

## Chapter 6

# Down with ECO-towns! Up with ECO-communities. Or Is There a Need for Model Eco-towns? A Review of the 2009–2010 Eco-town Proposals in Britain

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**Abstract** The recent Labour Government proposed in England that ten new green clean “eco-towns” should be built by 2020. How did this government programme begin? What are the objectives? Is the British Government creating fabulous models for the future or is it bull-dozing through a programme that will create the slums of the future? The discussion examines the origins of the eco-town programme, and the pros and cons of the proposals. The English eco-towns appeared to be in danger, despite concerns about the under provision of housing. Has the economic crunch paid to the creation of eco-towns? When the Labour Government was under siege, the ongoing row over eco-towns added to their troubles. The idea of eco-towns is valuable as a source of housing but the execution has left a lot to be desired. Many of the original proposals are in the wrong location or are reincarnations of schemes that have already been deemed unsuitable. The new Coalition Government of Conservatives and Liberal Democrats, to the surprise of everyone, announced that they will only keep four of the proposed eco-towns, and at the same time bring back the focus onto brownfield land and urban extensions. Many consider that eco-towns can only make sense of where they are in relation to existing centres of population, transport, infrastructure and employment. Some cities prefer a number of eco-communities or urban extensions in brownfield locations instead of a few free standing eco-towns. The eco-town proposals are compared with the New Urbanism proposals in the United States which burst upon the anti-suburban scene in the 1980s. The principles and concepts of New Urbanism are reviewed with examples where it has been most successful. The proposed new town, Tornagrain, by Inverness, for 10,000 people on a green field site where Andreas Dulany, one of the creators of New Urbanism has prepared a master plan, is examined. In summary, the proposed eco-towns, unlike New Urbanism, offer important opportunities to bring together models of environmental, economic and social sustainability. They will provide testbeds for different methods of delivering, for example: (a) zero carbon building development, (b) offering 30% affordable housing, (c) creating 40% green

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infrastructure; and (d) looking after waste. Some would say that establishing models of development from which others can learn is their most important result and not the provision of 50,000 homes, a small portion of the proposed 3 million homes required for the United Kingdom.

## 6.1 Introduction: Evolution of New Towns to Eco-towns in Britain

The Eco-Towns, proposed in 2007–2009, are the first revival of the New Town Movement in Britain for 40 years. Previously Britain has had a superb record of creating New Towns from the nineteenth century Utopian, Model New Towns and Garden City New Towns to the magnificent achievement of the first, second and third generation New Towns following the Second World War into the 1970s. In the nineteenth century, Utopian New Towns, such as Buckingham's "Victoria" and Pemberton's "Happy Colony" were envisaged to overcome the squalor, overcrowding and disease of the industrial slum. The principal Utopian New Town to be built in 1817 was New Lanark near Glasgow, Scotland by the industrialist Robert Owen for a manufacturing village of 1,500 persons (Morris 1997).

Model New Towns followed the Utopian communities of which one of the most ambitious was Saltaire, a model industrial town near Bradford, England, built by Sir Titus Salt (1848–1863). It provided vastly improved housing accommodation, lessening the cramped conditions of the city to a newly built town in the countryside. Bourneville, built by the Cadbury Brothers in 1894, further improved the provision of open space, sunlight and environmental conditions. Bourneville was followed by Port Sunlight, built by the Lever Brothers in 1888, again with the emphasis on good housing and generous amenities. The final model town was Earswick, built by Sir Joseph Rowntree in 1905 (Morris 1997).

The success of a handful of benefactors in providing better conditions for their workers could not overcome the extensive slum problem and a more radical approach was required. The public health reformers, like Chadwick, who brought in the 1870 By-Laws to improve workers' housing, made a greater impact on the slum problem than the individual new towns. Thus the reform movement with the greatest positive physical effect on British town planning was the Garden City movement, based on the ideas of Ebenezer Howard as published in *Garden Cities of Tomorrow* (Howard 1899, 1902). Howard was able to see his proposals realised in the Garden Cities of Letchworth (1903), Welwyn (1919) and Hampstead Garden Suburb (1915). Particularly Letchworth and Welwyn Garden Cities fulfilled Howard's idea with: (a) a wide range of industries and local employment; (b) a spirited community life; (c) houses with gardens and large open spaces; (d) a green belt; and (e) single ownership with excess profit for the benefit of the town. The Garden City concepts formed the basis of the New Town movement after the Second World War until the Futurist City of the linear town planners overturned this approach in the mid-twentieth century with new towns like Cumbernauld and Runcorn (Morris 1997).

Although Letchworth and Welwyn Garden Cities provided tangible evidence that New Towns could achieve the proposals for which they were created, no further

practical work occurred until the devastation of the Second World War was felt. The Greater London Plan 1944 proposed eight new towns beyond the Green Belt and the County area (Abercrombie 1945). This spurred the 1946 New Towns Act, one of the most extraordinary phenomena of the post-World War II period, a brilliant feat of creating over 30 New Towns. Internationally Britain achieved a spectacular standard, which other countries including China, Israel and the United States, continue to imitate. Between 1946 and 1950, 14 New Towns, the so-called first generation New Towns were designated; including the most famous Harlow, Stevenage and Crawley. Cumbernauld, Scotland, built with a futurist shopping mega-structure in 1956 was the only New Town of its kind to implement housing and community services focused on a sole centralised structure, unlike Harlow and Crawley with their organic neighbourhoods arranged around Garden City green belts and open space. Then, in a sudden reversal of government policy in 1962, there was a return to the designation of first generation type new towns and five more new towns were created. Finally the concept of Regional cities prompted the creation of Third Generation New Towns, including the most innovative Runcorn and Milton Keynes (Morris 1997).

The 1960s and the 1970s were an exciting period for town planning opportunities. New Towns were built; dispersion and decentralization policies gave many people new opportunities and a new way of life. But it was not to last. By 1979, with the Conservative Prime Minister Thatcher coming to power for 15 years, statutory Structure Plans were installed and any revolutionary new idealistic plans were but a memory of an age based on principles and ideals.

From then on, planning took the form of ad hoc principles, alternative strategies and specific local area objectives. The golden age of planning principles had come to an end (Morris 1997). In the 1980s and early 1990s, the Conservative Government was more interested in Inner City Regeneration, Science Parks and Business Parks than in creating new towns. But to give the Conservatives their due, privately financed “villages” were promoted. In the 1990s over 200 “planned” new villages with an architectural vernacular approach of 4,000–5,000 people were built as the Conservatives favoured new villages to relieve the pressure on the old villages and towns, preventing them from being destroyed by garish new housing estates. The original New Town concept of a “balanced community”, which provides local jobs for people living in the town) cannot be fulfilled by small villages. Further the recession of the 1990s also hindered New Town development (Morris 1997). Hence it is intriguing that towards the end of the 1990s with Labour again in power that a mini version of New Towns, the Eco-town should be promoted.

## 6.2 Background to the Creation of Eco-towns

Considering that strong action was needed to provide inexpensive affordable housing, the Labour Government produced a Housing Green Paper (DCLG 2007). The Housing Green Paper advocated the construction of 240,000 dwellings every year to meet an overall goal of 2 million housing units by 2016 and 3 million housing units by 2020. These figures included 650,000 houses in 29 specified growth areas

and 100,000 extra houses in 45 towns and cities which constituted 29 “new growth points” as follows (Lock 2007):

- (a) 200,000 new homes to be built on surplus public sector land by 2016 using 340 sites owned by British Rail; 130 sites owned by the Highway Agency and 50 sites by the Ministry of Defence;
- (b) 60,000 new homes on brownfield sites to provide affordable rented homes; and
- (c) 50,000 new homes to be located in 5 new eco-towns to become new growth points with the towns to achieve zero carbon development standards.

Under the plan, some cities could have access to a £300 million Community Infrastructure Fund earmarked for growth areas, new growth points, and particularly “eco-towns”. These new eco-towns were described as “communities with renewable energy sources, high energy efficiency, low carbon emissions, water efficiency, and waste minimalization” (DCLG 2007). The original real purpose of the eco-towns was to help attain the national goal of a 24–36% reduction in carbon emissions by 2020.

Already in May 2007, the then Prime Minister Gordon Brown recommended a series of eco-towns, new free-standing settlements between 5,000 and 20,000 units “intended to exploit the potential to create new settlements to achieve zero carbon development and more sustainable living using the best design and architecture” (Shaw 2007). Yet the programme could not be delivered by the central government but had to be built by private house-builders, housing associations and/or by new types of local housing companies. Long ago during the 1960s and 1970s, local governments each built hundreds of houses per year. What has changed is that the government is now heavily dependent on the private sector to meet the targets. All the talk about roof taxes and planning gain supplement is predicated on the developers’ profit margins. But the private sector has to depend on business opportunities in the open housing market which had collapsed since these proposals were made. The growth points initiative that the Government previously in 2005 launched to invite the local authorities to bid on 29 growth points as the location of the eco-towns (Office of the Deputy Prime Minister 2003) faced problems of implementation.

### ***6.2.1 Initial Eco-town Site Proposals***

Among the proposals for 57 potential sites for eco-towns submitted, 15 potential sites were nominated in March 2008. The purpose of these eco-towns remained the same: zero carbon development, promoting sustainable living and providing 30–50% affordable homes. In addition, there were to be underground systems for waste recycling, free public transport with car journeys curtailed by a 15 mph limit and green routes to school. Bath water would be recycled and fed to communal flower beds. Each home would pump excess power generated by its solar panels and turbines back into the National Electricity grid. These eco-towns were to

**Table 6.1** First 15 Eco-town schemes short-listed for final selection

Site number	Region and town	Number of homes
1	Leeds City region – Selby	Not yet known
2	Nottinghamshire, Rushcliffe	Not yet known
3	Leicestershire, Penn bury (proposed by the Co-op)	12,000–15,000 homes, including 4,000 affordable homes
4	Cornwall, St. Austell. Primary aim is to create jobs affected by the closure of clay pits	5,000 homes
5	Staffordshire, Corborough	5,000 homes
6	Warwickshire, Middle Quinton – (site of old Royal Engineers depot)	6,000 homes
7	East Hampshire, Borden and Whitehill (East Hampshire District Council) – Ministry of Defence sites	5,500 – with 2,000 affordable homes
8	Ford	5,000 homes
9	Oxfordshire, Weston Otmoor	10,000–15,000 homes
10	Bedfordshire, Marston Vale	15,000 homes
11	Northeast Elsenam	5,600 homes including 1,800 affordable homes
12	Cambridgeshire, Hanley Grange (Developed by Tesco)	8,000 homes including 3,000 affordable homes
13	Lincolnshire, Manby (East Lindsay District Council)	5,000 homes
14	Norfolk, Coltishall – An RAF airfield supported by the Dept of Communities & Local Government Rackheath desired by Norfolk DC as part of the planning process	5,000 homes
15	Rossington	15,000 homes
16 (already created)	Cambridge, Northstowe (first official eco-town)	9,500 homes
Total proposed homes		111,600–119,600 (including 10,800 affordable homes)

*Source:* Collated from various sources

count towards District Housing Targets, in order to make them preferential to urban extensions (Table 6.1).

The Conservatives claimed that the Labour Government chose locations in Tory constituencies, as only 3 of the 15 are in Labour areas, including Rossington. Eventually the Manly, Lincolnshire proposal, the Corborough Consortium and New Marston Gallagher Estate proposals were all dropped (Fig. 6.1).

Hanley Grove initially increased its housing numbers from 8,000 to 12,000 to be developed by Jarrow Investments. But by September 2008, Tesco withdrew its 8,000 homes and later decided to re-apply with a modified application through the then Regional Spatial Strategy (RSS) procedure, which has now been abandoned

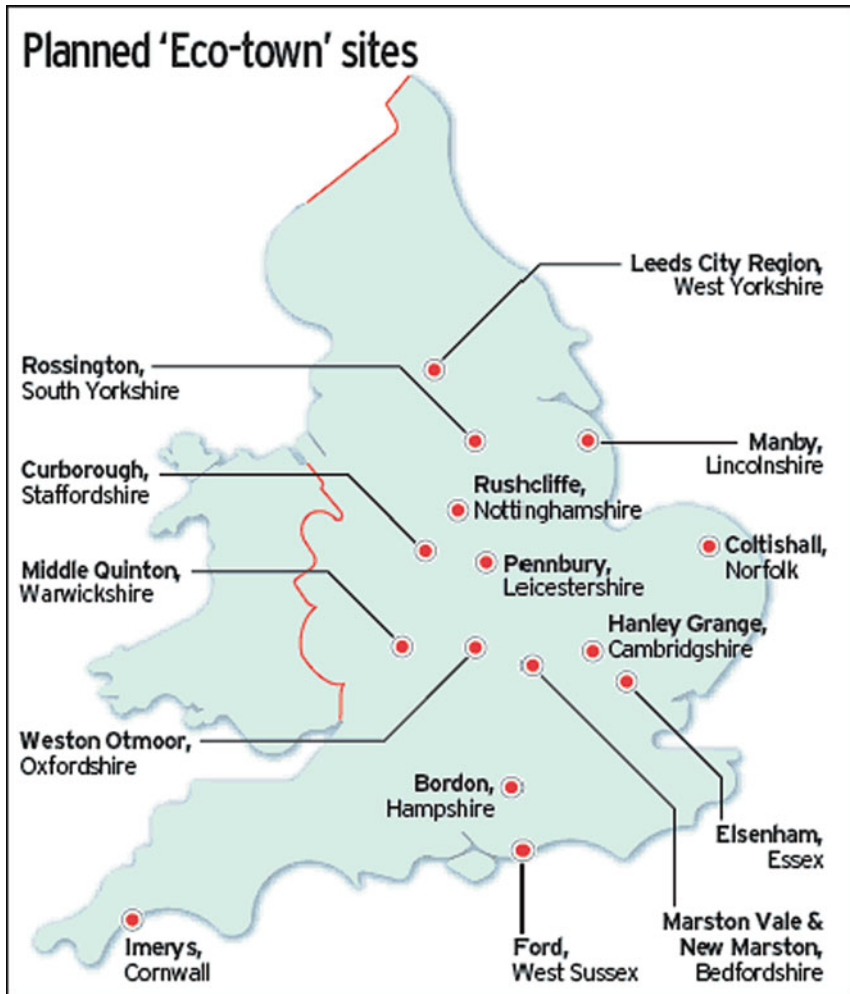


Fig. 6.1 The 15 potential eco-town sites nominated in March 2008. Source: Brooksbank-geographyr13, Eco-towns in the UK, <http://brooksbankgeographyr13.wikispaces.com/Case+Study+-+Ecotowns>, accessed 28 March 2011

by the Coalition Government. Hazel Blears, then Labour Housing Minister, blocked Multiplex’s plan for 5,000 homes in Mereham, Cambridge. Blears was also concerned that the Cambridgeshire Councils could not handle three applications on such a large scale. This left the Northstowe project as the principal eco-town in Cambridgeshire.

In June 2009, Arun District Council challenged the Government Office for the South East (GOSE) for stating it was going to “facilitate” proposals for the eco-town when it should merely “test”. The Government had to back track and agree that the eco-town proposal will be subject to full planning procedures.

### **6.2.2 *Choosing the Eco-towns***

By June 2008, the 15 chosen towns became 13, which the Department of Communities and Local Government (DCLG) then stated would be whittled down to 10 towns. According to David Lock (2008b), “the term “Eco-Town” turned out to be a powerful pairing of words, much stronger than “urban village” and approaching “garden city” for its ability to stimulate a wide range of people to pool their ideas”. As opposition to the eco-towns started appearing against the Labour Government, the Tory Shadow Government announced that there would be no new eco-towns at all when they achieved office.

Contrary to the common public perception, the planning of the eco-towns has complied with the planning process. In order for an eco-town to obtain an outline planning permission, the application will have to include approval in the following aspects:

- (a) an environmental appraisal;
- (b) a transport assessment;
- (c) a sustainability appraisal; and
- (d) a community involvement statement.

It is expected that the outline planning application would be “called in” for decision by the Secretary of State, who would hold a public inquiry conducted by an independent inspector. Some people are urging a Special Development Order by the Secretary of State in the manner of the New Town Development Order of the 1981 New Town Development Act. The problem with the outline planning application procedure is that it is painfully slow and allows the huge value on the land to rise, allowing less and less planning gain to provide for the eco-towns. Since the planning gains have to be high, only the best sites will likely survive against the anti-housing lobby.

### **6.2.3 *The Anti-Eco-town Lobby***

Throughout 2008 and 2009, the anti-eco-town lobby protested vigorously. Some of the eco-town proposals had to come under the wider Regional Spatial Strategy (RSS) review in early 2010. However, after the May 2010 election Regional Spatial Organizations have been disbanded by the new Coalition Government. Such a case is Middle Quinton in Warwickshire which was to be considered through the West Midlands Regional Spatial Strategy whose review will not be considered at all now. Against the town proposal was the Better Accessible Responsible Development (BARD) who went to the High Court to halt the development without success. They appealed against the High Court decision by saying there was no proper consultation on the Housing Green Paper but they lost that appeal (Fig. 6.2).



**Fig. 6.2** Anti-eco-town protestors at Long Marston, Warwickshire. *Source:* Sunday Telegraph 2008

Opponents to Weston Otmoor also fought the eco-town proposal but both groups were over-ruled by the High Court Judge who said the procedure had been adequate. The villagers of Ford, the former location of the RAF Ford Battle of Britain airfield, formed a campaign action group called CAFÉ (Communities against Ford Eco-town). Their objections were based on the lack of transport structure to support communities of up to 20,000 people, the lack of jobs and that the new eco-towns rather than creating local employment would overwhelm the existing prospects.

The campaigners promoted instead for redeveloping the 617,000 vacant properties in England including those in the neglected suburbs, by creating a green template for carbon-neutral neighbourhoods. They were against the Government's commitment to build 3 million new homes by 2020, and the Government's jargon exclaimed by Labour Minister Caroline Flint as "we will revolutionize how people live" (Sunday Telegraph 2009).

The Campaign to Protect Rural England (PPRE) supported rejuvenation of the area. However, the Ford Eco-town proposal could not demonstrate how to incorporate the needs of the local communities, the area's environmental limits and the nature of the infrastructure in the proposal, it was defeated. Meanwhile the Tory Shadow Planning Minister, Bob Neilly, warned the Chairman of the proposed Infrastructure Planning Commission (IPC) that the Tories would scrap any such Infrastructure Planning Commission on decision-making on national infrastructure. This was expected to have a knock-on effect on eco-town development in the United Kingdom (Planning Journal May 2009).

By May 2009, the then Housing Minister, Margaret Beckett, announced that she hoped to approve up to 10 schemes, but she added that the proposals all needed additional work to meet the green standards set by the government. Beckett argued that eco-towns are a good way to set a high bench mark for other housing developments. If Margaret Beckett, a former Foreign Minister, had been able to stay as Housing



Minister, the eco-towns might have had a fair chance. But Beckett had to resign as Housing Minister in the Prime Minister's reshuffle over the MP's expenses scandal. Indeed the turnover of Housing Ministers (Cooper, Flint, Blears, Beckett and Healey) in the past year and a half has been so numerous that it resembled Alice's Tea Party!

In the event the Coalition Government of Conservatives and Liberal Democrats won the May 2010 election, the prospect that eco-towns being scrapped would be high.

#### ***6.2.4 New Communities***

There is an opposing point of view that the money for new towns should go to new communities as part of urban extensions. The Leeds City-Region Partnership wants to develop a number of eco-communities in place of a single free-standing eco-town. They have located four brownfield locations including the Aire valley and the Bradford canal corridor as being more suitable to meet regeneration and affordable housing demand. A judicial review has caused the Government to admit that alternative approaches to affordable housing may be possible (Fig. 6.3).

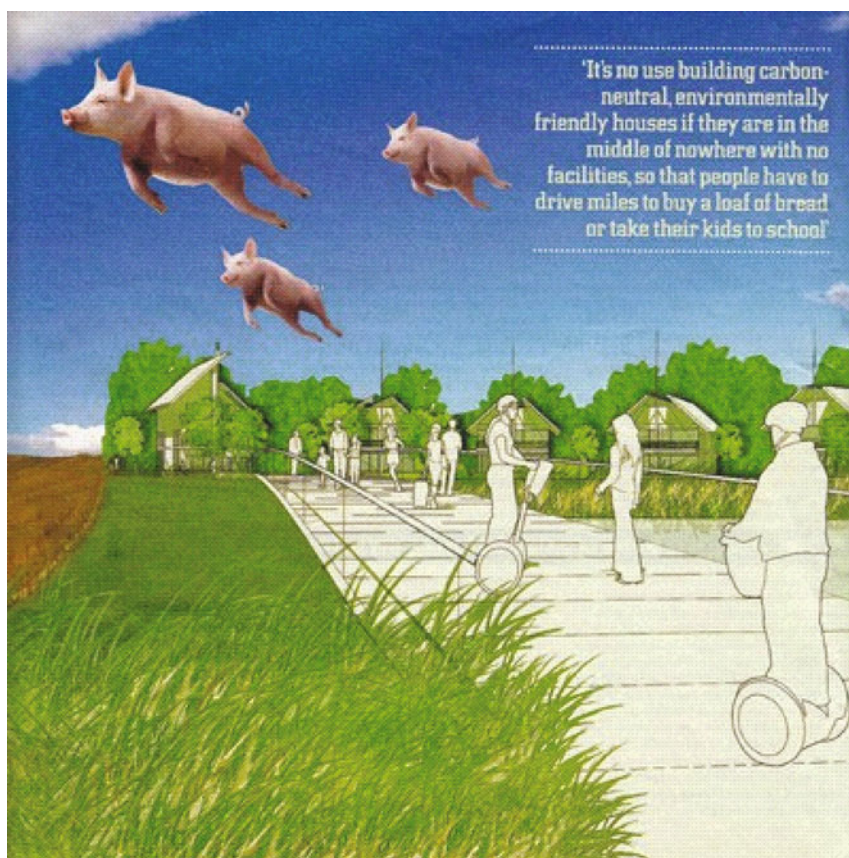
In principle, eco-towns should make sense in that besides having available land where new environmental criteria could be met, they must be developed in relation



**Fig. 6.3** Aire Valley site where eco-communities are preferred to solitary towns. *Source:* Planning Journal (2008)

to existing centres of population, transport infrastructure and employment. Size does matter. It has been noted that eco-towns of 5,000–10,000 people will not justify public transport unless they are attached to existing cities as urban extensions. They will also struggle to provide diversity of employment unless attached to existing urban areas. It has been suggested that EIA assessments should be paralleled with sustainability assessments in the early stages of choosing sites. People need to be able to walk or cycle or take bus to their activities; otherwise living, working, health and education would become so divorced that the car dominates daily life (Fig. 6.4).

Hence, the Conservatives will opt for regeneration of existing towns with urban extensions and accuse Labour of simply wanting a financial bonanza. Others suggest linking new settlements in a joined up process within the great urban areas. This is sensible as there is less need for high-level self containment; there is the possibility of the connecting thread of transportation, there can be networked local economic



**Fig. 6.4** Eco-towns in isolation may not provide the transport or diversity of employment to create thriving towns. *Source:* Country Life 2009

development with accessibility provided by communications technology. There can still be high environmental and carbon dioxide emissions standards within these urban extensions (Shaw 2007).

### 6.3 New Urbanism

The New Towns of the New Urbanism movement are the newest models for the eco-towns. The architects, Andres Duany and Elizabeth Plater-Zyberk (DPZ), first achieved national fame during the 1980s by creating Seaside, a resort town in the Florida panhandle. It has remained their most famous New Urbanism creation but is still an isolated resort town and not a complete community. In 1988, they created Kentlands, Maryland, the first application of their traditional neighbourhood development principles for a year round working community (Duany and Plater-Zyberk 1991; see Fig. 6.5 below).

The Modernism of the first half of the twentieth century was opposed by the anti-Modernists who were then in turn challenged by the new movement, the New Urbanism. In 1993, Duany and others founded the Congress for the New Urbanism (CNU) which was a deliberate attempt to counteract the 1930s modernist movement, *Congrès International d'Architecture Moderne* (CIAM). The New Urbanism Congress also cleverly allowed them to spread the word not only amongst architects but also amongst public agencies, developers and consumers, something that the older Congress, CIAM never did. In 1966, they created their Bible, the Charter of the New Urbanism, which showed how their approach could be extended beyond neighbourhood and small resorts to suburbia and urban extensions (Leccese and McCormick 2000). The New Urbanism includes the following elements:



Fig. 6.5 Middle Quinton – a British example of New Urbanism. Source: Planning Journal (2009)

- (a) Interconnected streets, friendly to pedestrians and cyclists in modified grid patterns (no *cul-de-sacs*);
- (b) Mixed land uses;
- (c) Careful placement of garages and parking spaces to avoid auto-dominated landscapes;
- (d) Transit-oriented development;
- (e) Well-designed and sited civic buildings and public spaces;
- (f) Use of street and building typologies to create coherent urban form;
- (g) High-quality parks and conservation lands used to define and connect neighbourhoods and districts; and
- (h) Architectural design that shows respect for local history and regional character.

With these key goals, they devised the tool of a zoning code. In the case of Seaside and Kentlands, the DPZ New Urbanism firm devised individual design codes that control the architectural elements and maintain a clear division between private, semi-public and public spaces. Builders and homeowners had to abide by the Code which specifies such details as front porches and white picket fences to promote neighbourliness. The result is that in Kentlands each residential block is a unique ensemble, characterised by varieties of house types as well as fully grown trees and lots of greenery on the periphery.

### ***6.3.1 Kentlands, Maryland, USA***

Kentlands was planned for a 356-acre site, surrounded by conventional suburban development, as a community for 5,000 residents and 1,600 dwelling units. By 2001 it was virtually complete. The gross density is low at 14 persons/acre, but higher than the normal density of conventional American suburbs (Dutton 2000). Unlike the *cul-de-sacs* of normal suburbs or the garden city, Kentlands' streets are based on grids, which are interconnected and adapted to the gently rolling topography, with easy access to the primary schools and the shopping centre. Kentlands has a well organised street hierarchy of residential streets and alleys and boulevards which gather the traffic from the streets and connect to the regional motorways. The residential streets (50 foot right of ways) are narrower than most suburban streets of 70 feet.

One of the New Urbanism principles is the mixture of land uses and the requirement that the neighbourhood plan should contain a variety of housing types and land uses. The different housing types (single family, town houses, multi-family condominiums and multi-family flats) are co-mingled within the same blocks whereas other New Towns build whole blocks of the same type of housing, a process known as cookie-cutter housing. The co-mingling of housing types and the great variety of housing type and lot size are special successful features of New Urbanism. The proportion of single family houses in Kentlands is 31% and the variety of styles is the result of using several different builders in a small area.

One particular feature of the housing units is their tiny gardens or no gardens at all. The housing units are accessible from both the street and the alley, which alleys are unique with all the garages tucked away in the alleys out of sight. They serve as a kind of buffered play area and semi-public social space. Since there are hardly any private gardens, the children tend to play in the service alleys, often making the alley entrance more important than the street entrance.

Kentlands also has squares, like European cities, which are open to the streets. Retail and office facilities are correctly relegated to the edge of the neighbourhood but the shops and supermarkets are big warehouse boxes surrounded by unattractive parking lots. There is nothing to be learnt. The parks are located on an average of 400 ft away from the housing and thus within walking distance. The park system consists of 100 acres or 28% of the total land use and the open spaces vary in size. Greenways and the lake are towards the middle of the site.

### 6.3.2 Summary of New Urbanism Principles

- (1) New Urbanism focuses on vernacular architecture- commonplace buildings of the past, embodying folk wisdom about design and construction, while at the same time giving the interiors light, openness and mechanical convenience expected in houses today. The design of the housing at Tornagrain is based on the vernacular style (see Fig. 6.6);



**Fig. 6.6** Housing design at Tornagrain, Scotland, based on the vernacular style. *Source:* Planning Journal (2009)

- (2) New Urbanism promotes neighbourliness and a friendly social atmosphere with detailed design features with an emphasis on front porches, picket fences, mews, and garages in the alleys and tight street elevations, all of which provide considerable social interaction;
- (3) Although New Urbanism stipulates that neo-traditional designs reduce the number of vehicle trips and trip distances, it is actually the mixed arrangement of the land uses, the densities and the greater number of route choices that reduce the vehicular traffic;
- (4) New Urbanism would like transit use. Although commuter rail stations exist in the Washington DC. area, they are not yet connected to Kentlands; and
- (5) Financially one pays 12% more for a New Urbanism dwelling, as there are still some builders who think that mixed use is financially risky. However the quality is high that many people are prepared to pay more.

## **6.4 Summary of the Current Position on Eco-towns**

To summarize the position of eco-towns we need to examine: (i) the eco-town and the planning process, and (ii) the criteria for eco-towns, as outlined below.

### ***6.4.1 Eco-towns and the Planning Process***

There are many who consider that the eco-town programme should be initiated through the statutory development plan system. This is the view put forward by the Campaign to Protect Rural England (CPRE), the Local Government Association, and naturally the Royal Town Planning Institute (RTPI). But the statutory development plan moves very slowly and it is thought that it might take 7–10 years to prepare the planning application.

The Town and Country Planning Association wishes the Government to shoulder the development risk by means of the existing 1981 New Town Development Act or on a joint venture basis by agreement with the landowners through the participation of an agency like the Homes and Community Agency (Lock 2008a). Using the 1981 Act would still require a full public inquiry in each case. There has also been a draft Planning Policy Statement (PPS) which proposes direct government action through part of the planning system.

### ***6.4.2 The Criteria for the Eco-new town***

The eco-town was the Labour government's initiative to deliver new affordable housing needed in England and to demonstrate how to deal with climate change. The only survey as to what people really think of eco-towns has been the YouGov Survey of 2008 which showed that 46% of people in England welcomed the eco-town idea and 34% would not mind seeing one close by where they live (Lock

2008c). The CPRE, RTPI and the Local Government Association are all against the idea. They see a suburban nightmare, car dependent housing estates built on green field sites against the opposition of local people. Building only for 5,000–10,000 people means it has to be car-based and will not be a walking community.

What does the eco-town provide? The main idea of the eco-town is to be a place of experimentation and innovation and to raise standards throughout England. The eco-town's main role therefore is a learning device – the leading edge of the Government's sustainable community's programme. According to Boardman (2007), eco-towns aim to:

- (a) Exceed the standards of environmental performance achieved elsewhere in the United Kingdom;
- (b) Place emphasis on reaching zero carbon development standards with energy use in housing to be “carbon- neutral”;
- (c) Provide good facilities and quality infrastructure and deliver new technology particularly in waste management, Combined Heat and Power, district heating, aquifer thermal energy etc;
- (d) Provide “affordable” homes as the proponents argue that 50,000 homes is a decent proportion of the 3,000,000 homes required by 2020 with at least 3 in 10 of these should be of low rent;
- (e) Provide a green structure in an interconnected network; with the green infrastructure factored into land values; and enhancement of the area's locally distinctive character and to provide multi-functional places, which help adapt the climate process; and
- (f) Use brownfield land before green field land, which is not excluded.

In late July 2009, the Department of Communities and Local Government published the Eco-Towns Planning Policy Statement (PPS) as a supplement to Planning Policy Statement 1 and announced that there were to be four approved eco-towns (DCLG 2009) and pledged £60 million over 2 years. Of that sum, £36 million was given to the four eco-towns. After the election, to the surprise of everyone, the Coalition Government accepted the four eco-towns but halved the budget for 2010/11. Despite the 50% cut in eco-town funding, there is still enough start up funding for the projects to proceed. The numbers of homes for these four eco-towns are to be constructed as follows (Matthew 2009):

Eco-towns	Number of homes
Whitehill- Borden, Hampshire	5,500
St. Astell, Cornwall	5,000
Rackheath, Norfolk	6,000
North West Bicester, Oxfordshire	5,000
The total is hoped to be eventually at least	30,000

Specific aspects of these four towns include an emphasis on affordable housing (low rent); improvements to public transport; installing electric car charging points and electric bike charging points, community projects showcasing environmental technologies; developers using up to 30% less carbon than usual; specially designed eco-homes to make them more energy efficient with rainwater re-cycling, low flush toilets, high insulation levels, and environmentally friendly roofs. Development in small stages has begun in all four eco-towns.

The Planning Policy Statement also agreed that projects may be refused if they do not comply with Local Development Frameworks (LDFs). This is a victory for the two-thirds of the local councils which insisted that schemes must fit in with local development frameworks. Already one of these four originally most promising of the eco-towns, St. Austell in Cornwall, is under review. It comprises six eco-settlements achieved by creating villages or expanding existing ones with housing targets. However the location is now considered unsustainable and unsuitable in planning terms for the scale of the development proposed. If it were not for the eco-town initiative the planning system would never have proposed it (Planning Journal 2009).

The surviving four proposals all have the support of their local authorities. As a consequence of all the considerations, an eco-town proposal can now be rejected if it does not comply with the local development framework, which means that future plans must go through the plan-making process. Two of the proposed towns are town extensions and the other one is not on a single site. The Labour planning policy stated that the standards might be adopted by other developers as a way of meeting climate change policy and will ensure that the eco-towns will be “exemplars of good practice and provide a showcase for sustainable living”.

## 6.5 Conclusion

Some of the proposals sound manipulative. One eco-town is to focus on “behaviour change techniques”, where residents are to be rewarded by a personal carbon trading scheme if they use low amounts of energy. At other eco-towns, the focus will be on environmental technologies, “green collar” jobs and renewable energy, 40% green open space and high sustainability standards. Some of the standards useful for developing countries keen on the construction of eco-towns include the following (Morad and Plummer 2010):

- (a) providing 30% affordable housing (housing for low-income people, particularly local people);
- (b) requiring long-term investment into community owned housing rather than private housing which requires a profit;
- (c) a zero carbon town which includes public buildings;
- (d) providing 40% green open space;
- (e) “green housing” using sustainable standards of insulation and thermal efficiency;



- (f) providing low carbon homes; and
- (g) giving priority to bus and cycling.

### 6.5.1 What Are the Pitfalls of Eco-towns?

The biggest pitfall is the inability to achieve agglomeration effects with provision of local jobs due to small community sizes; thus basic principle of building a “balanced community” cannot be fulfilled. The jobs are provided in existing towns or satellite business or science parks elsewhere. This makes commuting inevitable. Another pitfall is finding staff that will have the expertise on environmental impact assessment applicable to eco-towns to ensure that any negative environmental impact is timely detected. This means that local authorities will have to increase the extra skills required to deal with the scale and complexity of an eco-town in which exceptionally high standards and technical innovation will be essential.

In conclusion, the fate of the eco-towns remains in the hands of the political process. We would hope that the three eco-towns will survive to set an example to the rest of the country as a new way of life. Already North-East Essex could see eco-town principles applied to major developments after £200,000 was allocated to Haven Gateway (Planning Journal 2010). The money is to be used to conduct studies for using eco-town standards in development planning and to develop master plans. Hopefully the new communities could provide 8,000 homes and many local jobs in eco-towns. With new eco-town standards, the United Kingdom would be able to lead the world in this new way of life which combines affordable housing with green infrastructure.

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