

# **SCRATCH Conference 2009**

***Microcab Industries Ltd.***

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# Microcab Industries Ltd - status

## An SME with strong R&D focus

- Relies on central and regional government funding
- Produced a series of prototype vehicle designs: zero emission, low carbon, for urban use.
- Current vehicles are hydrogen fuel cell powered
- Aim to take zero emissions vehicles into large niche production in next few years
- Vehicles are built by the Microcab Consortium:  
RDM Coventry  
Delta Motorsport, Silverstone  
Microcab

**Supported by Coventry University**

# Microcab H4 prototype

## Taxi variant

- Accessible to wheelchair user
- 7.5m turning circle
- Flat floor for easy access



2005 fuel cell **H4** taxi

# University of Birmingham fleet

- 5 fuel cell vehicles for UB campus
- Funding from AWM Science City
- Hydrogen fuel station installed
- Green hydrogen from biomass
- 2 year trial funded by BERR under HFCCAT programme
- **Test bed UK in action!**



the fleet of five vehicles at the University of Birmingham



# Fuelling the Microcab

- **Permanent H2 filling station on Campus.**
- **4 minutes to fill vehicle**
- **Hydrogen from sustainable source**
- **Zero emissions – water is the only by product**



# Working with Royal Mail

- Van variant for postal service duties – working daily at UB
- Royal Mail has plans to introduce hydrogen fuel vehicle fleet
- Wants to decouple from fossil fuels



2008 fuel cell **H4** van

**New programmes:**

## **CABLED -**

### **Coventry & Birmingham Low Emission Demonstrator**

- **10 Microcabs in UK national project**
- **Includes Mercedes Smart, Mitsubishi, Tata, JLR, LTI**
- **1 year trial on public roads**
- **Microcab only fuel cell vehicle**



CABLED launch, Birmingham

## **New programmes -**

# **AWM Niche Vehicle R&D programme**

Ideal source of development funding for SME like Microcab

- Need support to achieve commercialisation after long R&D path

## **Niche Vehicle Programme will:**

- Provide chassis and supply chain for up to 2000 vehicles p.a.
- Deliver car, van and taxi variants
- Aim for Royal Mail specification vehicle
- Accept fuel cell or EV drivetrain for increased market share – H2EV

## **H2EV concept**

- Hydrogen and electricity are interchangeable
- Fuel cell and pure battery are both electric vehicles

## **Choice of drivetrain**

- Depends on duty cycle
- On refuelling time
- On location



Automotive industry is currently going through most radical change since invention of the motor vehicle

## Change equals opportunity!

- Thanks to:
- **AWM**
- **University of Birmingham**
- **Coventry University**
- **DECC**

Thank you

