

Localism Act 2011
Acquisition of Land Act 1981

Inquiry into:

**THE SOUTH TEES DEVELOPMENT CORPORATION
(LAND AT THE FORMER REDCAR STEEL WORKS,
REDCAR) COMPULSORY PURCHASE ORDER 2019**

Appendices

for

Proof of Evidence (STDC5/2)

of

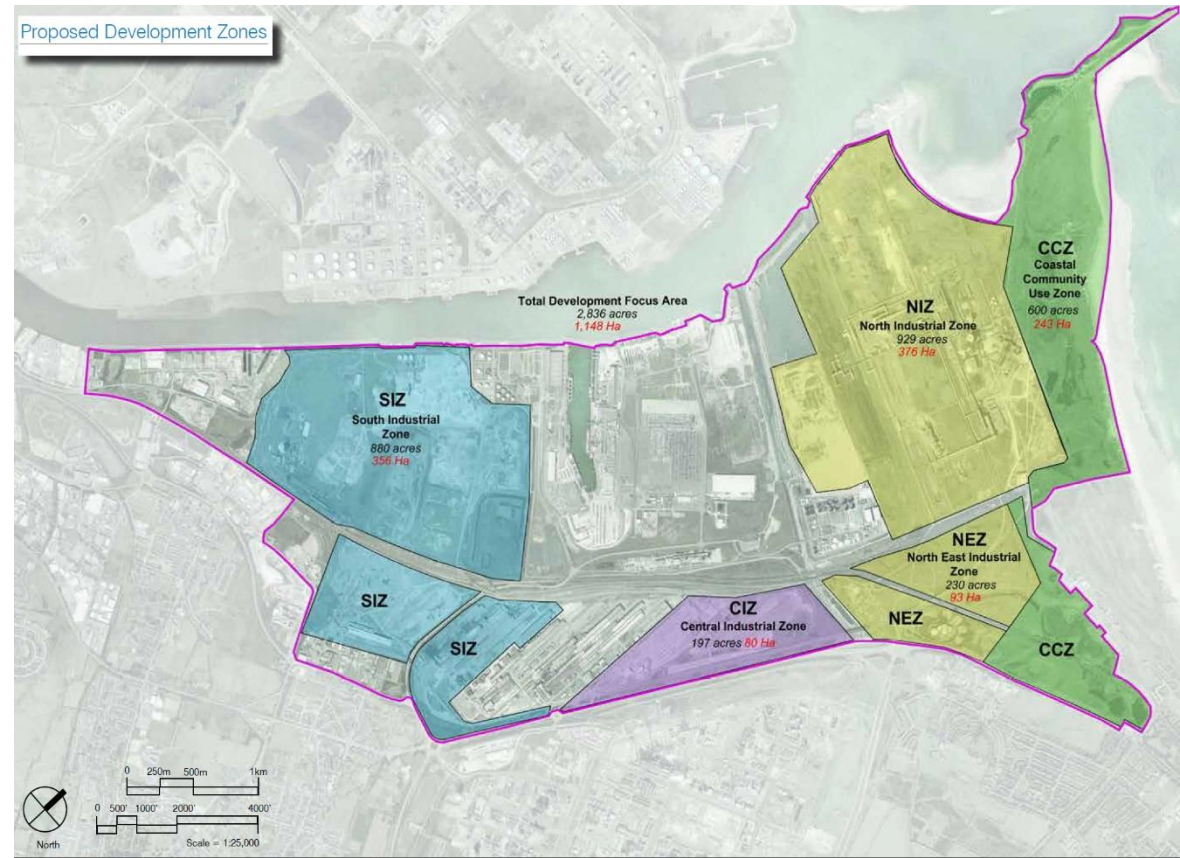
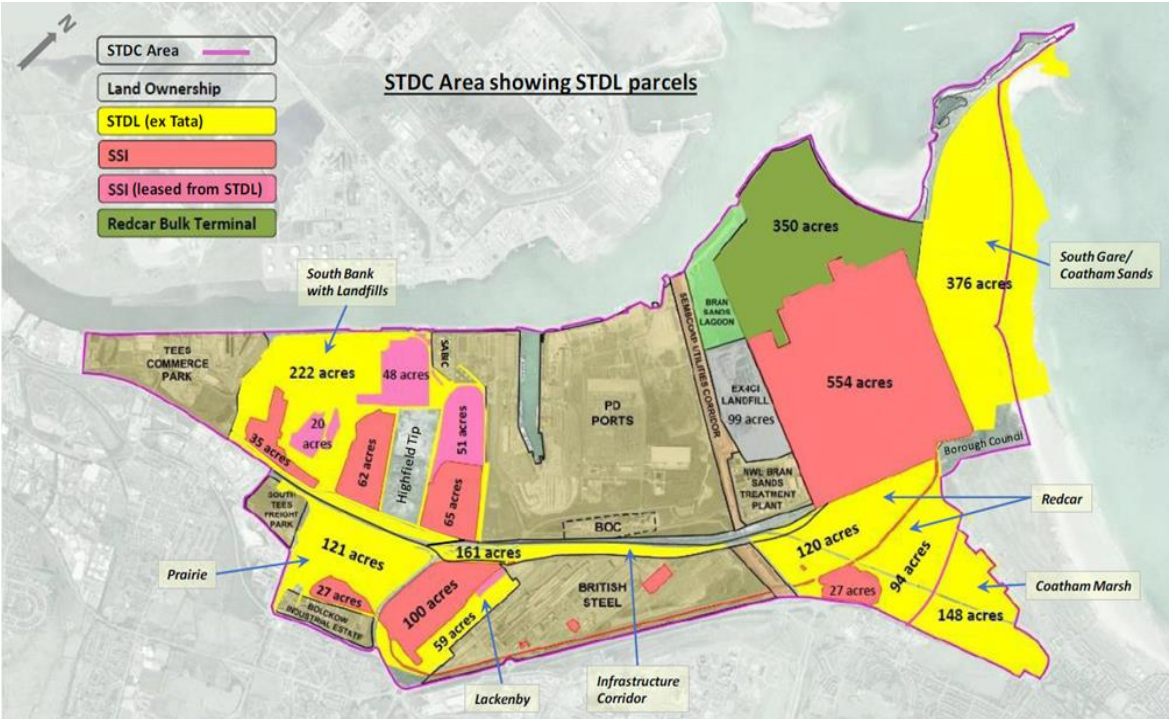
Guy Gilfillan

On behalf of South Tees Development Corporation

Ref. STDC 5/2

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Appendix 1: STDC Site Land Parcels and Photographic Images



Appendix 1 (cont.)

General photography of the site



Appendix 2: Images of Development of the STDC site in accordance with the Masterplan principles



Appendix 2 (cont.)

South Bank Wharf



Bulk Terminal



Steel Mills

Grangetown Prarie Site





INDUSTRIAL & LOGISTICS

Overview and Outlook – November 2019

19 November 2019

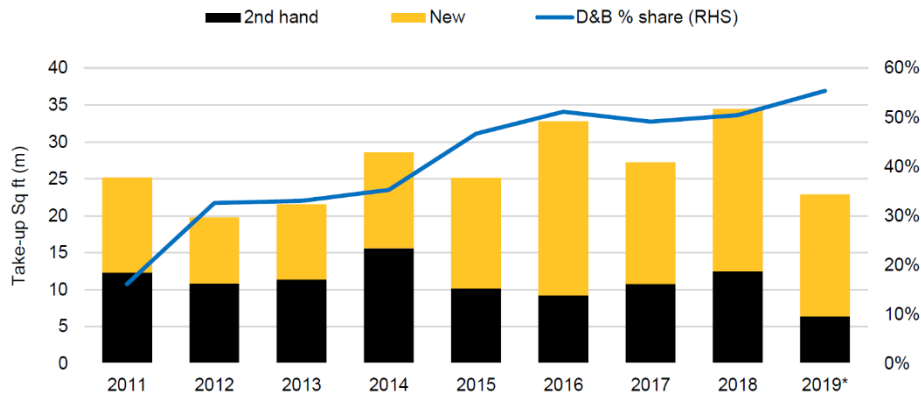


Agenda

1. National market review
2. Investment
3. Conclusion



Demand for new space increases



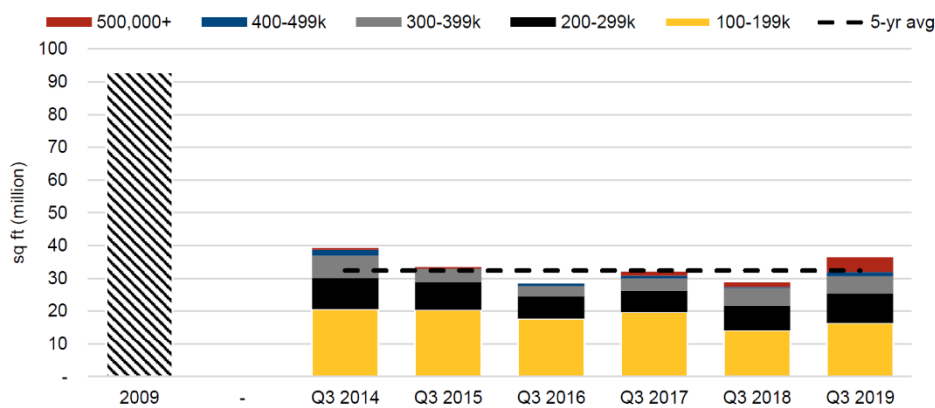
Source: Colliers International
Note: Units sized 100,000+ sq ft / 2019* as of end Sept.



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Supply increases due to development activity



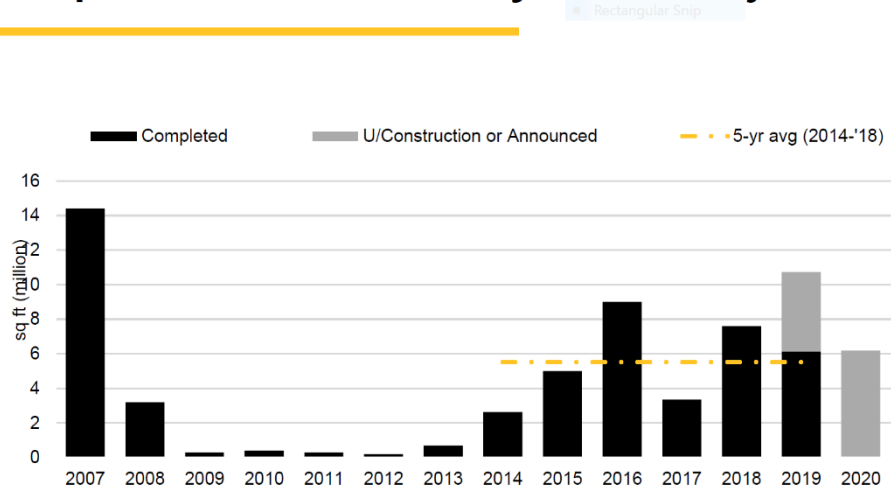
Source: Colliers International
Note: Units sized 100,000+ sq ft



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Developers remain unfazed by economic jitters



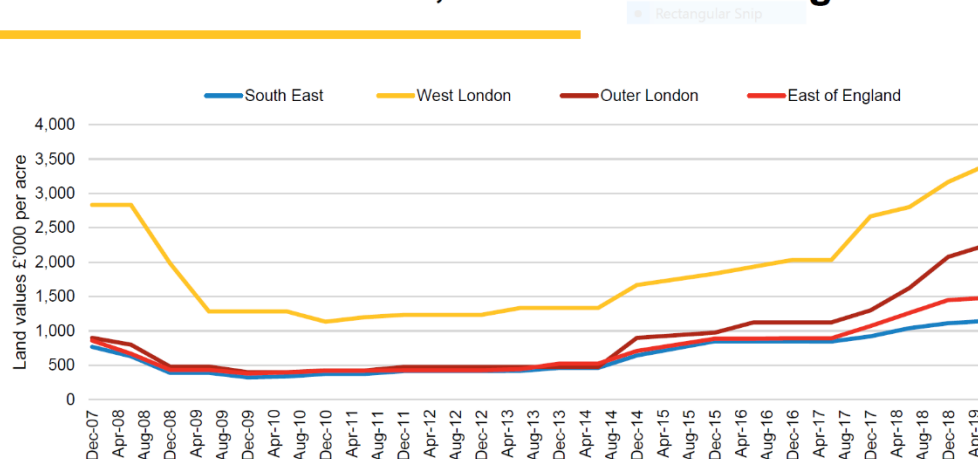
Source: Colliers International
Notes: Units sized 100,000+ sq ft



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Land values – London, SE and East of England



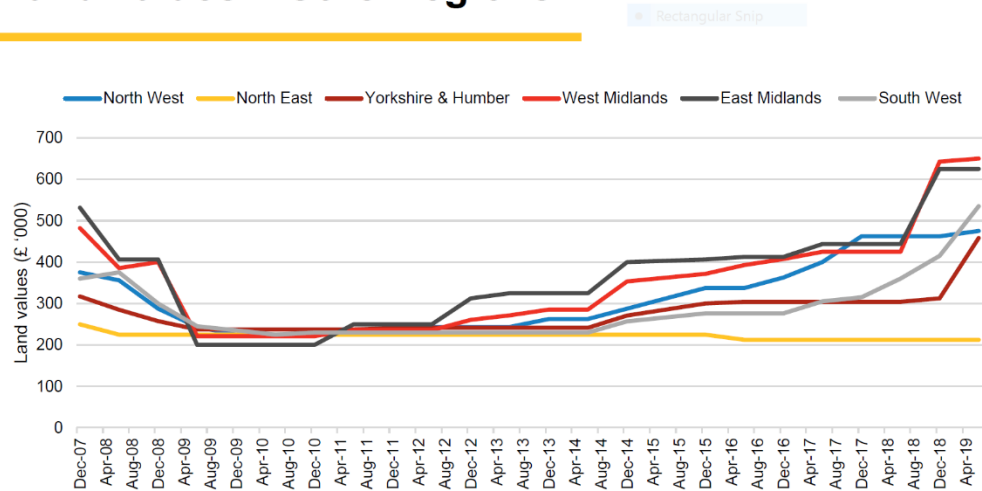
Source: Colliers International



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Land values – Other regions

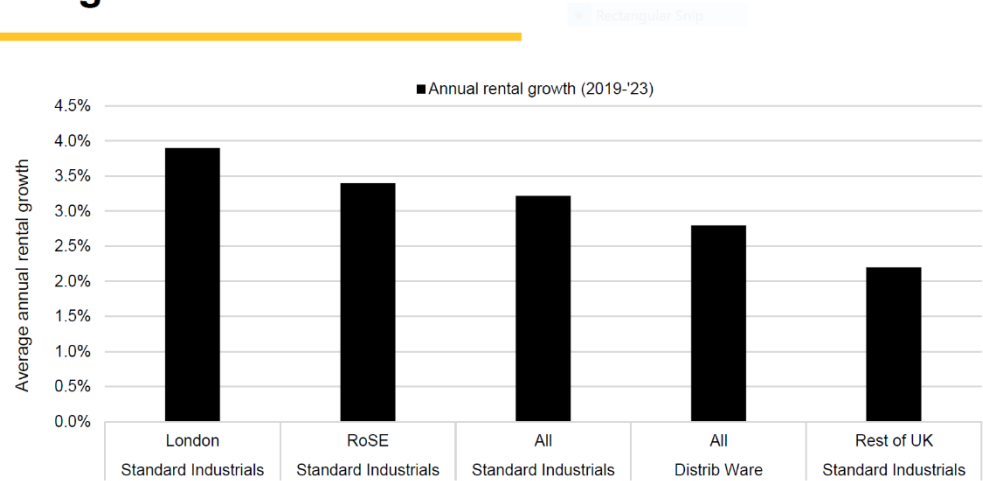


Source: Colliers International



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Rental growth forecasts



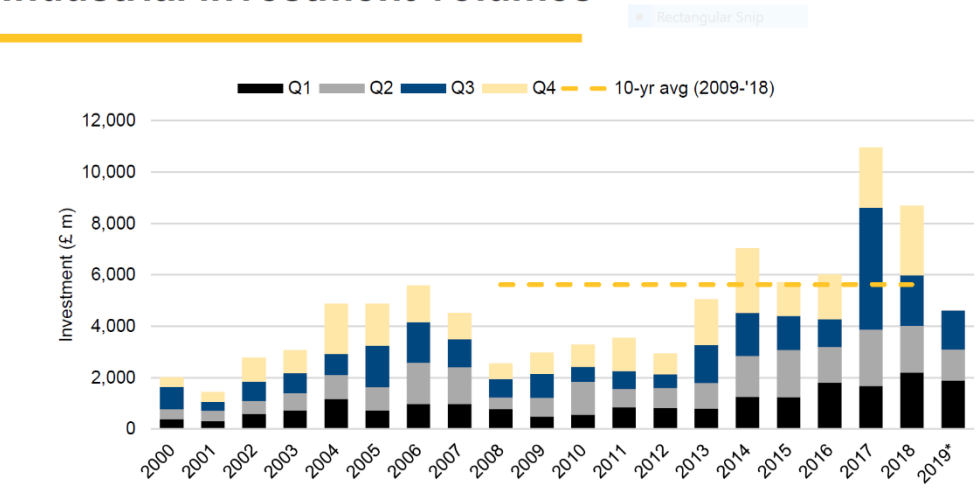
Source: MSCI/Colliers



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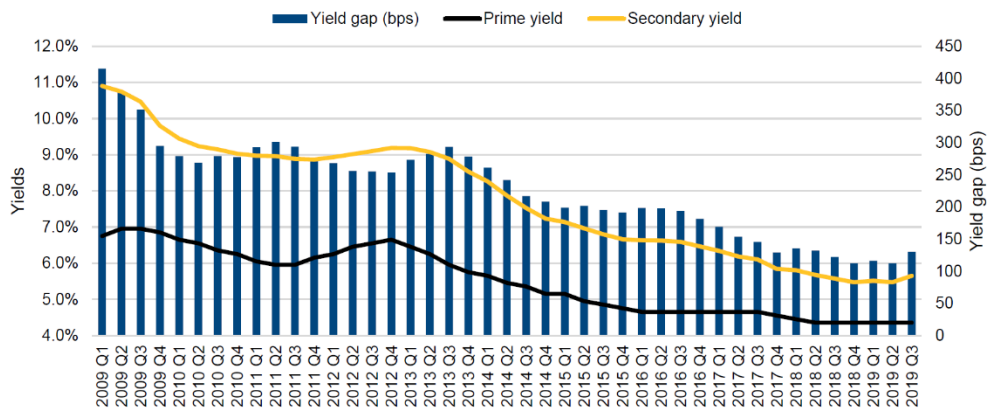
Industrial investment volumes



Source: Property Data
Note: 2019* to end Q3



Industrial yields



Source: Colliers International



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Key investment deals

Bilton Way, Enfield



- Three units totalling 130,295 sq ft
- 27.5k / 27.7k / 75k sq ft
- Average rent: £10.25 psf
- AWUT: 4.3 yrs / 3.7 yrs
- Q. £31.26m, NIY: 4%
- U/O £38.5m, NIY: 3.25%

Units A & C, Prologis Park, Croydon



- Two units totalling 176,556 sq ft
- 42,769 sq ft / 133,787 sq ft
- Average rent: £9.83 psf
- AWUT: 10.3 yrs / 3 yrs
- £45m, NIY: 3.61%
- Purchaser: SEGRO

Borehamwood Distribution Park, Elstree



- Three units totalling 123,886 sq ft
- 21k / 32k / 72.6k sq ft
- Average rent: £8.92 psf
- AWUT: 8 yrs / 7 yrs
- £29.9m, NIY: 3.46%
- Purchaser: RLAM

1-3 Iron Bridge, Stockley



- Three office buildings totalling 305,000 sq ft (vacant)
- 15.7 acres
- £56m
- Purchaser: Prologis



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Key takeaways

Rectangular Snip

1. Sentiments and underlying market drivers remain strong we continue to expect full-year take-up to exceed the 10-yr average. 2020 will witness pent up demand as we get more clarity
2. Flight to prime will support rental growth, particularly in Greater London and the South East with regional rental growth slowing
3. Yields for prime stock holding steady, with secondary stock being impacted by uncertainties
4. The Two Ps, People and Power will continue to affect occupiers' decision making process as labour shortages reach critical levels



Appendix 4: Background to the Manufacturing/Advanced Manufacturing Sector
(prepared by Colliers International)

The Manufacturing/Advanced Manufacturing Sector

UK manufacturing accounts for approximately 50% of UK exports, generating circa £140 billion per annum. Advanced manufacturing development is a vital component of a competitive manufacturing sector as well as the wider economy given the UK's need to generate higher skilled jobs and move into producing goods where we can add greater value.

Keen to encourage the creation of manufacturing jobs, UK exports and economic growth, in 2011 the Government launched the High Value Manufacturing Catapult in 2011, the £125 million Advanced Manufacturing Supply Chain Initiative and has devoted £45 million to setting up nine new university based Innovative Manufacturing Research Centres.

The Catapult provides a greater degree of integrated capability bringing together seven existing centres including:

- Centre for Process Innovation - CPI (Wilton (adjacent to the STDC site) and Sedgefield.
- Advanced Manufacturing Research Centre - AMRC (University of Sheffield)
- Nuclear Advanced Manufacturing Research Centre - NAMRC (Universities of Sheffield and Manchester)
- Manufacturing Technology Centre -MTC (Coventry)
- WMG (University of Warwick)

Since the launch of the Catapult, a number of additional centres have been established all with the aim of enabling the commercial development of key discoveries in university led manufacturing research.

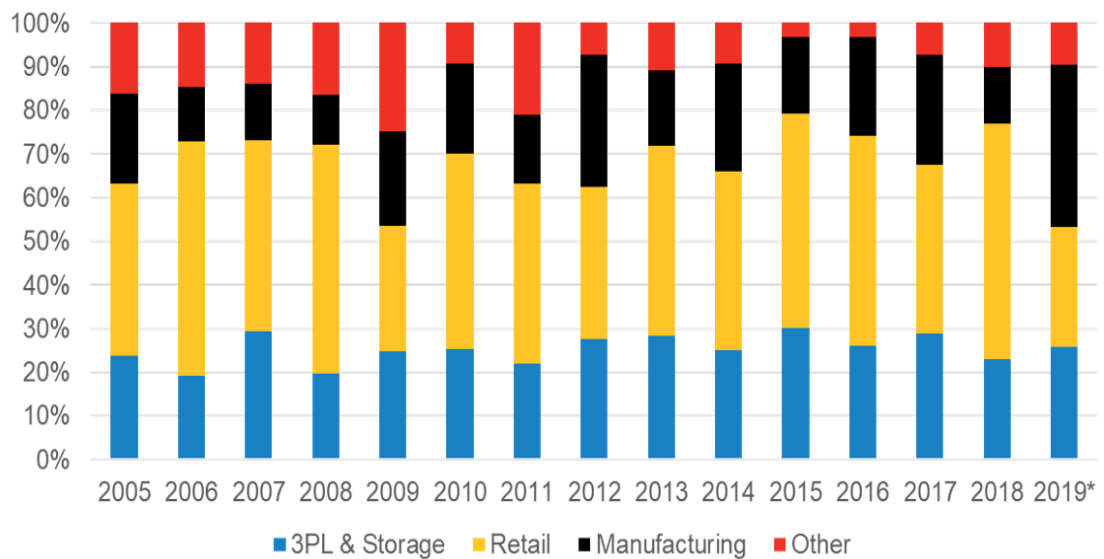
In 2017 the UK government published the Industrial Strategy white paper, 'Building a Britain fit for the Future'. The Industrial Strategy reinforces the importance of five foundations of productivity, ideas, people, infrastructure, business environment and places. It is a long-term plan for boosting the productivity and earning power of the people of the UK.

Key policies within the Industrial Strategy include boosting total research and development investment to 2.4 per cent of GDP by 2027, developing three new funds for Strategic Priorities, Industrial Strategy and International Collaborations, launching a new International Research and Innovation Strategy and the investment of over £300 million in world-class talent including in priority areas aligned with the Industrial Strategy, such as artificial intelligence, to enhance our skilled workforce and attract private sector R&D investment.

The focus of both Government policy on manufacturing and an increased appetite for investment in manufacturing by the private sector has led to an increase in the take up of property by the manufacturing sector in recent years as a proportion of the overall market take up of industrial buildings as evidenced by the following graph:

Appendix 4 (cont.)

Table A: Industrial Take-Up by Sector



Source : Colliers International

Note: Units size 100,000 sq ft +. 2019 data to end September

Recent years have seen a growing shortage of available industrial floorspace and sites across the UK, particularly sites of over 100 acres. This is partly as a result of the substantial increase in the demand for industrial buildings but is also a reflection of the increasing pressure for manufacturing/employment land to be allocated for other forms of development, particularly residential given the UK's housing shortage. Due to the higher land values attributable to alternative land uses (residential land values can be twice those for industrial land) landowner and developers are naturally encouraged to pursue planning for the higher value use.

The UK along with other leading economies is seeing the emergence of a series of fast growing new sectors within manufacturing . These include (with examples):

Sector	Company	Location
Offshore Wind	Siemens Gamesa	Green Port, Hull
	EEW SPC Blade Industries	
Clean Energy	Y Pellets	Goole 36, Goole
Waste to Energy		
Automotive	Jaguar Land Rover	I54, Wolverhampton
	McLaren Automotive	AMP, Sheffield/Rotherham
	Lear Corporation	
	Aston Martin	Bro Tathan Park, Barry, Wales
Sector	Company	Location
	TRW Automotive	

Rail Infrastructure		
Rail Rolling Stock	Siemens Rail	Goole 36, Goole
	Hitachi Rail	
Aerospace	Boeing	Advanced Manufacturing Park, Sheffield/Rotherham
	Dowty Propellers	

Increased industrial demand in wider North-East market is supported by recent transactions including:

- Tor Coatings, a paint and coatings producer leased a new build 135,000 sq ft (12,542 m2) at Follingsby Park, Gateshead in October 2018.
- In November 2018, SNOP, the French car parts manufacturer secures a 17 acre site for the development of a new 194,000 sq ft (18,023 m2) factory with expansion of up to 331,000 sq ft (30,750 m2). The development will create 150 new jobs. SNOP supply Nissan's Sunderland factory as well as other car makers.
- 2019 saw Lynx Precast acquire the freehold of their 14 acre (5.66 ha) site at Lynefield Park, Northumberland. This includes their 150,000 sq ft (13,935 m2) batch plant. As a result of the transaction, Lynx are investing an additional £0.5m into improvements to their operations.

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Advanced Manufacturing

- The Tees Valley has substantial capabilities in process engineering, energy (including renewables, oil and gas and nuclear), steel, automotive and aerospace.
- We also have a well-developed cluster of process manufacturing that has for decades underpinned our contribution to growth across the UK. These industries have benefited from reduced capital and operating costs due to our locational and infrastructure advantages.
- Around 750 advanced manufacturing businesses are based in Tees Valley, many of which operate in global markets.
- We have circa 5,000 people employed in engineering design, particularly focused upon the advanced manufacturing, process and low-carbon industries. This expertise means that Tees Valley has some of the highest level of knowledge-intensive business services in the UK
- Our businesses benefit from good physical connectivity via rail and roads links with access to international markets and good virtual connectivity with above average superfast broadband connectivity and robust water, gas and electricity infrastructure.

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Appendix 5 (cont.)

Rectangular Snip

Number of Jobs Advertised Online (1,311)		Total Jobs	Average advertised wage				
Occupation	Tees Valley	Total Jobs in Industry	Tees Valley	North East	Wales	North West	West Midlands
Large goods vehicle drivers	341	334	£24,800	£24,300	£25,100	£26,200	£26,300
Assemblers (vehicles and metal goods)	6	422	£21,210	£18,200	£18,400	£19,000	£18,900
Assemblers and routine operatives	23	304	£21,600	£24,000	£26,500	£26,700	£23,100
Production and Maintenance fitters	65	1,343	£25,400	£25,400	£28,700	£29,800	£29,400
Elementary Process Plant occupations n.e.c	58	452	£28,800	£25,300	£22,800	£22,400	£20,600
Elementary Storage Occupations	255	839	£16,800	£17,800	£18,900	£18,300	£18,300
Fork-lift truck drivers	46	320	£19,100	£18,900	£19,200	£20,100	£20,600
Vehicle technicians, mechanics and electricians	224	N/A	£23,800	£25,400	£26,200	£26,100	£28,500
Science, Engineering and production technicians n.e.c	209	N/A	£20,600	£21,700	£20,800	£22,800	£21,700
Quality Assurance Technicians	84	N/A	£29,000	£25,800	£27,500	£28,000	£26,700

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Rectangular Snip

Top thirty roles by number employed in 2018 – (manufacturing related roles in Tees Valley 26,000+ in total)

Occupation	Employed	Occupation	Employed
Production managers and directors in manufacturing	1,529	Routine inspectors and testers	410
Metal working production and maintenance fitters	1,343	Book-keepers, payroll managers and wages clerks	383
Food, drink and tobacco process operatives	971	Large goods vehicle drivers	334
Elementary storage occupations	839	Production and process engineers	325
Sales accounts and business development managers	795	Fork-lift truck drivers	320
Welding trades	734	Metal plate workers, and riveters	314
Metal machining setters and setter-operators	657	Assemblers and routine operatives n.e.c.	304
Other administrative occupations n.e.c.	635	Plastics process operatives	292
Chemical and related process operatives	620	Engineering professionals n.e.c.	290
Packers, bottlers, canners and fillers	607	Design and development engineers	259
Paper and wood machine operatives	455	Assemblers (electrical and electronic products)	249
Elementary process plant occupations n.e.c.	452	Business sales executives	241
Metal working machine operatives	446	Electrical and electronic trades n.e.c.	239
Electricians and electrical fitters	434	Engineering technicians	238
Assemblers (vehicles and metal goods)	422	Mechanical engineers	222

Source EMIS

Unemployment rate for Tees Valley is 7.1% for the twelve months up to June 2019

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Salaries

Rectangular Snip

Salaries

- The average advertised wage in Tees Valley remains very competitive at £28,000 in 2017 compared to a national UK wage of £34,100. The table below is an indicative sample of manufacturing and assembly roles by UK region, highlighting Tees Valley's competitive position.

		Average advertised wage 2017				
SOC code	Occupation	Tees Valley	North East	Wales	North West England	West Midlands
3119	Science, Engineering and production technicians n.e.c	£20,600	£21,700	£20,800	£22,800	£21,700
9139	Elementary Process Plant occupations n.e.c	£28,800	£25,300	£22,800	£22,400	£20,600
5449	Other skilled trades n.e.c	£22,300	£22,300	£21,300	£26,300	£26,300
3116	Planning, process and production technicians	£28,500	£33,200	£30,900	£36,800	£36,400
2113	Physical Scientists	£29,300	£35,700	£51,700	£40,600	£37,400
8139	Assemblers and routine operatives	£21,600	£24,000	£26,500	£26,700	£23,100
8114	Chemical and related process operatives	£22,140	£24,300	£26,100	£30,600	£25,600

Apprenticeships

- Demand for apprenticeships vacancies is high in the Tees Valley with 5,036 applications received between July 2017-September 2017 for 473 advertised vacancies, a ratio of around 11 applications per vacancy. This demonstrates the appetite and work ethic of the area's workforce.

Higher education

- 5,960 Tees Valley higher education students obtained an undergraduate or postgraduate qualification in 2015/16.
- There are currently 86,930 people aged 20-29 living in Tees Valley.

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Tees Valley Skills Base

Rectangular Snip

Tees Valley already has significant numbers of trained staff and a pipeline of apprenticeships able to meet increased labour demand.

Skills in the area are aligned to meet the requirements for our industrial activities, with salaries approximately 11% lower than the UK average.

This is because the underlying cost of living in the area is significantly lower than the South East of England. Typical examples are shown below:

Salary £'s	Tees Valley	London	Greater Birmingham	Greater Manchester	Leeds City Region
Plant operator	22,600	31,300	24,900	24,500	24,600
Process Control Engineer	23,200	31,500	25,000	24,900	25,000
Maintenance Manager	38,600	45,000	45,000	43,000	42,500
Quality Control Engineer	27,700	35,000	23,700	24,000	25,000
Metallurgist	22,600	33,300	23,900	26,400	25,000
HR Manager	22,900	36,400	25,000	25,500	25,000

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Source: Labour Insight

Notes: Median annual salary (£ p.a.) averaged over the last 12 months

Tees Valley Skills Base

Connections with Tees Valley educational institutions

Each of the five Tees Valley further education colleges (offer a range of flexible engineering and construction courses as well as Foundation Degrees covering, Electrical and Electronic engineering, Mechanical and Manufacturing Engineering and Civil Engineering.

Apprenticeships

The percentage of 16-35 year old Tees Valley residents starting an apprenticeship has consistently been higher than the percentage nationally over the last three years. In 2015/16 this was more pronounced with a 12% growth in apprenticeship starts compared to a 2% rise nationally.

Advanced Manufacturing apprenticeships accounted for 15% of all apprenticeships started by Tees Valley residents in 2015/16, with apprenticeships in Construction accounting for 7% and Logistics 3%.

The Advanced Manufacturing sector shows the largest increase in apprenticeship starts over the last year with 460 extra starts, a 47% increase.

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Tees Valley – Skills Overview

Our Further Education facilities are geared towards supporting the existing and future skills requirements of our engineering base.

- Middlesbrough College's £20million STEM Training Centre is a leading provider of technical training, skills, behaviours and competency solutions for a range of engineering industries.
- Hartlepool College of Further Education is one of the largest providers of apprenticeships in the North East, and its success rates have placed it as the second best provider of its kind in the country.
- NETA have opened a new £1.12m engineering training centre in Stockton, designed to meet the skills needs of the UK's emerging industries. This facility is equipped to respond to demands of employers operating in the renewable energy, low carbon and mining sectors, building on the Tees Valley's existing industrial infrastructure.

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Appendix 5 (cont.)



Specialist training provision



Falck Nutec

World Leading Offshore Health, Safety and Offshore Survival Training.

www.falck.com/nutec_uk/



TWI - Manufacturing, engineering, materials and joining specialists

TWI is a global leader in technology engineering providing research and consultancy

<http://www.twi.co.uk/>



The Faraday Centre

High And Low Voltage Training Specialists

www.faradaycentre.co.uk/



NETA Training Group

Offering quality training for engineering construction companies & hands on skills
www.neta.co.uk

PLUS

- 5 Further Education colleges in Tees Valley.
- 10 Leading universities within 2 hours
- Specialist working at height training centres
- Siemens & Maersk training centres 1 hour away in Newcastle
- 50k Armed Forces personnel available by 2015 for up-skilling into the industry.
- C-State provides specialist training for the operation of ROV's.



World Class Engineering Expertise

Case Study: Low Carbon Energy - Manufacturing Technology Centre

TWI is a global leader in technology engineering providing research and consultancy to its members. Respected for its expertise, professionalism, impartiality and confidentiality, TWI works with the most influential companies worldwide across all industry sectors.

TWI provides a single-point access to technical and project management support across the oil & gas and renewables sectors. The breadth of in-house expertise offered in materials, fabrication, repair, non-destructive testing (NDT), structural integrity, O&M optimisation, and training enables TWI to offer a cost-effective and fully integrated service.

- Reduce fabrication costs
- Increase production rates
- Reduced time to market
- Enhance durability
- Reduce in service maintenance

This will be achieved by supporting companies through involvement in:

- Innovation
- Research and development
- Prototyping
- Demonstration
- Supply chain assistance
- Technology transfer
- Underpinning workforce skills training and qualification

About TWI

✖ Rectangular Snip

TWI's Mission - To deliver world class services in joining materials, engineering and allied technologies to meet the needs of a global membership and its associated community

900 staff in 4 main R&D centres - 5 UK sites and 14 Intl. locations

Approx. 1800 industrial member companies Worldwide

TWI facilities in the Tees Valley are open access:

- Establish in Tees Valley for nearly 30 years
- Occupied new facility in 2016 on TeesAmp
- Main Regional Technology areas
 - Coatings and Tribology
 - Thick section metal welding
 - Plastic welding
 - Numerical modelling
 - NDT
 - Hydrogen testing

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Tees Valley – Skills Infrastructure

✖ Rectangular Snip

The Faraday Centre

A privately owned, international training company specialising in the provision of Electrical Power Training. The Tees Valley centre equipped with a wide range of operational high/low voltage electrical training equipment.

The Faraday Training Group undertakes a wide range of courses for those who are specialised engineers to those who come into contact with electrical equipment, including:

- High Voltage Switchgear Operation
- High Voltage Testing
- Introduction to the Safe Operation of High Voltage Power Systems
- Access to Electrical Substations & Switch rooms

The centre also provides Consultancy services, auditing and the development of High Voltage safety rules/documents and operational procedures designed to meet the clients' requirements and to ensure compliance with current regulations.

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Tees Valley – Skills Infrastructure

Materials Processing Institute

The Doctoral Academy at the Materials Processing Institute is a networking group primarily for students undertaking a PhD in a materials science related discipline at a UK University.

The Academy aims to utilise the expertise of the Materials Processing Institute to provide enrichment opportunities that link students to industry and industry to the UK academic research base.

The Academy has strong links with many industrial companies, including SMEs, universities and Centres for Doctoral Training (CDT). However, it is completely independent and does not seek to promote any individual organisation.

Through sharing resources, the Doctoral Academy provides a structure for companies to engage with academic research and expertise. This collaborative approach enables the Academy to increase understanding and establish better links between the metals and materials industries, doctoral students and universities working on relevant topics.

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Skills & Training



- **Teesside University** is an anchor institution in Tees Valley: a major provider of full-time Higher Education aligned to growth industries, continuing professional development for regional employers, graduate start-ups and scale-up support, and innovation and knowledge exchange for ambitious high-growth companies
- The university's School of Science, Engineering & Design research and innovation platform covers both innovative fundamental research and applied industry facing activities in Science, Engineering and Design.
- There has been a particular focus on the bio-economy, Smart Energy Systems & Informatics, Engineering Processes and Creative Design.
- Major multi-million EU H2020 projects funding supports ***internationally leading research in the field of Smart Energy Systems and Engineering Processes***. The School also has an international reputation for its work in Building Information Modelling development and application to Build Environment
- The School's vision and strategy is to develop internationally leading applications focused research.
- It has a long tradition of applied, collaborative research working with industrial partners. The Tees Valley is a major centre for the chemical and process industries, with an innovative industrial base and companies are actively involved in developing future technologies such as clean manufacture, biotechnology, biofuels, hydrogen technologies and printable electronics.
- As well as developing applications-focused new knowledge and technologies, the School provides a wide range of services through its strong, long-standing relationships with public and private sector organisations.
- Collaborators and partners include some of the world's leading companies and research organisations such as Rolls-Royce, IBM, Qatar Project Management, HOCHTIEF-Vicon and Ramboll and universities and research institutes such as Sheffield, Manchester, Oxford and VTT Finland.

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Skills & Training



- **Teesside University's Smart Energy Systems and Energy Informatics Research Group** carries out a range of research and enterprise activities centred around the themes of intelligent sensing, control and informatics for energy-related applications.
- Focus areas of research include applications of Information Modelling, Machine Learning and Optimization for smart grid and the built environment.
- The research interests and backgrounds of staff members are multi-disciplinary and varied in nature, and include specialisms in construction, control and instrumentation, power systems, artificial intelligence and ICT.
- The work of the group has been underpinned by numerous EU H2020 research grants and UK/Overseas Government investments, and research outputs have been recognised as world-leading or internationally excellent in terms of quality and impact.



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Creating a platform for excellence

Rectangular Ship

Tees Valley has existing expertise in metallurgy, process industries, industrial operations and maintenance, engineering consultancy and logistics.

The Tees Valley supply chains have embedded innovation and best practice in Health and Safety into their businesses. This has enabled them to successfully deliver on major projects nationally and internationally with a proven track record of successfully integrating into complex supply chain arrangements to deliver on time, on cost, on scope, on quality – and safely

The area benefits from being co-located with the region's innovation ecosystem, particularly the Material Processing Institute (specialising in metallurgy and steel making), Centre for Process Innovation (the advanced manufacturing catapult for the process industry) and The Welding Institute (specialising in fabrication).

These organisations already collaborate with local businesses and supply chains, developing new products and processes.

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About Materials Processing Institute

The Institute is a globally recognised centre for the innovation, development and commercialisation of technology for advanced materials, low carbon energy and the circular economy.

This is delivered by scientists and engineers with expertise in materials science and advanced processing, utilising state-of-the-art equipment, laboratories, workshops, demonstration, scale-up and production facilities to develop technology, enhance materials and improve processes.

The Institute predominantly works with the steel industry internationally, the materials industry nationally and small and medium sized enterprises in the Tees Valley region; offering research services, consultancy, training, specialist melting, library and information services, along with other support services direct from the Institute campus, including lease of office and workshop space, meetings, conferences and events.

Advanced materials expertise is focussed primarily on steel and metals, but also high temperature ceramics, glass and even natural materials. Drawing on core Institute expertise in metallurgy, thermo-fluid dynamics and engineering, new processes and technologies are under development, which increase yield, or improve the quality of materials.

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About Materials Processing Institute

Rectangular Snip

The Institute has extensive capabilities in mathematical and physical modelling; thermodynamic modelling; mineral, metallurgical and analytical laboratories, and associated techniques and technologies.

Their expertise extends to:

- Experimental and Computer Modelling
- Thermodynamics
- Instrumentation and Control
- Materials Microscopy
- High Temperature Materials
- Chemical Analysis
- Materials Testing

The pilot plant, scale up and demonstrator facilities offer flexible spaces that help businesses progress technology.

Research teams with extensive experience with process plant and equipment, often operating in challenging environments, provide robust solutions to complex problems.

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About Materials Processing Institute

Rectangular Snip

These teams work with clients to develop and enhance processes to support new technology and materials development.

Clients have access to a range of laboratories and equipment supporting the development of new technologies.

The institute has extensive laboratory space available from simple worktop or bench space, through to purpose built bespoke laboratory facilities.

A team of experienced scientists, skilled technicians and workshop staff are also available to support with technology development

The MPI is also in partnership with several universities including Teesside, Sheffield, Durham and Newcastle, providing doctoral training for PHD students.

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Teesside University

As part of the Innovate Tees Valley project, the university is supporting Tees Valley-based SMEs in the development of smart products and with smart manufacturing.

Smart products incorporate a variety of technologies including electronics, photonics, mechanics, wireless, chemical and biological, as well as advanced manufacturing processes such as additive manufacturing.

Smart manufacturing allows linking every part of a business, from the most distant part of the supply chain to delivery of a product to the customer. Analytics plays an important role to ensure that the information is available at the right time and place.

The university also supports low risk product innovation and development through gap analysis, design and prototype development in a number of key technology sectors including process, advanced manufacturing and engineering, health and social care, pharmaceuticals, biologics and medical technology.

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Teesside University

Our local University, Teesside University supports our manufacturing sectors through a broad range of engineering expertise including electrical and electronic, advanced materials, instrumentation and control, civil and construction, mechanical, chemical and biotechnology environmental sustainability, energy and waste management and CAD/CAM.

Its research expertise includes advanced processing, engineering management and sustainability.

Areas of particular strength are 4D simulation in large construction projects, nanotechnology and lab on a chip design and synthesis, lean manufacturing and studies into data transfer protocols.

Access to the specialist knowledge and expertise of University academics can add value to your business in many different ways including:

- research and evaluation
- testing and lab-based experimental work
- near-market research and development
- technical support for specialist facilities and equipment
- product design and product testing
- needs analysis and problem solving.

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Teesside University

Manufacturing Support

Support includes access to specialist electronic, photonic, and additive manufacturing expertise, alongside access to the University's own high spec 3D printing equipment and microfabrication facilities in order to design new product concepts, test their feasibility and identify the key elements of the supply chain which will facilitate introduction of the products to the market.

Intensive support is designed to support significant prototype development moving product concepts from technology readiness level 4 (small scale prototypes) towards technology readiness level 7 (system prototype demonstration in an operational environment).

There is particular focus on advanced sensor design, in order to embed digital signal processing and wireless communication capabilities in 3D printed prototypes

INVEST | TEES VALLEY

We are committed to developing the skills for our industries

Rectangular Snip

Our strategic economic plan sets out a number of ambitious but achievable steps for boosting skills, including increasing the number of young people in education, employment or training, introducing a high quality careers, education and guidance system and deliver high outcome training initiatives.

This includes the creation of an Apprenticeship Hub, to maximise the take-up of apprentices by employers and individuals seeking to develop their career. Our aim is to build upon the skills base in the area to support economic growth.

Our strategy prioritises working collaboratively with business.

With powers and resources devolved to us from central government, we have an exciting opportunity to deliver the change that our businesses need.

Extract

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'A contaminated, muddy field - and no clear ownership' - Billionaire on why he rejected Teesside for his car factory

Ineos owner Sir Jim Ratcliffe has revealed why he shunned Tees site for his 4x4 car factory

COMMENTS

BY

Kelley Price

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Sir Jim Ratcliffe - the UK's wealthiest man - has given his reasons for turning Teesside down (Image: Getty Images)

The billionaire who shunned a Teesside site as the location for his major 4x4 car plant said it was a "contaminated, muddy field with no road links - and no clear ownership of the land".

Ineos owner Sir Jim Ratcliffe did not think the [South Tees Development](#) site could "meet his timescales" but denied turning it down "on a whim" - claiming "nothing could be further from the truth".

But the South Tees Development Corporation (STDC) says his comments are an "unfair characterisation" of the state of the 4,500-acre site - which includes the ex-SSI steelworks - and Ineos had always said it preferred to convert an existing car factory "rather than build one from scratch".

Sir Jim - who is the UK's wealthiest man - was responding to a Financial Times report on Projekt Grenadier, his plan for a large UK factory to plug a gap for off-road vehicles left by Landrover's Defender.

He had been eyeing up the South Tees site as a possible location for months.

STDC chiefs say they "threw the kitchen sink" at bringing the plant to Teesside but the tycoon rebuffed them, reportedly choosing a ready-made rival facility in Wales.

The tycoon made the latest comments in a letter to the FT in response a column in the paper entitled "Big companies are pushing governments around", which referred to the STDC's efforts to lure Ineos.

Mr Ratcliffe wrote: "It implies that despite the riches of Croesus being laid at our feet by the authority, we churlishly dismissed the region on a whim.

"Nothing could be further from the truth.



Aerial view of major part of the SSI site, covering the ironworks and Redcar Bulk Terminal (Image: Evening Gazette)

"The offered site was a large, contaminated, muddy field with no road links and, at the time of our visit, no clear ownership of the land.

"There was no guarantee that the necessary infrastructure could be put in place to meet our timescale. "

Decisions "such as this", he said, did not come down to a "crude auction of financial incentives".

Tees Valley Mayor Ben Houchen previously said he had thrown "the kitchen sink" at bringing the new car plant to the South Tees site.

A spokesperson for the STDC said: "We offered Ineos a generous package of support including grants, tax credits and financial incentives.

"We also offered to build the factory and associated road infrastructure, to cover the full costs of land remediation, and a supplied a timetable for land acquisition.

"The company's preference, however, was always to convert an existing car factory, rather than building one from scratch.

"We continue to engage with over 100 investors who have expressed an interest on this site, and we look forward to making a series of positive announcements over the coming months."

Surveys into the site are almost finished and the results are "more positive than initially expected", according to the STDC.

Negotiations are ongoing with the Thai banks to secure the 870 acres of former [SSI](#) land within the site.

A deadline for a deal, originally fixed for October, has been pushed back to next February it emerged next week.

If an agreement cannot be reached, then a compulsory purchase of the land will be progressed.



Note: Images reduced in size, advertising material removed and text highlighted in red.