



Dunsfold Park – proposed eco-settlement

**Briefing prepared by Guildford and Waverley Friends of the Earth.
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1. The proposal

A planning application has been made to build a new “eco” settlement known as Dunsfold Park at the site of Dunsfold Aerodrome, Surrey, being a mixed use settlement of 2,600 homes (of which 910 will be affordable), 2,000 jobs and all day to day commercial, community, leisure and amenity facilities. The settlement is to be built and operated to the highest environmental standards and addresses directly the need to mitigate and adapt to climate change. In consequence it is radically different from any other development built thus far. It is a remarkable scheme.

The planning application was rejected by Waverley Borough Council and was appealed. The appeal was heard in March 2009 and the Secretary of State’s decision is expected before 28 September 2009.

Locally and nationally, Friends of the Earth strongly supports the proposed development.

2. Background to the proposed development

Dunsfold Aerodrome is a 600 acre site in the Borough of Waverley, Surrey and is about 7 miles south of Guildford and 1 mile south west of Cranleigh (about 9 miles and 3 miles respectively by the current road network). It is beyond the green belt and is not within the AONB or other area of landscape protection.

Dunsfold Aerodrome was built as a war time bomber aerodrome and after the war became a major military aircraft factory, employing about 1400 people at its peak. The factory shut about 10 years ago.

Today, it is a substantial working aerodrome and successful expanding industrial estate, with about 700 employees currently on site and with planning consent to increase this to about 1,350. At present it is remote from housing and has no public transport access. It is the largest employment site in Waverley comprising about 480,000 sq ft of commercial buildings, in addition to acres of open concrete hard standing.

The working aerodrome comprises many miles of heavy duty concrete runways and perimeter roads. It is not a grassy strip. It is not countryside. It has substantial hangers, fuel stores and ancillary buildings; and substantial factory buildings. It has been stripped of woodland and hedges (the Canadian Air Force blew up the trees), levelled, drained and compacted; it is not remotely agricultural land, woodland or parkland (and could not readily become so without a fortune being spent).

3. Major Local Housing Need

Waverley is an area of extreme housing availability and affordability problems. It is required to build 5,000 homes under the South East Plan, a number the Borough strongly opposed. There is a major shortage of affordable housing – there is a waiting list of around 3,000 households in Waverley. There is clearly an urgent need - estimated by Waverley Borough Council itself to be about 650 houses a year (way in excess of the total housing requirement for the Borough under the SE Plan), which there are no plans to meet. There is no other proposal in Waverley for a major provision of affordable homes let alone for such homes to be integrated within a first rate development on previously developed land. It offers a one off chance to have major impact on local housing need.

The grave shortage of affordable homes causes serious social and environmental difficulties, including overcrowding, splitting and dispersal of families and long distance commuting.

This is not the only problem. Market housing is extremely expensive. Figures gathered by the National Housing Federation show that the price of an average house in Waverley is 16 times average income, one of the worst ratios in the country.

The original Waverley LDF was withdrawn in January 2007. The Council is currently operating under the saved policies of the 2002 Local Plan and creeping slowly towards formulating a new LDF. If Dunsfold Park does not get permission, current indications are that it has recognised internally that to find the land it needs for new housing it will have to release Green Belt land for development on the edge of the market towns. We expect a significant proportion of this to be good quality agricultural land.

4. Fuel Poverty

Waverley is an area with extremes of wealth comprising some areas of great deprivation within the midst of areas of great wealth. Fortunately unemployment is not a major issue, but fuel poverty amongst the elderly is a great social problem.

There will be no fuel poverty at Dunsfold Park. The highly insulated buildings and focus on energy efficiency will guarantee this community is protected from fuel poverty.

5. Availability of Brownfield land in Waverley

Dunsfold Aerodrome is the only large undeveloped Brownfield site in Waverley. It is one of very few areas of the borough not actually in the Green Belt; if the SE Plan housing numbers are to be met then, unless built at Dunsfold, probably approaching half of them will need to be built on green field sites, farm land, woodland including protected land such as the Green Belt.

6. The proposed development of Dunsfold Park – key environmental features

- A mixed development of 2600 zero carbon homes, zero carbon business and community buildings for 2000 jobs, provision of day to day local services (including shops, a primary school, medical care, leisure services) and amenities.
- Closure of the aerodrome; the development to be built on previously developed land – no loss of farmland or woodland.

- 35% of homes to be affordable, built to the same quality as the private housing and dispersed within the development.
- Restoration of 350 acres of land to publicly accessible green space including park land, leisure land and bio diverse land.
- Radical measures to reduce CO2 emissions from homes, commercial and community buildings and transport.
- **The proposed development is the most environmental development ever proposed, anywhere (not only in our knowledge, but confirmed by experts from Cambridge University in a comparison of leading sites). It materially exceeds the standards proposed for eco-towns. It is a remarkable scheme.**

The development is controversial locally – as is any development in Waverley! The development is supported by the local Labour and Liberal Democrat parties, by Friends of the Earth nationally and locally, by the TCPA, by the local Cranleigh business community, by Age Concern and by various other local environmental and community groups; it is opposed by Surrey County Council, the local Borough and Parish Councils, by the Conservative Party (which controls these councils), by CPRE and by a well resourced specially formed local residents group (the membership of the objectors does overlap between these groups).

This is the first time that Friends of the Earth England Wales and Northern Ireland has spoken at an inquiry in support of a major development. Dr Hugh Ellis, national planning adviser to Friends of the Earth spoke in favour of the development at the planning inquiry as did representatives of Guildford and Waverley Friends of the Earth.

7. Key reasons why Friends of the Earth supports the development

Friends of the Earth is supporting the appellant and the proposed development at Dunsfold Park for three interrelated reasons:

- The proposed development is both an environmental exemplar, quite unique in the world so far in the scale and comprehensiveness of its vision, and an essential pioneer to show how society can live well within the severe and challenging constraints of a low carbon world; its key features are replicable elsewhere, making it even more important;
- the site is both appropriately located for this development and is the best use of the site taking account of its current status (working aerodrome and substantial out of town industrial estate);
- the proposed development is by far the best proposal which has come forward or can be envisaged to supply the housing that will be required to be built in Waverley under the South East Plan (in particular by building on a Brownfield site outside the green belt thus protecting local farmland and woodland and green belt land and because piece meal edge of town development cannot in practice achieve the same level of carbon reduction).

Friends of the Earth, locally and nationally, is totally independent of the developer and has no financial involvement in the development – it is supporting the development for the reasons given above.

The development will support the sustainability of Cranleigh, the nearby market town. Cranleigh is struggling to remain viable, and its commercial and community facilities are under threat. A sustainable Cranleigh reduces transport demand.

The development will protect and enhance the local countryside and biodiversity, not only by the direct restoration of 350 acres at the aerodrome from their current sterile state, but by bringing back into management many hectares of local derelict woodland to supply the biomass CHP power station, supporting local agriculture through the community agriculture scheme and protecting existing farm land and woodland elsewhere in Waverley from housing development that would otherwise take place to meet the housing targets (almost certainly on green belt land).

8. Climate Change and Dunsfold Park eco-settlement

Climate Change requires us urgently to decarbonise emissions from the world's major sources of greenhouse gases: from energy, deforestation and land use change, livestock and waste. We will need to use energy much more efficiently – and more sparingly. Dunsfold Park tackles each of these issues – although energy generation and efficiency is most prominent it is promoting reforestation and beneficial land use change, community agriculture and reducing emissions from waste.

To mitigate climate change we need to build and live differently in the future. Dunsfold is the first major response from a UK developer to this need.

Dunsfold Park is particularly important because it takes a holistic view of carbon reduction – grappling with reducing all material CO2 emissions in a community and not just e.g. those from housing

A number of the business tenants already being attracted to Dunsfold Park are working on climate change mitigation measures – the industrial park could become a significant leader in this field if planning consent is granted.

9. Key climate change mitigation features at Dunsfold Park

- 2,600 zero carbon homes, commercial and community buildings all drawing all their energy from 100% renewable energy provided on site; the first on any scale by a commercial developer; the first in any mixed community (as opposed to a housing estate);
- highly energy efficient homes, both for heating and for lighting and appliances; smart meters installed;
- highly energy efficient commercial and community buildings
- zero carbon renewable electricity from a community based biomass CHP power plant – a first on any scale in Britain – with huge benefits for biodiversity and countryside viability in the adjoining countryside (and carbon take up in agriculture and forestry);
- renewable zero carbon heat supplied to homes, businesses and community facilities – a first on this scale in the UK;
- exemplar low water use; the best mooted yet (which also materially reduces energy use in the water industry);
- a wholly novel waste recycling scheme dealing with much waste on site – another first;

- a genuine live/work and live/walk or cycle community with extensive financial incentives and penalties and many engineered facilities and other incentives to ensure it develops and remains like that – another first;
- the development supported and enhanced by a community land trust – a first for a development like this since the Garden Cities, and the trust in this case has a greatly enhanced role from that of the Garden Cities; the role of the Trust is to drive forward further measures for low carbon living and to involve the entire community in this process
- community supported local agriculture – a first in Britain on this scale;
- extraordinary and totally unique attempts to mitigate climate change from transport – see further below.

The assessment of experts from the University of East Anglia is that per capita CO2 emissions of residents of Dunsfold Park from the features installed there will be between about one third and one half of that of a typical UK citizen (and lower still as a proportion of the emissions of a typical Waverley resident); it is highly likely that they will be at the lower end – i.e. about one third of typical emissions, or even lower still.

Dunsfold Park is exactly the response we need developers to make to climate change. But someone has to be the pioneer and it is expensive and risky to be so! However, house builders and their trade bodies are lobbying the government now to defer the introduction of the zero carbon home standard due in 2016. This development shows the standard can be met, and housing can still be provided.

10. Reducing carbon in transport

Climate change is now absolutely central to transport policy but so far the focus has been on more fuel efficient vehicles and the partial use of bio fuels; however it is accepted that there has to be demand management, albeit that politically this is difficult.

In addition to technical fixes (such as electric vehicles) Dunsfold Park tackles demand – it is the most radical transport proposal that has ever been made for a British community.

Dunsfold Park looks at transport in a totally new and radical way, totally different from that of the traditional transport planner. It proposes a cascade of reducing carbon from transport by:

- reducing powered transport demand; then
- transferring residual demand to unpowered modes (walking and cycling); then
- transferring residual demand to public transport; then
- decarbonising the public transport; and then
- decarbonising the residual private powered transport to the extent possible.

It is doing this by a comprehensive range of measures that mix engineering, lifestyle, cash incentives and disincentives, convenience, peer pressure and other means. Features include:

- a genuine live/work community, with strong supporting mechanisms to make it continue that way - employment on site and housing allocation initially linked to employment

- a live/walk and cycle community with proper and extensive walking and cycling facilities (including home and work storage) and paths, probably the best town in Britain to walk and cycle in; facilities designed into the essence of the town and made the most convenient option
- dedicated cycle route to Cranleigh, on the flat and a shorter distance than the road
- a genuine mixed community with all day to day facilities on site to reduce the need to commute or travel;
- mutually supportive business services to encourage local procurement
- strong support for home based working
- community teleconferencing to reduce travel
- strong support for home based deliveries
- community based travel plan
- making it comparatively inconvenient to use personal powered transport compared to other modes – a car restricted centre, and no parking adjacent to homes, so it is more convenient to walk, cycle or take the bus
- making it comparatively more expensive to use personal powered transport – car access charges (rather like the London congestion charge)
- restrictive parking and work place car park charging
- car club – which both reduces usage and matches vehicle to the purpose, as well as significantly reducing car ownership and embedded resources in vehicles, thus reducing CO2
- community based fossil fuelled vehicle cordon charge based on vehicle emissions, time of exit and occupancy
- electric vehicle ownership encouraged and supported, and electric vehicles also available in a car clubs
- car sharing
- public transport in-home information
- school buses
- smart card systems
- zero carbon internal deliveries – with the inconvenience that entails for deliveries, so forcing modal switch
- fast frequent and cheap buses to the other major nearby destinations
- permanent endowment to ensure this continues in perpetuity (i.e. public transport subsidised in perpetuity by the cordon charge and by rent from commercial buildings)

There is nothing like this package of low carbon transport measures anywhere.

Dunsfold had also offered to build a light rail link to Guildford using the track bed of the former Guildford to Cranleigh railway, or to contribute materially towards the cost of reopening the line for heavy rail (which was recently proposed by Association of Train Operating Companies). However this requires local authority co-operation (unlike bus provision) which has not been forthcoming.

Evidence shows that demand is more responsive than previously thought to price signals and behaviour change does take place. For instance the London congestion charge has driven increased public transport use and reduced car use; the freedom pass/concessionary bus scheme has led to a 15% increase in bus use in Surrey (source Surrey Transport Plan 2008); the change in fuel prices last year led to a big drop in mileage and a change to car buying preferences.

Dunsfold will facilitate the achievement of other goals of national transport policy: one is to promote greater equality of opportunity. In Waverley about 14% households do not have car (source 2001 census) – the fast, frequent and cheap public transport offered is both liberating and equalising.

The Dunsfold development addresses all major transport CO2 emissions by purpose of journey. 25% of emissions come from commuting – here a high proportion work on site or on frequent bus routes; next is personal business and shopping – again well dealt with, as are the smaller categories of emissions from journeys to schools and leisure. Probably visiting friends is the only major emission category not well dealt with – which Dunsfold addresses by seeking to decarbonise the car fuel (particularly through electric vehicles through the car club).

11. Freight Transport

Dunsfold Park also represents the first attempt that we are aware of to tackle freight from a carbon point of view. Road freight represents about 35% of domestic transport CO2 emissions.

Food represents about 28% of carbon emissions from freight road transport. The Community Supported Agriculture scheme (an adjacent farm linked to the development and focussed on providing as much food to it as practicable) offers a genuine opportunity to reduce emissions from food transport. Waste will largely be dealt with locally. Most energy fuel will be locally sourced. Less petrol will be used. Dunsfold is planning load consolidation for shopping. Transshipping local deliveries will drive take up of zero carbon vehicles in the locality.

Freight will be included within the travel plan and one of the current tenants at the site (Cranleigh Freight) is a leader in seeking to reduce CO2 emission from road freight transport.

12. Lifestyle

This community is not just for lifestyle adopters. That is part of its value as an exemplar. Many of the solutions are engineered in to the development – such as the zero carbon homes; others are backed by incentives. Some residents will not be motivated or influenced by the vision, but they will be driven by the engineering and financial motivations. It will offer many lessons in lifestyle, what we need to do, what works, how the balance between incentives and penalties can and should be adjusted. On transport demand, which is the most complex issue, it cannot be realistically said that these comprehensive measures will have no impact on demand or mode – the degree is unknown. It could be much more beneficial than the modelling suggests.

13. Replicability

The community Dunsfold Park will represent - that of a small market town or large village – is a common settlement pattern in Britain. We urgently need to retrofit these settlements to deal with climate change – Dunsfold Park will show the way, both for comparable communities, and potentially for much larger urban areas too.

It shows that zero carbon development can be done and how to do it - no developer in the future will be able to argue that it cannot be done. It is a true exemplar; it raises the bar for all development.