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In the opening article of this issue of *Working Notes*, Donal Dorr writes that at the heart of the transformation which Pope Francis calls for, in response to the ecological crisis, is the replacement of present-day economics – in which the market and the pursuit of profits dominate – by an 'economic ecology', which takes proper account of ecological considerations. Donal Dorr suggests there are three particularly strong statements in the encyclical. These are: the need to reconsider the assumption of continuing economic growth and even to acknowledge that 'the time has come to accept decreased growth in some parts of the world'; the need to move away from reliance on fossil fuels; the need to recognise the global inequity inherent in the environmental crisis, such that the developed world now owes an 'ecological debt' to the developing world, because it is the former which has played the predominant role in generating ecological problems but it is the latter which is forced to bear the greatest impact, though least able to do so. Donal Dorr suggests these statements pose a significant challenge to political leaders, who for the most part have been unwilling to face up to, and to act upon, the issues involved.

Writing about the UN Climate Change Conference in Paris in December 2015, John Sweeney notes the high expectations for what may be achieved at these negotiations. He says that the preparatory work for the Paris conference has been strengthened by the publication of the 2013 Fifth Assessment Report of the Intergovernmental Panel on Climate Change, which set out the scientific evidence on global warming and emphasised the role of human activity in generating this. He highlights the significance of Pope Francis' encyclical in terms of making

'the moral and ethical case' for international action on climate change. However, John Sweeney also points to the reality that annual climate conferences over the past twenty years have failed to produce a global agreement capable of achieving the reduction in carbon emissions necessary to avoid dangerous climate change. He concludes that the most likely outcome of the Paris conference will be 'an agreement that will be marketed as a political triumph, but fall short of the radical change of hearts and minds necessary to protect the world from 2°C warming over the next four decades'.

An important feature of Pope Francis' encyclical is its call to individuals and civil society organisations to do whatever they can to respond directly to the environmental crisis. In this issue of *Working Notes*, six church communities in Ireland outline the ecology work they have been carrying out for several years. These articles reflect a commitment to taking practical action – for example, minimising the use of resources; reclaiming and replanting garden areas; incorporating environmentally friendly features into building projects – and to including environmental concern in prayer and liturgy. The articles also describe education and awareness-raising aimed not only at encouraging changes in lifestyles, but developing greater consciousness of the political dimensions and global justice aspects of the environmental crisis.

In the final article of this issue, Gerard Doyle suggests that social enterprises – that is, enterprises which have as their core aim the realisation of a social objective, rather than the maximisation of profit – can make an important contribution to addressing environmental issues. Focusing on social enterprises engaged in the production of renewable energy, he argues that the experience of other countries shows how such enterprises have the potential to play a significant role in meeting the energy needs of local communities and in assisting the transition to a low carbon economy. He suggests that the Irish State needs to place greater value on the role of social enterprises in providing renewable energy and that it should prepare an overall strategy for the development of this sector.

Ecological Economics and Politics in the Ecology Encyclical

Donal Dorr

The ecology encyclical, *Laudato si'*: *On Care for Our Common Home*, issued by Pope Francis in June 2015, is a very wide-ranging document. It is a call for 'an ecological conversion' in the areas of economics and politics – and also in the spheres of spirituality, theology, culture, and education. In this article, I shall focus only on the pope's challenge to governments and to all of us to establish an ecologically oriented economics and politics.¹

Ecological Economics

At the heart of the transformation called for in the encyclical is the replacement of the present-day market-dominated economics by a truly ecological economics – or what Francis calls an 'economic ecology' (§ 141). He is calling for a rejection of the 'deified market' (§ 56). This is a term which he later explains by referring to 'a magical conception of the market, which would suggest that problems can be solved simply by an increase in the profits of companies or individuals'. (§ 190)

In the same paragraph, he points out that, 'Where profits alone count, there can be no thinking about ... the complexity of ecosystems which may be gravely upset by human intervention.' In that situation, he adds, 'biodiversity is considered at most a deposit of economic resources available for exploitation ...'. (§ 190)

An important account of one crucial aspect of an ecological economics comes in the following passage:

Environmental impact assessment should not come after the drawing up of a business proposition or the proposal of a particular policy, plan or program. It should be part of the process from the beginning, and be carried out in a way which is interdisciplinary, transparent and free of all economic or political pressure. It should be linked to a study of working conditions and possible effects on people's physical and mental health, on the local economy and on public safety. Economic returns can thus be forecast more realistically, taking into account potential scenarios and the eventual need for further investment to correct possible undesired effects. (§ 183)

Another fundamental aspect of the converted economics which Francis calls for is that it puts a high value on employment – ensuring that people are not put out of work (§ 129; cf. §51, 127, 189). He says, 'In order to continue providing employment, it is imperative to promote an economy which favours productive diversity and business creativity.'

He goes on to point out that most of the peoples of the world are engaged in 'a great variety of small-scale food production systems ... using a modest amount of land and producing less waste, be it in small agricultural parcels, in orchards and gardens, hunting and wild harvesting or local fishing.' This type of economy, he says, provides adequate employment, whereas modern systems which seek economies of scale 'end up forcing smallholders to sell their land or to abandon their traditional crops'. (§ 129)

Further crucially important aspects of a renewed economics are the adoption of more ecologically respectful methods of production and consumption (§ 23, cf. § 5, 138, 191). So too is a great reduction in the amount of waste we generate and the way we deal with it (see § 44, 50, 51, 90, 129, 161). For instance, the encyclical refers to the possibility of 'developing an economy of waste disposal and recycling'. (§ 180)

Three Key Challenges

Francis makes three very strong statements which are probably the most challenging in the encyclical. The first is this passage:

*... given the insatiable and irresponsible growth produced over many decades, we need ... to think of containing growth by setting some reasonable limits and even retracing our steps before it is too late. We know how unsustainable is the behaviour of those who constantly consume and destroy, while others are not yet able to live in a way worthy of their human dignity. That is why **the time has come to accept decreased growth in some parts of the world**, in order to provide resources for other places to experience healthy growth.* (§ 193, emphasis added)

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The second blunt statement of Francis is:

We know that technology based on the use of highly polluting fossil fuels – especially coal, but also oil and, to a lesser degree, gas – needs to be progressively replaced without delay. (§ 165)

These statements focus attention on two issues which are emphasised time after time, not only by ecological campaigners but by the majority of scientists studying these questions. And they are, of course, issues which politicians in both the developed and the developing world are very reluctant to face up to and act upon.

The third strong statement of Francis which poses an enormous challenge – and one that the leaders of the developed countries have been most unwilling to accept fully and act upon – is the following:

Inequity affects not only individuals but entire countries; it compels us to consider an ethics of international relations. A true ‘ecological debt’ exists, particularly between the global north and south, connected to commercial imbalances with effects on the environment, and the disproportionate use of natural resources by certain countries over long periods of time. (§ 51)

Francis goes into some detail on this issue of *ecological debt*. He refers to the loss of valuable raw materials exported from South to North, to deforestation, and to the environmental damage done to poor countries by mining of gold and copper, by the dumping of toxic wastes, and by lack of adequate controls on pollution by companies operating in the South; he also mentions the global warming caused by the excessive consumption in rich countries which causes particular problems in the South, especially in Africa (§ 51).

By way of driving home his challenge to the leaders of the rich countries, Francis goes on to say: ‘The foreign debt of poor countries has become a way of controlling them, yet this is not the case where ecological debt is concerned.’ (§ 52)

Intergenerational Equity

Pope Francis leaves us in no doubt that his concept of a truly ecological economics is one which takes full account of the potential impact of present-day economic decisions on future generations of people and on other inhabitants of our world. He insists that, ‘The notion of the common good also extends to future generations’ (§ 159); and his concern for

future generations is expressed in no less than eight other paragraphs of the encyclical (see: § 22, 95, 109, 160, 162, 169, 190, 195).

Cooperative Enterprises

The encyclical has words of praise for ‘cooperatives of small producers’ who adopt less polluting means of production (§ 112). It refers also to the potential role of cooperatives in producing energy, noting that there are places where ‘cooperatives are being developed to exploit renewable sources of energy which ensure local self-sufficiency and even the sale of surplus energy’ (§ 179). Francis sees these cooperatives as models of an alternative economics – one which does not follow the dominant ideology of subordinating ecological concerns to the making of short-term profit.

Genetic Modification

The encyclical includes a significant treatment of the issue of genetic modification (§ 131–5), including a strong but carefully nuanced warning about its dangers. A key passage is the following:

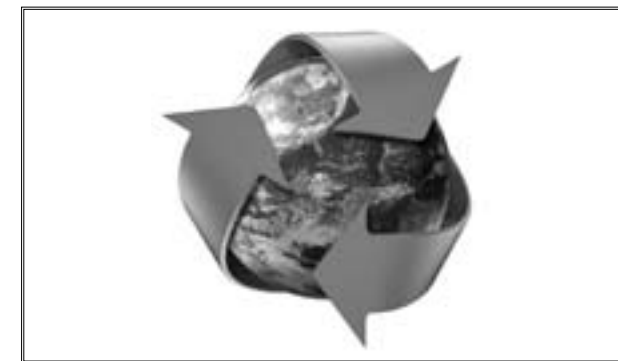
In various countries, we see an expansion of oligopolies for the production of cereals and other products needed for their cultivation. This dependency would be aggravated were the production of infertile seeds to be considered; the effect would be to force farmers to purchase them from larger producers. (§ 134)

Alternative Forms of Energy

On the question of alternative forms of energy, Francis says, ‘How could we not acknowledge the work of many scientists and engineers who have provided alternatives to make development sustainable?’ (§ 102). He also maintains that ‘poor countries ... are ... bound to develop less polluting forms of energy production.’ He points out that this ‘will require the establishment of mechanisms and subsidies which allow developing countries access to technology transfer, technical assistance and financial resources’, but he adds, ‘... to do so they require the help of countries which have experienced great growth at the cost of the ongoing pollution of the planet’. (§ 172)

However, he has chosen not to give detailed references to different alternative energy sources. Although noting that developing countries can take advantage of ‘abundant solar energy’ (§ 172), he does not mention wind power, tidal power or thermal energy from deep in the Earth (§ 172).

The encyclical offers no support at all to those who maintain that nuclear energy is the solution to the issue of global warming. Furthermore, Francis does not even bother to mention the more bizarre technological ‘solutions’ which are sometimes proposed – for instance, shooting billions of reflectors into or above the atmosphere in order to lessen global warming, or sucking huge amounts of carbon out of the atmosphere.²



Protecting our common home through recycling
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Political Aspects of an Ecological Conversion

Francis is under no illusion that small-scale alternatives undertaken on a voluntary basis can, on their own, constitute the economic conversion that is required to safeguard the Earth and its more vulnerable inhabitants. He sees an urgent need for decisive *political* action to eliminate abuses or ‘free-loading’ by individuals or companies. So he says:

Civil authorities have the right and duty to adopt clear and firm measures in support of small producers and differentiated production. To ensure economic freedom from which all can effectively benefit, restraints occasionally have to be imposed on those possessing greater resources and financial power. (§129)

This applies at both the national and the international levels. Focusing first on the national level, he insists that when any policy, plan, programme, or business proposition is being drawn up it is important that all the different stakeholders should be involved and should reach consensus. He insists that, ‘The local population should have a special place at the table; they are concerned about their own future and that of their children, and can consider goals transcending immediate economic interest.’ (§ 183)

However, adequate protection of the environment is an issue which goes beyond individual countries. There is urgent need for international binding agreements, since otherwise there will be a continuation of the present situation where countries compete with each other in regard to which of them can get away with doing the least to prevent further global warming and more pollution. Francis insists that, ‘... it is essential to devise stronger and more efficiently organized international institutions, with functionaries who are appointed fairly by agreement among national governments, and empowered to impose sanctions.’ (§ 175)

He has harsh words of criticism for political leaders who fail to respond adequately to ecological problems. He maintains that this happens because ‘too many special interests, and economic interests easily end up trumping the common good and manipulating information so that their own plans will not be affected’ (§ 54). He points out that the Conference of the United Nations on Sustainable Development in Rio de Janeiro in 2012 (Rio+20) ‘issued a wide-ranging but ineffectual outcome document’ (§ 169).

Perhaps the pope saw himself as contributing to the agenda of the up-coming UN Climate Change Conference (COP21) in Paris, from 30 November to 11 December 2015, when he wrote the following passage:

A global consensus is essential for confronting the deeper problems, which cannot be resolved by unilateral actions on the part of individual countries. Such a consensus could lead, for example, to planning a sustainable and diversified agriculture, developing renewable and less polluting forms of energy, encouraging a more efficient use of energy, promoting a better management of marine and forest resources, and ensuring universal access to drinking water. (§ 164)

Water

From his experience in Latin America, the pope knew how the poorest people suffer when the water supply is privatised. So his emphasis in the above quotation on the right to universal access to drinking water is particularly significant.³ Earlier in the encyclical he had said: ‘Fresh drinking water is an issue of primary importance, since it is indispensable for human life ...’ (§ 28). A little later he said: ‘... access to safe drinkable water

is a basic and universal human right, since it is essential to human survival and, as such, is a condition for the exercise of other human rights.

Our world has a grave social debt towards the poor who lack access to drinking water, because they are denied the right to a life consistent with their inalienable dignity’ (§ 30, emphasis in the original; see also § 185⁴).

By insisting on the universal right to clean water, Francis shows how aware he is of the need to protect what are called ‘the global commons,’ a term which refers to resources such as the oceans and the air, as distinct from *local* commonages of land or forest. He says, ‘What is needed, in effect, is an agreement on systems of governance for the whole range of so-called “global commons”’ (§174). The argument against the privatisation of commons is put forward very effectively by David Bollier in his book, *Think Like a Commoner: A Short Introduction to the Life of the Commons*.⁵ (Bollier also emphasises the significance of *new* kinds of commons, such as Wikipedia and the Linux open-source software.)

Carbon Credits

Francis adopts a very controversial position when he puts forward a quite strong criticism of the system of ‘carbon credits’ which is widely used at present. He describes this arrangement as appearing at first sight to be ‘a quick and easy solution, under the guise of a certain commitment to the environment’, but he maintains that ‘in no way does it allow for the radical change which present circumstances require’. Instead, carbon trading can ‘lead to a new form of speculation’, and actually enable rich countries and sectors of society to increase their carbon emissions (§ 171).

Population Growth

Responding to those who maintain that part of the solution to the environmental crisis is a reduction in the birth rate, Francis says bluntly:

To blame population growth instead of extreme and selective consumerism on the part of some, is one way of refusing to face the issues. It is an attempt to legitimize the present model of distribution, where a minority believes that it has the right to consume in a way which can never be universalized, since the planet could not even contain the waste products of such consumption. (§ 50)

He does, however, qualify his statement by adding

the rather vague comment that ‘attention needs to be paid to imbalances in population density’ (§ 50). We must hope that a later Vatican statement – perhaps a statement emerging from the October 2015 Synod of Bishops in Rome on the theme, ‘The vocation and mission of the family in the Church and contemporary world’ – will address the population issue in a more thorough and nuanced manner.

Ecological Conversion at Social and Community Level

Francis is keenly aware that we dare not leave everything to the initiative (or lack of it) of our political leaders. He holds that ‘... while the existing world order proves powerless to assume its responsibilities, local individuals and groups can make a real difference.’ So he insists that: ‘Society, through non-governmental organizations and intermediate groups, must put pressure on governments to develop more rigorous regulations, procedures and controls’. (§ 179)

Such civil society groups could be expected to include trade unions; NGOs including development groups; credit unions, and the whole range of business enterprises. All need to become far more ecologically aware, and to be willing to take effective action. One of these civil society organisations is, of course, the Church itself. Francis says that all Christian communities have an important role to play in ecological education (§ 214). This education can take place not only through words but also through a wide variety of committed actions.

Pressure has to be put not only on governments but also more directly on business interests. Francis spells out one way in which this can be done. He points out that consumer movements bring healthy pressure to bear on those who wield political, economic, and social power by using the tactic of boycotting certain products. In this way, ‘They prove successful in changing the way businesses operate, forcing them to consider their environmental footprint and their patterns of production.’ (§ 206)

As far as I know, this is the first time that a pope has come out in favour of boycotting the products of companies which fail to take seriously their ecological responsibilities. This support for a boycott of consumer goods can also be extended to the present campaign for divestment in fossil fuel companies; we must hope that this will be acted

on by all the agencies which have investments – including trade unions, philanthropic foundations, and a wide variety of church and religious agencies.

As already noted, Francis praises the initiative at local level of cooperatives of small producers who use renewable sources of energy and foster local self-sufficiency (§112 and §179). He also recommends a whole series of practical actions which each of us can take: ‘... avoiding the use of plastic and paper, reducing water consumption, separating refuse, cooking only what can reasonably be consumed, showing care for other living beings, using public transport or car-pooling, planting trees, turning off unnecessary lights ...’ (§ 211).

Conclusion

It is clear that in *Laudato si*’ Pope Francis has put forward a quite detailed account of what is required at the economic and political levels if there is to be an adequate response to the ecological problems of our world. His encyclical poses very serious challenges not only to governments but also to each one of us in our daily lives.

Is the programme he puts forward unrealistic? That depends on how we define the word ‘realistic’. If ‘realistic’ is understood to mean what is objectively required to avoid an ecological catastrophe then one must say that what Francis proposes is fully realistic. But if it is understood to mean what is likely to emerge by way of a binding agreement from the UN Climate Change Conference in Paris in December 2015 then there are serious grounds for pessimism. This, however, is not a reason for despair but rather for renewed commitment to put pressure on our governments to make truly realistic commitments, and for each of us ‘on the ground’ to devote all our energies to campaigning for ecological responsibility – and to bringing about a significant ecological conversion in our everyday living.

Notes

1. For an account of the encyclical’s treatment of an ecological culture see my article, ‘Ecological Conversion and Cultural Transformation’, in *Thinking Faith*, the online periodical of the English Province of the Society of Jesus, 20 July 2015 (www.thinkingfaith.co.uk).
2. Perhaps Francis or somebody who helped him to draft the encyclical had been reading Naomi Klein’s book, *This Changes Everything: Capitalism vs The Climate* (New York: Simon and Schuster; London: Allen Lane, 2014) in which Klein argues quite convincingly (pp. 256–8) that reliance on this kind of ‘geoengineering’ is not merely futile but is part of the problem rather than a solution. So perhaps it is not

so surprising that she was invited to take part in a Vatican conference on the encyclical in early July 2015.

3. We may presume that Francis is not suggesting that the water supply must always be provided entirely free; it is more likely that what he is condemning here is a type of privatisation of the water supply which has occurred in some parts of Latin America – one where poor communities were left short of water because they were deprived of access to traditional sources of water, or because their area was not provided with an adequate water supply, or because the price was set at a level they could not afford.
4. Pope Francis writes: ‘In any discussion about a proposed venture, a number of questions need to be asked in order to discern whether or not it will contribute to genuine integral development ... In this discernment, some questions must have higher priority. For example, we know that water is a scarce and indispensable resource and a fundamental right which conditions the exercise of other human rights. This indisputable fact overrides any other assessment of environmental impact on a region.’ (§ 185)
5. David Bollier, *Think Like a Commoner: A Short Introduction to the Life of the Commons*, Gabriola Island: New Society Publishers, 2014.

Donal Dorr is a theologian and a member of St Patrick’s Missionary Society. He is the author of numerous books and articles on spirituality, social justice and Catholic social teaching, including Option for the Poor and for the Earth: Catholic Social Teaching (Maryknoll NY: Orbis Books, 2012). A new edition of this book, reflecting the contribution of Pope Francis, is in preparation and will be published early in 2016.

Preparing the Road to Paris

John Sweeney

Introduction

Some of the younger activists at a recent United Nations Climate Conference sported tee shirts which read: ‘You have been negotiating about climate change since before I was born!’. Indeed, the seemingly intractable negotiations which began with the First Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) in Berlin in 1995 have been in essence a spectacular failure. These negotiations have been unable to deliver a global agreement capable of offering hope to the next generation that the inexorable rise in greenhouse gas emissions can be contained at a level that does not endanger their wellbeing, and the wellbeing of the entire planet.

This kind of agreement is, however, at last within reach – or is it? The forthcoming 21st Conference of the Parties (COP21) in Paris, from 30 November to 11 December 2015, is eagerly anticipated as offering the prospect of an agreement capable of bringing about reductions in carbon emissions sufficient to limit the rise in global temperature to no more than 2°C above pre-industrial levels. A rise in temperature in excess of this would commit the world to unavoidable ‘dangerous climate change’.

Careful ‘choreography’ has produced an expectation that, at last, what Pope Francis referred to as the ‘Care for Our Common Home’ will be prioritised over narrow national self-interests and powerful vested interest groups. The background to this prospect and the chances of success are addressed in this article.

Background Preparation

Some 50,000 people are expected to attend COP21, such is the level of anticipation. There is, however, an eerie sense of *déjà vu* – a feeling that we might be facing a repeat of what happened at the ill-fated COP15 (Copenhagen, 2009). Then, as now, expectations were high: 119 Heads of State or Heads of Government from 192 countries were joined by 40,000 participants to ‘seal the deal’. But negotiations foundered on a lack of trust between the developing countries and the developed countries, an unwillingness to subordinate national

self-interest to community good, and a carefully timed campaign of misinformation and attempted discrediting of leading climate scientists, a campaign collectively termed ‘Climategate’.

Six years on, the groundwork for COP21 has been more meticulously laid out and an evidence-based approach more solidly integrated into the procedures. Three pillars support this: the science, the ethics and the politics of climate change.

The Scientific Preparation

The Assessment Reports of the Intergovernmental Panel on Climate Change (IPCC) have always been seen as providing the underpinning for evidence-based policy initiatives. The First Assessment Report in 1990 provided an important impetus to the United Nations Framework Convention on Climate Change (UNFCCC) which was adopted in 1992, while the Second Assessment Report in 1995 was influential in persuading delegates at COP3 (Kyoto, Japan, 1997) to agree the Kyoto Protocol.

The protracted efforts to ratify Kyoto spanned almost a decade, during which political rather than scientific considerations became paramount, to the extent that, despite the IPCC Third Assessment Report of 2001, significant progress towards a comprehensive global agreement stalled. By 2007, and the Fourth Assessment Report, some momentum was restored and an elaborate ‘roadmap’ set the scene for COP15 in Copenhagen. The optimism was misplaced. Despite the ‘roadmap’ so carefully laid out in advance, the negotiations ended up in a cul-de-sac. European leadership of attempts to tackle climate change was lost and a new world order emerged which was more based on narrow national, rather than global, priorities. Recovery from this failure has been tortuously slow.

The publication, in 2013, of the Fifth Assessment Report (AR5)¹ has, however, injected a new sense of urgency into the build-up to COP21 in Paris. AR5 produced greater certainty about several aspects of climate change, based on better observations, better modelling and improved understanding of the complexities of the underlying

science. The headline statement that, ‘it is at least 95% likely that human activities – chiefly the burning of fossil fuels – are the main cause of warming since the 1950s’, was accompanied by a number of key findings, as follows:

- Global temperatures have increased by 0.85°C over the period 1880–2012 and about 0.5°C over the period 1979–2010. Slower warming occurred over the 15 years prior to 2013.
- The warming has been greater over land than over the ocean and greater in mid to high latitude parts of the globe. Heatwaves have increased in frequency. Each of the last three decades has been warmer than all preceding decades since 1850; moreover, 1981–2010 was the warmest 30-year period of the last 800 years.
- Global precipitation has not changed significantly over the course of the twentieth century. An increasing precipitation trend exists in middle and high latitudes of the northern hemisphere, strongly evident after the 1950s. Intense rainfall events have significantly increased in frequency in a majority of regions, especially Europe and North America.
- Tropical Atlantic storms have increased in intensity, though trends in other areas are not clear.
- Greenland’s ice sheets are melting much more quickly in recent years, with average losses per year six times higher than in the early 1990s. In the Arctic, sea ice cover has decreased by 4% per decade since 1979 and winter sea ice thickness has halved. The Antarctic ice sheet is now losing mass five times faster than in the early 1990s.
- Sea level rise has accelerated from 1.7mm per year over the twentieth century to 3.2mm per year over the past two decades.

Warming has continued in recent years: 2014 was the warmest year since reliable records were kept² and there is a high probability that 2015 will be warmer still, aided by the El Niño conditions present in the Pacific Ocean.

Should emissions continue to rise on their present trajectory, models project only a 50:50 chance that a global warming of 4°C (relative to pre-industrial levels) can be avoided by the end of this century. This would have very serious implications for much of humanity and the natural world.

However, perhaps the most influential finding of AR5 was the conclusion that global temperatures were closely related to the cumulative emission of carbon dioxide. Essentially, the long residence time of the gas in the atmosphere means that the effects of emissions on temperature are felt for a century or more. The consequence of this is that, once a certain total of emissions is exceeded, a specific temperature threshold will eventually be crossed.

Accordingly, to have a 50:50 chance of limiting total human-induced warming to less than 2°C relative to pre-industrial levels would require cumulative CO₂ emissions from all anthropogenic sources since 1870 to remain below about 3,000 GtCO₂. However, over 1,900 GtCO₂ has already been emitted. At current rates of emission increase, therefore, there is only a very narrow window of opportunity – about two decades – to achieve the radical cuts in emissions required to avoid inevitable dangerous climate change. Such a sobering reality has finally begun to permeate the public and political consciousness.

There is only a very narrow window of opportunity – about two decades – to achieve the radical cuts in emissions required ...

The IPCC does not conduct original research. Rather, it provides a synthesis of existing knowledge, based on extensive analysis of the peer-reviewed scientific literature. Some 3,605 experts provided 142,631 comments on AR5, all of which were tabulated and responded to by the author teams comprising 831 individuals. Possibly, no document in history has been more extensively reviewed prior to publication. Accordingly, while the IPCC does not make policy recommendations, the scientific case for action is robust and provides a compelling justification for radical decisions to be taken in Paris.

The Moral and Ethical Preparation

When he visited Dublin in May 2015 the UN Secretary-General Ban Ki-moon said: ‘Ireland has been a champion of efforts to counter hunger, but today one cannot be a leader on hunger without also being a leader in climate change’.³

In this statement, Ban Ki-moon was expressing the basic principles of climate justice. As with many hazards, those least responsible and least able to withstand the impacts bear the brunt. The burden of climate change falls most heavily on the developing world. The World Health Organization estimates that as many as 150,000 excess deaths occur annually due to the direct and indirect effects of climate change, a figure that is expected to rise to 250,000 between 2030 and 2050.⁴ Responsibility for this situation rests primarily with the emissions record of developed countries.

Key Principles for Climate Negotiations

Several principles are often invoked as providing a moral compass for COP negotiators.

The *Precautionary Principle* states that where there are threats of serious or irreversible impacts, lack of full scientific certainty should not be used as a reason for postponing actions to mitigate future climate change.⁵ Uncertainties – for example, in model projections – will always exist. But the nature of the ‘planetary emergency’ being faced should not allow preventative action being over-ruled by short-term economic or political considerations.

The *Polluter Pays Principle*⁶ likewise argues that the utilisation cost of the atmosphere should be paid for proportionately by those who pollute it. Burdening society with the costs of a delinquent sector, or the actions of a vested interest group, is not acceptable from a moral perspective.

The *Principle of Intergenerational Equity*⁷ extends this responsibility through time. Exploitation of a resource, such as the assimilative capacity of the atmosphere, must be conditioned by consideration of its impact in reducing the opportunities for sustainability for present and future generations.

The most widely quoted principle at COP negotiations is the *Principle of Common but Differentiated Responsibility*.⁸ This acknowledges that developing and developed countries bear very different levels of responsibility for causing the present problem and should bear differentiated responsibility for addressing it. To exemplify this with reference to a local case, total greenhouse gas emissions for Ireland (with a population of four and half million), amount to *more* than the total for the 400 million poorest people on the planet. Together with other developed countries, Ireland has made a historically greater contribution to causing the

problem than most countries in the developing world. However, it also has greater capacity to mitigate and adapt to climate change than they do. It should, therefore, bear a greater responsibility for both reducing its emissions and assisting poorer countries to adapt to future climate change along a more sustainable trajectory.

‘Common but Differentiated Responsibility’ is clearly the principle that should apply in apportioning the remaining carbon budget. However, national self-interest is the brief given to negotiators at climate talks and in such circumstances a resource with common access inevitably gets destroyed, as explained in Hardin’s classic essay on ‘The Tragedy of the Commons’.⁹



Highlighting the seriousness of the crisis
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Laudato Si’

The most significant event in terms of the moral and ethical case for addressing climate change came with the publication in June 2015 of the Pope Francis’ encyclical, *Laudato Si’: On Care for Our Common Home*.¹⁰ It is difficult to overemphasise the scholarly quality and potential impact of this work. What many anticipated as a theological treatise turned out to be a scientifically robust, readable and inspirational document. In this, Pope Francis calls for urgent and far-reaching cuts in greenhouse gas emissions and stresses the need for an internationally supervised agreement to ensure that states deliver on their commitments though action at both national and local levels.

The potential role of *Laudato Si’* as a ‘game changer’ comes, firstly, from its embracing of communities not normally the target audience for encyclicals. On the religious side, Pope Francis draws on the writings of the Ecumenical Patriarch, Bartholomew I of Constantinople, and of a ninth-century Muslim Sufi poet, emphasising the need

for unity in tackling the environmental challenges of water, air and land pollution, but especially in tackling climate change.

On the economic side, he brings together the radical opponents of globalisation from the far left of the political spectrum and conservatives from the other side sensitive to the fact that market economics require to be tempered by social and environmental responsibility to a much greater extent. He emphasises the need to move away from a solely economics-based view of the natural world and reminds us that its protection is essentially a moral and ethical issue. This is a challenging paradigm shift for decision-makers steeped in conventional cost-benefit analysis concepts. Our disconnection with the natural world is leading, Francis says, to an ecological crisis of our own making as our ‘throwaway’ culture destroys ‘our common home’.

All of this is highly relevant to the climate change problem. In a dismissal of deniers and sceptics, the pope identifies climate change as a human-induced problem, rooted in an insatiable quest for unsustainable growth and material consumption.

On the community front, non-governmental organisations and community groups are lauded for their role of holding to account political leaders who shy away from making the hard decisions necessary to address climate change issues effectively. In what amounts to the first endorsement of the environmental movement by the Catholic Church, Pope Francis has moved the debate beyond the concept of stewardship to active caring for the elements of the environment, such as water, biodiversity and the natural and built environment, which are threatened by climate change.

Secondly, the Encyclical emphasises the futility of a piecemeal approach to tackling the issues concerned. Feeling comfortable about tackling poverty is not sufficient. As regards climate change, emissions trading, for example, is seen by Francis as a flawed instrument that does not in itself get to the root of a problem which lies in excessive consumption. Rather, a holistic approach, termed ‘integral ecology’ is necessary to synthesise the multifaceted dimensions of the problem. Only then, can currently difficult-to-quantify components of the environment under threat, such as biodiversity, be recognised for their intrinsic worth and not seen as resources for exploitation. Although such a holistic approach seems an obvious prerequisite

for climate negotiations, the segmentation of responsibilities among government-based negotiators renders it difficult to operationalise in practice. Few have the breadth of vision to see beyond their ‘silo’ and this has rendered elusive the ‘big compromise’ necessary over the twenty years of UN Climate Conferences.

Pope Francis has moved the debate beyond the concept of stewardship to active caring for the elements of the environment ... threatened by climate change.

Thirdly, the Encyclical links ‘ecological debt’ to financial debt. Here the reality that developed countries have enjoyed access to the resources of the environment free of charge so as to propel their development is at variance with their wish to constrain poorer countries in *their* development by demanding that they achieve this in a non climate-threatening manner.

The need of the latter to finance their sustainable development through loans from the former raises the issue of climate justice, an overarching theme of the document. This links human and natural rights to more practical issues of compensation, legal and financial redress and ultimately how the developed world should interact with the developing world politically to ensure that a global accord on climate is achieved. This is where the politics comes in.

The Political Preparation

The UNFCCC was based on an assumption that a ‘top down’ international accord would be achieved, similar to the successful Montreal Protocol of 1987 which led to the phasing out of substances harmful to the ozone layer. Tackling carbon emissions, however, was always going to be a much more demanding task. The failure of the Kyoto Protocol to bring on board a sufficient number of nations to gather the momentum necessary to make meaningful progress further confirmed this, as did the failure of COP15 in Copenhagen.

While a second commitment period for Kyoto was agreed at COP18 (Doha, 2012) several large emitters withdrew or refused to participate. As of September 2015, only 43 states have ratified the agreement – far short of the 144 signatories

necessary for the agreement to enter into force.

Intended Nationally Determined Contributions
As an alternative to the ‘top down’ approach, a ‘bottom-up’ approach has been employed in the build-up to Paris. This has taken the form of an expression of effort at a national level in terms of what each nation, or bloc, considers appropriate to its own circumstances in terms of post 2020 actions. These pledges are known as ‘Intended Nationally Determined Contributions’ (INDCs). The European Union’s INDC commits the EU to a binding target of at least 40% reduction in greenhouse gas emissions by 2030 compared to 1990, with the modalities of how this will be achieved at Member State level still to be finalised.

In November 2015, a synthesis report expressing the aggregate emissions reductions pledged will be prepared as input to the Paris COP. It seems likely that the aggregate effort will fall far short of what is required to avoid the 2°C warming threshold. Pressures to increase the pledged reductions, especially by the developed countries, and to shorten the timescale for effective reductions to be achieved, will undoubtedly be centre stage during the Paris negotiations.

Loss and Damage
The realisation that even with projected mitigation and adaptation efforts, adverse climate change impacts are likely to occur has stimulated discussion on how the issue of loss and damage should be handled in the negotiations. Naturally, a focus on the plight of developing countries is apparent. COP20 (Lima, 2014) adopted a two-year work plan designed to enhance understanding and expertise in areas such as resilience, vulnerability and risk management. Although the terminology conjures up concepts such as liability and compensation, financial redress instruments are not likely to emerge as major issues at Paris unless developing countries lose confidence in the good faith of developed countries to bear the greatest burden of emission reductions. One area in which such a potential pitfall might occur is in climate finance.

Climate Finance
The future main multilateral funding mechanism for fostering climate mitigation and adaptation in developing countries is likely to be the Green Climate Fund (GCF). This facility was established under the UNFCCC to provide finance to developing countries for their mitigation and

adaptation programmes. In its establishment, issues of governance were of primary concern, with the developing countries in particular stressing the need for independence from control by bodies such as the World Bank. Resolution of such issues was finally achieved at COP17 (Durban, 2011) and the GCF, which has its headquarters in South Korea, has now begun to assess project proposals.

The intention of the GCF is to raise \$100 billion a year by 2020. Although this appears at first sight to be an extremely ambitious target, it is worth emphasising that, at present, annual fossil fuel consumption subsidies worldwide are over five times higher, at \$548 billion.¹¹ Pledges to the Fund have been slower to materialise than hoped for and this is currently a major issue for the developing countries. To date, about \$10 billion has been pledged from around 40 countries.¹² About half of this has been formally signed off on, and this has permitted the GCF to commence activities.

Typically, pledges are around \$10 per capita, with the most generous country (Sweden) committed to over \$60 per capita. Among EU states, generally poor contributions have been pledged by Member States in Eastern Europe, with some absent altogether. Member States in Western Europe have generally made more substantial pledges. A notable exception is Ireland, which has not offered any pledge to the GCF as of September 2015. This was a contributing factor to Ireland receiving the ‘Fossil of the Day’ award (decided by a network of 950 non-governmental organisations) at COP20, in Lima.

The Likely Outcomes from Paris

Climate finance will most likely be the deal maker or breaker at Paris. It is important that developing countries are persuaded that developed countries’ contributions to the GCF will not result in commensurate reductions in their development programmes. Developed countries are increasingly integrating climate change funding into their broader development strategy and while the distinctions are often blurred for individual projects, any suggestion of ‘re-labelling’ will be strongly resisted by developing countries. The fact that there was an inconclusive outcome from the Third International Conference on Financing for Development in Addis Ababa in July 2015 has not allayed the fears of the developing countries that unlocking financial commitments from developed countries is proving more challenging than anticipated.¹³

The extent to which a deal achieved in Paris will have legal standing is not clear. The compromise agreed at COP17 in Durban was to seek ‘a protocol, another legal instrument or an agreed outcome with legal force’. The experience with Kyoto suggests that a new treaty would face major hurdles in gaining ratification from some member state governments, such as the USA. Crucially, it is also not clear to what extent the Intended Nationally Determined Contributions (INDCs) would be legally binding, or indeed to what extent pledges made by the developed countries to the Green Climate Fund would be enforceable.

Progress on preparing the way for decisions to be made at Paris continues to be tortuously slow. A draft negotiating text of 89 pages formed the basis for two weeks of talks in Bonn in June 2015; the intention was that the discussions would lead to this document being reduced to a more manageable length but by the end of the talks it had been cut by just four pages.

A wide range of options, from radical to conservative actions, are up for decision in Paris. An emphasis on transparency is indicative of a degree of mistrust still remaining regarding the translation of aspirations into actions. Ultimately, national negotiators will leave the big decisions to the Heads of Government in Paris. Despite what the latter say for public consumption regarding the imperative of tackling climate change, when it comes to making concessions in the international arena, protecting national interests remains the priority for most.

The most likely outcome from Paris is, therefore, an agreement that will be marketed as a political triumph, but fall short of the radical change of hearts and minds necessary to protect the world from 2°C warming over the next four decades. Whatever the outcome, any agreement is not currently scheduled to come into force before 2020, leaving open the possibility that new administrations will row back on their commitments. The one surety from COP21 is that negotiations to strengthen the UNFCCC will continue at COP22 in Morocco in 2016.

Notes

1. IPCC, *Climate Change 2013: The Physical Science Basis*, Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge: Cambridge University Press, 2013, 1,535 pp. (<http://www.climatechange2013.org/>)

2. National Oceanic and Atmospheric Administration (NOAA), National Centers for Environmental Information, *State of the Climate: Global Analysis – Annual 2014*. (<http://www.ncdc.noaa.gov/sotc/global/201413>)

3. Pamela Duncan, ‘Ban Ki-moon: Ireland must realign stance on climate change’, *The Irish Times*, 25 May 2015.

4. World Health Organization, *Quantitative Risk Assessment of the Effects of Climate Change on Selected Causes of Death, 2030s and 2050s*, Geneva: World Health Organization, 2014 (Editors: Simon Hales, Sari Kovats, Simon Lloyd, Diarmid Campbell-Lendrum).

5. Kenneth R. Foster, Paolo Vecchia and Michael H. Repacholi, ‘Science and the Precautionary Principle’, *Science*, Vol. 288, No. 5468, May 2000, pp 979–81.

6. Thomas Lindhqvist and Reid Lifset, ‘Can We Take the Concept of Individual Producer Responsibility from Theory to Practice?’, *Journal of Industrial Ecology*, Vol. 7, Issue 2, April 2003, pp 3–6.

7. Douglas MacLean, ‘Intergenerational Equity’, in James C. White (ed.), *Global Climate Change: Linking Energy, Environment, Economy, and Equity*, New York: Plenum Press, 1999, pp 177–82.

8. Lavanya Rajamani, ‘The Principle of Common but Differentiated Responsibility and the Balance of Commitments under the Climate Regime’, *Review of European Community and International Environmental Law*, Vol. 9, Issue 2, July 2000, pp 120–24.

9. Garrett Hardin, ‘The Tragedy of the Commons’, *Science*, Vol. 162, No. 3859, 13 December 1968, pp 1243–48.

10. Pope Francis, *Laudato Si’: On Care for Our Common Home*, Encyclical Letter, Vatican City, 24 May 2015. (http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html)

11. International Energy Agency (IEA), *World Energy Outlook 2014*, Paris: IEA Publications, 2014.

12. Green Climate Fund, *Status of Pledges and Contributions made to the Green Climate Fund*, 10 July 2015. (<http://news.gcfund.org/wp-content/uploads/2015/04/Status-of-Pledges-2015.7.10.pdf>)

13. ‘Statement from Mary Robinson on the Closing of the Third Financing for Development Conference in Addis Ababa’, 16 July 2015. (<http://www.mrfcj.org/news/statement-from-mary-robinson-financing-for-development.html>)

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Environmental Initiatives by Church Groups in Ireland

A previous issue of Working Notes devoted to environmental questions (Issue 72, October 2013) included articles describing initiatives by four Church groups in Ireland aimed at protecting and enhancing the natural environment.

In this issue, we publish articles outlining the ecology work of a further six groups. The first article describes the work of the Presentation Sisters in Ireland. Following this, there are articles on four church communities (Carrigaline Union, Church of Ireland; Clonakilty Methodist Church; Fitzroy Presbyterian Church; Rathfarnham Quaker Meeting) which have received an 'Eco-Congregation Ireland Award', and on a fifth (Balally Catholic Parish) which is shortly to receive an Award. The Eco-Congregation Award is open to church groups throughout the island of Ireland which have been working on ecology issues for a minimum of two years. Applications are assessed on the basis of environmental work undertaken under four headings: spiritual, practical, community and global.

Eco-Congregation Ireland is an all-Ireland, inter-denominational project, which aims to provide information, resources and support for individuals and church groups wishing to become involved in awareness-raising and practical action in relation to environmental questions. The initiative is supported by the Roman Catholic Church, the Church of Ireland, the Presbyterian Church in Ireland, the Methodist Church and the Religious Society of Friends in Ireland (Quakers) (see: <http://ecocongregationireland.com>; see also, Catherine Brennan, 'Eco-Congregation Ireland', Working Notes, Issue 72, October 2013 www.workingnotes.ie).

Presentation Sisters and Ecology

Maureen O'Connell

Introduction

Although Presentation Sisters are primarily recognised in Ireland as educators in first and second level schools, we have, for many years now, been active in education of a different kind. Influenced by experiences gained through our own international networking, and challenged by the outcomes of the 1992 Rio Earth Summit and by the aspirations of the Earth Charter,¹ we saw and responded to the need for education to promote 'ecological conversion'. Pope John Paul II appealed for this kind of conversion in 2001² and, more recently, so has Pope Francis in his encyclical, *Laudato Si': On Care for Our Common Home*.

Founded in Cork by Nano Nagle in 1775, the Presentation Congregation now has members in 23 countries. The International Presentation

Association (IPA) – consisting of the Union of Presentation Sisters, to which Ireland belongs, the Conference of Presentation Sisters of North America, and the Australian Society of Presentation Sisters – was established in 1989. The IPA works in partnership with others to promote a 'more sustainable society based on universal human rights, economic justice and a culture of peace'.

As for many other organisations, IPA's 'special consultative status' at the United Nations Economic and Social Council allows active participation in sessions of the UN Commission on Sustainable Development. In association with other non-government organisations (NGOs), we aim to influence global policies that promote justice, peace and sustainable development. We use our international network to bring experience from grassroots realities to the attention of decision-makers.

At the 2006 Congregational Gathering, the sisters of Presentation Union pledged themselves to commit to a 'spirituality of being in communion that seeks God in the interconnectedness of the whole of creation and empowers active love for self, others and all of creation'. This spirituality

includes awakening to the mystery of God in all of life, reverence and care for the cosmos, earth and its peoples, 'particularly where these are most wounded'. The sisters undertook to reflect critically on the way power is used, including our own use of power; 'move towards ways of living that enable justice and sustainable living'; and endeavour to challenge unjust systems at local, national and international level.

Presentation in Ireland

In honouring congregational commitments to ecological conversion, many sisters collaborate locally to promote this. The following are some examples of our current initiatives in Ireland.

Nano Nagle Centre: based in the birthplace of the foundress (Ballygriffin, Mallow), the Centre's work has a three-pillar approach – heritage, ecology and spirituality.³ It offers workshops, spirituality programmes and retreats for all ages to promote deeper awareness of the 'spirituality of being in communion'. The 32-acre organic farm at the Centre tries to be as self-sustaining as possible, using its own produce and modelling a more ecologically-friendly method of farming and living.

Presentation Justice Network: the Network collaborates with others in working to bring about systemic change for more sustainable development. Its Sustainable Living Programme – a training module originally published in 2007 – has been widely disseminated.⁴

The Network advocates and lobbies in collaboration with other NGOs. For example, it is a member of Stop Climate Chaos, a coalition of civil society organisations which has been campaigning for effective climate legislation in Ireland. It has been involved with the Comhlámh Trade Justice campaign regarding the potential social and environmental impacts of the EU–USA Transatlantic Trade and Investment Partnership (TTIP). It collaborated with Trócaire and the Debt and Development Coalition Ireland in lobbying in the lead-up to the Third International Conference on Financing for Development in Addis Ababa in July 2015.⁵

Challenge-to-Change: this is a development education programme for young people attending Presentation schools; it aims to raise awareness and bring about a greater understanding of global social and environmental issues.⁶

Presentation Ecology Officer: the work of the Ecology Officer focuses on environmental education, environmental advocacy and sustainable communities. In collaboration with Nano Nagle Centre, the Justice Network and Mount St. Anne's Retreat Centre, the Ecology Officer advocates on environmental issues, facilitates workshops for community groups, young people, transition year programmes and runs a 'Take Learning Outside' course for primary school teacher training.⁷

Clann Credo: founded by Presentation Sister, Magdalen Fogarty, the initial investment capital for this programme was provided by the Presentation Sisters. Now involving more than twenty religious charities, Clann Credo provides affordable loan finance to community, voluntary and charitable organisations, community businesses and social enterprises throughout Ireland.⁸

Inter-Congregational Collaboration: through involvement in 'The Future We Need' group, the Justice Network collaborates with other religious congregations in Ireland, promoting awareness and lobbying decision-makers on environmental issues – examples include making submissions to the Environmental Protection Agency advocating against 'hydraulic fracturing' and to the UN Working Group on the sustainable development goals and climate change in the lead-up to Rio+20 in 2012. Currently, The Future We Need group is developing a toolkit on the extractive industries, which is intended as an education and advocacy tool.

Training Opportunities: over the years, Presentation Sisters have availed of education and training opportunities relating to ecology, including:

- *'Be the Change':* this programme, brought to Ireland by the Sisters of Mercy, trains facilitators to deliver modules promoting a more 'environmentally sustainable, spiritually fulfilling, and socially just human presence on this planet'.
- *Diploma Course in Ecology and Religion* in Dalgan Park.
- *An Tairseach's 10-week programme* exploring spirituality in the light of Christian tradition, an evolving Universe and our endangered Earth.

Conclusion

We Presentation Sisters continue to respond to the challenge of protecting the environment by

modelling methods of care of the earth, promoting sustainable living, lobbying for systemic change and supporting like-minded organisations. In particular, we focus now on the follow-up to the Post-2015 Sustainable Development Agenda, which governments will commit to at the UN Special Summit on Sustainable Development in September 2015 and to the carbon reduction targets it is hoped will be agreed at the UN Climate Change Conference in Paris from 30 November to 11 December 2015.

Days of reflection and discussion on *Laudato Si'* are being sponsored for Presentation Sisters and their co-workers. The encyclical asks, 'What kind of world do we want to leave to those who come after us, to children who are now growing up?' This motivates us to continue to question the negative social and environmental impacts of unsustainable patterns of production and consumption. We envision a world where 'no one is left behind', where the principles of integrity, sustainability, equity, inter-generational solidarity, respect for nature and the common good are firmly established.

Notes

- 1. The Earth Charter, a product of a decade long, world-wide, cross-cultural conversation about common goals and shared values, is a declaration of fundamental principles for building a just, sustainable and peaceful global society in the 21st century. The Preamble to the Charter states: 'Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of life and to future generations.'
- 2. Pope John Paul II, General Audience Address, 'God made man the steward of creation', 17 January 2001. (http://www.vatican.va/holy_father/john_paul_ii/audiences/2001/documents/hf_jp-ii_aud_20010117_en.html)
- 3. <http://www.nanonaglebirthplace.ie/news/>
- 4. See: Union of Presentation Sisters, 'Sustainable Living Programme Downloads' <http://www.presentationistersunion.org/resources/default.cfm?loadref=271>
- 5. <http://www.un.org/esa/ffd/ffd3/>
- 6. http://presentationistersunion.org/news/view_article.cfm?id=1251&loadref=16
- 7. www.ecopresireland.org
- 8. www.clanncredo.ie
- 9. <http://bethechange.org.uk/symposium.cfm>

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Carrigaline Union, Diocese of Cork, Cloyne and Ross
Elaine Murray

Introduction

This is an account of the ‘eco journey’ of one County Cork Church of Ireland parish – ‘Carrigaline Union’, which has two churches, St Mary’s, Carrigaline and St John’s, Monkstown.

As a Christian community, we believe that all are accountable to God for what is done with creation, and so we face the question of how we are to fulfil that responsibility in the light of our contemporary problems. At a parish level we must emphasise the need for justice for those places and people who bear the brunt of the damage and pain provoked by our human-induced climate change. For these places and people, a changing climate means droughts, floods, crops failing, and diseases spreading, with no resources to adapt to the changes. As we see the effects of climate change, we are forced to acknowledge the ‘carbon debt’ owed by the developed countries to the rest of the world.

However, even as we acknowledge the need to respond to the environmental crisis we can also feel overwhelmed by the scale of the challenge: we can experience a sense of helplessness and of being swamped when faced with problems of such magnitude. Yet we recall the words of the eighteenth century Irish statesman and writer, Edmund Burke, who said that: ‘Nobody made a greater mistake than he who did nothing because he could do only a little.’

As a parish, an existing Christian community, we are already called to be ‘hope-filled’ and so we are ideally formed to actually do something about the threat of climate change.

At the heart of the covenant of God with his people is a call to ‘do justice’ and climate change is primarily a matter of justice. To do justice in this area is a call to change our lifestyles.

The Green Charter

As a vicar in Kilkenny between 2005 and 2011, I was fortunate to be working in a diocese (Diocese

of Cashel, Ferns and Ossory) determined to do something about environmental issues.

We developed a Diocesan Green Charter¹ which was rolled out to every parish in the diocese. This initiative ultimately led to a motion being brought to the General Synod of the Church of Ireland, in May 2015, proposing that an Environmental Charter be adopted by the whole of the Church as a way forward in environmental good practice. The motion was adopted by the General Synod.

The Environmental Charter commits parishes in each of the twelve Church of Ireland dioceses to:

- Identify areas of waste and excess;
- Encourage environmental responsibility in the broader community;
- Support the development of developing countries both spiritually and financially, by supporting fair trade and addressing the effects of climate change;
- Advocate policy change that is environmentally beneficial at both at local and national level.

Carrigaline Union

I arrived in my new parish of Carrigaline Union, Diocese of Cork, Cloyne and Ross, in December 2011. Initially, we set about becoming a ‘Fairtrade Parish’ which we achieved in August 2012, and then we began our journey towards applying for an Eco-Congregation Ireland Award. We received the Award in November 2014.

We see our work in the area of ecology as an ongoing process, and the Eco-Congregation website has many more resources and ideas which we hope to tap into in the coming years as we continue our work.

Our initiatives over the last three years have included:

Practical:

- The Select Vestry of the parish voted unanimously in February 2013 to support the concept that environmental issues and caring for God’s creation form part of our parish’s life and mission. This is important as it recognises the fact that a concern for the environment needs to be a ‘whole parish’ initiative.
- In our parish’s page in the diocesan magazine we have a section called ‘Green Matters’

where we let people know what has been happening and indicate that we are continually looking out for suggestions as to what we can do to become a greener parish. We also have items on environmental issues in our weekly ‘Pewsheets’.

- We stopped buying plastic cups and cutlery and began using the delph we already had in the cupboard. We sourced ‘green’, 100% compostable, cups, plates and napkins for use at events attended by large numbers; these materials are composted in the rectory compost bin.
- We bought new bins and began separating recyclable items.
- The Sunday School children were all given sunflower seeds, courtesy of Christian Aid, in 2013 and they ‘saved’ seeds from this original stock in 2014; we hold a competition to see who can grow the tallest sunflower and awards are made at the Harvest Service.
- In 2013, major work was undertaken on the rectory garden which had been left to its own devices for many years. We began by felling some trees which were in a dangerous state; the logs were sold within the parish to bear some of the costs of the renovation and the remainder of the logs were used in the rectory during the winter of 2013/14. We planted bee-friendly scrubs, hedging and fruit trees. The entire garden usage was revised and two separate ‘allotment’ type areas were developed for growing vegetables. A composting area was set up. The rectory now has a lovely and productive garden, buzzing with bees and butterflies and the members of the rectory family are enjoying the ‘fruit of our labour’.
- The surplus from the rectory garden is left in a box at the back of Carrigaline Church with a poster encouraging people both to take produce from the box and to add their own surplus to the box for others to take. This has proved very popular as people put in what they cannot use and then take home other types of produce.
- The wider parish is benefiting from the rejuvenated rectory grounds as the parish picnic is held there in June and the parish barbecue is held in September.
- An initiative which has not yet been implemented but has been passed by the Select Vestry, and has a subcommittee assigned to get it established, is to use our parish hall as a ‘community market’ each Saturday morning, encouraging local producers to ‘take a table’

and sell their wares, in particular items such as ‘ugly vegetables and fruit’ which supermarkets will not buy from them. (We have a number of farmers and market gardeners in the parish, as well as, for example, honey producers, bakers, egg producers, soap makers). The Rector has already met with the local Environmental Officer to expedite this project and now, with their approval, we are negotiating with our insurers and hope to be up and running in 2016.

- We have boxes at the back of the churches to collect clothes, shoes and blankets for Cork Simon Community. We also collect food for Cork Penny Dinners and cosmetics and other items for the Women’s Refuge.

Spiritual:

- We arrange creation-themed special services in the church (for example, Saturday Service on 9 February 2013 launching the parish’s ecological initiative; Harvest Festival Service in 2013 and 2014; Rogation Sunday Service in 2013 and 2014).
- Billy the donkey joins us for our Palm Sunday Service in Carrigaline each year and the entire congregation walks out of the church, down the road, through a housing estate, into the rectory grounds for an outdoor reading from the day’s lectionary and then through the graveyard back into the church.
- On Easter Sunday in 2013, 2014 and 2015, we joined with our sister church in Monkstown for an ecumenical dawn service which celebrated the Risen Christ out of doors by the sea.
- We hold an Animal Blessing Service in Carrigaline on the Sunday nearest the feast of St Francis of Assisi.

Community:

- We are involved in our parish school’s Green Flag initiative.
- Since 2013, we have had an annual sponsored ‘parish and school walk’ which joins up with An Taisce’s National Spring Clean initiative. All of the participants pick up rubbish as they walk. Rubbish bags are then collected free of charge by the local council.
- We had a Flower Festival at Pentecost 2013 in Carrigaline, celebrating the wonderful diversity of flowers. The theme was ‘The Fruit of the Spirit’. Plants were sold at this event and we advertised the availability of allotments in our local community.

- We have planted daffodil bulbs (a gift from the local Tidy Towns committee) in our properties to enhance the look of the area for the Tidy Towns competition.
- The Rector organised a Dawn Chorus event in Currabinny Wood within the parish boundaries in May 2015. This was an ecumenical event, with the Roman Catholic parish priests from Carrigaline and Monkstown joining in. Over 50 people took part in what we hope will now be an annual event.

Global:

The parish supports several global charities, some of which are involved in mitigating the effects of climate change on vulnerable communities (these charities include: Christian Aid, United Society and Feed the Minds).

Notes

1. For the text of the Charter, see website of the Diocese of Cashel, Ferns and Ossory. (http://cashel.anglican.org/?page_id=14650)

Rev Elaine Murray has been Rector of Carrigaline Union since 2011, and prior to that was Vicar of the Kilkenny Group of parishes, Diocese of Cashel, Ferns and Ossory.

Clonakilty Methodist Church *Clonakilty Eco-Congregation*

In Clonakilty Methodist Church we began our Eco-Congregation journey in 2004 when members met together to undertake an ‘environmental check-up’. We started by noting down the existing activities of the church and to what extent the environment played a part in these activities. We chose the following five areas to concentrate on as we worked towards achieving an Eco-Congregation Ireland Award:

- **Creation and Christianity** – in our regular and special church services we highlighted our stewardship of God’s creation and included prayers for environmental issues; we held a children’s summer club titled, ‘Reduce, Reuse, Recycle’.
- **Financial Matters** – we switched to a greener electricity supplier and worked on reducing the amount of electricity used, including low energy lighting options in the church. We also reduced the number of lights used and the length of time they were in use for services.
- **Care of Church Grounds and Land** – we cleared the back yard to make a garden (in which we no longer use synthetic chemical weed-killers); we planted trees to commemorate special services such as baptisms and confirmations. At Christmas, we have a living Christmas tree in the church, and then we transfer the tree into the garden for the rest of the year.
- **Personal Lifestyles** – we encouraged church members to reduce, reuse, recycle and compost, to use long-life shopping bags; to plan better for car-journeys, including using car-pooling as a option; to use eco-friendly cleaning products; to purchase L.O.A.F. products (that is, products that are locally produced, organic, seasonally available and fresh); and to join local groups such as ‘Sustainable Clonakilty’ and ‘Grow Your Own’).
- **Global Neighbours** – we encouraged church members to purchase Fairtrade products; we fostered links with asylum seekers in Clonakilty Lodge; we created an awareness of the impact of climate change on developing

countries and hosted an annual charity craft fair (to raise money for Tearfund, Christian Aid, and CAPHA, Centre for Artists Handicapped Physically, Ivory Coast) to which we invited speakers from developing countries and at which we served Fairtrade products.

Thanks to our then minister’s championing of the cause, the mindset of the congregation changed over time and we all became more aware of local and global environmental issues. In 2008, we were the first church in the Republic of Ireland to receive an Eco-Congregation Ireland Award.

Towards our Second Award

We were aware that this was an on-going project and there was still much to do so we appointed a member of the congregation as an ‘Eco-Champion’ to keep us on our toes! He encouraged us by including an ‘Eco-Tip’ in each Sunday Service and displaying it on our new notice board (made locally with local timber) outside the church so that passers-by could see it throughout the week.

In the church buildings, we continued to make changes so that we as a church community would be kinder to the environment. We began to turn off the lights in the church on the brighter days during spring, summer and autumn. Solar lamps were installed on the pulpit and beside the organ. When our old boiler broke down we replaced it with a new, more efficient, one and reduced the length of time it is running. We reclaimed more waste space at the back of the church and re-designed the garden (with more trees, eco-friendly gravel pathways and raised flower beds including plants to attract bees, butterflies and insects). The garden is now a wonderful facility and is used to host outdoor events.

In the church and at home we began to use a wider range of green cleaning and Fairtrade products and recycling facilities. We purchased a compost bin. The plaster on the wall outside the church was stripped to reveal beautiful natural stone.

In 2013, we were the first church in Ireland to receive a second Eco-Congregation Award. Representatives of Eco-Congregation Ireland came to present us with our wooden plaque (made from recycled church pews) and a bag of bio-charcoal for our garden! After the ceremony, members of the congregation, along with local organisations involved in environmental projects, joined

together for a L.O.A.F. meal. We received national recognition when RTE Six One News included a short piece on our eco achievements.

Since 2013, we have continued to look for ways to reduce our use of resources – for example, installing a data projector which is operated through a reconditioned laptop: this reduces printing and paper usage. We have installed timers on the water heaters. We encourage all those who decorate the church with flowers for Sunday Service to use what they have in their own garden and/or use what is in the church garden first before buying imported expensive flowers. We have spoken about the possibility of installing solar panels or a wind turbine in the future. We have discussed purchasing a water butt to save rain water, using water hippos to reduce the amount of water used in toilets and installing aerators for taps.

We also continue to encourage members of the church to find ways to ‘reduce and re-use’ in their own lives – for example, to consider their heating options and reduce the use of fossil fuels; to use non-peat firelighters; to consider where and how the clothes they buy are produced and when finished with them to donate them to charities, to consider more fuel efficient models as options if purchasing a car.

The journey is not over – we plan to keep environmental issues in the minds of the congregation, to continue the work we have done to date and endeavour to come up with new and fresh ideas. We will continue to encourage one another to take care of the beautiful planet which God provided for us, remembering the words of the Psalm: ‘The earth is the Lord’s, and everything in it, the world, and all who live in it’ (Psalm 24:1; New International Version).

Fitzroy Presbyterian Church

Fitzroy Caring for Creation

Origins

The environmental work of Fitzroy Presbyterian Church in Belfast city emerged from Fitzroy’s existing work with Clonard Monastery, under the ‘Clonard/Fitzroy Fellowship’. As part of the programme of activities of the Fellowship, we asked Sr Catherine Brennan of Eco-Congregation Ireland to speak to the group on the theme of the environment and reconciliation. This excited the interest of a number of members of the group, so they spoke about it in the wider church circle and from this emerged a desire to expand the Fellowship’s work of reconciliation to include the environment.

A meeting open to people from both churches was arranged to see what interest there was in pursuing this issue and what they would like to do. Everyone who attended shared experiences and perspectives and indicated the issues that interested them. Out of this, Fitzroy Caring for Creation group was set up in 2009; all the members of the group were from Fitzroy Church.

Inspiring Principles and Core Features

Fitzroy Caring for Creation (FCfC) started out as a small group of people who shared a passion for creation and a concern for its well-being. Initially, we had a core group of about six to eight, with links to others who also had an interest in creation. This core group met monthly to monitor progress in current projects and to start work or research on any future projects.

From the beginning, an important feature of the group has been that it is led by ordinary members of the congregation – it is not a top-down group initiated by the Kirk Session. After it was set up, the group wrote to the Kirk Session to seek its support; this was given, but the driving force remained the members of the group itself, and it was left to them to decide the direction the work of the group should take.

The group is based on co-operative values without an individual leader. Having various skills and

talents, we co-operate and we complement each other. We try to meet each month and tend to arrange our meetings via emails; our minister and Clerk of Session are also included in any relevant emails, as are members of the congregation who have registered an interest in the group but are unable to attend the meetings because of other commitments.

Activities and Award

We used the resources of Eco-Congregation Ireland website to get us started, compiling the suggested ‘audit’ to identify where we were strong and where there were gaps. This showed up several gaps in our eco-awareness and practice.

We decided not to be a group that focused inwardly on Fitzroy but, rather, we would go out and visit other churches in Belfast, as well as individuals, we knew had similar interests. And so we spent time building relationships with other groups and churches – we visited St Molua’s parish in East Belfast (this was first church on the island of Ireland to receive an Eco-Congregation Ireland Award) and other churches and church groups to see what they had done and to get ideas for how we could start becoming more environmentally-friendly. We were keen also to network with other churches and groups to promote an eco-congregation approach. In addition, we sought to address the wider Presbyterian community in south Belfast through meeting with the South Belfast Presbytery.

Following our self-assessment through the audit and the initiation of a number of eco-friendly initiatives, the group submitted an application for an Eco-Congregation Ireland Award. The subsequent visit and assessment by Eco-Congregation led to Fitzroy becoming, in 2011, the first Presbyterian Church in Ireland to gain an Eco-Congregation Award.

Some of the practical changes that Fitzroy Caring for Creation has been part of include:

Flowers: We spent time getting about 20 large troughs built to place around the church premises. These troughs were filled with soil and we then planted them with annual flowers. Fitzroy is located in a rather bleak urban setting – there is little of the natural world evident in the vicinity. Having 20 troughs filled with flowers and shrubs really helped to soften the look of the area, brought along lots of insects and bees to feed off the flowers, drew the

attention of passers-by to the church and improved the look of the church grounds.

Cleaning: We switched to using eco-friendly hand soaps, cleaning products, and toilet rolls.

Energy Saving: We changed all of the light bulbs in the main church to energy-saver bulbs (most of the bulbs in the halls were already energy-saving).

Recycling: We started weekly recycling of paper, plastic and tins in the church and church halls. Three separate bags are now available beside the main bin, so that people can appropriately dispose of council-recycled products.

Environmental Message: We had a notice area in the corridor of the church to promote our message and provide information on new initiatives. We have also led a Harvest Service on Caring for Creation themes, as well as other environmental slots in services throughout the year.

Reduce: We have tried to reduce the size of our Order of Service printouts each week. The front page is no longer just a presentation page but also contains the start of the Order of Service. The words of all hymns/songs are no longer printed in every Order of Service handout: instead, there are now just a few copies of the words printed for people who struggle to read the words from the screen at the front of the church. We have reduced the quantity of paper used by 50%, although there are some larger print versions for those with a visual impairment.

Fairtrade: We have maintained our Fairtrade status, encouraging the use of Fairtrade tea and coffee throughout the church. We use ceramic mugs and cups after church services on Sundays and try to use biodegradable paper cups at other meetings.

Nature: In 2010 there were five Sunday afternoon church walks with an emphasis on being aware of our surroundings – and some practical recycling! Each walk examined a different eco-system, for example, woodland, wetland, coastline. In 2011, four walks were arranged: Carnmoney Hill (April); Helen’s Tower, Conlig (May); Cavehill (June); Scrabo Country Park (September). These walks were led by a member of the congregation who is a keen amateur botanist.

Eco Network: As stated previously, we are interested in the wider community outside the doors

of Fitzroy. To this end, we initiated the setting up a wider network of churches and groups to promote environmental/creation work across Belfast – networking laterally. This group meets every six months or so with representatives from about eight different churches and is a forum for individuals and churches/church groups to meet and hear from one another. Our discussions have ranged from practical matters (such as environmentally-friendly cleaning products) to more structural issues, such as the struggle to persuade church authorities and members of congregations to give more serious attention to the issue of care for creation. The support of Eco-Congregation Ireland in promoting these events has been very helpful.

Plans

We in Fitzroy are coming towards the completion of a large extension of our premises; this work has meant that many of our facilities have not been in use over the last year. We have tried to include a number of environmentally-friendly and cost-efficient ideas in the new build – for example, zoned heating and movement sensors to turn lights on and off.

Like all groups, we have lost some members over the years, and with the church facilities not available during the past year we have not been very active. With the new premises opening in autumn 2015, it will be a time to renew our activities, so we are hopeful for the future.

Rathfarnham Quaker Meeting

Ciara Harrison

Are you concerned that man's increasing power over nature should not be used irresponsibly but with reverence for life and with a sense of the splendour of God's continuing creation?

Try to live simply. A simple lifestyle freely chosen is a source of strength. Do not be persuaded into buying what you do not need or cannot afford. Do you keep yourself informed about the effects your style of living is having on the global economy and environment?

These are the words of two of the *Advices and Queries* on which members of the Religious Society of Friends (Quakers) are encouraged to reflect from time to time. Quakers, who in the early days were known as Friends of the Truth, have ‘testimonies’ which point to the way we attempt to lead our lives by putting faith into action. The testimonies have changed over the years, according to the times in which Quakers have lived. At one time, there were testimonies with regard to slavery, capital punishment and taking oaths, but in the past century the focus has been primarily on the testimonies of peace, simplicity, equality and integrity.

In 2009, two members of Cork Quaker Meeting visited Rathfarnham Meeting and delivered an informative and challenging talk on environmental care. Denise Gabuzda linked creation care to the testimonies, emphasising especially those of simplicity and peace. She shared with us also how some Quakers, especially in America, were beginning to talk about environmental care as an emerging testimony. Natasha Harty, who at that time was the Quaker representative on the Eco-Congregation Ireland committee, shared how Cork Quakers had undertaken practical steps to incorporate earth care into the life of their Meeting, including planting an orchard in the grounds of their graveyard and promoting locally-grown fruit and vegetables.

Natasha and Denise's presentation struck a chord with many members of Rathfarnham and prompted several of us to form an Eco Committee for the Rathfarnham Meeting to consider what steps we

could take to incorporate creation care into the life of our Meeting.

One of our first actions was to complete Eco-Congregation Ireland's ‘Church Check-up’, which is the first section of its online resources (www.ecocongregationireland.com).

We found this an encouraging exercise as it helped us identify what we were already doing – for example, recycling, using low-energy light bulbs, and using delph rather than disposable cups. We met with the warden of the Meeting to work out a plan to take further steps and we found that working through the check-list had already given us plenty of ideas.

In order to save water, we put water containers into the toilet cisterns and, to support renewable energy, we switched to Airtricity. We made a commitment to buy only eco-friendly soap, washing-up liquid, toilet rolls and cleaning products and to purchase Fairtrade-labelled tea and coffee.

In the garden of our Meeting House, we dug a herb garden and planted four fruit trees. All members of the Meeting – from toddlers to people over 90 – got involved in digging, wheelbarrowing, planting and nurturing. Our gardening was a small step towards local resilience, to be sure, but also a great way to strengthen bonds of friendship in the Meeting. It was hoped too that by growing herbs and fruit in our garden, members of the Meeting would be encouraged to grow produce at home, thus reducing food miles to food metres.

In order to encourage biodiversity, we allowed some of the lawn to grow into a natural meadow and in 2011 this became home to three bee-hives. Given the precarious position of bees in the world today and how essential they are to the balance of nature, it is satisfying to be able to accommodate bees in this way and to enjoy the fruits of their labour – including natural lip balm as well as delicious honey. We also installed a water butt, which is convenient for watering the herbs and trees.

From time to time, Junior Meeting sessions with our children and teenagers focus on environmental topics – covering everything from fair trade and recycling to the importance of rainforests. They joined in Stop Climate Chaos's ‘Ring the Changes’ action in 2009 and over the years have organised fundraising events for environmental charities such

as VITA and Rainforest Concern. One year, the children and young people made an Easter Garden using natural materials and, more recently, they made a climate change ‘love tree’ on which they hung hearts with pictures/words depicting things they love which are currently under threat from climate change – including their families, favourite beaches, and chocolate.

We have found too that environmental care is a great way to engage with members of the local community and other churches. We have invited local people to join us in a number of initiatives, including litter picks and candle-lit vigils to mark Earth Hour on the last Saturday of March. We hope the vigils will become an annual event: there is something powerful in joining with people locally and across the globe in switching off lights to save energy and, in so doing, promoting awareness of the urgent need for carbon reduction.

In December 2011, we were delighted to become the first Quaker Meeting in Ireland to receive an Eco-Congregation Ireland Award. Since then, we have continued to strive to keep earth care in our sights. For example, in summer 2014, we held a Plant-a-Seed Day for the children and in the autumn they planted 100 daffodil bulbs. In autumn 2015, they will make lavender bags, using lavender from the herb garden, and they are also intending to make pictures for a 2016 calendar with a ‘Save the Earth’ theme. We are also planning an eco-stall for the Open Day we will be holding on 4 October 2015 where we will invite visitors to write carbon-reducing pledges on footprints; these we will use to make a giant collage, which will be displayed so that it can be seen by all the different groups who use the premises.

Members of the Rathfarnham Meeting will also continue to take part in events and campaigns organised by Eco Quakers Ireland and Stop Climate Chaos. We believe it is crucial that we continue to work together with other groups – locally, nationally and internationally – especially in the run-up to the crucial UN climate talks taking place in Paris in November-December 2015.

Ciara Harrison is a member of the Rathfarnham Quaker Meeting Eco Committee.

Nurturing Creation in Balally

Balally Parish Environment Group

Introduction

Over many years, there has been a growing awareness in Balally Parish of the threat to humankind posed by climate change; of the reckless way we humans abuse the natural environment and of the fact that the people who suffer most from the effects of climate change are those who live in developing countries, i.e., the people who have contributed least to the problem.

People in the parish began to recognise that, as Pope John Paul II said in 1990, there is a new consciousness throughout society ‘that world peace is threatened, not only by the arms race, regional conflicts and continued injustices among peoples and nations, but also by a lack of due respect for nature, by the plundering of natural resources and by a progressive decline in the quality of life’.¹

Some parishioners were motivated to come together to seek ‘to recover the gift of the Spirit in creation, in the earth, in each other, and in our Christian communities so that we may together be inspired and empowered to heal a planet in peril.’²

Leadership

For many years, strong leadership on environmental concerns has been given by the parish team led by Monsignor Dermot Lane, the Parish Priest of Balally. Monsignor Lane has a long history of presenting a Christian theological understanding of humankind’s role in the continuing act of God’s creation in his homilies, liturgies, lectures and writing. He encouraged the parish affiliation to the Three Rock Churches’ Environment Group, an ecumenical grouping of seven church communities located in the shadow of Three Rock Mountain.

Since 2008, the Parish Pastoral Council has included in its objectives a determination to increase awareness of climate change; to engage actively with other local Christian communities in developing a Christian response to climate change and to engage actively with the Eco-Congregation Ireland programme.

Balally Parish Environment Group

Encouraged by this parish leadership, a parish environmental group became active. We participated in the Eco-Congregation Ireland bell-ringing initiative on 8 December 2007 (in connection with the UN Climate Change Conference in Bali); we marked Earth Hour in March 2008 and mounted an exhibition in the church on the effects of climate change; with Eco-Congregation and Three Rock Churches’ Environment Group we hosted an Ecumenical Prayer Service.

The group was formally launched in October 2010 as BEG (**B**alally **P**arish **E**nvironment **G**roup).

Mission Statement

The Group adopted the following mission statement:

We recognise:

- that as Christians we have a role to play in God’s continuing work of creation;
- that our lifestyles are causing immeasurable damage to the natural environment;
- that we are placing in jeopardy the future of generations as yet unborn;
- that vulnerable people in the developing world are currently suffering from drought, flood, famine, illness and dislocation as a consequence of our lifestyle choices.

Our mission:

We intend to act on our responsibility as Christians to care for God’s creation by:

- making appreciation of and care for God’s creation an integral part of our parish liturgies;
- participating in ecumenical environmental initiatives;
- informing ourselves and our parish community of the ways in which we can participate in initiatives to promote sustainable living, both local and global;
- promoting awareness of our duty to future generations as well as towards the poorest people of the world who are suffering the adverse effects of the unsustainable lifestyles of richer countries.

Activities

Responding to its mandate from the Parish Pastoral Council and its own mission statement, BEG engages in a range of activities with the aim of raising awareness of the environmental crisis, and awareness of how we as Christians together might address the situation.

Liturgy

- We contribute prayers on an environmental theme to be regularly included in the Prayers of the Faithful at Sunday Masses.
- We organise special ‘Creation Masses’, in consultation with the parish liturgy committee, on significant dates each year (for example, World Environment Day) when the homily, the offertory procession, the hymns, the Prayers of the Faithful and the Communion Reflection are all chosen to reflect an environmental theme.
- With Eco-Congregation Ireland and Three Rock Churches’ Environment Group, we hosted an Ecumenical Prayer Service for the success of the Durban Climate Change Conference in December 2011. We attend similar liturgies organised by other church groups.
- To coincide with the Summit on Climate Change in September 2009, we organised a climate change lunchtime prayer service accompanied by the ringing of the church bell.
- To mark World Environment Day in October 2010 we erected in the church a simple structure made of light branches, bamboo, and garden netting, and covered it with leaves, flowers, fruit, and Fairtrade items. The inspiration for this initiative was the Jewish feast of Sukkot, marking harvest time and the wandering in the desert of the ancestors of the Jews (Lev. 23:42–43). Our aim was to draw attention to the plight of so many Africans today who are being driven from their land by advancing desertification.
- After our Creation liturgy in October 2012 we organised a public talk, ‘Treading Lightly on the Earth’, by environmentalist and broadcaster Éanna Ní Lamhna, followed by a question and answer session.
- We distribute bulbs to all members of the congregation as they leave Mass on ‘Balally Plant a Bulb Day’. We encourage people to plant the bulb at home as a symbol of our appreciation of the beauty of creation and of our belief in the future flourishing which will result from hopeful seeds sown in darkness. This project commenced in 2010 and our

purpose was to lift spirits at a time of deep depression in our country. In 2014, people had the option of planting the bulbs in a new flower bed which had been prepared for this purpose outside the church. In 2015, they were encouraged to plant the bulbs at home.

- For Creation Time in 2014 we held an evening of music, poetry, and prayer to accompany a PowerPoint presentation of the many wonderful facets of our natural world.

Information

We recognise that, in order to make a meaningful contribution to environmental protection, we and our parish community need to keep abreast of changes and proposals for changes that have the potential to impact on the environment for better or for worse. There is, therefore, an information element in all of our input to liturgies and community projects.

- Individually, we attend conferences, seminars, public meetings; we visit relevant websites and read books and articles on environmental issues.
- We regularly publish climate change material in the weekly Parish Newsletter and also in the monthly Three Rock Panorama Community Magazine (circulation 1,700 in the area from Dundrum to Enniskerry and from Leopardstown to Glencullen).
- We display posters relating to nature, the environment and climate change in the church from time to time.
- We display notices in the church to inform parishioners of events and activities of environmental interest.

Community Projects

- In the lead-up to the Copenhagen Climate Change Conference in December 2009, we organised a petition, which was presented to the then Minister for the Environment, urging that the Irish Government representatives at the Conference would press for a meaningful agreement on climate change. A book for signatures to the petition was available in the church over a number of weeks to give parishioners an opportunity to be associated with the initiative.
- We publicise and support initiatives by agencies, such as Trócaire, which work for climate justice.

- Each year, as our Lenten priority, we adopt the theme of that year’s Trócaire campaign and plan our initiative around it.
- We engage our schools in a variety of ways. Surplus bulbs from the annual ‘Balally Plant a Bulb Day’ are distributed to the schools to assist them in the greening of their school.
- Following the building of our Parish Pastoral Centre we worked with a group of children from Queen of Angels School in planting a flower bed outside the church/pastoral centre in preparation for the visit of the President of Ireland for the official opening of the Pastoral Centre, in January 2013. Subsequently, at a school assembly, a member of BEG presented each child who had participated in the work with a certificate signed by the Parish Priest and the Chair of BEG.
- Our two parish schools partnered us in our Lenten project, ‘A School Child’s Environmental Pledge for Lent in 2013’. The children were asked to select a simple task from a list and pledge to do that selected task for the week, then select another task for the following week, and so on for each week of Lent. Different lists were prepared for the younger and older children. The lists also contained a gentle reminder, to those who could afford it, to put a little money in the Trócaire box that week.
- We worked with residents of Wedgewood Estate in a clean-up of the area surrounding the local Scout Den and in preparing the ground for planting.
- On an ongoing basis, we collect used batteries and used stamps in the church porch. The batteries are delivered to the Laura Lynn Foundation and the used stamps to a local school. Both batteries and stamps are used for fundraising.
- We have been represented on Three Rock Churches’ Environment Group (TRCEG) and have participated in its activities over the years. In summer 2008, our church was the venue for a display of posters created by children from seven local primary schools who participated in the TRCEG-organised ‘Make a Poster’ initiative, the theme of which was ‘Cherishing Creation’. Two ecumenical Eco Services were held in Balally Church under the auspices of TRCEG and more recently some meetings of the group were held in our new Pastoral Centre.

Practical Parish Arrangements

- Use of paper is kept to a minimum in the

parish office, by employing alternatives such as texting and emailing where appropriate. When printing is necessary, it is done on both sides of the page, if feasible. Waste pages are used when preparing machines for print runs and for testing before printing commences.

- BEG encourages the use of Fairtrade products by providing the Pastoral Centre café with Fairtrade tea and coffee.
- A member of BEG was actively involved in the planning and overseeing of the development of the new Pastoral Centre. Sustainability was a key consideration in its design and construction. Heating is provided through the use of solar panels.

Current BEG Activities

- In late spring 2015, Balally Parish applied for a Eco-Congregation Ireland Award, and in the subsequent assessment was successful. This Award will be formally presented in autumn 2015.
- For Earth Day 2015 (Wednesday, 22 April 2015), fourteen posters, one for each Station of the Cross, and containing relevant (climate change related) quotations by a variety of well-known philosophers were mounted on the walls of the church, and remained there throughout the summer months.
- BEG was involved in supporting Balally Parish in hosting a conference in Balally Pastoral Centre (18–19 September 2015) on Pope Francis’ encyclical, *Laudato Si’: On Care for Our Common Home*.

Notes

1. Pope John Paul II, ‘Peace with God the Creator, Peace with all of Creation’, Message for the Celebration of World Day of Peace, 1 January 1990. (http://www.vatican.va/holy_father/john_paul_ii/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace_en.html)
2. Dermot A. Lane, ‘Discerning the Holy Spirit in the Life of Creation’, *Doctrine and Life*, Vol. 62, No. 2, February 2012. The article is the text of Fr Lane’s sermon at an ecumenical service organised by Eco-Congregation Ireland in the Church of the Ascension, Balally Parish, 1 December 2011, in the context of the UN Climate Change Conference, Durban, South Africa.

The Role of Social Enterprise in Renewable Energy Production

Gerard Doyle

Introduction

Natural resources – water, energy and fertile soil – are fundamental to our life on earth. Many environmentalists – for example, Tim Jackson¹ – believe that at the heart of the environmental crisis we are experiencing, and which is manifesting itself in so many ways, lies over-consumption of the earth’s resources. In 2009, for example, it was estimated that humans were extracting and using in excess of 50% more natural resources than was the case thirty years previously.²

This level of consumption is leading to deforestation, species extinction at an alarming rate, shrinking of our natural water resources and climate change. In order for people in both developed and developing countries to live fulfilled lives, there is need to reduce over-consumption wherever it occurs and, in essence, to live more sustainably. Failure to do so will lead to increased pressure being exerted on ecosystems and may ultimately result in large swathes of the earth becoming uninhabitable.³

In his encyclical letter, *Laudato Si’: On Care for Our Common Home*, Pope Francis documents the relationship between environmental degradation and global inequality.⁴ He speaks of the requirement to replace the culture of consumption with a more humane and ecological model of economic development which meets all of humanity’s essential needs.

This article asserts that social enterprise can play an important role in addressing many aspects of the environmental crisis. The particular focus of the article is the contribution which social enterprise can make towards combating climate change through the development of renewable energy projects.

Definition and Focus of Social Enterprise

‘Social enterprise’ has been defined in many different ways. However, a widely accepted definition is that a social enterprise is an independent, autonomous organisation that engages in economic activity to realise a social objective.⁵

Social enterprises are democratic in that they are controlled by their members. These enterprises express their commitment to their social goals by limiting the distribution of surplus income to members, and instead reinvesting this for future development. Social enterprises can take many forms including co-operatives, mutuals and foundations.⁶

John Pearce⁷ suggests that social enterprises are more concerned about protecting the environment than are private enterprises, since the success of social enterprises is measured in terms of their economic, environmental and social impacts as opposed to the maximisation of profit for owners, which is the fundamental objective of conventional private enterprises. Furthermore, social enterprises have close connections with the communities in which they are based and are often controlled by local residents.

Social Enterprises and Renewable Energy

The arguments for promoting renewable energy social enterprises (also referred to as ‘community energy’) include:

- Social enterprises can play an important role in increasing public acceptance of renewable energy, particularly wind energy,⁸ because the benefits to communities are visible.⁹ Danish research has found that people who have shares in wind turbines owned by social enterprises are more positively disposed to the construction of additional turbines than those who have not invested.
- Social enterprises can also play an active role in educating the public about renewable energy¹⁰ and the importance of adhering to more sustainable lifestyles where households have a lower carbon footprint.
- Social enterprises provide ordinary citizens with the opportunity to develop renewable energy projects. Research into public attitudes towards renewable energy projects in the UK indicates that people would welcome the opportunity to have greater involvement in renewable energy development. However, it also reveals that people are conscious that in

- Each year, as our Lenten priority, we adopt the theme of that year’s Trócaire campaign and plan our initiative around it.
- We engage our schools in a variety of ways. Surplus bulbs from the annual ‘Balally Plant a Bulb Day’ are distributed to the schools to assist them in the greening of their school.
- Following the building of our Parish Pastoral Centre we worked with a group of children from Queen of Angels School in planting a flower bed outside the church/pastoral centre in preparation for the visit of the President of Ireland for the official opening of the Pastoral Centre, in January 2013. Subsequently, at a school assembly, a member of BEG presented each child who had participated in the work with a certificate signed by the Parish Priest and the Chair of BEG.
- Our two parish schools partnered us in our Lenten project, ‘A School Child’s Environmental Pledge for Lent in 2013’. The children were asked to select a simple task from a list and pledge to do that selected task for the week, then select another task for the following week, and so on for each week of Lent. Different lists were prepared for the younger and older children. The lists also contained a gentle reminder, to those who could afford it, to put a little money in the Trócaire box that week.
- We worked with residents of Wedgewood Estate in a clean-up of the area surrounding the local Scout Den and in preparing the ground for planting.
- On an ongoing basis, we collect used batteries and used stamps in the church porch. The batteries are delivered to the Laura Lynn Foundation and the used stamps to a local school. Both batteries and stamps are used for fundraising.
- We have been represented on Three Rock Churches’ Environment Group (TRCEG) and have participated in its activities over the years. In summer 2008, our church was the venue for a display of posters created by children from seven local primary schools who participated in the TRCEG-organised ‘Make a Poster’ initiative, the theme of which was ‘Cherishing Creation’. Two ecumenical Eco Services were held in Balally Church under the auspices of TRCEG and more recently some meetings of the group were held in our new Pastoral Centre.

Practical Parish Arrangements

- Use of paper is kept to a minimum in the

parish office, by employing alternatives such as texting and emailing where appropriate. When printing is necessary, it is done on both sides of the page, if feasible. Waste pages are used when preparing machines for print runs and for testing before printing commences.

- BEG encourages the use of Fairtrade products by providing the Pastoral Centre café with Fairtrade tea and coffee.
- A member of BEG was actively involved in the planning and overseeing of the development of the new Pastoral Centre. Sustainability was a key consideration in its design and construction. Heating is provided through the use of solar panels.

Current BEG Activities

- In late spring 2015, Balally Parish applied for a Eco-Congregation Ireland Award, and in the subsequent assessment was successful. This Award will be formally presented in autumn 2015.
- For Earth Day 2015 (Wednesday, 22 April 2015), fourteen posters, one for each Station of the Cross, and containing relevant (climate change related) quotations by a variety of well-known philosophers were mounted on the walls of the church, and remained there throughout the summer months.
- BEG was involved in supporting Balally Parish in hosting a conference in Balally Pastoral Centre (18–19 September 2015) on Pope Francis’ encyclical, *Laudato Si’: On Care for Our Common Home*.

Notes

1. Pope John Paul II, ‘Peace with God the Creator, Peace with all of Creation’, Message for the Celebration of World Day of Peace, 1 January 1990. (http://www.vatican.va/holy_father/john_paul_ii/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace_en.html)
2. Dermot A. Lane, ‘Discerning the Holy Spirit in the Life of Creation’, *Doctrine and Life*, Vol. 62, No. 2, February 2012. The article is the text of Fr Lane’s sermon at an ecumenical service organised by Eco-Congregation Ireland in the Church of the Ascension, Balally Parish, 1 December 2011, in the context of the UN Climate Change Conference, Durban, South Africa.

The Role of Social Enterprise in Renewable Energy Production

Gerard Doyle

Introduction

Natural resources – water, energy and fertile soil – are fundamental to our life on earth. Many environmentalists – for example, Tim Jackson¹ – believe that at the heart of the environmental crisis we are experiencing, and which is manifesting itself in so many ways, lies over-consumption of the earth’s resources. In 2009, for example, it was estimated that humans were extracting and using in excess of 50% more natural resources than was the case thirty years previously.²

This level of consumption is leading to deforestation, species extinction at an alarming rate, shrinking of our natural water resources and climate change. In order for people in both developed and developing countries to live fulfilled lives, there is need to reduce over-consumption wherever it occurs and, in essence, to live more sustainably. Failure to do so will lead to increased pressure being exerted on ecosystems and may ultimately result in large swathes of the earth becoming uninhabitable.³

In his encyclical letter, *Laudato Si’: On Care for Our Common Home*, Pope Francis documents the relationship between environmental degradation and global inequality.⁴ He speaks of the requirement to replace the culture of consumption with a more humane and ecological model of economic development which meets all of humanity’s essential needs.

This article asserts that social enterprise can play an important role in addressing many aspects of the environmental crisis. The particular focus of the article is the contribution which social enterprise can make towards combating climate change through the development of renewable energy projects.

Definition and Focus of Social Enterprise

‘Social enterprise’ has been defined in many different ways. However, a widely accepted definition is that a social enterprise is an independent, autonomous organisation that engages in economic activity to realise a social objective.⁵

Social enterprises are democratic in that they are controlled by their members. These enterprises express their commitment to their social goals by limiting the distribution of surplus income to members, and instead reinvesting this for future development. Social enterprises can take many forms including co-operatives, mutuals and foundations.⁶

John Pearce⁷ suggests that social enterprises are more concerned about protecting the environment than are private enterprises, since the success of social enterprises is measured in terms of their economic, environmental and social impacts as opposed to the maximisation of profit for owners, which is the fundamental objective of conventional private enterprises. Furthermore, social enterprises have close connections with the communities in which they are based and are often controlled by local residents.

Social Enterprises and Renewable Energy

The arguments for promoting renewable energy social enterprises (also referred to as ‘community energy’) include:

- Social enterprises can play an important role in increasing public acceptance of renewable energy, particularly wind energy,⁸ because the benefits to communities are visible.⁹ Danish research has found that people who have shares in wind turbines owned by social enterprises are more positively disposed to the construction of additional turbines than those who have not invested.
- Social enterprises can also play an active role in educating the public about renewable energy¹⁰ and the importance of adhering to more sustainable lifestyles where households have a lower carbon footprint.
- Social enterprises provide ordinary citizens with the opportunity to develop renewable energy projects. Research into public attitudes towards renewable energy projects in the UK indicates that people would welcome the opportunity to have greater involvement in renewable energy development. However, it also reveals that people are conscious that in

order for communities to become involved there is need for appropriate structures and supports to facilitate this.¹¹

- Social enterprise can contribute to EU Member States attaining their EU renewable energy targets.
- Social enterprise energy development is an effective mechanism for creating employment and for rural regeneration.¹²
- The provision of energy through social enterprises reduces the risks to communities of disruption of energy supply due to geo-political factors.¹³
- The provision of household heating through social enterprise communal heating schemes results in participating households being less at risk of experiencing fuel poverty.

Barriers to Establishing Renewable Energy Social Enterprises

Research in the UK has identified a number of issues which can act as significant barriers to the establishment of renewable energy social enterprises. These include:

- Securing expertise in setting up an appropriate legal structure and testing feasibility; acquiring expertise in renewable energy technology.
- Securing appropriate finance, particularly for large-scale renewable energy projects.
- Difficulties in getting connected to the national electricity grid.
- Lack of state incentives to promote small-scale renewable energy production.
- A failure on the part of local authorities to promote community renewable energy projects and their reluctance to grant planning permission for such projects.¹⁴

Irish communities endeavouring to establish renewable energy social enterprises encounter similar barriers to those outlined above. The result is that, so far, a relatively low number of renewable energy social enterprises have been established in Ireland.

In 2011, there were only 30 renewable energy social enterprises at either operational or planning stage in Ireland.¹⁵ One of these is the Camphill Community in Ballytobin, County Kilkenny, which generates all of the heating requirements of the community's buildings from waste organic matter

in a process called anaerobic digestion. Another is the Cloughjordan Ecovillage whose heating system is fuelled by wood chips.

The barriers Irish communities encounter in developing renewable energy social enterprises as compared to their counterparts in other European countries is exemplified in the process for gaining connection to the national electricity grid in Ireland as compared to Denmark. A renewable energy social enterprise in Denmark can be connected to the national electricity grid within one week of submitting an application;¹⁶ in Ireland, the process can sometimes take years to complete.¹⁷

How It Might be Done

Ireland can learn a great deal from other countries about how communities can, through social enterprise development that is supported by national policies, embrace renewable energy and in doing so fortify their local economies and strengthen community self-reliance.

Denmark

A high proportion of Denmark's wind power capacity is owned by 'local partnerships' and guilds (legal restrictions on ownership structures in Denmark mean that joint ownership of wind turbines takes the form of a general partnership/full liability company rather than of a 'co-operative'¹⁸). In 2002, these groups owned 5,600 wind turbines, the output of which represented 23% of Denmark's wind capacity in that year, and equated to 14% of the nation's electricity consumption.

A key factor in the growth of these local partnerships was the formation of the Danish Association of Wind Power Guilds (DV), a non-profit, independent association of local wind farm groups. DV has played an important role in advocating for a benign environment for the growth of the social enterprise sector in wind energy production and is responsible for representing the sector's interests in interactions with local authorities, utilities and wind-turbine manufacturers.

Wind energy social enterprises in Denmark developed from informal interactions amongst residents. The process for establishing wind farms has generally entailed the following steps:

- A local person has the idea of establishing a wind farm;

- She/he gets the assistance of a few other residents;
- They find a small number of farmers living in close proximity willing to erect turbines on their farms;
- They gain community support for the initiative at a series of public meetings;
- They join DV and it provides advice on legal issues and assists with the formation of the social enterprise.



Wind Farm vs Power Station?

iStock Photo © stevotin

In addition to the generation of wind power, social enterprise groups in Denmark play a central role in the operation of district heating systems in areas outside the country's major cities.¹⁹ Denmark's Heat Supply Act of 1979 obliged local authorities to formulate heating plans.²⁰ This stimulated major investment in heating networks, and local authorities were mandated to require consumers to connect to new district heating systems. As a counterbalance to consumers being compelled to switch to district heating systems, social enterprises in the form of consumer co-operatives were formed to manage these schemes, thus ensuring consumer control. Since the co-operatives are not-for-profit operations, heating costs are kept to a minimum: prices are set on an annual basis and are calculated to cover costs only. Any surplus that accrues is re-invested in improving the district heating system or in reducing prices.

One analysis of the policy concluded that 94% of the heat sold by Danish district heating systems was cheaper to customers than alternative heating systems fuelled by oil or natural gas.²¹ This analysis has also concluded that the fact that the heating schemes are provided by social enterprises ensures that a breakdown of the system is not as financially onerous for households as would be the breakdown of an individual, household-owned, heating system.

Furthermore, the democratic structure of these district heating systems means that members, who are also consumers, have an input into the governance and operation of schemes.

David Connolly, Associate Professor, Aalborg University, Denmark has co-ordinated an EU study which developed a heating strategy for Europe for the year 2050. During this study, his research team created the first ever pan-European heat atlas to identify where district heating is feasible in Europe. The results for Ireland indicate that approximately one-third of the heat demand in this country is in areas where overall demand is sufficiently high to allow for the development of district heating.²² It has been estimated that if district heating were to be fully pursued in Ireland, this would save approximately €400–€500 million per year on the country's fossil fuel import bill.

Germany

At a seminar organised by the Society for Co-operative Studies in Ireland in 2014, Andreas Wieg, Director of the Executive Staff Department at the German Cooperative and Raiffeisen Confederation, spoke about the role and development of energy co-operatives in Germany. The number of such co-operatives has increased dramatically since 2008: in that year, there were just 67 but by 2013 there were 717, with over 200,000 members.

A number of drivers have contributed to this growth. These include legislation and public policy which set in place incentives such as a feed-in tariff guaranteed for 20 years and an obligation on grid owners to purchase energy from renewable energy producers.²³ Furthermore, the growth of community energy in Germany has taken place against a background of a long tradition of co-operative enterprise.²⁴

The German experience has highlighted some specific factors which contribute to the creation of a successful energy co-operative:

- A good organisational structure;
- The involvement of local people (as this reinforces the mutual benefit);
- Support for, and from, the local economy, including engagement with a range of different interests and stakeholders;
- Recognition that social justice is also a goal of this energy process – as there is a focus on members' needs;

- Ensuring stability and relatively low risk for members and potential members.

By the end of 2012, German citizens through renewable energy co-operatives owned an impressive 40% of total German renewable energy capacity.²⁵

Scotland

The Scottish Government has set a target of meeting 30% of the country’s overall energy demand from renewable sources by 2020 and ensuring that, by then, ‘100% electricity demand equivalent’ will be met from renewables. In the achievement of this goal, it sees an important role for social enterprise energy projects: it has announced that it intends to achieve 500 megawatts of community and locally-owned renewable energy by 2020.²⁶ Implicit in this approach is recognition that community-owned renewable energy can provide a range of benefits beyond securing a source of energy.

Towards achieving its aim of having community groups play a significant role in achieving the country’s renewable energy goals, the Scottish Government established, in 2011, the Community and Renewable Energy Scheme (CARES) to provide loan finance to communities intending to establish community-owned renewable energy projects. This scheme aims to provide loans towards the high-risk, pre-planning consent stages of renewable energy projects. The scheme is managed on behalf of Scottish Ministers by Community Energy Scotland Ltd. A key feature of the loan finance is that security is not required. Another important element in the support for renewable energy social enterprise in Scotland is the information, advice and expertise provided to enterprises by the NGO, Community Energy Scotland.²⁷

Conclusion

Compared to Denmark and Germany, Ireland has an under-developed renewable energy social enterprise sector. In different ways, the State, community and voluntary organisations, third-level institutions and religious bodies can and should support the development of this sector.

If this support is forthcoming, then a range of economic and social benefits will accrue to households, communities and to the State itself – benefits which will not be realised if the private sector is afforded, either by design or default,

the primary responsibility for reducing Ireland’s dependence on fossil fuels.

For the necessary change to come about, the Irish State will need to place a greater value than it has heretofore on the additional impacts that renewable energy social enterprises can generate compared to conventional private enterprises. The White Paper on Energy due to be published before the end of 2015 will indicate the role the State sees social enterprises performing in reducing Ireland’s dependence of fossil fuels.²⁸

The State should prepare a strategy for developing a vibrant renewable energy social enterprise sector; this should include:

- A national target for the level of energy output to be generated by social enterprises.
- A policy framework to mandate local authorities to draft robust energy plans that would place social enterprise at the centre of Ireland’s transformation to a low carbon society.
- A policy on public procurement that would enable and encourage State agencies to procure renewable energy from social enterprises.
- Proposals to streamline the bureaucratic process associated with getting a connection to the national electricity grid.
- Funding to resource a third sector intermediary body that would provide expertise to communities committed to establishing renewable energy projects.

It is incumbent on civil society organisations, including community groups and religious organisations, to campaign for a more enhanced role for social enterprises in Ireland’s transition to becoming less dependent on fossil fuels and also to provide leadership to their members to collectively strive to initiate renewable energy social enterprises. In his encyclical letter, *Laudato Si’*, Pope Francis highlighted how, in many places, co-operatives are producing renewable energy,²⁹ thus meeting the energy needs of their communities and at the same time demonstrating that there is an alternative to the model of economic development that currently prevails.

New models of finance are required for social enterprises to secure the necessary capital to establish a renewable energy initiative. Community organisations, co-operatives, the credit union

movement, trade unions, philanthropic bodies and religious groups can play a role in the design of these new models and in providing necessary seed capital.

With regard to research, third-level institutions should undertake rigorous action-based research on social enterprise and sustainability, including renewable energy. This research would provide the bedrock for lobbying the State for policies and supports that are essential for enhancing the vibrancy of renewable energy social enterprises.

If the above recommendations were to be implemented then social enterprises in Ireland would be in a position to emulate what has occurred in Denmark and Germany where social enterprises have been central to the transition away from fossil fuel dependence.

Notes

1. Tim Jackson, *Prosperity Without Growth: Economics for a Finite Planet*, Abingdon, Oxon: Earthscan, 2011.
2. Friends of the Earth Europe, Global 2000 and Sustainable Europe Research Institute (SERI), *Overconsumption? Our Use of the World’s Natural Resources*, 2009. (https://www.foeeurope.org/sites/default/files/publications/FoEE_Overconsumption_0909.pdf)
3. *Ibid.*
4. Pope Francis, *Laudato Si’: On Care for Our Common Home*, Encyclical Letter, Vatican City, 24 May 2015. (http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html)
5. Examples of ‘social objectives’ include providing employment or delivering a service such as elder care.
6. Gerard Doyle and Tanya Lalor (eds.), *Social Enterprise in Ireland – A People’s Economy?*, Cork: Oak Tree Press, 2012.
7. John Pearce (with a chapter by Alan Kay), *Social Enterprise in Anytown*, London: Calouste Gulbenkian Foundation, 2003.
8. Gordon Walker, Sue Hunter, Patrick Devine-Wright, Bob Evans and Helen Fay, ‘Harnessing Community Energies: Explaining and Evaluating Community-Based Localism in Renewable Energy Policy in the UK’, *Global Environmental Politics*, 7:2, May 2007, 64–82.
9. *Ibid.*
10. *Ibid.*
11. J.C. Rogers, E.A. Simmons, I. Convery and A. Weatherall, ‘Public Perceptions of Opportunities for Community-based Renewable Energy Projects’, *Energy Policy*, 36(11), 2008, 4217–4226; Patrick Devine-Wright, ‘Lower Aspects of UK Renewable Energy Development: Exploring Public Beliefs and Policy Implications’, *Local Environment*, 10(1), 2005, 57–69.
12. J.J. Hain, G.W. Ault, S.J. Galloway, A. Cruden, and J.R. McDonald, ‘Additional Renewable Energy Growth through Small-scale Community Orientated Energy Policies’, *Energy Policy*, 33 (9), 2005, 1192–1212.
13. Geoff O’Brien and Alex Hope, ‘Localism and Energy: Negotiating Approaches to Embedding Resilience in Energy Systems’, *Energy Policy*, 38(12), 2010, 7550–7558.
14. Gordon P. Walker, ‘What are the Barriers and Incentives for Community-owned Means of Energy Production and Use?’, *Energy Policy*, 36(12):4401–4405.

15. Comhar and Trinity College Dublin, *Community Renewable Energy in Ireland: Status, Barriers and Potential Options*, Policy Paper, Dublin, November 2011. (Comhar/TCDhttp://files.nesc.ie/comhar_archive/Comhar%20Papers/Comhar_Paper_11_2011.pdf)
16. Erik Christiansen, Chairman of Middelgrundens wind energy co-operative made this point at a seminar in Dublin hosted by the Society for Co-operative Studies in Ireland in 2014.
17. This point was made in a submission by number of NGOs (including Feasta, Comharchumann Fuinneamh Oileáin Árainn, and Tipperary Energy Agency) in relation to the Green Paper on Energy Policy in Ireland.
18. Mark Bolinger, *Community Wind Power Ownership Schemes in Europe and their Relevance to the United States*, Berkeley, CA: Lawrence Berkeley National Laboratory, 2001.
19. A district heating system works like a domestic central heating system only on a larger scale. Water is heated using a boiler located in a central heating plant. The heat is distributed to the customer via an underground network of insulated pipes. The water in the network is continuously circulating and therefore heating is always available to the householder.
20. The Heat Supply Act of 1979 stipulated there would be municipal heat supply planning in each municipality, a new natural gas infrastructure, a substantial increase in district heating, and that district heating should move from fossil fuel boilers to combined heat and power plants and renewable energy.
21. Anna Chittum and Poul Alberg Østergaard, ‘How Danish Communal Heat Planning Empowers Municipalities and Benefits Individual Consumers,’ *Energy Policy*, 74(11), 2014, 465–474.
22. <http://www.heatroadmap.eu/>
23. Tanya Lalor, *Co-op Power: Opportunities for Community Energy Production in Ireland*, Dublin: Report of a seminar hosted by the Society for Co-operative Studies in Ireland, 2014.
24. *Ibid.*
25. David Buchan, *The ‘Energiewende’: Germany’s Gamble*, Oxford: The Oxford Institute for Energy Studies, University of Oxford, 2012.
26. <http://www.communityenergyscotland.org.uk/support/cares>
27. Community Energy Scotland (CES) is a membership-based organisation. Members can share knowledge and connect with other member groups which are developing, or have already developed, community energy projects. CES provides detailed, independent and ongoing support for all aspects of community energy project development, from micro to megawatt scale.
28. Department of Communications, Energy and Natural Resources, ‘White Paper on Energy Policy in Ireland’. (<http://www.dcenr.gov.ie/energy/en-ie/Energy-Initiatives/Pages/White-Paper-on-Energy-Policy-in-Ireland-.aspx>)
29. *Laudato Si’, On Care for Our Common Home*, § 179.

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