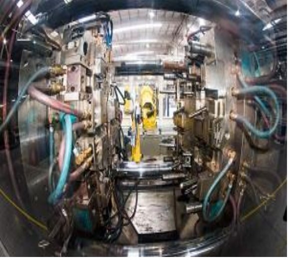
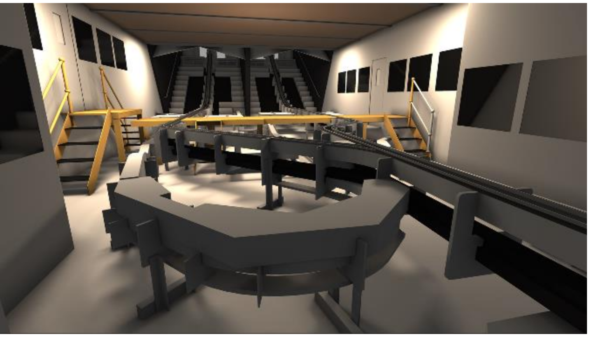










North East Automotive Alliance

BRONZE

Cluster Management Excellence

STRIVING FOR CLUSTER EXCELLENCE

Automotive Sector Growth

UK

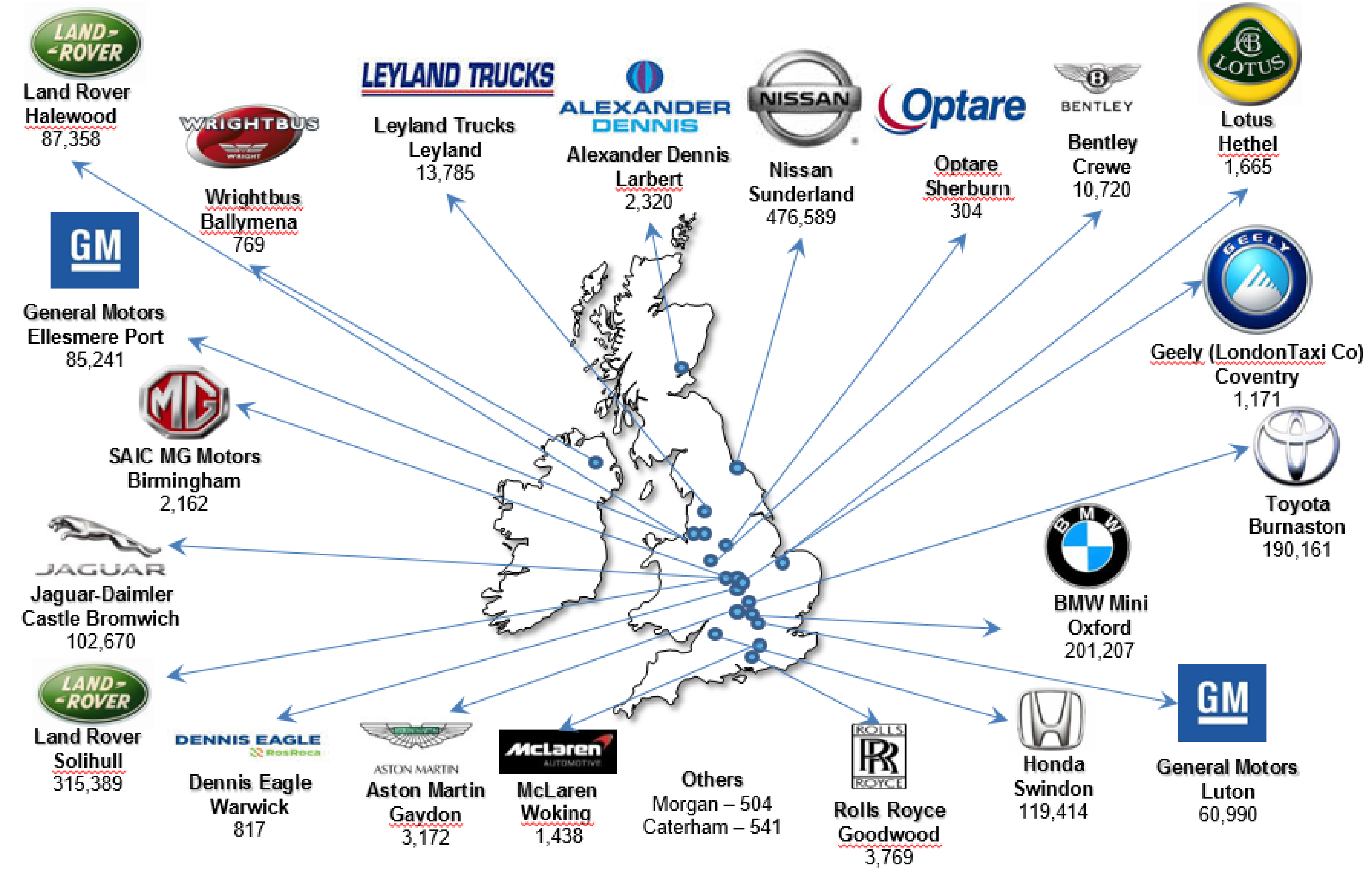
- £71.4bn turnover
- 950,000 direct jobs
- £15bn invested since 2012
- Production for passenger vehicles set to hit 2 million by 2020
- Desire to increase local content to a comparable level to Germany ~ 60%
- £6 billion tier 1 and tier 2 supply chain opportunity

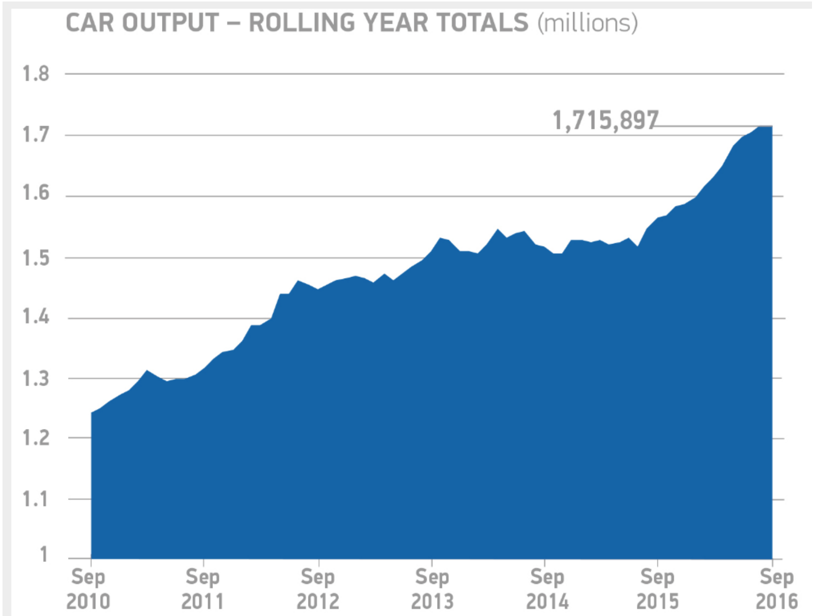
North East

- Nissan
    - a world class manufacturing plant account for 1/3rd of UK automotive sector
    - Nissan Renault Alliance – potential to supply 2.6 million vehicles
    - Nissan Qashqai & X-Trail Announcement
    - 11th January 2017 – UK's largest sourcing event took place in Sunderland
- Off-highway sector with OEMs such as Komatsu, Caterpillar & Cummins
- Tier 1 Supplier expanding

European Union
European Regional Development Fund

Vehicle Plant Locations & Output 2015





- 1.7m vehicles
- 2/3rds by Nissan and JLR
- ⇧ to 2m by 2018/19

NORTH EAST AUTOMOTIVE ALLIANCE

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£6bn Tier 1 & 2 Supply Chain Opportunity

Component	Opportunity value (£m)
Engine castings	550
Steering systems	330
Trim	255
Engine forgings	255
Pressings and hot stampings	240
Seat components	225
Alloy wheels	210
Lighting	210
Electronics	170
Plastic mouldings	150
Entertainment & navigation	135
Bearings	120
Instrument Clusters	120
Glass	110

Component	Opportunity value (£m)
Hinges	105
12V Lead/Acid Battery	90
Cast aluminium sub-frames	90
Brakes	80
Drive shafts	80
Fuel tanks	75
Engine accessories	75
HVAC assemblies	75
Misc. (pedals, mirrors etc.)	60
Shock absorbers	60
Oil pans	30
Premium finish	50
Weather strips	50
Switchgear	30
Other *	520

Source: Automotive Investment Organisation (AIO)

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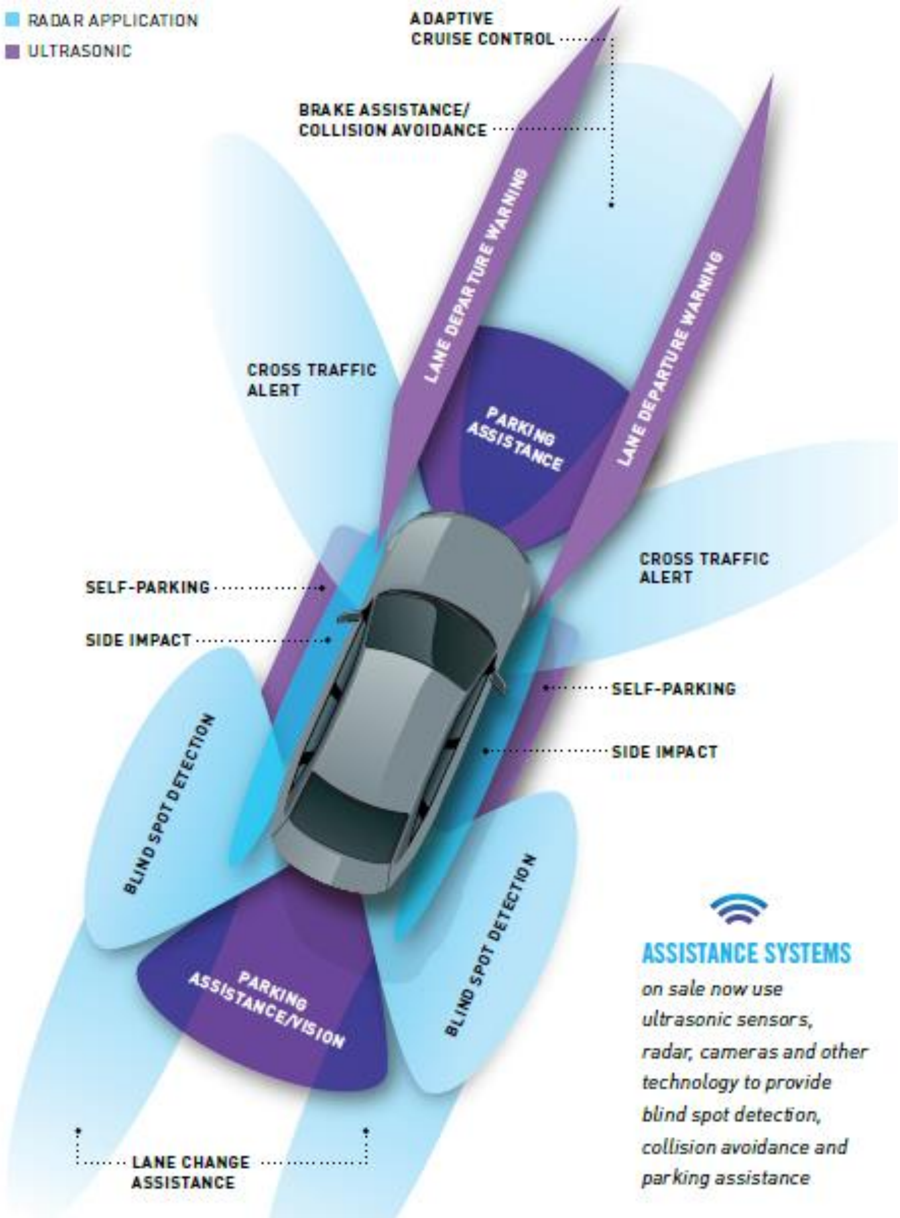
The Automotive Technology Revolution



"Almost half of the world's top 20 "Most Innovative Companies" are automakers. In fact, for the first time this year's (2014) top 20 list included more automobile manufacturers than technology companies. "

The Boston Consulting Group (BCG)

- Robotics, inc collaborative robots
- Light weighting & advanced materials
- Driver assists
- Advanced propulsion – EV & hydrogen
- Connected and autonomous vehicles, inc cyber-security
- Infotainment
- Mass customisation – expanded model choice & personalisation
- Codaholics
- Changing consumer use - modal integration & ride sharing

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NMUK 30 years in Sunderland

- 8.5m cars since the launch
- Invested £3.85bn
- Accounts for 1/3rd of all UK car production
- Exports to more than 130 markets

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NE Growth & Expansion

TRW

Vantec

Calsonic Kansei

Expert Tooling

Unipress

Lear

Gestamp

AV Dawson

Elring Klinger

Nifco

Mecaplast

Automotive Council stated investment in the UK automotive sector over the next 5 years will be £20bn

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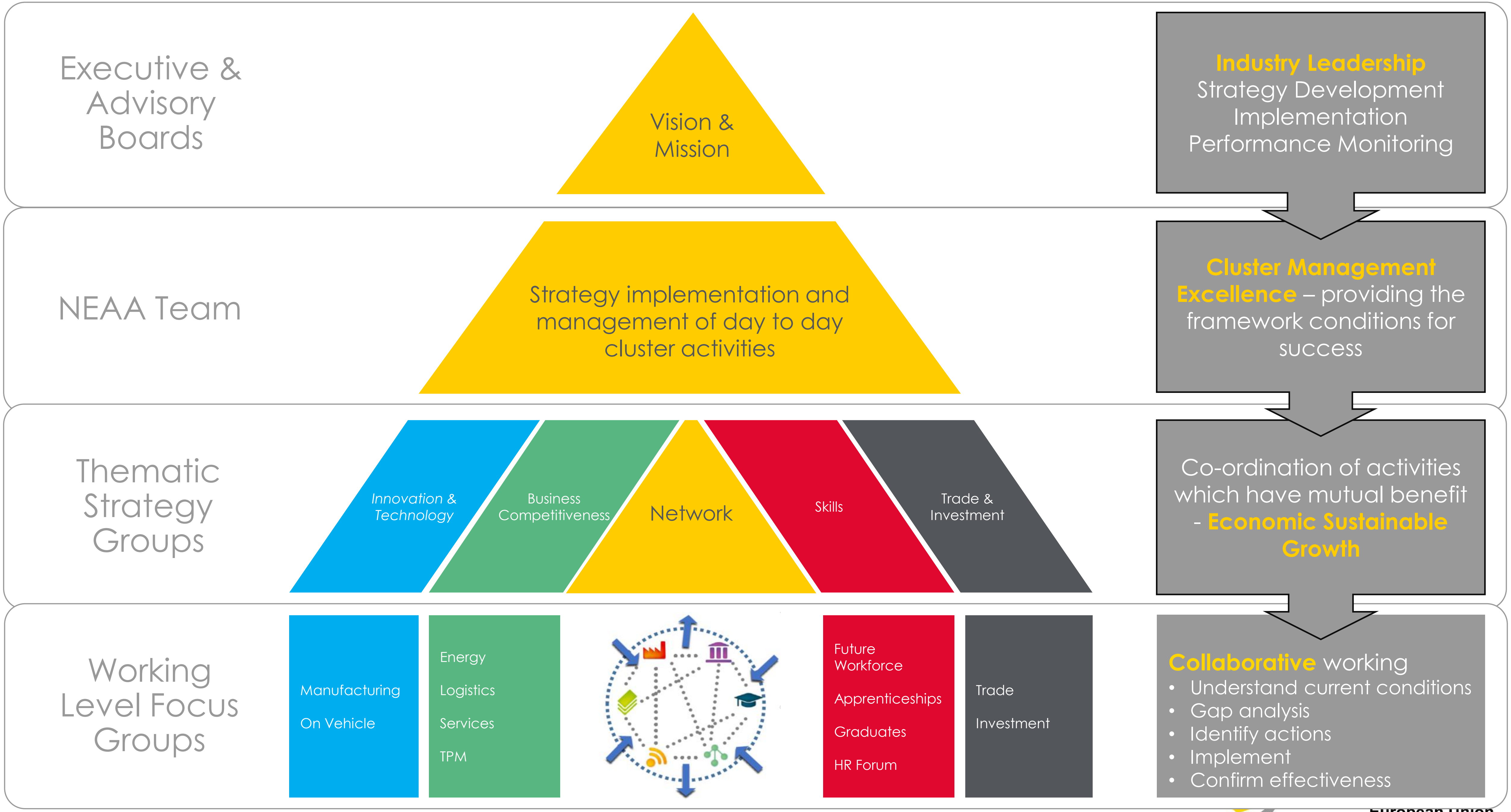
Industry Leadership

Executive Board

Kevin Fitzpatrick	Nissan & NEAA Chair	Peter Watson	RTEK, Chair of BEG
Mike Mathews	Nifco & NEAA Vice Chair	Stephen Irish	Hyperdrive
Paul Butler	NEAA CEO	Peter Howe	Komatsu
Martin Porton	RTC & NEAA Comp Sec	Simon Elliot	Independent Director
Matt Boyle	Sevcon, Chair of Skills WG	Irene Lucas	Sunderland City Council

Advisory Board



European Union
European Regional Development Fund

208 Cluster Participants

UNIPRES
FALTEC
NISSAN
MECAPLAST GROUP
Johnson Controls
Gestamp
GESTAMP TALLENT LIMITED
KOMATSU
NIFCO
Kasai
Calsonic Kansei
snop
ALTEC ENGINEERING LTD
CALDAN CONVEYOR A/S
signalplastics
its
icon plastics
a symbol of quality and performance
Cummins
EXPERT
elringklinger
RTC NORTH
HYPERDRIVE
LEAR CORPORATION
ZF TRW
SEVCON
Partner with Performance
TOMLINSON HALL
PUMP SPECIALISTS SINCE 1919
DYER ENGINEERING
GATE 7 GROUP
Innovative Print Solutions
BRIGGS EQUIPMENT UK
ThreeBond
AVID technology
DS Smith
ACTIVE COMPOSITES LTD
Dontyne Systems
FORD
MAKE it Sunderland
Chameleon
Vocational Training Ltd
inspiring change
TVS Cramlington Precision Forge Ltd
SEV
SEV Automotive & Plant Limited
DF Durham Filtration
VISUAL
BUSINESS PERFORMANCE PARTNERS
FESTO
ELM
ELECTRIC VEHICLE CHARGING SOLUTIONS
Desoutter
Yorkshire Bank
Zero Carbon Futures
Innovative Transport Solutions
OPEN MIND
pinpoint recruitment
3P PEAK PERFORMANCE PARTNERSHIP
FarNorth
seta
nrg
integrating talent
THE EXPANDED METAL COMPANY
Kawasaki
Powering your potential
i2B
PARAGON Rapid Technologies
Wilde
South Tyneside College
Dedicated to your success
GATESHEAD COLLEGE
zenithpeople
Industrial Workwear
MSS RECRUITMENT
AMF
ADVANCED MANUFACTURING FORUM
waterstons
e-max systems
Grorud
QuickHydraulics
fluid power centre
fs design
PORT of TYNE
Arlington Automotive
Pressings | Welding | Painting | Assemblies
SMMT
DRIVING THE MOTOR INDUSTRY
Eleven
necc
North East Chamber of Commerce
newresults training
Surestart
Recruitment
EDM ZONE
PRECISION ENGINEERING
OUTPACE
PACKAGING SOLUTIONS
MICC LTD
PEGASUS
MATERIAL HANDLING LTD
Tel 0191 419 0003
IOH
INDUSTRIAL + ORGANISATIONAL HEALTH
nasgroup plc
ISM
institute for supply management
A1 Scales
SPEARHEAD
WEEK 2 WEEK
APARTMENTS
Infinite
Learning & Development
HTA
REAL ESTATE
Industrial Property Specialists
Reprotec UK Limited
THE surface protection specialists
middlesbrough college
Armagrip
INDUSTRIAL SUPPLIES
EXCELLENCE IN PRODUCT PROTECTION
NORTH EAST BRIDGE
sora GROUP
FM COATINGS LTD
Addere Valorem Limited
Chartered Accountants & Corporate Finance Advisers
NAYLORS
CHARTERED SURVEYORS
K.HARTWALL
Logistics Efficiency through Innovation
SLALEY HALL
Business Durham
Husqvarna
McDONOUGH
MARKETING COMMUNICATIONS
Newcastle University
LOCKTON
Teesside University
KATMEX LTD
Steel plate processing and fabrications
northumbria
UNIVERSITY NEWCASTLE
Jigsaw Group
Solutions that fit
animmersion
SMS
sigma asl
ADM Automation
INFINITI CENTRE NEWCASTLE
Sunderland College
South Tyneside Council
SR Technology Innovations
NBT GROUP
BRADLEY O'MAHONEY Public Relations
CW APPLIED TECHNOLOGY
Baltic
RECRUITMENT SERVICES
NORTH EAST AUTOMOTIVE ALLIANCE
European Union
European Regional Development Fund
SQUAREONELAW
University of Sunderland
UK Trade & Investment
HOLLAND PR & MARKETING
lornamichaels
RECRUITMENT
horizonworks
your marketing team
BAKER MALLETT
OculusHR
ARK ASSOCIATES

Stage 1: World Class Infrastructure

International Advanced Manufacturing Park

- Enterprise Zone status
- 100 hectare site
- 260,000m² developable floor space
- Excellent links to the A19 and A1
- Ready for development in 2019

Ideally placed location to support Nissan, UK and European markets

A once in a lifetime opportunity!!!

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Stage 2: Open Innovation

Industry challenges

Universities: NE, UK and overseas

NEAA: Network

North East: other sectors and networks

UK: KTN, APC, SMMT, Catapults, clusters

Europe: Clusters, EEN, EIN

Open innovation bringing forward the best solutions, maximising funding support and promoting collaboration

CESAM

New research

Known solutions, needs proving to standards

Existing & ready for the sector

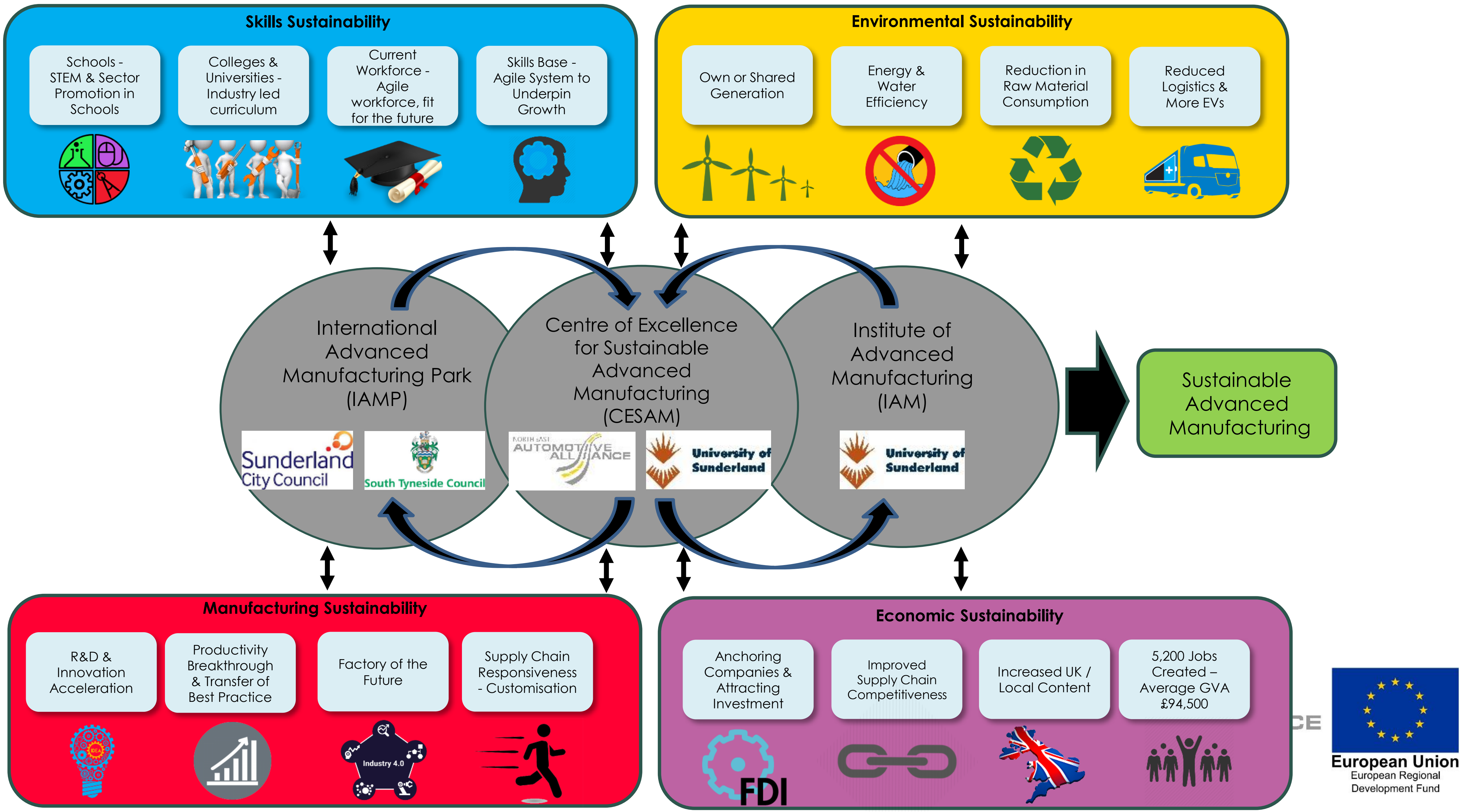
CESAM

- Review industry challenges (synergies)
- Assess TRL level and funding landscape
- Anonymise and disseminate project
- Review applications and form collaboration where appropriate
- Responsibility for overall project management and funding application (when applicable)
- Assessment of project output and suitability for sector
- Dissemination of learning

TRL1	TRL2	TRL3	TRL4	TRL5	TRL6	TRL7	TRL8	TRL9

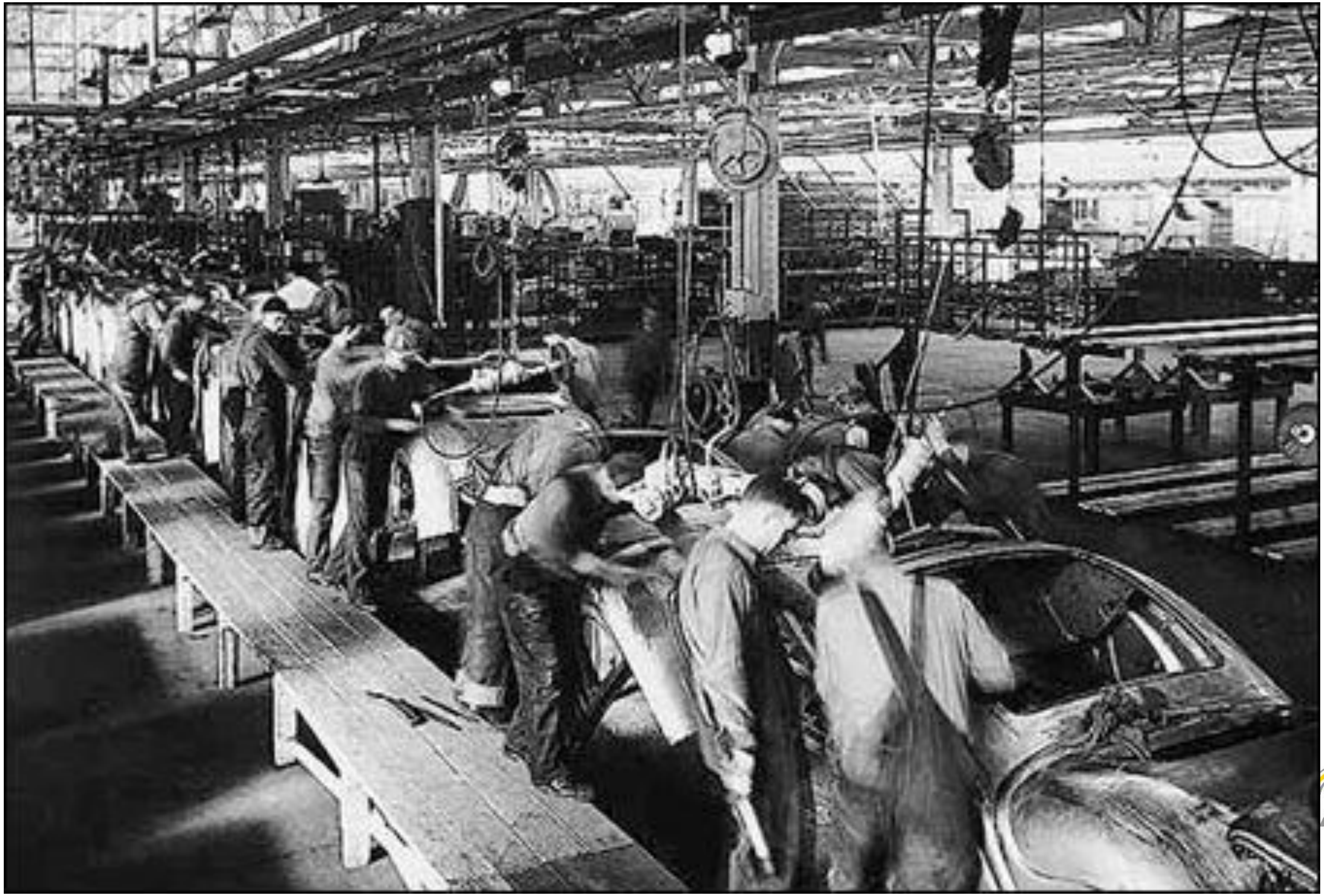
Horizon 2020 - €80bn	EPSRC - £800m/year	Innovate UK £1.8bn to date	APC - £500m over 10 years	LGF - £135m in last 2 years	ESIF/ERDF - £380m

European Union
European Regional Development Fund


Skills Sustainability
Schools - STEM & Sector Promotion in Schools
Colleges & Universities - Industry led curriculum
Current Workforce - Agile workforce, fit for the future
Skills Base - Agile System to Underpin Growth
Environmental Sustainability
Own or Shared Generation
Energy & Water Efficiency
Reduction in Raw Material Consumption
Reduced Logistics & More EVs
International Advanced Manufacturing Park (IAMP)
Sunderland City Council
South Tyneside Council
Centre of Excellence for Sustainable Advanced Manufacturing (CESAM)
North East Automotive Alliance
University of Sunderland
Institute of Advanced Manufacturing (IAM)
University of Sunderland
Sustainable Advanced Manufacturing
Manufacturing Sustainability
R&D & Innovation Acceleration
Productivity Breakthrough & Transfer of Best Practice
Factory of the Future
Supply Chain Responsiveness - Customisation
Industry 4.0
Economic Sustainability
Anchoring Companies & Attracting Investment
Improved Supply Chain Competitiveness
Increased UK / Local Content
5,200 Jobs Created – Average GVA £94,500
FDI
European Union
European Regional Development Fund

Highly Skilled but Ageing Workforce

Industry Perception



The Reality….

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NEAA Website/ CRM