

New politics and innovative democracy can engage people in making Ireland's low carbon transition sustainably

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a) Introduction

Global economic growth has been linked to burning fossil fuel since the Industrial Revolution, but to stop runaway climate change we need a system-wide change that decouples economic growth from fossil fuel consumption. A low-carbon economy is another term for a decarbonised economy or a low fossil-fuel economy, meaning an economy that is based on low-carbon power sources (e.g. renewable energy sources or nuclear power) and therefore has minimal greenhouse gas emissions and impact on climate change. Aside from the positive benefits to climate change from moving to a low-carbon economy, there are numerous other social benefits from this transition, including:

- **More jobs** - Renewable energy generates more jobs than fossil-fuel based energy production. For example, McKinsey's Climate Change Initiative modelling indicates an increase of 91-119% in employment if the United States switched from coal and gas to renewable energy production¹. In Ireland, the sustainable energy sector supports over 15,000 jobs.
- **Greater social equity** - Fuel poverty now affects approximately 300,000 households in Ireland². Spiralling energy costs impact poorer people more than the middle-class or wealthy. Renewable energy and community ownership schemes enable cheaper, more stable fuel prices which can improve social equity between classes.
- **Improved national fuel security** - Removing dependency on foreign imported fossil fuels improves our national security and foreign investment potential. To date, Ireland has saved over one billion Euro in fossil fuel imports through renewable energy production³.
- **Improved agricultural production** - Carbon mitigation strategies can improve soil tillage and lead to increased agricultural productivity. Expansion of sustainable bioenergy crop production can also open up new markets for farmers. Furthermore, low carbon farming is more efficient and cost-effective, ultimately making farms more profitable.
- **Improved public health** - Fossil fuels release particulate matter and harmful chemicals when burned. Switching to clean, renewable energy sources eliminates

¹ Beinhooker, E. and J. Oppenheim (2014) Economic opportunities in a low-carbon world. United Nations Framework Convention on Climate Change.

http://unfccc.int/press/news_room/newsletter/guest_column/items/4608.php

² Convery, Frank (2013) Household Energy Conservation in Ireland – lessons from two jurisdictions. Common Ground Report on Fuel Poverty. Energy Action Ireland. http://energyaction.ie/wp/wp-content/uploads/2013/09/Common_Ground_Report_on_Fuel_Poverty.pdf

³ REVE (2014) Why do we need wind energy? <https://www.evwind.es/2014/04/07/why-do-we-need-wind-energy/44623>

these substances from our air and improves public health and associated costs. Switching to a low-carbon economy could prevent 5,000 premature deaths a year in the city of London alone⁴.

Much of the rest of the world has already embraced the transition to a low-carbon economy. In 2015, Costa Rica achieved a record-breaking 75 days on completely renewable energy sources⁵; Denmark is well on their way to achieving a low carbon future, with residents in Copenhagen already producing half the greenhouse gas emissions of the OECD average⁶; and Iceland, who suffered a similar banking-related economic collapse to Ireland, credits their economic recovery to investment in green energy⁷. Some of the world's least developed countries (such as Ethiopia, Bangladesh, and Bhutan) are leap-frogging the old carbon-based economic model in favour of the new low-carbon economy⁸, in a similar fashion to the way they embraced mobile-phone technology over land line phones.

Ireland's fuel mix for electricity generation is dominated by carbon-based fossil fuels (83%), including gas (48%), coal (22%), peat (12%) and oil (1%)⁹. In 2013, then Minister for Environment, Phil Hogan, defined a low-carbon society as "near zero carbon dioxide emissions by 2050 in the case of energy, buildings and transport, and carbon neutrality in the case of agriculture."¹⁰ Currently, energy, transport and agriculture emit approximately 20%, 19% and 32% of total Irish greenhouse gas emissions, respectively¹¹. No matter how 'low-carbon' society is defined, Ireland is still a long way away from achieve it.

The technology already exists for Ireland to become a low-carbon society in the next 35 years. The challenge is how to inspire the public or political will to move away from unsustainable economic growth to a new sustainable economic model. A society producing its own renewable energy independent of fossil fuel imports will be more stable economically and have higher employment and investment potential than Ireland's current system¹², but a new sustainable economy needs to focus on more than just decarbonisation and consider the economic and social capital of all our natural resources.

⁴ Haines, Andy (2012) Health benefits of a low carbon economy. London School of Hygiene and Tropical Medicine. <https://www.kingsfund.org.uk/sites/default/files/sir-andy-haines-climate-change-health-co-benefits-low-carbon-economy-kingsfund-nov12.pdf>

⁵ The Guardian (26 Mar 2015) <https://www.theguardian.com/world/video/2015/mar/26/costa-rica-only-renewable-energy-first-75-days-of-2015-video>

⁶ OECD (29 Jan 2013) <http://www.oecd.org/cfe/leed/Measuring%20Local%20Green%20Growth%20Copenhagen%2029%20January%202013%20FINAL%20for%20Francois.pdf>

⁷ Graeiber, D. (2 Mar 2013) <https://oilprice.com/Finance/the-Economy/Iceland-Credits-Green-Energy-for-GDP-Growth.html>

⁸ International Institute for Environment and Development (22 Jan 2013) <https://www.iied.org/low-carbon-resilience-least-developed-countries-panacea-address-climate-change>

⁹ SEAI (2014) Energy in Ireland 1990-2013 Report

¹⁰ Oireachtas.ie (2013) <http://oireachtasdebates.oireachtas.ie/Debates%20Authoring/DebatesWebPack.nsf/committeetakes/ENJ2013071000003?opendocument#B00100>

¹¹ EPA (2014) <http://www.epa.ie/pubs/reports/air/airemissions/GHGprov.pdf>

¹² Irish Examiner (14 Jul 2008) <http://www.irishexaminer.com/ireland/energy-imports-near-top-in-eu-at-91-67253.html>

In 2015, Ireland enacted its first legislation to address climate change in the form of the Climate Action and Low Carbon Development Act. The act was intended to "*provide certainty surrounding Government policy and provide a clear pathway for [greenhouse gas] emissions reductions*" and referenced the Government's National Policy Position to achieve near zero carbon dioxide emissions by 2050 in the case of energy, buildings and transport, and carbon neutrality in agriculture.

While Ireland has historically been a laggard on climate action and greenhouse gas emissions continue to rise as the country recovers from recession, 2017 marked the publication of the first national climate action plan in over eight years forced by national climate legislation. While weak on measurable impact, the national climate action plan is a baby step in the right direction.

The enactment of climate legislation, alongside the United Nations' ratification of the Paris Agreement, marked a turning point for climate action both in Ireland and worldwide. Globally, the page has been turned on use of fossil fuels. Over the past three years, the economy has shown signs of decoupling its growth from greenhouse gas emissions. All the technology now exists to transition from a fossil fuel based civilization to a "fossil free" one. However, without the engagement of citizens, technology will never be accepted at local level where most climate action ultimately takes place.

Director of Friends of the Earth England, Craig Bennett, described how essential it is to engage communities in the Guardian the day after Brexit, saying "*Change will have no chance of enduring if it is done to people. It has to be done by people and with people.*"¹³ This is critical in creating a fossil free Ireland. As Ireland begins to address climate change through its national legislation and international commitments, bringing citizens along in the low-carbon transition is essential and more innovative methods of democracy are needed to address the sustainability challenges associated with this transition. This paper outlines the most significant sustainability challenges as part of Ireland's low carbon development and describes innovative new methods being implemented to engage people in developing solutions to these challenges.

b) Sustainability challenges in the low carbon transition

Sustainability challenges regarding environmental issues in Ireland are wide-reaching, but achieving the low-carbon transition brings up new challenges and opportunities to address these challenges in a manner that incorporates the needs and desires of the people in Ireland. Some of the most significant challenges to be addressed as part of the low-carbon transition include:

¹³ <https://www.theguardian.com/environment/2016/jun/25/how-can-we-make-brexit-work-for-the-environment>

- **Household energy retrofit:** Moving to a 100% renewable energy system set forth as part of the vision of the Energy White Paper will require a reduction in energy demand, which must start now with retrofit and insulation of homes. Ambitious regulations coming from the EU Buildings Directive will require new buildings to be designed to nearly zero energy building standards by 2021 leading to a 50% to 60% improvement in terms of energy efficiency and reduction in CO₂ emissions. However, while there is vision for Ireland's homes of the future, two million existing homes need retrofit and require a new national renovation strategy. At an average cost of EUR 28,000 per home for deep energy retrofit, this is a significant technical and financial challenge. Allocating financing for such retrofit in a way that benefits householders from all income levels will be key.
- **Community ownership of energy** - Many parts of Europe are experiencing a revolution in community ownership of renewable energy. In Germany alone, 1.5 million people generate solar electricity in their homes and sell their excess back to the grid, but in Ireland there is no community feed in tariffs for excess solar electricity and community involvement in renewable energy is limited. Research has found that solar panels on homes and businesses in Ireland is a potentially vital component of the flexible and responsive energy system of the future¹⁴.
- **Development of a bioenergy sector:** Ireland's Energy White Paper presents a vision of a 100% renewable energy system and a draft Bioenergy Plan with a commitment to introduce a Renewable Energy Heat Incentive, but whatever Ireland does in an effort to increase its bioenergy production must also ensure it avoids creating more problems elsewhere on the globe. The impact of importing biomass such as palm kernels from Malaysia and cocoa husks from Nigeria at our peat burning power plants are unsustainable practices. These imported biomass feedstocks create additional greenhouse gas emissions from their transport and have no local community benefits for Ireland. Other imported biomass products, such as wood exports from Brazil and Africa, put additional pressure on deforestation and/or drainage of peatlands and contribute to land-grabbing and competition with food production in these countries. Faraway environmental and social impacts are no less real than if they were happening in Ireland. To avoid negative environmental and socioeconomic impacts both domestically and globally, the expansion of bioenergy production needs to be accompanied by regulations that ensure genuine sustainability with greater policy coherence for development of this sector and policies that have demonstrably negative impacts on developing countries, such as biomass importation, must be altered. In addition, the current practice of subsidizing biomass if it is burned along with 70% peat must be eliminated if an indigenous bioenergy sector is to be considered sustainable.

¹⁴ Curtin, Joseph (2017) <https://www.foe.ie/documents/the-case-for-residential-solar-pv-analysis-by-joseph-curtin/>

- **Climate smart agriculture** - Over 30% of Ireland's greenhouse gas emissions come from agriculture, making Ireland unique as a developed country with a developing country's emissions profile. While it is challenging to reduce emissions from agriculture, Teagasc has declared Ireland should aspire to carbon-neutrality in the sector. Ireland has strengths that offer opportunities to become a leader in addressing the challenge of climate change in the agricultural sector, but to lead in climate smart agriculture Ireland needs to reduce absolute emissions from agriculture. Based on future climate projections, Europe will experience increasing drought conditions over the coming years and such conditions have already taken a significant toll on food production. In the long term, this means Ireland could have to produce more food to try to help support the rest of Europe and should focus on producing food products that will be needed in Europe and appropriate to Ireland's changed climate. Ireland's current focus on Infant formula for the Chinese market is clearly not one of those products. There is an urgent need for Irish agricultural policy to stop putting short-term financial gains above the long-term well-being of the Irish landscape, environment, public health, and climate projections.
- **Sustainable transport** - A completely electrified transport system must be constructed over the next three decades, including both electric cars and an electrified public transport system. Ireland is leading in Europe with respect to EV infrastructure but going the opposite direction on the consumer purchasing side. A quarter of Irish vehicles are SUVs and Ireland has some of the highest diesel car sales in the world, which have higher costs to air quality, public health, and the additional wear and tear on infrastructure that larger vehicles can inflict.

Measures to discourage the purchase of the least fuel-efficient vehicles and incentivise electric vehicles are needed, but Ireland's fossil free transport system cannot be based on electric vehicles alone. The LUAS is an example of the right approach, carrying over 35 million passengers a year with continually increasing demand and need for expansion. It is possible to power buses from livestock slaughter waste, municipal waste, and even sea lettuce, and new buses should run on alternative, indigenous and renewable fuel sources.

Most importantly, cycling must be part of the transition. There are many co-benefits in cycling beyond its role to address climate change. -Cycling could contribute to solving Ireland's obesity crisis, mental health crisis, and economically struggling high streets. There is evidence to show people who cycle are healthier, less prone to depression and more inclined to stop and shop. In Copenhagen, 45% of the population uses bikes for their daily commute, while in Dublin we're at less than 6%. Last year Ireland spent less than 1.5% of the transport budget on sustainable transport (mostly in the form of safe cycling education for kids) when 10% would be a more appropriate figure to support the low carbon transition. The [EPA reported](#) last May transport emissions will increase 13%-19% on current levels by

2020. Hard questions must be asked about how and when transport will contribute to the low-carbon transition.

- **Climate change adaptation** - Ireland's towns and cities are designed to function within a narrow environmental envelope. When that environment fails, it impacts everything about the way people live and work. Risk of extreme storms on the West coast of Ireland is now up 25% due to climate change. Over 260 homes were flooded in floods in December 2015 and will continually be at risk as the climate continues to warm. Combine this with the thousands of homes and businesses that are at risk due to sea level rise and Ireland will have another kind of housing crisis on our hands, one due to climate displacement. After the 2015 floods, then Taoiseach, Enda Kenny proposed the idea of relocating those who live in high risk flooding areas, but the Stern review has shown that the benefits of strong, early action to address climate change considerably outweigh the costs of doing so¹⁵. A 2007-2013 EPA report on climate adaptation said Ireland has failed to systematically address all the climate risks to adapt to¹⁶. These include risks to water (supply, quality & management); planning; and critical infrastructure, and that does not include how Ireland could adapt to the global impacts of climate change while relying so much on imported energy and food. Adaptation is the only available response for the climate impacts that will occur before mitigation measures can have an effect, and flooding is a significant one of those impacts. But as the Earth's temperature rises, so too will the cost of adaptation and residual damages will remain inevitable which the State must begin preparing for to protect citizens.

c) The impact of "new politics" in the low carbon transition

In February 2016, Ireland entered uncharted political waters when the General Election resulted in neither of the country's two political powerhouses, Fianna Fail or Fine Gael, securing support from more than 50% of the electorate for the first time in the history of the State. Widespread disaffection with mainstream political parties created unprecedented opportunity for smaller parties and Independents and established one of the most diverse Irish parliaments in history.

Political commentators exclaimed these "New Politics" would spell disaster for Government operations, believing Independents would hang on to "pet causes" and local issues with no interest in operating as part of a cohesive Government. They cited similar patterns of populism in Spain, Portugal and Greece, where parliaments were "crippled" by voters' disaffection with mainstream political parties. However, "New Politics" has not resulted in such doomsday scenarios, particularly when it comes to addressing some of the challenges of sustainability.

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http://www.wwf.se/source.php/1169157/Stern%20Report_Exec%20Summary.pdfhttp://www.wwf.se/source.php/1169157/Stern%20Report_Exec%20Summary.pdf

¹⁶ https://www.epa.ie/pubs/reports/research/climate/CCRP_9_web.pdf

In a 90 to 53 vote last February, the Government approved legislation to drop coal, oil and gas investments from the €8 billion Irish Strategic Investment Fund. The bill was introduced by an Independent politician, Deputy Thomas Pringle, who stated at the bill's second stage hearing, *"A lot has been said about attacking so-called new politics and the situation that has arisen. However, this Bill would never have passed Second Stage in the previous Dáil because the Government had the numbers to block anything it wanted to... That change is very positive and shows that things can change in the House."*¹⁷ While Ireland's Strategic Investment Fund only comprises a small amount of fossil fuel divestment relative to the global investment in these companies, when complete, it would make Ireland the first country in the world to legislate for a shift in capital from fossil fuels to renewable energy.

The political momentum continued in June when the Irish Government unanimously banned onshore hydraulic fracturing, or fracking, as the first private members' bill to pass by both Houses during the lifetime of the minority Government. Ireland now joins three other EU member states – France, Germany and Bulgaria – who have banned the practice on land. In both the divestment and fracking legislation, campaigners found "new politics" facilitated their victories because parliamentarians were under less pressure from traditional party politics.

d) The art of conversation

In 2017, Ireland's first National Dialogue on Climate Action was established. The Dialogue aims to create awareness, engagement and motivation to act in relation to the challenges presented by climate change and facilitate people to discuss and maximize consensus on the response to those challenges. In a country whose mainstream media still hold debates about whether climate change exists, the government supported Dialogue has the long overdue potential to align Ireland's climate narrative with the overwhelming scientific and global consensus calling for urgent action.

Previous efforts by the Irish government to engage the public in climate action during the country's Celtic Tiger years focused solely on "The Power of One" campaign, encouraging citizens to lower their individual carbon footprints without acknowledging the system changes that needed to be made in parallel. Ireland's Economic and Social Research Institute reported the campaign had "no persistent effect" on the habits of millions of people, despite government funding of EUR 10 million. The new National Dialogue on Climate Action could go further by facilitating public engagement in reducing emissions at scale and collating their views to inform Ireland's climate policies going forward.

e) Participatory democracy changes the narrative

Our current political system sometimes forgets that democracy is not simply the act of electing representatives, but also involves the active participation of citizens in politics and civic life. The most innovative move toward climate action in Ireland concluded in November 2017, when a ground-breaking process in democratic decision-making on climate change was undertaken within Ireland's Citizens' Assembly. Established in 2016, the Assembly

¹⁷ Dail Debates (19 Jan 2017) <https://www.kildarestreet.com/debates/?id=2017-01-19a.354>

provides a platform for 99 citizens, randomly selected to represent the views of the people of Ireland, to discuss crucial issues facing Irish society. The Assembly is a successor to the 2012–14 Constitutional Convention, which catalysed the legalisation of same-sex marriage approved by the people of Ireland in the momentous Marriage Equality Referendum of 2015.

The Assembly's consideration of the topic '*How can Ireland be a leader in tackling climate change*' came in response to years of Government inaction on climate change. In an unprecedented move, the Assembly's Chairperson and Irish Supreme Court Judge, Mary Laffoy, recommended the Assembly meet for an additional weekend on November 4th to fully consider the issue. Following the conclusion of this assembly, the Irish Government is now obliged consider and respond to each of the Assembly's recommendations.

Individuals, non-governmental organizations, and businesses from Ireland and around the world voiced their concerns on the topic of climate change to the Citizens' Assembly through a public consultation that concluded in August 2017. The Assembly received nearly 1,200 submissions from that consultation, far more than traditional government consultations on climate issues, indicating the public places the Assembly process in high regard. The Assembly's consideration of Ireland's response to climate change were closely watched, not just in Ireland but around the world, giving the people of Ireland a new democratic means to encourage their Government to take positive action on climate change.

The Citizens' Assembly voted strongly in favour of thirteen key recommendations for climate change action that will go before the houses of the Oireachtas, including the removal of Government subsidies on peat extraction and higher taxes on carbon intensive activities in all sectors. The results of the assembly votes demonstrated an understanding of the need to transition to a low-carbon economy and a willingness to do whatever was necessary to make that transition.

f) Conclusion

After the last general election in Ireland, then Prime Minister Enda Kenny conceded his party's defeat, stating "*Democracy is always exciting but it is merciless when it clicks in.*" Indeed, Ireland now finds itself squeezed between merciless democracy in both the U.S.A. and the United Kingdom and flails politically between a two-party model and a multi-party consensus system. However, "new politics" has already reaped rewards that will benefit generations of Irish people to come through the prohibition of fracking and an anticipated divestment from fossil fuels. Willingness to attempt new structures of democratic engagement through the Citizen's Assembly and National Dialogue on Climate Action could help to accelerate the fossil free transition. In a world where climate politics now sits on a knife edge without American leadership, Ireland may prove that unconventional politics and innovative democratic methods can tip the balance finally in the planet's favour.