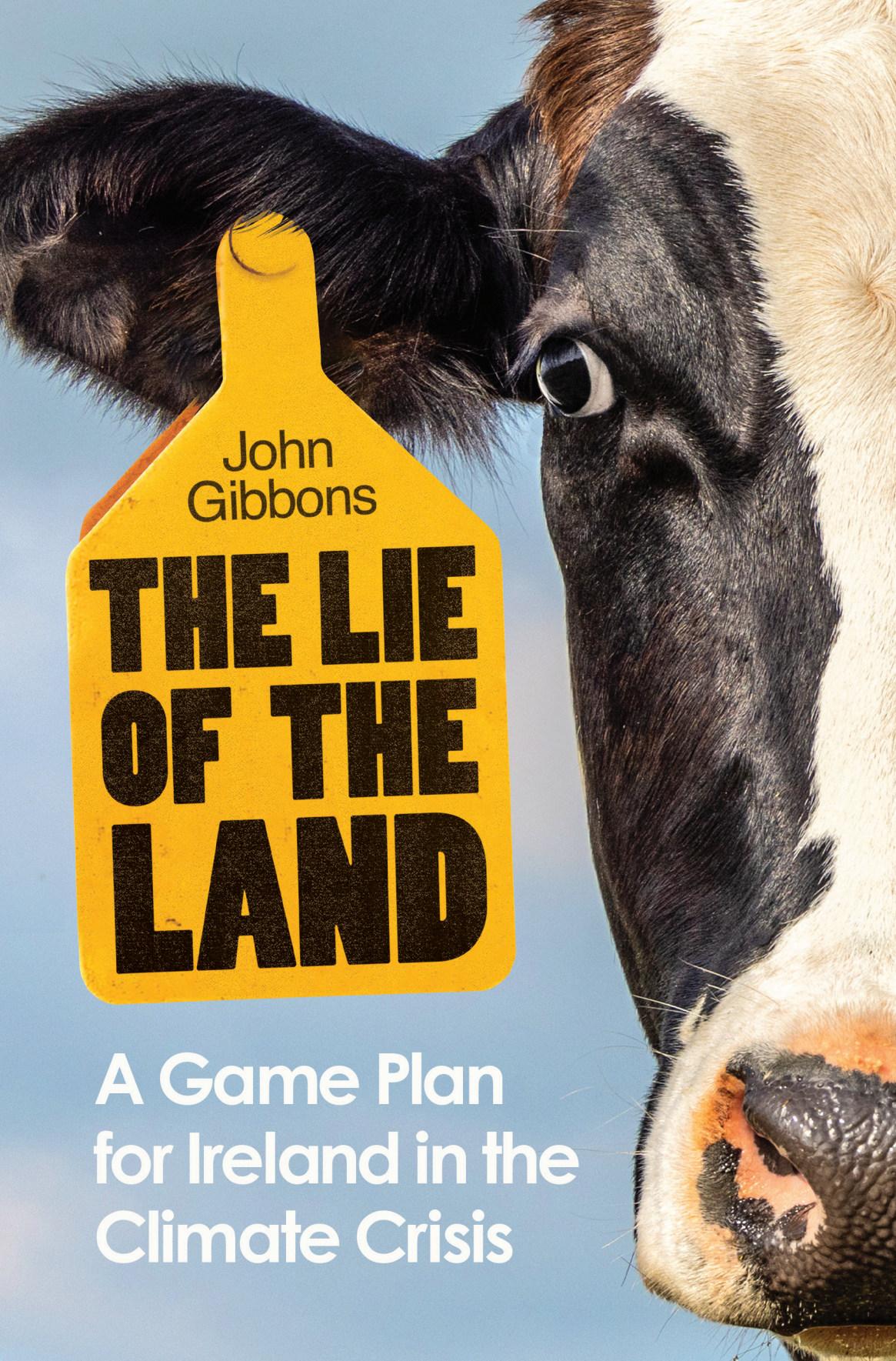
John
Gibbons
THE LIE
OF THE
LAND
A Game Plan
for Ireland in the
Climate Crisis

The Lie of the Land

ABOUT THE AUTHOR

John Gibbons was born and raised on a farm in Co. Kilkenny. The founder of a successful healthcare publishing business, Gibbons began a second career as an environmental journalist and activist following the birth of his first child in 2002. He is a regular contributor to a number of media outlets, including the *Irish Examiner*, the *Irish Times* and *The Last Word with Matt Cooper* on Today FM.

The Lie of the Land

A Game Plan for Ireland in the Climate Crisis

JOHN GIBBONS

SANDYCOVE

an imprint of

PENGUIN BOOKS

SANDYCOVE

UK | USA | Canada | Ireland | Australia
India | New Zealand | South Africa

Sandycove is part of the Penguin Random House group of companies
whose addresses can be found at global.penguinrandomhouse.com.

Penguin Random House UK,
One Embassy Gardens, 8 Viaduct Gardens, London SW11 7BW

penguin.co.uk

First published 2025
001

Set in 13.5/16pt Garamond MT Std
Typeset by Six Red Marbles UK, Thetford, Norfolk
Printed and bound in Great Britain by Clays Ltd, Elcograf S.p.A.

The authorized representative in the EEA is Penguin Random House Ireland,
Morrison Chambers, 32 Nassau Street, Dublin D02 YH68

A CIP catalogue record for this book is available from the British Library

ISBN: 978–1–844–88683–8

Penguin Random House is committed to a sustainable future
for our business, our readers and our planet. This book is made from
Forest Stewardship Council® certified paper.

To Jane, Sophie and Simone, with love and gratitude.

Contents

1. Goldilocks Is Dying

Earth has long been described as a Goldilocks planet, with climatic and atmospheric conditions uniquely suited to life. If Earth is such a planet – not too hot, not too cold – then Ireland, with its temperate climate, is a Goldilocks country. By an accident of geography, Ireland exists in a climatic sweet spot, sheltered from the very worst extremes of heatwaves, hurricanes, droughts and deluges.

But Goldilocks is dying. The long era of uncanny global climatic stability has ended; the climate has changed more radically in the past half-century than at any other time since the end of the last Ice Age. Levels of atmospheric carbon dioxide (CO_2), the planet's key heat-trapping gas, are increasing around a hundred times faster than would be the case under natural warming conditions.[1] Once a molecule of CO_2 is released, it continues to warm the atmosphere for between 300 and 1,000 years.[2] For every litre of fuel burned, the long-term warming effect is 100,000 times greater than the actual heat released at the moment of combustion.[3] That's the insidious power – and danger – of greenhouse gases. When rapid increases in other greenhouse gases such as methane and nitrous oxide are also tallied, the picture becomes even darker.[4] As a result of the proliferation of greenhouse gases, the planet is warming ten times faster than at any time in the last 65 million years.

In 2024, global average temperatures were 1.55 degrees Celsius above the pre-industrial average.[5] That made it the

hottest year on the instrumental record and, in all likelihood, the hottest in over 120,000 years. The second hottest year ever recorded was 2023. And the eleven years 2014–2024 were all warmer than any year on record pre-2014.

The water that laps along Ireland's shorelines is warmer and more acidic now than it has been in millennia. And, although you would not be able to detect it when you inhale, the very air that we breathe has also changed. Today, it contains some 50 per cent more CO_2, and 270 per cent more methane, than in the pre-industrial era.[6] Incredibly, a single species has, in just a few generations, altered the very chemistry of the Earth's atmosphere.

The distinct interglacial climatic era known as the Holocene, which prevailed for roughly the last 10,000 years, was a period of quite remarkable climatic stability. It was thanks to the conditions of the Holocene that our ancestors were able to forgo eons of nomadic hunter-gatherer existence, settle down and use the land to produce the food surpluses that gave rise to human civilization.

The Holocene, although still the current geological epoch, has now effectively been supplanted by an era scientists identify as the Anthropocene, so named because humans are now the most impactful drivers of planetary change.[7]

In physical size and human population, Ireland may appear globally insignificant. The future of human civilization will not be determined here. But the story of Ireland's relationship to the climate crisis – the story that this book will tell – is a fascinating microcosm of global dynamics. And the people of Ireland face a choice – or, more accurately, a spectrum of choices that will largely determine what life here will look like in the age of global heating.

The bad news – there is no avoiding it – is that grave

damage has already been done, both globally and in Ireland, and that much of it is irreversible. The good news is that there is still much to play for. Climate action is often described in terms of humans making sacrifices in the short term to secure a long-term future, but this framing is now out of date. With each passing year it becomes ever clearer that, barring a swift change of direction, most humans currently alive will see the world change dramatically for the worse.

*

Like almost every other country in the world, Ireland has seen a sharp rise in extreme weather events in recent years. There is a general understanding that these events are linked to climate change, and are only going to get worse. But for the vast majority of people in Ireland, the climate crisis remains a peripheral issue, like the sound of distant thunder, breaking to the surface of consciousness every now and again, then quickly ebbing away. The great majority of people are, it seems, more concerned about the end of the month than the end of the world.

I can say this with some confidence and empathy because, for almost the first forty years of my life, I was one of those people. I recall in my youth reading about rainforests being cut down and whales being hunted, but to my parochial outlook, these were things happening in remote parts of the world that had absolutely nothing to do with me.

I grew up on a farm in rural Kilkenny, the tenth of twelve children. My late father, Michael, was a driven man, and was regarded by his peers as a progressive and successful farmer. He bought a large arable farm in the 1950s and set about draining and improving the land over the following two decades.

One field, more than forty acres in size, was known as the

'big seven': it had been created by turning seven smaller fields into one. Though I was oblivious to it at the time, hedgerows are one of the few remaining refuges for wildlife in rural Ireland. Turning seven fields into one involved destroying the hedgerows that had separated them, and this involved the loss of habitat and biodiversity.

I made a personal contribution to this on one occasion when a JCB had been hired to dig out a mature hedgerow. As it worked its way up the field, rabbits and other small animals staggered out of the wreckage, some injured, all disoriented. They were swiftly dealt with by bystanders armed with hurleys, this author included.

The farming life that I grew up in was a tough, low-margin and unsentimental business. What I learned from my father is that there are two types of animal: livestock and vermin. Badgers, rabbits, crows, foxes – all were vermin and thus fair game for extermination. I was regularly dispatched, shotgun or rifle in hand, to blast anything that moved. In spring, we targeted the nests of crows. Pigeons, foxes and rabbits were shot all year round, and badgers killed when encountered, which thankfully was extremely rare. Other people will, of course, have had a very different experience growing up in rural Ireland in those years and subsequently, but at no time did I have any sense that our approach to wildlife was particularly unusual or atypical. There were moments, like when the early morning dew draped itself across a hundred spider webs, that you had a momentary sense of the unfolding miracle and beauty of life all around you, but these were very much the exception.

In the local Christian Brothers primary school, I was one of only a handful of culchies in a classroom of around fifty boys, and regularly found myself cast in the role of chief

defender of farmers and rural Ireland to a largely hostile audience that sometimes included the teachers. The prevailing narrative was that us boys from the countryside were backward, unsophisticated and a bit thick. There is nothing really new about the culture wars that surround Irish agriculture these days. Then, as now, people were often more inclined to imagine themselves in mutually hostile camps than to wonder who might be stirring up this animus in the first place.

*

My first child, a daughter, was born in late 2002. This was a watershed moment, in ways I could scarcely have anticipated. Almost overnight, my temporal perspective shifted. The furthest future horizons were no longer measured in weeks and months but in years and decades. I found myself drawn to explore what Ireland and the wider world might look like when my daughter reached middle age. Nothing in my life up to that point could have prepared me for what I was to discover.

This journey began serendipitously, when I came across a copy of *Something New Under the Sun: An Environmental History of the Twentieth-Century World* by John R. McNeill of Georgetown University. The human race, he wrote, 'without intending anything of the sort, has undertaken a gigantic uncontrolled experiment on the Earth'.

McNeill calculated that, in a single century, humans employed more energy than in all of our history up to 1900. This massive spasm of activity saw world population quadruple, the global economy grow fourteen-fold, energy use increase thirteen-fold, water use expand nine-fold, cattle population grow four-fold and marine-fish catch increase thirty-five-fold. Most impactfully of all, CO_2 emissions

increased seventeen-fold. My maternal grandmother was born in Kilkenny in 1901. Over the brief three-generation span from her life to mine, humanity has reshaped an entire planet.

My father died suddenly one Saturday in late 1989. While our relationship had always been tense and sometimes fractious, the event threw me into a state of shock that persisted for weeks. I had almost forgotten that feeling until it returned with a vengeance nearly fifteen years later, after I had read, then reread, McNeill's book. For weeks, even months afterwards, I found myself in a state that cycled through shock, disbelief and denial. Initially, I found it impossible to accept that the situation could possibly be as bleak as it appeared. After all, at that time there was little or no sustained media coverage of the climate and ecological crisis. If this was indeed real, how could it be possible that nobody was talking about it? But the more books I read, the more I realized just how much trouble we were in.

Every five or six years since 1990, the United Nations Intergovernmental Panel on Climate Change (IPCC) has published a comprehensive Assessment Report. The third of these was released in 2001. It stated that, since the mid-twentieth century, most of the observed warming of the planet was 'likely' due to human activities. The report added that climate change would have 'beneficial and adverse effects on both environmental and socioeconomic systems, but the larger the changes and the rate of change in climate, the more the adverse effects predominate'.

With such wishy-washy language, it is no wonder the 2001 IPCC report made little impression. It certainly passed me by completely. By the time the next report was released, in 2007, it was a different world. And this time, I was actually paying

attention. The earlier ambiguous language was supplanted by a sense of real urgency. Among the report's findings was that 'warming of the climate system is unequivocal'.[8] That might seem painfully obvious today, but 2007 was the first time the intensely conservative IPCC actually spelled it out. It was also the first time the IPCC acknowledged the very real possibility of climate disaster ahead, stating that 'unmitigated climate change would, in the long term, be likely to exceed the capacity of natural, managed and human systems to adapt'. You didn't have to read too closely between the lines to realize this careful language was signalling the very real possibility of widespread system collapse.

A year earlier, the release of *An Inconvenient Truth*, a documentary film by former US vice-president Al Gore, had tapped into growing public unease about shifts in the climate system. The catastrophic flooding that inundated New Orleans in the wake of Hurricane Katrina in 2005, with nearly 1,400 fatalities and damage costing over $100 billion, provided a visceral backdrop to the film. By the time I saw it, I was already well up to speed with the science, but I was still a bystander. The intensely moving experience of watching *An Inconvenient Truth* provided at least some of the emotional impetus I needed to start taking some action.

I first met John Sweeney of the ICARUS climate unit in Maynooth University that year. An affable and approachable Glaswegian who has lived and worked in Ireland since the late 1980s, Sweeney teased out the science and patiently answered my many questions. That one-on-one encounter left me in no doubt as to the gravity of the climate crisis and redoubled my desire to get involved.

During 2007 I launched a blog, ThinkOrSwim.ie, exploring climate, environment, energy and related issues. I had

heard on the grapevine that the *Irish Times* might be on the lookout for climate-related contributions, so took a chance and pitched the opinion editor, Peter Murtagh. On the back of this, he asked me to contribute an opinion article. It was published in mid-March 2008, and to my complete surprise this grew into a weekly column, covering the spectrum of climate and ecological issues.

I got a first real inkling of what I was letting myself in for in early 2008, when I visited California to meet Stephen Schneider, a renowned climatologist, at his office in Stanford University. I was required to supply multiple forms of identity before being granted an interview. In person, Schneider was apologetic about all the security, explaining that the FBI had informed him that his name was on a neo-Nazi 'death list'. He received hundreds of abusive emails every week and his home phone number and address had been delisted. He had also installed an elaborate home security system. His crime? Speaking out publicly about climate change.

I now realize I was quite naïve about the nature of the 'climate debate' in the media and beyond at that time. My encounter with Dr Schneider should have alerted me to the fact that it was less about science communication and more a battleground of ideology and powerful vested interests. I innocently assumed that once people were presented with the scientific facts in a clear, consistent and logical way, then public opinion would shift decisively in favour of strong climate action. As I was to discover, this is not how the world works.

With two young children at home and a demanding full-time job running a business that was entirely unrelated to this time-sapping and emotionally draining new journalistic commitment, I began to wonder if I hadn't made a terrible mistake. And then, in the bitterly cold January of 2010, I

received an email from the *Irish Times* with the subject line 'Bad news'. My weekly column was getting the chop.

The COP15 international climate conference in Copenhagen the previous month had just ended in failure and disarray. It was derailed at least in part by a clever hoax known as 'Climategate', which involved the cherry-picking of two or three phrases from a cache of tens of thousands of hacked emails between climate scientists to create the entirely false impression that scientists were conspiring to tamper with the data to exaggerate global warming.[9] This was shown to be groundless, but not before headlines about the supposed 'scandal' went around the world. The hoax was crude yet effective, as it depended for its success on the limitations of the public's – and the media's – understanding of how the scientific process actually works.

Meanwhile, as I was still coming to terms with the axing of my column, an editorial appeared in the *Irish Times*. It was mostly about practical issues arising from an extended spell of cold weather in Ireland, but its headline ('Global Cooling') was shockingly misjudged, as were its opening sentences: 'So much for all of that guff about global warming! Are world leaders having the wrong debate? We are experiencing the most prolonged period of icy weather in forty years and feeling every bit of it.'[10]

I have no way of knowing whether or not the cancellation of my weekly column was connected to Climategate or the cold snap. But it was probably indicative of the thinness of the soil in which editorial understanding of the climate crisis was sown. Either way, I was more relieved than disappointed.

*

There should probably be a health warning for anyone who tries to wrap their head around the climate and biodiversity

emergency. It bruises you deeply, in ways that are difficult to describe adequately. I have been peering into this abyss as a journalist, as a parent and as a human being for more than twenty years, and it still leaves me numb and shaken. Nothing in my previous life ever came remotely close to preparing me for this. Mark Twain once described education as the path from cocky ignorance to miserable uncertainty, and that about sums up my own experience over the last two decades in coming to terms with the reality of the global climate emergency.

As a species, our system of reasoning by mental shortcuts is optimized for making quick decisions based on the best available information or hunch. This system is ill equipped to respond to a slow-moving or seemingly distant hazard. We also are prone by nature to heavily discount future costs against even modest present gains. The philosopher Timothy Morton coined the phrase 'hyperobject' to describe something of such vast temporal and spatial dimensions that it defeats traditional means of thinking about it.[11] The ecological emergency is the ultimate hyperobject, overwhelming our senses and rendering itself both omnipresent and near-invisible, as if the very light by which we might perceive it were emanating from beyond the visible spectrum.

Many in the climate science community are now acknowledging that the implications of the work they are doing are leaving them with what could be called 'pre-traumatic stress disorder'. They can clearly see the ecological and climate tsunami sweeping towards us, but humanity is, figuratively speaking, relaxing on the beach as the wave draws ever closer. The world we once knew, the world our parents were born into, simply no longer exists, and it is never coming back. Coming to terms with that stark reality is no small

undertaking. The understanding that the world is growing more and more hostile to life is not easy to truly take on board or to communicate to others. To save lives and mitigate ecological damage as the climate emergency deepens, we must first abandon false hope, the sort of hope that is itself the enemy of resolve.

What is needed, psychologist Eoin Galavan told me, is 'a balance between our capacity to bravely, creatively and constructively meet challenges around the climate crisis and the recognition of the peril that we are in and the damage we've already done'. The Covid pandemic provided a case study in what happens when there is such an overwhelming focus on a clear and present danger that many of the usual political and social assumptions are reconsidered. 'I don't remember people saying should we be optimistic or pessimistic about how we talk about Covid; we just said it's dangerous, it's going to kill us, so here's what we have to do to protect ourselves,' Galavan said.

American journalist David Wallace-Wells, who had no prior background in climate reporting, caused an international sensation in 2017 with the publication of an extended essay titled 'The Uninhabitable Earth'.[12] Researching the article, and the book that grew out of it, left Wallace-Wells finding it 'impossible to even consider our likely future without recoiling in horror and grief'.

When I interviewed Wallace-Wells in 2020 he explained the secret to his relatively upbeat approach to his prediction. 'One of the reasons I've been able to work on this material is that, as a journalist, I keep a kind of a distance from it. I often joke it's as if all journalists are somewhat sociopathic in their ability to regard stories as just stories.'

For Wallace-Wells, being able to use his platform to warn

his readers is also a personal coping mechanism. 'It's the unique privilege of being a journalist; when I'm feeling especially distressed about the future of the planet, I tend to think about what I can do.'

Psychologist John Sharry told me: 'The silver lining of eco grief is that for many people it makes them more sensitive, more tuned in and more appreciative of the life they have right now, and to savour their relationships with their children and friends.' Realizing how fragile and precious our lives really are 'leads many people to live their lives more meaningfully', he added.

After giving talks or presentations, I'm often asked why I don't strike a more optimistic tone. What about renewable energy, solar panels, heat pumps, cattle feed additives and electric vehicles (EVs)? Surely they are tangible evidence that we're finally getting on top of this crisis?

The numbers, alas, tell an altogether different story. The intergovernmental process to tackle climate change has been underway in earnest since around 1990. In the three and a half decades since then, we have released more heat-trapping greenhouse gases (GHGs) into the global atmosphere than in all of human history prior to 1990.

Renewable energy is indeed growing fast, but so far it is simply being used to serve our ever-expanding and seemingly insatiable energy demands, rather than to reduce fossil-fuel usage. In 2024, amidst the ongoing revolution in wind and solar energy, humans burned more fossil fuels than in any previous year.[13]

*

Ireland's Climate Action Plan commits us to achieving a 51 per cent cut in total GHG emissions by 2030, while the separate but related EU Effort Sharing Regulation gives

Ireland a binding emissions-reduction target of 42 per cent by that year. Based on the lack of progress to date, these objectives remain completely out of reach. In mid-2025, the Environmental Protection Agency (EPA) reckoned the absolute best-case scenario for emissions reductions is now 23 per cent. Even this seems fanciful, as it would require an improbable 'full implementation of a wide range of policies and plans across all sectors and for these to deliver the anticipated carbon savings'.[14] And in March 2025 a report by the Irish Fiscal Advisory Council and the Climate Change Advisory Council (CCAC) warned that Ireland is on track to fall far short of EU-mandated targets in four separate areas by 2030, and will be on the hook for between €8 billion and €26 billion in fines if it continues with business as usual. Ireland currently ranks last of the twenty-seven EU states in terms of meeting its Effort Sharing obligations.[15]

Clearly, we are on the wrong path. In this book, we will look at where Ireland stands today, and we will explore how the necessary changes can be brought about.

It is no accident that I devote three chapters to agriculture and food security. Agrifood are the source of almost 38 per cent of total national emissions – by far our largest single contributor, and the sector that has been the most resistant to doing its fair share on emissions reductions.[16] One might imagine that the GHG footprint of Irish agriculture is roughly proportionate to the sector's importance in the national economy. The truth is very different. Ireland's agri-food industry, which includes farming, fisheries and food processing, employs 6.4 per cent of the national workforce, and accounts for around 6.7 per cent of gross national income and 9 per cent of exports.[17] These are significant numbers, but nowhere nearly proportionate to its negative environmental impacts.

Because of our oversized agricultural emissions, mainly emanating from our huge livestock herd, Ireland has the third highest overall emissions per capita in the EU. A 2017 study found Irish agriculture to be the least climate-efficient in the entire EU.[18] This sits most uncomfortably with the dominant narrative that Ireland's largely grass-based livestock systems are inherently or uniquely 'greener' than those of other countries.

We need a new narrative and new ways of operating for agriculture – and also for transport, housing, and energy generation. Our task is two-fold: to transition away from fossil fuels as quickly as possible while also investing heavily in building resilience against the climatic and socio-political upheavals that are already baked in. The range of possible outcomes for Ireland is wide: there is everything to play for. For all its challenges, Ireland, with its Goldilocks microclimate, is one of the very best locations in the world in which to weather the coming climatic storm.[19] To capitalize on our natural advantages while shoring up our many vulnerabilities will require this generation to make some tough political choices. Should we succeed, the prize of a resilient, energy-independent and food-secure future is within our grasp. Failure cannot be an option.

2. The Lie of the Land

The farm that I grew up on in the 1960s and early 1970s was typical of the time. The farming system was mixed – a combination of beef cattle, sheep, cereals and vegetables, managed in rotation to give the land a chance to recover and to recycle animal manure as efficiently as possible.

The use of costly inputs, such as fertilizers, feeds or pesticides, was very limited. We kept a cow to provide milk for the house, and a pair of pigs to eat household food waste. There were hen houses in the haggard, from which we collected fresh eggs every morning and, every now and then, a chicken for the pot.

In the kitchen garden, fruit and vegetables were grown for our own consumption. As a small child, I regularly trailed out into the kitchen garden in the early evening as my parents and an older sibling or two tended to the patch after the day's farm work was completed.

In hindsight, it was a bucolic picture, and it is probably pretty close to many people's idea of what life is like on a typical Irish farm today. But the truth is that, even during my childhood, that way of life was already dying out. Our kitchen garden was abandoned in 1970. The arrival of relatively cheap vegetables in the local shops meant my parents felt it was no longer worth the effort of growing our own. We moved to a larger farm on the other side of Kilkenny city two years later, and that was the end of the household cow and chickens, though we still kept a pair of pigs.

The change in our family farming circumstances coincided with wider shifts in agriculture. In 1973, Ireland joined the European Economic Community (EEC), the forerunner of the EU. Irish farmers were now operating within the EEC's Common Agricultural Policy (CAP), which meant guaranteed prices and rising farm incomes. The new farming era would be defined by specializing in a single product and ramping up production.

Half a century later, our rural landscape has been transformed. In 1973, one in four Irish people worked in agriculture.[1] Today, it is fewer than one in twenty-five. While the numbers working in agriculture have plunged, total production has dramatically increased, bringing with it huge benefits for some, but at a fearsome cost in terms of GHG emissions, biodiversity loss and plummeting water quality.

It didn't have to be like this. The ramping up of agricultural activity after we joined the EEC initially led to increased emissions and marked declines in water quality. However, by the early 2000s, GHG emissions and water pollution from agriculture were declining steadily, as a direct result of EU-directed policies.[2]

There were two reasons for this progress, according to a Teagasc study: 'declining ruminant livestock populations and declining inputs of manufactured fertilizers'. This followed changes in the CAP aimed at reducing beef cattle and sheep numbers, and was also assisted by EU limits on dairy production. Further reforms in the early 1990s saw major cuts in price support for arable crops and beef, offset by compensation payments, a scheme that was extended in 2003 into the single farm payment, decoupled from production.[3] This regime saw emissions from Irish agriculture fall from a

1998 peak of around 22 million tonnes of CO_2-equivalent to around 18 million tonnes by 2011.

Had this pathway been maintained, then the whole sector would have been primed to meet the more ambitious climate targets coming down the line at both national and EU level. But in 2008 the EU decided to lift its milk quotas – essentially limits on national production. The limits would cease to apply from 2015.[4]

The Irish general election of early 2011, meanwhile, was to mark a decisive shift in direction for agriculture. Emerging from the ashes of the economic crash of 2008, the new Fine Gael-led government was casting around for home-grown options to stimulate the moribund Irish economy, and with milk quotas due to be lifted, dairy seemed to fit the bill. A template for an expansion of the dairy sector already existed, in the form of an industry-developed strategy document titled 'Food Harvest 2020', published by the Department of Agriculture in 2010.[5] The following year, shortly after becoming Minister for Agriculture, Fine Gael's Simon Coveney wrote the Foreword to the first annual progress report on the strategy. If there was any doubt that government and industry were in lockstep, Coveney laid it to rest. 'I am very aware that many of the steps needed to be achieved by 2013 and 2015 are primarily commercial decisions for industry,' he wrote, 'but I hope that the industry will work with me and the State Agencies to meet, and indeed exceed, the ambitious targets.'

In what would become a familiar pattern, 'Food Harvest 2020' was heavily cloaked in the language of faux sustainability. It noted the historic link between Ireland and the colour green, adding that associating itself with this colour, and its connection in the public mind with concern for the environment, would lead the industry's overseas customers to

recognize that, by buying Irish, 'they are choosing to value and respect the natural environment'.

The rewards of dairy expansion were tantalizing, but the risks were obvious. An EPA analysis of 'Food Harvest 2020' concluded that the strategy it outlined would lead to a 7 per cent increase in overall agricultural emissions driven by 'a projected increase in the national herd'.[6] Teagasc economist Trevor Donnellan wrote in a 2009 paper that to meet Ireland's EU-mandated 20 per cent GHG reduction target by 2020, 'even with reduced fertilizer usage and more extensive production practices, a very substantial decrease in the livestock population is required'.[7] In the same paper, Donnellan and colleagues concluded that 'agricultural policy is likely to contribute to a reduction in GHG emissions from agriculture over the next decade'.

The exact opposite happened. This detailed Teagasc analysis, which pointed to the necessity to sharply reduce beef cattle numbers in order to offset emissions from the expanding dairy sector, failed to find its way into the government's published plans. Teagasc seems to have chosen not to back its own analysis, arguing instead that various technological, dietary and other tweaks could somehow achieve the same effect. In any case, all the key stakeholders understood the reality: increased stock levels would drive higher emissions. As the head of the Irish Cattle and Sheep Farmers' Association, Gabriel Gilmartin, noted in 2012, 'On the one hand, "Food Harvest 2020" says we must strive to dramatically increase agricultural production – but on the other, we are expected to reduce the emissions from farming activities. The two targets are plainly incompatible.'[8]

Prior to the 2011 election, Simon Coveney had been Fine Gael's environment spokesman. I had in-depth discussions