Worksheet 1.2A

Characteristics of sustainable property development

Use the following checklist to determine whether a property development could be considered 'sustainable'. This checklist is not a substitute for a design or operational performance rating scheme.

Land use, urban form and urban quality	Applicable?
Good urban design – creating precincts that are designed to encourage and facilitate safe pedestrian movement, link logically with surrounding areas and be complementary to those areas.	
Good and attractive site design – designed to meet the needs of the end users, with consideration given to how the buildings, infrastructure or open space will be used in practice, while (although subjective) also creating attractive spaces.	
Reuse of land and buildings – using a 'brown field' or contaminated site in preference to a 'green field' site. Reusing buildings on site, either by refurbishing all or part of a building or by recycling demolition material.	
Density – having the appropriate density for the location, such as high density around transport nodes, and minimising impacts associated with noise, traffic congestion and privacy.	

Transport

Access-related issues – having good access to public transport, being situated close to local amenities.	
Active transport – providing for cyclists and pedestrians.	

Business and community

Local labour and skills – encouraging or giving preference to local labour through the construction process or during the lifetime of the completed development. Providing training as part of the development process that will also help to increase the local skills base.	
Local procurement – (ideally) sourcing materials locally or through local suppliers where economically viable.	
Community involvement – creating interest and preferably buy-in from local stakeholders, achieved in part through community consultation and engagement initiatives over and above those required by the development approval process.	

Community facilities – including facilities for community use or designed for multiple users, helping to create a focus point for the community – could be the residential community as well as local business community.	
Designing for community – instigating processes which will facilitate a sense of community as the development matures. This includes considering how people interact and what generates a community, and providing space for people to meet socially and accidentally.	
Equality and diversity – designed to support social equality and cultural diversity. This is an important way of ensuring lasting sustainable development and is about fostering equality across the community through the development.	
Health and wellbeing – considering the quality of the indoor environment (see Section 3.8) and the impact this has on occupants. Aspects include providing natural and artificial lighting, reducing internal noise, managing internal air quality (ventilation and emission of pollutants) and maintaining services to avoid or reduce additional airborne contamination entering the building.	
Safety and security – designed to provide inherent safety and security including accommodation of mixed uses, overlooking walkways and car parks, encouraging ground level walk-through, and providing adequate night lighting.	
Accessibility – making the development accessible to a diversity of users including the disabled, mothers with young children, visually impaired and aged people. Much of this is subject to regulation and design codes, but sustainability can be improved through early attention to risks and opportunities during the design process.	

Environmental protection and enhancement

Supporting biodiversity – considering and conserving ecological values including locally, regionally and nationally important species as well as retaining or improving habitat values.	
Pollution to air, water and land – focusing on minimising, mitigating or avoiding polluting emissions during construction and operation.	
Noise abatement – recognising that the ambient noise of the area or within the site will affect the quality of life and health of the occupants and those that live or work nearby. Using design and operational controls to mitigate detrimental noise impacts.	

Resource use

Energy efficient design – taking advantage of the many technologies available to avoid energy wastage and track energy consumption during occupation. Efficient energy use is a key measure to reduce carbon dioxide emissions, thereby reducing the effects of global warming and climate change.	
Renewable energy – generating renewable energy onsite. This will reduce reliance on more carbon-intense, fossil fuel-derived energy sources.	
Water conservation – reducing the demand for potable water supplies and capturing and using rain, stormwater and wastewater. This may become mandatory for residential and commercial developments in the future. Current expectations focus on water efficient appliances and fittings, while new design ideas, including water sensitive urban design and water efficient technologies, are becoming more commonplace.	
Low-impact building materials – considering the life-cycle environmental impact of materials used in the development to maximise the use of environmentally friendlier alternatives and reduce burdens on virgin material sources.	
Minimising waste to landfill – in the design phase: reducing the creation of waste, using recycled or recyclable materials and supporting the recycling industry. In the occupation phase: instigating waste collection systems that help users to sort recyclable materials from residual waste which goes to landfill.	

Adapted from the *Sustainable Design and Construction Toolkit*, London Development Authority, prepared by URS Europe 2005, www.lda.gov.uk