





EU-China Cooperation on Smart City and Technology Innovation

Midlands Engine and Staffordshire Enterprise Partnership

John Carr

Special Advisor
Energy, Carbon, Environment and Smart City Technology Innovation





The Midlands Engine is looking for Partnerships in a range of Technology Innovation for Smart Cities to be Clean, Powered and Working in Harmony.

Partnerships in Research and Development,

Market Testing and Deployment,

Commercialisation,

Vocational Training Support and Personnel Supply





1). Smart Working City – Software development by UK company.

Company X offer an adaptive video analytic solutions that emulate human vision to offer: Time and Cost savings. The technology allows data capture and analysis for metrics / flows – people & transport / identification / utility and infrastructure design optimisation.

X Limited is a spin-out company from a UK University, one of the UK's leading research University for Intelligent Security and Data Systems.

Commercialisation partnership opportunity.





2). Smart Clean City - Fine particulate capture

Company Y has an advanced combustion particulate capture technology. This technology is a non-physical contact filtration system so does not suffer from "blanking" of conventional systems. It is patented

It is particularly effective for micro particles associated with biomass fuel use in urban areas. The technology can be applied to a exhaust flow without causing constriction.

Company Y is seeking a Commercialisation partnership opportunity.





3). Smart Clean City - CO₂ capture

UK company development of advanced CO₂ capture technology from exhaust flows for emission sequestration – it is scalable to large scale plant and for small plant.

Company Z has a mass transfer device, which is suitable for absorption, gas cooling, cleaning, drying and distillation applications. The technology is based on well-established technical principles, which have been demonstrated in +200 applications, using an earlier format. It is patented.

Commercialisation partnership opportunity.





4). Smart Powered City - ECBM and CO₂ sequestration development

ECBM – Enhanced Coal Bed Methane extraction from unworked coal seams linked with direct combustion CO₂ product sequestration back into the same coal seam.

Offers closed loop solution.

Public sector Midlands Energy Hub interest in developing this with partnership potential to support R&D and Commercialisation with links with academic partners.

Chinese Coal Authority link.





5). Smart Powered City - Flooded minewater heat

Flooded minewater heat capture for use in city space heating developed by UK Coal Authority & BEIS for demonstrators on closed flooded coal mine systems.

In the UK the closed mine systems have c5 times space heating capacity of the UK housing stock.

Higher temps also envisaged for ORC power generation.

Public and private partnership opportunity - Chinese Coal Authority link.







6). Smart Working City – Vocational Training - Nursing

UK currently has 40,000 Nursing vacancies – raising to 100,000 by 2027.

UK Health Service need Nurses

Opportunity for vocational training and supply of Nurses into the UK working with UK Medical Academic Training entities and resource facilitation.

Public and private partnership opportunity.







Further partnership discussion opportunities for Development and Commercialisation with the Midlands Engine and Staffordshire Enterprise Partnership

John Carr

Special Advisor
Energy, Carbon, Environment and Smart City Technology Innovation