

Student Innovation Projects - Client Brief

Project Title: Southampton; Smart City of the future

Business Issue or Need (please contextualise this if appropriate):

XXX is moving into delivering projects in Energy Transition. One of the areas we have been studying is transportation and the use of electric vehicle (EV) charging for light vehicles, LNG for large trucks and hydrogen for buses. With the change in technology there will automatic payment for refuelling will become standard practice and autonomous cars will become common place.

Working and education will change in the way we currently interact, communicate and travel. Sustainable living, recycling and the environment will be key factors driving and supporting the switch to alternative fuels.

XXX wants to understand what the city of the future will look like, how will the different vehicle charging requirements interact. Using the Southampton Green Plan 2030 as one of your key inputs discuss the engineering social and economic challenges that need to be overcome to create a smart city of the future and how XXX can position itself to deliver solutions.

Project Aims (please be mindful that the expected student outcomes are a set of recommendations, not to implement their suggested solutions):

Literature search of definitions of a smart city.

- Narrative report of possible technology advances in a smart city including:
 1. Transport
 2. Office environment
 3. Education

The report should include justification for conclusions and comparisons of other cities. The report may be a power point with some diagrams and infographics of what the future might look like.

Skills you think the students will require to complete the project:

- Research skill and extrapolation to new conclusions
- Social and environmental understanding of communities
- An understanding of renewable energy

- An awareness of UK government commitments for net-zero emissions goals

Students are expected to arrange a client meeting with yourself during the first week of their 4-week project, ideally as early as possible.

Please detail any dates or times that are not suitable for an initial client meeting during week 1.

Dates unavailable for initial meeting:

Please return to employ@southampton.ac.uk