



Analysis of the Eco-Towns Shortlist

Much of this material was submitted to the Environmental Audit Commission's 'Greener Homes for the Future' Inquiry

SUMMARY

- The transport CLG/TCPA Transport Worksheet sets out an ambitious vision for sustainable transport, which should be achievable under the right circumstances.
- This vision will **not be achievable in the locations short-listed** through the eco-towns process. Small satellite towns, and extensions to existing medium-sized towns, are likely to be characterised by high car ownership and use.
- Car ownership is a key determinant of car use. Around 10% of the adult population lives without a car *by choice*. Research suggests others would be prepared to, under the right circumstances. To enable substantial proportions of their new residents to live without a car, **eco-towns must be either**:
 - **Integrated towns**, functioning as part of a larger conurbation, or:
 - **Self-sufficient towns**, which are large enough to provide for the great majority of their residents' needs
- Direct access to **mainline rail** is an advantage for integrated towns and essential for self sufficient towns. Outside large conurbations, few residents will choose to live without a car if buses provide their only links to the rail network.
- The process has failed to produce a shortlist of sustainable locations because:
 - the original prospectus implied a preference for satellite towns
 - 'previously developed land' and greenbelt policies (sound principles in themselves) have been applied with little consideration for sustainability
 - it relied on bids based on existing landholdings
- A **national search** should now be undertaken, as was conducted for the post-war New Towns, but with the aim of identifying the most sustainable locations. Public sector land assembly mechanisms may need to be used.
- If sufficient sites cannot be found for 'integrated' eco-towns, **a single larger eco town or eco city** should replace most of the smaller proposals
- CLG should apply the eco-town principles to a new programme of **eco quarters** on redevelopment sites **within existing towns and cities**.

1. Transport Objectives of the Eco-Towns

The Transport Worksheet produced by the TCPA for CLG¹ is in our opinion, the most advanced statement on transport policy yet to emerge from a British Government source. The key transport objective for eco-towns, one which is likely to seal its success or failure in the eyes of the general public is to:

“equal or better the modal share of the most sustainable modes achieved in the most sustainable European communities”

25% of journeys by private car is set as an objective for the ‘transport exemplar’ eco-towns, with 40% being “good practice” for the rest. These levels have never been achieved in the UK outside the inner areas of cities and larger towns, so the Worksheet correctly identifies that radical new approaches will be needed.

One of these approaches is the recommendation that: “carfree residential and mixed use...areas should cover a substantial proportion of the eco-town”. The evidence from Europe suggests that carfree areas can facilitate extremely low levels of car use. In Vauban, in Freiburg, for example, just 16% of journeys by residents are made by car². Carfree neighbourhoods also provide better environments for pedestrians, for socialising and particularly for independent movement and active play amongst children.³ More information is available in Carfree UK’s *Guide for Planners and Developers*⁴.

The Minister referred to Vauban⁵ when defending her aspiration for eco-towns to “follow the most ambitious European models where only half of households rely on a car”. As a policy to facilitate this objective, we would commend the Transport Worksheet to anyone concerned with sustainable development. However, it is regrettable that its authors were not asked to comment on the critical questions of eco-town size and location.

2. ‘Sustainable’ New Settlements – A Reality Check

Car dependence is almost universal across suburban and small town England and Wales. The 2001 Census showed 435 wards – just under 5% of England and Wales – where fewer than 40% of working adults travelled to work by car. More than three quarters of these were in London. Of the remaining 86, 60 were in the inner areas of cities and larger towns. Particular local circumstances, such as the proximity of a University, explain the rest.

Research in Oxfordshire⁶ found that even badly designed suburban extensions close to Oxford generate lower car use than medium sized towns where longer-distance commuting by car is more common. A similar pattern has been observed even in regions such as Metropolitan Stockholm where satellite towns are well planned, and transport links are generally good⁷. Although the *centres* of such towns achieve better modal shares than the Stockholm suburbs (due particularly to good rail links), this is counterbalanced by longer journey distances.

The Oxfordshire study also found that **access to the motorway or trunk road network** tends to exacerbate problems of car dependency. Another recent study conducted in Surrey⁸ found that locations within 3km of the motorway and strategic road network were associated with **44% higher transport related energy consumption** than elsewhere in the county. Studies of this nature often try to separate out the socio-economic contributions to observed differences like this (is it the places, or is it the types of people who are attracted to those places?). In the context of eco-towns both may be relevant, since attracting people who want to live a more sustainable lifestyle may be a legitimate aim for eco-towns. To put it another way: should we be designing eco-towns that Jeremy Clarkson would be happy to live in?

Many claims have been made about more recent developments in the UK, allegedly breaking the mould of car dependency. **Poundbury**, a suburban extension to Dorchester in Dorset, was an early and influential example. By the end of its first phase the proportion of people driving to work (64.5%) was higher than the averages for England (55%⁹), Dorchester and the (mainly rural) district of West Dorset. Over three quarters of residents made their regular shopping journeys by car or van¹⁰. When we spoke to the planning department of West Dorset Borough Council last year, they believed the situation had not significantly changed as Poundbury had grown.

Cambourne is nine miles west of Cambridge, connected by a regular bus service but no railway. A recently published study¹¹ 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. The author of the report was “sceptical that eco-towns will achieve significantly lower levels of car use even if they have superior links to main centres.”¹²

Although the relationship is not straightforward, car ownership is a key determinant of car use; households with more cars travel further and more often by car.¹³ So if the vast majority of residents decide they need to own a car, attempts to promote sustainable transport through design or persuasion are likely to have only limited success.

3. Under What Circumstances Will People Choose to Live Without Cars?

Two of our members¹⁴ have been researching the question of potential demand amongst home buyers and tenants in Britain, for housing in new carfree neighbourhoods. Initial findings have been published for one¹⁵.

Although car ownership is strongly correlated with income, most people who live without a car could probably afford to buy one if they had to¹³. Those who choose to live without a car (‘carfree choosers’) tend to be younger than average, often single, with significantly higher incomes than other non-car owners. There is another group of people who say they would like to give up their car under the right circumstances, *and have actually done this* at some point in the past¹⁵. These people (‘carfree possibles’) tend to be older than the carfree choosers, have higher incomes, and more children. This study did not attempt to quantify the national proportions of these groups. A 2005 study using a representative national sample in Scotland suggested that people who live without a car by choice represent about one in ten of the population¹⁶.

In the more recent study¹⁵, some respondents were asked whether, and under what circumstances, they could see themselves moving to carfree neighbourhoods in eco-towns. The carfree concept was often greeted with approval, even delight, qualified on further questioning by practical considerations, particularly relating to employment – the principal determinant of location for those of working age. The following quote illustrates one typical line of response:

“But isn’t the issue with them [the eco-towns] that where a lot of them are planned to be, that there’s no transport there. They’re not on railway lines, for example, so you have to have a car. It’s more likely that you’ll need a car to get in and out of them. Is that right?”

4. Implications for the Eco-Towns

Drawing on the evidence briefly outlined here, Carfree UK and Sustrans submitted a paper to CLG recommending that eco-towns should be selected from one of two broad categories:

- **integrated towns:** physically close to, and designed to function as part of a larger conurbation, or:
- **self-sufficient towns:** designed to grow over time to become a larger town or city with a higher degree of self sufficiency

A third category of “satellite towns” was likely to encourage car dependence and should be avoided. Extensions to existing smaller towns should also be avoided for similar reasons.

To enable people to live without a car, an integrated town would need to be part of a conurbation of sufficient size to provide for the vast majority of destinations within it. It would also need to ‘plug into’ an existing transport network (rather than a separate ‘in and out’ service). Integrated towns would normally be urban extensions, although some separate locations may fulfil these criteria.

The relationship between size and self-sufficiency is not straightforward, but clearly size does matter. Given the right policies, eco-towns may achieve greater self sufficiency than existing settlements of a similar size. The maximum guideline of 20,000 homes is small for a self sufficient town, but the Prospectus did raise the possibility of further longer-term growth in some cases.

If an eco-town is designed to achieve self sufficiency in the longer term, then it needs to be designed as such from the start, so that the centre is large enough, for example. It also needs to be surrounded by land suitable for future growth without overriding environmental constraints.

Access to mainline rail is important for people choosing to live without a car. In big conurbations, it may be possible to provide a carfree neighbourhood which is not immediately served by rail, providing the neighbourhood is part of a conurbation-wide public transport network. Vauban, for example, is 20 minutes by tram from Freiburg’s

main railway station – it takes about half that time by bike, which is how more people travel.

For an eco-town growing towards self sufficiency, mainline rail is clearly essential. To function effectively without car dependency, this should be in the town centre. The strategy for many of the eco-towns (and for some ‘proto-eco-towns’ like Cranbrook near Exeter) appears to rely on bus links to railway stations. Outside of big conurbations past experience does not suggest that this is likely to persuade people to give up their cars. Dedicated bus rail links work well for major airports but not for small towns (e.g. Lewes to Uckfield, stopped in 2002 due to lack of demand). Parkway stations, situated on the periphery of towns are a “largely car based market segment”.¹⁷

5. How Does the Eco-towns Shortlist Measure Up?

In a word – badly. Setting aside the research evidence, the reader may want to consider the simple question: would *you* want to live there without a car?

Of the 15 shortlisted sites only Pennbury (near Leicester) could conceivably fulfil the ‘integrated town’ criteria. The Leeds and Rushcliffe locations have yet to be determined. In all the other cases, the ‘parent’ conurbations are either too distant (Norwich, Cambridge, Oxford, Doncaster), too small (Bishops Stortford, St. Austell, Littlehampton, Lichfield, Bordon, Bedford), or both: (Louth, Stratford-on-Avon). Most of the proposals are towards the smaller end of the target range and none of them seem located or designed to grow into larger self-sufficient towns.

In none of the locations, with the possible exception of Marston, does a mainline railway station near the new town centre seem likely, and the dispersed settlement proposal there raises serious doubts about its sustainability. In several cases rail is mentioned as a possibility, but the line is either at one extremity of the site (Ford, Elsenham, Weston Otmoor), or separated from it.

Several of the proposals relate to former airfields. It seems their classification as ‘previously developed land’ has weighed considerably in their favour. We question the grounds for this. Why is it more sustainable to build on a disused airfield in a remote location, rather than agricultural land in a more accessible location?

Several of the individual location summaries in *Greening the Future* imply that ease of access to the strategic road network has been considered as a positive attribute, whereas the evidence cited earlier suggests this is a powerful factor promoting car use. Some of the summaries (e.g. Rossington, St. Austell) mention road building schemes without acknowledging the contributions these would also make to increasing car use.

One of the shortlisted sites, Weston Otmoor, illustrates the danger of greenbelts causing ‘leapfrogging’ development. Proximity to the motorway, and its long thin shape with the railway line at one extremity, are both likely to exacerbate problems of car dependency, however well the town itself is designed.

6. What Should be Done?

There is to be a sustainability appraisal of alternative sites which could also “include sites or locations that are not currently shortlisted”. This suggests the possibility of better alternatives. There are two dangers however. One is that this process will be unduly constrained, particularly as the process is raising expectations amongst the promoters of unsustainable sites on the shortlist. Another is the ‘tick box’ approach to sustainability appraisal which tends to favour fragmented patterns of development (‘because this field scores higher than that one’). An unconstrained holistic assessment is called for.

The current shortlist has been selected mainly from proposals submitted by private land owners, or in some cases local authorities. Why would the land holdings of developers or local authorities, assembled with different objectives under a different policy regime, reflect the most sustainable locations for building eco-towns?

A national search disregarding land ownership should now be undertaken, as was done for the post-war New Towns, but with the aim of identifying the most sustainable locations (considering all factors – not just transport). Although the private sector may develop the new towns, public sector land assembly mechanisms may be necessary to facilitate this, whether through local authority CPOs or the New Towns Act. In practice, these may only be necessary as reserve measures.

Integrated towns should be the first objective. The ‘separate and distinct’ criterion must not be interpreted in a way which favours satellite towns over more sustainable urban extensions. If appropriate sites cannot be found for integrated towns, the next alternative should be a single **larger eco-town or eco-city** to replace most of the smaller proposals. This must be surrounded by land with no important environmental constraints and have mainline rail at its centre.

If the political will does not exist to make these changes, then as an absolute minimum, substantial changes should be made to the shortlisted locations to improve their proximity and accessibility to major centres. This will mean moving the eco-towns away from the land controlled by the current list of promoters. It is important that these promoters are given no further signals implying that their schemes are likely to be favoured. The Challenge Panel should not be considering proposals from developers until the question of location has been determined.

7. Eco Quarters

One of the original objectives of the eco-towns programme was to pilot more sustainable approaches with the potential for replication elsewhere (although *Living a Greener Future* has little to say about this). The key to achieving greater sustainability is mainly to be found in existing urban areas. Some of the eco-town principles, particularly relating to transport and efficient use of land, would be easier to implement in such places. A programme of **eco quarters on larger redevelopment sites** could play an important pilot role in helping to raise environmental standards in existing towns and cities.

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