

# ONE PLANET POWYS



## A LOW-IMPACT APPROACH TO POPULATION GROWTH AND COMMUNITY WELL-BEING

We must draw upon the talents and energy of the people that live in the towns, villages and hills of Powys. If their intelligence, wit, imagination and passion can be brought together and harnessed, almost anything can be achieved.



April 2012

This is a suggestion to Powys CC by the Calon Cymru Network that a flexible land-use planning policy be included in the LDP 2011-2026 to operate in the communities served directly by the Heart of Wales Line.

The context and reasoning for our suggestion are set out in some detail on our website, [www.heartofwales.net](http://www.heartofwales.net), but this paper is a specific response to the publishing of the LDP Preferred Strategy.

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## COMMENTS ON THE LDP PREFERRED STRATEGY

We were unable to attend the LDP Strategic Options stakeholder involvement event in November 2011 but we have spent some time studying and discussing the 5 options and the Preferred Strategy.

Our feelings to date are that, taking into account the limitations of national policies, the strategic concept is a sensible and reasonable compromise.

It is clearly the right approach to direct population growth to settlements with the best range of service provision, although not to the extent that the more deeply rural communities continue to struggle to exist. This is a difficult balance to achieve. We recognise that.

We also agree that, because of the physical character of the county and the nature of its travel-to-work patterns, the concept of a growth spine following the central trunk road has an inescapable logic.

However we do also feel the need to state our view that continuing to base our regional planning on the assumption that motor transport on roads will continue indefinitely more or less as before, is not safe.

We do understand the constraints on Powys CC in preparing the LDP but we believe that, even within the remaining 13 years of the plan period, there is a high likelihood of severe energy shocks occurring that could make casual and routine motor travel virtually impossible for a large part of the population.

We would like to see much more attention being given to the future role that railways like the Heart of Wales and Cambrian Lines could play as essential transport routes in Powys.

## THE NEED FOR BALANCED, RESILIENT RURAL COMMUNITIES

A One Planet Powys must be a resilient Powys. See the One Wales document: <http://wales.gov.uk/docs/desh/publications/090521susdev1wales1planeten.pdf>

1. Resilient to rising energy prices and to energy shortages.
2. Resilient in the face of changing climate and more unstable weather.
3. Resilient to higher food prices resulting from global demand, water stress, soil exhaustion, and the loss of farmland to development and flooding.

Resilient communities must have the capacity to house, feed, educate and care for their population. And they must provide employment for themselves.

The compartmentalised model of land use zoning, which became dominant during the era of cheap oil, will no longer be appropriate. Instead, as used to be normal in villages and small towns, homes and workplaces will often be located close together, and more households than at present are likely to want to produce at least some of their own food.

It will be important to enable more young adults to live and work in Powys, to counteract the unbalanced age structure in which over-60s are over-represented. A greying Powys creates escalating pressures on health and social care services.

Flexibility and diversity are important components of resilience - diversity provides the options for flexible response to changing conditions.

Railways, such as the Heart of Wales line, are crucial to transport diversity, and provide corridors in which land-based rural industries and affordable housing can be added to their communities to restore

demographic balance.

*Transition Town Llandeilo, part of the Transition Towns movement which aims to put sustainability and resilience at the heart of local communities, also believes that the Heart of Wales railway is a crucial provider of public transport, with the potential to carry many more passengers and freight too. The railway corridor offers the possibilities for new clusters of affordable homes and jobs arising from new craft and land-based industries. [For information on Transition Towns, see [www.transitionnetwork.org](http://www.transitionnetwork.org)]*

## THE UK & WALES PLANNING SYSTEM

The 1947 Town and Country Planning Act was designed to stop ribbon development and protect the countryside from rampant commercial exploitation. Our planning system is still the only protection we have to stop large areas of Britain becoming like a California suburb, and we should never forget that.

Yet at the same time it has created a scarcity of building land that has forced low-income people out of the countryside and made rural England, in the words of a recent Cabinet Office report, “the near exclusive preserve of the more affluent sections of society.” The same could be said of most of the more accessible parts of Britain. Apart from gifts and special circumstances that can’t be planned for, it is difficult to see any way in which development land can be found for the needs of ordinary people on modest incomes.

Our planning system is there to make us think about the way we use the land we “own”. And an important objective is to ensure that in Wales generally and, for the purposes of this submission, in Powys specifically, sufficient land areas remain to meet future needs for food, water and energy.

On the other hand the planning system needs to address the urgent problem of how to provide decent, accessible housing for the large and growing numbers of individuals and families that are currently excluded from the open market.

## THE POWYS HOUSING PROBLEM

The UK has an enduring housing crisis which is reflected in Wales. Powys not only has the problem of insufficient affordable homes, it also has a large land area and a small population which is ageing rapidly and making costly demands on health and social care services.

The National Assembly for Wales found that in 2009 there were 91,000 households on Local Authority waiting lists. That figure is increasing steadily.

Emerging LDPs, in considering LHMA projections of housing need, are sounding warnings to the effect that LPAs are facing “....unrealistic targets for the planning system alone to address”.

The central problem affecting the potential supply of housing is, we believe, the high cost of development land, so in addition to proposing greater flexibility in land-use controls, the Calon Cymru Network advocates the setting up of Community Land Trusts to exert continuing local control over land use and related values.

Could new land-use classes be devised to allow local communities and Community Land Trusts to help with the needs of their less affluent citizens and restore demographic balance? We believe they could.

Does the planning system need to be as overwhelmingly top-down as it is now? No, we are convinced of the need for a more bottom-up approach.

## LOW IMPACT DEVELOPMENT

The term “low impact development”, a widely understood concept relating to rural planning, was originally coined by Simon Fairlie of *Chapter 7*, the planning office of *The Land is Ours*. He points out that it would be more correct semantically to use the term “low adverse environmental impact” but the accepted definition for LID appears to be: “*Development which through its low negative impact, either*

*enhances or does not significantly diminish environmental quality”.*

This is to distinguish it from the term “sustainable development” which has a social component as defined at the Rio Earth Summit. LID relates more strictly to environmental matters, although the two concepts are profoundly linked.

A study of the potential for LID in Wales was carried out for the Countryside Council for Wales in 2002 by the University of the West of England Land Use Consultants. The recommendations in the final report were as follows:

- It is recommended that criteria-based and local planning policies be developed for LID in Wales.
- It is also recommended that planning obligations are used as the principal means of control for LID in Wales.

Some local authorities have now accepted the principles of LID and have included related policies in their Local Plans, the most notable being the Pembrokeshire Low Impact Policy ( No.52).

## **ONE PLANET DEVELOPMENT**

More recently, Planning Policy Wales has introduced the concept under the title “One Planet Development” in TAN 6 – “Planning for Sustainable Rural Communities” (4.15).

This national planning guidance adopts the Simon Fairlie definition and makes the following statements:

- One Planet Development is potentially an exemplar type of sustainable development. It should initially achieve an ecological footprint of 2.4 global hectares per person or less in terms of consumption with the clear potential of reducing to 1.88 hectares in time.
- It should also be zero carbon in both construction and use.

- One Planet Developments may take a series of forms. They can 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.

Chapter 7, the planning office of *The Land is Ours*, drafted the original 15 criteria for valid low-impact development and most, if not all of these have been adopted in Planning Policy Wales TAN6 as guideline conditions.

## THE PROPOSAL

We believe that there should be a presumption in favour of a defined “*Low-impact Development Zone*” adjacent to, or surrounding some of the settlements on the Heart of Wales Line. Some zones might be non-contiguous with existing settlements, depending upon local circumstances.

This zone, or cordon, would be defined by the individual Community Council which would also exercise development policy and control in consultation with the LPA.

Developments within the zone would be carried out in accordance with Community policies, as *One Planet* projects, mainly by Land Trusts and other social agencies. We describe the proposed development process in more detail on our website.

Planning consent would, in most cases, only be granted to not-for-profit enterprises and land values would be strictly controlled by the judicious use of the Community planning system. Most consents and transactions would be tied to legal agreements in order to ensure affordability in perpetuity. All development would need to comply with the guidelines set out in *Planning Policy Wales – Tan 6 2010 (4.15)*.

We suggest that, as a trial, low-impact development areas are identified and agreed in at least two of the Communities. These would be granted conditional status as experimental **ONE PLANET CONSERVATION and**

**DEVELOPMENT ZONES** and the Community Councils would take on the duties of planning and development control subject to a co-operation protocol with Powys CC.

Specifically, one of the suggested locations for these two trial projects is in the road / railway corridor between Builth Wells and Llandrindod Wells, the other is adjacent to Llanwrtyd Wells. One is situated in a central position on the HoW line and in an area suggested in the Preferred Strategy as a “heartlands hub”. The other is deeply rural but also on the railway line.

To summarise, the Calon Cymru Network proposal is founded upon three essential principles:

1. The use of Community Land Trusts ( CLT ) and other not-for-profit agencies to acquire and hold land / assets in trust for the community.
2. The practice of low-impact development and...
3. Localism, a system of planning and decision-taking at the lowest level, in partnership with the LPA.

We believe that by applying these principles it should be possible for CLTs, supported by ethical funders, to buy land at a fraction of the cost of sites allocated in the usual way, while maintaining sufficiently high incentive values to interest potential vendors.

By keeping land costs to a minimum and by building to standards that would eradicate fuel poverty and reduce fossil fuel dependency, genuinely low-cost, high-quality housing is actually achievable. Costs will also be kept lower than in conventional developers’ housing by designing for ease of self-building and self-finishing.

Preferred sites would enable development to meet high environmental standards on generally south-facing slopes with the benefit of low-trajectory winter sunlight and with easy access to existing settlements and railway stations by cycling or walking. All would be outside settlement development boundaries. The size of individual land parcels would range from smallholdings to small plots for starter homes and all

dwellings would need to meet Passivhaus or AECB Gold standards.

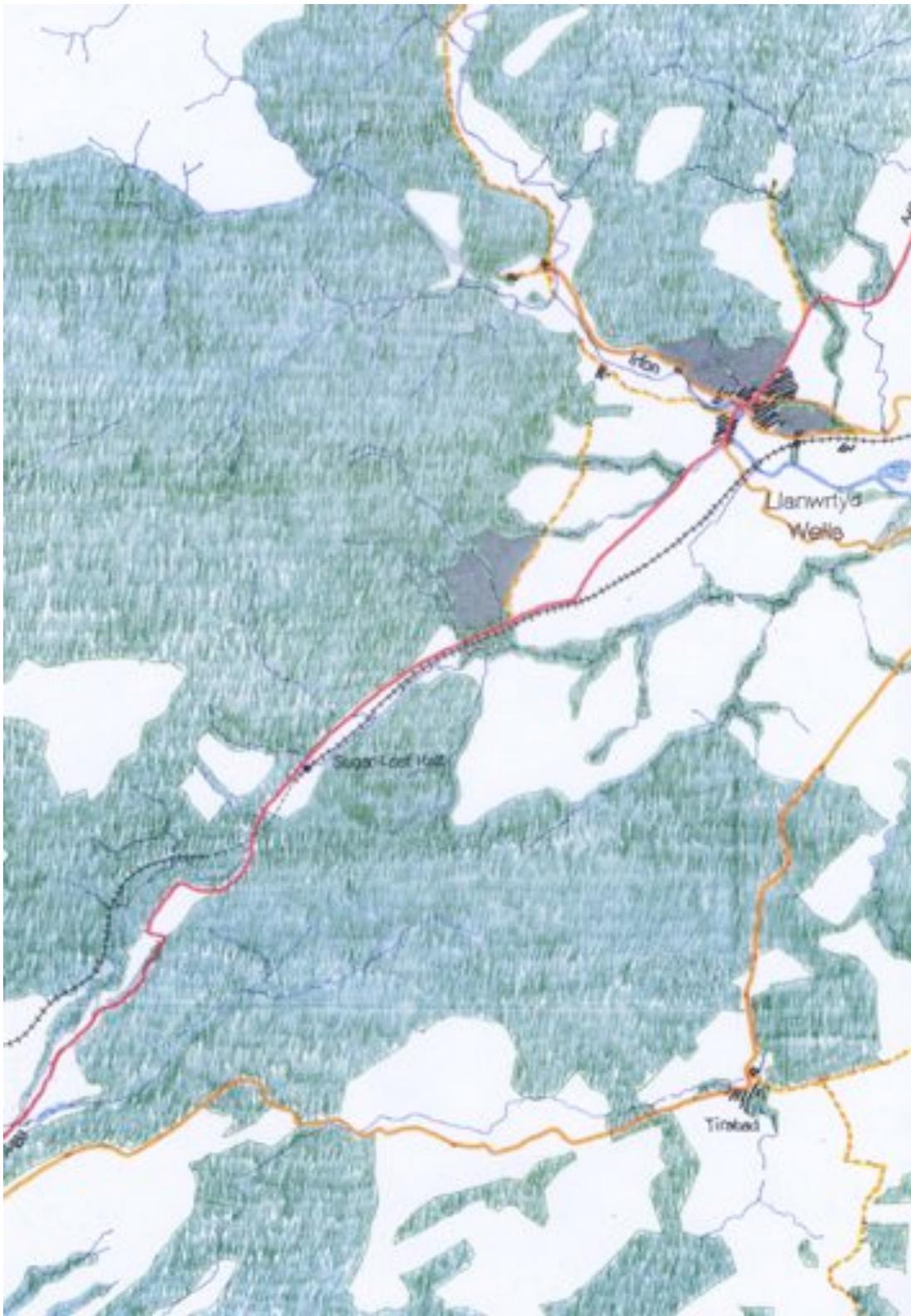
The infrastructure engineering techniques of low-impact, low-carbon construction, would focus on recycling, simplicity of demolition and the need to ensure minimal residual impact if land is returned to agriculture. The use of locally available materials for structure and cladding from local forests, along with natural insulation materials such as hemp and wood fibre. would be the normal practice.

Concrete-free foundations would be formed by rock filled gabions or by hardwood piles. Roads and sub-structures would use unbound (no cement) aggregates. Retaining walls would be of gabions or timber crib construction.

Rainwater run-off would be routed to recharge ground water, controlled through a system of ditches, ponds and swales. The LID concept is based upon self-sufficiency and a low dependence upon public utilities, so underground services would be minimized and laid in disciplined patterns to enable easy location for maintenance and removal. Sewage treatment would be by means of reed-bed and low-energy single dwelling package systems. Essential/emergency power and telecom distribution would be overhead.

The following map illustrates the Fforest Calon Cymru corridor concept, following the Heart of Wales Line from southern Carmarthenshire through central Powys to the Shropshire border.

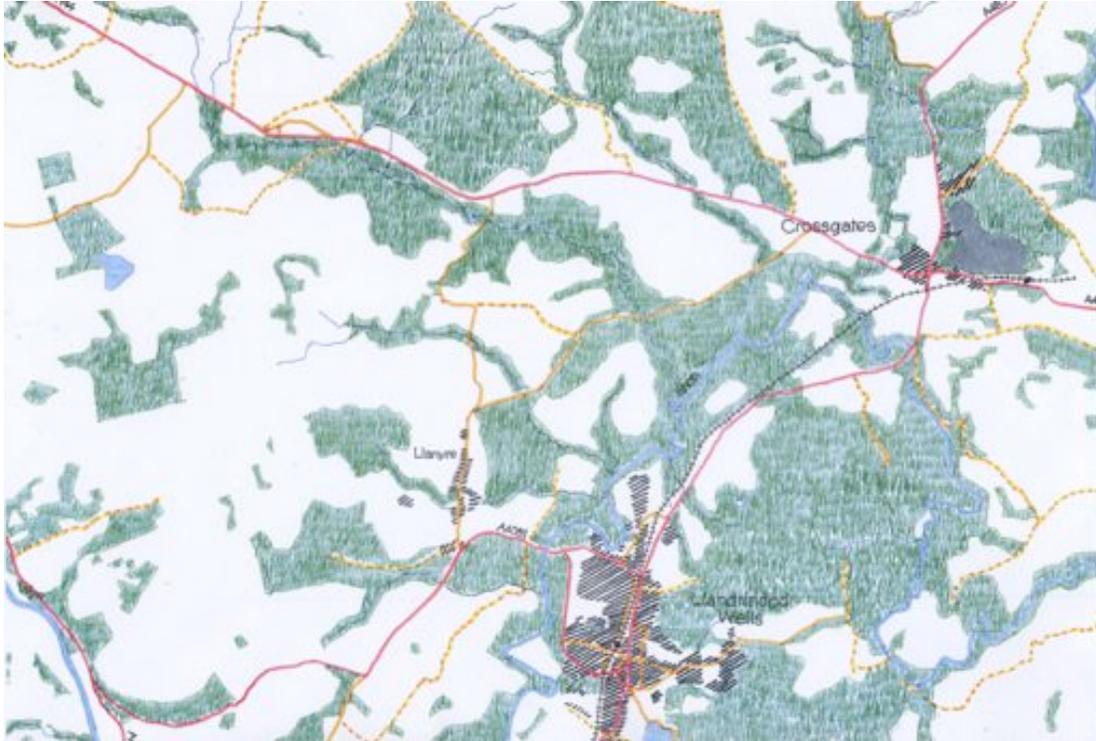




Grey shaded areas indicate suggested potential LID locations. Green areas show existing and expanded, mixed woodland.



Above and below, the road / rail corridor between Builth, Llandrindod, and Crossgates referred to in the Preferred Strategy as a “heartlands hub”.



ENDS

## Appendix 1 A LOW-IMPACT DEVELOPMENT EXEMPLAR

In the early 1970s a Kent-based architect / writer conceived a plan to create a family compound from his parents' plot on which their old stone cottage stood. The plot, of about an acre, was situated on the steep, south-facing escarpment of a river valley in the Welsh Marches.

The architect and his craftswoman wife applied for planning consent to erect a timber-framed, 2-bedroom house below the cottage, designed for self-building in a manner similar to that of Walter Segal. The two architects were close associates. They were refused consent by Hereford & Worcester Council for the following reasons:

- *“ The design is considered to be too modernistic.”*
- *“ The design is considered to be out of character with the Herefordshire vernacular.”*

The architect's response was to ask the Herefordshire planners what the local vernacular was deemed by the County Council to be, stating his opinion that stone and timber construction was entirely appropriate. The reply which came back from back from the planners was:

***“The vernacular tradition for houses in Herefordshire is 2-storey red brick.”***

Eventually in 1978, after lengthy wrangles with the LPA, the couple succeeded in getting planning consent, helped by strong support from the community which recognised the social benefits of their proposals. Work started the same year on the self-build project, using a couple of local tradesmen and with the family travelling down from Kent each weekend to work on the construction

The project took several years to complete to a standard where the family could move permanently from Kent, although the architect's attitude was that it was always a work-in-progress, never finished.

Now, some 30 years after taking occupation the site supports two dwellings, the architect's studio and three other workshops used for a family picture-framing business and various other craft enterprises. Much of the compound is given over to food production which is believed to be capable of keeping two generations virtually self-sufficient in fruit and vegetables.

Although the construction of the buildings on the site would not satisfy the much stricter energy-conservation requirements of 2012, this small enclave demonstrates very well the principles of low-impact development and has acted as a source of inspiration to many self-builders and architects. It continues to do so.



Above: the “new” house from the south.  
Following page: two views of the studio.



## Appendix 2 THE BACKGROUND

- One thousand years ago there were fewer than 345 million people on earth in total.
- Summer 2005 - over 6.45 billion on our planet. May 2011 - 6.96 billion.
- World population at 11.19am 17 January 2012, 7,016,153,485. ([www.worldometers.info/world-population/](http://www.worldometers.info/world-population/))

*“If there were only 100 million of us on the earth we could do almost anything we liked without harm. At 7 billion I doubt if anything sustainable is possible or will significantly reduce fossil-fuel combustion enough to halt global heating.”*

*James Lovelock*

For 7 billion people there are 5.75 acres of land each, but most of that is not cultivable, being desert, mountain, frozen or urban. In reality there is less than half an acre of cultivable land to sustain each person and little scope to expand the farmed area significantly. The size of that plot is shrinking at an alarming rate.

The world population in 2050 is forecast to exceed 9 billion although there may not be enough food for this figure to be reached.

The respected NASA climatologist James Hansen believes that with a rise in average global temperature of less than 2°C, rapid melt rates would cause the whole Greenland ice-sheet to disappear within 140 years. Most of New York would be drowned, central London would be flooded, Miami would disappear completely, as would Bangkok, Shanghai and Bombay. The coastlines of the world would look radically different.

The IPCC is basing its projections upon a range of scenarios, from 1.5° to 8°C rise in average temperature. ( Polar ice melts at 2.2 x average melt rate.)

Climate change is a classic “tragedy of the commons” prospect, where behaviour which makes sense at an individual level ultimately proves disastrous to society when repeated by everyone.

*“Our first imperative is to survive, but at some point we will face the appalling question of who we can let aboard the lifeboats? And who must we reject? There will be no ducking these questions for before long there will be a great clamour from climate refugees seeking a safe haven in those few parts of the world where the climate is tolerable and food is available.”*

*James Lovelock*



A low-impact woodshed and playroom - Imagined and built by Lucy Woodbutcher

