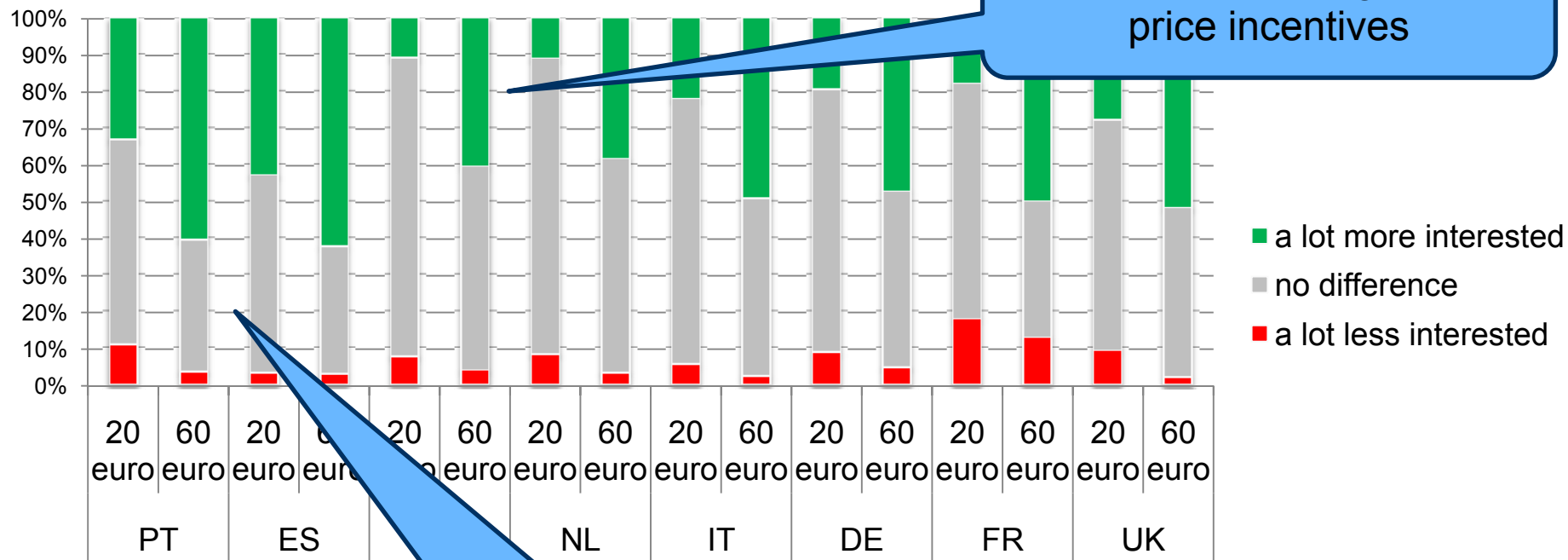
Young people & respondents (currently) without car, most interested



Respondents with big car, least interested

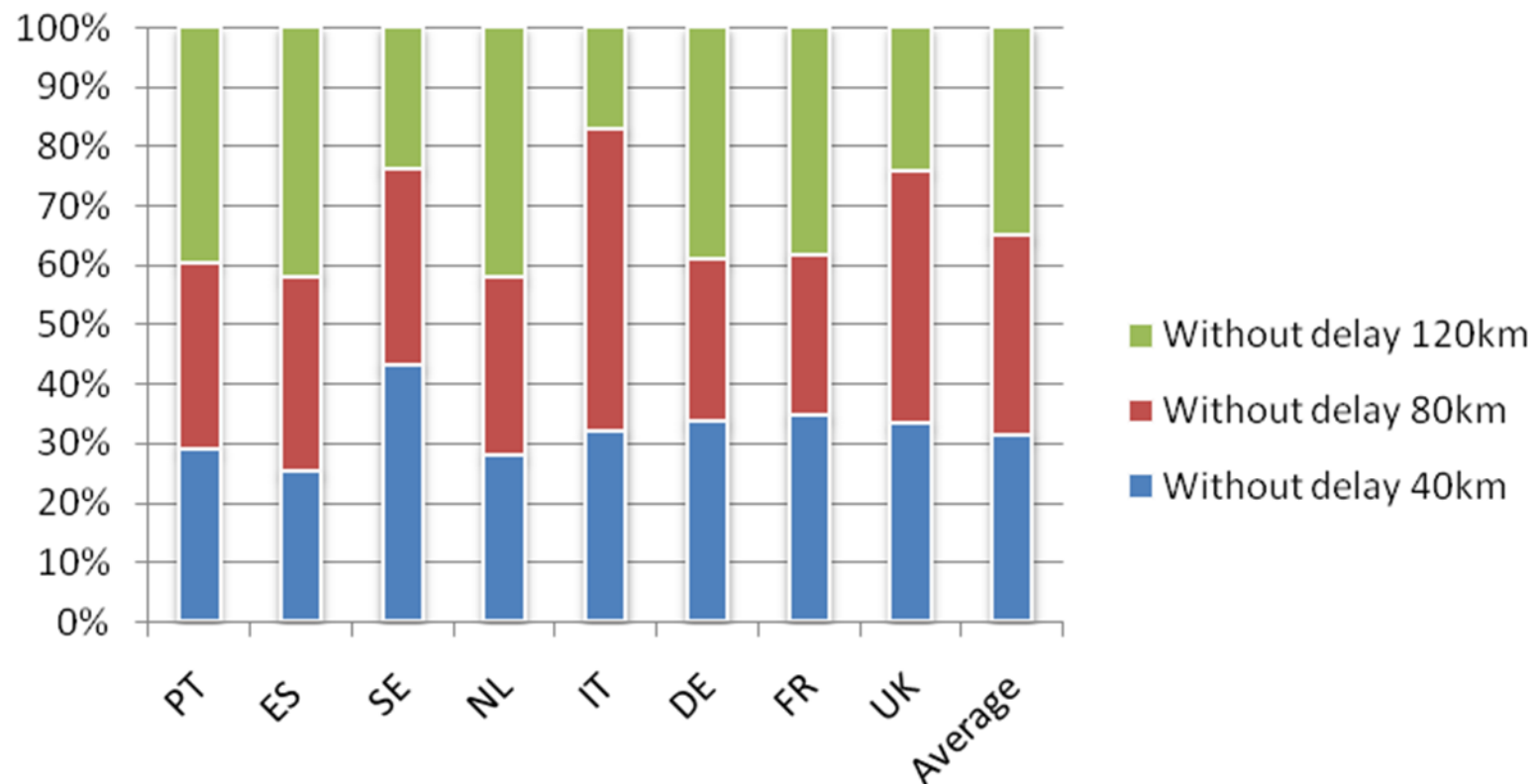
Interest in V2G – Impact of price incentives

- Interest to participate in V2G services with price incentive of € 20 and € 60 / year:

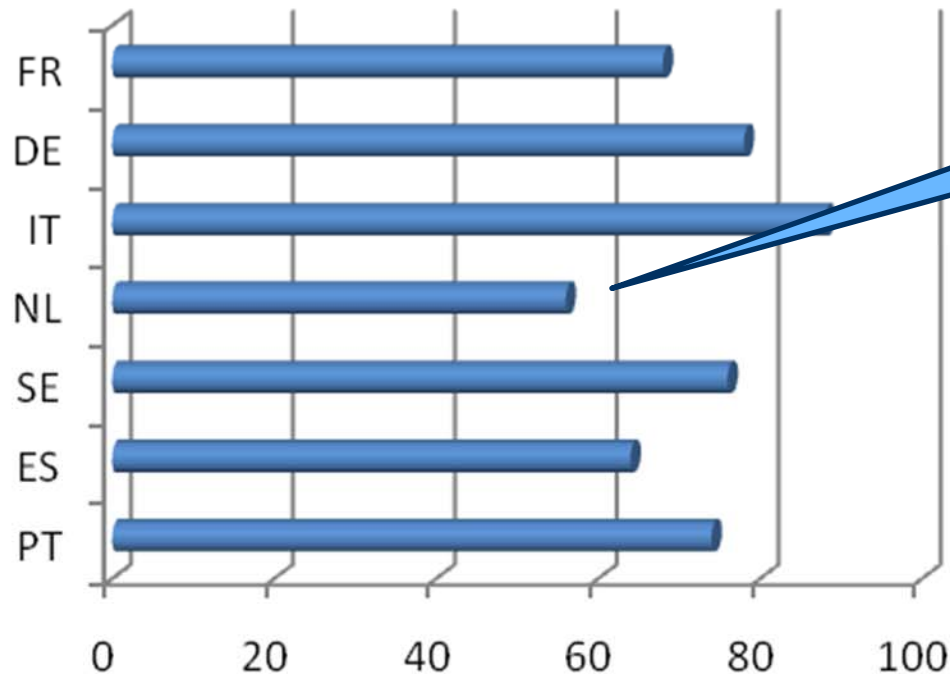


- Options: Recharge battery up to 40km:€2 80km:€2.5 120km: €3

Recharging with specified battery capacity



Minimum required battery capacity of 120km or less



On average 70km
considered sufficient

■ percentage of respondents
indicating 120km or less

Survey results: Impact of leased battery

Impact of leased battery



- People want mixture of home/work recharging and public recharging spots
 - French/German: Highest percentages only home recharge
 - With price incentives, it is possible to 'massage' behaviour towards charging at home/work → Users in the next 2 years
- Urban/suburban infrastructure
 - People living in smaller communities (<100,000) will charge at home/work
 - People living in large cities → most afraid of being 'stranded'
 - Cities: Recharging at points of interest (large office parks, shopping centres)
 - Fast charging, inductive charging? → help to reduce fears of city dwellers
- Initial user group willing to participate in delayed charging schemes as they have mostly private parking → home recharging
 - Price incentives positive effect to influence consumer behaviour
- V2G schemes generally lower acceptance levels
 - On average 70km should remain in the battery → provides indication which battery capacity could be used for services