Appendix 1: Greater Manchester's science and innovation strengths

Greater Manchester and Cheshire East science excellence and key related assets Sourced from the <u>Greater Manchester and Cheshire East Science & Innovation Audit</u> Strengths

Health Innovation

- GM has amongst the highest concentrations of allied health research in the UK
- University of Manchester is 5th in the UK for research power in medical sciences, the highest-ranking institution outside the South East

Key assets include: the Medicines
Discovery Catapult, Manchester Cancer
Research Centre, the Manchester
Institute for Biotechnology, The Stoller
Biomarker Discovery Centre, Manchester
Science Park, Citylabs, the Christabel
Pankhurst Institute for Health Technology
Research and Innovation, the UK
Biobank, and Alderley Science Park

Advanced materials

- University of Manchester produces the secondhighest number of publications in 10% most cited among Russell Group universities
- GM leads the world in graphene citations and is amongst the world leaders in carbon capture and storage

Key assets include: BP Centre for Advanced Materials, Henry Royce Institute, National Graphene Institute, Graphene Engineering Innovation Centre, the International Centre for Advanced Materials, and the Cockcroft Institute

Fast-growing opportunities

Clean Growth

- Globally significant research in nuclear, hydrogen, and sustainable materials, with fast growing strengths in smart energy systems and sustainable construction methods
- GM is the first city-region testbed for energy innovation, and our Local Industrial Strategy launched a mission-led approach to becoming carbon neutral by 2038

Key assets include the Dalton Nuclear Institute, The Tyndall Centre for Climate Change Research, The Manchester Fuel Cell Innovation Centre, Sustainable Materials Innovation

Hub, and Salford Energy House.

Digital

- GM is home to the largest digital and creative sector outside London, the fastest growing sector in GM accounting for £5bn of economic activity, 10k businesses, and 86k jobs
- GM has a fast-growing UK and global market share in e-commerce, cyber, and broadcast media, anchored around large operations of Government Communication Headquarters (GCHQ) operation, The Hut Group, AO, BooHoo, Amazon and Hewlett Packard Key assets in and around GM include MediaCityUK, the Manchester Digital Security Innovation Hub, Digital Futures, The Greater Manchester Cyber and AI Foundries, UoM Department of Computer Science, The Manchester School of Digital Arts, and the Hartree Centre.