

the art of building a garden city

garden city standards for
the 21st century

creating garden cities and suburbs today

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The Art of Building a Garden City – Garden City Standards for the 21st Century

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Introduction

1. On 14 April 2014, two years after the Prime Minister first announced his support for a new wave of Garden Cities in England, the long-awaited *Locally-led Garden Cities* prospectus¹ was launched by the Department for Communities and Local Government (DCLG). While the prospectus makes it clear that the Government does not wish to be prescriptive about the precise form that new Garden Cities might take, it clearly endorses the TCPA's Garden City principles as the foundation of any debate on what these principles imply. This document has been produced with the objective of articulating what the principles mean in the 21st century and how development embodying these principles can be delivered. It is not intended as the final word on how to realise a new generation of Garden Cities, but instead distils many of the lessons identified in the TCPA's recent research on overcoming the barriers to their development. It is therefore a milestone for policy-makers and practitioners seeking to bring forward proposals for new Garden Cities. The TCPA will publish greater detail on the practical implementation of the principles in the autumn of 2014.

Garden Cities

2. A Garden City is a holistically planned new settlement which enhances the natural environment and offers high-quality affordable housing and locally accessible work in beautiful, healthy and sociable communities. The Garden City model of development was devised in the late 19th century by Ebenezer Howard in response to the acute overcrowding and inequality of industrial cities. Famously, his aim was to combine, 'all the advantages of the most energetic and active town life, with all the beauty and delight of the country'.² The Garden City ideals were shaped by people who believed that there could be a better, more sustainable and more co-operative way of living. Furthermore, Howard and his supporters acted upon this idealism: they bought land in Hertfordshire and developed Letchworth Garden City, and later Welwyn Garden City. The success of these developments inspired others, in England and all around the world, to build many more towns and smaller communities, drawing on Howard's ideas.
3. Howard's conception of a Garden City was sophisticated, radical and practical. His thinking encompassed planning, design, economics, sociology and environmentalism. Unfortunately, some of the so-called 'Garden Cities' that sprang up around the world in the 20th century were based on a superficial understanding of his thinking – they are suburbs with gardens, but not Garden Cities. As a result, although they may have provided adequate – even good – housing for people, most have not proved to be as enduringly successful as those developments that were based on a more thorough understanding of Howard's ideas. There are, of course, important lessons to be learned from both the successes of places such as Letchworth and Welwyn and the challenges that they faced. The pioneers in the Garden City movement saw Garden Cities as crucibles in which the best of the past was fused with the opportunities of new technology and progressive social values. That sense of excitement,

1 *Locally-led Garden Cities*. Department for Communities and Local Government, Apr. 2014. <https://www.gov.uk/government/publications/locally-led-garden-cities-prospectus>

2 Ebenezer Howard: *To-Morrow: A Peaceful Path to Real Reform*. Swann Sonnenschein, 1898, p.7. Reprinted, with commentary by Peter Hall, Dennis Hardy and Colin Ward, by Routledge, 2003

experimentation and creativity remains central to fulfilling the ambition encapsulated in the Garden City principles.

Garden Cities in the 21st century

4. The emphasis within the Garden City principles on high-quality environments for everyone backed by a fair development model is highly relevant in addressing today's housing crisis. The scale of this crisis has been quantified in a number of TCPA publications,³ and requires consideration of the needs of the country as a whole, not just the South East.⁴ Meeting housing needs is a principal concern, but Garden Cities are holistically planned settlements that also offer ways of dealing with other challenges – climate change, innovation in design, local food production, and more – all set within a context of participative governance.
5. For example, the Garden City model can produce the kinds of places in which green infrastructure and sustainable drainage builds resilience to extreme weather events and new renewable energy technology held in local ownership delivers energy-positive lifestyles. It provides opportunities to achieve tangible health benefits through walkable neighbourhoods and build lifetime homes for an era of a rapidly ageing demographic profile. There are strong relationships between the planning system's key legal objective of the delivery of sustainable development⁵ and the Garden City principles. Both emphasise the delivery of social, economic and environmental progress simultaneously and avoid trading one off against another. There is no inherent conflict between sustainability and Garden Cities, and in fact the Garden City principles give practical effect to ambitions for sustainable development set out in the UK Sustainable Development Strategy.⁶
6. Such high ambition must be paid for, and one of the greatest achievements of the Garden City model of development, demonstrated at Letchworth, is the way that development economics is used for the benefit of the community. The model, based on land value capture, ensures that Garden Cities are endowed with assets that provide an income, in perpetuity, to pay for the upkeep of the town and for community facilities.
7. Because Garden Cities can meet housing needs in a highly sustainable way, using the opportunities that new large-scale development brings in terms of economies of scale and land value capture, they are a vital element in the wider drive to address the

3 Alan Holmans: *New Estimates of Housing Demand and Need in England, 2011 to 2031*. Town & Country Planning Tomorrow Series Paper 16. TCPA, Sept. 2013. http://www.tcpa.org.uk/data/files/HousingDemandNeed_TCPA2013.pdf

4 The TCPA is clear that a national spatial approach to planning is needed, and that there are significant opportunities to apply Garden City principles in the north of England as well as the rest of the United Kingdom – see recent publications including *The Lie of the Land* (http://www.tcpa.org.uk/data/files/Lie_of_the_Land_ExecSummary.pdf), the *Making Planning Work* papers (<http://www.tcpa.org.uk/pages/making-planning-work-2013.html>), and *Planning Out Poverty* (<http://www.tcpa.org.uk/pages/planning-out-poverty.html>), which sets out the role of Community Development Corporations in regenerating northern communities. The TCPA's 'Stewardship Guide', *Built Today, Treasured Tomorrow – A Good Practice Guide to Long-Term Stewardship* (<http://www.tcpa.org.uk/pages/built-today-treasured-tomorrow.html>), also details a range of models for applying the Garden City stewardship principles, including through urban Community Land Trusts

5 *National Planning Policy Framework*. Department for Communities and Local Government, Mar. 2012, para. 6. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

6 *Securing the Future. The UK Government Sustainable Development Strategy*. HM Government. TSO, 2005. <https://www.gov.uk/government/publications/securing-the-future-delivering-uk-sustainable-development-strategy>

housing crisis. However, as set out in the TCPA's *Creating Garden Cities and Suburbs Today: A Guide for Councils*,⁷ the principles have wider applicability to both smaller-scale development and area regeneration. At a time when the efficacy of planning is at a historically low ebb, they offer a framework of good planning from which all of our communities should benefit.

⁷ *Creating Garden Cities and Suburbs Today: A Guide for Councils*. TCPA, Mar. 2013.
<http://www.tcpa.org.uk/pages/creating-garden-cities-and-suburbs-today-a-guide-for-councils.html>

The Government's objectives for Garden Cities

8. The focus on Garden Cities in Government policy has emerged over the last three years, beginning with the Housing Strategy⁸ and then with a firm statement of policy in paragraph 52 of the National Planning Policy Framework.⁹ This policy states:
- 'The supply of new homes can sometimes be best achieved through planning for larger scale development, such as new settlements or extensions to existing villages and towns that follow the principles of Garden Cities.'*
9. The *Locally-led Garden Cities* prospectus articulates this vision in more detail by endorsing the TCPA definition of the Garden City principles. It is important to note that the prospectus does not commit to these principles as Government policy. Instead, it leaves the detail of proposals open to local determination. Nonetheless, the prospectus makes it clear that the principles are the foundation for such local decision-making. The prospectus offers some capacity funding and brokerage and builds on other local growth initiatives designed to support large-scale development.¹⁰ The sum total of Government policy on Garden Cities offers more rhetorical encouragement than detailed support, but it does signal a clear direction of travel – to which all three major political parties are now committed.

Ebbsfleet Garden City

10. In the 2014 Budget the Government announced a package of support to help realise the existing plans for the development of Ebbsfleet.¹¹ This includes the use of an Urban Development Corporation, in a welcome endorsement of the approach advocated by the TCPA. However, the TCPA recognises that it will be extremely challenging to successfully uphold the Garden City principles at Ebbsfleet because it is problematic to retrofit ideas such as land value capture once planning permission has been granted. The TCPA looks forward to learning more from the Government about the proposals for Ebbsfleet and how it will be ensured that all the Garden City principles are upheld in perpetuity.

8 *Laying the Foundations: A Housing Strategy for England*. HM Government. Department for Communities and Local Government, Nov. 2011.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7532/2033676.pdf

9 *National Planning Policy Framework*. Department for Communities and Local Government, Mar. 2012, para. 52. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

10 The prospectus invites expressions of interest, on an ongoing basis, for proposals of 15,000 or more housing units that can demonstrate 'local support', 'scale', 'connectivity' and 'robust delivery arrangements', and that are 'commercially viable'. It says that the Government will favour sites with a 'significant element of brownfield land'. In December 2013 the Chancellor of the Exchequer announced that the Local Infrastructure Fund would be extended as the Large Sites Infrastructure Programme (LSIP). This programme – a prospectus for which was also launched on 14 April 2014, alongside the *Locally-led Garden Cities* prospectus – offers 'technical support', 'brokerage support', 'capacity funding' and 'infrastructure funding' to local authorities and private sector companies who submitted expressions of interest for sites of 1,500 or more homes by 30 May 2014. The LSIP prospectus also endorses the Garden City principles, stating 'We are also keen to support developments that follow the principles and design of Garden Settlements.'

11 The 2014 Budget Report (available at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/293759/37630_Budget_2014_Web_Accessible.pdf) confirms (at para. 1.145, p.40) that the Government will 'form a dedicated Urban Development Corporation for the area, in consultation with local MPs, councils and residents, to drive forward the creation of Ebbsfleet Garden City, and will make up to £200 million of infrastructure funding available to kick start development'

The planning context for Garden Cities

Localism and the need for co-operation

11. The delivery of a new generation of Garden Cities through a localised planning system demands a particular commitment to consensus and participation. If the housing crisis is to be tackled effectively, a national, regional and sub-regional planning framework is required to guide development to the most efficient and sustainable locations.¹²
12. In the current absence of such a framework, partnership working and real co-operation between local authorities will be vital, as will wider relationships with other bodies such as Local Enterprise Partnerships (LEPs), Local Nature Partnerships (LNPs) and non-governmental organisations, and with wider civil society. Here, the core planning tool is the 'duty to co-operate', but formal arrangements such as joint planning committees are likely to be necessary to deal with the long-term nature of building new communities.

A strategic approach to meeting housing needs

13. Co-operation between local authorities allows for the realisation of one of the principal incentives to follow the Garden City approach: the opportunity to meet housing needs in a strategic, long-term and sustainable way. At present, if local authorities fail the five-year housing land supply test they can become subject to speculative applications and appeals, which often reinforce a piecemeal approach to new development that itself can be deeply unpopular. Meeting the housing needs of a number of district authorities across a sub-region through a strategic approach requires rapid action and strong leadership, but such an approach can have lasting benefits in resolving housing conflicts over the long term. A strategic approach to growth would also fulfil the NPPF requirement to prepare a Strategic Housing Market Assessment where housing markets cross administrative boundaries.¹³

A plan-led approach

14. Ultimately, local authorities and communities will need to decide on a pathway for gaining consent for a new Garden City. Embedding such proposals in plan-making can take time, but it allows for wide debate and participation and a strategic conversation with other local authorities. This remains the TCPA's favoured approach: the TCPA's publication *Creating Garden Cities and Suburbs Today: A Guide for Councils*¹⁴ has set out in detail how tools such as the Community Infrastructure Levy, section 106 agreements and development briefs can be used to require high development, social and environmental standards and to set frameworks for funding and managing Garden Cities. Dealing with Garden City proposals as planning applications is a possible alternative, but will require a strong emphasis on consensus-building. The TCPA

12 *Making Planning Work. Paper 3: Filling the Strategic Void.* TCPA. Nov. 2013. http://www.tcpa.org.uk/data/files/Filling_the_Strategic_Void.pdf

13 *National Planning Policy Framework.* Department for Communities and Local Government, Mar. 2012, para. 159. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

14 *Creating Garden Cities and Suburbs Today: A Guide for Councils.* TCPA, Mar. 2013. <http://www.tcpa.org.uk/pages/creating-garden-cities-and-suburbs-today-a-guide-for-councils.html>

believes that the Government must play an active and enabling role in whatever route a local community decides to take.

Contemporary lessons on large-scale development

15. While new Garden Cities are yet to emerge through the planning process, there is still a wealth of valuable planning experience in the UK and across Europe to draw on, particularly from authorities building smaller but nonetheless significant-scale communities of between 5,000 and 10,000 homes. The TCPA hosts the New Communities Group (NCG), composed of local authorities and their partners seeking strategic solutions to housing needs.¹⁵ Originally established in 2009 by the TCPA and DCLG, the NCG shares valuable learning on the challenges of infrastructure provision, negotiating public sector land disposal, and gaining local consent. The developments promoted by NCG members also provide an object lesson in how positive collaboration – in NCG members’ cases, between local authorities, the Homes and Communities Agency, central government departments and the private sector – is a vital ingredient of success. The NCG developments continue to progress, following the high standards set out in the Eco-towns Planning Policy Statement, with work on the ‘Exemplar’ phase at North West Bicester starting on site in May 2014.¹⁶

15 The NCG consists of local authorities, key delivery bodies and other groups bringing forward large-scale sustainable developments of different models; from Garden City inspired new towns and villages to urban regeneration and extension schemes. The NCG helps members to develop their proposals and embed ambitious sustainability standards, and encourages a sharing of knowledge and best practice between the various developments. Together, members of the NCG are providing innovative local leadership for plans to deliver over 48,000 new homes. For further information on the NCG and/or how to join, see the NCG website at <http://communitiesgroup.org.uk/> or contact Alex House, Projects and Policy Officer/NCG Manager at the TCPA, on alex.house@tcpa.org.uk or 0207 930 8903

16 See the North West Bicester website, at <http://nwbicester.co.uk/2014/01/construction-begins-on-the-uks-first-eco-town/>

Garden City principles

16. The Garden City principles are a distillation of the key elements that have made the Garden City model of development so successful, articulated for a 21st century context. Modern Garden Cities should be predicated on a fusion of the very high social and environmental standards of Gardens Cities with the highly effective delivery mechanisms of the post-war New Towns, combining the best of both approaches and learning the lessons of what has worked in the past and what has not.
17. Taken together, the principles form an indivisible and interlocking framework for the delivery of high-quality places. Each principle will be beneficial if applied to a new development on its own; but it is only developments that incorporate all the principles which can be truly described as 'Garden Cities', and which are more likely to be places that become more – not less – desirable as time passes. This indivisible framework reflects the holistic vision of the Garden City pioneers, but it also has direct practical advantages. For example, the capture of land values is vital to securing wider social and environmental benefits for people in perpetuity.
18. The practical application of the principles will, of course, depend on the detailed circumstances of the location of each development in the same way as the design of masterplans should reflect an acute understanding of the ecology and topography of any particular site. The principles are also best applied at the conception of a new scheme: they are much harder to retrofit into schemes that already have planning approval.
19. The following sections set out the Garden City principles.

Garden City principle

Land value capture for the benefit of the community

Summary of key considerations

- A development cannot be considered to be a Garden City if it lacks an appropriate approach to land value capture for community benefit.
- The delivery body (town developer) will ideally be a Development Corporation with the necessary powers for the task.
- Land value capture de-risks investment for both the public and private sectors.
- There is a role for private sector investment, but some level of public sector investment is essential.
- Land value capture is not the only source of income for a Garden City: the control of community assets and the management of utilities can also be profitable.

20. One of the biggest challenges when creating new developments is how to pay the basic upfront costs. **Land value capture forms the basis of a development model which can both pay down the debt of infrastructure and provide an active asset base for future renewal and community benefit.**
21. Values are created through betterment – the increased value of land derived from public works, including the grant of planning permission. They are also created by the related rental and sales incomes from the residential and commercial estate as the Garden City is developed. The values created through this process are substantial: drawing on such value creation the first generation of New Towns both paid for themselves and became net lenders to other public bodies.¹⁷
22. The original Garden City model of land value capture was based on a mutualised company deriving incomes from sale and the renewal of leaseholds.¹⁸ While this approach had many direct benefits, it also led to problems of under-capitalisation in the first Garden Cities. The New Town model was more flexible in relation to how assets were realised, but was predicated on public loans on a scale which today appears to be politically implausible.
23. In today's context there are three related principles regarding land value capture:
 - **Land value must be captured at or near existing-use value.** Landowners may well receive a premium for their land to facilitate negotiated sales, but this must not compromise the viability of the wider scheme in terms of debt repayment or the long-term security of community assets.
 - **Capturing land values on this basis requires a body with land assembly and compulsory purchase powers.** While it is possible for a local authority to engage in this task (as many European municipalities do), the TCPA strongly recommends

17 *Assessing Proposals for Garden Cities. Memorandum to the Judges of the Wolfson Economics Prize MMXIV Concerning the Delivery of a New Garden City.* TCPA, Feb. 2014. http://www.tcpa.org.uk/data/files/TCPA_Garden_City_Memorandum.pdf; and *Transferable Lessons from the New Towns.* Oxford Brookes University, for the Department for Communities and Local Government, Jul. 2006. http://www.futurecommunities.net/files/images/Transferable_lessons_from_new_towns_0.pdf

18 See Box 3 on page 6 of *Built Today, Treasured Tomorrow – A Good Practice Guide to Long-Term Stewardship.* (TCPA, January 2014. <http://www.tcpa.org.uk/pages/built-today-treasured-tomorrow.html>) for an outline summary of this model

the establishment of Development Corporations with strong delivery powers. However, where negotiation over land assembly fails and compulsory purchase is used as a last resort, there remain important unresolved issues relating to the compensation code. These are explored, with recommendations and further discussion of land value capture, compensation and the potential of Development Corporations, in the TCPA publication *New Towns Act 2015*?¹⁹

- **Effective delivery mechanisms should de-risk the development process, allowing for long-term patient investment in new Garden Cities from the public and private sectors.** Because the first two land value capture principles effectively secure investor confidence, it is possible to consider financing Garden Cities through a mixture of private and public funds. The public sector must, of course, play a leading role in the creation of political will, in the designation of a Development Corporation, and in enabling the provision of public goods such as homes for social rent. But there is a real opportunity to attract large-scale, institutional patient funds into a new generation of Garden Cities if the emphasis moves to generating returns from investment into the whole place. Continuation of Treasury guarantees would give funders confidence about the scale and longevity of the town-building activity. A number of private sector investors have already indicated an interest in making wider capital investment,²⁰ and some leading developers have considered in detail how this might be delivered.²¹ However, it is vital that investors recognise and buy into the ethos of Garden Cities. This requires long-term patient investment which essentially trades lower returns for lower risks. This can be facilitated by tools such as Strategic Land and Infrastructure Contracts.²²

24. **The Garden City land value capture development model, although common in Europe, stands in stark contrast to the standard 'current trader' housing supply model which is dominant in the UK.**

A new model of land value capture

25. A new model of land value capture is vital not just for the delivery of new Garden Cities but also for the wider drive for new development and community regeneration.

19 *New Towns Act 2015?* TCPA, Feb. 2014. <http://www.tcpa.org.uk/pages/new-towns-act-2015.html>

20 For example Legal & General – see Phillip Inman: 'Legal & General wants to create five new towns in UK in next 10 years'. *The Guardian*, 19 Jan. 2014. <http://www.theguardian.com/business/2014/jan/19/legal-and-general-build-new-towns>

21 The Wolfson Economics Prize MMXIV, which poses the question 'How would you deliver a new Garden City which is visionary, economically viable, and popular?', encourages entrants to identify how Garden Cities could be 100% funded by the private sector, and a number of developers have set down their approach in response

22 John Walker, whose experience includes time as the Chief Executive of the Commission for the New Towns, has set out in a TCPA Tomorrow Series Paper (available at <http://www.tcpa.org.uk/pages/land-value-capture-and-infrastructure-delivery-through-slics.html>) how 'Strategic Land and Infrastructure Contracts' (SLICs) could hold the key to unlocking the delivery of Garden Cities and Suburbs, as well as many other locally planned, large-scale developments. This type of contractual arrangement, voluntarily entered into by private landowners with a public body such as a local authority or Government agency, enables timely and predictable provision of essential infrastructure to be committed at an early stage by, in effect, staging the payments for land to the speed at which it is taken for development, and would enhance both investor and community confidence in the quality and deliverability of new Garden Cities. However, scaling this concept from town expansion schemes to the creation of an entire Garden City may be problematic, as the geography of land-take may be extensive (for example for infrastructure) while the geography of remunerative property development may be much tighter

European models have much to offer this debate, with empowered municipalities acting effectively as Development Corporations might in the UK.²³ There is also a wider political message that the development of new communities is not a *burden* to the state but, over the medium term, a *highly profitable enterprise*. The effective sharing of such profits for community benefit is likely, over time, to shift the politics of development by showing not just how proper infrastructure can be provided but that assets can be secured for the long-term benefit of localities. Nor should we discount the wider and incalculable benefits to the nation and individuals of resilient, inclusive and efficient communities.

Other income sources in new Garden Cities

26. The income of a Garden City is not derived solely from the values generated by land and property. The original Garden Cities were conceived with their own locally controlled utilities, and the provision of key services such as energy supply provides an opportunity for long-term income streams which can support future investment in the community. Such schemes can benefit from being planned in a comprehensive and integrated way during the masterplanning process. Apart from some notable examples, such as Thameswey in Woking,²⁴ energy supply remains highly centralised in the UK, but European cities derive substantial income from municipal energy companies. In Germany there are a large number of community-owned energy co-operatives (the National Association of Energy Cooperatives represents around 700 co-operatives²⁵) which allow for genuine local control of energy investment. The scale of return from localised energy companies will depend on the choice of generation and supply technologies and on the outcomes of ongoing debates such as those on wider government subsidy regimes. However, investment for such development would be readily available from the private sector, particularly where a Development Corporation has reduced the risk by establishing a comprehensive planning regime.
27. All these models of long-term funding for community benefit have been used with great success in England and elsewhere. The key lies in implementing them right at the start of the development process: in most cases they are difficult or impossible to set up once the new development has been built.
28. Land value capture in perpetuity relies on a stewardship body acting on behalf of the community to manage assets, capture land values, and facilitate the re-investment of these values back into the community. Such stewardship bodies can take a number of forms and perform a range of activities. These issues are discussed in further detail under the 'long-term stewardship' Garden City principle, on pages 15-17.

23 See, for example, Nicholas Falk: *Making Eco-towns Work: Developing Vathorst, Amersfoort NL*. URBED, Oct. 2008. <http://media.urbed.coop.ccc.cdn.faelix.net/sites/default/files/Making%20Ecotowns%20work%20-%20developing%20Vathorst.pdf>; and Peter Hall, with contributions from Nicholas Falk: *Good Cities, Better Lives: How Europe Discovered the Lost Art of Urbanism*. Routledge, 2013

24 Thameswey Energy, a private special-purpose vehicle formed by Woking Borough Council, makes earnings of £297,000 before interest, taxes, depreciation and amortisation. See Case Study 8 in *Built Today, Treasured Tomorrow – A Good Practice Guide to Long-Term Stewardship*. TCPA, January 2014. <http://www.tcpa.org.uk/pages/built-today-treasured-tomorrow.html>

25 See the National Association of Energy Cooperatives website, at <http://www.dgrv.de/en/cooperatives/newcooperatives/energycooperatives.html>

Garden City principle

Strong vision, leadership and community engagement

Summary of key considerations

- Leadership and support from central government is essential to the delivery of new Garden Cities.
- By offering better end results from development, Garden Cities provide an opportunity to reframe the housing debate and help people to feel positive about new housing.
- The New Town Development Corporation model, updated through a modernised New Towns Act, is the most effective means to deliver a new Garden City.
- Local leaders have an important role to play in providing certainty of vision and persuading the public about the benefits of new Garden City development.
- Building a Garden City transcends electoral cycles and requires a cross-party and cross-departmental approach.
- Garden Cities require a commitment to genuine and co-operative public participation.
- Participation does not necessarily guarantee consensus, and elected politicians will still have to exercise their role as the final guarantors of democratic decision-making.
- The delivery of a new Garden City will require a dedicated planning and delivery team, with the right skills and expertise.

Vision and leadership

29. Britain's failure to designate even one very large-scale new community over the last 50 years is in part a result of a lack of clear vision for the kinds of places that we want to build, and also in part a result of a lack of political will to tackle significant delivery problems. Vision and leadership are intrinsically connected, because only through high-quality development which engages with both politicians and people's real, lived experience is sufficient local support likely to be gained to allow new places to be realised.²⁶ In the past it has proved difficult to generate positive public interest and support for concepts such as 'growth areas' and 'eco-towns'. But, for the reasons set out in this document, the Garden City approach is well placed to reframe the debate on development from one typically focused on 'impacts and destruction' to one in which the benefits and creativity of new places are more widely understood.

The role of central government

30. Leadership must come from all parts of the political establishment. At the national level, the Government must be an active player in enabling and co-ordinating development. This requires a range of actions, ranging from providing a strategic framework so that new places are well connected to other planned provision of infrastructure, to an effective cross-departmental approach so that opportunities to deliver benefits in, for example, energy and transport are maximised and blockages over public sector land disposal

²⁶ For further information about the importance of local leadership, see *Creating Garden Cities and Suburbs Today: A Guide for Councils*. TCPA, Mar. 2013. <http://www.tcpa.org.uk/pages/creating-garden-cities-and-suburbs-today-a-guide-for-councils.html>

are quickly resolved. The Government has to play a detailed role in the brokerage of the location of new places – and must ultimately be prepared to designate new communities. The Government must also be prepared to designate Development Corporations to drive effective delivery, as it intends to do at Ebbsfleet. The TCPA's *New Towns Act 2015?* sets out in detail the benefits of using the New Towns legislation for this purpose and the advantages of using New Town Development Corporations rather than Urban Development Corporations.²⁷ Here, in short, three primary issues need to be resolved:

- Development Corporations must have the full range of powers necessary to be effective. Urban Development Corporations are not as effective as New Town Development Corporations in this regard, and where they are used they will need to be given enhanced powers of forward planning.
- Development Corporations must balance strong powers with strong upfront objectives enshrining the Garden City principles, particularly in relation to social inclusion and effective action on climate change.
- Development Corporations must have a form of governance which includes local authorities and local residents.

The role of local government

31. The *Locally-led Garden Cities* prospectus makes it clear that local councils have the leadership role in bringing forward new large-scale communities. There is a vital role for councillors in explaining to local residents and businesses the need for a new Garden City, the long-term vision underpinning it, and the many ways in which existing residents in an area can benefit from a new, high-quality, large-scale development nearby. In communicating the advantages of meeting local housing needs through a new Garden City or Suburb, councillors should also highlight that an alternative 'no growth' scenario would not necessarily equate to 'no change' for a community. By rejecting growth, communities may face a range of unwanted consequences, including a lack of affordable homes for their adult children, overcrowding, over-subscribed schools and medical services, and a local labour force insufficient to fill key jobs.
32. Planning and building a new Garden City will inevitably take several years – far more than a single electoral cycle. It is therefore very important to the success of a proposed new Garden City that local political leaders help to build a cross-party, cross-community consensus around the need, and the vision, for the development. Councillors have a role in maintaining the momentum of the development of a new community, and they must be clear that they are in it for the long haul.

Delivering real participation

33. Garden Cities are places that give people a real opportunity to shape the development and ongoing direction of their community. People have a civil right to be engaged in planning, and their participation is likely to lead to better planning outcomes. The planning system was once at the cutting edge of the participation debate but has lost a sense of the core principles that should be applied to its governance. Decision-making often defaults into passive consultation rather than active, participative dialogue

²⁷ *New Towns Act 2015?* TCPA, Feb. 2014. <http://www.tcpa.org.uk/pages/new-towns-act-2015.html>

between communities, politicians and planners. In practice, the planning system presents real barriers, such as the use of legalistic and technical jargon, that can exclude those without experience of how the system operates. The approach to participation in Garden Cities should be defined by the following principles:

- An effective scheme of participation must be prepared at the inception of a new proposal.
- People must be engaged upfront and as soon as is practically possible on decisions which affect them, with clear sense of the process which will guide participation. Above all, there must be honesty about how much power over any given decision is being offered to the community.
- Participation methods should be relevant to the community whose engagement is sought. There are diverse methods of engagement, and some may be more appropriate than others for particular social groups. Above all, there is a need for a dedicated team of practitioners, with the relevant planning and community development skills, to ensure continuity.
- There must be total transparency and accessibility in the development process, with a presumption that bodies such as Development Corporations will disclose all the information necessary for active participation. This is vital to secure long-term trust and co-operation.
- There must be a clear route of redress when communities consider that their voice has not been heard.
- Garden Cities are places in which co-operation and the co-operative spirit should be the guiding ethic. The Garden City approach offers an opportunity to change a planning culture which is all too often marked by polarised views on all sides and develop a genuine sense of shared ownership in the enterprise of building a new community.

34. These principles will play out in different ways across the two principal phases of developing a new Garden City. Community participation during the designation process is undoubtedly the hardest Garden City principle to put into effect. Even when designation is locally led there is bound to be opposition from at least some of the existing residents in the area most directly affected. However, their voice has to be balanced against wider local needs, and also against the views of those in dire housing need in communities which may be 50 miles away and would normally have no means of engagement. Effective dialogue at this stage requires a sub-regional and regional as well as a local approach, supported by the Government. Ultimately, participation will not necessarily guarantee consensus, and elected politicians will still have to exercise their role as the final guarantors of democratic decision-making.
35. Once a designation has been secured, the design and operation phase offers much greater opportunities for creative participation. This should include existing residents, as well as new residents as they move in. Local people should be encouraged to get involved in the planning and design of a new Garden City as it develops. Active involvement in shaping the future of a new Garden City can help to develop social links between existing residents and the people who move into the Garden City as it grows, bringing together diverse groups of people to help shape and create the new place. This will need to be encouraged and facilitated by local leaders.

Garden City principle

Long-term stewardship

Summary of key considerations

- The Garden City model demands a clear understanding of how the assets generated by the development process will be managed on behalf of the community in perpetuity.
- There are a range of tried-and-tested ways of successfully funding and managing community assets for the long term, including models for community land ownership.
- The right governance and legal structures for asset management are essential.
- If funds are to be generated for the management and maintenance of community assets, finance needs to be considered from the outset.
- Assets and utilities can be managed to generate significant income, but planning and design from the outset is required if opportunities are to be maximised and capitalised upon.
- Meaningful community participation is necessary to enable people to engage in the management of their new community.

36. The Garden City movement builds on a long and rich history of community rights, ownership and asset management in the UK,²⁸ and the establishment of a body to own and manage land and community assets is an essential aspect of the Garden City model. Such a body must be designed to ensure that those living and working in a Garden City are the key beneficiaries of the development process.
37. The Garden City model demands a clear understanding of how the assets generated by the development process will be managed on behalf of the community in perpetuity.²⁹ This stewardship task goes beyond the management in trust of, for example, a lump sum endowed for the maintenance of green space: active, positive management of assets, commercial estates and utility companies is required.
38. At some point in the Garden City development process, the delivery body (i.e. the Development Corporation or town developer) will need to hand over relevant assets to one or more suitable stewardship bodies. There are a range of tried-and-tested ways of successfully funding and managing community assets for the long term – including generating income by trading goods or services or from property portfolios, or securing income from charitable grants or through the financial incentives attached to the new package of community rights introduced by the Localism Act 2011. Some developers may want to hand the community assets of a newly built place over to a trust or charity; others may want to remain involved in the place for many years or in perpetuity. The Garden City model can accommodate both approaches.

28 For a history of land rights and asset ownership, see S. Wyler: *A History of Community Asset Ownership*. Development Trusts Association (now, Locality), 2009, <http://www.communityplanning.net/pub-film/pdf/AHistoryofCommunityAssetOwnershipsmall.pdf>. See also the TCPA's *Love, Life & Liberty* performance (on a CD available through the TCPA website, at <http://www.tcpa.org.uk/publications.php?action=publication&id=33>)

29 The TCPA's publication *Built Today, Treasured Tomorrow – A Good Practice Guide to Long-Term Stewardship* (available at <http://www.tcpa.org.uk/pages/built-today-treasured-tomorrow.html>) provides detailed and technical guidance on the long-term stewardship of community assets and should be read alongside this section

Planning for long-term stewardship

39. Long-term stewardship should be a consideration right from the very first stages of planning a new development – many funding opportunities can only be secured in the early stages of planning (for example, site development briefs in Local Plans, Community Infrastructure Levy charging schedules, masterplans and section 106 agreements may need to include long-term stewardship considerations). Processes of engagement should address matters of stewardship, including a staged approach to identifying stewardship opportunities in new development and how the community might be involved in management. Planning for long-term stewardship in new Garden Cities requires a strategic approach, involving dialogue with neighbouring councils at all levels at an early stage. And the implications of community asset use for the design of new facilities must be considered at the outset.

Paying for long-term stewardship

40. We cannot afford to build new places that within a generation are run-down and undesirable because there is no money to maintain them. This is particularly true of our parks and streets – high-quality public parks and attractive tree-lined streets are immensely important if we are to encourage people to live active, healthy lives in sustainable places. They are also key to whether or not a place looks cared-for and welcoming or dilapidated and off-putting. But, parks, streets and other community facilities need ongoing maintenance that will have to be paid for in perpetuity. Proactive management of land and property endowments can be profitable, although a long-term revenue stream is much harder to secure than upfront capital funding.
41. Some assets, such as a sustainable energy company, will usually create their own income stream, but the requirements for any potential income-generation from assets must be fully considered, and a realistic business plan drawn up, before the asset is designed and built. For example, a community centre might be able to generate its own income if it runs a café on the premises, but in order to do so the building will have to be designed to include a sufficiently large kitchen and seating space.

Running a stewardship body

42. A stewardship body must be run with the right governance and legal structures in place from the start. This requires the right team with the right skills, as well as an interest in the assets to be managed.
43. A fundamental aspect of stewardship in new Garden Cities is that it should be in the hands of, or carried out on behalf of, the residents. This requires an integrated programme of engagement throughout the development process and an ongoing dialogue. It is vital to understand what the community wants and their funding priorities. Using a range of different tools (such as community forums and social media) will help to give people a say in how their neighbourhood is run. Moreover, putting local people at the heart of community stewardship can generate increased local support, creativity and entrepreneurialism and so help to create successful places.

Garden City principle

Mixed-tenure homes and housing types that are genuinely affordable and meet the requirements of those most in need

Summary of key considerations

- New Garden Cities must have a primary focus on providing homes for those most in need in the current housing crisis.
- Garden Cities should provide diverse housing tenure options, delivered by a range of providers, from Development Corporation partnerships with housing associations to smaller providers such as co-operatives and community land trusts.
- Self-/custom-build homes are an important part of the housing mix in Garden Cities, and land should be designed for this purpose, potentially as serviced plots.
- At least 30% of homes in a new Garden City should be for social rent. Other forms of 'sub-market housing', such as shared-equity and low-cost or discounted ownership, should form at least a further 30% of homes, with clear mechanism to ensure this is made available in perpetuity.
- Capitalising on the opportunity for Garden Cities to meet the needs of the general population will require an element of public sector funding.
- The Garden City model of land value capture makes achieving genuinely affordable homes a viable prospect.

44. The Garden City principles were founded on an understanding of the importance of decent homes in high-quality environments for everyone. **This means that Garden Cities built today must have a primary focus on providing homes for those most in need in the current housing crisis.** The nature of these needs will vary from place to place, and an up-to-date detailed analysis of not just local needs but the wider demographic, social and economic trends in the region will be required. This analysis should move beyond crude debates about 'affordability' to develop a detailed grasp of the kinds of homes and tenures that will meet the needs identified. Such data must be set within the wider and vital planning objective of socially mixed communities which reflect the diversity in age, household composition and ethnic background of modern Britain.
45. Clear targets for 'sub-market housing' should be set for all Garden Cities. These targets should be dictated by the local circumstances revealed by analysis. However, we already know the current housing crisis has locked out many people on low incomes. This implies a strong emphasis on meeting their needs, and so as a benchmark at least 30% of homes in a new Garden City should be for social rent. Other forms of sub-market housing, such as shared-equity and low-cost or discounted ownership, should form at least a further 30% of homes, and there should be a clear mechanism to ensure that such housing is made available in perpetuity. This is a demanding standard, but, as the New Towns demonstrated, it can be delivered if Development Corporations are able to offer cheap land for social rent providers. For example, between 69% (at Basildon) and 97% (at Peterlee) of housing in the Mark 1 New Towns was for social rent.³⁰ Capitalising on the opportunity for Garden Cities to

³⁰ Statistics from Census data cited within the New Towns Record – <http://www.idoxgroup.com/knowledge-services/idx-information-service/the-new-towns-record.html>

meet the needs of the general population people will require an element of public sector funding. At a minimum, there is a need for clarity on how existing housing investment will play out in new communities;³¹ however, new resources as loans or subsidies will be required to secure strong, mixed and affordable communities.

46. Recognising the diversity of housing needs, Garden Cities should, as Howard imagined, offer a range of housing solutions and providers. The TCPA publication *New Towns Act 2015?*³² identified the opportunity for Development Corporations to set up, or work in partnership with, a major housing association. This arrangement should be complemented by other smaller players, including housing co-operatives, industrial and providential societies or community land trusts, in order to deliver a range of tenure options. Self-/custom-build should play a significant role in provision, and land should be designated for this purpose, including serviced plots where possible. Opportunities offered by self-/custom-build must be made realistic for those on moderate and low incomes.

31 Including the Affordable Housing Programme 2011-15 (which itself includes programmes on Affordable Rent, Affordable Homes Guarantees, Empty Homes, Help to Buy, and the Community Right to Build), the Custom Build Fund, the Local Infrastructure Fund, the Large Sites Infrastructure Programme, the Local Growth Fund, and the New Homes Bonus

32 *New Towns Act 2015?* TCPA, Feb. 2014. <http://www.tcpa.org.uk/pages/new-towns-act-2015.html>

Garden City principle

A wide range of local jobs in the Garden City within easy commuting distance from homes

Summary of key considerations

- Garden Cities are not simply about housing – a broad range of employment opportunities is required if unnecessary or undesirable commuting is to be avoided.
- Sustainable transport networks should facilitate sustainable commuting where necessary, but a new Garden City should aim to be broadly self-contained while playing a role in the sub-regional hierarchy.
- Garden Cities must accommodate smart systems and should be flexible enough to respond to the changing nature of – and emerging trends in – work and technology.
- Garden Cities must provide a full range of employment opportunities, with the aim of offering no less than one job per new household.
- A clear industrial strategy must be established at the inception of a new Garden City. It should engage private sector employers and key players in the knowledge economy, such as research and educational partners. This strategy should also quantify the outcomes of other key Garden City principles in building a local economy.

47. An important element in Howard’s thinking about Garden Cities was that they would provide a range of both housing and jobs so that they were as far as possible self-sustaining new communities rather than soulless commuter suburbs. Reducing commuting is still highly desirable today, both to improve residents’ quality of life and to reduce carbon dioxide emissions. Howard believed that this required careful consideration of locations for Garden Cities that would be far enough from existing conurbations to allow for the development of distinct local economies but close enough to maximise the benefits of connections to other towns and cities (through a grouping Howard called the ‘Social City’). New Garden Cities must be of sufficient size and have the necessary services to establish their own character and identity and a strong measure of self-containment, but there also needs to be a recognition of their sub-regional economic role. The Government’s current commitment to Garden Cities of 15,000 homes is at the lower end of what might realistically meet this ambition.

The changing nature of work

48. In recent decades the nature of work has been changing significantly, with a decline in industrial and manufacturing sectors and a rise in more flexible working arrangements and enhanced communications. The importance of the knowledge economy in sustaining places is now crucial, as is the flexibility to respond to the ‘third industrial revolution’, in which 3D printing and nanotechnologies may again change the nature of work.

Providing a full range of employment activities

49. New Garden Cities must provide a full range of employment opportunities, with an aim of no less than one job per new household. While the changing nature of work is such that the achievement of complete employment self-sufficiency is impossible, and in some circumstances may not even be desirable, the aim should be to reduce the need to travel to work as far as is practicable.

Designing-in flexibility

50. In practical terms, this means that while it will be vital to attract businesses to new Garden Cities, it will also be important to ensure that new housing is designed to include enough space to allow people to work from home, and that it benefits from the high-quality broadband connections necessary to make this possible. In order to nurture new businesses, local small business or innovation hubs might be desirable. High-quality public transport connections will also be vital – even home-workers have to visit colleagues or customers from time to time. With the nature of work changing so rapidly, a wide variety of different types of employment could help to create economic resilience for the new community. In addition, a wide range of employment opportunities will help to ensure both that there is a good social mix in the new Garden City and that as people develop their skills and careers they can continue to find employment nearby.

The need for a clear industrial strategy

51. A clear industrial strategy must be established at the inception of a new Garden City. It should seek to engage private sector employers and key players in the knowledge economy, such as research and educational partners. This strategy should also seek to quantify the outcomes of other key Garden City principles in building a localised economy. For example, jobs in energy, water and housing provision should be under local control in perpetuity, allowing for the substantial internalisation of expenditure which otherwise would usually leave the local economy – flowing out to, for example, multinational energy providers.

Garden City principle

Beautifully and imaginatively designed homes with gardens, combining the best of town and country to create healthy, vibrant communities

Summary of key considerations

- Garden Cities provide beautiful homes, in attractive places that are aesthetically, culturally and environmentally rich and stimulating, and that are planned, designed, developed and managed to achieve long-term success and public appeal.
- The local built heritage should be married with the best design approaches appropriate to today's context, making the most of new technologies and innovations in construction and design.
- The 21st century Garden City will be characterised by a landscape structure of multi-functional green infrastructure, including the private or shared gardens associated with homes and a surrounding belt of well managed agricultural land.
- The amount of land allocated to accommodate a Garden City should be determined through a masterplanning process that applies the Garden City principles and takes into account the constraints and opportunities presented by the site. The land area should not be artificially constrained by land ownership or political boundaries, or by previous assessments of site capacity based on conventional planning approaches.
- Garden Cities must be designed to enable households to enjoy healthy lifestyles in a high-quality built environment.

52. Ebenezer Howard was strongly influenced by William Morris, John Ruskin and the Arts and Crafts movement, and the early Garden Cities were quite consciously designed to be beautiful places that would lift the spirits of those who lived there. Howard and his design team at Letchworth – the architect Richard Barry Parker and planner Raymond Unwin – thought very deeply about how best to create homes and places in which people could flourish. They wanted to create beautiful homes in attractive places that were aesthetically, culturally and environmentally rich and stimulating.
53. It is therefore no surprise that the original Garden Cities are places of enduring quality and choice. They have met the lifestyle and housing aspirations of successive generations and remain popular today. They stand in stark contrast to much of the unimaginative and poor-quality design of many modern homes, not least in terms of room sizes.
54. The 21st century Garden City needs to be planned, designed, developed and managed to achieve the same long-term success and public appeal.

Design principles

55. Garden Cities are places of high-quality design and innovation, and 21st century Garden City developers can still learn much from the principles of the Arts and Crafts tradition. This tradition includes sensitivity to the heritage of local building design, a commitment to human scale, an understanding of the use of detail and craftsmanship, and a strong appreciation of the power of the natural environment to enhance people's wellbeing. The Garden City movement's design ethic also recognises the powerful role of art in people's lives, not as a superior activity but as something that should be embedded in good design available to everyone.

56. Applied properly, this means that a Garden City designed for Cornwall is likely to look and feel very different to one designed for Norfolk. Both will reflect the unique materials, designs and landscape of their locality.
57. While new Garden City design should be sensitive to the past, it should not be backward-looking: the local built heritage should be married with the best design approaches appropriate to today's context, making the most of new technologies and innovations in construction and design. While innovation should be encouraged, designs should apply the following basic urban design principles:
- Integrate the Garden City with strategic movement corridors and public transport services so that it is well connected to surrounding settlements and facilities.
 - Create a sustainable urban structure of walkable neighbourhoods based around a network of mixed-use town and local centres in which residents can meet most of their weekly and day-to-day needs.
 - Meet the full range of housing needs and aspirations through a diversity of housing opportunities, having particular regard to the needs of older people and the provision of plots for self-/custom-building.
 - Create spacious and well planned homes that are designed to achieve the highest possible standards of building fabric efficiency – by, for example, following Passivehaus approaches. Room sizes must not fall below level 3 of the Government's Housing Standards Review,³³ and should aim to be of a more appropriate size.
 - Foster healthy and active communities by encouraging walking and cycling and providing a comfortable, stimulating and therapeutic environment, bringing together the best of the urban and natural environments.
 - Provide a multi-functional green infrastructure network throughout the Garden City, including the private or shared gardens associated with homes, areas for local food-growing, and a surrounding belt of agricultural land to prevent sprawl.
58. The developers of a new Garden City must consider its implications for the local landscape and historic environment, and should aim to enhance both heritage assets and their settings through the proposed development.

Making space for gardens and green infrastructure

59. A defining characteristic of the original Garden Cities is their landscape setting of parks, open spaces, tree-lined streets and homes with generous gardens. The resulting 'leafy and green' character is an important reason for their enduring popularity, but it also offers a number of key benefits in terms of sustainability and climate change resilience³⁴ (considered further under the 'natural environment' Garden City principle, on pages 25-27). Given the need to build greater resilience to

33 *Housing Standards Review. Illustrative Technical Standards Developed by the Working Groups*. Department for Communities and Local Government, Aug. 2013. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/230251/2_-_Housing_Standards_Review_-_Technical_Standards_Document.pdf

34 See, in particular, Ross Cameron *et al.*: 'The domestic garden – its contribution to urban green infrastructure'. *Urban Forestry & Urban Greening*, 2012, Vol. 11 (2), pp.129-37 (doi:10.1016/j.ufug.2012.01.002); and *Gardening Matters: Urban Gardens*. Royal Horticultural Society, 2011. <http://www.rhs.org.uk/science/pdf/climate-and-sustainability/urban-greening/gardening-matters-urban-greening>

climate change into new communities, the 21st century Garden City will be characterised by a landscape structure of multi-functional green infrastructure. As a minimum (and including private gardens), 50% of a new Garden City's total area should be allocated to green space (of which at least half should be public), consisting of a network of multi-functional, well managed, high-quality open spaces linked to the wider countryside. Homes should have access to private or shared gardens, and space must be allocated to allow local food production from community, allotment and/or commercial gardens.

60. Analysis undertaken as part of the TCPA's centenary re-publication of Raymond Unwin's *Nothing Gained by Overcrowding!*³⁵ has shown how these benefits have been lost from much recent development, which has become increasingly dominated by hard-surfaced areas for roads and car parking at the expense of space for gardens.³⁶ The analysis shows how a Garden City approach to neighbourhood design can incorporate tree-lined streets, generous private gardens and space for allotments while still accommodating a similar number of homes to that provided by 'hard-surfaced' developments, without adding additional cost.

Green Belt

61. A fundamental aspect of the Garden City model, and of its New Towns descendants, is the provision of an agricultural belt to prevent sprawl and provide a local source of food and resources for the emerging market of the new Garden City. The Green Belt around a new Garden City must be properly managed, with urban and rural land management decision-making systems linked to ensure that it also provides for access for recreation, energy generation, agricultural production, and habitat creation.

Delivering the approach in practice

62. The amount of land allocated to accommodate a Garden City should be determined through a masterplanning process that applies the Garden City principles and takes into account the constraints and opportunities presented by the site. The area of the Garden City should not be artificially constrained by land ownership or political boundaries, or by previous assessments of site capacity based on conventional planning approaches. In particular, care should be taken to ensure that the land set aside for residential neighbourhoods is sufficient to accommodate the necessary green infrastructure, including tree-lined streets and private gardens. Identifying the area required for residential neighbourhoods at the very outset will help to ensure that the principles are successfully applied and will help to underpin the viability of the Garden City project.

35 *Nothing Gained by Overcrowding! A Centenary Celebration and Re-exploration of Raymond Unwin's Pamphlet – 'How the Garden City Type of Development May Benefit Both Owner and Occupier'*. TCPA, Apr. 2012. http://www.tcpa.org.uk/data/files/Nothing_Gained_By_Overcrowding.pdf

36 A major review of consumer attitudes to new housing conducted by CABI (*What Home Buyers Want: Attitudes and Decision Making among Consumers*. CABI, 2005. <http://webarchive.nationalarchives.gov.uk/20110118095356/http://www.cabi.org.uk/files/what-home-buyers-want.pdf>) highlighted the importance attached to private garden space. The study found that 75% of households wanted access to private outdoor amenity space rather than communal space, that the desire for a larger garden was a frequently given reason for moving home, and that efforts to increase density and reduce garden space had met with strong market resistance

63. A common misconception is that the Garden City approach to development means low-density living. In fact, there is no specified density for new Garden Cities, and a range of densities across the different functional areas would be expected. There should not be a negative correlation between housing density and wealth in new Garden Cities. The test is the extent to which the density applied allows for the realisation of the Garden City principles and meets the standards outlined in this document.

Planning for healthy communities

64. The development industry should be acting with the same awareness of social responsibility as shown by housing associations in taking great care to ensure that development proposals result in outcomes that enable households to enjoy healthy lifestyles in a high-quality built environment.³⁷ This can be achieved by positively engaging in the planning process to deliver health-promoting communities and by factoring long-term benefits into a broader viability assessment of development proposals. It also needs a new level of engagement between local authorities and their partners, developers and communities, to identify how the evidence-based local health benefits of investing for the long term can be factored into development.³⁸ Local food-growing, whether in private or shared gardens or through local commercial activities, can have a range of physical and psychological benefits, as well as contributing to food security.
65. Standards on the following should be considered when planning new Garden Cities:
- **Active travel and physical activity:**
 - Set targets for walking and cycling, including reviewing proposed schemes to see how they could be enhanced to provide a safer, more appealing environment for pedestrians and cyclists in all sections of the community.
 - Meet 'Active Design' guidelines to improve opportunities for access to sport and physical activity.
 - **Access to healthier food:**
 - Identify opportunities to create innovative spaces for growing food – for example allotments, derelict public open spaces, and green roofs.
 - Require landscape or green infrastructure plans to demonstrate the potential use of any open space for community food-growing.
 - Consider appropriate programmes, policies and conditions to restrict the proliferation of unhealthy fast-food outlets in proximity to school premises.

37 The TCPA's Reuniting Health with Planning project has produced a number of documents on planning for health which should be read alongside this section – see <http://www.tcpa.org.uk/pages/health.html>

38 Andrew Ross, with Michael Chang: *Planning Healthier Places – Report from the Reuniting Health with Planning Project*. TCPA, Nov. 2013, p.54.
http://www.tcpa.org.uk/data/files/Health_and_planning/Health_Phase_2/Planning_Healthier_Places.pdf

Garden City principle

Development that enhances the natural environment, providing net biodiversity gains and using zero-carbon and energy-positive technology to ensure climate resilience

Summary of key considerations

- Garden Cities are places in which human development positively enhances the natural environment.
- New Garden Cities should yield a net gain in local biodiversity and should adopt plans to achieve the objectives of the Biodiversity 2020 strategy.
- Garden Cities must demonstrate the highest standards of innovation in zero-carbon and energy-positive technology in order to reduce the impact of climate-change-inducing emissions.
- Garden Cities must be water efficient and must aim to be water-neutral in areas of serious water stress.
- The location, layout and construction of a Garden City should minimise, and wherever practicable avoid, flood risk.

66. Howard's Garden City vision was based on a belief that 'Human society and the beauty of nature are meant to be enjoyed together.'³⁹ His concept of 'town-country' was not only about combining the economic and social opportunities of urban and rural life, but also about recognising the intrinsic beauty of nature and the physical and psychological benefits of experiencing the natural world.

Biodiversity and ecosystem services

67. Today, the intrinsic value of nature and biodiversity is well evidenced, as are the range of social, physical and psychological benefits provided through a range of ecosystem services. Consideration of ecosystem services is a key policy priority. As recognised in the Biodiversity 2020 strategy, these services include 'essentials such as food, fresh water and clean air, but also less obvious services such as protection from natural disasters, regulation of our climate, and purification of our water or pollination of our crops. Biodiversity also provides important cultural services, enriching our lives.'⁴⁰
68. New Garden Cities should yield a net gain in local biodiversity and should adopt plans to achieve the objectives of the Biodiversity 2020 strategy, including avoiding significant adverse effects on internationally designated conservation sites (in line with the requirements of EU legislation such as the SEA Directive and the Habitats Directive) and Sites of Special Scientific Interest. The planning approach taken to biodiversity should be integral to the planning and design approach of the new Garden City as a whole, and should set out details such as the use of native species, particularly local varieties for planting and food production. At Welwyn Garden City, Howard is said to have planted an apple tree in the garden of every home.

39 Ebenezer Howard: *To-Morrow: A Peaceful Path to Real Reform*. Swann Sonnenschein, 1898, p.10. Reprinted, with commentary by Peter Hall, Dennis Hardy and Colin Ward, by Routledge, 2003

40 *Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services*. Department for Environment, Food and Rural Affairs, Aug. 2011. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69446/pb13583-biodiversity-strategy-2020-111111.pdf

Enhancing the environment and wellbeing through green infrastructure

69. A Garden City's multi-functional green infrastructure network (see the 'homes and gardens' Garden City principle, on pages 21-24) should provide a wide range of benefits for people and the natural environment, including:
- **moderating temperature** – green space plays an important role in cooling surface and air temperatures and in mitigating the urban heat island effect: trees in particular provide important cooling, both through shading and through the process of evapotranspiration;
 - **mitigating flooding and surface water run-off** – a higher proportion of unbuilt permeable space allows more rainfall to infiltrate naturally to recharge groundwater resources, while trees and shrubs intercept rainfall in their canopies and slow down surface run-off;
 - **supporting biodiversity** – green spaces, and gardens in particular, are widely recognised as providing important habitats for plants and wildlife, as well as the opportunity for human contact with nature; and
 - **promoting human health and wellbeing** – green space and gardens support a wide range of physical and wellbeing objectives.

Ensuring climate resilience

70. Climate change is the greatest economic and social challenge facing our society today. In whatever sector we work, we should endeavour to forge practical and rapid paths to a sustainable low-carbon planet, which now require radical cuts in carbon dioxide emissions. Fairness and justice should be at the heart of the debate about ways forward, alongside an acknowledgement of the need for risk-taking and innovation.
71. Climate resilience is multi-faceted and calls for the highest environmental standards of building and urban design, particularly in relation to homes and movement (see the 'homes and gardens' and 'transport' Garden City principles, on pages 21-24 and 30-31, respectively). A Garden City's green infrastructure network should also offer a range of benefits in terms of adaptation to and mitigation of climate change.

Energy-positive Garden Cities

72. Garden Cities must demonstrate the highest standards of innovation in zero-carbon and energy-positive technology in order to reduce the impact of climate-change-inducing emissions.
73. Garden cities must be zero-carbon, in that, over a year, the net carbon dioxide emissions from all energy use within the buildings in the Garden City are zero or below. It is likely that the development of new Garden Cities will begin after the Government's 2016 zero-carbon target has been implemented.
74. Garden cities must be energy-positive: they should aim to produce more energy than they consume, by maximising opportunities for both energy efficiency and the use of renewable energy generated by a Garden City stewardship body (as outlined under the 'land value capture' Garden City principle, on page 11) and by smaller-scale, community- and individually-owned facilities.

Water efficiency

75. Garden Cities must be water efficient and must aim to be water-neutral in areas of serious water stress. Garden Cities must be planned to improve water quality where necessary. They should manage surface water, groundwater and local watercourses in order to prevent surface water flooding from those sources, and they should incorporate sustainable drainage systems. The long-term maintenance, management and adoption of sustainable drainage systems should be undertaken by a suitable stewardship body, with funding established from the outset.

Flood risk

76. The location, layout and construction of a Garden City should minimise, and wherever practicable avoid, flood risk. Garden Cities must not increase the risk of flooding elsewhere and opportunities should be taken to address and reduce existing flooding problems.

Sustainable waste management

77. New Garden Cities provide an exciting opportunity to plan mechanisms, facilities and services that make it easier for residents and businesses to reduce and manage their waste in a sustainable ways. Garden Cities should be leaders in the transformation from a waste management economy to one based on resource management, and they should contribute to reducing the impacts of waste on climate change.

Garden City principle

Strong cultural, recreational and shopping facilities in walkable, vibrant, sociable neighbourhoods

Summary of key considerations

- The pioneers of the Garden City movement put great emphasis on the role of the arts and culture in improving wellbeing as part of a co-operative approach to society.
- Garden Cities are places of cultural diversity and vibrancy, with design contributing to sociable neighbourhoods.
- The creative arts cannot be perfectly planned, but they can be brilliantly enabled. Garden Cities should provide formal frameworks for cultural expression, but also leave open space for artistic dissent and chaos.
- Garden Cities should provide a full range of cultural, recreational, retail and commercial activities which are easily accessible for everyone.

78. Planning is both a technical and an artistic endeavour, and the pioneers of the Garden City movement put great emphasis on the role of the arts and culture in improving wellbeing as part of a co-operative approach to society. In Welwyn Garden City the first public building to open was a theatre. Writers such as Colin Ward have recognised the power of artistic expression to bring people together in new communities.⁴¹ He also recognised the importance of seeing places through a child's eyes in order to create spaces that meet their need for adventurous play.⁴² To meet such cultural and recreational aspirations we need a renewed interest in and understanding of the detail of human behaviour, and a reconnection of planning practice with human psychology.

Planning for culture and sporting facilities

79. Garden Cities are places of cultural diversity and vibrancy, with design contributing to sociable neighbourhoods. This means, for example, shaping design with the needs of children's play, teenage interests and the aspirations of the elderly in mind, and creating shared spaces for social interaction and space for both formal and informal artistic activities, as well as for sport and leisure activities. The creative arts cannot be perfectly planned, but they can be brilliantly enabled. Each generation produces cultures and subcultures which bind them together and help to define human experiences. Garden Cities should provide formal frameworks for this expression through cinema, theatre and dance, but should also leave open space for artistic dissent and chaos.
80. Those setting a strategic vision for sports facilities, developing planning policy, taking planning decisions, or delivering or designing a facility should:⁴³
- Engage with and place appropriate weight on the advice of Sport England when it is identified as statutory consultee, and engage with other key stakeholders through the planning process to maximise multiple benefits.

41 See Colin Ward's discussion of community and music in Milton Keynes in 'Anarchy in Milton Keynes'. Center for a Stateless Society. <http://c4ss.org/content/12697>

42 Colin Ward: *The Child in the City* (1978) and *The Child in the Country* (1988). Bedford Square Press

43 See good practice guidance in *Improving Culture, Arts and Sporting Opportunities through Planning. A Good Practice Guide*. TCPA, Jun. 2013. http://cultureandsportplanningtoolkit.org.uk/fileadmin/user_upload/2013_Guide/TCPA_Culture_Guide.pdf and in the Culture and Sport Planning Toolkit, available at <http://cultureandsportplanningtoolkit.org.uk/> should be read alongside this section

- Work with other sectors and stakeholders to ensure that provision for sport is included as part of other developments – for example within the provision of schools.
 - Consider improving the quality of and accessibility to existing provision, as this can be more beneficial than making new provision; and where new provision is needed, ensure that it enhances the existing network.
 - Assess needs and opportunities by identifying and reflecting the different levels of need across the district in terms of quality, access and needs for associated facilities, and how they relate to provision.
 - Apply evidence of need for sports provision by producing or refreshing a strategy for sport, including action planning, and by contributing to infrastructure delivery plans and Community Infrastructure Levy Regulation 123 lists.
 - Recognise that the level of provision and access will vary between urban and rural areas.
 - Take into account ongoing maintenance and management in planning provision, and reflect the costs in infrastructure planning.
81. New Garden Cities should provide a full range of cultural, recreational, retail and commercial activities which are easily accessible for everyone. Formal provision of cultural facilities should be based on an assessment of current and future needs, which should be used as a baseline for determining benchmarks for the provision of social infrastructure within a Garden City. The assessment should be part of the infrastructure planning process to identify provision for:
- culture and the arts (see below);
 - sport and leisure;
 - informal playspace;
 - retail;
 - health and social care; and
 - education.
82. The assessment should take into account as a bare minimum the following nationally recognised government and industry standards for culture and arts facilities:
- arts: 45 square metres per 1,000 people;⁴⁴
 - archives: 6 square metres per 1,000 people;⁴⁵
 - museums: 28 square metres per 1,000 people;⁴⁶ and
 - public libraries: 30 square metres per 1,000 people.⁴⁷

44 *Arts, Museums and New Development. A Standard Charge Approach.* Museums, Libraries & Archives Council, and Arts Council England, 2009. http://www.artscouncil.org.uk/media/uploads/arts_museums_and_new_development-a_standard_charge_approach.pdf

45 *Public Libraries, Archives and New Development. A Standard Charge Approach.* Museums, Libraries & Archives Council, May 2010. http://cultureandsportplanningtoolkit.org.uk/fileadmin/user_upload/Public_libraries_archives_and_new_development-a_standard_charge_approachFINAL.pdf

46 *Arts, Museums and New Development. A Standard Charge Approach.* Museums, Libraries & Archives Council, and Arts Council England, 2009. http://www.artscouncil.org.uk/media/uploads/arts_museums_and_new_development-a_standard_charge_approach.pdf

47 *Public Libraries, Archives and New Development. A Standard Charge Approach.* Museums, Libraries & Archives Council, May 2010. http://cultureandsportplanningtoolkit.org.uk/fileadmin/user_upload/Public_libraries_archives_and_new_development-a_standard_charge_approachFINAL.pdf

Garden City principle

Integrated and accessible transport systems, with walking, cycling and public transport designed to be the most attractive forms of local transport

Summary of key considerations

- New Garden Cities should be designed to encourage positive behavioural change in terms of low-carbon transport: walking, cycling and low-carbon public transport should be the most convenient and affordable modes of transport.
- Garden Cities should embrace new low- and zero-carbon technologies and aim to be free of polluting vehicles as soon as possible and within 20 years; this will require a transport framework that can accommodate future transport planning.
- Garden Cities should be located only where there are existing rapid public transport links to major cities, or where plans are already in place for their provision. Locations should be considered in the context of sub-regional, national and international transport networks.

83. Integrated and accessible transport systems were central to Howard's Garden City vision in two ways: first, in relation to the spatial development of a network of Garden Cities, linked by rapid transport to create a 'Social City'; and, secondly, in terms of the physical walkability of neighbourhoods designed to promote healthy lifestyles. Both are fundamental to the design of New Garden Cities today.
84. Locations for new Garden Cities should be identified through a national spatial approach which considers the needs of the nation as a whole. This means ensuring the focus is on the needs of the North and the rest of the country, not just the South East. Infrastructure and the sub-regional spatial relationships between towns and local economies are key considerations, and provide the context for the development of low-carbon rapid-transport systems designed to support sustainable patterns of living, working and communicating.

Encouraging walking and cycling

85. It is essential to ensure that neighbourhoods in new Garden Cities are walkable, offer easy access to a safe and comprehensive cycle network, and are also linked into an affordable, low-carbon public transport network for the Garden City and beyond – not only to encourage healthy and sociable lifestyles but also as part of a low-carbon economy that reflects how our working patterns and family units have changed.
86. Walking, cycling and low-carbon public transport should be the most convenient and affordable modes of transport in new Garden Cities. Design should allow for a comprehensive and safe network of footpaths and cycleways throughout the Garden City, with public transport nodes and neighbourhood facilities within a short walking distance (not more than 10 minutes) of all homes to reduce reliance on private cars. To promote healthy lifestyles for children, there should be a maximum walking distance of 800 metres from homes to the nearest school for children aged under 11.

Behavioural change and low-carbon transport

87. Garden Cities should be designed to encourage positive behavioural change in terms of low-carbon transport, not only through infrastructure and services that are in place from 'day one' of residential occupation, but also through the provision of information on transport choice. The carbon impact of transport in a Garden City must be monitored as part of a long-term, low-carbon approach to travel, set within plans for community governance.

Low- and zero-carbon transport and future-proofing transport systems

88. Cars are an integral part of movement in Britain today, but the use of cars and their technologies are changing. Where car travel is necessary, Garden City proposals should require consideration of shared transport approaches, such as car clubs. Those planning new Garden Cities should look at key transport planning lessons from Europe. A Garden City's design must enable at least 50% of trips originating in the Garden City to be made by non-car means, with a goal to increase this over time to at least 60%; and design must use the latest best practice in street and transport design as a minimum standard. New Garden Cities should embrace new low-carbon technologies and aim to be free of polluting vehicles as soon as possible and within 20 years; this will require a transport framework that can accommodate future transport planning.
89. Garden Cities should be located only where there are existing rapid public transport links to major cities, or where plans are already in place for their provision. Locations should be considered in the context of sub-regional, national and international transport networks.

Conclusion

90. Garden Cities are not simply about green spaces or dormitory suburbs for the rich: the Garden City ideals embody the highest aspirations for sustainable, inclusive places and are of direct relevance to the challenges of the 21st century. This document has elaborated the definition of the Garden City principles with the intention of helping to shape an active debate about the delivery of new Garden Cities.
91. The application of the Garden City principles is, above all, a creative enterprise, demanding both political will and the assembly of the very best cross-disciplinary talent – from planners and ecologists to energy engineers and artists. At the very least, the principles offer a framework for good planning which has largely disappeared from English policy. And in total they offer a foundation for innovation in the construction of communities which, like the original Garden Cities, will secure a lasting legacy of quality and inclusion.
92. However, in applying the principles there is a crucial, overarching need for effective preparation and co-ordination. Garden Cities will not be conjured out of the air by wishful thinking. Above all, delivery requires the Government to set out plainly how these new places will fit into the wider economic, social and environmental development of England. This requires unprecedented cross-departmental co-ordination in everything from social housing investment to energy generation and use. Only with this kind of forethought and enabling will new Garden Cities truly be able to deliver their outstanding benefits for future generations.

Annex A – Advice and guidance

Land value capture and delivery

Publications

- ***New Towns Act 2015?***
TCPA, 2014
Considers how the New Towns Act should be modernised to deliver New Towns and Garden Cities today and discusses key issues such as land value capture and compensation.
<http://www.tcpa.org.uk/data/files/NTA2015.pdf>
- ***Assessing Proposals for Garden Cities. Memorandum to the Judges of the Wolfson Economics Prize MMXIV Concerning the Delivery of a New Garden City***
TCPA, 2014
Lessons and key issues to consider when delivering new Garden Cities today.
http://www.tcpa.org.uk/data/files/TCPA_Garden_City_Memorandum.pdf
- ***Creating Garden Cities and Suburbs Today: A Guide for Councils***
TCPA, 2013
Guide for councils on key issues that need to be considered in planning and delivering sustainable growth through Garden Cities, and on the policy hooks, tools and resources available.
http://www.tcpa.org.uk/data/files/Creating_Garden_Cities_and_Suburbs_Today_-_a_guide_for_councils.pdf
- ***Creating Garden Cities and Suburbs Today: Policies, Practices, Partnerships and Model Approaches – A Report of the Garden Cities and Suburbs Expert Group***
TCPA, 2012
Considers action in five principal areas to address barriers to developing new Garden Cities.
http://www.tcpa.org.uk/data/files/Creating_Garden_Cities_and_Suburbs_Today.pdf
- ***Ensuring Eco-towns Are Delivered: Eco Towns Delivery Worksheet***
TCPA, 2010
Advice on eco-town delivery, including guidance on finance and delivery vehicles.
<http://www.tcpa.org.uk/pages/delivery.html>
- ***Developing Effective Economic Strategies for Eco-towns: Eco-towns Economy Worksheet***
TCPA, 2009
Advice on developing an economic strategy for an eco-town.
http://www.tcpa.org.uk/data/files/20090327_et_ws_economy.pdf
- ***Good Cities, Better Lives: How Europe Discovered the Lost Art of Urbanism***
By Peter Hall, with contributions from Nicholas Falk. Routledge, 2013
Includes examples of best-practice urban development across Europe and lessons for the UK.
<http://www.routledge.com/books/details/9780415840224/>

Other sources of advice and guidance

- **HCA-ATLAS. Advisory Team for Large Applications**
Independent advisory service, sponsored by DCLG and hosted and delivered through the HCA, available at the request of local authorities to support them in dealing with complex large-scale housing-led projects.
http://www.atlasplanning.com/page/about_atlas.cfm

Long-term stewardship

Publications

- ***Built Today, Treasured Tomorrow – A Good Practice Guide to Long-Term Stewardship***
TCPA, 2014
Sets out methods of securing a good long-term future for community assets such as parks, community buildings, etc., and also considers funding and management approaches.
http://www.tcpa.org.uk/data/files/TCPA_GC_Stewardship_Guide.pdf
- ***How Good Could It Be? A Guide to Building Better Places***
TCPA, 2013
Short and simple plain-English guide for communities that want to grasp the Garden City agenda.
<http://www.tcpa.org.uk/pages/gc-community-guide.html>

- **Towards Sustainable Communities: Eco-towns Community Worksheet**
TCPA, 2008
Advice on community development in eco-towns.
http://www.tcpa.org.uk/data/files/etws_community.pdf

Other sources of advice and guidance

- **Civic Voice**
National charity for the civic movement in England.
<http://www.civicvoice.org.uk/> 0151 707 4319
- **Co-operative Enterprise Hub**
Advice and support for new and prospective community co-ops.
<http://www.co-operative.coop/enterprise-hub/>
- **Co-operatives UK**
National trade association for co-operatives.
<http://www.uk.coop/> 0161 214 1750
- **Locality**
Nationwide network for community-led organisations.
<http://locality.org.uk/> 0845 458 8336
- **National Community Land Trust Network**
National body for Community Land Trusts.
<http://www.communitylandtrusts.org.uk/home> 020 7067 1191

Community participation and engagement

Publications

- **Applying Inclusive Design Principles to Eco-town Development: Eco-towns Inclusive Design Worksheet**
TCPA, 2009
Guidance on inclusive design in eco-towns.
<http://www.tcpa.org.uk/data/files/ecotwsinclusion.pdf>

Other sources of advice and guidance

- **Social Life**
Social enterprise offering advice and guidance on social sustainability in the built environment.
<http://www.social-life.co/publication/Social-Sustainability/> 0207 703 9630
- **The Glass-House Community Led Design**
National charity working to empower communities in the design and regeneration process.
<http://www.theglasshouse.org.uk/> 020 7490 4583
- **The Prince's Foundation for Building Community**
Offers advice and workshops on community engagement in the built environment.
<http://www.princes-foundation.org/> 020 7613 8500

Delivering affordable housing, including self-build

Other sources of advice and guidance

- **Ethical Property Foundation**
Independent property advice for charities, community groups and not-for-profit organisations.
<http://www.ethicalproperty.org.uk/> 020 7065 0760
- **National Self Build Association**
Resources and advice on building one's own home.
<http://www.nasba.org.uk/> 01452 610051
- **Shelter**
Housing and homelessness charity providing a range of guidance and research.
<http://england.shelter.org.uk/> 0344 515 2000

Design assessment tools

Publications

- **Nothing Gained by Overcrowding! A Centenary Celebration and Re-exploration of Raymond Unwin's Pamphlet – 'How the Garden City Type of Development May Benefit Both Owner and Occupier'**
Re-publication of Raymond Unwin's seminal pamphlet, with commentary.
TCPA, 2012
http://www.tcpa.org.uk/data/files/Nothing_Gained_By_Overcrowding.pdf
- **Sustainable Water Management: Eco-towns Water Cycle Worksheet**
Advice on planning for sustainable water management in eco-towns.
TCPA, Apr. 2008
http://www.tcpa.org.uk/data/files/etws_water.pdf

Other sources of advice and guidance

- **BREEAM**
Information about sustainable building standards.
<http://www.breeam.org/about.jsp?id=66>
- **BREEAM Communities UK**
Assessment method providing a way to improve, measure and certify the social, environmental and economic sustainability of large-scale development plans.
<http://www.breeam.org/page.jsp?id=372>
- **Building for Life 12**
Industry standard for the design of new housing developments.
<http://www.designcouncil.org.uk/knowledge-resources/guide/building-life-12>
- **Design Council Cabi**
Source of advice on architecture and design.
<http://www.designcouncil.org.uk/our-services/built-environment>
- **Housing Quality Standards, Homes and Communities Agency**
Measurement method for assessing the quality of housing schemes funded by the HCA.
<http://www.homesandcommunities.co.uk/hqi>
- **Lifetime Homes Standard**
Set of 16 design criteria that provide a model for building accessible and adaptable homes.
<http://www.lifetimehomes.org.uk/>

Planning for Health

Publications

- **Planning Healthier Places – Report from the Reuniting Health with Planning Project**
By Andrew Ross, with Michael Chang. TCPA, 2013
Appendix 1 gives a detailed list of guidance on planning for health.
http://www.tcpa.org.uk/data/files/Health_and_planning/Health_Phase_2/Planning_Healthier_Places.pdf

Other sources of advice and guidance

- The TCPA is leading a project to reunite the public health and planning professions to create healthier places. Project resources are available at <http://www.tcpa.org.uk/pages/health.html>

Green infrastructure

Publications

- **Planning for a Healthy Environment – Good Practice Guidance for Green Infrastructure and Biodiversity**
TCPA, 2012
Guidance on how green infrastructure and biodiversity can be enhanced through the planning system.
http://www.tcpa.org.uk/data/files/TCPA_TWT_GI-Biodiversity-Guide.pdf

- **Biodiversity Positive: Eco-towns Biodiversity Worksheet**
TCPA, 2009
Advice on planning for biodiversity in eco-towns.
<http://www.tcpa.org.uk/data/files/biodiversity.pdf>
- **The Essential Role of Green Infrastructure: Eco-towns Green Infrastructure Worksheet**
TCPA, 2008
Advice on planning for green infrastructure in eco-towns.
http://www.tcpa.org.uk/data/files/etws_green_infrastructure.pdf

Other sources of advice and guidance

- **Federation of City Farms and Community Gardens**
National charity supporting and promoting community farms and gardens.
<http://www.farmgarden.org.uk/> 0117 923 1800
- **Green and Blue Space Adaptation for Urban Areas and Eco Towns (GRaBS)**
TCPA-led project on integrating climate change adaptation into planning and development.
<http://www.grabs-eu.org/>
- **Green Infrastructure Partnership**
Cross-sector partnership supporting the development of green infrastructure in England.
<http://www.gip-uk.org/>
- **Groundwork**
National federation of local trusts promoting greener living and greener, healthier places.
<http://www.groundwork.org.uk/> 0121 236 8565
- **Incredible Edible Network**
Network of community-led urban food-growing initiatives.
<http://www.incredibleediblenetwork.org.uk/> 0781 8570177
- **Natural England**
Source of guidance on green infrastructure, biodiversity and the natural environment.
<http://www.naturalengland.org.uk/> 0845 600 3078
- **Royal Horticultural Society**
Source of guidance on community gardening.
<http://www.rhs.org.uk/communities> 0845 260 5000
- **Sustain**
Source of advice and guidance on planning for agriculture and food.
<http://www.sustainweb.org/> 020 7065 0902
- **The Landscape Institute**
Royal Chartered institute for landscape architects.
<http://www.landscapeinstitute.co.uk/> 020 7685 2640
- **The Land Trust**
Manages green spaces on behalf of and in partnership with local communities.
<http://www.thelandtrust.org.uk/> 01925 852005

Resource use and zero-carbon and energy-positive Garden Cities

Publications

- **Creating Low Carbon Homes for People in Eco-towns: Eco-towns Housing Worksheet**
TCPA, Nov. 2009
Advice on planning for zero-carbon, affordable and accessible homes in eco-towns.
http://www.tcpa.org.uk/data/files/ws_housing.pdf
- **Towards Zero Waste: Eco-towns Waste Management Worksheet**
TCPA, Nov. 2008
Guidance on planning for sustainable waste management in eco-towns.
http://www.tcpa.org.uk/data/files/etws_waste.pdf
- **Sustainable Water Management: Eco-towns Water Cycle Worksheet**
TCPA, Mar. 2008
Advice on planning for sustainable water management in eco-towns.
http://www.tcpa.org.uk/data/files/etws_water.pdf

Other sources of advice and guidance

- **Spatial Planning and Energy for Communities in all Landscapes (SPECIAL)**
TCPA-led project building the capacity of planners to deliver sustainable energy solutions.
<http://www.special-eu.org/>
- **Leadership for Energy Action and Planning (LEAP)**
TCPA-led project on delivering local sustainable energy solutions in line with the Covenant of Mayors.
<http://leap-eu.org/>

Planning for culture and sport

Publications

- ***Improving Culture, Arts and Sporting Opportunities through Planning. A Good Practice Guide***
TCPA, 2013
Guidance on planning for culture art and sport.
<http://www.tcpa.org.uk/pages/planning-for-culture-arts-and-sport.html>

Other sources of advice and guidance

- **Culture and Sport Planning Toolkit**
Practical toolkit for culture and sport planning.
<http://cultureandsportplanningtoolkit.org.uk/>
- **Fields in Trust Toolkit**
Information and guidance on outdoor space.
<http://www.fieldsintrust.org/Toolkit>
- **Play England**
Resources on play space and facilities.
<http://www.playengland.org.uk/>
- **Sport England**
Advice on the design and maintenance of sports facilities.
<http://www.sportengland.org/facilities-planning/tools-guidance/>

Sustainable transport

Publications

- ***Design to Delivery: Eco-towns Transport Worksheet***
TCPA, Mar. 2008
Advice on planning for sustainable transport in eco-towns.
http://www.tcpa.org.uk/data/files/etws_transport.pdf
- ***Handbook for Cycle Friendly Design***
Sustrans, Apr. 2014
Design guidance on planning for a safe and accessible cycle network.
http://www.sustrans.org.uk/sites/default/files/file_content_type/sustrans_handbook_for_cycle-friendly_design_11_04_14.pdf

Other sources of advice and guidance

- **Living Streets**
Guidance on planning for vibrant and people-friendly high streets.
<http://www.livingstreets.org.uk/professionals/better-street-design-and-management/vibrant-high-streets>
- **Planning for Sustainable Travel**
Advice on planning for sustainable travel.
<http://www.plan4sustainabletravel.org/>
- **Sustrans**
Charity working to enable people to travel by foot, bike or public transport for more of the journeys made every day.
<http://www.sustrans.org.uk/>



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