

ASPIRE

Case Study:

Arup Greenfield Site Bristol, UK

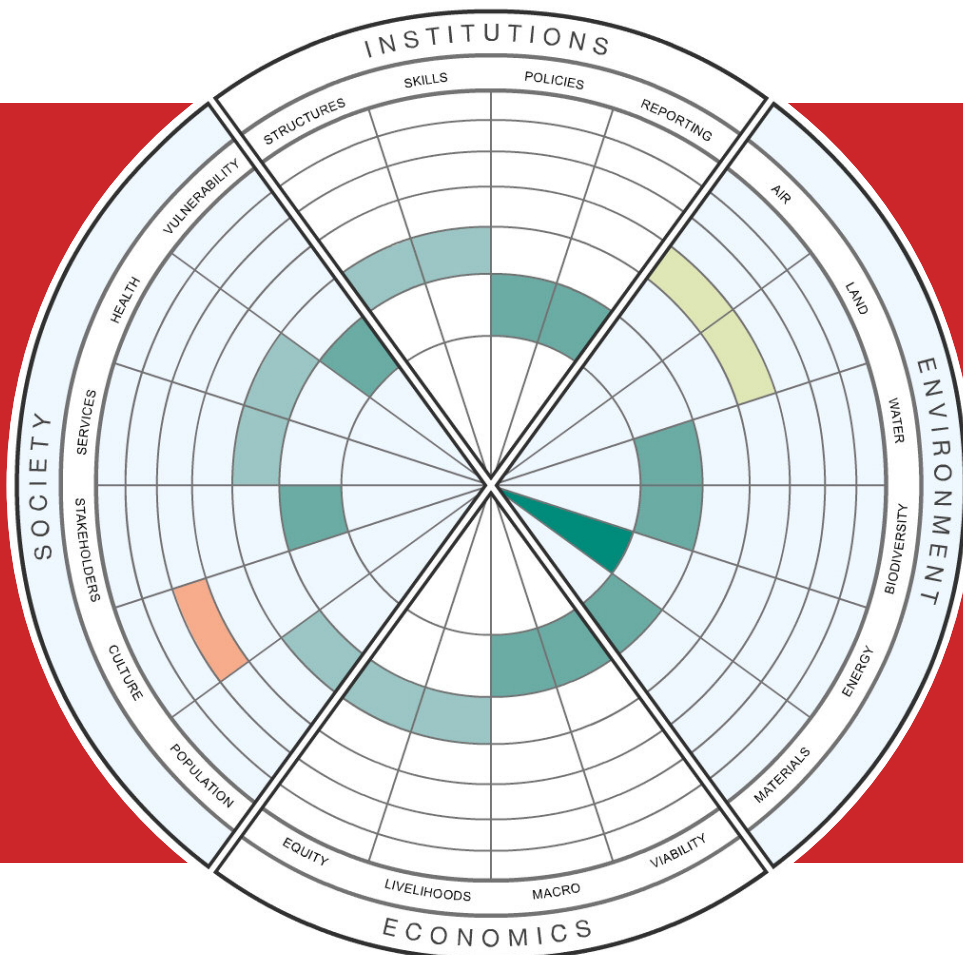
Project Description

The site tested by ASPIRE is a 'greenfield' site, located north of Bristol, in the UK. The site is owned by a private developer, although the identity of the client and exact project location remains confidential. The proposed development is predominantly an office scheme, which is surrounded by small, mature, semi-rural existing communities. The scheme is looking to create new types of employment in the local area and to create constructive links with the existing communities. The primary aim of the ASPIRE assessment was to test the applicability of the software in a developed country context. An assessment for the potential of the site's contribution and impact had previously been carried out using SPeAR, and whilst SPeAR is a powerful tool for building assessments, it was felt that ASPIRE might be relevant for larger scale projects.



Source: Arup Bristol

Greenfield Site, Bristol



ASPIRE Keystone

The ASPIRE assessment was carried out by members of the Arup Sustainability team in the Bristol office.

ASPIRE has been applied at the Identification stage of the project life cycle, in the Feasibility stage of site development. The ASPIRE assessment demonstrates the potential application of the tool in a developed country context. Poverty focused themes such as Equity and Vulnerability were useful in identifying key issues for this proposed development.

ASPIRE Assessment

Institutions

The project performs quite strongly in the Institutions quadrant, as thorough monitoring and evaluation systems have been put in place with open dissemination of information to stakeholders, and a range of media channels have been used to ensure effective communication. In terms of further improvement, ASPIRE has highlighted that there is a potential gap in local government delivery capacity associated with the project. In addition, there is scope to enhance innovation as a core value of the project design.

Environment

Performance of the scheme within the Environment quadrant is variable, highlighting the environmental issues associated with developing an agricultural, greenfield site next to a motorway. The project performs well in the energy category owing to the integration of onsite wind turbines and combined heat and power (CHP) into the potential development design. Performance is also strong in the water and biodiversity categories. Although the development site is within a floodplain, Sustainable Urban Drainage Systems (SUDS) will be designed into the scheme to reduce the risk of flooding and run-off into the surrounding area. Water quality targets have also been established and consumption targets will be established and monitored. In terms of air quality, the site is next to a motorway, therefore existing air quality is poor, although it is made clear that appropriate mitigation will be suggested. The land element of the scheme scores low because it is a greenfield site in an area adjacent to housing. The impact of these factors can therefore be monitored and re-evaluated using ASPIRE and potential mitigation measures suggested during the Design and Appraisal stages.

Economics

The macroeconomic theme scores highly, mainly owing to the scheme providing increased opportunities for new local businesses and enhancement of the economic vitality of the local area. The economic viability of the project is also judged to be relatively strong, due to an alignment with national and regional growth policies. In terms of Equity, the

project scores fairly well, but because the office development will mainly cater for skilled workers and blue-chip companies, it has been noted that the economic benefits, such as provision of jobs for local people, may not be equally distributed to the surrounding communities. ASPIRE also highlights that little consideration has been given to the future cost of carbon, although there is a detailed understanding of most of the costs and benefits associated with the project over the entire lifecycle.

Society

Certain strands of the Society quadrant score relatively highly, notably within the Vulnerability and Stakeholder themes, owing to a fully resourced consultation scheme and consideration of the physical vulnerabilities associated with the scheme (e.g. flood risk). There are also strong elements of community involvement associated with the development, although there is concern that local farming practices may be diminished. The lower performance in the Culture theme highlights the need for the project to take sociocultural diversity, gender equity and local practices into greater consideration in the project plans, as these have not yet been fully addressed.