



Northern

automotive
Alliance

Northern Automotive Alliance



**The Opportunities in the
Automotive Industry for
Northern Companies**

Carol Holden OBE CEng, FIMechE



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What is the NAA?

- The NAA provides a community for all automotive-related businesses in the North West, Yorkshire & Humber
- It purely focuses on the automotive sector, with a wealth of contacts and knowledge



What do we do?

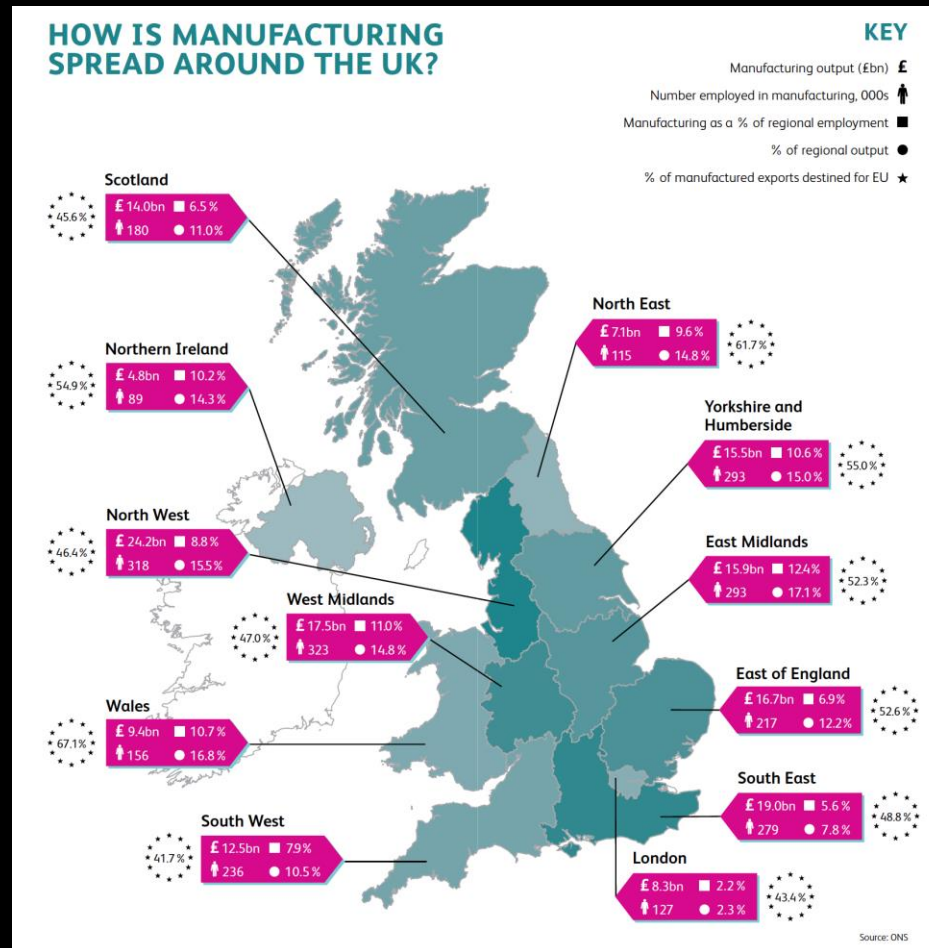
- Focused networking
- Knowledge Transfer
- Collaboration





Why the North?

- NW: UK largest manufacturing output £24.2bn, 318,000 jobs





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Why the North?

- NW Automotive £2,622m GVA, 2nd region in UK (ONS 2014 figures)



Why the North?

- 6 major vehicle manufacturers
- 5 niche vehicle manufacturers
- Over 20 global top 100 automotive T1s
- Specialist SMEs linked to commercial vehicles, engines & textile legacy





Who needs to be ready?

- In or outside of the sector
- Micro to multinational
- Local public sector
- Universities
- Trade & support organisations
- Consultancies



Readiness

- Professional image
- Professionalism
- USP/core competencies
- Automotive language
- Business development



National Assets



At the forefront of energy transformation

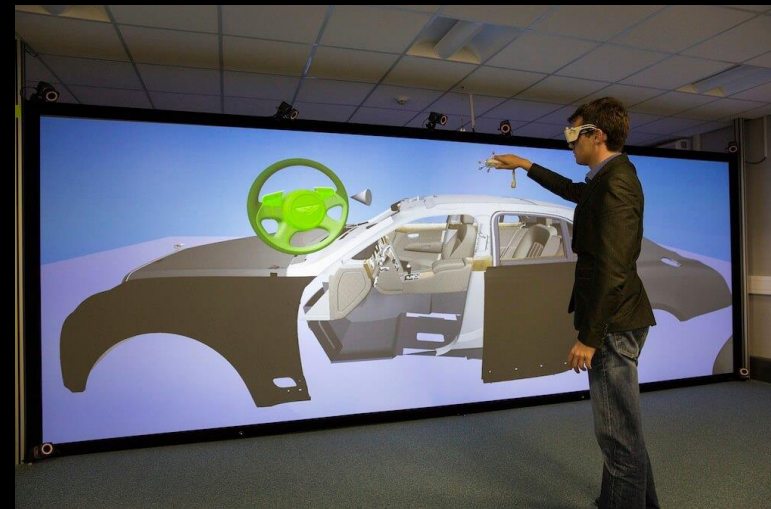
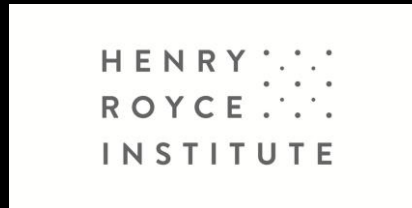


MERIDIAN
MOBILITY TECHNOLOGY

Accelerating intelligent mobility through collaboration
worldwide

UK BATTERY
INDUSTRIALISATION
CENTRE

Utilising local national assets



SENSORCITY

Making the future happen



Future Technologies

Electric vehicles & the grid

- Electric machines
- Power electronics
- Volume
- Niche vehicle
- Charging systems
- Electrical infrastructure
- Smart charging



Future Technologies

Batteries

- Faraday Challenge
- UK Battery Industrialisation Centre



Future Technologies

Lightweighting

- Lightweight components
- Low to high volume components
- Composites
- Metals: aluminium, titanium, magnesium
- Advanced design techniques



Future Technologies

Engines

- Improved exhaust after-treatment
- Alternative fuel engines
- Hydrogen
- Biofuels



Future Technologies

Connected & Autonomous Vehicles

- UAV
- Software, gaming
- Processors, sensor
- Data management
- Infomedia systems
- Built environment impact
- Mobility



Future Technologies

Vehicle Systems

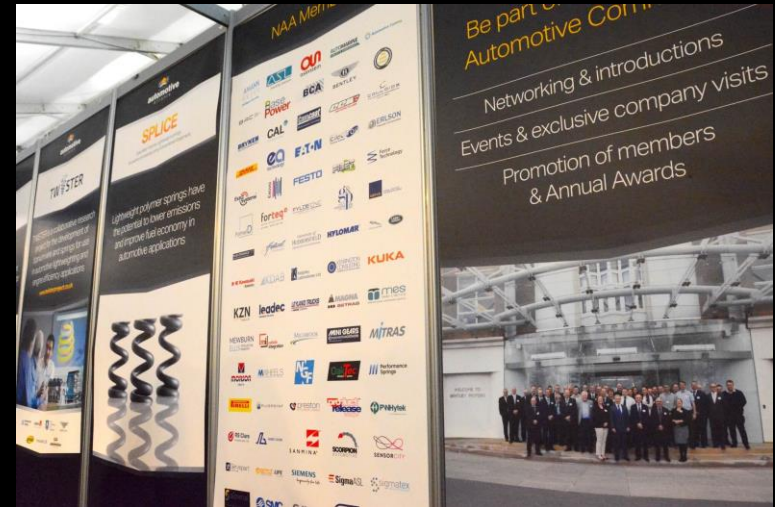
- Vehicle system integration
- Test services
- New modes of vehicle operation
- Formula E
- New entrants - who is going to be the UK 'Tesla'





How can the NAA help you?

- **N**ational Automotive Infrastructure introductions
- **A**wareness: industry & key activities
- **A**ssets: local infrastructure programme introductions
- **C**ollaboration: development support
- **A**ccess to companies
- **R**oad-mapping: Technology & growth
- **E**xpert: Contract, project & technical project management
- **S**upport: Where & how to find



What does the North need?

- Local, joined-up approach for the Northern low carbon vehicle industry – vision, strategy
- Automotive recognition for our research & national assets
- Funding & support mechanisms that make sense for a diverse, geographically spread community





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