

Swindon Central Area Action Plan Examination
Written Statement from Swindon Climate Action Network (SCAN)
June 9 2008

1. What is the evidence to support Swindon's suitability for development of a decentralised energy supply scheme?

Strategy 4 – Sustainability

Policy 2 - Sustainable Energy Supply

p. 23 'Central Swindon lends itself well to the development of a decentralised energy supply scheme'

p.26 'As an alternative to delivering on-site renewable energy, schemes can connect to a 'community energy scheme', to provide a major element of their heating, cooling and power supply.

Test 7

SCAN supports the proposals for community energy schemes. However, it believes that the soundness of the policy regarding test 7 could be demonstrated more thoroughly by providing evidence of the suitability of Swindon for decentralised energy and suggests the following evidence:

- Town centres, by their nature suit CHP as the high density of buildings means that many buildings are close enough to the CHP unit to get heat and energy ultra-efficiently.
- By developing CHP in conjunction with a major redevelopment, disruption and costs of the new infrastructure will be significantly reduced
- Southampton and Woking are national exemplars for introduction of CHP on a similar scale to that for Swindon town centre. CHP has brought considerable benefits to the towns, in terms of reduced energy costs, increased energy security and reduced CO₂ emissions. (See case studies below).
- Swindon has agreed CO₂ emission reduction targets which it will be unlikely to meet without introduction of CHP (Decentralised energy contributes over 70% of Woking and Southampton's CO₂ emission reduction targets).
- CHP will enable Swindon to capitalise on an important local biofuel source, since diverse fuels can be used in CHP boilers, enabling Swindon to reduce its CO₂ emissions even further. A significant biofuel plant is being developed just outside Swindon. Roves Energy of Highworth aims to develop 5000 ha of energy crops in the Swindon area based on farmer led Investment in a fuel processing facility, together with a 2MW 'embedded' biomass co-generator. The project has secured a £960,000 NOF/DTI grant. It aims to provide 30,000 t/yr of processed biomass fuel for the heating and co-firing markets, and to provide a replicable model for the rapid expansion of energy cropping. The project is currently securing markets and preparing the planning application. Swindon Town Centre should be a key market.

Southampton Case Study

In Southampton, thousands of homes and many large businesses save both money and emissions by being part of the heat network and supplied by local CHP plants. In 1986, Southampton began pumping heat from the geothermal borehole through a district heating network. Over the years, several combined heat and power (CHP) engines and backup boilers

for heating have been added, along with absorption chillers and backup vapour compression machines for cooling.

The scheme, which started with a single customer (the Civic Centre) now has thousands of customers. It provides heating and cooling to over a thousand residential properties, several large office buildings, a hospital, a health clinic, a university, a large shopping centre, a supermarket, several hotels, BBC television studios, one of Europe's largest shopping complexes, and a swimming and diving complex, among others.

The constantly growing scheme is in the process of commissioning a new large CHP plant to replace a smaller unit and will be adding a biomass boiler early in 2008.

A 725kWe CHP engine has recently been installed at the Royal South Hampshire Hospital as part of the scheme, which will guarantee the secure operation of the hospital supplying its heat and electricity. Any extra requirement for steam is provided by the district energy network and any excess is fed back into the network, to supply other properties.

Southampton's district energy network cost £7m to develop and now has annual sales of 40GWh of heat, 22GWh of electricity and 8GWh of cooling, with 11 kilometres of heating and cooling pipes. It saves over 12,000 tonnes of carbon emissions per year and is 85 per cent efficient (compared to an average of about 38 per cent for centralised power station). This high level of efficiency won it a Queen's Award for Sustainable Development in 2001 and a National Energy Efficiency Award in 2006.

Woking Case Study

Woking Borough Council is at the forefront of the decentralised energy revolution in the UK. By decentralising its energy, Woking Council has slashed its energy use by nearly half, and its CO₂ emissions by a massive 77 per cent since 1990. It has pioneered the development of a network of over 60 local generators, including cogeneration and tri-generation plant, photovoltaic arrays and a hydrogen fuel cell station, to power, heat and cool municipal buildings and social housing. Many town centre businesses are also connected to this local energy supply.

2. What is the overall strategy for transport in Swindon. Does it include an objective to reduce reliance on the private car?

Strategy 6. – Transport and Movement

Policies 5 (Transport Strategy), 6 (Traffic Management) and 7 (Parking Strategy)

Test 7

Policy 5 - Transport Strategy (p. 54)

The transport strategy for Swindon ('A vision for Transport 2030') was subject to public consultation in 2007-2008, in which respondents (including focus groups run by Halcrow Limited and written responses) overwhelmingly considered it to be unsound. The Transport Vision had high-level aims of sustainability, but the strategies it contained were not consistent with these, since they focused on facilitating continued increases in car use through traffic management, improved signalling, car park integration and a new car parks. The Transport Vision was widely considered to fall significantly short of anything that would deliver a modal shift towards sustainable transport.

The Transport Vision assumes continued access to the town centre by private car to be a prerequisite of economic success, and did not take into account changing behaviours driven by rising fuel prices, growing carbon markets, and national climate change mitigation policies. In so doing it does not consider appropriate alternatives fully and is not based on robust evidence.

In order to effectively reduce reliance on the private car **the Transport and Movement Strategy requires a new policy that focuses explicitly on delivering a modal shift towards sustainable transport and reducing the number of total vehicle miles travelled in Swindon**. This should include:

- Redirection of existing funds and large scale bids to central government away from funding increasing car travel towards delivering a modal shift
- Inclusion of non-infrastructure measures in addition to the infrastructure measures already described such as the bus priority routes, cycle routes, and new bus exchange. Non-infrastructure measures include marketing, pricing signals, financial incentives, harmonised ticketing, and subsidised fares. In doing so, it should look to case studies such as the UK Sustainable Travel Demonstration Towns and European exemplars such as Freiburg, Basel, Ghent, La Rochelle and Siena.

Specifically concerning Appendix 2 to the Regulation 31 Statement:

- SCAN considers the SBC response to our question about how Travel Plans will be enforced to be inadequate. SBC's response was that there were no examples of enforcement carried out anywhere in the UK and therefore there would be no plans for enforcement in Swindon. We suggest that without monitoring and enforcement, there will be no inducement for companies to implement the plans and the Council will be unable to gauge the success of its policy.
- SCAN also considers the SBC response to our request for policies to bring about a modal shift to be inadequate. SBC states that the principle of the modal shift is embodied in the CAAP as access to the town centre by bus, car or foot will be improved. We disagree. A modal shift requires more than this – it requires access to the town centre by bus, car or foot to be improved *above and beyond* that for other modes of transport. The SBC strategy seeks to 'improve *all* travel modes into and throughout Central Swindon' (p.9), with the significant investment in traffic management, road signing and increased car parking designed specifically to facilitate access by cars. Since SBC policies will continue to enable car travel to be cheap and easy, that is how people will continue to choose to travel. The SBC policies must prioritise investment in sustainable transport over investment in the private car.

Policy 6 - Traffic Management (p. 55)

The Traffic Management (re-routing and re-timing traffic) system aims to relieve congestion by re-routing and re-timing traffic, rather than reducing total vehicle miles travelled in Swindon. This temporary alleviation of congestion will encourage reliance on the private car and increase total vehicle miles travelled. This is in conflict with the Council's stated sustainability aims and will result in increased CO₂ emissions, pollution, wear-and-tear on roads and reduced public health and amenity. The traffic management policy should be removed and replaced a policy to reduce congestion by reducing total vehicle miles travelled through the modal-shift mechanisms outlined above. With congestion reduced this way, the need for a traffic management policy would be obviated.

Policy 7 – Parking Strategy (p. 61)

The policy of 1000 additional parking spaces in the town centre (and an additional 2000 park and ride) will do nothing to reduce reliance on the private car, and in fact will increase it. SCAN considers that the future economic success of Swindon Town Centre can be much better served by provision for sustainable transport modes over the private car, given projected trends for fuel prices and security and climate change mitigation policies. The Parking Strategy should be reversed, to reduce the number of parking spaces available, reserving parking primarily for less mobile members of society, and redirecting the funds to sustainable transport infrastructure and incentives.

Specifically concerning Appendix 2 to the Regulation 31 Statement:

SCAN considers the SBC response to our objection to increased parking provision to be inadequate. SBC states that because floorspace will increase by 50% and Car parking by 25% a modal shift will be therefore be required. Presumably this statement is based on an assumption that an increase in retail floor space will result in a proportional increase in trips? What is the evidence for this? Furthermore, even if this assumption is correct and a smaller percentage of trips are made by car, the provision of additional car parking spaces will facilitate an increased number of car trips in absolute terms – and this is neither in the spirit of modal shift or a reduced need to travel. Nor is it sustainable.

3. How and when is it intended to remove the barriers to pedestrian movements such as bridges and underpasses, and to complete the urban cycle network? What consideration has been given to the segregation of cyclists and pedestrians.

Strategy 6 – Transport and Movement

Policy 8 - Pedestrian and Cycle Movement, p. 58

Test 7

Specifically concerning Appendix 2 to the Regulation 31 Statement:

The SBC response to our point that connectivity across the Town Centre for cyclists is currently very poor was inadequate. The response was ‘Support noted’ but we did not make a statement of support on this issue. Cyclist access across the Town Centre is currently very poor and the CAAP contained no plans to improve it. The Town Centre must be ‘permeable’ to cyclists – this is a mandatory requirement for Swindon to become a Cycling Demonstration Town and qualify for funding from Cycle England, and is best practice for towns which are exemplars for sustainable transport.

The urban cycle network fails to pass test 7 as the design of the network is not founded on a robust and credible evidence base. As SBC states that the network is never finished, therefore the Council should put in place *ongoing* mechanisms for consulting with local stakeholders and leading exponents of sustainable transport in the UK such as Sustrans and Cycle England.