Building Back Differently: 
A Climate Emergency Recovery from COVID-19

A Green House Gas by Jonathan Essex 
June 2020

Introduction

In 2004 when the Boxing Day Tsunami struck land around the Indian Ocean I was in a boat in the Sundarbans, a mangrove swamp in South East Bangladesh. The boat slowly rose and then slowly subsided. One fishing boat capsized. Elsewhere, the impacts were catastrophic. Where mangroves had been cleared along the coast of Sri Lanka people were washed out of the top floor of hotels and whole villages obliterated under the tidal wave that gushed inland, killing thousands. Years later I started work in the field of ‘disaster risk management’ – helping to improve preparedness to future disasters by ‘building back better’ – a phrase born out of the Boxing Day tsunami responses.

Living now through the COVID-19 lockdown feels like the second time I have lived through a crisis. The first was also in Bangladesh, earlier in 2004, an experience that engrained in me a personal and emotional attachment to what the rising tide of climate disasters actually looks and feels like. A short account of this is set out in Box 1 below.

<table>
<thead>
<tr>
<th>BOX 1: Bangladesh 2004 – A glimpse into what Climate Emergency feels like?</th>
</tr>
</thead>
</table>
| In June 2004 I lived through a one in ten year monsoon that turned Dhaka, the capital city of Bangladesh, into an island as vast swathes of the countryside were submerged. One day I read in the local newspaper (a direct translation to English) that ‘last night the Brahmaputra broke its banks and widened by 10 km overnight and the following villages were deleted…..’ One village I had visited two weeks earlier was halfway down a three paragraph long list of village names. I felt powerless as the floodwaters rose, dirty and fresh water mixed. The price of water purification tablets doubled in a week and people died of cholera, sea snake bites and drowning. Yet more people died the following year in New Orleans than Bangladesh in 2004 – reflecting a depth of Bangladeshi mutual aid that far surpassed what I have witnessed in response to Covid-19.

As an engineer I read hydrological studies for a new bridge over the mighty Padma river, which brought home to me just how vulnerable this low-lying country is to climate change. One modelling report set out how a one metre rise in sea level could magnify flood and storm surge events. I understood this to amplify the scale of flooding so an event predicted to happen only once every 50 or 100 years would then happen on average every single monsoon season. I lived through a 1 in 10 year monsoon flood season in 2004 and learned that the last 1 in 50 year event in 1970 killed literally hundreds of thousands of people. More recently I have read that a one metre rise in sea level is all but inevitable by the end of the century.

Thus, I think of Bangladesh when I reflect that for climate change you simply can’t just ‘build back better’ after disasters. The only way to improve our long-term resilience - at a national and global scale as well as for individual communities - is to stop climate change. Unless we halt the almost unstoppable increase in the scale, frequency and severity of disasters that climate change is predicted to foment, our future will not simply be an ‘inconvenient truth’ but apocalyptic. Thus, long-term resilience is only possible if we eliminate all carbon emissions as quickly as possible.

This piece reflects on these experiences after relating different types of disaster recovery to the COVID-19 crisis.
What form will recovery take?

Rebecca Solnit said recently\(^1\) that disasters begin suddenly but never really end. That is in contrast to the textbook ‘V-shaped’ recovery from disasters such as earthquakes or tsunamis, and even more so for the anticipated ‘U-shaped’ recovery from COVID-19, illustrated in Figure 1.

One particular feature of the COVID-19 recovery in contrast to the impact of an earthquake or similar is the extended period of the disaster itself – in this case referred to as ‘lockdown’, in contrast to emergency relief and recovery being mobilised directly after an earthquake, flood or similar event strikes. This delay could affect the potential for a ‘climate emergency recovery’ to Covid-19:

- Firstly, the extended lock-down might embed new sets of behaviours that have a lasting impact afterwards, just as is the purpose of the six week long army basic training. Some are referring to these aspects as what could become a ‘new normal’. So, some of the changed priorities, heightened awareness and experience of improved air quality, greater walking and cycling, growth in community-level solidarity and mutuality may not bounce back but may become institutionalised into our culture and form part of a ‘new normal’.
- Secondly, the slow-end to the lock-down and subsequent economic recovery is revealing an increased tension between a recovery that minimises loss of life (slower) and one that more quickly restores parts of our pre-Covid economy as more and more businesses reach crisis point and more jobs are lost. There is a possibility that this tension creates space for a recovery that puts the climate emergency front and centre, what many are referring to as ‘building back better’.

Might this combination of a new normal and building back better be sufficient as a response to climate emergency that faces us? Naomi Klein has suggested that this may be the case, but the opportunity might equally be exploited by vested interests to ‘build back’ to the status quo, or worse. The rest of this piece explores what we might learn from COVID-19 in successfully transforming our economy and

---

society to truly face up to climate reality. I would argue we might better think of this as building back differently: to retrain the economy’s emergency footing to this far bigger crisis.

**Key Lessons from COVID-19 to Guide a Climate Emergency Response**

There are many lessons than can be drawn from the current coronavirus crisis. These are my current top-five, explored below:

1. Ensure our response is timely, and matches what we say is required with what is actually done;
2. Rethink what is important, putting solidarity over self-interest;
3. Reprioritise which jobs are critical and redirect resources to these areas; and
4. Ensure fairness runs through our plans and responses, including to address institutional inequality and bias that exists in our economy and society;
5. Apply the ‘real emergency’ approach of COVID-19 to a climate emergency recovery.

**1. Sufficient plan, put into action, ahead of time**

Firstly, the fact that the UK waited, perhaps to the last possible moment before implementing the COVID-19 lock-down, most likely contributed to a far higher death toll than in other countries. Not only did the UK delay before acting, it did so in spite of there being a plan in place. After a three-day drill (Exercise Cygnus) to determine its readiness in responding to a respiratory pandemic in 2016 the UK published a biological security strategy (in 2018), a report that was used to guide the coronavirus response of other countries.

Strategic planning and the response to COVID-19 was led by governments and Local Resilience Forums (multi-agency partnerships that bring together different public services under leadership of local government). The response to COVID-19 took precedence over business strategy, which had to accede to emergency priorities and restrictions.

Similarly, national and local government must play a key role in any meaningful government plan to address the climate emergency, combining supply-side and demands-side measures. If the current actions by individuals and businesses are not sufficient to put our climate response onto an emergency footing then the government should (as it did in the case of COVID-19) limit access to fossil fuels and ban activities that make things worse, such that we succeed in drastically reducing our carbon emissions. As long as we continue to fail to put the climate crisis onto an emergency footing we are likely to repeat the failure to plan-and-act-together from COVID-19 - but the additional death toll, and wider societal destruction will be orders of magnitude higher.

We should view the scale of economic and cultural shock brought about by COVID-19 as a climate wake-up call. As slow-onset climatic changes such as temperature and sea-level rise become unstoppable and ratchet up discrete disasters such as droughts and flood events, the scale of impacts will increase. Impacts are likely to range from increasing the fragility of the most vulnerable nations, to destabilising regions such as the Sahel which is already suffering prolonged drought, to becoming the determining factor in global food prices. The sufficiency of fresh water, viability of coastal cities around the world,

---

global trade, economies and civilisation as we know it will also be impacted. We know this, yet we still have not truly faced up to it. Will we treat the coronavirus as a blink in the eye of capitalism or a wake up call? It should and must be the latter.

2. Rethinking our Priorities and Frontlines

Secondly, during the COVID-19 crisis we very quickly elevated those on the coronavirus front-line: the NHS and belatedly our care staff as well as council recycling collection teams, delivery drivers other key workers,3 to being critical to our way through this crisis. To at least some degree we shifted from a culture of following football superstars, celebrities and the ultra-elite class as our consumer-ids, to celebrating those taking us through the crisis.

This is reflected in a different culture that unfurled during the coronavirus crisis, in which we acted in solidarity rather than self-interest (except in some isolated and high profile exceptions). Our collective experience has shown that such a change is not just possible and can happen, but that we can be part of such a rapid shift. We also discovered the importance of community resilience, also crucial in our collective response to the climate crisis.

3. Climate Emergency Jobs: From changes in employment and infrastructure use under COVID-19 to new jobs to deliver a climate emergency recovery.

COVID-19 quickly created a ‘new normal’ with some occupations shedding staff and putting them on furlough, some with reduced demand, whilst others have boomed and been elevated into ‘key worker’ status. The same will be true for the climate emergency.

The changes caused by the pandemic led to some redeployment of primary production, manufacturing and service sector jobs, such as follows:

- **Production sector**: the coronavirus crisis and low oil price could lead to up to 30,000 job losses in the UK’s oil and gas industry.4
- **Manufacturing**: the Airbus plant in North Wales quickly transitioned from being part of the globally connected aviation supply chain to making ventilators for the NHS.5
- **Service sector**: Cabin crew from different airlines helped staff the emergency Nightingale hospital in London and are being targeted to retrain as nurses.6 There have also been extensive job losses in retail and hospitality.

The rapidity of this shift shows the potential for a similar just transition from manufacturing products that support high-carbon lifestyles to the ones needed for a zero-carbon, more local and circular climate emergency economy. These examples reflect the well thought out plans to shift defence industry into socially useful production (including heat pumps, kidney dialysis machines and wind turbines) known as

---

the Lucas Plan in 1976\textsuperscript{7} and research by Green House that has highlighted the potential for around 7 million climate jobs in the transition to zero carbon in the UK.\textsuperscript{8}

Whether we return to normal or shift to a climate emergency footing will affect the nature of the economic recovery. One example is how passenger flights and car use changes after the lockdown. Reduced demand for air transport during lockdown has led to many to question whether planned expansion at many airports is still needed. More uncertain is the medium term impact on car travel. It was drastically reduced at the start of the lockdown but as we come out of it could increase as people take to their cars rather than using public transport. Or will growth in home working along with cycling and walking call into question the need for the UK government’s extensive road-building programme? The government did, quietly, approve the high-carbon investment and high energy using HS2 at the start of the lockdown.\textsuperscript{9}

A survey of some the world’s most senior economists and officials suggested that financing green policy initiatives would not only shift the world towards a zero carbon emissions pathway, but also offer the best economic returns.\textsuperscript{10} But it is not just about investment - we also need to sustain the scale of transformative change that the COVID-19 crisis has made to our economy – that is that it must serve us, and transform how we live – rather than being an end in itself. This would mean not just a better society post-Covid but a different economy. Molly Scott Cato explains how we can be better off with a smaller economy, calling for a recovery that is decoupled from growth, and that redistributes wealth to those contributing less to the climate breakdown. This means funding sustainable industries, aligning any fiscal stimulus to the tenets of a Green New Deal, and supporting conversion to low-energy industrial production (excluding high-carbon sectors, such as aviation and fossil fuel industries from government funding).\textsuperscript{11}

Instead of relying on the likes of house building, increased industrial throughput and consumer spending to create economic multipliers to kick-start the economy, we should aim for a more local and circular economy. The climate emergency economy needs to re-join the notion of an ‘economy’ with the social and environmental purpose it fulfils. So instead of incentives for house building the government should finance and incentivise home energy makeovers, combining a Green New Deal programme of retrofit with a shift from zero VAT rating of new-build housing to refurbishment of existing buildings to bring them up to a zero carbon standard. Each construction job would be accompanied by far less material and energy expenditure as the demand for high-carbon bricks, concrete and steel (much of which is imported long distances) is displaced by the likes of insulation products and PV panels. This makes

\textsuperscript{7} See https://lucasplan.org.uk/story-of-the-lucas-plan/

\textsuperscript{8} See https://www.greenhousethinktank.org/climate-jobs.html.


\textsuperscript{10} O’Callaghan and Hepburn (2020) Leading economists: Green coronavirus recovery also better for the economy, https://www.carbonbrief.org/leading-economists-green-coronavirus-recovery-also-better-for-economy

\textsuperscript{11} Scott-Cato (2020) Less is More: How to be better off with a smaller economy, https://www.greenparty.org.uk/assets/files/reports/less-is-more_how-to-be-better-off-with-a-smaller-economy.pdf
Insulating homes perhaps the cheapest way to create new jobs as part of a COVID-19 recovery, as well as being central to bridging the gap to addressing the climate emergency.  

A report for the LGA proposed that such local green jobs will be best delivered by government support for local councils and education providers, including for jobs guarantee programmes and training. Further education colleges could utilise local trades people in climate-job sectors under ‘day release’ roles to train up renewable energy fitters, restorers and remanufacturers etc. needed to bring about the societal shift. And with more jobs created locally more people should be able to work closer to home, encouraging walking and cycling, and ensuring spending stays within local areas.

Such a public-led creation of climate jobs could build on the success of the ‘Preston model’ to strengthen local economies. The Preston Model redirected public sector procurement of councils, the NHS and education to local suppliers including smaller enterprises, community organisations, cooperatives and ones in municipal ownership. Nurturing a local ecology of interconnected businesses whilst supporting training and recruitment in local lower income areas has been proven to revitalise and create more circular local economies. In Manchester this approach now supports over 5,000 local jobs as only an eighth of Manchester City Council’s spending through its top 300 suppliers is now outside Greater Manchester. The benefits of creating a vibrant local economy mean this approach should be applied more widely, as a strategy for both private sector and household procurement post-COVID – including supporting local supply chains linked to the rural economy, and locally owned shops and businesses.

Thus, in terms of employment, a climate emergency recovery from COVID-19 will need to build back differently. For too long green living has been ‘best practice’ – it now must become mainstream. With just transitions of employment, elevation of the status of the public sector (strategically not just in terms of key workers), an energy makeover of our buildings and rethinking of transport we can make zero-carbon living not just a pipe dream but a reality for everyone.

4. Address underlying divisions, divides and inequalities in our society

Fourthly, the COVID-19 lock-down highlighted existing inequalities and underlying divides in our society. The pandemic is exposing and extending existing gender, age and race inequalities in the UK. For example, more women and young people lost their jobs and were furloughed, whilst it was older people who were more vulnerable and had a higher mortality rate from the disease. And as I write this calls


mount for an inquiry after an official report\textsuperscript{17} set out the higher death rate from COVID-19 in black and ethnic minority (BAME) communities.

Similarly, climate change risks extending existing inequalities. Changes in climate are already impacting the lives of the most vulnerable first, including those in some of the poorest countries whilst the richest (people and countries) are better shielded from current climate disasters by expensive infrastructure and greater buying power to secure access to global supply chains. Yet the richest 10% of the world’s population contribute half of global greenhouse gas emissions – five times that of the poorest half. Molly Scott-Cato proposes that our recovery must deal with these realities – proposing a cancellation of debt owed by the poorest countries globally and creating a universal basic income to address inequality and insecurity in the UK.\textsuperscript{18} In addition, we need to ensure that the shift to a zero carbon economy is one that empowers people: we do not want simply a shift from banking and fossil fuel firms coercing democracy to tech-giants and renewable energy monopolies having undue influence.

Living through the COVID-19 pandemic affects us all but in different ways. Different people have had very different experiences of the crisis: those recovering from or grieving those lost to Covid-19 to those who have not been affected; those who are alone and more isolated to those finding a greater or renewed sense of community; those without work or under-employed to those overworked in frontline roles. Similarly, a climate emergency response must bridge between those most affected by extreme climate chaos and those whose livelihoods are currently wedded to industries that obstruct transition, globally as well as locally. So, as well as addressing inequalities, COVID-19 has shown how deeply important it has been to bring us together, and that an emergency response will most likely be complex, messy and require learning along the way. How we do this together, respect with dignity our differences, make it a people-led plan – our plan – will be the challenge of our times.

5. The Need for a Climate Emergency Recovery

Finally, and perhaps most importantly the COVID-19 crisis has shown what treating something as an emergency really looks like. In the lockdown weeks the way society has operated, ways of living and our economy have all been transformed. Many parts of this were not for the better but the true scale at which we have collectively responded to a government setting out a plan and promptly taking action has been awesome. We now know we can change, as we have done just that over the past few weeks.

In contrast, up and down the country councils, regional assemblies and even parliament have declared their intention to respond to the ‘climate emergency’. But in many places this has yet to make a palpable difference to peoples’ lives. Yet this, surely, is an even bigger emergency, requiring far deeper, systemic change.

We need to overcome the tension that has clearly existed in the COVID-19 crisis, between what is good for the economy and what is needed to ensure the lockdown is effective. This is a real challenge for climate change – to have a strategic climate plan for the economy\textsuperscript{19} yet make it happen now.

\textsuperscript{17} Public Health England (2020) \textit{Disparities in the risk and outcomes of COVID-19},

\textsuperscript{18} Scott-Cato (2020) – see note 11.

\textsuperscript{19} Essex, J (2020) \textit{What would a UK climate emergency plan that faces up to climate reality look like?}
\url{https://www.greenhousethinktank.org/reports.html}
There is perhaps an equally big tension in how we respond: between planning and acting, and between focusing on an emergency (immediate) and recovery (longer-term). A climate emergency response requires us to do all of these together, which affects what we mean by an emergency plan, as follows:

We cannot afford to plan first, to the extent that this delays actions, as there is precious little time left to act as it is. Strategic changes must incentivise demand reduction, making space for economy-wide transitions. There is no blueprint written already, yet we must start now and augment the plan as the process, the pathway and the journey unfolds. There is no need for a perfect plan for it will change and evolve. It must build policy into practice and vice-versa, in real time. Planning and doing are joined, not separate. Yet it must be far sighted by recognising where we are and where we are heading, and start by changing direction. Our plan must span from the immediate to the very long term. Planning for the emergency and planning for the future are now one and the same.\(^\text{20}\)

My Green House colleague John Foster puts it like this: as Greta [Thunberg] keeps saying we should be panicking – because an inexorable slow-burn emergency is [still] an emergency now. So, instead of noticing that the fuse is lit and getting meetings in the diary to discuss surviving the explosion, we should be at least trying to stamp out the fuse. This would mean a genuine emergency-mode response now.

And that is a big ask. Not to ‘build back better’ and then, separately, attempt to put our climate response onto an emergency footing. We do not need to return first to our consumer capitalist set of values. We should take this opportunity to transition straight from COVID-19 to addressing the climate crisis. We must apply emergency thinking across our whole society, to plan a sufficient response that engages people, as communities, in an inclusive way. We need to place the economy on an emergency footing to take us from where we are now all the way to zero carbon. That requires a climate emergency response to the coronavirus crisis.

Jonathan Essex is a chartered engineer who has worked for engineering consultants and contractors in the UK, Bangladesh and Vietnam. He is a member of Green House Think Tank, where he has researched plans to decarbonise the UK’s construction and industrial sectors and been involved in estimating the climate jobs potential of local transitions to zero carbon. He is also a councillor on Surrey County Council and Reigate and Banstead Borough Council.

\(^{20}\) See Essex, J. (2020) ref cited, p. p19. As that most unlikely of climate emergency thinkers, Niccolò Machiavelli, wisely noted, ‘Make no small plans, they have no power to stir the soul’.