

Unit 12: Planning for Sustainable Communities

Unit code:	F/504/4356
QCF level:	6
Credit value:	15

Aim

The aim of this unit is to give learners an understanding of the challenges faced by the evolving planning system and gain skills to balance environmental issues when developing sustainable communities within the evolving framework of 'localism'.

Unit abstract

The prospect of decentralising planning will create significant opportunities for communities to assume greater control and more accountability for their own environments by interpreting national planning guidelines in a manner which is more aligned to their particular local aspirations.

Whilst sustainable communities are still very much in their infancy, the maintenance and improvement of the natural and built environments will continue to pose formidable challenges in balancing changing government policy, human wellbeing and prosperity with potentially damaging environmental impacts. The situation demands a holistic and sustainable approach to building design, the way in which natural and man-made resources are consumed, and best practice strategies to ensure any residual environmental risks can be fully mitigated.

Learning outcomes

On successful completion of this unit a learner will:

- 1 Understand the concept of sustainable communities for development control strategies
- 2 Be able to operate planning control mechanisms to maintain the natural and built environments
- 3 Be able to use value engineering techniques in the optimisation of asset management within the regulatory frameworks
- 4 Be able to use appropriate planning and modelling techniques for developing sustainable communities.

Unit content

1 Understand the concept of sustainable communities for development control strategies

Sustainable community: concept, e.g. ecological protection, density and urban design, urban infill, heritage protection, village centres, local economy, sustainable transport, affordable housing, liveable community, sewage and storm water, water quality, energy, recycling facilities; conceptual features, e.g. governance, transport and connectivity, services, environmental sensitivity, ecological protection, density and urban design, equity, economy, housing and the built environment, social and cultural, shared community activity/social capital, safety and security

Value of a sustainable communities plan: positive responses to climate change, urbanisation, economic growth and globalisation; improved liveability, e.g. cleaner streets, improved parks and public spaces; protection of countryside (safeguarding greenfield land)

Challenges: e.g. addressing housing shortages, accelerating housing provision, providing affordable housing, preventing homelessness, addressing low demand and abandonment, provision of decent homes; reference topics, e.g. neighbourhood, growth, urbanisation, climate change, sprawl, neighbourhoods and connectivity; development control plan, e.g. positive responses to climate change, urbanisation, economic growth and globalisation; improved liveability, e.g. cleaner streets, improved parks and public spaces; protection of countryside; environmental protection (natural habitat, biodiversity, flora, fauna)

Development control strategies: local planning policy (planning policy statement/guidance legacies, adoption of principles of the National Planning Policy Framework NPPF 2012); development strategies (e.g. clean, 'green' attractive place, local housing need, safe, active and inclusive communities, healthy living, access to services and transport, diverse economy, public consultations); benefits to society (e.g. integrated community planning, community empowerment, broader stakeholder involvement, longer-term community vision, environmental protection, equitable economic opportunities, strong social policies, open processes, inclusive majorities, appropriate development and land use, raised public awareness levels, 'bottom up' rather than 'top down' approach, problems with 'NIMBYism', problems with encouraging greater public engagement; delivery mechanisms, e.g. stakeholder partnerships, urban regeneration companies, local development corporations; supporting legislation relevant to the home country, e.g. Planning Act (2008), Housing and Regeneration Act (2008), Localism Act (2011)

2 **Be able to operate planning control mechanisms to maintain the natural and built environments**

Planning process: environmental statement; environmental assessment, e.g. physical, ecological, economic, social, cultural, publicity; Environmental Impact Assessment, mechanisms, processes, e.g. screening options, scoping options; sector comparisons, benchmarking; impact identification (identification of significance of impacts, identification of mitigation measures, residual impacts, alternatives, methodology (information, data sourcing)); Environmental Statement (ES); Environmental Management Plan (EMP); public consultation and disclosure

Policy and procedure: european community directives; national directive; local policies; sensitive areas, e.g. Sites of Specific Scientific Interest (SSSIs), Social Policy Association (SPA), national parks, green belt, Areas Of Natural Beauty (AONB); maintenance/conservation activities; spiral of decay and neglect, resource issues; occupancy issues; monitoring and inspection regimes and regulatory impacts; heritage-based policy

Statutory and non-statutory consultants: statutory, e.g. British Waterways, Commission for Architecture and the Built Environment, Civil Aviation Authority, Coal Authority, Crown Estate Commissioners, Department for Culture, Media and Sport, Department of Energy and Climate Change, Department for Environment, Food and Rural Affairs, Department for Transport, Environment Agency, English Heritage, Forestry Commission; non-statutory consultees, e.g. Conservation Area Advisory Committees, county archaeological officers, Drainage Board, Emergency Services and Multi-Agency Emergency Planning, health authorities and agencies, HM Revenue and Customs, local authority environmental health officers, navigation authorities, Police Architectural Liaison Officers and Crime Prevention Design Advisers, schools and colleges, waste disposal authorities, water and sewerage undertakers

3 **Be able to use value engineering techniques in the optimisation of asset management within the regulatory frameworks**

Asset: natural; built, e.g. architectural features, supporting infrastructure, immediate built surroundings, sustainable features

Building assets and environmental damage considerations: building fabric; building structures; engineering services; architectural features; supporting infrastructure; immediate built surroundings; tiering of the commercial, real estate market based on sustainable features

Environmental damage: damage, e.g. climate change, building inoperability, lack of adaptability, excess waste generation and waste treatment, short-term water management, energy loss and low-tech energy generation, negative social and community costs, incompatible relationships between energy use and global warming

Value engineering: compliant asset management approach; original building design concept, e.g. size/shape, orientation, shading, thermal mass and night-time cooling, natural ventilation, appropriate sustainable technology resources, construction detailing and materials selection, improved resource utilisation, life prediction of materials durability; smart technologies, e.g. reduced electrical energy consumption, natural light and artificial light, appliance energy ratings, innovative energy generation technologies; Building Management System

(BMS); Building Information Modelling (BIM); virtual prototyping of building projects (object-based CAD systems, parametric modelling, automated cost estimator); function analysis; cost appraisal; timescale planning; economic implications; alternative cost options; quality assessment; cost/benefit appraisals; value decision; action plan; monitoring and review; project functionality, best value over life of building

4 Be able to use appropriate planning and modelling techniques for developing sustainable communities

Modelling techniques: Building Management System (BMS); Building Information Modelling (BIM), e.g. virtual prototyping of building projects, object-based CAD systems, parametric modelling, automated cost estimator

Planning: devolution; localism; national legislation, e.g. Sustainable Communities Act (2007); Local Government Act (2000) and community plans; National Planning Policy Framework (NPPF); The Spectrum of Participation; Community Right to Build; local, e.g. Enterprise Partnerships, local authority governance, neighbourhood participative governance, neighbourhood empowerment models, Framework for Neighbourhoods, government initiatives; National Performance Framework; Local Development Framework, e.g. community-led social enterprise and asset management schemes, local charters, Community Calls for Action, Community Empowerment Action Plan; National Planning Policy Framework, key objectives, e.g. social, economic and environmental; support for sustainable development, plan-led approach, decentralisation and community empowerment; local agenda; spatial planning

Community-responsive policy making strategies: e.g. economic development, responses to social segregation, integrated spatial development, effective environmental management, effective governance, investment choices, transparent accountability, access and connectivity; placemaking, e.g. regenerating places, evolving places, new places; input by the sustainable communities team; disciplines and professions, partnerships, development corporations, locality boards, community action groups, specialist interest groups, stakeholder organisations; targets, e.g. set goals, select indicators, conduct assessment and collect data, community carbon footprint, natural resource inventory, community asset mapping, climate action plan; government policy, e.g. Local Development Framework Monitoring: A Good Practice Guide, local planning policy (planning policy statement/guidance legacies, adoption of principles of the National Planning Policy Framework (NPPF)); framework monitoring

Development plan: set goals; select indicators; conduct assessment and collect data; consider reduction in community carbon footprint; conduct a natural resource inventory; community asset mapping; climate action plan; government policy

Learning outcomes and assessment criteria

Learning outcomes On successful completion of this unit a learner will:	Assessment criteria for pass The learner can:
LO1 Understand the concept of sustainable communities for development control strategies	1.1 Critically analyse the essential features of a Sustainable Community proposal 1.2 Justify the value of a sustainable communities plan for a specific user 1.3 Assess the challenges faced by local planning authorities when formulating strategies for sustainable communities for a specific location
LO2 Be able to operate planning control mechanisms to maintain the natural and built environments	2.1 Assess the value of a specific Environmental Statement against the statutory requirements of the planning process 2.2 Devise a planning policy that controls intervention affecting the status of a specific heritage asset 2.3 Critically evaluate the function of statutory and non-statutory consultees that protect the natural and built environments
LO3 Be able to use value engineering techniques in the optimisation of asset management within the regulatory frameworks	3.1 Critically evaluate how the regulatory planning framework mitigates environmental damage to a building asset 3.2 Critically appraise value engineering systems available for use in asset management for a development project
LO4 Be able to use appropriate planning and modelling techniques for developing sustainable communities	4.1 Justify a modelling technique that assesses the sustainability value characteristics of an existing community 4.2 Critically evaluate the strategies for encouraging community-responsive policymaking and empowerment 4.3 Synthesise a development plan for the creation of sustainable communities within a specific local planning area

Guidance

Links to National Occupational Standards, other BTEC units, other BTEC qualifications and other relevant units and qualifications

The learning outcomes associated with this unit are closely linked with:

Level 4	Level 5	Level 6
		Unit 9: Construction Regulations for a Sustainable Society (M/504/4353)

This unit has been informed by the following National Occupational Standard:

BEDCL4/C01 002-023.

Essential requirements

There are no special requirements for this unit.

Delivery

All the learning outcomes can be delivered flexibly. Formal teaching sessions should identify and emphasise essential theoretical information and practical aspects. The learner is encouraged to undertake information searches individually and/or, where appropriate, as part of a team. Where learners are using the internet for research into sustainable communities they need to be aware that other resources are available.

Using the skills, expertise and experience of professional practitioners as guest speakers will provide an essential 'reality check' for learners who might otherwise feel remote from the day-to-day impacts of the regulatory framework. To simulate professional activity a proportion of the learning is intended to involve structured role-play and teamworking.

Assessment

To achieve this unit, the learner must meet all the assessment criteria.

For 1.1, 1.2, 1.3 and 1.4, learners should carry out investigative research and analyse historic data and contemporary case study material to accurately identify the characteristics of the wider range of challenges impacting on the development of sustainable communities.

For 2.1, 2.2 and 2.3, the learner should carry out research and appraise the roles of a variety of consultees associated with the planning process. They should then take part in a group session to determine the overall environmental impact of a given planning application proposal.

For 3.1 and 3.2, the learner should prepare an independent piece of work that demonstrates their appreciation of value engineering for a specific development proposal with a view to maximising building sustainability.

For 4.1, 4.2 and 4.3, the learner should work as part of a small team and use appropriate modelling techniques to demonstrate how aspects of 'Localism' and current planning reforms might be played out in reality.

Resources

Books

Glasson J, Therivel R, and Chadwick A – *Introduction to Environmental Impact Assessment (Natural and Built Environment Series)* (Routledge, 2011)
ISBN: 978-0415664707

Reports and journal articles

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| <i>Design of Sustainable Buildings Through Value Engineering</i> | <i>Journal of Building Appraisal</i> (Palgrave Macmillan, 2010)
www.palgrave-journals.com/jba/journal/v6/n1/full/jba201014a.html |
| <i>The National Planning Forum – Framing the Role of Spatial Planning in Climate</i> | A report by Newcastle University, September 2009 –
Simin Davoudi |
| <i>The Setting of Heritage Assets – English Heritage Guidance</i> | <i>English Heritage Guidance</i> (English Heritage, October 2011)
www.english-heritage.org.uk/professional/advice/advice-by-topic/setting-and-views/setting |
| <i>Sustainable Communities and Sustainable Development: A Review of the Sustainable Communities Plan</i> | The Sustainable Development Commission
http://eprints.lsc.ac.uk – Professor Anne Power |
| <i>Sustainable Communities – Building for the Future (ODPM/DCLG)</i> | www.communities.gov.uk/documents/communities/pdf/146289.pdf |