As Safe as *Green* Houses?
Security and Sustainability

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Content of the Presentation

- Research commissioned by ACPO CPI
- The importance of sustainability and sustainable development
- Code for Sustainable Homes
- Security within the sustainability agenda
- Case study
- Tensions/synergies
- Some recommendations
Research

- ACPO CPI commissioned an extensive piece of research surrounding this topic
- The findings from this research are to be published in the near future
- The aim of this presentation is to provide an overview of the findings
What we did...

• Visit to Freiburg, Germany

• Literature Review

• Formed an expert group (potential problems/synergies)

• Interviews with Key Personnel - (DCLG, CABE, Eco-Town Panel)

• Visited 8 case study sites around the country (actual problems/synergies)
  - Interviews with ALO, planner and developer
  - Discussed experiences of attempting to achieve a sustainable and secure development
What is sustainability and sustainable development?
What is Sustainability and Sustainable Development?

- **Sustainable means** ‘capable of being maintained’

- **Sustainable development;**

  ‘meets the needs of the present without compromising the ability of future generations to meet their own needs.’

  UN Department of Social Affairs Division for Sustainable Development (1987) p.54

- **Sustainable community;**

  ‘places where people want to live and work now and in the future. They meet the diverse needs of existing and future residents...’

  ODPM (2005) *Defining Sustainable Communities*, HMSO.
'The main thing we want is places where we can live for a long time and don’t have to regenerate. The fact that we’ve got regeneration departments in all our councils says that we fail and that we are unsustainable…'

Why Sustainable Development?

- Housing shortage – 3 million more homes by 2020 - it is important that this is done without unnecessary costs to the environment

- Buildings contribute half of the UK total CO₂ emissions

- Buildings generate 16% of the nation’s waste during the construction phase

Why Sustainable Development?

- We need **more homes** and we need to make sure that these are built with **minimal impact** on the environment.

- The Government is planning to build up to 10 eco-towns by 2020.
Code for Sustainable Homes
Code for Sustainable Homes

- Officially launched in England in 2007
- Single framework which can be used to measure standards of sustainable design
- Nine categories that form the Code
- Point scoring scheme (mandatory and non-mandatory) across the nine categories
- The sustainability rating which a home achieves represents its overall performance across nine Code design categories
## Point scoring table

<table>
<thead>
<tr>
<th>Total points score</th>
<th>Code Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>36 Points</td>
<td>Level 1 ★</td>
</tr>
<tr>
<td>48 Points</td>
<td>Level 2 ★★</td>
</tr>
<tr>
<td>57 Points</td>
<td>Level 3 ★★★</td>
</tr>
<tr>
<td>68 Points</td>
<td>Level 4 ★★★★</td>
</tr>
<tr>
<td>84 Points</td>
<td>Level 5 ★★★★★</td>
</tr>
<tr>
<td>90 Points</td>
<td>Level 6 ★★★★★★</td>
</tr>
</tbody>
</table>
Nine categories:

- Energy and CO₂ emissions;
- Water;
- Materials;
- Surface water run-off;
- Waste;
- Pollution;
- Health and wellbeing;
- Management;
- Ecology.
Code for Sustainable Homes

- Overall sustainability rating
- Mandatory requirements for a number of categories, but apart from these, the Code is flexible
- Developers can choose how they make up their credits
Code for Sustainable Homes

- Credits awarded vary
- Each credit is weighted

Health and Well Being

↓

Daylighting

↓

3 credits

↓

weighted at 1.17 per credit

= 3.51 points
Code for Sustainable Homes

- **Water section** - 1 credit is weighted at 1.50 points

- **Management section** – 1 credit is weighted at 1.11 points

‘...derived from extensive studies involving a wide range of stakeholders who were asked to rank (in order of importance) a range of environmental impacts’.

Department for Communities and Local Government (2008) *The Code For Sustainable Homes: Setting The Standard In Sustainability For New Homes*

- Only information provided in the Code
Code for Sustainable Homes – Crime

- Management – Security

- A maximum of **two** credits (weighted at 1.11 points per credit) are available for security (2.22 points)

- Credits are obtained where:
  - an ALO or CPDA is consulted at the design stage and their recommendations are incorporated into the design of the dwelling

  **AND**

  - by complying with Section 2 – Physical Security from ‘Secured by Design New Homes’

- Not a mandatory requirement, unlike other sections of the Code that are
Examples of getting credits
Ways to obtain credits

- Once all mandatory credits from the varying sections of the Code are achieved, additional credits can be obtained by:
  - Provision of drying space (two credits)
  - Cycle storage provision (two credits)
  - Installing a water-butt (one credit)
  - Composting bin (one credit)
  - Consultation and compliance with Section 2 of SBD New Homes (two credits)
Effort versus reward

- Easier to obtain two credits by doing other things?
- Don’t have to consider security at all when attempting to score eco-points
- Security is optional and only scores you two credits
- Quick win!
Points scoring?

“The government has introduced the Code for Sustainable Homes, so expect to see more ‘rabbit hutches’ with solar panels...In fact, I am pretty confident that public realm, landscape and house design will suffer because of the rush towards scoring eco-points”


• Not just trying to score points as quickly as possible

• Need to make sure they are building truly sustainable developments
Tensions
An example...

- Example in the North of England
- Look at a number of things, specifically:
  - Orientation;
  - Car parking and
  - Decking.
- Other tensions include:
  - External lighting;
  - Cycle storage and
  - Planting.
An example...

- Living room
- Communal garden
- Car parking
- Bedroom and kitchen
- Southward facing solar panels
- Living room
- Communal garden
- Car parking
- Bedroom and kitchen
- Southward facing solar panels
An example...
Decking
Sustainable?
External Lighting

- Two credits are available
- **Aim:** To encourage the provision of energy efficient external lighting, thus reducing CO$_2$ emissions
Security Lighting

• One credit
  – A maximum wattage of 150W and...
  – Movement detecting control devices and...
  – Daylight cut-off sensors or timers

OR...

• ‘If no security lighting is installed, the security lighting credit can be awarded by default’
Cycle Storage

- Two credits for having cycle storage in the occupants’ garden
- Credits only achieved if access from the store to a public right of way is not through a dwelling
Cycle Storage

Rear Access

Garden

Dwelling

Back Door

Front Door
Cycle Access

- Rear access is not recommended by SBD
- This encourages the use of footpaths/alleys
- It would need to be secure
- Additional lighting, fencing and locks
- Additional cost and additional energy
- Is securing the rear access a priority once the points for cycle storage have been achieved?
Planting
Ecological – but what about surveillance?
Conflicts?

- Although **specific tensions** identified through case study visits, the research found that there were **no tensions** between the wider aims and principles of sustainability and security
- No tensions between aims and principles of SBD and Code for Sustainable Homes
- The tensions we identified were about bad design and poor management
Conflicts?

- Achieving SBD does not prevent a developer from achieving high levels of sustainability
- Achieving high levels of sustainability does not prevent a developer from achieving SBD
- You can achieve a secure AND sustainable development
- Sustainability via security
- “There is no earthly reason why the two can’t live together in harmony”
  
  CPDA
- ‘Solutions’ provided by expert group
Synergies
Synergies...

• More windows = more natural light

• More windows = more opportunity for surveillance

• Triple glazed windows

• Promotion of private space

• Promotes sound insulation to reduce the likelihood of noise complaints from neighbours (4 credits!)
It’s not just about being green

- Too heavily focused around green credentials?
- Crime **has** to be taken into account – is a sustainable development one with high crime rates and high levels of fear of crime?
- ‘places where people want to live and work now and in the future...’
  
  ODPM (2005) *Defining Sustainable Communities*, HMSO.
- People have to be safe and feel safe
It’s not just about being green

“We have to start rolling other things into sustainability. We have to address the climate but...we’re becoming blinkered and thinking that this is the only thing that matters to society at the moment. Well it isn’t. Other things go hand in hand”


“...the criminogenic capacity of the built environment has consistently been ignored within this conceptual framework [sustainability agenda]”

“Housing that meets the perceived and real needs of the present in a resource efficient fashion, whilst providing attractive, safe and ecologically rich neighbourhoods”

To conclude...
As Safe as Houses?

- It is not just about being green
- Has the sustainability agenda become too closely focused upon environmental concerns?
- Not about security and sustainability being incompatible – no real thought for security provided within the Code
- Better design
- Pre-planning consultation – seeking ALO/CPDA advice
“I don’t necessarily think...this idea of trying to save rainwater or making a property retain more heat...will make any contribution to security but I think what you have to do is adopt the opposite view and say, well it may not help, but it is certainly not hindering either. If ...they are using sustainable materials...but you can still factor security in, we should all pat one another on the back and be pleased by that”

ALO
Some recommendations...
Some recommendations

- Security is given more weight within the Code for Sustainable Homes or becomes a mandatory requirement. Level 6 with no consideration for crime prevention.
- Crime representative on the Eco-Towns Expert panel.
- Avoid disincentives ie: Lighting – easy to achieve the one credit by having no security lighting.
- The Code looks at individual houses (not past garden wall). More thought for the wider environment (eg: rear access).
Some recommendations

• Encourage manufacturers of sustainable windows and doors to have them tested (eg: triple glazed, energy efficient Austrian windows)

• Consider water-butts and composting bins – to avoid them being used as climbing aids

• Include standards for secure cycle storage
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