

**Response to DEHLG Consultation Call Feb 2008:  
Sustainable Residential Developments in Urban Areas  
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5th May 2008**

In general, we welcome these Guidelines and Urban Design Manual as they comprise a good outline of current best practice, an improvement on the current situation. But we fear that the Guidelines are too late;- they address an economic reality that is rapidly changing; they largely ignore pressures in rural areas and they are not ambitious enough to properly address the energy, climate and social challenges currently facing Ireland.

**1) The title and terminology used throughout does not acknowledge 'the village' as the most sustainable and appropriate rural settlement form**

The over riding flaw of this otherwise commendable document is illustrated in its title 'Sustainable Residential Development in Urban Areas' that appears to exclude rural villages. The impression is given that villages are not a rural housing typology but are instead, some kind of urban incursion into the rural area. The terminology used throughout perpetuates the widespread but mistaken belief that the isolated single house is the sole authentic rural housing model. It therefore conflates the farmhouse with associated farm buildings and land, a functional, appropriate and sustainable rural housing type, with the single house on the half acre site that has no economic connection with the rural hinterland. These non-functional dispersed dwellings are more properly classed within a suburban typology that is no longer sustainable in an energy constrained, climatically challenged and socially responsible future.

Dispersed rural houses contribute very little to a rural community; their agglomeration never reaches the threshold for local job creation; their car dependency is isolating both for their owners and their neighbours; their shopping is bought in the nearest big town bypassing the village. The children in these scattered houses have to be driven to 'play dates' with other children with consequences for their social and health development. Levels of loneliness and isolation have become a serious problem in Kerry and other parts of the West. Single houses, no matter how large and elaborate, contribute nothing to housing affordability for others as they are exempt from Part V of the 2000 Act. Instead they reinforce social exclusion by isolating themselves from the affordable and social housing provided by others in the cities, towns and larger villages.

Ireland already has a large legacy of non-functional, dispersed housing in the countryside that will shortly become redundant or at the very least, severely compromised in the face

of energy scarcity and/or measures to control GHGs as climate tipping points approach. As the population ages and energy cost rise, taxpayers will have the painful choice either to permanently subsidise public transport and other essential social services for these now elderly residents in isolated dwellings or, to cut future losses and encourage their abandonment as permanent homes. Some isolated dwellings may find use as ‘dachas’ where the garden is large enough to grow food but many will be worth little more than the value of their salvaged materials. Further additions of these future maladapted dwelling types should not be encouraged by any act or omission of the Department of Heritage Local Government and Environment.

It may be argued that the Department has already issued guidelines for Sustainable Rural Housing. These Rural Guidelines suffer from the same fault in that they do not acknowledge the rural village as the most appropriate and sustainable housing typology for rural areas but instead attempt to ration the numbers of an inherently unsustainable housing type by applicant origin and need. The premise that sustainable planning and development criteria varies according to location and/or applicant origin is highly contestable both from objective science and human rights standpoints.

The title and relevant references should read: **Sustainable Residential Settlement Development.**

## **2) The Guidelines ignores past experience that pressure for scattered housing in the countryside will grow in tandem with the credit squeeze and economic downturn.**

The record of earlier recessions shows that when there is a property downturn and associated credit squeeze, residential estate development output quickly drops considerably. However, single house development may not drop to the same extent and could even grow in absolute numbers. We enclose a copy of page 34 of the Construction industry Statistics of 1984, published by an Foras Forbartha shortly before it was unwisely abolished. It shows that the numbers of private single houses grew from 5,500 in 1976 to 10,500 in 1983 while private estate houses fell from 10,500 in 1976 to just over 7,000 in 1983. That is what happens in a credit squeeze;- developers cannot finance their projects because the banks regard development for speculative sales as highly risky. However, financing self builders for owner occupation, especially where the proposer has significant equity from the sale of a house, is seen as a much safer bet.

These guidelines may be too late for urban areas where density requirements require multiple units that will be difficult to finance, but they could still contribute to the sustainable development of rural areas where most investment will occur in the near future. It would be irresponsible to ignore entirely predictable new pressures for scattered one-off housing in rural area in this document. The Department should grasp the opportunity to foster a development process that can meet the demand for self-build in rural areas and, with capacity building for cooperative and co-housing development, in urban areas too.

### **3) The guidelines should support and offer guidance for new village settlements in rural areas - to the highest sustainability standards**

The compact walkable settlement is the single residential form that will deliver secure environmental, social and economic sustainability for residents in both urban *and rural areas*. Exceptions in rural areas are houses linked to intrinsically rural activities such as farming, recreation or energy generation dependant on local resources.

Neither is it always appropriate, as is implicitly suggested by the guidelines, to expand existing villages until their rural connection and character is lost. Many villages have been bloated beyond recognition by suburban cul de sac estates that have destroyed their rural character, adding impetus to the flight to the half acre site. Some, well sited villages have and will again transform successfully into fully featured towns but they can no longer be termed villages or be described as rural in nature.

The rural village is not a smaller version of a town or city, it is qualitatively as well as quantatively different. The rural village's function was, in the past, and will in the future, be linked to food and energy generation. But we do not argue here that all non-functional i.e. non agricultural and energy related housing in rural areas is always unsustainable. In fact, such housing can be more sustainable than similar housing in large cities if it is grouped in compact settlements that utilize local natural resources and allow for shared transport. It not reasonable to insist that all livelihoods in rural areas to be land-based. Villages were and can be again, services centres for their population and farming hinterland, and now further afield, with the advent of virtual communication.

Consideration should be given in the Guidelines for developing new villages to absorb or attract population to a rural area. These new villages can be small enough to preserve green views and provide authentic rural character for urban and rural residents alike with no need to ration along bloodlines. Ireland lost much of its historic complement of villages due to the malicious actions of Cromwell in the 17<sup>th</sup> Century and the well meaning actions of the Congested Districts Board and Land Commission in the 19<sup>th</sup> and 20<sup>th</sup>. Their loss, it can be argued, led to years of un-development and emigration to the point where some rural areas have been emptied of their non land-owning farming population. New eco-villages can redress that loss and contribute to securing a better future for Irish citizens. A proposal by Irish Rural Link for the development of pilot Eco villages that includes suggestions for planning guidelines is attached in the Appendix.

### **4) The Guidelines should include support for Framework Plans, a process that offers benefits to communities that formal Development and Area Plans do not.**

Because Framework Plans are voluntary, they are not subjected to the full rigours of consultation processes and local democratic scrutiny. This might be seen as a flaw but it is a sad but undeniable fact that the involvement of elected representatives can reduce the

outcome for the local community and common good. Elected representatives see their primary role as representatives for their landowning constituents. The wishes of a local community and/or the advice of the planners and other professionals is frequently overruled by councilors to alter or extend zoning in Area Plans at the last minute before adoption. Framework plans do not have to be passed by a Council vote, therefore they are somewhat protected from this kind of interference. Until legislation is introduced to strengthen local subsidiarity i.e. to prevent local councilors from overruling the plans of the local community that are agreed and approved by it and the Council professionals, the option of Framework Plans should be promoted strongly in these guidelines.

Framework Plans are especially important for small settlements in rural areas and within larger urban areas, that would have to wait a very long time to reach the top of the list for a formal Area Plan.

This guidance document should provide a template for self build in properly planned and serviced settlements i.e. Framework plans and two-stage development process to replace both the speculative estate and the one-off on the side of an existing public road.

A section of the ENLIVEN study that treats this issue is attached in the Appendix.

#### **5) Insufficient emphasis given to energy security and no attention to the advantages of local waste management/recycling for residential developments**

While some guidance is given for renewable energy, it is not sufficiently emphasized. In particular the advantages of rural locations for residential development is not understood.

No guidance is given to developers to explore alternative wastewater, sewage treatment and green waste management on site. Anaerobic digestion (AD) of organic wastes in residential settlements has been piloted and successfully operated in other European Member States. AD is an energy neutral to positive waste processing system and one that also produces a useful soil amendment by-product.

Dry organic and cellulosic waste can also be processed by pyrolysis, gasification or flash carbonisation to produce heat, electricity and biochar on site in smaller settlements thus also taking advantage of their heat output. Larger settlements with significant reliable waste streams should investigate second generation lignocellulosic processing for bio fuels and heat.

#### **6) No requirement/guidance to provide productive community gardens and/ or allotments as part of substantial residential developments is given.**

Food prices are likely to continue to increase as a result of fossil fuel peaks, ill-advised biofuels support measures and disruptions to climate systems. Urban dwellers are likely

to be affected more severely than those in rural areas. Their food security should be enhanced by urban food growing; allotments, community and school gardens and tied box schemes linked to local food procurement policies. Education and research and the protection of local resilient seed and animal varieties is also required. The relative power of landowners will increase but can be balanced by land value taxes and/or by land reform.

Even if the security and health benefits of community gardens and allotments for food growing is not accepted, the evidence of their usefulness in creating community cohesion is growing. Where space is not available for gardens in an urban residential development, the developer should be required to provide allotments on another plot within a limited distance. Local authorities should be compelled to make provision in development plan objectives for allotments and/or community gardens and to zone for them in Area and Framework Plans.

## **7) Guidance is required to encourage carbon capture in building construction**

The need for large scale action both to reduce emissions and to sequester carbon already in the air is extraordinarily urgent see the latest Hansen Report. The usual accounting for Co2 in construction measures energy and carbon is energy in use; best practice is moving to accounting for energy and Co2 embodied in the construction materials and process - but a further step is required. The net negative Co2 effects of building with timber and other organic plant material such as hemp and straw should be properly recognized in standards and labeling. Even 'temporary' buildings can be expected to endure for 30 years which easily covers the sensitive threshold period. The qualities of durability and ease of reuse of some materials such as steel and brick with lime should be reassessed in this critical context. Concrete should only be employed where no alternative is realistically possible. New construction systems, specifications and details must be quickly developed and disseminated within the construction sector. It must be noted however, that growing fibre for construction will impact on the land available for food.

- End –
- Appendix 1: Sustainable Rural Settlements
- Appendix 2: ENLIVEN Report Chapter 5
- Appendix 3: Construction Industry Statistics 1984, P. 34

## Appendix 1: SUSTAINABLE RURAL SETTLEMENTS

17/9/2007

Proposal from Irish Rural Link  
and Feasta  
(Foundation for the Economics of Sustainability).

### **Concept:**

Creation of new not-for-profit fully sustainable (Zero to Negative Co<sub>2</sub>) settlements in rural areas that will thrive under all likely future conditions, including fossil energy scarcity and responses to climate change.

### **Objectives:**

#### Social:

- Provide attractive, affordable alternative sites for self-build/development in rural areas as an alternative to remote sites along existing roads to locals.
- Ditto for non-locals.
- Provide attractive, affordable homes to buy or rent in rural areas as an alternative to suburban estate in rural towns and villages, for all income and age groups.
- Provide all services necessary for daily life within walking distance or by convenient shared/public transport in a rural area.
- Facilitate population growth especially in areas of continuing rural population loss.
- Foster contemporary, fully faceted Irish speaking settlements and communities.

#### Environmental:

- Provide secure, competitive energy infrastructure from local renewable resources in rural areas to serve residential, agricultural and business needs in partnership with local farmers and existing communities.
- Provide closed loop waste/material streams than generates valuable outputs in terms of energy, nutrients and GHG storage in rural areas with local farmers and existing communities.
- Provide excellent standard of healthy air, water, food and recreational, indoor and outdoor living environments.
- Protect existing and facilitate increase of local biodiversity within local townlands

#### Economic:

- Provide excellent IT connectivity to support global de-materialised knowledge-based services and products.
- Facilitate new rural enterprises and jobs based on local energy, food, biomaterial and non-material global products and services.
- Provide an innovation testing ground for high quality design, construction systems and robust details that will inform Irish standards generally.

## Process and Actions:

### **1. Minister to issue guidance to local authorities to provide for new not-for-profit sustainable settlements in rural areas (general agricultural zoning) in their Development Plans.**

Indicative wording might include;- “The local authority will positively consider planning applications by not-for-profit developers of ‘eco villages’ or sustainable rural settlements of up to 200 dwellings, subject to meeting the following site criteria:”

- Not under an SAC or other biodiversity, heritage or landscape designation.
- Located at least three miles from existing village or town.
- Adequate site size for all local needs i.e. food and energy, with reasonable provision for expansion. (Guide area 60 to 200 acres).
- Satisfactory ground and drainage conditions for development.
- Adequate local potable water - using very efficient systems
- Abundant renewable resources (other than wind) for energy generation i.e. animal wastes, forestry waste, biomass potential, hydro potential.
- Near medium voltage electricity lines

Desirable but not mandatory characteristics -

- Near an active railway rail line
- Near high capacity IT lines
- Fertile soil for horticulture
- On an existing crossroads /proto village site or derelict village site.

The development must demonstrate that it will be socially, environmentally and economically sustainable. At a minimum, the settlement must provide at 60 homes for socially mixed balanced (reflecting national profile) community with choice of tenure type. It should be net energy exporting and resolve all its waste on site. Embodied energy in construction and in-use combined should achieve net zero carbon status within a ten-year period. It must demonstrate that it has the potential to generate adequate incomes for a minimum 60% of its adult residents within the local area.

The promoters cannot profit directly from the land development. However, normal fees and salaries for services provided related to land development can be legitimately charged. All non-land development activities can be commercial (for-profit) in the normal way i.e. the energy infrastructure and services. Promoters can be a dedicated agency (see below), local Leader or Partnership Companies, Housing Association, Cooperative or a Community Development / Sustainability NGOs (properly constituted) and can act alone or in Partnership with the Local Authority, government development agency or/and private sector partner that will accept the not-for-profit land development criterion. Each proposal will be judged on its merits.”

- 2. The Minister to set up a new EcoVillage Development Agency under the auspices of Irish Rural Link to develop one or two pilot projects.**
  - The agency will have a board/steering group broadly representative of rural and urban community organisations, environmental sustainability NGOs, technical experts in the fields of sustainable energy/waste/food/shelter technology and systems.
  - The executive will be tasked to identify suitable locations for the pilot developments, develop feasibility studies and business plans, identify and overcome regulatory, legal and other obstacles, negotiate land purchase agreements, write briefs for the design development phase, obtain all necessary permits, manage the tender and construction process, manage the outreach, promotion and sales for the project and disseminate the learning experience to a broader audience.
  - A once off rolling development fund will provided to purchase land, fund the design phase and provide sufficient equity with further borrowing for the construction work. (circa 3 million euro)
  - Extra over annual funding will be provided for the innovative and dissemination work of the Agency (circa 200,000 pa for 4 years).
  - Following the pilot phase, the role of the Agency will change to providing advice and services to eco-village developers as described above.

In addition to the actions specifically targeted above, incentives for distributed energy infrastructure and service companies and recognition of agricultural practices that capture Green House Gases are desirable to provide a positive economic environment for eco-village development. These might include.

- 3. Capital allowances for renewable energy facilities, similar to those for property in the past, would stimulate a shift of investment from unproductive property into productive energy that would assist Irish competitiveness and increase resilience to interruptions of fossil fuel supply. It would also provide a secure pension income for an aging population.**
- 4. Energy Service Companies (ESCOs) will be needed to balance local energy consumption and production and manage the interface with the distributed and transmission electricity grids.**
- 5. A scheme to reward Co2 sequestration in soils;– conserving existing carbon by no-till agriculture and in forests but more importantly, increasing Co2 sequestration by the application of ‘biochar’ would stimulate production of energy from organic and biomass and provide a much needed income for farmers.**

## **Why Not Develop Existing Rural Villages as Sustainable Settlements?**

Most existing towns and many villages are already designated for development directly or implicitly in the development plan. That means that landowners have expectations of very high prices for their land. That price is based on conventional non-sustainable development where infrastructure and services are provided by the others – mainly the local authority. Landowners will not sell land at a price that allow an eco-village developer to provide a fully featured sustainable settlement of sites and houses that can be afforded by ordinary people.

Cloughjordan was bought 4 years ago for a relatively modest price for development land but a high price relative to agricultural land. No electricity generation is included and there is limited processing of human wastes on site due to cost constraints. Even so, the eco village community are finding it hard to keep the price of the developed sites low enough for the original members. This model is a once-off and is unlikely to be replicated.

Section 48 and 49 of the 2000 Act require levy payments on new construction to help offset water, waste and road provision, but they are a fraction of their value to the landowner. They cannot be used to recoup the costs from existing residents who will also enjoy access to the new infrastructure and services. There are no local taxes such as a land value tax that would refund the local authority or any developer for new services that add value to the houses or lands of a pre existing settlement. The levies expressly exclude provision for schools. Community facilities can be charged under section 48 /49 or required to be provided as a planning condition in large schemes; but these have never been required for rural villages.

Furthermore, many County Councils such as Offaly, discourage compact development that would require shared sewerage treatment facilities and instead zone for extremely low densities that allow only for septic tank drainage. That means that district heating linked to combined heat and power generations systems are impossible and much of the advantages of a rural site with abundant renewable energy resources are lost.

As new eco villages are developed, existing village and town communities will see how they disadvantage themselves by their land price expectations and lack of cooperation. Local authorities will see the competitive advantages that rural energy resources can give a community living within a compact footprint and will ensure that their Area Plans provide the same for existing villages and towns. Further reforms such as annual land value taxes may be needed before existing settlements can fully match the benefits as new eco villages on green field sites.

But none of these reforms are likely without the example and competition from new eco villages.