

Engineering the West Team's

Submission to

Department of Housing, Planning, Community and Local Government

in relation to the

Draft National Planning Framework

November 2017



Executive Summary

The Engineering the West Team welcomes the Vision for Ireland in 2040 set out in Section 1.1 of the draft NPF.

it is essential to recognise that Ireland is not in fact on a path of economic, environmental and social progress. **Ireland must first establish** the right path **before it can continue**!

The NPF should set out in clear and understandable terms what is meant by "sustainable" and "sustainability". It should include an inspiring vision of what a "sustainable" Ireland will look like in 2040.

There is insufficient understanding of the importance of the inter-relationship between land-use planning and transport in achieving sustainable development. For sustainability the main objective should be to reduce the need to travel in the first place by providing places where people can live and work without the need for travel.

It is critically important that responsibility for implementation of the NPF rests with one body which cannot be circumvented for short term political gain.

A framework such as One Planet Living should be adopted to ensure that all development carried out under the NPF is socially, environmentally and economically sustainable.

Planning Authorities should **proactively engage** with the people within their functional areas in developing ambitious and inspiring visions for their cities/counties and towns and villages.

All planning authorities should prepare masterplans up to, and preferably beyond, 2040 for their own functional areas detailing how the projected increase in population and employment will be accommodated in their cities, towns and villages.

Regional assemblies and local authorities must be adequately resourced to enable the proper implementation of the NPF.

The N5 national primary route which serves the heart of the West Region should be upgraded to an acceptable standard.

Deliver high speed broadband without further delay to offset the disadvantage that is the remoteness of rural areas in the West Region.

Resource Galway City Council's planning department adequately to enable the proper implementation of the NPF and to enable it to **proactively engage** with the people within its functional area on Local Area Plans, Masterplans and Framework Plans.

Address as a matter of urgency Galway City's worsening chronic traffic congestion.

Engineering the West Team's

Submission on the 'Draft NPF'

Table of Contents

Se	ction	Planning Framework Consultation 1 Engineers Ireland West Region
Ex	xecutive Summary	i
1.	Introduction	1
1.1	Draft National Planning Framework Consultation	1
1.2	Introduction to Engineers Ireland West Region	
2.	Engineering the West to 2020 -Reinventing our Region	2
3.	Locations where OPL principles are being implemented	
4.	Submission on the 'Draft National Planning Framework'	4
4.1	In relation to Ireland nationally	4
	4.1.1 Concerns	5
	4.1.2 Recommendations	6
	4.1.2.1 Implementation Body	6
	4.1.2.2 Adopt a Sustainability Framework	6
	4.1.2.3 Individual Planning Authority Masterplar	ns 7
	4.1.2.4 Resources	7
4.2	In relation to the West Region specifically	8
	4.2.1 Concerns	8
	4.2.2 Recommendations	
4.3	In relation to Galway City Specifically	8
	4.3.1 Concerns	8
	4.3.2 Recommendations	9
Aı	ppendix A - Members of the Engineering the West Team	12

1. Introduction

1.1 Draft National Planning Framework Consultation

The Engineering the West Team welcomes the opportunity to make a submission in relation to the Draft National Planning Framework.

In our Report 'Engineering the West to 2020 – Reinventing our Region', discussed in Section 3 below, we recommended the adoption of a sustainability framework for development and our work in developing this Report has informed our submission.

1.2 Introduction to Engineers Ireland

Engineers Ireland is the operating name of the Institution of Engineers of Ireland which was founded in 1835. It is the largest professional body in Ireland with a membership of over 23,000 members from all engineering disciplines who are employed in both the private and the public sector. Its primary role is to be the representative voice of the engineering profession in Ireland.

It is organised on both a divisional and regional basis. Engineers Ireland West Region represents 2,300 members located in counties Galway, Mayo & Roscommon.

As engineers our work impacts on the quality of life of every individual in such diverse ways as:

- generation and distribution of electrical power,
- design of renewable energy generators
- exploration for and production of oil and gas
- design and construction of motorways,
- design and construction of piers and harbours
- design of public transport facilities,
- design and construction of hospitals and schools,
- provision of potable drinking water,
- design and manufacture of stents, artificial joints, prostheses, advanced surgical robotics, diagnostic and life support equipment,
- design of software solutions,
- design of Information and Communication Technologies
- production of pharmaceuticals,
- providing third level education, research and innovation.

Engineers also play an important role in mitigating the negative anthropogenic impacts on the environment by:

- the design of waste water treatment plants,
- the design of systems for the treatment of emissions to air which have the potential to cause air pollution,
- the design of recycling equipment and facilities,
- the development of renewable energy technologies.
- the design of flood relief and coastal protection schemes

2. Engineering the West to 2020 - Reinventing our Region

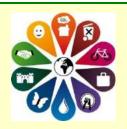
For a considerable period of time, Engineers Ireland West Region has had a strong focus on its contribution to the development and sustainable growth of the West of Ireland. Motivated by this ambition, a body of work was commissioned in which there was a critical assessment of the Region in terms of its resources and the enormous potential that exists. This work led to the publication of a Report in May, 2011 entitled "Engineering the West to 2020 – Reinventing our Region".

Our vision is to foster the growth of

An agile and sustainable West Region, benefiting from world class industrial clusters, a vibrant economy and our rich natural and cultural heritage.

The Report, through a series of key recommendations, spells out how this vision can be achieved. This enables Engineers Ireland West Region to identify, promote and support all those activities necessary to realise that vision, advise and support local and central government and the development agencies in their work towards achieving the potential of the West Region. Given the current pressure on public finances it is more important than ever that the scarce resources are invested in the right projects at the right time so as to have the maximum positive impact on the sustainable development of the West Region.

The report recommends the adoption of a sustainability framework based on the ten **One Planet Living**® principles. One Planet Living is a sustainability framework that was developed by BioRegional and the World Wide Fund for Nature (WWF) to enable people and organisations to live and work within a fair share of our planet's resources.



The basic concept behind One Planet Living is to encourage people to live within an ecological footprint that can be supported by the planet. At present if everybody in the world had the same ecological footprint as the inhabitants of Europe, three planets would be needed to support the global population.

The core of the framework is the use of ten guiding principles to help individuals and organisations to examine the sustainability challenges that they face, and to develop appropriate solutions. The ten guiding principles which One Planet Living promotes are outlined and briefly explained below:

- **Zero Carbon Energy:** Making buildings and manufacturing energy efficient and supplying all energy with renewables.
- **Zero Waste:** Reducing consumption, reusing and recycling to achieve zero waste and zero pollution.
- **Travel and Transport:** Reducing the need to travel, encouraging walking and cycling and low carbon transport.
- **Materials and products:** Using materials from sustainable sources and promoting products which help reduce consumption.

- **Local and Sustainable Food:** Promoting sustainable humane farming and healthy diets high in local, seasonal organic food and vegetable protein.
- **Sustainable Water:** Using water efficiently, protecting local water resources and reducing flooding and drought.
- Land and Nature: Protecting and restoring land for the benefit of people and wildlife.
- **Culture and Community:** Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.
- **Equity and Local Economy:** Creating safe, equitable places to live and work which support local prosperity and international fair trade.
- **Health and Happiness:** Encouraging active, sociable, meaningful lives to promote good health and well-being.

See the following link to the ten One Planet principles:

http://www.bioregional.com/wp-content/uploads/2017/01/One-Planet-Principles-guide-Jan-2017.pdf

Our comments in the following sections are informed by the "Engineering the West to 2020 – Reinventing our Region" report and the key recommendations therein. The full report is available at the following link;

http://www.engineersireland.ie/EngineersIreland/media/SiteMedia/groups/regions/west-region/EIWR2020The%20Bookev10.pdf

The Engineering the West Team is a sub-committee of Engineers Ireland West Region's committee which is charged with advising the committee in relation to the sustainable development of the West Region.

3. Locations where OPL Principles are being implemented

There are currently seven fully endorsed One Planet Communities in Australia, Luxembourg, Portugal, the UK, and the USA. They have a rigorous One Planet Action Plan with targets and strategies for each of the 10 One Planet Principles which have been reviewed as part of Bioregional's endorsement process and have made a commitment to monitor performance until 2020. The seven One Planet Communities are;

- Grow Community, Asani
- One Brighton, Crest Nicholson BioRegional Quintai
- Sonoma Mountain Village, Codding Enterprises
- One Gallions, BioRegional Quintain Ltd
- Mata de Sesimbra, Greenwoods Ecoresorts
- WestWyck EcoVillage
- Hollerich Village, Schuler Group
- Villages Nature, Euro Disney and Groupe Pierre & Vacances Center Parcs
- North West Bicester, A2Dominion- the UK's first eco-town

North West Bicester in Oxfordshire is a particularly suitable exemplar for Ireland. It is being planned to accommodate 6,000 homes. This is less than twice the "3,385 units" envisaged for Ardaun in Galway. The first phase of 393 highly energy efficient homes in Elmsbrook, known as the Exemplar, commenced in April 2014. The first residents moved in in 2016. It has been awarded Bioregional's One Planet Living status. The development includes a school, a pub and a community centre. In August 2017 Cherwell District Council commenced the construction of a new zero carbon business centre to accommodate up to 125 office workers supported by European Regional Development Funding. We have strongly recommended in our submission on the draft LAP for Ardaun that Galway City Council look to this as an exemplar for the development of Ardaun – see the following link:

http://nwbicester.co.uk/the-first-phase/introducing-exemplar/

There are other communities around the world in South Africa, China, Australia, and Canada where the One Planet Principles are being used to guide their approach to sustainability but they have not been granted endorsed status by Bioregional.

4. Submission on the National Planning Framework

4.1 In relation to Ireland nationally

The Engineering the West Team welcomes the Vision for Ireland in 2040 set out in Section 1.1 of the draft NPF.

The draft NPF correctly recognises that current development trends ("business as usual") will only lead to a degraded environment, more social disadvantage and inequality.

We welcome:

- the commitment to target "a level of growth in the country's Northern and Western and Southern Regions combined to match that projected in the East and Midland Region which includes Dublin)".
- the commitment to the "compact growth" of our cities as opposed to the urban sprawl which has been the result of planning policies to date. The targeting of 40% of future housing development to happen within and close to existing built-up areas is welcome.
- National Policy Objective 3c that "at least 50% of all new homes in the five cities and immediately adjoining suburban areas of Dublin, Cork, Limerick, Galway and Waterford would be delivered within the built-up envelope of existing urban settlements."
- the commitment to "progressive development of the Atlantic Economic Corridor from Galway northwards by completion of the M17/M18, upgrading sections of the N17 northwards, where required and upgrading the N15/N13 link."

4.1.1 Concerns

There are inconsistencies in the draft NPF. For example, both in the Preface and in High-Level Objective 1, it is stated "that in addressing future change, Ireland will continue on a path of economic, environmental and social progress that will improve our prosperity, sustainability and well-being". Such statements undermine the opportunity for citizen engagement, in a similar way the slogan "keep the recovery going" did. How do the homeless, or those waiting on trolleys in our hospitals, relate to improving prosperity and well-being? The is much more to sustainability than meeting our 2020 emissions targets. We respectfully suggest that it is essential to recognise that Ireland is not in fact on a path of economic, environmental and social progress. **Ireland must first establish** the right path **before it can continue**!

The words "sustainable" and "sustainability" are liberally used throughout the draft NPF but there is no definition of what is meant by sustainable. It is used widely in terms of "sustainable growth" which can mean growth sustained over a period time – this does not mean however that growth will be environmentally, socially or economically sustainable in the proper sense of growth within the capacity of planet. The NPF should set out in clear and understandable terms what is meant by "sustainable" and

"sustainability". It should include an inspiring vision of what a "sustainable" Ireland will look like in 2040.

There is no sustainability framework put forward in the draft NPF to ensure that development is sustainable. Without a sustainability framework it will not be possible to achieve the socially, environmentally and economically sustainable development of Ireland. There is no mention at all of the government's own sustainability framework, "Our Sustainable Future - A Framework for Sustainable Development for Ireland", launched in June 2012 following a public consultation process and presented at the Rio Earth Summit. Preparing a National Planning Framework without the integration of such documents is, unfortunately, business as usual – just lip service.

Regional assemblies and local authorities, in some instances, are neither demonstrating the required leadership nor do they appear to be adequately resourced to implement the NPF and achieve an environmentally, socially and economically sustainable Ireland by 2040.

We are not convinced that there is sufficient understanding of the importance of the inter-relationship between land-use planning and transport in achieving sustainable development. For sustainability the main objective should be to reduce the need to travel in the first place by providing places where people can live and work without the need for travel. After that, if people need to travel they should have attractive, sustainable options to walk, cycle and/or use public transport. They should not be dependent on cars for transport.

4.1.2 Recommendations

4.1.2.1 Implementation Body

It is critically important that responsibility for implementation of the NPF rests with one body which cannot be circumvented for short term political gain. It must be appropriately resources and have adequate powers to ensure that the NPF can be delivered. We must not have a repeat of something like the decentralisation of government departments which completely undermined the National Spatial Strategy.

4.1.2.2 Adopt a Sustainability Framework

The Engineering the West Team recommends that a framework such as One Planet Living be adopted to ensure that all development carried out under the NPF is socially, environmentally and economically sustainable. In fact input from bodies such a Bioregional, the developers of One Planet Living, should be sought before the National Planning Framework is finalised. Adopting such a framework will define in a very understandable and easily communicated way what is meant by "sustainable" and "sustainability" and will be inspiring for individuals and communities throughout Ireland.

4.1.2.3 Individual Planning Authority Masterplans

Each local authority should formally consider if their city/county, towns and villages should become truly sustainable. If the answer is yes, the One Planet Living framework, for example, will provide the means by which to achieve it. It will require a step change in how local authorities operate. Local authorities are ideally positioned, provided they are adequately resourced, to bring together all the stakeholders, to develop together a vision for sustainable cities/counties, towns and villages and to lead the process. The Engineering the West Team is already convinced that a framework such as One Planet Living offers a route to a truly sustainable Galway, the West Region and Ireland and stands ready to play a positive role in achieving it.

Planning Authorities should **proactively engage** with the people within their functional areas in developing ambitious and inspiring visions for their cities/counties and towns and villages.

All planning authorities should prepare masterplans up to, and preferably beyond, 2040 for their own functional areas detailing how the projected increase in population and employment will be accommodated in their cities, towns and villages and demonstrate how those masterplans will achieve socially, environmentally and economically sustainable development. In addition such masterplans need to be rigorously assessed independently to ensure they comply fully with the objectives of the NPF.

4.1.2.4 Resources

Regional assemblies and local authorities must be adequately resourced to enable the proper implementation of the NPF and to enable planning authorities to **proactively engage** with the people within their functional areas on Development Plans, Local Area Plans, Masterplans and Framework Plans. Regional assemblies should be given the necessary authority to ensure that local authorities' plans are consistent with regional plans.

Each local authority should employ an appropriately qualified and experienced Senior Architect to assist in creating a future vision for a sustainable built environment in their cities, town and villages. The positive influences of local authority architects are to be seen in Co. Mayo (Westport Town being an exemplar) and Limerick.

Each local authority should employ an appropriately qualified and experienced social scientist to assist in designing and developing places which will be attractive to people to work and live in sustainably.

4.2 In relation to the West Region specifically

4.2.1 Concerns

There is no mention of the N5 national primary route which serves the heart of the West Region.

There have been many false dawns already in following more than half a dozen launches of unambitious National Broadband Strategies in as many years which have failed to deliver.

4.2.2 Recommendations

Galway, Mayo and Roscommon Local Authorities should commence the process of assessing how the projected increase in population can be sustainably accommodated in the towns and villages in their functional areas. They should be appropriately resourced to enable them to do so effectively.

The N5 national primary route which serves the heart of the West Region should be upgraded to an acceptable standard. The section of the N5 from Westport to Turlough is in planning and should continue through to tender and construction as expeditiously as possible. The section of the N5 from Turlough to Bohola is currently suspended. The project should be recommenced and move to the planning stage.

The N17/N15/N13 Northwards from Tuam represents an opportunity to hugely improve north-south connectivity, building on the motorway connectivity currently in place from Limerick to Tuam and the planned M20 linking Limerick to Cork. If an Atlantic Economic Corridor is to develop this connectivity will be critical to it.

We welcome the recognition in the draft NPF that "for rural Ireland broadband is essential enabling infrastructure." It needs to be delivered without further delay to offset the disadvantage that is the remoteness of rural areas in the West Region.

4.3 In relation to Galway City specifically

4.3.1 Concerns

We agree that a number of regeneration projects could be delivered which would provide an opportunity for "new development to extend an intensify the City Centre including the Station, Docks and Headford Road areas." There are other opportunities at Eyre Square East Quarter, the Inner Harbour, the Harbour Lands and Nuns' Island which should also be recognised as opportunities in the NPF. All of these offer opportunities to intensify housing and employment development. There are opportunities to create communities who can enjoy life-long, liveable and living city centre areas with a reduced need to travel. However, there is no Local Area Plan for the city centre areas. Representatives of Galway City Council have stated publicly the City Council does not have the resources to prepare a Local Area Plan. This leaves the door wide open to developer-led planning of

these areas.

Although City Development Plan 2017-2023 provides for a LAP for the Headford Road area we are concerned that developer led planning may commence prior to the preparation an adoption of a statutory LAP for this area.

In a presentation entitled "Planning for a Different Future" to the Sustainable Communities and Housing Conference in 2009, the chairman of An Bord Pleanála at that time, John O'Connor, having reflected on the lessons of the Celtic Tiger era, said that the "future must be different". One of the means John O'Connor proposed to achieve a different future was that there must be "properly adopted LAPs [Local Area Plans] rather than 'frameworks' or developer 'master plans'".

We have serious concerns about the sustainability of the development of Ardaun, based on the recent draft Local Area Plan, unless the infrastructure to support sustainable transport modes, walking, cycling and public transport is put in place **before the first homes are occupied**.

Galway City Council has not replaced its Senior Executive Architect since she took up a promotional position as Senior Architect with Limerick City and County Council in August 2016.

Galway is being choked by traffic congestion which is doing irreparable damage to its national and international reputation, endangering the continuance of multi-national businesses, making it very unattractive for future Foreign Direct Investment, not to mention damaging people's health and well-being and impinging very negatively on their quality of life. There has been an urgent need for many years to address the worsening chronic traffic congestion but progress on this has been completely inadequate. Galway City and County Councils, Transport Infrastructure Ireland and the National Transport Authority have, for several years now, demonstrated an inability to effectively address the problem.

The practice until now of preparing a City Development Plan every 6 years ("business as usual") has failed to deliver a socially, environmental and economically sustainable Galway city. We need masterplan for Galway City in 2040 and beyond which will identify where the increased population of 124,000 will live and work, where the additional social infrastructure will be and how it can be served by sustainable transport modes of walking, cycling and public transport. In planning the future Galway City the need to travel must be reduced by enabling people to live and work in close proximity.

4.3.2 Recommendations

We welcome the recognition that key enablers for the future growth of Galway city are;

- "Improving access and sustainable transport links to, and integration with, the
 existing employment areas to the east of the City at Parkmore, Ballybrit and
 Mervue."
- "Provision of a City wide public transport network, with enhanced accessibility between existing and proposed residential areas and the City Centre, third level

institutions and the employment areas to the east of the city."

- "Development of a strategic cycleway network with a number of high capacity flagship routes."
- "Delivery of the Galway City Ring Road."

Because Galway is confined by Galway Bay to the South and Lough Corrib to the north it has tended to develop in a linear fashion. Due to poor planning decisions in the past 40 years or more residential development has tended to be more on the west side of the city while the industrial employment opportunities have been concentrated on the east side of the city. Its development has not been compact enough to take advantage of public transport. This lack of compactness can be addressed to a considerable extent by concentrating on the development of infill sites initially rather than developing green field sites on the fringe of the city such as Ardaun.

The Galway Transportation Strategy, published in August 2016, gave some consideration to the feasibility of a Light Rail Transit system but did not recommend its adoption. If the target of a growth in the population of Galway of 44,000 (55%) by 2040 is to be achieved, and the development of the city centre and infill sites is to be given priority, this may well make a Light Rail Transit system the preferred option for Galway in 2040. The development of Galway between now and 2040 and beyond should envision a transport corridor for a Bus Rapid Transit or Light Rail Transit system in Galway. A transit corridor should be identified along which there are nodes (stops) identified around which development would be planned and encouraged.

There is an opportunity given the adjacent regeneration sites in Galway City centre, including the Inner Harbour and Ceannt Station Lands, Eyre Square East Quarter and the remaining Harbour lands to develop a mixed-use centre city core, with significant residential elements, where people can live and work in vibrant city centre without being car dependent. These areas are centred on the Ceannt Station railway terminus, Bus Éireann's bus terminus and the Coach Station at Fairgreen Road.

There is also the regeneration site on Nuns' Island much of which is owned by NUI Galway, which could accommodate, innovative start-up business opportunities, student accommodation and other residential accommodation in the heart of the city taking particular advantage of the site surrounded by water, canals and the River Corrib. This would help to further integrate the University into the city.

A number of regeneration projects could be delivered which would provide an opportunity for "new development to extend and intensify the City Centre including the Station, Docks and Headford Road areas." There are other opportunities at Eyre Square East Quarter, the Inner Harbour, the Harbour Lands and Nuns' Island which should also be recognised as opportunities in the NPF. All of these offer opportunities to intensify housing and employment development. There are opportunities to create communities who can enjoy liveable and living city centre areas with a reduced need to travel.

We are of the view that these centre city lands present a once in a century opportunity to develop an exemplary, 21^{st} century, vibrant, living and liveable sustainable city centre where people can work and live happy and fulfilled lives. There should be an ambitious,

imaginative vision for Galway City, worthy of its rich heritage and culture, its inclusion in the UNESCO Creative Cities Network, its receipt of the European Green Leaf Award for 2017 and it's designation as European City of Culture 2020. The public must be given the opportunity to participate in shaping that vision to meet the needs and aspirations of current and future generations.

Galway City Council should prepare a masterplan up to, and preferably beyond, 2040 for its own functional area detailing how the NPF will be implemented in Galway and demonstrate how those masterplans will achieve socially, environmentally and economically sustainable development. The masterplan should plan how the increased population of 44,000 by 2040 will be accommodated. Given that increase in population, it implies there could be approximately an additional 30,000 associated jobs. The masterplan needs to consider where the employment opportunities will be relative to where the residential accommodation will be so as to reduce the need to travel in the first place, how people can access their places of employment, education, etc., by walking and cycling and how best public transport can serve this growth.

Galway City Council's planning department must be adequately resourced to enable the proper implementation of the NPF and to enable the planning authority to **proactively engage** with the people within its functional area on Local Area Plans, Masterplans and Framework Plans.

Galway City must have a City Architect, at Senior Architect level, to assist in creating a future vision for a sustainable built environment in the city.

Galway City Council should employ an appropriately qualified and experienced social scientist to assist in designing and developing places which will be attractive to people to work and live in sustainably.

Appendix A – Engineering the West Team

The following are the members of the Engineering the West Team, a sub-committee of Engineers Ireland West Region, which prepared this submission;

Dr Finbar Dolan, Chartered Engineer

Dr Annette Harte, Chartered Engineer, Department of Civil Engineering, NUI Galway

Brendan Mulligan, Chartered Engineer

Professor Padraic O'Donoghue, Chartered Engineer, Department of Civil Engineering, NUI Galway

Justin Tuohy, Chartered Engineer, Director, Integrated Project Management

Queries or comments in relation to the submission may be addressed to the Engineering the West Team by contacting;

Brendan Mulligan

Mobile:	
Email:	