Does Welsh National Planning Policy effectively address Low Impact Development in the open countryside?

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1. Introduction

During the sixteenth and seventeenth century, Western European thinkers such as Galileo Galilei, Francis Bacon, Rene Descartes and Isaac Newton, advanced the idea that humans are separate and dominant over nature. This anthropocentric view of the world legitimised destructive exploitation of the earth's resources. However, since the 1970s the devastating and severe consequences of our destructive actions have become acutely apparent. This revelation, coupled with scientific findings that humans are part of a wider ecosystem, highlights that humanity can only be sustained into the future by living within ecological boundaries.

Aldo Leopold proposed a new "land ethic" in which human interaction with the natural world would be "right when it tends to preserve the integrity, stability, and beauty of the biotic community" and "wrong when it tends otherwise."²

Low Impact Development (LID) demonstrates that an ecologically just way of life based on this land ethic is a reality and not just something grounded in theory. LID models a sustainable way of life, and embodies principals of social and ecological justice.

In 2010 LID was first recognised in Welsh national planning policy (Appendix 1).³ The aim of this report is to discuss how effective this policy is in addressing LID in the open countryside.

This essay will examine the first LID planning application submitted under this policy - John Hargraves' Green Apple Cross Farm - to analyse how the policy is working in practice. It will also discuss the views of Paul Wimbush, and Simon Fairlie; both key figures in the LID movement and Vicki Hirst, the planner from Pembrokeshire Coast National Park Authority who worked on Hargraves' application.

2. Definition of LID

LID is difficult to define in a single sentence. Fairlie defines it as "development which by virtue of its low or benign environmental impact, may be allowed in locations where conventional development is not permitted' and which is characterised by nine features. It must:

- Be temporary
- Be small scale
- Be unobtrusive
- Be made from predominately local materials

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¹ Cullinan, C. Wild Law: A Manifesto for Earth Justice (Green Books 2011 2nd ed.) p.45

² Leopold, A. A Sand County Almanac and Sketches Here and There (Oxford University Press 1968) p.224-225

³ Welsh Assembly Government *Planning Policy Wales* (2010 3rd ed.) s. 9.3.11-9.3.11

⁴ Fairlie, S. *Low impact development- Planning and People in a Sustainable Countryside*, (Jon Carpenter Publishing 2009 2nd ed.) p. xiv

- Consume a low level of non renewable resources
- Generate little traffic
- Be used for a low impact or sustainable purpose
- Be linked to a recognised positive environmental benefit⁵

3. Are LIDs required?

In 2002, the Welsh Assembly Government (WAG) commissioned a report, which found LIDs to be an "intrinsically sustainable form of development" making positive contributions to the three pillars of sustainability, and providing a possible solution to the many interconnected environmental crises we currently face.

LIDs can contribute towards meeting the sustainable development policy objectives set out in the WAG Sustainable Development Scheme. In summary, this envisages a sustainable Wales which:

- Lives within its environmental limits
- Has sustainably managed ecosystems
- Has a resilient and sustainable economy
- Has sustainable communities
- Is a fair, just and bilingual nation

LIDs can also contribute towards the statutory target of reducing net UK carbon emissions by 80% less than 1990 levels by 2050,8 and the EU target of "halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible."9

Despite these benefits, until very recently restrictions on development in the open countryside¹⁰ have made obtaining planning permission for LIDs extremely difficult. Currently LIDs are barely mentioned in planning policy across the UK, and Wales remains the only country in the UK with a national planning policy devoted to LIDs.

4. National policy

4.1 Context

Welsh national planning policy on "One Planet Developments" takes forward LIDs in the Welsh context, and is supported by further guidance contained in Technical Advice Note 6 (TAN6) (Appendix 2). 11 This policy is significant as it should make it easier to gain planning permission for LIDs in Wales and it can also act as a model for adopting LID policies across the UK.

⁶ University of the West of England and Land Use Consultants (2002) Low Impact

Development- Planning Policy and Practice Final Report for the Countryside Council for Wales

⁷ Welsh Assembly Government (2009) One Wales: One Planet, a new Sustainable Development Scheme for Wales

Climate Change Act 2008 s. 1

⁹ European Communication from the Commission (3.5.2011) Our life insurance, our natural capital: an EU biodiversity strategy to 2020 COM(2011) 244 p. 2

¹⁰ Town and Country Planning Act 1990 s. 63 (2) (TCPA)

¹¹ To avoid confusion, this essay refers only to LIDs rather than One Planet Developments, and refers to LID Welsh national planning policy as TAN6

It was adopted at a time when the profile of LIDs was increasing; there was a growing recognition of the positive sustainable impacts of LIDs,¹² Pembrokeshire County Council and Pembrokeshire Coast National Park Authority had adopted a forward looking LID policy "Policy 52" in their Joint Unitary Development Plan (Appendix 3) and Lammas Eco Village, through testing policy 52, had become the first LID in the UK to obtain prospective planning permission.

Currently, local planning policy is set out in Unitary Development Plans, although Local Planning Authorities are preparing or have already adopted Local Development Plans (LDPs) which supersede UDPs once adopted. TAN6 does not mandate Local Planning Authorities to include a policy on LID in their Local Development Plans. However, Local Planning Authorities will have to ake into account "material considerations" when deciding applications, which includes national policy. If LID applications are refused by the Local Planning Authority, then on appeal the Inspectorate will consider all relevant information to make a rational decision, including national planning policy. However, even with TAN6 in place, planning permission for LID applications is dependent on the Local Planning Authorities interpretation and weighted according to policy.

4.2 TAN6

TAN6 provides planning policy for two types of LID which are differentiated by location; those to be located within or adjacent to existing settlements, and those to be located in the open countryside.¹⁸

Both types of LID can be single homes, co-operative communities or larger settlements. They should initially achieve an ecological footprint of 2.4 global hectares per person (GHPP) in terms of consumption and demonstrate clear potential to move towards 1.88 GHPP over time. The ecological footprint is a sustainability indicator which "provides a notional figure for the land area required to support an individual, a family or a community in terms of food, resources, energy, waste assimilation, and greenhouse gases mitigation. LIDS must also be zero carbon in construction and use which is assessed using the Code for Sustainable Homes.

Both types of LID should be managed and controlled by a trust, co-operative or other similar mechanism in which the occupiers have an interest if the proposal involves

¹² Supra n. 6 and Baker Associates (2004) Low impact Development-Further Research Final Report for Pembrokeshire Coast National Park Authority

¹³ Planning and Compulsory Act 2004 (PCA)

¹⁴ Supra n. 3 s. 9.1 p. 138

¹⁵ TCPA s.70 (2) and PCA s.38 (6)

¹⁶ Pye Itd v West Oxfordshire District Council [1982] JPL 577

¹⁷ Bell, S. and McGillivray, D. *Environmental Law* (Oxford University Press 2008 7th ed.) p. 420

¹⁸ s..4.15.2

¹⁹ s.4.15.2

²⁰ s.4.15.1

²¹ s.4.18

²² s.4.15.1

²³ TAN22

members of more than one family. 24 A s.106 agreement should be used to tie the dwelling to the land. 25

LIDs proposed in the open countryside must satisfy more stringent criteria and must become the sole residence for the proposed occupants. They must justify the need to live on site, be able to provide for the minimum needs of the inhabitants in terms of income, food, energy and waste assimilation within, at least, five years time and identify a clear relationship between the use of the land and projects proposed and the number of occupants to be sustained on the site. They must be supported by robust evidence detailed in a management plan produced by a competent person, which will be used as the basis of a legal agreement relating to the occupation of the LID if permission is granted.

The management plan should include a business improvement plan, ecological footprint analysis, carbon analysis, biodiversity and landscape assessment, and transport and travel plan.³¹ Activities agreed in the planning permission will be controlled by tying the management plan to a planning condition or s.106 agreement, and to ensure compliance with the management plan, a monitoring report must be submitted on an annual basis to the Local Planning Authority.³² Upon the change of ownership a new management plan should be submitted to the Local Planning Authority.³³

5. Methodology

To understand how TAN6 is working in practice, Hargraves' Green Apple Cross Farm was chosen to study as it was the first LID application based in the open countryside to be decided under TAN6. An interview was carried out in person with John Hargraves, the sole applicant for Green Apple, who could therefore offer an insight into his experience of the policy.

A telephone interview was carried out with Paul Wimbush, who assisted Hargraves throughout his planning application. Paul was one of the co-founders of Lammas and he plays an important role in campaigning for low impact development policies in Wales and across the UK. His opinion was sought due to his direct experience of the planning system before and after the adoption of a national policy.

An interview via email was conducted with Simon Fairlie. Fairlie is the author of "Low Impact Development: Planning and people in a sustainable countryside" and the founding director of Chapter Seven an organisation which offers free planning advise to low impact developers and also campaigns for LID planning policy. Fairlie lives a low impact life and has direct experience of the planning system in England.

²⁴ s.4.15.2

²⁵ s.23.1

²⁶ s.4.17.1

²⁷ s.4. 17.1

²⁸ s.4.15.2

²⁹ s.4.17.1

³⁰ s.4.16.1

³¹ s.4.16.1 - 4.22

³² s.4.23.1 - 4.23.2

³³ s.4.23.1

Hargraves, Wimbush and Fairlie were asked the same questions. Vicki Hirst from Pembrokeshire Coast National Park Authority was interviewed via email and was asked some alternative questions.

Notes were taken during the interviews with Hargraves' and Wimbush's as well as being transcribed and checked against the notes to ensure they were accurate. To ensure transparency the reasons for asking these questions are included in appendix 4.

6. Green Apple Application Summary

Green Apple was an application to change the previous commercial nursery site within the Pembrokeshire Coast National Park, into a low-impact organic horticultural smallholding.

This would require the retention of two poly-tunnels and building an off-grid low impact dwelling which would be the sole residency of Hargraves and his three year old daughter. A number of horticultural activities would be carried out on site including woodland coppicing, and the site would also provide an educational resource for schools.

Hargraves' application predated TAN6. Advised by Pembrokeshire Coast National Park Authority he initially attempted an application under the agricultural dwellings policy (Policy 48 Joint Unitary Development Plan). After an unsuccessful attempt, he applied under Policy 52 (26/10/09). This was refused by Pembrokeshire Coast National Park Authority (12/03/10) on the grounds that it failed to satisfy a number of policy criteria.

In July 2010 Wales adopted TAN6 on LID and Pembrokeshire Coast National Park adopted its Local Development Plan (September 2010). Policy 48 on LID contained in the Local Development Plan is much the same as Policy 52, and it takes forward the same supplementary guidance.

Hargraves' appeal was held 12/10/10. However, following complaints over conduct, the Inspectorate was removed and the appeal started afresh in January 2011. Planning permission was finally granted on 11/05/11.

7. Interview Results

7.1 Hargraves, Wimbush and Fairlie

i) Is the planning process efficient, effective and simple in operation?

Hargraves, Wimbush and Fairlie felt that the planning process was extremely complicated, far more so than a normal application.

Hargraves had found the planning process complicated, time consuming and wearing. He felt the planning officers were completely unhelpful in aiding his understanding of the planning process, and that communication was poor.

Hargraves thought his application under policy 52 was blocked at every opportunity by Pembrokeshire Coast National Park Authority. He felt that the Authority had never

seriously engaged in the process and felt this may have been due to the mentality that development shouldn't go ahead in a national park.

Hargraves felt that after all the difficulties he experienced, the fact that he finally got a fair and impartial hearing based on policy was a tribute to democracy.

Wimbush thought that the planning process is effective, tending towards efficiency, but is far from simple. He thought it would be difficult to get a much simpler policy in theory but that the requirements which come from outside the policy, such as the Code for Sustainable Homes and Design and Access Statement, which constitute around 50% of the paper work could be simplified.

ii) Does TAN6 provide LID applicants with certainty?

Fairlie and Hargraves felt that the policy fails to provide certainty. Hargraves mentioned that it is impossible to assess the outcome of a LID planning application as it is dependent on the interpretation of planning officers.

Wimbush felt that the policy in theory provides certainty, but that applicants don't feel certain, due to the process itself. Wimbush stated that applicants are feeling more certain following Hargraves' planning approval.

Both stressed the need for precedents to provide certainty.

iii) Is the planning process prohibitively expensive for LID applicants?

Hargraves and Wimbush felt that the application process is prohibitively expensive.

Wimbush stated that a LID application can cost between £1000 and £5000, which is a lot of money for those living on a subsistence basis.

Wimbush felt that this could be reduced by permitting some sort of self assessment in place of the Code for Sustainable Homes and ecological footprint analysis.

iv) Should LIDs have environmental, economic and social benefits?

Hargraves and Wimbush felt it was important for LIDs to have environmental, economic and social benefits.

Hargraves felt that LID owners have a responsibility to use land well as it is such a precious resource.

Wimbush mentioned that although he would be surprised if a LID application was permitted without an environmental benefit and that LIDs had inherent environmental, economic and social benefits, it is challenging to prove and therefore he didn't think that those three were good measures.

Fairlie felt that if there is no impact, there should be no need for any benefit, and if the environmental impact is low, then the benefit should be proportionate. But he felt that it is highly desirable for there to be these benefits.

v) Should LIDs be zero carbon in construction and use?

Hargraves and Wimbush felt that the phrase "zero carbon" didn't make sense and that construction can never be zero carbon.

Wimbush felt that zero carbon is "confusing, misleading and creates more problems than solutions." Instead the policy should require LIDs to be run on renewable sources and be built from locally sourced natural materials.

Fairlie felt that there is overemphasis on insulation and technical performance and little account taken of scale and use. A recycled touring caravan or a single skin yurt, heated with a small woodburner, are likely to have a lower impact than a five bedroomed state of the art "zero-carbon" passivhaus.

vi) Is the Code for Sustainable Homes an appropriate assessment method for LID?

Hargraves and Wimbush felt the Code for Sustainable Homes was irrelevant for LID.

Wimbush said that it was "expensive, cumbersome and bureaucratic".

In Hargraves' appeal, the Inspectorate allowed some flexibility with regard to the Level 6 Code for Sustainable Homes standard being met and stated that "an assessment, whether in line with the code *or otherwise*, would cover such matters as the source and nature of the materials to be used". 34

vii) What percent of household needs should LIDs provide for, in what time frame, and what do you think constitutes household needs?

Hargraves felt that 75% of household needs is enough. He was unsure what this should consist of, but believed that there should be some flexibility taking into account specific circumstances. He felt that it didn't make sense to dig a well if there was already a mains water supply.

Both Wimbush and Hargraves agreed that the minimum set up period should be at least 5 years.

Wimbush stressed that the percentage of household needs which LIDs should provide for is dependent on what you define as household needs. He believed that 75% should be sufficient and should include basic food and income but not the mortgage or set up costs or things like trips to the cinema. He felt it was important that LIDs have some sort of macro enterprise which feeds into the local community so that the benefits of LIDs are shared with society. Wimbush advises having a land based enterprise which would bring in approximately £5000 a year as a guideline as this requires a proper land commitment.

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³⁴ Inspectorates decision (11/05/11) Ref: APP/L9503/A/10/2132242 paragraph 53

Fairlie was not enthusiastic about the household needs criterion and highlighted "a LIDS occupier could be getting 100% of their "household needs" on site whilst earning a six figure sum as a private jet salesman. I prefer the standard agricultural workers dwelling definition; that it should be a full time occupation, and provide for over 50% of your income."

viii) Is an ecological footprint of 1.88GHPP achievable?

Hargraves didn't know if 1.88GHPP is achievable. He stressed the need for everyone to accept a reduction in consumption not just LID residents, and felt frustrated and angry that people aren't accepting this.

Wimbush felt that 1.88GHPP is difficult to achieve and that this would involve living on the fringes of society. He currently has an EF of approximately 2.5GH and a large proportion is down to the share of government's footprint.

Fairlie felt it is achievable but that it can't be measured to the nearest 0.01 of a hectare.

ix) Is the TAN6 definition of LID: "development that either enhances or does not significantly diminish environmental quality" a good definition?

Hargraves felt the LID definition was good, but he stressed concern over allowing excessive population of the countryside and for the need for strict criteria for permitting LIDs.

Wimbush and Fairlie felt that the more recent definition given by Fairlie "development which by virtue of its low or benign environmental impact, may be allowed in locations where conventional development is not permitted" is better and gets more to the heart of the matter.

x) Should you have to justify need to live on site?

Hargraves felt that this was important as land is such a precious communal resource.

Wimbush on the other hand believed that this was unnecessary; it has historic associations with the old agricultural policy which caused many problems for LIDs obtaining planning permission, and is misleading. He believed that this was not taken too seriously in TAN6.

Fairlie also felt that there was no need for this justification if LID residents had to provide the majority of their income and livelihood from the land and ensure a low environmental impact of the LIDs.

xi) Should it be necessary to identify a clear relationship between land use, projects proposed and number of occupants to be sustained on site?

Hargraves, Wimbush and Fairlie felt that it was important to establish a relationship between the land use, projects proposed and number of occupants. Wimbush highlighted that otherwise you may get a household with four adults where only one adult is working the land and the other three are "just there for the ride".

xii) Should a new management plan be submitted upon change of ownership? Both agreed that this was necessary. Fairlie agreed unless the existing management plan was reaffirmed.

xiii) Are conditions or legal agreements necessary to control activities and tie the dwelling to the land?

Both felt that conditions can cover the use of land. Wimbush stated that it is necessary to have a strong agricultural tie clause but that in the three times he has used s. 106 agreements in applications the Inspectorate has deemed them unnecessary. Fairlie agreed there is the need for a mechanism of some sort.

xiv) Is annual monitoring of LIDs necessary?

Hargraves, Wimbush and Fairlie believed this was very important. Fairlie stated "it is no more onerous than doing a tax return. Once a stable performance is achieved, after say three years, then monitoring reports could be reduced to every three or five years."

xv) Should LIDs be addressed in wider policy such as in England or the European Union?

Hargraves, Wimbush and Fairlie felt that wider policy was important. Wimbush felt that it was important in England but he couldn't comment on Europe.

xvi) Do you have any other comments?

Hargraves mentioned that the most significant point for LID policy is the lack of certainty, and the huge risks involved in buying land which you may never get permission to build on. He stressed the need for greater certainty and the need for precedents.

Wimbush talked of a sense of frustration with the lack of political will to actually address environmental precipice on which we stand. He felt that the TAN6 is a step in the right direction but that the whole planning system needs to be radically overhauled.

Fairlie stressed that there is currently too much emphasis on LIDs in the open countryside and that more attention needs to be given to LIDs in or adjacent to settlements. There is more demand for LIDs from people who want a small amount of access to land, but continue to earn the bulk of their income from other sources. These people have no need to live in the open countryside.

7.2 Pembrokeshire Coast National Park Authority

i) What experience of LID applications have you had?

Pembrokeshire Coast National Park Authority became aware of LIDs about 10 years ago. They had dealt with one other LID application in addition to Hargraves' LID. They are also currently receiving a few LID pre-application enquiries.

ii) What do you think of TAN6? Are there aspects which are problematic?

Pembrokeshire Coast National Park Authority thought that the term "zero carbon" needs further clarification. They felt that protection and enhancement of the environment should be a key feature of LID proposals and that this is not adequately addressed in TAN6.

They felt that it is highly unlikely that LID plans will be produced by competent persons, which is a requirement of TAN6. In their experience LID proposals have often needed hand holding and a considerable amount of effort and resources by the Local Planning Authority.

Pembrokeshire Coast National Park Authority felt the term "Business and Improvement Plan" (Paragraph 4.17.1 TAN6) should be replaced with "Sustainable Livelihood Plan" which better reflects how these types of proposals are approached.

Pembrokeshire Coast National Park Authority mentioned that requirement of justifying the need to live on site fails to acknowledge that LIDs can include projects such as teaching sustainable building techniques or permaculture techniques off site, which are not directly linked to the land but nevertheless, contribute to income generation and wider community benefits.

Pembrokeshire Coast National Park Authority expressed concern over the phrase "potential to have wider community...benefits through the export of any surplus electricity to the grid."³⁵ They thought that this might encourage large renewable energy proposals in unsuitable locations just so that income can be generated to sustain the community. They were concerned that the standard to be achieved for transport generation was not set out, and also believed that opportunities for reusing buildings already on site needs to be explored.

iii) Are Pembrokeshire Coast National Park Authority planners well equipped to deal with LIDs? Is there enough time, resources, expertise?

Pembrokeshire Coast National Park Authority mentioned that LID proposals by their very nature are complex and therefore not straight forward to deal with, but felt that they were learning with each new proposal. They mentioned that Hargraves' appeal inquiry took approximately three days in officer time together with officer preparation time amounting to approximately a week's full time work in total.

³⁵ 4.19.1

They felt under-resourced for most of their work, but found assessing and monitoring LID proposals particularly resource intensive. LID proposals do not involve a tick box exercise and planners have to rely on a range of in-house and external expertise.

They felt that it would be difficult to make the policy more prescriptive, although this would make assessment easier.

iv) How much would it cost to monitor a LID?

Pembrokeshire Coast National Park Authority felt that the cost of monitoring would depend on how informative the annual monitoring report submitted was. If a development is not complying with the targets set out, resulting in the need for enforcement, then this would be far costlier than a straight forward by the book proposal.

v) Do you think LIDS are needed in rural areas?

Pembrokeshire Coast National Park Authority felt that those that require land to sustain them need a rural location but that this could be on a settlement edge rather than in the open countryside.

vi) Do you think proposed LIDs within a National Park should be subject to more stringent criteria than elsewhere?

Pembrokeshire Coast National Park Authority were not concerned with making the test more difficult for LIDs within the National Park. The only element that differentiates an application in the National Park is that there are special qualities of the National Park in terms of visual impact that require protection, which might make finding a suitable location for LID more difficult than outside the National Park.

8. Discussion

8.1 Complexity

Hargraves, Wimbush and Fairlie all found the policy and the process complicated. To some extent this is to be expected. The policy itself needs to ensure that permitted developments are truly low impact and that they will remain low impact in the future. Whilst the policy itself could not be made much simpler, it is recommended that alternatives to the Code for Sustainable Homes are used to assess the sustainability of LIDs. Additionally, the policy is relatively new; Hargraves' application was the first to test it, and over time it may be made simpler through amendments and guidance on terms. Currently WAG is commissioning best practice guidance on LID which is due to be published with an update on TAN6 in December 2011.

The planning application process was also found to be complicated. In Hargraves' case the process was made complicated by two interconnected points. Firstly, he was advised by Pembrokeshire Coast National Park Authority against a policy 52 application and instead for an agricultural dwelling application, and secondly

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³⁶ Personal communication with James Shorten who is drafted the guidance

Pembrokeshire Coast National Park Authority were unhelpful in aiding his understanding of the process.

The first point highlights a need for Local Authorities to be aware of the differences between LID and other policies but also highlights that LID applicants are not getting sufficient planning aid for applications. This is linked to the second point.

Whilst most planning applications are complicated, LID applications are even more so, and yet applicants who live on a subsistence basis will not be able to seek advice from planning consultants due to cost. Instead applicants turn to Local Planning Authorities who do not have the resources to 'hand hold' applicants through the process. LID applicants also seek advice and assistance from LID residents with direct experience of the planning process, such as Paul Wimbush and Simon Fairlie for advice and assistance. However, these people are not trained planning consultants and they may not meet the "competent persons" test in TAN6 which requires management plans to be produced by "competent persons".

Complications arising from the planning process are likely to be reduced over time. As Local Planning Authorities become more accepting and familiar with LID policies they will be able to deal more effectively with applications. However, it is recommended that LID training is held for Local Planning Authorities, and best practice shared, as it is likely that LID applications will increase. It is also recommended that existing LID residents who advise LID applicants attend this (free) training and gain certification. This would ensure that a high standard of free or affordable advice was provided for LID applicants, and reduce the burden of assistance on the Local Planning Authorities. Certified LID advisers could verify management plans for LIDs thus satisfying the "competent persons" test.

8.2 Certainty

Hargraves, Wimbush and Fairlie all complained of the lack of certainty due to the policy and the policy interpretation. Local Planning Authorities also need the policy to be sufficiently precise so that they can spend resources efficiently deciding applications first time around rather than going to appeal.

Certainty is likely to come in time and with precedents and guidance.

8.3 Affordability

Currently the application process is expensive for both LID applicants and Local Planning Authorities.

For LID applicants the price depends on how much work the applicant does themselves. The price could be reduced by permitting self assessment in place of the Code for Sustainable Homes and ecological footprint analysis. This could be safeguarded by certified LID adviser verification.

The cost of monitoring is also a factor for LID residents and Local Planning Authorities. Hargraves, Wimbush and Fairlie felt that monitoring was necessary on an annual basis. However, due to financial burden on both the LID resident and Local Planning Authorities it is recommended that once LIDs are fulfilling specific targets set out in the management plan, monitoring can be reduced to once every

two—three years, supported by periodic site visits from the Local Planning Authority. Additionally, whilst it is important for a new management plan to be submitted on change of ownership, it should be possible to resubmit the existing management plan providing this was accepted by the new owners.

8.4 LID benefits

TAN6 does not explicitly require LIDs to make positive environmental, social and/or economic benefits.

Pembrokeshire Coast National Park Authority, Hargraves, Wimbush and Fairlie all felt it was important for LIDs to have environmental and wider social and economic benefits but Wimbush felt that this may be difficult to prove.

It is recommended that TAN6 requires LIDs to make a positive environmental, social and/or economic benefit but that clear prescriptive guidance is given as to what these might consist of. Environmental benefit could include enhancing biodiversity through tree planting, social benefit could include providing low impact skills training and economic benefit could include using the land in a more efficient manner.

8.5 Zero Carbon

All interviewees raised issues with the use of "zero carbon." It seems to be an unhelpful phrase and it is recommended that policy replaces this requirement with "made predominately from locally sourced natural materials and run on renewable energy."

8.6 Household Needs

The household need criterion is problematic and fails to provide LID applicants with certainty. It is recommended that this is replaced with the requirement that land based activities on site provide LID residents with full time work and provides 75% of their economic income, food, water and energy within 5 years. The benefits from these land based activities should be shared with the wider community, such as through teaching sustainable building techniques or selling produce.

8.7 Ecological footprint

The ecological footprint is a useful indicator and "tool to help us plan for sustainability" and provides a more holistic and comprehensive approach to considering human impact on the environment than the carbon footprint. However, for LID residents to achieve 1.88 GHPP and for it to be effective, it is necessary for the government and wider society to seriously commit to reducing their ecological footprint.

8.8 Justification test

The justification to live on site is unnecessary in light of the other requirements. However, it is necessary for the LID to be the sole residence of the occupants.

8.9 Relationship between land, project and occupants

Wimbush, Hargraves and Fairlie did not find this criterion problematic. The only issue is that the word "occupants" is ambiguous. It does not differentiate between those

³⁷ Wackernagel, M. And Rees, W. *Our ecological footprint : Reducing Human Impact on Earth, New Society Publishers* (Gabriola Island 1996) p. 28

who are able to work the land and those who are dependents, such as children, disabled and elderly people. Further clarification is needed to give LID residents and Local Authorities further clarity.

8.10 Conditions or mechanism

Both Hargraves and Wimbush felt that conditions can cover the use of land. This would be the preferred option to reduce any legal costs involved in drawing up a s.106 agreement.

8.11 Other issues

It is important that LIDs encourage sustainable transport use and further guidance is needed on this point. Concerns over renewable energy projects raised by Pembrokeshire Coast National Park Authority may warrant further research. It is also recommended that TAN6 includes a requirement for LID applicants to explore reusing existing buildings on site.

9. Future

LIDs in the open countryside need to be addressed in wider policy and there is also a growing need to address LIDs on the edge of settlements, for those who wish to be self sufficient but who have alternative sources of income unrelated to the land.³⁸ TAN6 provides policy on this, but further guidance is needed as to the definition of "settlements" as a Local Planning Authority could decide that land adjacent to a village is actually in the open countryside.³⁹

Currently the national planning policy framework in England is under review, 40 which opens up an opportunity for LID policy, based on TAN6, to be included in the reforms. It is difficult to say whether a LID policy will be adopted, however, it is relatively unlikely for three reasons. Firstly, campaigns over the last 12 years by the LID campaigning group; "Chapter 7", to get LID recognised in English national planning have failed. 41 Secondly, introducing a LID policy is contrary to the reform aims which are directed at reducing and consolidating policy statements, circulars and guidance documents into a single concise national planning policy framework.⁴² Thirdly, LID planning applications require more Local Planning Authority resources to assess and monitor than other planning applications, which is not compatible with the current large public sector cuts.

The English planning reforms are very likely to include a presumption in favour of sustainable development.⁴³ Under this presumption the default answer to planning will be yes, unless "to do so would significantly and demonstrably outweigh the policy objectives of sustainable development."44

³⁸ Supra n. 4 p..xv and p. 144

³⁹ "Wales Adopts Low Impact Development" (Autumn 2010) 9 The Land p. 62

⁴⁰ http://www.communities.gov.uk/planningandbuilding/planningsystem/planningpolicy/planningpolicyfr amework/
41 Supra n. 4 p.146

⁴² Supra n. 40

⁴³ Greg Clark Minister for Decentralisation *A New Settlement for Planning* Speech (14th June 2011) The Royal Town Planning Institute Planning Convention

http://www.communities.gov.uk/speeches/corporate/newsettlement

lbid

While this may at first glance look hopeful for LID applications, it could in fact give Local Authorities even greater discretion to refuse applications, while at the same time permitting a host of unsustainable and environmentally destructive developments. This is due to the fact that the term "sustainable development" is elusive and ambiguous and can be used just as much to support perpetual growth of the economy at the expense of the environment as it can to support environmental protection. In this respect, it acts as political panacea but fails in reality to act as a solution to multiple and interconnected environmental, social and economic problems.

10. Conclusion

TAN6 is a landmark policy, and is the only current national planning policy on LIDs in the UK. It provides criteria specifically designed to judge LID applications, and in this respect it is a significant step in the right direction towards permitting truly sustainable development. It has to perform a difficult balancing act of providing a policy that is efficient, effective and simple, with the task of ensuring that LIDs do not act as a "Trojan horse" and lead to unsustainable and environmental destructive development in the future. In these respects it appears that both the policy and the planning authorities have so far erred on the side of caution. As this is a new policy certain issues are understandable, and in time this will be aided with guidance and precedents. However, the recommendations in this report are aimed at improving the policy for LID applicants and residents and Local Planning Authorities, ensuring that LIDs are being addressed in policy in the most effective way.

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⁴⁵ *Supra* n. 4

Appendix 1: Planning Policy Wales

9.3.11 **One Planet Development** is development that through its low impact either enhances or does not significantly diminish environmental quality. One Planet Developments should initially achieve an ecological footprint of 2.4 global hectares per person or less in terms of consumption and demonstrate clear potential to move towards 1.88 global hectares over time (the global average availability of resources in 2003). They should also be zero carbon in both construction and use.

9.3.12 One Planet Developments may take a number of forms. They can either be single homes, co-operative communities or larger settlements. They may be located within or adjacent to existing settlements or be situated in the open countryside. Land based One Planet Developments located in the open countryside should provide for the minimum needs of the inhabitants in terms of income, food, energy and waste assimilation over a period of no more than 5 years from the commencement of work on the site. This should be evidenced by a management plan produced by a competent person(s). The management plan should set out the objectives of the proposal, the timetable for development of the site and the timescale for review. It should be used as the basis of a legal agreement relating to the occupation of the site, should planning consent be granted.

Appendix 2: TAN6

4.15 One Planet Development

4.15.1 The Sustainable Development Scheme, "One Wales: One Planet" includes an objective that within the lifetime of a generation, Wales should use only its fair share of the earth's resources, and our ecological footprint be reduced to the global average availability of resources - 1.88 global hectares per person in 2003. One Planet Developments take forward Low Impact Development (LID) principles in the Welsh context. One Planet Development is development that through its low impact either enhances or does not significantly diminish environmental quality. One Planet Development is potentially an exemplar type of sustainable development. One Planet Developments should initially achieve an ecological footprint of 2.4 global hectares per person or less in terms of consumption and demonstrate clear potential to move towards 1.88 global hectare target over time. They should also be zero carbon in both construction and use.

4.15.2 One Planet Developments may take a number of forms. They can either be single homes, co-operative communities or larger settlements. They may be located within or adjacent to existing settlements, or be situated in the open countryside. Where One Planet Developments involve members of more than one family, the proposal should be managed and controlled by a trust, co-operative or other similar mechanism in which the occupiers have an interest. Land based One Planet Developments located in the open countryside should, over a reasonable length of time (no more than 5 years), provide for the minimum needs of the inhabitants' in terms of income, food, energy and waste assimilation. Where this cannot be demonstrated, they should be considered against policies which seek to control development in the open countryside.

4.16 Management plans

- 4.16.1 Planning applications for land based One Planet Developments located in the open countryside need to be supported by robust evidence. A management plan, produced by a competent person(s), must accompany planning applications for this type of development. The management plan should set out the objectives of the proposal, timetable for development of the site and timescale for review. It should be used as the basis of a legal agreement relating to the occupation of the site, should planning consent be granted. The management plan should cover the following areas:
- Business and Improvement plan to identify whether there is a need to live on the site and establish the level of the inhabitants' requirements in terms of income, food energy and waste assimilation that can be obtained directly from the site (See paragraph 4.17.1);
- Ecological footprint analysis of the development (See paragraph 4.18.1);
- Carbon analysis of the development (See paragraphs 4.19.1 4.19.2);
- Biodiversity and landscape assessment (See paragraph 4.20.1);
- Community impact assessment to identify potential impacts on the host community (both positive and negative) and provide a basis to identify and implement any mitigation measures that may be necessary (See paragraph 4.21.1), and;
- Transport assessment and travel plan to identify the transport needs of the inhabitants and propose sustainable travel solutions. (See paragraph 4.22.1).
- 4.16.2 Where planning applications for One Planet Developments located in the open countryside are not accompanied by the information identified in paragraph 4.16.1, the planning authority should first seek the necessary information from the applicant. Should this not be provided they would be entitled to refuse the application on the grounds of lack of proper justification for the scheme.

4.17 Business and improvement plan

4.17.1 Planning applications for One Planet Developments in the open countryside must justify the need to live on the site and quantify how the inhabitants' requirements in terms of income, food, energy and waste assimilation can be obtained directly from the site. The land use activities proposed must be capable of supporting the needs of the occupants, even on a low income or subsistence basis, within a reasonable period of time (no more than 5 years). It will also be necessary to identify a clear relationship between the use of the land and projects proposed and the number of occupants to be sustained on the site in terms of the need for them to work the land or ensure the smooth running of the venture and the return that is gained. The business plan should include a statement that the development will be the sole residence for the proposed occupants.

4.18 Ecological footprint analysis

4.18.1 Ecological footprint analysis measures the impact of human activity upon the environment. The footprint provides a notional figure for the land area required to support an individual, a family or a community in terms of food, resources, energy, waste assimilation, and greenhouse gases mitigation. In 2006 the ecological footprint for each Welsh citizen was 4.41 global hectares with a long term target to reduce the ecological footprint to the global average availability of resources - 1.88 global hectares per person within a generation. One Planet Developments should initially achieve an ecological footprint of 2.4 global hectares per person or less in terms of

consumption and demonstrate clear potential to move towards 1.88 global hectare target over time.

4.19 Zero carbon analysis

- 4.19.1 One Planet Developments should be exemplars of the Welsh Assembly Government's zero carbon aspiration and achieve zero carbon status in terms of the construction and use of the development30. There is also the potential to have wider community carbon reduction benefits through the export of any surplus electricity to the grid.
- 4.19.2 Planning applications should be accompanied by supporting information confirming that the development will be zero carbon in construction and use. Plans should be monitored as part of the annual monitoring report prepared by the applicants.

4.20 Biodiversity and landscape assessment

4.20.1 A baseline assessment of biodiversity and landscape character should be undertaken and a management plan to enhance features of importance prepared.

4.21 Community impact assessment

4.21.1 A community impact assessment should be undertaken to assess any potential impacts (positive and negative) on the host community and provide a basis to identify and implement any mitigation measures that may be necessary.

4.22 Transport assessment and travel plans

4.22.1 Planning applications should be accompanied by an assessment of the traffic generated from the use of the site by its residents and visitors. The travel plan accompanying the planning application should clearly identify a preference for low or zero carbon modes of transport including walking, cycling and car sharing schemes. Where proposals are distant from larger towns and villages they should be located near public transport routes to minimise use of the private car.

4.23 Planning obligations and conditions

- 4.23.1 Where planning consent is granted for One Planet Developments it will be necessary to tie the management plan directly to a planning condition or \$106 agreement. This will provide control over all of the activities agreed in the permission. A \$106 agreement should also be used to tie the dwellings to the land which justified the grant of planning consent. Where there is a change in ownership of the One Planet Development or any individual holding within larger schemes, a new management plan should be submitted to the planning authority for approval.
- 4.23.2 An annual monitoring report should be submitted to the planning authority to evidence compliance with the management plan by identifying activities carried out during the previous twelve months. Failure to meet the terms of the management plan could result in enforcement proceedings in respect of a breach of condition subject to which planning permission was granted.

Appendix 3: Policy 52 Low Impact Development making a Positive Contribution

Low impact development that makes a positive contribution will only be permitted where:

- i) the proposal will make a positive environmental, social and/or economic contribution with public benefit; and
- ii) all activities and structures on site have low impact in terms of the environment and use of resources; and
- iii) opportunities to reuse buildings which are available in the proposal's area of operation have been investigated and shown to be impracticable; and
- iv) the development is well integrated into the landscape and does not have adverse visual effects; and
- v) the proposal requires a countryside location and is tied directly to the land on which it is located, and involves agriculture, forestry or horticulture; and
- vi) the proposal will provide sufficient livelihood for and substantially meet the needs of residents on the site; and
- vii) the number of adult residents should be directly related to the functional requirements of the enterprise; and
- viii) in the event of the development involving members of more than one family, the proposal will be managed and controlled by a trust, co-operative or other similar mechanism in which the occupiers have an interest.
- 5.4.42 Sustainable Development has emerged as the overarching objective of the planning system in the last decade. This policy provides a context for permitting development in the countryside which contributes to that agenda (see paragraph 2.2.3 National & Regional Section of the Plan) as an exception to normal planning policy, where the proposals are tied directly to the land and the proposal provides sufficient livelihood for the occupants.
- 5.4.43 Proof that there is a positive contribution from the development in terms of the environment, the use of resources, and a combination of social/economic benefits will be needed. Public benefits might include providing services to the community. Proof that the proposals will achieve a neutral or at least the lowest possible adverse impact for each part of the government's sustainability agenda must be submitted.
- 5.4.44 To this end any proposal will have to submit an integrated site management plan, biodiversity and landscape character assessment together with a business and improvement plan and sustainability action plan for the site. These will detail the activities and structures on site and the environmental management of the site as well as sustainability objectives to be achieved by the development. The Business Improvement Plan will also provide evidence of the functional needs of the enterprise and financial information as to the likely returns to be achieved. It will be necessary to establish that the land use activities proposed are able to financially support the occupants. The applicants will be expected to enter into a S106 agreement relating to the continued operation of the site, based upon the site management plan.
- 5.4.45 SPG will be prepared, setting out a step by step approach to considering proposals under this policy. The guidance will include a comprehensive checklist of

sustainability design and construction matters to be included in any assessment. A checklist will include the requirements for development and associated activities to:

- be of a scale appropriate to the site and the enterprise proposed;
- accord with sustainable construction and design principles;
- use materials which are natural, renewable, recycled and where possible locally sourced:
- incorporate comprehensive measures to minimise energy use, light pollution and waste production; and
- be capable of easily being dismantled and removed from the site and the site restored to an appropriate state in accordance with the terms set out in the management plan.
- 5.4.46 In advance of preparing SPG the report 'Low Impact Development Further Research' will be used as interim supplementary guidance to inform the application of this policy.
- 5.4.47 Within the National Park developments must demonstrate themselves to be compatible and not adversely effect the special qualities of the National Park landscape (Policy 5 & 67)

Appendix 4: Interview questions

Questions for John Hargraves, Paul Wimbush and Simon Fairlie

i) Is the planning process efficient, effective and simple in operation?

This is an objective of the planning system contained in Planning Policy Wales paragraph 1.2.3 p. 10. The author wanted to find out whether LID policy was meeting these objectives, and gain an understanding of Hargraves', Wimbush's and Fairlie's personal experiences of the planning system.

ii) Does TAN6 provide LID applicants with certainty?

The author felt it was important that LID applicants have some amount of certainty when applying for planning permission, without certainty LID applicants will be hesitant to come forward to use the policy and this will hinder the evolution, improvement and expansion of the policy.

iii) Is the planning process prohibitively expensive for LID applicants?

Most LID applicants are living on a subsistence basis and therefore cost of the process is an important factor.

iv) Should LIDs have environmental, economic and social benefits?

Policy 52 (JUDP) contains more stringent criteria in some ways to TAN6, including the requirement for LIDs to have environmental, economic and/or social benefits. The author wanted to see whether this was seen as an important aspect of LID and whether it should be included in TAN6.

- v) Should LIDs be zero carbon in construction and use?
- vi) Is the Code for Sustainable Homes an appropriate assessment method for LID?
- vii) What percent of household needs should LIDs provide for, in what time frame, and what do you think constitutes household needs?
- viii) Is an ecological footprint of 1.88GHPP achievable?
- ix) Is the TAN6 definition of LID: "development that either enhances or does not significantly diminish environmental quality" a good definition?
- x) Should you have to justify the need to live on site?
- xi) Should it be necessary to identify a clear relationship between land use, projects proposed and number of occupants to be sustained on site?
- xii) Should a new management plan be submitted upon change of ownership?
- xiii) Are conditions or legal agreements necessary to control activities and tie the dwelling to the land?
- xiv) Is annual monitoring of LIDs necessary?

Questions v - xiv were based on the requirements in TAN6. The author wanted to see whether the requirements in TAN6 were realistic, necessary, important, and how they were working in practice.

xv) Should LIDs be addressed in wider policy such as in England or the European Union?

It was assumed that the LID residents would want to see wider policy on LIDs adopted. However, rather than assuming it was thought appropriate to ask.

xvi) Do you have any other comments?

The author thought that the residents may have had other comments, and so this was asked to ensure the LID residents had been given the opportunity to state these.

Questions for Pembrokeshire Coast National Park Authority

i) What experience of LID applications have you had?

The author thought that it was important to find out about the experience of Pembrokeshire Coast National Park Authority with LIDs as this would reflect their understanding of LIDs, show awareness of the policy including what works and what is problematic.

ii) What do you think of TAN6? Are there aspects which are problematic?

The author would have liked to go through separate questions similar to those posed to Hargraves and Wimbush, but due to a tight word limit this was not possible. Instead this open ended question was asked to find out Pembrokeshire Coast National Park Authority"s experience of TAN6 and what they felt worked and didn"t.

iii) Are Pembrokeshire Coast National Park Authority planners well equipped to deal with LIDs? Is there enough time, resources and expertise?

iv) How much would it cost to monitor a LID?

Question iii and iv were asked to find out the cost and resources used in determining and monitoring LID applications. This is important as if Local Authorities do not have enough resources they will be likely to turn down LID applications and may try to deter LID applications.

v) Do you think LIDS are needed in rural areas?

The author thought that it was necessary to find out whether Pembrokeshire Coast National Park Authority supported the need for LIDs in the rural countryside or to see whether they thought they could be placed elsewhere.

vi) Do you think proposed LIDs within a National Park should be subject to more stringent criteria than elsewhere?

Hargraves had mentioned that Pembrokeshire Coast National Park Authority had continuously blocked his LID application. However, he did mention that he thought it was very difficult for any development to get planning permission in the National Park. However, LIDs are supposed to be exemplars of sustainable development, and this justifies locating LIDs in areas where other developments are not allowed. The author thought it was necessary to find out whether Pembrokeshire Coast National Park Authority felt that there should be restraints on LIDs in National Parks.

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