LowCVP
Low Carbon Vehicle Partnership
Connect
Collaborate
Influence

Changing perceptions:
Can we electrify mainstream motoring?

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AA
Your 4th Emergency Service

Drivers said they cared

Measures to reduce the environmental impact of driving

- ❑ 62% - would buy a more fuel efficient car
- ❑ 60% - would implement Eco-driving
- ❑ 51% - would buy discounted greener cars
- ❑ 28% - would use incentive schemes to scrap older cars
- ❑ 3% - would give up their cars
- ❑ 7% - would take none of the measures above
- ❑ 57% - believe the AA should campaign to reduce environmental impact of cars

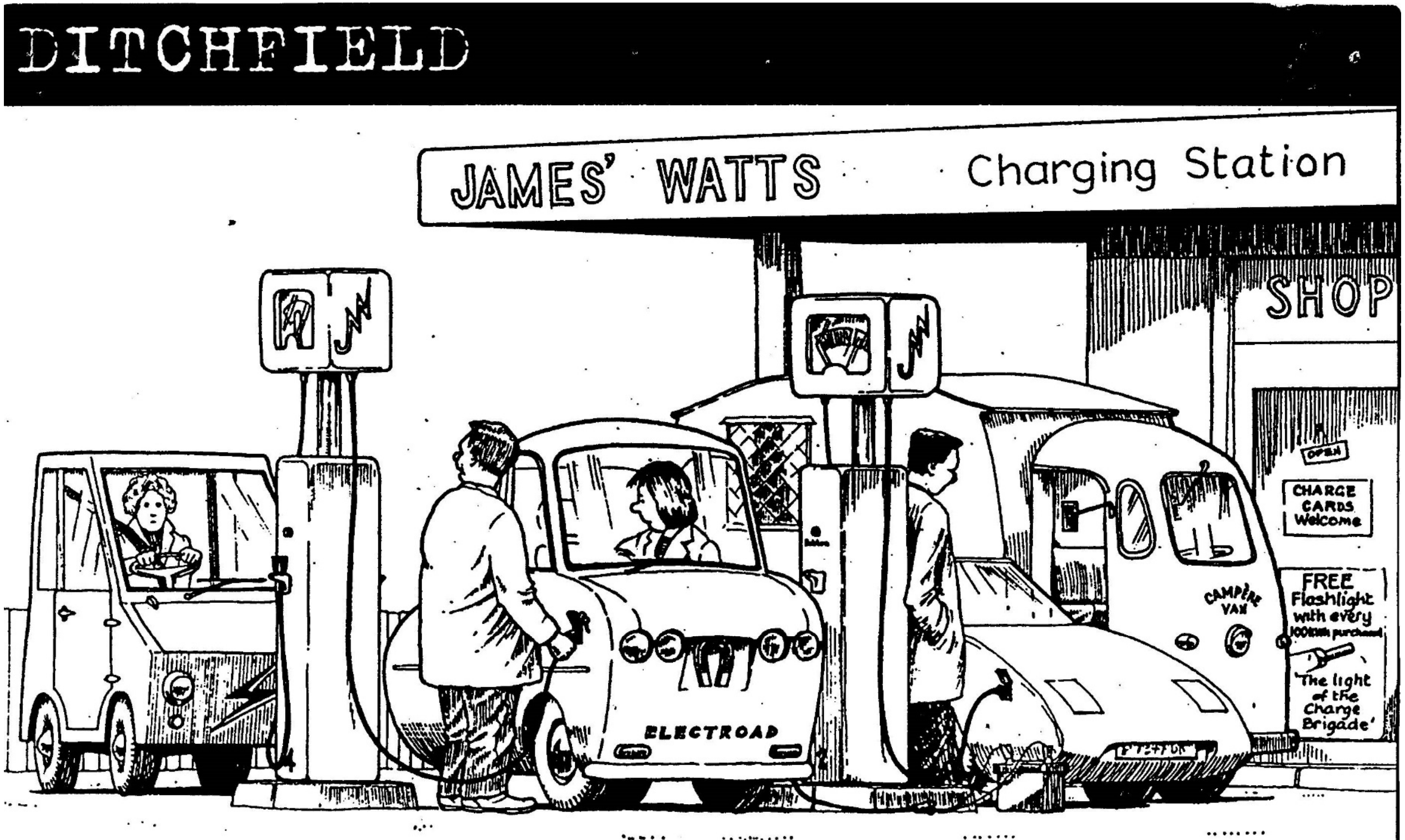
[AA-Populus Panel, 2010 (18,500)]

To electrify mainstream motoring

We need

- Pioneers
- Early adopters (fleets)
- Incentives
- Infrastructure
- Planners with vision
- To overcome range anxiety
- To address cost of batteries, safety issues
- Quick charge (5 minutes to refuel v 5 hours EV charge)
- Change of attitude towards car use and ownership

To electrify mainstream motoring



"Why doesn't she go to the other side?
It'll be another five or six hours before we're fully charged"

To electrify mainstream motoring

- We are dependent on fuels with which we have become familiar
- We will remain reliant on petrol and diesel for some years
- We need to familiarise drivers with new methods of propulsion/use
- Plug-in hybrids will help to fill the gaps
- Public familiarisation with types of EV
- Design/build what the customer will want
- Cost of issues for a perceived "inferior" product
- Change of image. Formula E will help

Change perceptions?

- 50% households have more than one car [AA-Populus, April 2015 (18,688)]
- 43% households more than one car [NTS 2013]
- Average trip length 7.1 miles (95% less than 25 miles) [NTS 2013]
- 5% journeys perhaps not suited to an EV
- Fleet managers big influence
- Battery replacement costs
- Repair/maintenance charges – more information
- “Clean” electricity critical to future of EVs

The main car you drive

- Half (48%) say the main car they drive is the only car in the household. (London 61%, Social grade DE 66%)
- A third (33%) drive up to 5 miles every day
- A fifth (19%) drive 5 to 20 miles every day
- One in twenty (5%) drive 20 to 50 miles every day

- Overall only 15% never drive 100-200 miles (12% men, 22% women, 26% 18-24s)
- 25% never drive 200 + miles (21% men, 33% women, 43% 18-24s)

[AA-Populus, April 2015 (18,688)]

Overnight parking/charging

- Overall 74% have access to overnight charging
    - three fifths (58%) park the main car they drive on a driveway
    - 16% park in a garage
    - 13% park on the road
    - 6% residents parking (11% in London)

[AA-Populus, April 2015 (18,688)]

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EV and PHEV

- Mean estimate of EV range = 109 miles (141 miles amongst 25-34 year olds falling to 100 miles for those 65+)
- Mean estimate of PHEV range (before charging) = 293 miles
- Three quarters (74%) agree that EVs may be cheaper to run now but government will tax them if they become popular (71% say the same re. PHEVs)
- More than two thirds (69%) say driving range on single charge still too low
- Two thirds (65%) say EVs too expensive (64% for PHEVs)
- Half (56%) say possible cost of replacing batteries in EV/PHEV later in car's life puts them off buying (64% men, 41% women)

[AA-Populus, April 2015 (18,688)]

Most second cars could be EVs

- 50% of respondents have access to two or more cars
- 12% of respondents drive the family ‘second car’

- Second cars more likely to have access to charging, 79% vs 74% overall
- Second cars less likely to be used for longer journey
  - 25% never drive 100-200 miles (15% overall)
  - 38% never drive 200+ miles (25% overall)

- Estimated 2.5 million second cars could be EV with home charging and no requirement for charging away from home

[AA-Populus, April 2015 (18,688)]

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Second car drivers' opinions/expectation

Similar to overall sample:

- Slightly lower *range* expectation for EV: mean = 105miles (109 overall)
- Slightly lower expectation re. reliability and safety
- Slightly less concerned about charging time
- Slightly more likely to be put off by limited choice
- Price isn't any more or less an issue
- Less likely to be concerned by cost of battery replacement
- Less likely to be concerned by possibility of increased taxation

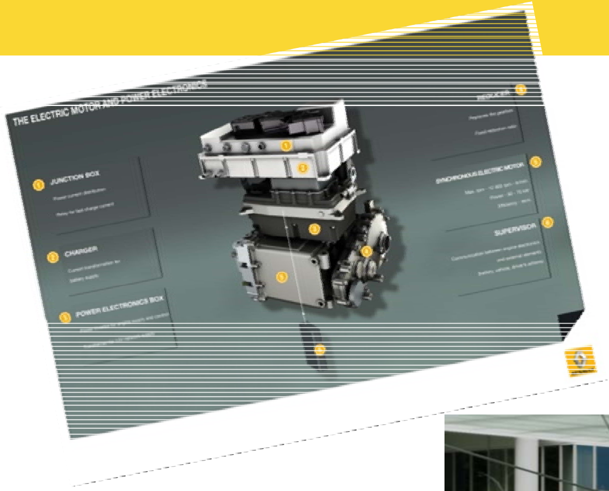
Drivers not yet convinced

- Today 58% have petrol cars, 41% diesel, <1% other
- Three quarters AA members expect to change car in next 3 years. Of those:
- 58% will buy petrol
- 33% diesel
- 7% hybrid
- 1% plug-in hybrid
- 1% EV

[AA-Populus panel, May 2015 (28,265)]

In Conclusion

We need your help ……



- ❑ To be Pioneers
- ❑ To give incentives
- ❑ To help with infrastructure
- ❑ To change perceptions (Formula E)
- ❑ To help drivers overcome range anxiety
- ❑ To address cost of batteries, safety issues
- ❑ To help provide quick charge points
- ❑ To target second car owners
- ❑ To help us change attitudes towards vehicle ownership
- ❑ To electrify mainstream motoring

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