Radical Realism

Climate action that is fast, feasible and universal



Simon Glynn December 2022

As we move on from our practical failure to keep global warming to 1.5°C, we need to keep working, not give up. But we should also ask what we are doing wrong, not just keep pushing with the approach that has failed us.

In short, we have spent so long getting started on incremental efforts that would have been effective twenty years ago, that the actions we have happening now are woefully inadequate for the stage we are at. The action we need at this point is radical, not incremental. But that is not yet where many business leaders' mindsets are. And the prominent radical visions that are out there don't provide a credible beacon to follow. Too often, we are offered a choice between radical optimism and radical pessimism, when what we need is radical realism.

Learning from missing 1.5°C

For the world, investing to achieve the 1.5°C ambition of the Paris Agreement would have been the best choice to make. The costs of missing that target will hugely outweigh the costs of achieving it, in both financial and human terms.

The target is a point on a continuous scale, so it is right that if we miss it, we should not give up, but strengthen our efforts to get as close to it as we can. But we should also take stock. If we are pursuing an approach that allows us to miss this target, then there is something wrong with the approach. It is easy to argue that all that is wrong is historical delays and sluggishness, and we are now gearing up. And the progress in activity over the past couple of years has been dramatic. The trouble is, though, that we have spent so long getting started, that the actions we are now taking are no longer fit for purpose. Twenty years ago, the 'glide path' we would have needed to follow to keep within the planet's carbon budget for a 1.5°C temperature rise was quite gentle. On that path, annual incremental gains would have gone a long way. But instead, we have spent most of that carbon budget before even starting to reduce our global emissions, and so the reduction we now need to achieve is more of a base jump than a glide path.

Yet we are putting a lot of effort into mechanisms that deliver incremental change, but not the systemic changeout that we now need. We can't get to net zero just by doing less; it can only happen by doing different, which is a different type of quest.

We need a more radical approach: an approach that is fast, if we are to come close to our 2030 reduction goals; feasible, so we can make it happen in practice, not just theory; and universal, recognizing that the system to decarbonize transcends rich and poor countries, resource-rich and resource-poor countries, autocratic and democratic countries, and so on.

Exam question: Who will pay and why?

The world-scale economic argument for investing in the climate transition is clear. For years the World Bank and other institutions have built models showing not just that we need to invest trillions of dollars each year in green infrastructure, but that the money invested yields an attractive economic gain compared with the business-as-usual alternative.¹ Collectively, we can well afford to invest - in fact, we can't afford not to. The challenge is in translating that global economic rationale into a financial rationale for each actor who needs to make the investments. A critical test for any approach to climate action is to ask who will pay the cost, and why will they do it? This is a relatively easy question to answer for incremental changes, but tougher when we go more radical.

For any climate action that costs money, there are five ways that it could be funded:

- 1. The end consumer may voluntarily pay a premium for a green solution, and this premium travels along the value chain to where the costs are incurred.
- 2. A company may require the end consumer to pay, by building the action into how it operates, designs products or buys from suppliers.
- 3. A government may require the end consumer to pay, by setting standards that oblige providers to act, as the EU is doing through the announcement of a future ban on internal combustion engines.
- 4. A government may pay for the climate action itself through subsidies, grants etc., as the U.S. federal government is doing through the Inflation Reduction Act.
- 5. Innovation ensures that the action pays for itself, so the only finance needed is to 'prime the pump' to make the new solution cost-competitive.

In practice, the first two approaches can only work for incremental solutions, where the cost to be recouped is low. Consumers, whatever they tell researchers, do not pay significant premiums for green solutions there are too many other factors in play. Some of them will pay more when they also get a direct benefit, as with the pleasure of driving an electric car – but even that won't spread through the cost-conscious part of the market without state help. Companies can absorb or pass on incremental costs as, for example, Walmart and Salesforce do when they impose climate standards on their supply chains - but these can't be substantial extra costs, or the companies choosing to take them on would become uncompetitive. So for radical change, we are down to options 3-5.

The fifth option is ideal, where it can be made to happen. This is what Bill Gates is

describing when he talks about the need to eliminate the 'green premium'.² Wind and solar are the often-cited poster children. Advanced nuclear has a good, though unproven, prospect of following a comparable cost curve, as the technology moves from massive site-specific projects to controlled and replicable factory-based manufacture.

Nice work if you can get it. But the opportunities are limited. Will restricting ourselves to these opportunities allow ourselves to achieve our goals in the time we have? Or, together with the incremental efforts made in using the first two approaches, might it give a false appearance of progress that allows governments to avoid playing their role in the third and fourth approaches? The examples of wind and solar show both the potential of this approach - they are now both claimed to be cost-competitive without subsidy - and the limitation: despite this claimed position, construction is not happening at the pace we need, because of both hidden costs and hidden barriers. (For wind and solar the hidden costs include the infrastructure needed for electricity transmission and storage, end-of-life recovery, and the decreasing returns to scale as expanding usage spreads to ever less favourable sites. The hidden barriers include local and political resistance to use of land for turbines, solar arrays and transmission lines, and the environmental and geopolitical challenges of sourcing the minerals that a renewable-energy grid would depend on.)

Let us see how three different mindsets for radical climate action answer this exam question.

The radical optimist answer

The radical optimists acknowledge that we need trillions of dollars of annual transition finance, and are confident that markets can provide and direct this funding. They are radical, in embracing flows of finance that are vastly greater than we have managed so far; and they are optimists, believing that our existing institutions and systems will deliver this voluntarily, quickly and at scale in a massive step up from what has yet been achieved.

To support this view, they are often particularly optimistic about the second of our approaches: companies requiring the end consumer to pay, by building their climate actions into their businesses and cost structures. This is what must happen when companies make voluntary net-zero commitments to investors and other stakeholders. then make transition plans to deliver those commitments, in the absence of pull from consumers. And that is what is happening today: companies are reporting most pressure from their investors and business-tobusiness customers, and relatively little pressure from consumers or policymakers.³ But it is happening at an incremental, not radical. level.

How can this approach be scaled up to a more radical level, without loading companies with increased costs that put them out of business? The radical optimists have two answers: disclosures and carbon markets.

Certainly, companies are about to face new demands on how they disclose their carbon emissions, in particular from the U.S. Securities and Exchange Commission⁴ and the European Union's Corporate Sustainability Reporting Directive⁵. These regulatory burdens help to level the playing field, with companies knowing that their competitors (at least in the same jurisdiction) face the same. But disclosures aren't the same as emission reductions.

Voluntary carbon markets can help close the gap, by shifting the actual decarbonization to where it is cheapest to do, so more radical change becomes affordable. A manufacturing company in the Global North may not find it affordable to make radical cuts to its emissions directly; but if it can instead buy carbon credits for the same level of emissions reductions in e.g. the Global South, bigger cuts become financially viable. In the short term, this looks an attractive solution, amplifying the reductions we can achieve for the same level of investment. But to get to net zero, the real emissions in the North will still need to be eliminated, so the carbon market can only postpone that cost, not actually avoid it.

In reality, the rational optimist approach is less of a pure market play than its rhetoric suggests. It recognizes the need for 'concessional finance' - that is, finance from publicly funded development banks for projects and capacity-building that private finance won't pay for because they don't see a sufficient commercial return. This is a stealth form of our fourth approach – governments paying for climate action – in that any losses or below-market returns are paid for by the states who fund the development banks. But the stealth matters, because it hides the accountability and public acceptance for how public money is spent, beneath a market veneer - which is likely to limit the level at which the funding can be provided.

The radical pessimist answer

The radical pessimists are sceptical of these market-based solutions. They see the seductive power that markets have over the business world. They also see that while we build ever more sophisticated concepts for carbon accounting and trading, global carbon emissions continue to rise. And we are already nearly halfway through the time between when the Paris Agreement was signed in 2015, and 2030, the deadline for halving global emissions in order to be on track for a 1.5 °C temperature rise. So some level of pessimism is warranted.

The radical pessimists conclude that what is needed is nothing less than a revolution in our economic system. We need to challenge the core of how capitalism has worked throughout our industrial age, including the pursuit of growth itself.

The rationale for a 'post-growther' perspective is straightforward. Perpetual, exponential growth is hitting our planetary limits – in the atmosphere's capacity for carbon dioxide without overheating; in land for food without causing mass extinctions; and in raw materials. It is hard to 'decouple' economic growth from these physical demands, and in any case, above a certain level of prosperity, greater material wealth does not appear to make us happier. So, the argument goes, in order to release the stress on the planet, we need to break our addiction to growth.

This argument answers the exam question by rejecting its premise: we shouldn't be making these investments in the first place. 'A less energy- and material-intensive economy is likely to be one that revolves around care and creativity, rather than the induced dissatisfaction of consumerism.'⁶

Radical, certainly. But is this necessarily pessimistic, if we can be a happy society freed from our addiction and embracing a more transcendental existence?⁷

The pessimism comes from recognizing that, whether or not this state is desirable, it is not attainable. Degrowthers agree that it would require a different politics, as well as a different economics. To make a meaningful transition to it in the few years that we have for decisive climate action, we would need some sort of world revolution and the people arguing for this shift are not planning one. Whatever the intellectual or moral arguments for a post-growth society, to argue the case without the revolutionary movement it would take to bring it about is a resigned, pessimistic stance. It is a pessimism that feeds itself, allowing its advocates to be uncompromising in their pursuit of idealized solutions, in denial about the likelihood that these will actually happen.

The radical realist answer

Is there a middle way? What would a radical realist answer be? Can we find a way to act on climate change that is fast, feasible and universal?

To be fast, we need to work with the system we have. Greta Thunberg told us nearly four years ago that we must 'act as if our house is on fire – because it is.'⁸ When your house is on fire, this is not the time to explore if there are better ways to organize the fire service. So we can't depend on reinventing capitalism. To be feasible, we must draw on technologies that are not yet mature and cost-competitive. We can't get there without them. And we can apply them with the time and resources we have available, provided that we invest heavily in bringing them to scale (as has happened with wind and solar), and we don't bet everything on any single solution.

We can't be sure today about the productivity, financials and timing of advanced nuclear, carbon capture, new industrial energy carriers such as hydrogen and ammonia, or the displacement of animal agriculture by precision fermentation. But we can see that the untapped potential is enormous, with each advance helping to decouple economic growth from carbon emissions. We can sensibly invest in a portfolio of those technologies, without betting our future on any one of them. And we can make that investment profitable, if we set up supportive regulatory frameworks that promote their adoption as they prove themselves - but we should not pretend that the private sector can do it alone.

To be universal, we need to recognize the diversity of political environments we need the transition to work in – not just across different countries, but as governments change within the same country. So we need to pursue climate action technocratically, not as a social project. There are strong arguments, frequently made, for linking climate action with issues of social justice. But any issue of redistribution can become a game of winners and losers, in which the actors with the most power, and often therefore the greatest need to transition, are those least motivated to join in.

How does the radical realist answer the exam question? They recognize the limitations of what markets can do beyond the incremental, and are honest about the need for public and government involvement. They also recognize that what they need from the public and government is only partly about finance. It is also about permission to do things differently, in order to unlock the potential of the solutions we have available. Permission to explore without prejudice the potential for nuclear energy and genetically-modified food. Permission to challenge the countryside idyll of farming animals. To accept some compromises that can have a disproportionate impact, such as the transmission lines across the country that a renewable electricity grid would require. To be open to the possibilities of carbon capture, even if it is brought to us by the oil and gas companies, who tend to be the firms with the knowhow. assets and resources most suited to delivering it. Earning such permission is at the core of the radical realist agenda.

Radical realism may be a new label to describe this mindset, but the mindset itself is already in play. It is there in the tens of new companies developing advanced nuclear technologies. It is in the U.S. Inflation Reduction Act's provisions for funding them. It is in the vision for using spare shipyard capacity to build productized, floating nuclear stations that can be taken across the world and moored at any coast, or even be used offshore to produce hydrogen or other zero-carbon fuels.9 It is in a commercial venture to power Singapore and parts of Indonesia using solar power from northern Australia, deploying the world's largest solar plant, largest battery, and longest submarine power cable.¹⁰ It is in the 'Climate Prosperity Plans' proposed by some of the world's most climate-vulnerable countries not pleas for reparations based on a sense of fairness, but financeable plans to grow a country's economy through investments that will also advance the energy transition and build climate resilience.11

After wasting critical decades talking about climate change, there is a natural desire to focus now on action, not on ideas. But when our path is not taking us to where we want to go, then taking a moment to rethink what we are doing is the most practical thing we can do to make progress. And when we look through the lens of radical realism, we can see a more promising path already beginning to take shape.

Simon Glynn is founder of Zero Ideas and a partner and co-lead for climate and sustainability at Oliver Wyman.

Zero Ideas is challenging business thinking on climate change. We seek to accelerate and deepen the approaches that businesses take to tackling climate change by stimulating a curious and visionary mindset among business leaders, encouraging them to go beyond today's focus on carbon accounting and reporting.

Copyright © Zero Ideas 2022

Zero Ideas is a Charitable Incorporated Organization in England & Wales. Registered Charity Number 1199593. www.zeroideas.org.

¹ United Nations, Financing climate action, <u>un.org/en/climatechange/raising-ambition/climate-finance</u>

² Bill Gates, How to avoid a climate disaster: The solutions we have and the breakthroughs we need, 2021, p59

³ Oliver Wyman and the Climate Group, <u>Getting going: Breaking through the barriers to corporate climate action</u>, September 2022, p33

⁴ <u>SEC proposes rules to enhance and standardize climate-related disclosures for investors</u>, U.S. Securities and Exchange Commission press release, 21 March 2022

⁵ See for example <u>What business needs to know about the EU Corporate Sustainability Reporting Directive</u>, BSR, 7 July 2022

⁶ Richard Roberts, <u>Net zero by 2050 is a fantasy, unless we get serious about degrowth</u>, LinkedIn, 22 April 2022

⁷ See for example Tim Jackson, Post growth: Life after capitalism, 2021

⁸ Greta Thunberg, speech at the World Economic Forum, Davos, 25 January 2019

⁹ Rauli Partanen, <u>Shipyard nuclear in Finland</u>, Think Atom, June 2022

¹⁰ en.wikipedia.org/wiki/Australia-Asia Power Link

¹¹ <u>Sri Lanka launches 'Climate Prosperity Plan' to power faster economic recovery and achieve net-negative carbon emissions</u>, Climate Vulnerable Forum press release, Sharm El-Sheikh, 8 November 2022