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Ecotowns or Egotowns?

A typical English village scene – the village centre

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Farm buildings with a mixture of local building materials, such as stone...





Historic remnants - Dovecots



....and attractive knapped flints with brick, and limestone

A typical English village scene – some substantial houses, limited green space Side streets, with a variety of types of houses, representing development over a period of time

AFII AOB

Early Victorian almshouses?

MIT

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A typical English village scene – organic growth over centuries has perhaps led to some curious architectural anomalies



A typical English village scene – shops and some more striking historic buildings?

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Quaint shops, meeting local needs?



A typical English village scene – the Butter Market, surely built in the 17th Century?

..lovely individual shops, a quilters paradise, a beautiful bead shop, wonderful clothes shops, a Waitrose, Budgens, lovely cafes, bike shops, gift shops, flower shops along with a lovely garden centre and food shops which specialise in Dorset produce from Olives, Wines, Chocolates and of course Dorset Cereals..'

A typical English village scene – repurposed warehouses and industrial premises





Walking through an arcade to reach Waitrose supermarket

The ravages of time are starting to tell on some of the buildings

Higher quality building materials should perhaps have been used



A typical English village scene, with a lot of parking?

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What's

this?

mix

A typical English village scene? – This is





A French chateau in an English village?







Poundbury's Primary School, in modern buildings





and accommodation for senior citizens

OPEN DAY HE

PARTMENTS FOR THE OVER 70'S ... HURRY, SELLING FAST!

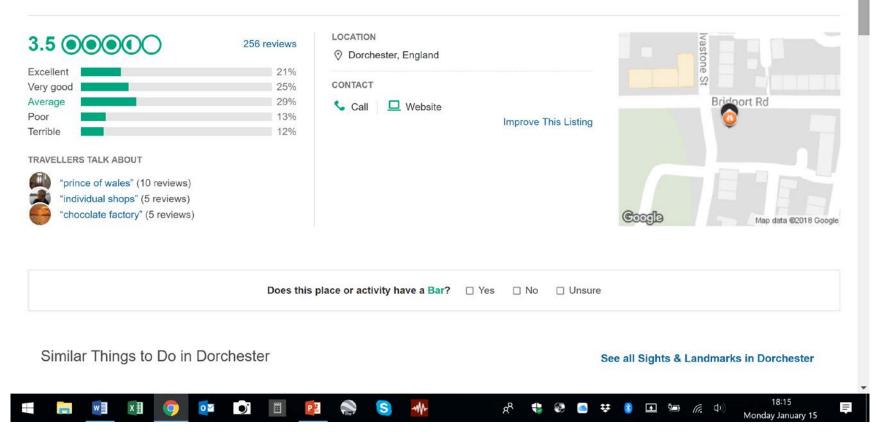
There is public transport by bus to Dorchester and Weymouth





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Overview	Reviews	Location	Q&A								1

Overview









'UK apartments (in Hemel Hempstead) will be a Beacon of sustainable luxury'





Green botanical roof using sedges, in Augustenborg, Sweden



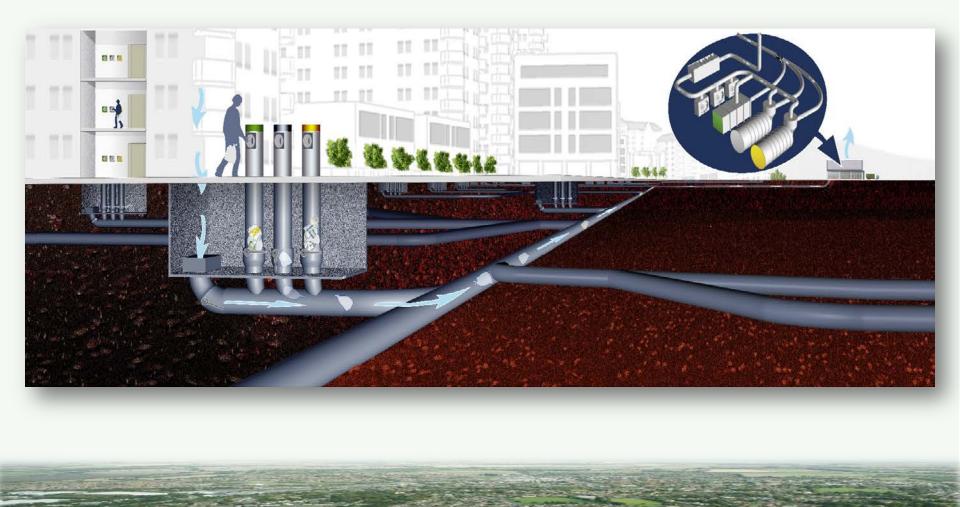
An oxymoron – green roofed petrol pump, opposite Malmo city offices, Sweden 'Envac' out-door inlets for three waste and recycling streams, Wembley City, London, United Kingdom. Waste is sucked away into underground sorting systems.





Other models were trialled in Hammarby Sjöstad, Sweden, including indoor inlets

'Envac' stationary vacuum waste and recycling system, as used in Hammarby Sjöstad, Sweden



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Lammas Eco-village, Pembrokeshire, 2011. A low emissions and low impact settlement: no mains power, water or waste collection, and built using local materials such as wood, cob, earth, turf, wool. 75% resources generated on site.



Breaches of planning guidance –

- Fire hazards, including fires under baths
 - Outside (composting) toilets
 - Ladders instead of staircases
- Used unspecified recyclable materials



'Tread Lightly' Eco Village, Cotswold. AR Design Studio

Proposed 34 unit Cotswold village. This first 'UK Code 6' Village will employ state-of-the-art zero carbon systems to power and heat itself. Simple design, form and construction maintain affordability whilst allowing inclusion of environmentally friendly technology. Community is created through design, encouraging interaction of people, places and activities; the development should be looked upon as a whole and not its individual units. Fun is important; lakes take on the 'Tread lightly' identity and shape the village's footprint.



Christchurch, New Zealand, previously a 'garden city', struggling to agree what to rebuild after the earthquakes of 2010 and 2011

Consideration of a 'food resilient' city



Health and happiness

BedZED residents say they know on average 20 of their neighbours by name; the local average is eight

Equity and local economy

Half of the homes are for low cost rent or shared home ownership

Sustainable Water

Water consumption per BedZED resident is about 50% of the London average

Sustainable materials

Just over half of the construction materials by weight came from within 35 miles

Sustainable Transport

BedZED was the first residential location in London to have an onsite car club

Zero Carbon

It has ben estimated that BedZED produces 37% less carbon dioxide emissions from gas and electricity use than an average development of the same size and mix of uses

Ecotown concepts

- Encouraging residents to be more sustainable in their day-to-day activities – reduced greenhouse gas emissions, les water consumed, reduced car use, healthier lifestyles
- Responding to environmental pressures such as climate change
- Maintaining countryside (and today interpreted as enhancing biodiversity, too)
- Providing comfort for residents
- Example settlements to inspire other development

Energy The Hammarby Model Högdalen's combined Hammarby Biofuel heat and power plant thermal power station Biosolids District heating and electricity District heating - District cooling NWW N ed waste w Biofuel Environmentally friendly electricity Combustible waste Biogas Purified waste Bioga Organic waste Biosolids New packaging The sea Waste water Sjöstaden's and Henriksdal's waste water treatment plants Recycling - pa t storm ' Waste Equalizer Lake Hammarby Sjö Filter treatment Water Lake Mälaren/drinking water plant

The story of Ecotowns in the UK

Letchworth Garden City, Hertfordshire, started early 1900s by Ebenezer Howard. Current population about 34,000

February 2008 areas under consideration



2014 Plan for Shrewsbury to double in size to become an 80,000 population garden city provoked outrage





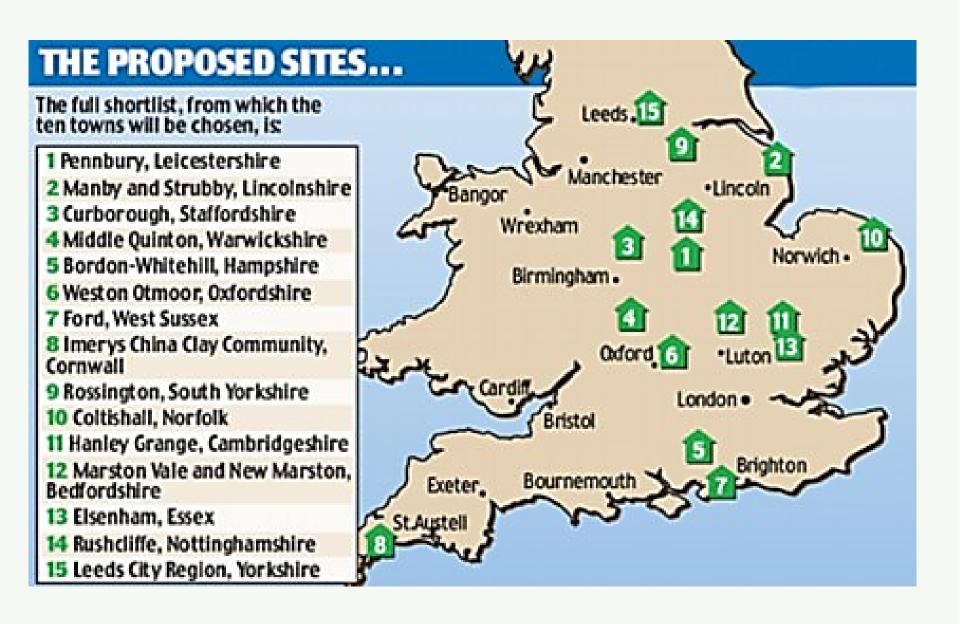


July 2009 'Ecotowns'



Scotland has disappeared from the proposals













Imerys China Clay Community, St Austell, 2008

 Roche
 450-550 homes
 Canlivery

 Bugle
 Luxulyan
 Canlivery

 St Dennis
 1800-2500 homes
 Penpillick

 Anpean
 Nanpear
 Penpillick

2,100-2500 homes

St Austell

Carlyon Bay

Fai

00 - 7.00

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Image © 2018 TerraMetrics Image © 2018 Getmapping plc Polgooth Google Earth

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West Carclaze, Cornwall site, 2013 Coldvreath

Bowling Green Rosevean

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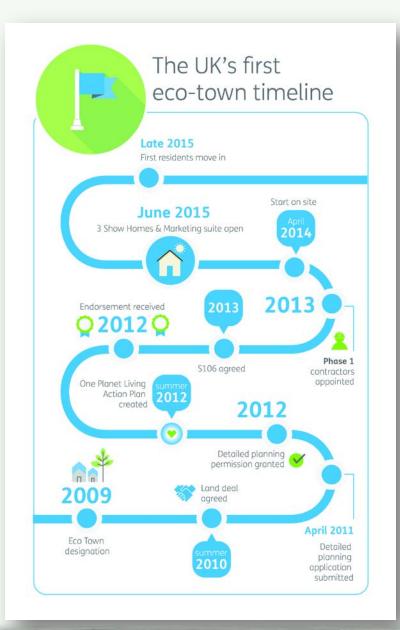
1275 m

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Image © 2018 Getmapping plc

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Google Earth



Bicester, Oxfordshi re, as an 'ecotown' proposal

North West Bicester, 2009



Image © 2018 Getmapping plc

332 m

Google Earth

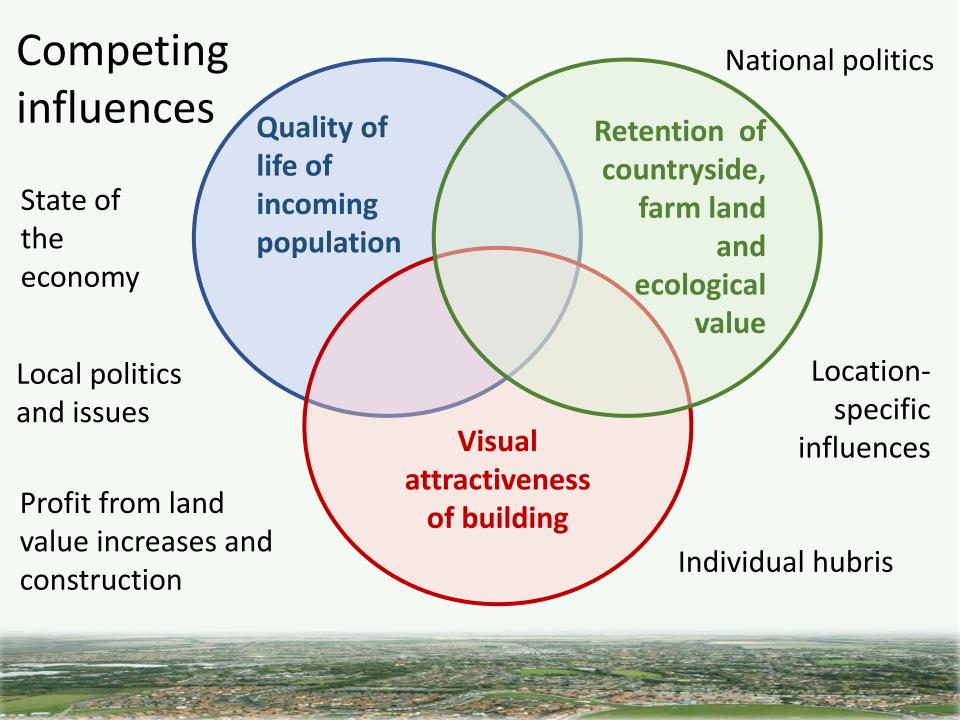
North West Bicester, 2017



© 2018 Google



Google Earth



'Wicked Problems'.... Based on Horst Rittel and Melvin Webber, 1973

- Poorly formulated and complex problems
- With interconnected physical/scientific and human/sociological dimensions...
- Where what happens in one place and time affects what happens somewhere else, at a different time
- Involving many different stakeholders...
- Who don't agree about what is important...
- and who use the terminology in different ways...
- and who cannot agree if the problem has been solved

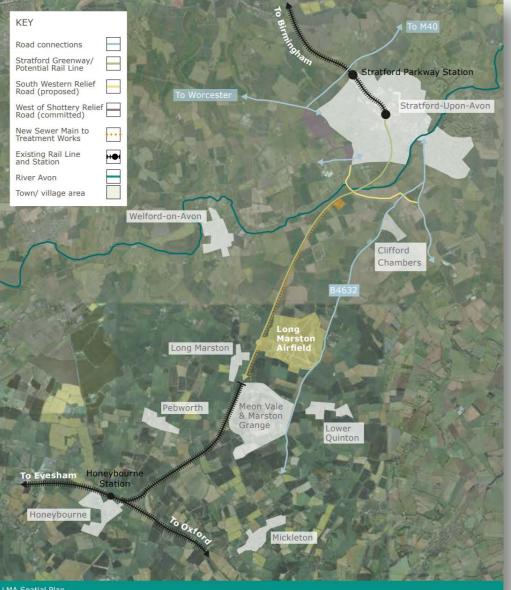
'Super Wicked' Problems based on Levin et al, 2012

..... and

- Where time is running out
- Those who cause the problem also seek to provide a solution
- The central authority needed to address the problem is weak or non-existent
- And policy decisions are made that disregard the future and reflect short time horizons

Current key concepts in ecotown design

- Drawing on 'natural capital' as an asset 'eco'?
- Valuing green space and building 'green infrastructure'
- Using space effectively for multiple purposes (for example, playgrounds and flood water storage)
- Providing communicating spaces, through which people can walk
- Collaborative and holistic planning, drawing on local community views
- Private sector leading



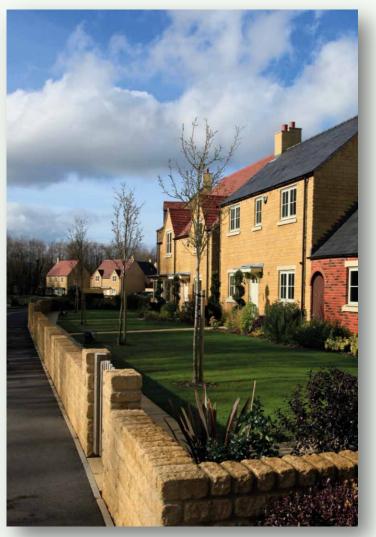
Long Marston, Stratford-upon-Avon, Warwickshire. 2017 proposals for Garden Village

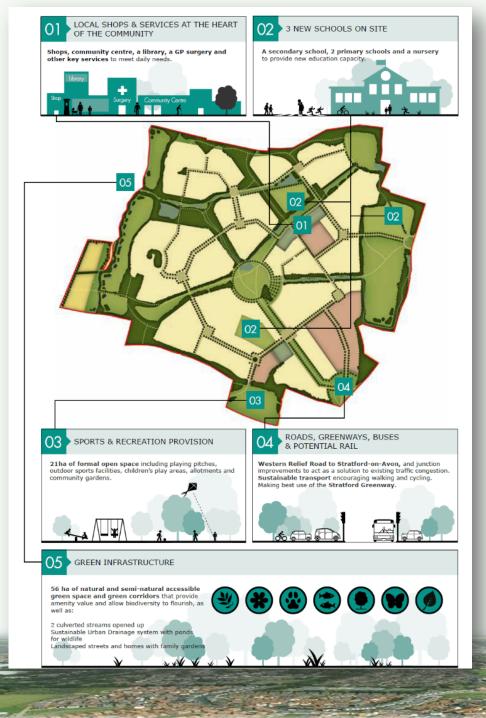
Public see first detailed plans of Long Marston Airfield 'garden city' development 27 September 2017, Proposals for a development of 3,500 new homes set within "parkland and wooded glades" designed with "garden city principals" have gone on public display.



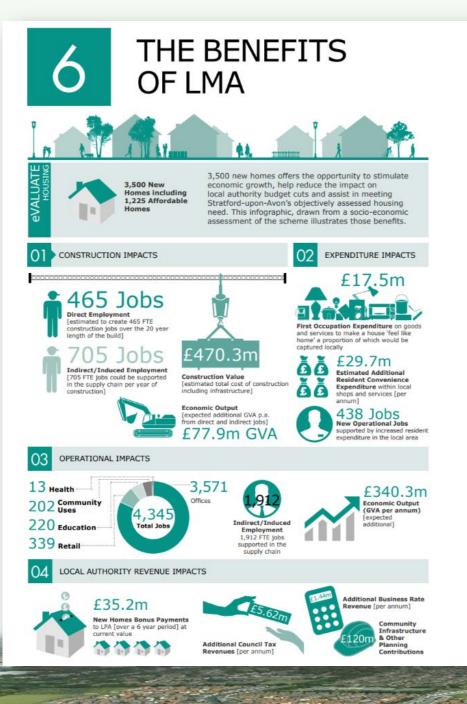








- Local shops and services at the heart of the community
- 2. Three new schools on the site
- Sports and recreation provision
- Roads, Greenways,
 Buses and potential Rail
- 5. Green infrastructure culverted streams daylighted, Sustainable Urban Drainage with ponds, landscaped streets and homes with family gardens



- 465 jobs and 705 indirect jobs during construction
- £30m annual residents spend within local area, creating a permanent 438 operational jobs
- 1,912 indirect jobs after completion
- £35m bonus payments to local authority
- £5.6m additional Council Tax
- £120m community infrastructure and planning contributions



Ecotown challenges

- Conflicts between national and local interests, for example on housing need and the value of the natural environment
- Many stakeholders, lack of collaboration
- Short term horizons
- Competing demands of different goals
- Uncertainty about some of the key objectives
- Lack of evidence to support many decisions
- Rapidly changing technologies continuously opening up new possibilities, for example autonomous electric vehicles, communication technologies, artificial intelligence changing the nature of employment