

The Liverpool City Region Knowledge Economy

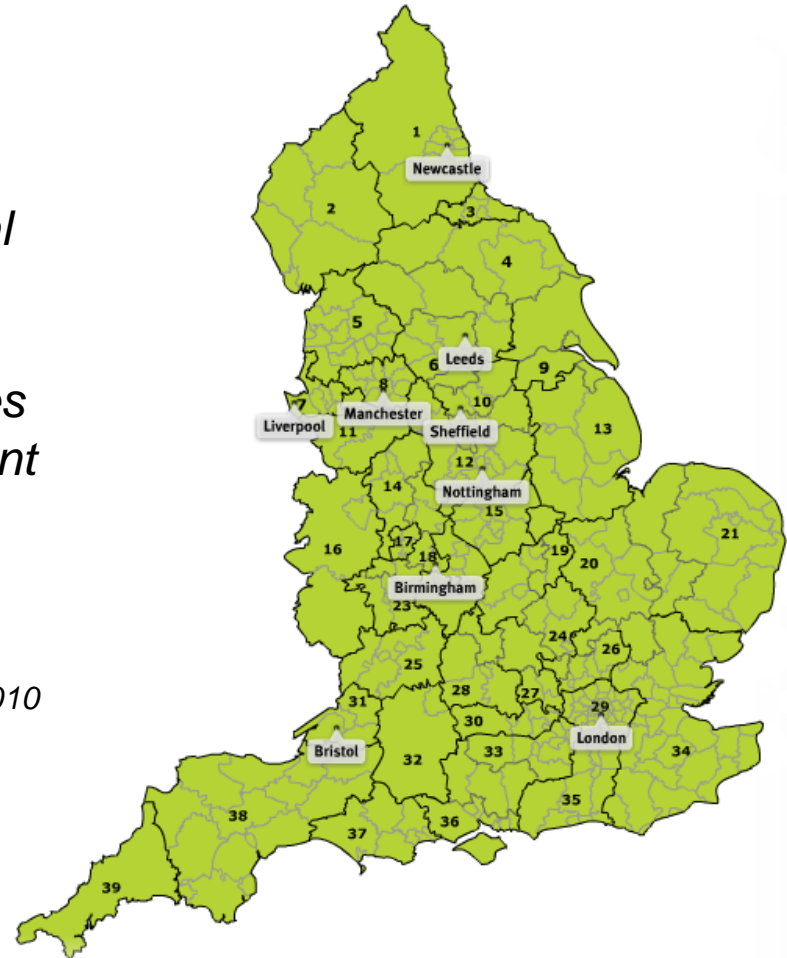
Alan Welby



What are LEPs?

“ We will support the creation of Local Enterprise Partnerships – joint local authority-business bodies brought forward by local authorities themselves to promote local economic development – to replace Regional Development Agencies (RDAs).”

Coalition Programme For Govt. May 2010



Liverpool City Region

1.6 million people

£20 billion economy

47,500 businesses

The LCR economy grew
by 50% over the past
decade.



LCR LEP

- Unique membership model
- 450+ strong, fee-paying, and private sector-led
- Private sector-led Board chaired by Robert Hough
- Plus political leaders representing the six Local Authority areas
- Main body which representing City Region at Government level
- Innovation Board –chaired by Howard Newby
- Executive team based at Princes Parade



Strategic Objectives of the LCR LEP

Strategic Objectives

- Accelerate the rate of economic growth and create jobs
- Improve productivity
- “Re-balance” the economy

Actions

- Grow existing businesses
- Increase productivity levels of existing businesses
- Create new businesses
- Attract new investments to the City Region
- Change the business environment
- Create new jobs
- Support identified “Growth Sectors” in the City Region

Economic Context

“Liverpool City Region needs to strengthen its business base”

18450 businesses / 90000 jobs short

Business stock rate per 10,000 16-64 year olds

	2005	2008	2011	Change 2005-2011
UK	559.5	582.2	572.8	+13.3
LCR	369.7	401.5	384.2	+14.5
Halton	366.7	404.6	382.0	+15.3
Knowsley	243.7	276.5	286.6	+42.9
Liverpool	367.3	395.5	369.9	+2.6
Sefton	434.5	457.4	440.9	+6.4
St Helens	334.2	378.4	370.3	+36.1
Wirral	401.6	436.5	414.2	+12.6



Visitor Economy



Knowledge Economy



Low Carbon Economy



SuperPort

LEP Growth Sector Approach



Sectoral Approach

- Long-term private sector led strategies
- Bespoke promotion of key elements or short-term investment plans

The UK's Central Port Centric Location

Average HGV Access Times

■ Birmingham (Hams Hall)	2 hours
■ Glasgow	5 hrs 15
■ Leeds	1 hr 40
■ Manchester	50 mins
■ M4 Corridor / Slough	3 hrs 50
■ Nottingham	2 hrs 45
■ Central London	4 hrs 30

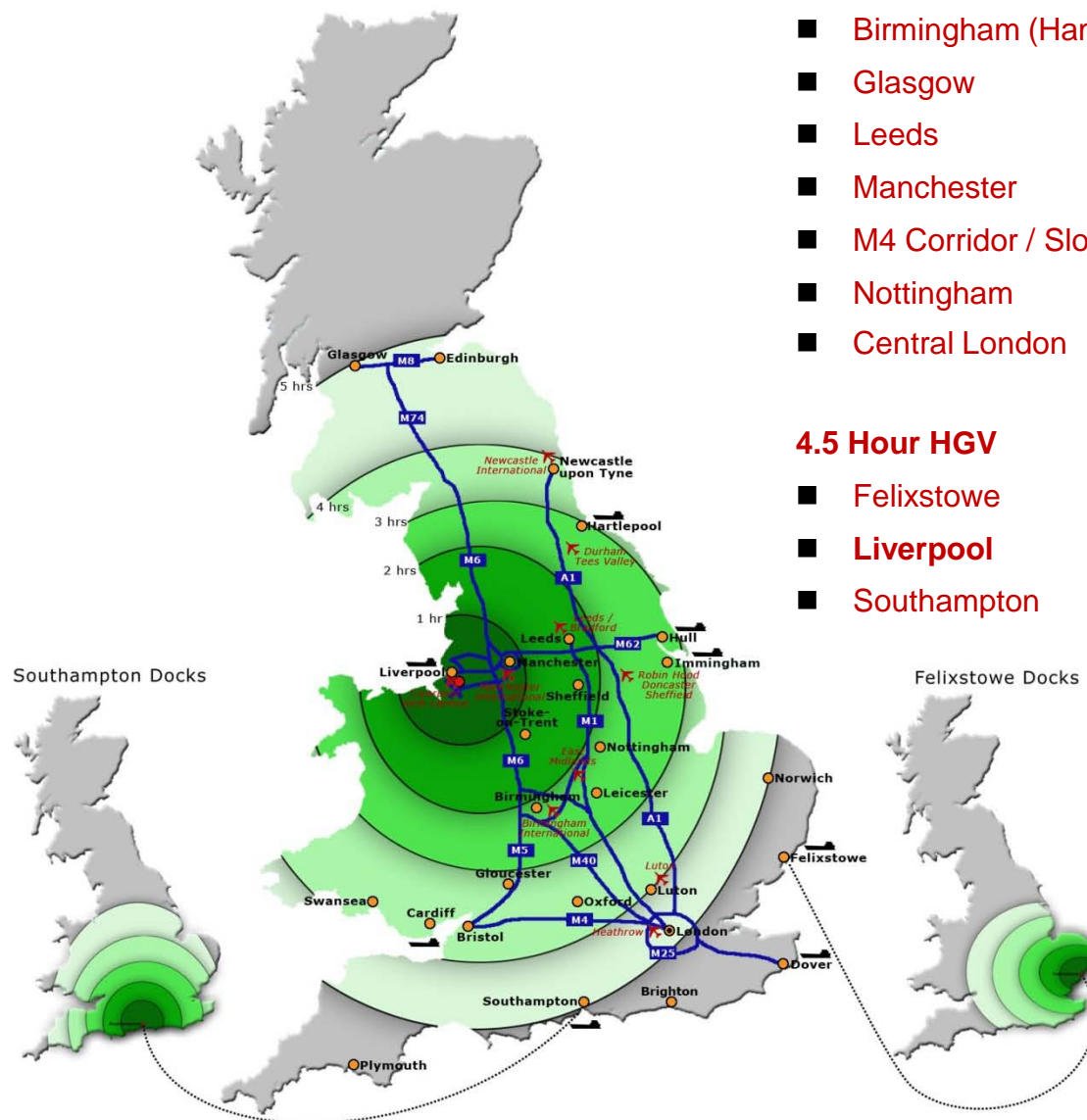
4.5 Hour HGV

■ Felixstowe
■ Liverpool
■ Southampton

Households

Population

12.7m	30,793,600
14.1m	33,753,400
15.0m	36,179,300



Source: East West Locations

SUPERPORT

Liverpool 2 - New deepwater container facility enhancing global connectivity

- Capacity for two 13,500 teu vessels to berth at once (Current capacity 3,500 teus)
- Will be able to handle over 90% of the worlds container fleet including all post panamax vessels





SUPERPORT

- Liverpool 2 – Removes the need for goods to be transhipped
- Port currently handles 650,000 teus per annum
- New facility will double capacity
- Potential saving of 150 million UK road miles per annum





SUPERPORT

Multimodal Facilities

- 3MG: fully operational intermodal terminal facility handling 120,000 containers per annum
- Room for 3.5m sqft of warehousing space
- Partnership between Stobart and Halton







SUPERPORT

Investment

- £1.8bn of investment in transport and logistics infrastructure across the City Region to further improve connectivity
- Mersey Gateway Bridge - £600m new 6 lane toll bridge



Low Carbon Assets & Opportunities

- Sustainable Energy
- Offshore Wind
- Retrofitting and Microgeneration
- Hydrogen Network
- Tidal and Wave





Sustainable Energy

Opportunity:

Sustainable Energy Action Plan has identified over 50 opportunities for energy projects including heat networks across the City Region. Delivery of sustainable energy alongside £1bn investment by Scottish Power in the City Region's energy infrastructure over the next 10 years will create a more robust energy system and several thousand jobs in construction operation and maintenance.

Offshore Wind

Opportunity:
A substantial offshore wind manufacturing, installation, operating and maintenance centre will be developed in Liverpool City Region to serve the proposed £18bn Irish Sea installations and wider UK and global offshore opportunities. Hundreds of jobs already created at Cammell Lairds, RWE, Dong etc in installing and servicing current offshore wind farms

A construction worker wearing a white hard hat, a high-visibility yellow and red safety vest, and dark trousers is working on a roof. The worker is using a power drill to install or secure a solar panel. The roof has a mix of traditional brown tiles and modern dark grey solar panels. A wooden ladder is leaning against the roof structure. The background shows a clear sky.

Retrofitting & Microgeneration

Opportunity:

Retrofitting - Roll-out of energy efficiency measures in existing properties stimulated by Green Deal and Energy Company Obligation (ECO) incentives – including heating systems, solid wall insulation, double glazing

Microgeneration - photo voltaic and other renewable energy technologies to residential and commercial buildings using UK Government incentives

Opportunities for renewable technology manufacturers, suppliers and installers

Hydrogen Network

The background image shows a hydrogen refueling station. It features a large, modern canopy with a yellow top and red trim. Underneath the canopy, there are several hydrogen fueling stations. A Shell logo is visible on the right side of the image. The overall scene is a clean, industrial-looking environment.

Opportunities:
Work with Universities, Automotive manufacturers, specialist research companies and Europe's largest H₂ producer to develop a Hydrogen Network for new generation of fuel cells for vehicles and other applications

Develop a sustainable supply chain to support low emission vehicle production

Tidal and Wave Energy

Opportunities:

Power from the Mersey – The UK's most advanced Tidal Energy Scheme - 700MW potential. Led by Peel Energy

Irish Sea/Atlantic – Some of Europe's best wave energy locations – Cammel Laird engaged

Future opportunities for research, investment, manufacture, installation and maintenance

Visitor Economy Assets & Opportunities

- Retail
- Culture
- Sport
- Major Events
- Conferences
- Waterfront
- Business Tourism















Life Sciences



Creative and Digital



Advanced Manufacturing



Financial and Professional Services

Global 'Megatrends' – recurring themes to 2030

- People

- Population Growth
- Urbanisation
- Western Aging
- Growing Middle Class
- Individual Empowerment
- '*Generation Y*' Consumption

- Technology & Markets

- Enhanced Connectivity . . . & portability
- Increased Resource Competition
- Increased Productivity
- Regulatory Harmonisation

- Macro-Economy & Geo-Politics

- Crisis-Prone Global Economy
- Wider Scope for Regional Instability
- Emerging Economy Growth

- Government Office for Science - *'UK Growth Opportunities for the 2020s (2019)*

Theme	Component
Biotech & Pharma	Genes & Cells
	Sensors & Computing
	Production
Materials & Nanotech	Advanced Materials
	Applications
Digital & Networks	E-Infrastructure
	Analytical Tools
	Processors, Interfaces & Sensors
Energy & Low-Carbon	Infrastructure
	Cars & Beyond
	Resource Efficiency
	Energy Technologies

Technology Trajectories

Theme	Component	Examples
Biotech & Pharma	Genes & Cells	<i>Synthetic biology & genetic medicine</i>
	Sensors & Computing	<i>Lab-on-a-chip, bio-imaging, & e-health</i>
	Production	<i>Agri-tech & biotech</i>
Materials & Nanotech	Advanced Materials	<i>Nanotech & intelligent polymers</i>
	Applications	<i>'Smart' materials & 3D printing</i>
Digital & Networks	E-Infrastructure	<i>Complex systems & ubiquitous computing</i>
	Analytical Tools	<i>Decision tools, search, & modelling</i>
	Processors, Interfaces & Sensors	<i>Photonics, biometrics, & swarm robotics</i>
Energy & Low-Carbon	Infrastructure	<i>Smart grids, microgeneration, & batteries</i>
	Cars & Beyond	<i>Intelligent, low-carbon vehicles & fuel cells</i>
	Resource Efficiency	<i>Recycling & carbon capture & storage</i>
	Energy Technologies	<i>Nuclear, bio, solar, marine, & wind tech</i>



Technologies >>> Growth Markets



• Global Markets

- Industrial biotechnology – \$170bn in 2010, \$660bn in 2020
- Biopharmaceutical market – \$100bn in 2012, \$392bn in 2020
- Agricultural Biotechnology – \$8bn in 2010, \$50bn in 2025
- The Smart City Market – \$2.1tn in 2020
- Green Environmental Products & Services – \$2.74tn in 2020
- Chemicals – \$5.3tn 2020

• For UK & EU opportunities, key markets

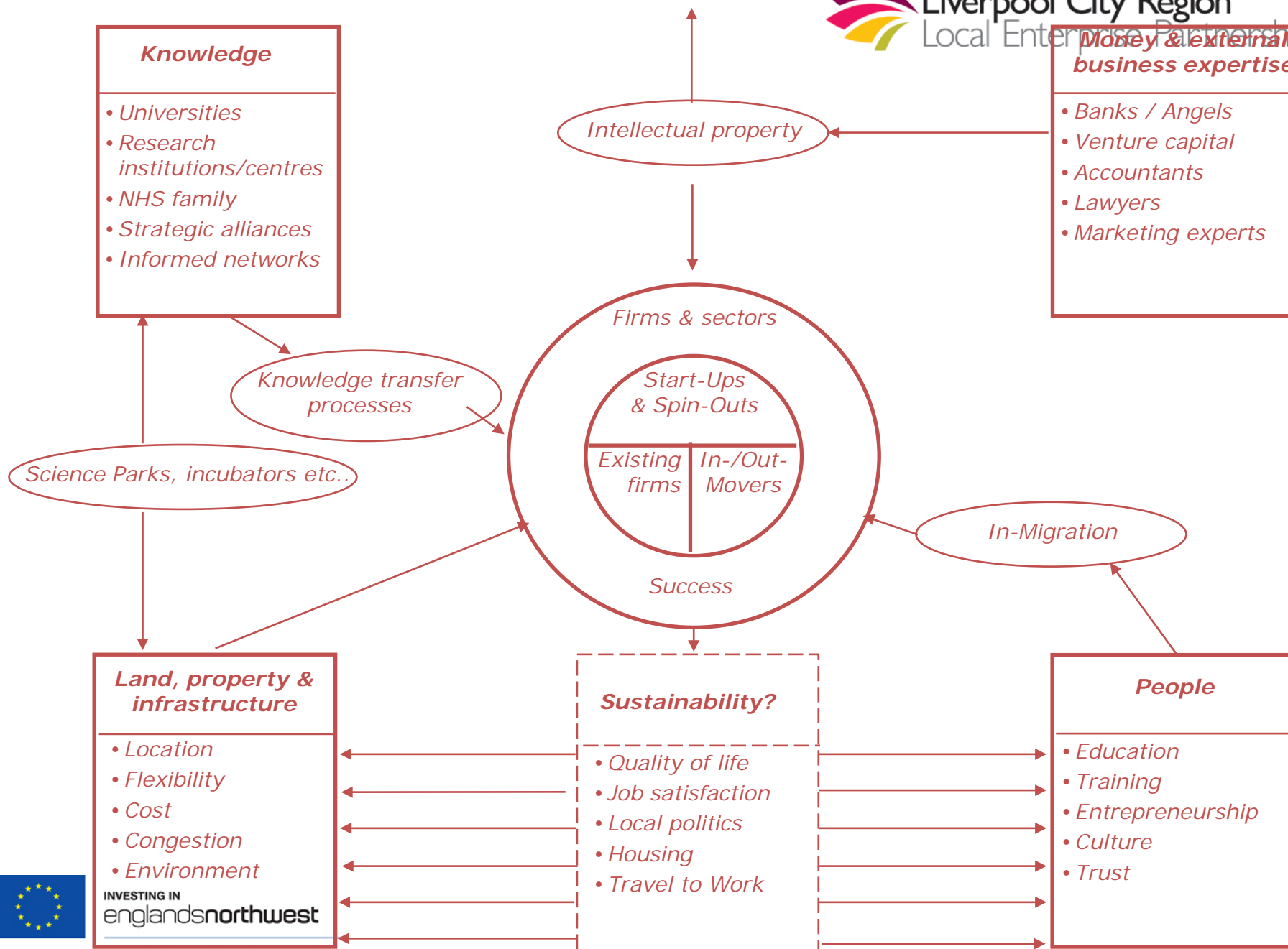
- Business services – ‘non-routine’ knowledge work
- Highly-automated, highly-skilled industrial manufacturing
- Energy generation, management, & use reduction
- Healthcare & welfare services (inc. care technologies)
- Leisure, media, & entertainment

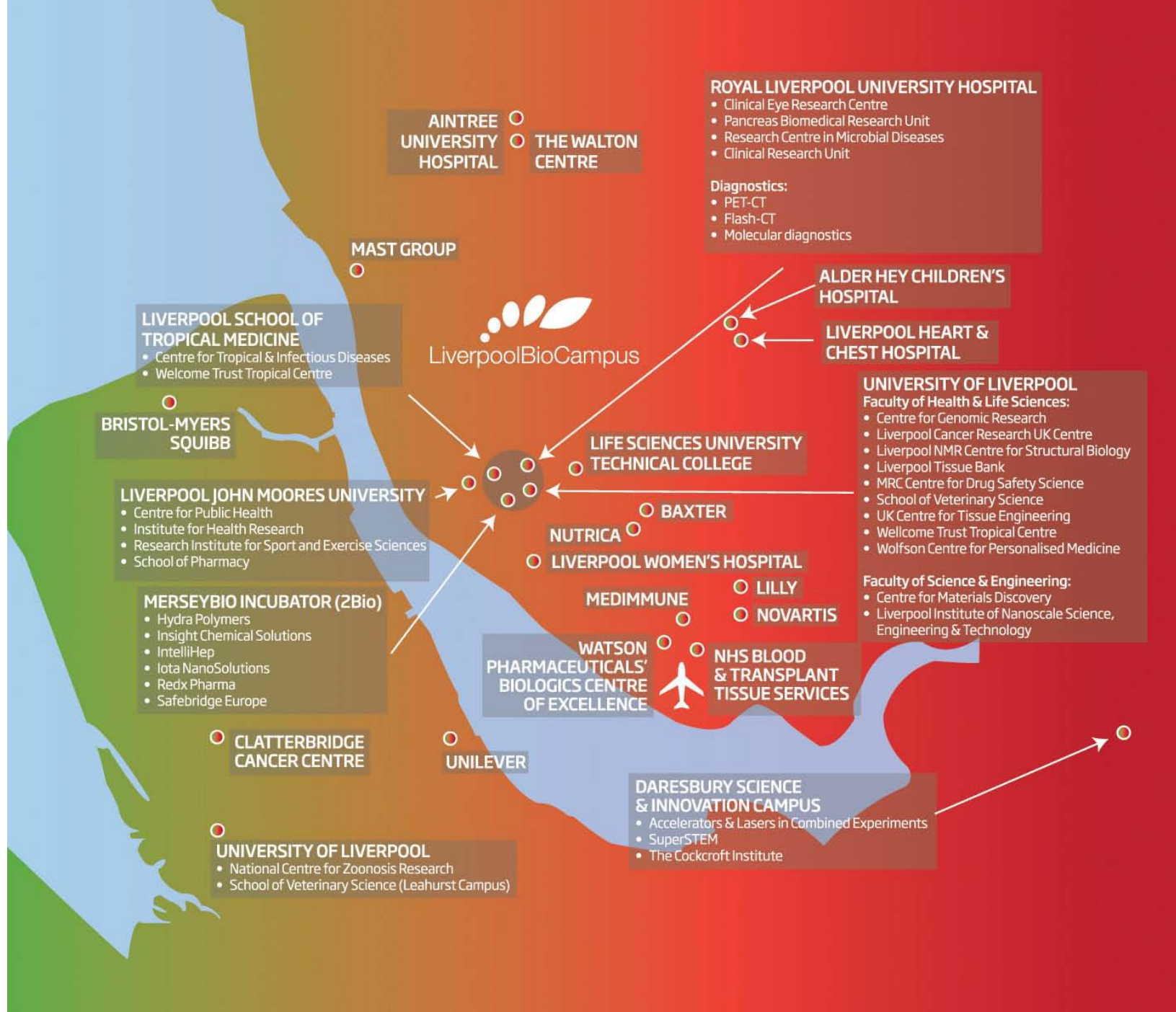
New Business Models

- Key themes
 - Vertical integration & distributed collaboration
 - Outsourcing & automation of high value 'knowledge work'
 - Migration to the web, & leverage of long tail markets
 - Aging workforce, working longer
 - Increasingly complex & connected markets, with increased risks
- 'Non-routine' activities that cannot be automated - innovation, leadership & sales - will dominate employment progressively from 2015
- '*Creativity*' will be the most important leadership competency for future successful business
- Intelligence, agility, & responsiveness the key characteristics of business performance

How do we compete? Knowledge is key

- Western companies increasingly can't compete in global mass market manufacture . . . (cost)
 - Instead, we may need to focus increasingly on
 - Niche markets esp. with design sophistication
 - Innovative new areas – with lead in-times & IPR cover
 - Combinations of product & service – the 'servicisation' model
 - Products & services tailored for the public sector
 - Military equipment & services, where competition is restricted
- *To compete*
 - *R&D*
 - *Niche Manufacturing*
 - *Marketing*
- Innovation – in all its forms – vital for our City Region





Life Sciences Key Activity 1 (Land Property and infrastructure)

BioCampus

“an exciting biomedical innovation environment where multiple businesses flourish in flexible partnerships with the primary Liverpool HEIs, Research Institutes and Hospitals”



Life Sciences Activity 2 (Knowledge)

Dallas

- Dallas assisted living programme – new technology to change care and health services
- Improve knowledge, confidence and use of life enhancing technology
- £23m in 4 programs over 3 years (Liverpool)
- More Independent is one of the 4 programs, £7.7m from TSB
- Liverpool Primary Care Trust, Liverpool Community Health, Liverpool City Council, Riverside Housing, PSS and Hft
- Technology partnerships include Philips, Tunstall and Informatics Merseyside.



Life Sciences Activity 2 (People)

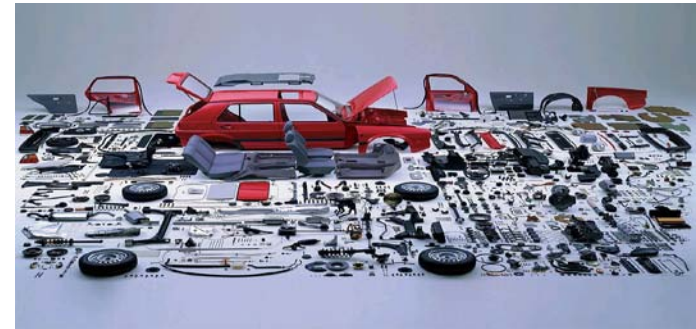
Life Sciences University Technical College

- specialist scientific and healthcare education with traditional GCSES, BTECs and A-Levels + qualifications such as GLP and GMP (Good Laboratory Practice and Good Manufacturing Practice)
- Sponsored by local employers: Redx, Novartis, Pro-Lab Diagnostics, Unilever and Thermo Fisher
- Underpinned by University of Liverpool
- 14-19 / City Region catchment
- Full day / 5 semesters



Key Programmes

1. Growing Places Fund of £18m to allocate
 - Submission of a £10m RGF 4 bid
2. Regional Growth Fund - £10m Business Growth Grants
 - Minimum grant **£50k** and maximum **£750k**
 - Fund will be fully operational by **summer 2013**
 - £5m Small Business Grants – bid submitted
3. AMSCI
 - £20million loan or grant funding
 - automotive and aerospace
 - + West Midlands LEPs
4. Mersey Waters & Daresbury Enterprise Zones
5. Skills for Growth Bank
 - Apprenticeship creation,
 - recruitment of targeted individuals
 - co-investment in skills - businesses own workforce development budgets
6. European Regional Development Fund 2007-2014
 - 40% ring fenced spend for Merseyside
 - Calls in 4 priorities
 - Support for NW Fund / Chrysalis



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