## 12 CONCLUSIONS: IT COULD GO EITHER WAY

There is only one credible position to take. We can expand our horizons and grow and prosper. We can make this a green and prosperous land. But that prosperity is not likely to materialise on the current economic model, because it is seriously flawed both in its objectives and in its inner workings. We will not 'save the planet' by more of the same. What is required is a very radical recalibration. It is not markets and capitalism themselves that are the problem; it is the ways they are being channelled in the twenty-first century by largely ignoring the environmental consequences. We have a choice, a pathway we could take. The challenge is urgent. To get onto a sustainable consumption path, and thence onto a sustainable economic growth path, requires some brave and more radical surgery. We don't have time to wait and see.

The sustainable economy is very different from the existing economic model. Its ambitions are limited to leaving the next generation with a set of assets at least as good as we inherited. This first principle of the sustainable economy requires very limited foresight. No economic forecasts, no focus on ever-rising GDP. Just the basics: making sure that future citizens have the basics to choose how to live their lives. And not the future generally, but limited to the next generation specifically.

As we stare into the unknown world of the next generation, trying to make them happy gives way to something more solid: making sure the assets are in place. It turns the spotlight back onto us and what we are

doing to the planet, and especially its natural capital. What we have to do is in fact very simple: we have to do the capital maintenance, and follow the polluter-pays and precautionary principles. It is us who are taking risks with the planet, and us who are the polluters and who are not paying for the pollution we cause and us who are putting the next generation at risk. It is us as citizens who are not fulfilling our obligations.

The rules of the sustainable economy are simple too: to follow these principles, we should not behave with the kind of blatant selfishness currently on display. We should not saddle the next generation with piles of debt raised to pay for our current consumption. The next generation can be burdened with debt only where they are blessed with new assets worth at least as much as the liabilities that are incurred to make the investment, to enhance their future. Building better assets, better ideas and knowledge and enhancing natural capital are good things to borrow for.

Right now, the next generation is being screwed by us. As populations age, as the majority becomes skewed to the pensioners, the demands for more public services grow, but not the corresponding willingness to vote for higher taxes. The young are inheriting lots of debt, lots of climate change and a lot less biodiversity. They are also getting increasingly inadequate infrastructures. Instead of making sure the energy, water and transport systems are in good shape for the challenges of this century, the old systems of the twentieth century are often patched up with sticking plasters. Water leaks out of the pipes, sewers cannot cope, energy networks struggle to accommodate the new demands from electric cars and the roll-out of fibre looks to the consumers in densely populated cities, and less the citizens in the more peripheral and rural areas.

This is not some accident that has befallen the young. It is very much by design of the economic orthodoxies of our time, which match the interests of the majority – a majority that is increasingly focused on the old. The prevalence of Keynesian economic policies panders to this narrow electoral base, to the inevitable tyranny of this majority. A focus on aggregate demand, on keeping up consumption, has not produced higher productivity and higher GDP growth, its measures of success. It has at times brought very negative real interest rates, fiscal deficits and, consistent with this paradigm about how to manage an economy, it has ended up with QE, as many rulers in the past also did. In ordinary language, this is printing money.

Perhaps it is not too extreme to claim that the first principle has been turned on its head: the next generation will inherit a set of debts and degraded assets to maximise the benefits to the current generation. Worse, the polluted should pay, and we should sail as close to the wind as possible when it comes to taking risks with climate change and biodiversity loss. If these are the principles, we are doing pretty well at meeting them.

It is at the heart a consumerist ideology, spending now and to hell with the consequences. Old-fashioned values, like thrift and saving for a rainy day, about paying one's way, are thrown out of the window. The Victorian approach that Keynes and Bloomsbury so disparaged is dead and buried. Conspicuous consumption, which was once a criticism hurled at the rich and famous, has been democratised through the new forms of communication, and 'influencers' are the high bar of disposable fashions and 'image'. If this is what Keynes wanted, he should rest easy in his grave.

What should make him less easy are the consequences of his success. Whereas, for Keynes, the economic prospects of the grand-children were an ever-enlarging set of consumption possibilities, it has turned out for them to be a less happy place, and a potential disaster for the environment.

It is at this late hour that choices have to be made. They 'have' to be made because the consequence of an unstainable economy is that it will not be sustained and the point of no return is approaching fast. In making this choice, the missing bit is being able to envisage what that sustainable economy would actually look like. Its architecture is, like the problem itself, at heart remarkably simple.

Its starting point is its most fundamental one. It is to throw off the central idea that humans are best regarded as consumers only, and the sole path to happiness, the maximisation of utility, is to achieve the highest level of consumption. There is more to life than spending, and turning economics away from pure consumerism towards citizens, recognising that citizens have common and equal rights and responsibilities, shifts the focus dramatically. The central concern is making sure that these citizens have the capabilities to thrive. Citizens are of course also consumers, but they are also more than just consumers.

Putting citizens centre stage and recognising that we have very fuzzy glasses to peer into the future leads to the second radical point of departure: the centrality of assets, and in particular primary assets. This is why the first principle is defined as leaving the next generation with a set of assets at least as good as the current one inherited. It is all about systems and assets rather than utility and flows, creating the platform for the young to launch themselves into adulthood, to build careers and families and do all this to the maximum of their capacity.

Choices are made now in the radical uncertainty which is the human lot, and what makes life so interesting. There is little that is more boring than certainty as to what the future may hold. Imagine if you know how your life was going to unfold, and when you are going to die. It is all predetermined and there is nothing you can do about it. That is what certainty entails. Living such a life would probably not be a life worth living. Instead, we should embrace the uncertainty that is at the heart of the human condition, and be risk-averse about it. We should be precautionary, as good Victorians would have been.

In living our lives as good citizens, and accounting for our behaviour, the idea of a day of reckoning is quite helpful. It contains the idea that we should account for our conduct. To do this, the sustainable economy asks for accounts. The sustainable economy has proper accounts with balance sheets that reflect the assets, and their management in perpetuity. They tell us what assets we have and how well we are protecting and enhancing them, whether we are being good stewards on behalf of the young in the next generation.

The sustainable economy has a simple measure of this. It is the test of whether the assets are being properly maintained, so they don't depreciate, and hence we avoid consuming the capital. Capital maintenance is the central organising concept to achieve the first principle. It is what needs to be done, before we can spend. What we can safely and responsibly spend is after deducting capital maintenance before determining the amount of spending consistent with sustainable consumption and growth.

Only when the natural ecosystems are protected and properly managed, the energy system delivers low-carbon electricity securely, the water system delivers drinking water and cleans up the sewage, the trains, buses and electric cars have networks to travel on, and everyone has access to fibre communications can enhancements be brought into the picture and borrowing be contemplated.

Borrowing to spend does not wash in the sustainable economy, except in the event of a big and sudden economic shock, and even

then there has to be a recognition and a plan to repay it. Three recent shocks have shown how easy the borrowing bit is, and how hard the repayment catch-up is to deal with: the financial shock in 2007/8, the Covid pandemic and the energy price crisis. There are no signs that the borrowing associated with each of these shocks will be repaid, and no clear plans to do so. Default is the likely exit, and inflation is the traditional means. It is now and it was in the 1970s. The debt is not sustainable and hence will not be sustained.

Many governments have tried to commit to credible financial rules, and 'borrowing for investment only' is the one that repeatedly gets invoked, for good reason. It is the right fiscal rule. The problem is that it is investment not capital maintenance that counts, and creative governmental accounting often gets health and education and a host of other things conveniently renamed as investment. It is the right rule, and in the sustainable economy it has a clear and hard meaning. The hard bit is that in the sustainable economy, it is actually followed in practice. The watchwords of the sustainable economy are: 'shine the torch'. Look closely, peer through the fabric of lies and wishful thinking that underlie many national accounts, and ask what is really going on. Don't believe the political hype about 'things can only get better', that 'growth will pay for itself', and that tax cuts and more spending are what make for a stairway to heaven. Shining the torch on the ambulance queues, what is actually going on in the classroom, at the state of the infrastructures, at the rising debts and rising inequalities, reveals a story that few politicians – and us who vote for them – wish to acknowledge, let alone do something about.

The polluter-pays principle makes markets the servants of the overall objectives, not the carriers of destructive subsidies to polluters. It is hard to overestimate how radical this would be. Take the 2022 energy price crisis. If and when oil and gas prices fall back to a better reflection of their (non-carbon) costs of production, and if then a proper carbon tax is added back to reflect the scale of the damage from carbon emissions and at a level necessary to meet the net zero targets on a sustainable basis, the high energy prices experienced in late 2022 would become the norm. The fact that consumers clamoured for bail-outs, and had insufficient funds to pay the bills, is a measure of just how big the switch to polluter pays would actually be. Add in taxes on methane, and the environmental damage from mining all those minerals needed for electric car batteries and for the

magnets in wind turbines, and energy in a useable form would be treated as a scarce resource (energy itself is anything but scarce). This is not a message that governments want to give in extolling the virtues of net zero. They would have us believe that decarbonisation is the route to cheaper energy and hence more disposable income to spend. It probably won't be, and serious decarbonisation is going to hurt – probably a lot.

The sustainable economy is radically challenging. Making us the polluters pay, making us pay for the capital maintenance of the core primary assets and especially renewable natural capital, and making us save to invest in enhancing these assets is going to require a big adjustment to our spending and the ways we live our lives. There is quite a lot of pain in getting onto the sustainable path. In the macroeconomic mess that most countries are in, and after two decades of monetary and fiscal stimuli, and QE, there is little scope for tax cuts, more and more unsecured borrowing and dithering over paying for carbon and other pollution. These will only make matters much worse.

The shock would be profound. It upends the consumerist world all are so addicted to. There would be immediate and more long-term casualties. They would not just be the oil and gas and coal companies, the fertiliser and plastics manufacturers, and the conventional steel and cement makers. They would be citizens' bottom lines. The sustainable economy has to deliver social justice, not just in steady state, but to manage the transition from here to there, and to do so without creating a global slump and mass unemployment, and dire poverty too. It has to do it from a starting line that the last two decades have made much more unequal.

The good news is that there are plenty of sources of funding available once we are prepared to think radically enough, and admit that tax and welfare sticking-plaster changes are wholly inadequate for the challenges ahead. And, in focusing on citizens, there are plenty of resources to tackle their capabilities to participate in society now and for the young in the next generation. Again, simplicity is both the right call, and perfectly plausible to achieve. Complexity is the enemy of effective relief of poverty and ensuring efficiency in both spending and taxation. In the sustainable economy, there are two bits to all this: the provision of broadly universal services and a modified universal income paid to a significant number of citizens from a combination of taxation and a national dividend, so that wages are flexible, and

that the Keynesian encouragement of ever-greater unfunded fiscal deficits is abandoned.

The obvious question which haunts this book is whether or not there is any chance that the framework set out here will be adopted, whether the voters will elect leaders on a policy platform like this, and whether the autocrats in countries like China and Russia will see it in their interests to follow. Or even whether any political leader is actually prepared to confront us with the consequences of our selfish ways.

It has to be admitted that the prospects are slim. The immediate politics has focused on 'the cost of living crisis', yet more borrowing to cover current spending, and even tax cuts. If anything, there is an acceleration in the pursuit of the sorts of economic policies that got us into this mess. In a world of Xi Jinping, what chance is there that the world's largest polluter will change tack? Faced with drought and serious environmental shocks already, China's response is to double down on buying more coal. Putin's Russia, underpinned by the great Russian fossil-fuel industries, does not take kindly to carbon taxes and decarbonisation. Putin's priorities are territorial expansion and military aggression, not addressing the environmental crises. Helping to wreck the planet should be treated as just as serious as Putin's horrors in Ukraine. For both, he should be an international pariah. In the US, the ghost of Trump lurks.

Rather than despair, there are two ways of advancing against this gloomy outlook. The first is to tell people about the upsides of taking the path in this book, stressing the benefits to the current as well as future generations, and explaining why an enlightened self-interest might actually be better met through the benefits of a more environmentally benign consumption and growth path. The second is to spell out what might happen if we ignore the environmental destruction all around us, and what the consequences might be when the unsustainable hits the brick wall and is no longer sustained.

The upsides are impressive. In *Green and Prosperous Land*, I set out the opportunities within just the UK, for the urban areas, the rivers, agriculture, the uplands and the coasts. Better air quality in cities, trees and green spaces improving mental and physical health and for children to play, improving river quality and thereby lowering the costs of cleaning it up for water supplies, and diverting the subsidies to farmers to pay for greener public goods. Once properly accounted for and brought into the evaluation of both current spending and future

investment, these are all projects that have positive economic values. Add in the carbon sequestration opportunities from better land and coastal management, many of which are both cheaper than some current emissions reductions opportunities, and offer up the many other returns to the natural capitals over and above the carbon offsets.

These are all no regrets, even before the biodiversity gains are added on top, and make economic sense as soon as sensible pricing is introduced. Just doing all these sensible things now would make a big difference, and show people the great upside potential of the sustainable economy. Recall that not to price pollution is to court inefficiency, since an efficient economy includes all the costs. Proper pricing changes the patterns of world trade, benefits the local over the global and stops carbon leakage. What's not to like about all this?

And there is another different and optimistic reason for radical change. Part of what makes us human is our inherent sociability. We care about others and especially about our relatives and very specifically our children. If we build the sustainable economy, we can look them in the eye with the integrity that comes from behaving in an ethically acceptable way. Our lives are better if we can realise a better future for them. A life worth living is one that has principles and a sense of doing the right thing.

The final upside cuts against many of the more gloomy environmentalists. These are the no-growthers. Many green activists tell us that not only should we mend our ways, but we should also forsake all future aspirations for economic growth. This is profoundly wrong. The sustainable economy can and will grow, and potentially strongly, as a result of the growth of ideas, knowledge and technology. This is investment that can be financed legitimately through debt, creating new and better assets and hence passing on the liabilities associated with them to the next generation. This is in one sense a pretty obvious point: all economic growth is now driven by this form of capital, Karl Popper's 'World 3', the bundle of theories and hypotheses that have stood the test of repeated attempts to bring them down, and all the new additions to this body of knowledge. The bit of growth that we benefit from now comes from the huge advances in technology in the late nineteenth century, what the Victorians gave us in evolution, and modern organic chemistry, all built on great theoretical leaps forward. The reasons why the citizens of the sustainable economy can regard the step away from current unsustainable consumption to the sustainable consumption path as a temporary set-back is because ideas, knowledge and technology are marching on at an incredible pace.

The choice is whether to make sure there is a world within which this great advance in this form of capital can be realised and enjoyed, or whether we blow this great opportunity by destroying the climate and the biodiversity, the natural capital upon which the whole edifice of economic life is constructed. In all but the very short term, it is a great bargain to switch to the sustainable economy, and a disaster in the making not to do so.

That brings us back to the downsides of not acting now. These are already upon us and the consequences are going to get much worse. If our leaders are not persuaded to act in ways that grasp the opportunities in front of them, they (and therefore we) will have to confront the consequences, and there have been a number of attempts to spell out why the costs of action now to head off the worst impacts are lower than those we will have to pay when the unsustainable is not sustained.

The risk is that climate change continues unabated. Indeed, that is what is most likely going to happen. People will move, some people will starve and ecosystems will cross tipping points. The era of mass migration would make what is now going on in the Mediterranean look like a picnic. The Arctic warming is already pointing that way, and rises in sea level will accelerate. The tundra might melt and the consequent methane leakage might have planetary impacts. The question is whether the consequences are revealed too late in the day to turn the situation around.

What tips the balance is whether the interests of the next generation get a fair hearing. If the young and the next generation were properly at the table, it might all be rather different. That's why the sustainable economy needs a constitution. To turn the situation around, we need to embed the future in our deliberations. That constitution would entrench the rights of the next generation and ensure the stewarding of the natural and other assets so that their life chances are as good as ours. This is because they would have the capabilities to choose how to live their lives. We do not owe them equal happiness, whatever happiness means. But we do owe them our duty to be good leaseholders and to hand over a better world, both environmentally and with more and better ideas and technologies. We do not need to worry about the distant future. If we leave a decent inheritance to the

next generation, it will be their duty to look after the one after that. It would in any case be an enormous step forward.

When the American rebels got rid of the British in the eighteenth century, they sat down to start again, from first principles, and to write these down in their new constitution. Two hundred and fifty years later, it is still standing, having seen off a number of less-than-perfect presidents and broadly protected individual rights against the tyranny of the majority. Now is the time for another such radical departure, to see off the tyranny of the current selfish generation over the next. Again, it is about principles and citizens.

We come back to the choice. The sustainable economy is within our reach. We can do this. There have been previous examples in history when consumption has had to give way to investment in order to meet a higher-order objective. Sadly, these have generally been during and immediately after wars. The challenge for our age and our generation is whether the global environmental threats are big enough yet to motivate radical change. There are lots of upsides in moving to the sustainable economy, which a war economy does not yield. But it does require us, the current generation, to mend our economic ways and put the planet on a sustainable path. It requires quite radical change, not just a tilt of the tiller. It can and should be done. Whether now turns out to be what the great naturalist Edward Wilson called 'nature's last stand' will be shown in time. It is for history to reveal how it will end.

The legacy we leave is for us to choose.1

<sup>&</sup>lt;sup>1</sup> See chapter 3, 'Nature's Last Stand', in E.O. Wilson (2002), *The Future of Life*, London: Little, Brown.