25 YEARS
EBN | INNOVATION | INCUBATION | NETWORKING

MICRO:CAB®
life without oil™

Getting from R2D2 to H4 through the BIC

John Latham
Pro-Vice Chancellor
Coventry University

27th January 2010

Coventry University Enterprises Limited

CUE Ltd ~ Objective

"To be recognised by regional, national, European and international bodies as the most effective partner organisation in the region to support innovation and wealth creation through the provision of high quality, high value facilities and services."

Background

- CUE is a wholly owned subsidiary of Coventry University.
- It is a gateway to the University's capabilities and helps the University to access and exploit commercial opportunities.
- It works closely with public organisations and government bodies, forming solid working relationships.
- It has established a good track record working with the private sector, from Corporates such as BT and Hewlett Packard to small and micro companies.

Coventry & Warwickshire BIC

- Portal for occupier business support
- Regional support for business start-ups and entrepreneurs
- Development of virtual incubation services through the regional BIC network

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ASTON SCIENCE PARK

BIC STAFFORDSHIRE

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Microcab is designed by John Jostins, a part time lecturer at Coventry University.

He made R2D2s for the ‘Star Wars’ movies.

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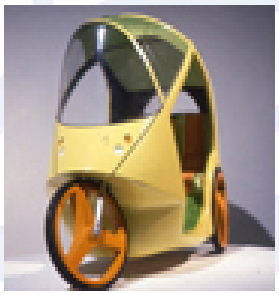

Pedal – Electric Hybrid 1998

Hydrogen Fuel Cell Electric Drive 2009

Lighter moulded carbon sub-frame 2003

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The Microcab consortium

comprises of Microcab Industries , RDM in Coventry and Delta Motorsport in Silverstone
They are a small group of companies working together to deliver the Microcab product

Fuel cell hybrid drive train

- Carbon composite 350 bar H2 tank system
- EU hydrogen vehicle regulations
- 1.5 kW fuel cell
- 55kg of deep cycle lead acid battery
- 4kW motor (11kW peak)
- Rear wheel drive via differential shaft

Hybridisation:

- Fuel cell provides average power. Acceleration, hills and higher speed use fuel cell and battery power together.
- On deceleration and idling fuel cell replenishes battery pack

General Specifications

- 20mph speed limit on campus
- Top speed 30mph
- Range about 45 miles, equates to 73 mpg
- Tank capacity 630g hydrogen
- Target range for next phase vehicle = 110 miles
- Target top speed up to 50mph
- Vehicle weight 670kg
- Target weight 550kg

Load:

- Driver and 3 passengers - car
- Driver and 200kg freight - van

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World Class Incubators and Technology Parks

Operational experience has shown universal success factors.

- Excellent, Modern Facilities, Laboratories and Offices
- Proximity to Academic Partner
- Cluster in business sector
- Supply chain co-located
- Leading edge, reliable ICT Infrastructure

Immediate Business Support on Site

Access to Finance
Legal
IP
Marketing
Export
Logistics
New Product Introduction

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Coventry Technology Park, The Design Hub and Bugatti Lab

•Proximity to Academic Partner
Coventry University

•Cluster in business sector and supply chain co-located

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LowC VP
low carbon vehicle partnership

Accelerating the Shift to Low Carbon Vehicles and Fuels

cenex

NICHE Vehicle Network

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Access to Finance – Grant Applications


DTI Smart Award 2002


JIP Project 2004


Science City ERDF Project 2007


CABLED Project 2008


Technology Strategy Board 2009

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World Class Incubators and Technology Parks

Legal	Company registration, Accountants, Board Members
IP	Trade Mark, Registered designs and Patent Advice
Marketing	Website, Brochures, Event organisation, Displays, Trade Shows and UKTI Trade Missions
New Product Introduction	Access to Tier 1 Automotive manufacturers Hydrogen Fuel Cell Development Access to Manufacturing Advisory Service Access to Tier 2 suppliers

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UK TRADE & INVESTMENT

Awards

2008
Microcab achieved second place at the Oxygen Awards held in Paris on Friday 14 November

2007
Lord Stafford Awards finalist

2006
Shell Springboard finalist

2005
EAST Vehicle Innovation Award winner

2004
DTI Research and Development Grant winner

EAST Industry Green Investment Award runner up

Lord Stafford Awards runner up

2002
DTI Smart Award winner