

SUBMISSION ON ECO-TOWNS PLANNING POLICY STATEMENT

Summary

This joint statement from Campaign for Better Transport, Campaign to Protect Rural England, Carfree UK, CTC, Friends of the Earth and Sustrans suggests the following changes to the draft planning policy statement (PPS) on eco-towns:

- The requirement that eco-towns be 'separate and distinct' should be deleted from paragraph 2.1.
- An additional principle ensuring rail connectivity of eco-towns should be added to paragraph 3.2 in order to ensure the comparative advantage of sustainable travel over private car travel
- A clearer target for reducing the carbon emissions from transport should be included in the PPS. This should include all trip types for personal and commercial journeys.
- The PPS must clarify the status of the *Eco-towns Transport Worksheet* and the DfT's *Menu of Options* as advice. Planners and promoters of eco-towns should be expected to follow the more detailed advice given in these documents.
- A clear target for modal share of all trips within the eco-town must be set by the PPS.
- The more challenging targets outlined in the *Transport Worksheet* should be used in the final version of the PPS. If it is not considered possible to set a maximum target of 40% of *all* trips being made by car (and preferably a more challenging target) in a given location, then that location should not be considered suitable for an eco-town. The aspiration of 50% of *in town* trips being able to be made other than by car not a 'challenging and stretching standard', assuming it is clear enough to be a standard in the first place.
- The PPS should clarify the method of measurement of modal share. We would suggest the measure of annual trips by mode used in the National Travel Survey
- We support the walking distance criteria proposed in the PPS as necessary but not sufficient conditions for promoting walking and reducing car use.
- The PPS should ensure that any future proposals for eco-towns take the principle of car-free development seriously. Car-free development should be listed as a principle in paragraph 4.13.
- Given the objectives of the eco-town programme, to achieve modal shift and low-carbon development, the principle of filtered permeability should be spelt out in paragraph 4.13 of the PPS.

1 Introduction

We welcome the opportunity to comment on the draft planning policy statement on eco-towns. This document, focusing on the transport implications of the statement and the eco-towns programme, is a joint submission by the following organisations:

- **Campaign for Better Transport:** is the leading transport NGO. Our compelling arguments and ideas have won us the support of national decision-makers and local activists, securing transport policies and programmes that improve people's lives and reduce environmental impact.
- **Campaign to Protect Rural England** has campaigned for a beautiful, tranquil and diverse countryside since 1926. It promotes plan-led development so as to ensure sustainable use of land and other natural resources in town and country.
- **Carfree UK:** promotes car-free development and its environmental, social, financial and health benefits.
- **CTC:** is the UK's National Cyclists' Organisation, CTC has been protecting and promoting the rights of cyclists since 1878.
- **Friends of the Earth:** campaigns for solutions to environmental problems.
- **Sustrans:** is the UK's leading sustainable transport charity, working on practical projects so people can choose to travel in ways that benefit their health and the environment. The charity is behind the award winning National Cycle Network, Connect2, Safe Routes to Schools, Bike It, TravelSmart, Active Travel and Liveable Neighbourhoods.

2 Response to Q2. "Are the locational principles for eco-towns sufficiently clear and workable?"

2.1 Eco-towns as separate and distinct settlements

We believe the words 'separate and distinct but' should be deleted from paragraph 2.1. As the policy stands, it would exclude urban extensions, which in many cases may be the more sustainable option. A recent report on sustainable settlements in continental Europe¹ concluded that "all the success stories [in their study] demonstrate that new settlements have to be located close to growing urban conurbations so that they can share infrastructure and access to jobs and services in the early stages." Some of the shortlisted eco-towns proposals (Bordon Whitehill, Elsingham) are extensions to smaller settlements, which do not fulfil this criterion. In other cases (such as Pennbury) there is a danger that the precise shape and location of the eco-town could be determined by the artificial requirement to maintain a minimal separation. Whether a separate settlement or an urban extension is more appropriate

¹ PRP, URBED, Design for Homes. 2008. *Beyond eco-towns: Applying the lessons from Europe.*

should be determined by the planning system, on sustainability grounds without the potential distortion which this criterion introduces.²

2.2 Transport and locational principles

We are concerned that the use of the term 'public transport links' in paragraph 3.2 (a) might imply that bus connections would suffice – we believe this is a mistake and that locational principles must refer to rail. Also, as currently phrased the draft PPS also seems to imply that public transport links are less important for eco-towns which are more remote from local service centres.

We believe that a rail connection with regular service is essential, particularly for eco-towns which are not in the immediate vicinity of a large urban area. Where capacity constraints on the rail network exist, the plans should explain how these will be addressed. If this is judged to be unfeasible, then the site should be considered unsuitable for an eco-town. **We would suggest as an absolute minimum requirement that an additional principle is added between (b) and (c) in order to ensure that sustainable travel modes have comparative advantage – including journey time, reliability, price, convenience, comfort – over private car travel:**

(x) the connectivity of the eco-town to the rail network (or light rail networks where appropriate), with consideration given to any capacity constraints and how these might be overcome. Rail connections are essential for eco-towns which are not immediately adjacent to a higher order centre.

To be successful, the locations and connectivity of eco-towns need to enable a significant proportion of the eco-town population to live without cars, and most others to manage with just one car per household. European car-free areas provide access within walking distance to rail and/or trams/light rail.

Analysis of people in the UK who live without cars indicates that access to rail is an important criterion when choosing where to live. The majority of people who live without cars live in larger urban centres. Rail connections seem particularly important for the much smaller group who live in smaller settlements.

We understand that for short journeys bus travel performs an invaluable role and powers within the Local Transport Act 2008 seek to improve the role that bus services can play. Rail performs a different (and complementary) function to bus travel, however. The average distance of a rail journey in 2006 was 24.4 miles, compared with 4.5 miles for local buses. Non-local bus use has declined by a third over the past decade and now accounts for less than 1% of travel mileage.³

² A good overview of the locational principles that would ensure high levels of sustainable travel can be found in Taylor, I. And Sloman, L. 2008. *Masterplanning Checklist for Sustainable Travel in New Developments* On:

www.bettertransport.org.uk/system/files/Masterplanning_Checklist_2008.pdf

³ DfT (2007) Transport Trends. Average journey distances calculated from tables 1.4 & 1.5.

If eco-towns are built without connections to the rail network, with residents obliged to take a local bus and change for medium and long distance travel, we would question whether many people would choose to live in them without owning a car. The likely consequences of that are illustrated by the new settlement of Cambourne.

Cambourne is nine miles west of Cambridge, connected by a regular bus service but no railway. A recently published study⁴ was conducted last year when just over half of its projected 4,250 dwellings were built. 95% of households owned a car (national average 75%). 56% owned two or more. 81% of the working population drove to work.

Our assessment of other options:

Light rail may provide the necessary connectivity under some limited circumstances. Given the cost implications, this is only likely to be relevant where an extension to an existing system is a possibility, or where the eco-town is the ‘tipping’ factor persuading local authorities and national Government to invest in a new light rail system for a city region.

Bus Rapid Transit may play an important role in supplemented rail services but we do not believe that on its own it will prove sufficient to enable significant proportions of eco-town residents to live without a car. Although in theory, a sufficiently segregated BRT might be able to match the performance of trams, in practice, most if not all of the systems are likely to rely on conventional bus priority measures through existing urban areas. There is evidence that as conventionally implemented, with discontinuities, such measures actually *increase* both journey times *and* variability compared to the ‘do nothing’ option.⁵

3 Response to Q4.5 (with reference to zero carbon)

We are concerned that emissions from transport are excluded from the definition of zero carbon in eco-towns, and that no quantified standard has been set in relation to overall emissions from transport. (The only relevant reference is in paragraph 4.13 to travel plans to include “how the carbon impact of transport will be monitored, as part of embedding a long term low-carbon approach to travel within plans for community governance”). This concern also relates to non-personal trips e.g. freight and commercial trips, which receive little to no attention in the PPS as drafted. And while personal trips are covered by modal share targets (but see 4.3 below), the PPS should set the context for providing low carbon travel choices for eco-towns residents. There needs to be some consideration of the trip length of commuting journeys. Communities with

⁴ Lessons from Cambourne, Stephen Platt, Cambridge Architectural Research Limited, 2008, on www.carl.co.uk.

⁵ ANDERSON, J., MULLEY, C. and NELSON, J., 2008. *No Car Lanes or Bus Lanes, Which Gives Public Transport the Better Priority? An Evaluation of Priority Lanes in Tyne and Wear*, 40th Universities Transport Study Group Conference, January 2008.

a predominance of long distance commuting are unlikely to be environmentally or even socially sustainable: even where made by potentially zero carbon means such as electric trains, such patterns have high energy costs that use up scarce sources of sustainable energy.

This also contradicts previous CLG guidance given to planners and developers which suggested that “a specific emissions target for transport will need to be set”.⁶ **A clearer target for reducing the carbon emissions from transport should be included in the PPS. This should include all trip types for personal and commercial journeys.**

4 Response to Q4.9 (with reference to transport)

4.1 Clarification of the terms of our response

We would first clarify that we cannot answer the question as posed, since in our opinion, the key criteria are not whether the transport standards are ‘clear and workable’, but whether:

1. The standards are consistent with the overall aim of the eco-towns programme to create exemplar low-carbon developments
2. The PPS gives sufficient guidance on the means by which these standards are to be achieved.

The answer to both these questions must be ‘no’.

4.2 Relationship between this PPS and other guidance

In addition to the PPS, CLG has commissioned and endorsed a series of guidance notes (the *Design to Delivery* series co-published by the TCPA), and other government departments have published guidance (e.g. Department for Transport *Building Sustainable Transport into New Developments: A Menu of Options for Growth Points and Eco-towns*).

PPSs often make reference to supplementary guidance and advice. The transport section of this draft refers to documents such as *Manual for Streets*, which apply to all development, but makes no reference to the eco-towns advice. This is inconsistent with the claim in paragraph 12 that the PPS sets ‘more challenging and stretching standards than would normally be required for a new development’.

The introduction to the *Design to Delivery: Eco-towns Transport Worksheet* states that it (together with the DfT’s document) “should be referred to and together form part of the Government’s advice on transport for eco-towns”. The foreword from the then Communities Minister, Caroline Flint MP, makes it clear

⁶ CLG/TCPA 2008 Design to delivery: eco-towns transport worksheet

that the *Worksheet* is not just a TCPA document, but represents advice from the Department.

As described below, the submissions for several of the shortlisted eco-towns have attempted to follow some of the more stretching criteria in the Eco-towns Transport Worksheet. This PPS will apply not just to this ‘first wave’ but to any future proposals for eco-towns. The absence of any reference to the specific eco-towns advice raises the possibility that future eco-towns may be designed and built to lower standards than the ‘first wave’. **The PPS must clarify the status of the *Eco-towns Transport Worksheet* and the DfT’s *Menu of Options* as advice. Planners and promoters of eco-towns should be expected to follow the more detailed advice given in these documents.**

4.3 Modal Share Targets

The *Eco-towns Transport Worksheet* published last year set much higher transport standards than the draft PPS. It sets a target of no more than 40% of all journeys within the eco-town (whether by town residents or outsiders) to be made by car – 25% in the case of transport exemplar eco-towns.

Paragraph 4.13 of the PPS proposes that the travel plan should “demonstrate how the town’s design will enable” no more than 50% of journeys *originating in eco-towns* to be made by car. **We believe this wording is unacceptably vague, and a clear target for modal share of all trips originating or ending in the eco-town must be set by the PPS.** This would cover not just trips by eco-town residents returning home but also trips in by visitors. If public transport services out of the town are going to be attractive enough to attract people, they will need to be used by people in surrounding areas too in order to attract sufficient conveniences of scale.

Existing UK policy is likely to produce results similar to elsewhere in the UK. To achieve significantly better results, a break with existing policy is needed. If the principles outlined in the *Worksheet* are followed, eco-towns should be able to achieve significantly lower levels of car use than those currently seen in the UK. **We believe that the more challenging targets outlined in the *Transport Worksheet* should be used in the final version of the PPS. If it is not considered possible to set a maximum target of 40% of *all* trips being made by car (and preferably a more challenging target) in a given location, then that location should not be considered suitable for an eco-town. The aspiration towards 50% of trips originating in eco-towns being able to be made other than by car is not a ‘challenging and stretching standard’, indeed it is arguably not a standard at all.**

There are many different ways of measuring modal share – **the PPS should clarify the method of measurement. We would suggest the measure of annual trips by mode used in the National Travel Survey** would appropriately reflect the intention behind this statement. According to this measure, 63.5% of trips across Great Britain were made by car during 2006.⁷ Comparable statistics at the town or city level are difficult to obtain for the UK. Using 2001 Census data, which only refers to travel to work, Oxford and Cambridge both achieve around 41 – 42%.⁸

4.4 Maximum Walking Distance Standards

The Sustainability Appraisal assesses the PPS standards against the weak criterion of whether they represent an improvement on ‘business-as-usual.’ We believe the consultant’s assessment (page 45 of the Non-technical Summary) exaggerates the significance of the maximum walking distances proposed in paragraphs 4.12 (public transport and neighbourhood centres) and 4.16 (primary schools). The principle of walkable proximity is already reflected in existing planning policy such as PPG13 and PPS3. Although they are not statutory documents, a reference text has been used since 1995 to interpret and operationalise these principles⁹. The 2003 edition¹⁰ contains detailed guidance on walkable proximity, with differing proximity guidelines to different types of neighbourhood facility and different levels of public transport.

There is little evidence from within the UK of developments (outside inner cities) which have applied these ‘walkability’ principles achieving significantly lower levels of car use. These principles were followed in the masterplanning of Poundbury, for example. Two studies of Poundbury have shown high levels of car use similar to other edge of town developments in the UK¹¹.

The criterion concerning proximity to ‘frequent public transport’ has been widely applied by many planning authorities across the UK, again with little evidence, as yet, that it has significantly changed transport behaviour. The effectiveness of the ‘ten minutes walk to frequent public transport’ criterion will depend upon other factors, such as the principle of direct public transport, covered in Section 5 of the *Eco-towns Transport Worksheet*, and accessibility to the rail network, as discussed below.

⁷ DFT, 2007. Transport Statistics for Great Britain: 2007 edition. London: TSO. Table 2.3

⁸ Census table CS121 – travel to work or study only.

⁹ BARTON, H., LOCAL GOVERNMENT MANAGEMENT BOARD. and UNIVERSITY OF THE WEST OF ENGLAND, BRISTOL., 1995. Sustainable settlements : a guide for planners, designers and developers. Local Government Management Board.

¹⁰ BARTON, H., GRANT, M. and GUISE, R., 2003. Shaping neighbourhoods : a guide for health, sustainability and vitality. London: Spon.

¹¹ BECKER, A., 2006. Does mixed-use development reduce the demand for travel? BA edn. Bristol: University of the West of England.

WATSON, G., BENTLEY, I., ROAF, S. and SMITH, P., 2004. Learning from Poundbury, Research for the West Dorset District Council and the Duchy of Cornwall. Oxford Brookes University.

We support the walking distance criteria proposed in 4.12 and 4.16 as necessary but not sufficient conditions for promoting walking and reducing car use.

4.5 Missing transport principle: Car-free development

The purpose of the PPS should be to set out the principles which differentiate eco-towns from other developments. This section lays out the first of two key principles which we feel should be included in the PPS in Paragraph 4.13.

Car-free residential and mixed use developments can achieve significantly lower levels of car use than any other form of development. Car-free centres can also exert a significant downward influence on car use across the settlement as a whole, by making journeys in and out of the centre easier by sustainable means than they are by car. This has been a key element in the successful strategy of cities such as Freiburg¹² and Groningen¹³.

The *Transport Worksheet* defines car-free development following European practice (differentiating it from the concept of 'car-free housing' which is sometimes used by UK planning authorities to mean 'housing with no parking'). It says that car-free areas should cover a 'substantial proportion' of each eco-town¹⁴.

Although planning is at an early stage (and the situation unclear for some) promoters of the better located eco-towns that are better served by existing transport infrastructure do appear to be taking the recommendations on car-free development seriously. The masterplans for Ford¹⁵, Pennbury¹⁶ and Marston Vale¹⁷, all stress the importance of this. Pennbury is proposing an overall parking ratio of 0.5, similar to Vauban. The masterplan for Marston Vale is proposing an average parking ratio of 0.75, with 27% of the housing car-free, clustered around the railway stations and local centres.

The PPS should ensure that any future proposals for eco-towns take the principle of car-free development seriously. Car-free development should be listed as a principle in paragraph 4.13.

¹² MONHEIM, R., 1997. The Evolution from Pedestrian Areas to 'Car-free' City Centres in Germany. In: R. TOLLEY, ed, *The greening of urban transport : planning for walking and cycling in Western cities*. 2nd edn. Chichester: Wiley, pp. 253-265.

¹³ LIGERMOET, D., 2006. *Continuous and Integral: The Cycling Policies of Groningen and Other European Cities*. 7. Rotterdam: Fiets Beraad.

¹⁴ TCPA/CLG, 2007, *Eco-towns Transport Worksheet*, page 7

¹⁵ www.fordairfielddecotown.co.uk – see August 2008 submission

¹⁶ <http://www.ecotownforleicestershire.coop/masterplanVision-to-clg050908.html>

¹⁷ <http://marstonvale.co.uk/wp-content/uploads/2008/10/bid-update-document-august-2008.pdf> (see page 17)

4.6 Missing transport planning principle: filtered permeability

Transport Worksheet defines filtered permeability as: “separating the sustainable modes from private motor traffic in order to give them an advantage in terms of speed, distance and convenience.” Filtered permeability is key to ensuring that sustainable modes have priority and comparative advantage (outlined in 2.2 above) over private motor traffic within the town itself.

This principle, described in slightly different ways, has again been important to the success of Freiburg¹⁸ and Groningen¹⁹ and several other sustainable European cities such as Malmö, Maastricht, Münster,²⁰ and Houten²¹

A recent study conducted in North America²², compared four otherwise similar neighbourhoods which provided comparable examples of the four possible approaches to permeability:

		Permeability for Pedestrians	
		Low	High
Permeability for Vehicles	Low	1	2
	High	3	4

This study found that type 2, with high permeability for pedestrians, and low permeability for cars achieved significantly lower levels of car use and higher levels of walking than the other three types.

It is important to cite filtered permeability as a principle for the travel planning of eco-towns, because it represents a significant departure from current practice in the UK which seeks to maximise permeability for all modes, including the car (type 4).

Although *Manual for Streets* has been worded with some flexibility in this respect (e.g. the word ‘generally’ in paragraph 4.2.4) it appears to favour type 4 above, arguing that this will lead to “a more even spread of motor traffic”²³.

Given the objectives of the eco-town programme, to achieve modal shift and low-carbon development, the principle of filtered permeability should be spelt out in paragraph 4.13 of the PPS.

¹⁸ MELIA, S. (2007) *Filtered Permeability, Giving the Advantage to the Bike*, Presentation to Cycling Conference Bolton University, Powerpoint presentation on: www.stevemelia.co.uk/bolton.ppt See plans of Freiburg and Groningen.

¹⁹ CARFREE UK, 2008, Car-free Development, A Guide for Planners and Developers, On: <http://www.Car-free.org.uk/index.php?pid=046> – see the two network plans of Groningen on the final page.

²⁰ See: <http://www.Car-free.org.uk/docs/cycling&fp.doc>

²¹ MARSHALL, S. and BANISTER, D., 2000/6. Travel reduction strategies: intentions and outcomes. *Transportation Research Part A: Policy and Practice*, 34(5), pp. 321-338.

²² FRANK, L.D. and HAWKINS, D., 2008. *Giving Pedestrians an Edge—Using Street Layout to influence transportation choice*. Ottawa: Canada Mortgage and Housing Corporation.

²³ DfT (2007) *Manual for Streets* 4.2.3

4.7 Missing transport principle: integration into the surrounding area

4.13 (a) should be expanded so that not just the town's design but also its integration into the surrounding area will lead to low modal shares for cars. By introducing district wide Smarter Choices and Individualised Travel Marketing, car use in the surrounding area can be reduced and new public transport services made more viable. Through 'trip credits' from existing residents of an area, there will be no need for eco-town funding to be spent on road improvements, that would decrease the comparative advantage of non-car modes.

Annex A Additional background information to accompany Section 4.3: Modal share targets

The aim of the eco-towns programme, according to the *Transport Worksheet* was to “equal or better the modal share for sustainable modes achieved in the most sustainable European communities”. The comparability of statistics from different sources can be problematic, but there is no doubt that many European countries, cities and towns, achieve results significantly better than in the UK.

For Switzerland as a whole, modal share of car use is only 42%²⁴. Basel is often cited as one of the cities with the lowest modal share. A household survey carried out in 2005 asked a sample of just over 1000 people about their normal daily journey to work. The reported findings²⁵ show modal shares for the car falling substantially between 2003 and 2005, to less than 20%.

Several Dutch cities of different sizes achieve modal shares for the car of a third or less. Groningen achieves 33%, mainly due to high levels of cycling²⁶. Amsterdam achieves 27% with both cycling and public transport important²⁷. Some of the smaller Dutch towns achieve impressively low levels of car use. Delft (population 96,000) has maintained the level at 26% for some time²⁸.

Freiburg am Bresgau is an important example, as discussed below. By a range of planning and transport policies it has succeeded in significantly reducing the modal share of car use since the 1970s. The following presentation produced by Freiburg City Council²⁹, shows the share in 1999 as 32%. It is believed to have fallen slightly since then.

The modal shares in Car-free developments are considerably lower than these city-wide examples. The largest Car-free neighbourhood in Europe is Vauban, in the city of Freiburg, a suburban development with a population of around 5,000. A survey conducted there before the extension of the tram system to Vauban indicated a modal share for the car of 16%.³⁰ The proportion may have fallen since then (levels of car ownership have fallen)³¹. The same study examined some other European Car-free areas such as GWL Terrain in

²⁴ http://www.voev.ch/Modal_split.html

²⁵ <http://www.statistik-bs.ch/kennzahlen/bevbef05/pdf/Verkehr.pdf> (in German - see page 5, figure 9.1)

²⁶ GEMEENTE GRONINGEN, 2008. *Statistisch Jaarboek*. Groningen Available:

<http://gemeente.groningen.nl/gemeente/de-stad-in-cijfers/statistische-jaarboeken>

²⁷ GEMEENTE AMSTERDAM, 2008-last update, openbare ruimte, milieu en verkeer: verkeer. Available: <http://www.os.amsterdam.nl/themas/70503/> [January 3, 2009].

²⁸ http://www.energie-cites.eu/db/delft_123_en.pdf (page 3)

²⁹ <http://www.arkitektur.no/?nid=160772&lcid=1044&iid=190217&pid=NAL-Article-Files.Native-InnerFile-File> (slide 11)

³⁰ SCHEURER, J., 2001. *Urban Ecology, Innovations in Housing Policy and the Future of Cities: Towards Sustainability in Neighbourhood Communities*. PhD edn. Perth: Murdoch University Institute of Sustainable Transport.

On: www.istp.murdoch.edu.au/ISTP/publications/jscheurer/urbanecology/

³¹ MELIA, S., 2006. *On the Road to Sustainability - Transport and Car-free Living in Freiburg*. Report for W.H.O. Healthy Cities Collaborating Centre edn. www.stevemelia.co.uk/vauban.htm: University of the West of England.

Amsterdam (600 dwellings) where car use was only 10% and Vienna Vienna, Autofreie Mustersiedlung Floridsdorf (250 dwellings) where the figure was 5%.

Some of the cities cited, such as Groningen and Freiburg, have Car-free city centres, which differ from the British equivalents both in the size of the pedestrianised area, and the number of residents who live there. The population within the (substantially Car-free) inner ring of Groningen is 16,551. They own 28.7 cars per 100 households, less than a third of the national average. Car-free city centres also exert a powerful influence on the travel behaviour of non-residents. Just 9% of journeys to Groningen City Centre are made by car²⁶.

While there are fewer examples in the UK, there is one very powerful example: London. Figures from 2006/07³² show a mode share of trips by car of 39%. And while eco-towns could not match the high share of trips by public transport (26%), they should be able to significantly better the cycling share (only 2%). These figures reinforce the need for a credible public transport (i.e. rail) link for eco-towns, the need for high density development, and the severe disadvantage of creating stand-alone settlements which will not serve all the daily needs of future residents.

³² Transport for London, 2007. London Travel Report 2007. On: <http://www.tfl.gov.uk/assets/downloads/corporate/London-Travel-Report-2007-final.pdf>