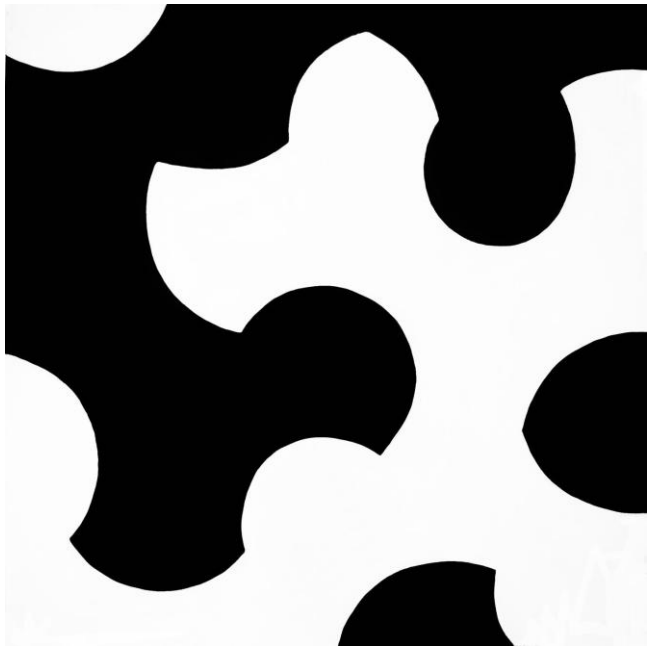
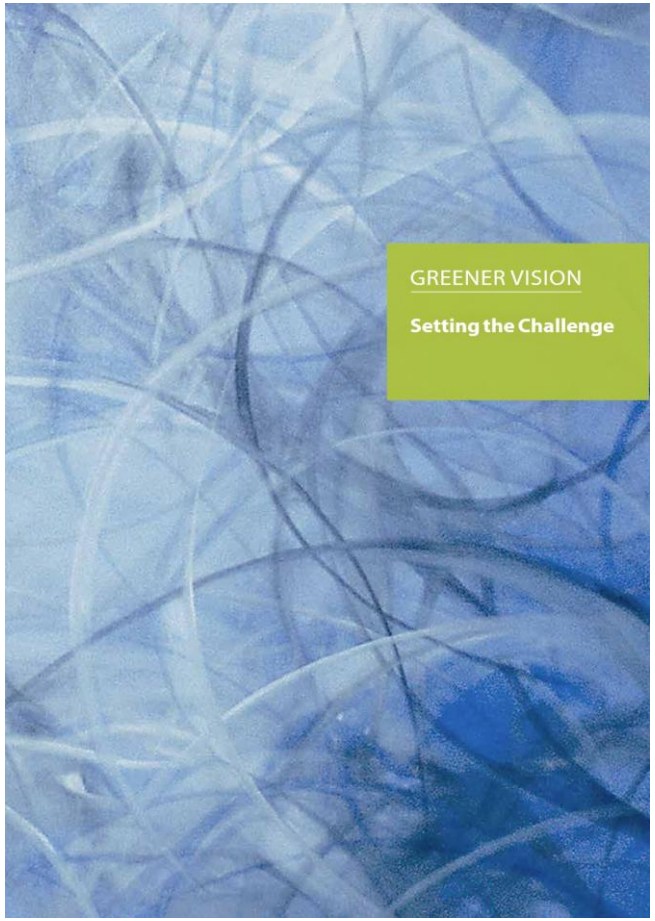


SETTING THE CHALLENGE CONSULTATION FINDINGS

Claire Haigh, Founder & CEO Greener Vision

12 November 2026

GREENER VISION | Setting the Challenge Consultation



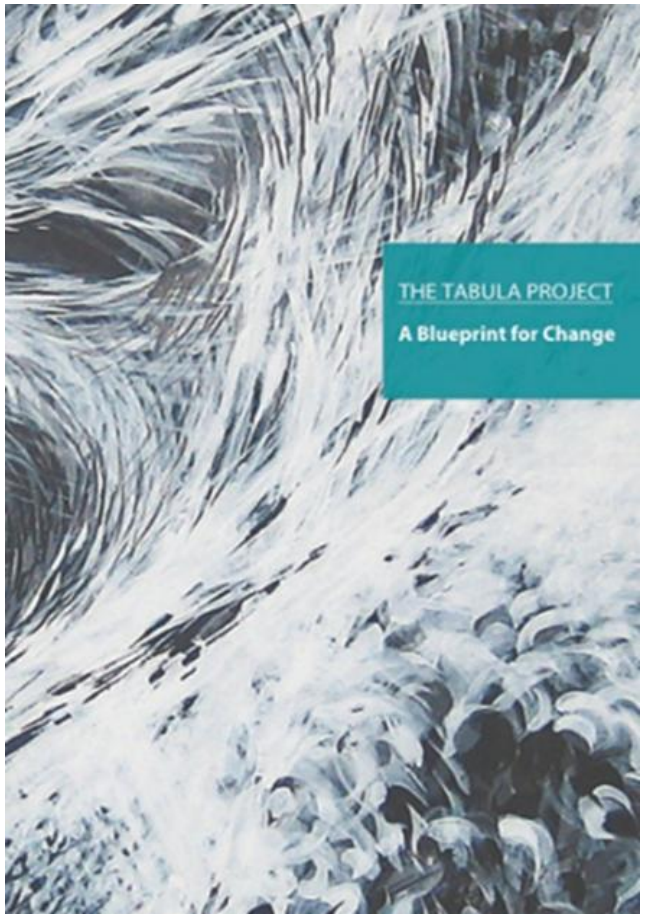
"The climate alarm is blaring from every direction," UN Climate Chief Simon Stiell, 28 July 2026

Greener Vision has conducted a wide-ranging political and stakeholder consultation seeking to explore new ways to address some of our most intractable problems.

In-depth interviews with 94 politicians and stakeholders held between May-August 2026 explored how our whole approach needs to change and the urgent action needed to tackle our climate and nature crises. The consultation spanned the five unprecedented searing heatwaves experienced in the UK.

The Setting the Challenge consultation applied insights from The Tabula Project, a 30-year creative endeavour that began with the assumption that we won't solve our most intractable problems with the thinking that created them.

THE TABULA PROJECT | A Blueprint for Change



Our thinking needs to change if we are to rise to the scale of the climate challenge.

We need a radical realignment of how we perceive ourselves in relation to each other and the environment on which we depend. THE TABULA PROJECT: A Blueprint for Change recommends we embrace more holistic thinking and that policy is underpinned by five key **'Pillars of Unity':**

I Seeing the whole picture

II Integrating heart and mind

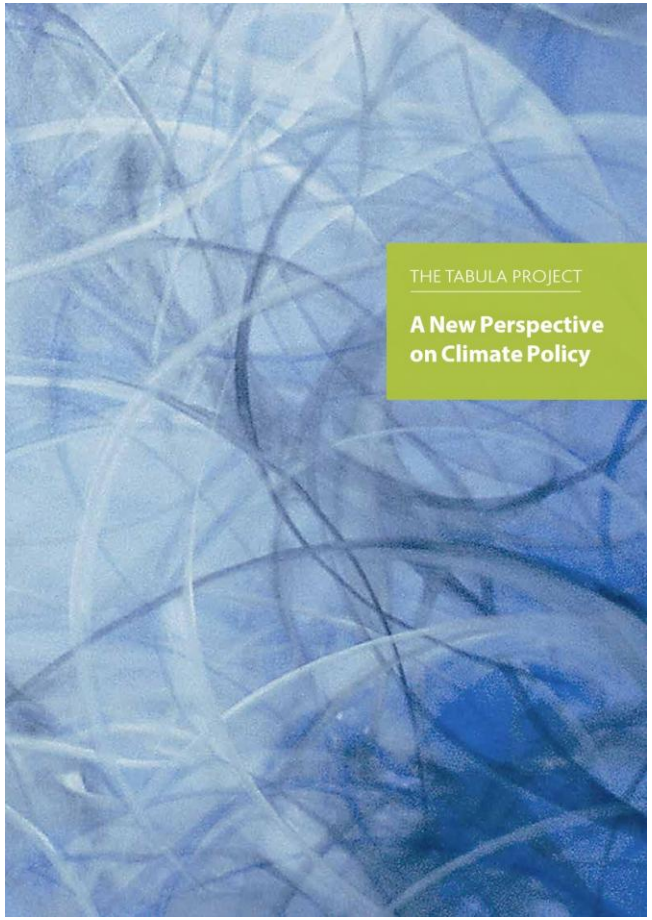
III Being at one with nature

IV Healing the whole system

V Becoming citizens of 'One World'

Setting the Challenge interviews were structured around the each of the five 'Pillars of Unity'.

THE TABULA PROJECT | A New Perspective on Climate Policy



"We are the first generation with the tools to end the fossil fuel age – and the last who can avert climate catastrophe". UN Secretary-General António Guterres 23rd September 2026

THE TABULA PROJECT: A New Perspective on Climate Policy draws out the key conclusions from the Setting the Challenge Consultation. We are a long way from where we need to be.

We are on course to breach 1.5°C before 2030. What will it take to galvanise a response commensurate with the scale the challenge? What is the alchemy we need? Political leadership is urgently required but cannot exist in a vacuum. Strong cross-sector collaboration is also required, as that makes political consensus possible and supports an environment conducive to policy and decision-making in society's long-term interest.

*The report is illustrated by **Metamorphosis** a poem and series of paintings which are part of The Tabula Project. Metamorphosis explores the fluidity of the self and the infinitely malleable and changeable nature of consciousness*

I – Seeing the whole picture

NAVIGATING COMPLEXITY

1 An overlapping series of crises

2 Lack of perfect information

3 The fundamental constraints

WILFUL BLINDNESS

4 Avoiding the big picture

5 Confirmation bias

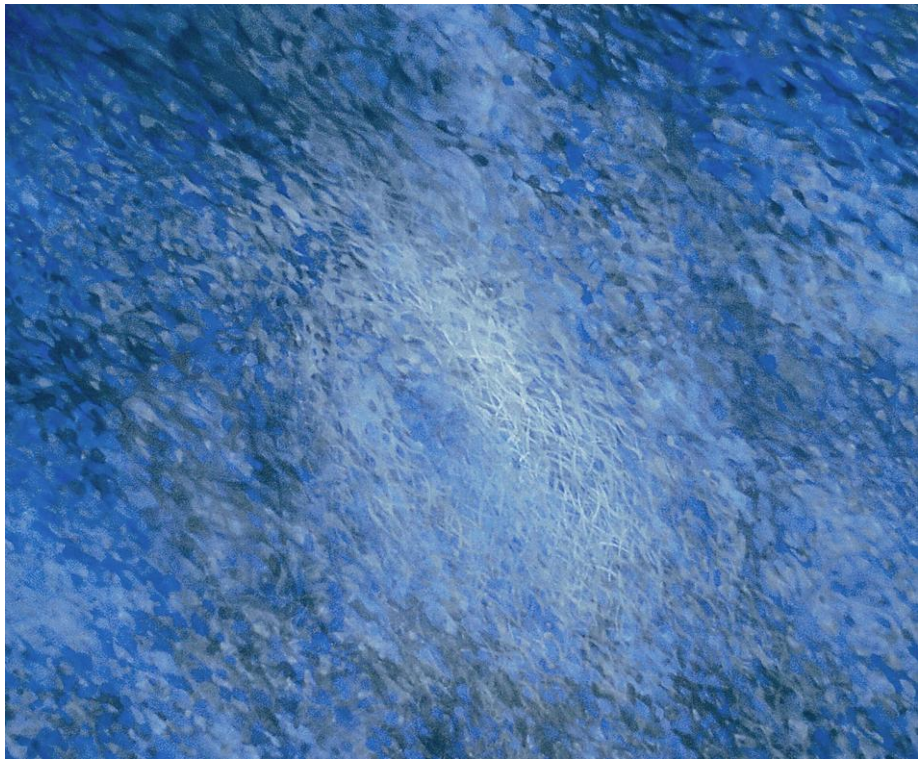
6 Political constraints

INFORMATION DISORDER

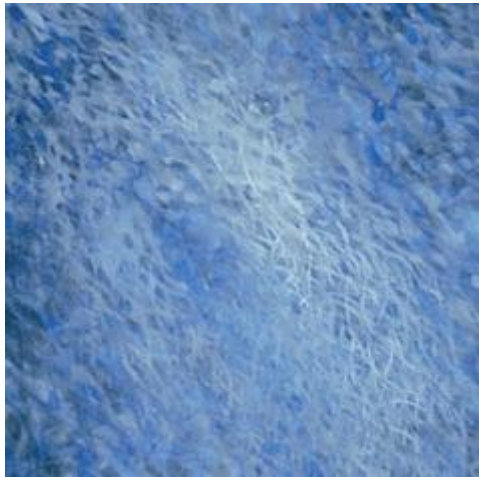
7 Losing the battle of words

8 Information overload

9 Lack of good information



The last rays of light



NAVIGATING COMPLEXITY

The climate and biodiversity crises are part of an overlapping series of interconnected crises which we need to see through a single lens. They pose a national security risk, threaten our food systems, exacerbate inequality and are a systemic risk to the financial system. Greater attention is urgently needed on the real fundamental constraints we operate under; the hydrosphere, lithosphere, biosphere and atmosphere. The complexity of the challenges we face mean that collaboration with others is vital but multiple actors each seeing a different part of the picture make clarity and consensus difficult. However, lack of perfect information cannot be an excuse for inaction.

"We face a series of overlapping crises that can only be understood through a single lens [climate change]. During my seven years as Chair of the Net Zero APPG, I saw that policymakers can break these challenges down sector by sector, even if progress is often frustratingly slow. But for individuals, it is far harder. No one can hold the full picture in their mind or fully understand how every aspect of their daily lives connects to the wider challenges we face."

Alex Sobel MP, Chair of Joint Committee on Human Rights, Chair APPG Fair Elections & Chair Global Deforestation APPG

1 – An overlapping series of crises

It is important to see all crises through one lens and not play one crisis off against another.

Climate Change is a wicked problem, a hyper object, so enormous that you "can't get your arms around it" and the picture is changing all the time. It is not a steady state picture. Multiple actors are all seeing part of the picture which makes it challenging to work in consensus because everyone is seeing something different. Even if there is high level consensus on anthropogenic climate change that's only part of the picture. Part of my picture may be that I'm facing a cost-of-living crisis or that I am being drawn into other narratives. My whole picture different to yours.

How do we manage the climate and nature crises and balance the tensions between them? Greater Manchester looks at the climate challenge as part of the wider environment. ***We have an Environment Plan and within that carbon plays a very significant part. A lot of these issues are inter-related.***

Our climate and nature crises pose a national security risk, threaten our food systems, exacerbate inequality and are a systemic risk to the financial system of a different order of magnitude to anything seen before. We must not to play one crisis off against another. AI is going to change the world whether we like it or not. Age-UK is thinking through the massive implications of demographic change.

Politics stops us seeing the whole picture. Politicians necessarily come from different parties and bring different perspectives. There is strong pressure on politicians to simplify problems into binary choices. Mostly we use heuristics, short cuts, redlines that help us filter what best meets our particular requirements. However, this is a faulty way of decision making in terms of climate crisis as we need to take a genuinely holistic approach. ***We could all learn from planning which is an unusual discipline in that it looks at weighing incommensurable factors in a planning balance – ecological impacts, social impacts, transport impacts, housing impacts etc. – and weighing up whether there are more benefits or not from proceeding with a development.***

Climate crisis has its tentacles across so many areas. Whilst we must be cognisant of the big picture we need to work in silos, or it would be impossible to get anything done.

You can't think about the whole system all the time, or you would be paralysed. You have to focus on one part at a time whilst understanding where what you do fits into the whole system. We are focused on reducing territorial emissions – an important part of the picture. It's not the whole picture but at least we can make progress there.

2 – Lack of perfect information

It is impossible to see the whole picture. We may always have to operate with a level of ambiguity, but lack of perfect information cannot be an excuse for inaction.

There may be undesirable consequences of a policy, such as the rare earth implications for electric vehicles or bike lanes reducing road space for other road users, but on balance that doesn't mean the policy shouldn't go ahead. ***As a civil servant I have made decisions based on not enough information and I am okay with that because decisions have to be made.***

From an audit perspective there is a gap between the picture that's being painted and the day-to-day drudgery of putting this together into a spending review, statement of funds available, dry risk assessments. The ribbon cutting stuff gets the focus, not the less sexy fixing of existing infrastructure! Are we putting our money where our mouth is? ***Transport policy makers seek to articulate the whole picture, but something gets lost in translation. Adaptation is not coming through as strongly as I would expect***

From an industry perspective, where massive investment is required, there needs to be a clear path from government on how to get "from one side of forest to the other". Parliamentary cycles and short termism are not conducive to providing the policy certainty and consistency needed by industry and this can hinder progress. ***This is a watershed moment for the industry. We are trying to do in 120 months what we did in 120 years and to achieve that we've got to have clear direction and we are not getting that.***

It is important to ask probing questions and to think through unintended consequences and competing objectives. ***Is supporting hydrogen in coach decarbonisation the right thing? It may be clean at the tailpipe but in the manufacturing process for certain types of hydrogen it can create more emissions than Euro VI. We need to improve accessibility and decarbonisation but do wheelchairs on coaches leave enough space for batteries? We need a plan for both.***

Climate pressures, shifting demographics and evolving ways of living and working are forcing a radical rethink for transport organisations in ways of operating. As these changes accelerate it is not possible to wait for full perfect knowledge to act. FirstGroup made a commitment in 2020 to be zero emission at the tailpipe by 2035. Their report **Driving Change** reflects on how the places we live, work and travel are changing and how this means we need to think differently about how we design and deliver the systems that support them. ***The inevitable is out there and we need to act.***

Without perfect knowledge we can still know we are on the wrong trajectory. ***There is nothing we know 100%, but we know we must reduce emissions. You can have people with very different belief systems and ideologies still agreeing on that basic point***

3 – The fundamental constraints

What is it we are trying to achieve? What are the constraints that we imagine we may be operating under and what are the real constraints that we are not focusing on?

We need to ask the "Five Whys" of standard management theory to get to the root cause, to truly understand and not be satisfied with means but to think about ends. Greater focus is needed on the fundamental constraints. We do not understand our dependency on the natural world. People think they have a right to tap water to water their gardens in a drought, are outraged when grass verges are allowed to grow wild and think of nature as something to look at or be ignored.

There is lack of focus on the real constraints: the hydrosphere, lithosphere, biosphere and atmosphere. We perceive money and economics as constraints, but these are manmade things that we can change.

I feel we will be at a crunch point in nature in five- or ten-years' time. Progress is being made in certain circles on systems thinking, but the tendency is to talk about systems thinking around manmade infrastructure. We are still not grasping the fundamental constraints.

We need to appeal to people's selfishness. We have been talking about climate change in the wrong way and researching it in the wrong way. Climate pathways are based on things we can measure, and huge assumptions that we don't acknowledge are giving us the wrong result. Even when our timelines prove wrong, we don't necessarily change our models.

We need to focus on what is happening now. Discourses into the future cause delay and can lead to kicking the can down the road. The focus has to be on how we can live through this. Whilst is it fine to start talking about co-benefits etc we need to ensure we don't lose focus on the things we need to do. ***We've got to stop trying to imagine that climate change is something we can find a solution for. We must recognise that we are living with a condition. Whatever actions we take we are still facing quite radical levels of climate change.***

We have got to a crisis point. The big system change is now about resilience and adaptation which can be used to turbo-charge mitigation. There are inspiring stories about communities who have come back from flooding and built greater resilience. ***Rupert Read is spot on! To adapt you have to mitigate as well.***



WILFUL BLINDNESS

We wilfully ignore the big picture because it is scary, but the science has been there for decades. Confirmation bias and a tendency to look for evidence to support existing assumptions drive decision-making. There are political constraints around establishing the facts e.g. we can't have a free and open debate on road pricing. Policies have been pursued with serious consequences that were known about in advance. Dieselgate and the promotion of biofuels can be tracked to vested interests. There is a problem with the "net" in net zero. An increase of millions of tonnes of carbon from a new road permitted because savings will be made from an unspecified "elsewhere" in the UK economy.

"What immediately comes to mind is that there is a tendency to look for the evidence you want to support your own assumptions or a case you want to make. As a politician you do not have a disinterested position, it goes deep…

"We rich societies are responsible for the lion share of the current climate crisis, and we have a responsibility towards poorer countries who weren't responsible for it. From a human rights perspective we must encourage mutual respect and dignity."

The Baroness Lister of Burtersett CBE

4 – Avoiding the big picture

We may shy away from realities of what a 3°C-4°C hotter world would look like, but we need to try to face it. We don't want to see the big picture because it's scary, but we are not going into any of this unknown.

I'm sitting here on a very hot day! Sometimes if you knew everything you'd worry too much. The science has been there for decades. The film *Don't look up* powerfully illustrates our tendency to avoid inconvenient truths and wilfully ignore the big picture. Inertia plays a huge part, and our own day-to-day aspirations as well as the power of vested interests who don't want us to see the big picture. But we cannot act as if it is business as usual. We face an existential crisis, and if we don't act now the costs will escalate. On a personal level it can feel overwhelming. ***Even for me, having spent a career working in this space, I am still ignoring things I should not do. On a professional level it can feel like an impossibility. Firstly, I am aware of needing to keep the team motivated and in a positive mindset with enough hope and optimism to do their bit. Secondly, working with Ministers and gauging their appetite to be honest with the public about what needs to be done.***

If anything, the human system and response to climate change is slowing down because of deliberate obfuscation of vested interests, and the frailties of human beings and the fact that most people are worrying about paying their rent rather than something that they might feel is very remote and not directly affecting them. ***There is a catastrophic gap – psychological, emotional, action gap – between what those of us who know that climate change is already underway and what we think we should be doing in response to it. And that gap is what will do for the human race.*** That gap has multiple constituent parts – a mixture of evolutionary psychological, political, significant vested interests in status quo and slowing down, institutional, ideological, populist leaders.

If you haven't got the luxury to care about the environment it then it makes you susceptible to fictional messages that make it easier to ignore the whole picture. Where things are scary and where people don't feel they have much agency, it is easier psychologically to pretend it is not real and to be seduced by arguments that it is not happening. ***Trump saying it's not real is reassuring.***

How do people feel about losing their coastlines? People don't want to talk about the difficult stuff partly because it seems so hopeless and overwhelming and partly because politicians work on short term cycles and don't want to depress everybody!

It's going to take such a massive effort, we are all probably doomed, then why should I bother why not just enjoy the ride [fly wherever I want, consume whatever I want]. That sounds dreadful, doesn't it?!

5 – Confirmation bias

The net zero transition is being weakened by a lack of honesty about the shortcomings and the inability to have a proper discussion. Confirmation bias is central to the problem.

Through our media we are not exposed to a balanced selection of evidence and views. ***People blame social media, but it is only where peoples already engrained behaviours are reinforced. People look for information to back up what they already think.***

We have developed our position on climate change through very divided perspectives. There is a parallel between the obfuscation and misinformation on the one side of the debate and an unwillingness to look at the difficulties on the other. The cost of electricity is too high, for example. Part of that is tax, and that is a policy choice. The transition must work for people, otherwise it won't succeed.

As a journalist the only way we can have credibility with and serve the audience is to be scrupulously impartial and call things out as we see them. Not go along with the influential NGO movement who are nice and kind to us. We need to honestly reflect wilful blindness all different ways.

We can't do this from "behind the windscreen of a car". Prof Ian Walker (Bath) talks about motonormativity or "car brain". There is no plan for traffic reduction and is little to no focus on demand changes in policy to decarbonise transport. This is institutional car brain. Everything flows from the assumption that people are just going to drive everywhere. We need to include modal shift targets into infrastructure planning; this would create business case for public transport investment. However, our entire lives are designed around the car especially outside of London. ***Supposedly people don't like sharing. Yes, that's true until they try it then it turns out that car sharing is cheaper and easier. The challenge is how to get them to give sharing a go!***

As legislators we can be wilfully blind and tunnel visioned. What technologies can people get grant funding for? We seem to have tunnel vision about heat pumps, need to be more technology neutral. We are over prescriptive. We should give more flexibility as new tech emerges; we need to be more outcome focused.

As a society we are facing growing inequality and lack of mobility. Technology could be used to improve participation and democratic decision making, but it isn't. ***That the professional and managerial class don't do that is very telling. They don't realise that they are a class, imagine they have the whole picture whilst not seeing how their own assumptions and judgement play into this.***

6 – Political constraints

There are political constraints around establishing the facts. We need greater honesty and more evidence-based policy if we avoid unintended consequences in the future.

For an analyst, seeing the whole picture is important. "All facts are friendly." However, politics is about winning and using power to achieve ends. We can't have a free and open debate on road pricing. ***Analytically we can examine this but politically it is suicide.*** This limits the debate we can have. Why do we have a system that differentiates between different modes and how we pay of them.

We have a National Highways building roads when that is clearly out of alignment with climate goals. EVs aren't anywhere near the answer. We are still building houses on floodplains. We are not looking at food shortages, heat impacts coming down the line. The knowledge is there but the will to even look at it and discuss it properly isn't there, sweep inconvenient truths under the carpet. Climate change is embedded in everything. ***As policy officers we can see the whole picture, and we know what we need to do but the political will isn't there.***

There is a problem with the "net" in net zero. An increase of millions of tonnes of carbon from a new road may be permitted because savings will be made from an unspecified "elsewhere" in the UK economy. Our focus on territorial emissions leads us to ignore our consumption emissions. ***We are exporting our carbon production and patting ourselves on the back. We end up with a low carbon emitting shrunken economy which does not have the desired effect globally.***

Moreover, actions have been taken with unintended consequences that were known about. Diesel-gate a decade ago, biofuels today can both be tracked to vested interests. ***Is building out windfarms more important or upgrading the grid? The latter is less eye-catching, and there are less vested interests pushing for it.***

How do we avoid ensure evidence-based policy rather than policy-based evidence? How do we avoid only looking for evidence to back up our assumptions? ***Case studies can be very powerful, but we need the discipline to reflect honestly and not just cherry pick the case studies we want.***

We need to stop approving new roads, airport expansion and car dependent housing. We need to stop uncosted tax relief such as fuel duty freezes and stop subsidising high carbon activities. Crucially, greater focus is needed on adaptation. ***I think as academics we do see the whole picture, the evidence is all there, but, in the reporting, politicians don't focus on what really needs to happen.***



INFORMATION DISORDER

We are at a hyperpolitical stage. Consensus on net zero has broken. We are losing the battle of words in the media. We need a clear narrative about how the transition will improve lives, but deliberate disinformation funded by vested interests is undermining public support for net zero. Constant bombardment of polarised views, culture wars, criticism of experts, calls to trust "gut instincts" and information overload make it impossible to see the whole picture. Online communication entrenches divides. Social media and digital algorithms push people deeper into echo chambers. There are fewer physical places where people of different views and backgrounds can congregate.

"I've felt a shift in public opinion of late around this agenda. As politicians we have been guilty of triangulating on this agenda and trying to find ways to make it palatable. Green energy is cheaper energy, and this is going to save you energy on your bills. We are making an economic argument but to some extent it becomes disingenuous because there will be costs too. Realpolitik is that there are tough decisions. But climate change is the Number One risk. How do we get that across properly? If we don't act everything could change irrevocably."

Cllr James Gibson, Executive Member for Environment, Leeds City Council

7 – Losing the battle of words

We are losing the battle of words in the media. We are at a hyperpolitical stage. Consensus has broken and public perception is going backwards. Feelings have overtaken evidence-based information.

The media environment is very different to 20 years ago. Climate change is now filtered through other issues such as security, cost of living issues, culture wars etc. ***The whole context has changed immeasurably and so has the information environment. Political consensus has broken down but we are also dealing with a totally different comms landscape and a different rule book.***

The framing has changed. It is less about climate denial, now more framed in terms of why should we bother we are only 1% what about US China India? Thoughts and feelings are so politicised. ***The recent weather is a perfect example. Excess deaths, underground shut, hospital struggling etc., but people's response depended on their view i.e. "just what scientists have been warning" or "isn't it nice to have warm weather!"***

We are very polarised as a society. I fear it is getting worse. Social media is a key player in the polarization. People isolate themselves in echo chambers. Wealthy actors are having an outsized influence. The information environment is corrupted and degraded and is becoming an emergency for democracy. ***Elon Musk using his X platform to foment white suprematist race riots. Government is using X as a share button – totally corrupted. Ministers still on X merrily tweeting away.***

We need to have an emergency response. The starting point has to be the fact that we are in real danger, but no-one wants to hear that message. ***The mainstream media – or rather "billionaire owned press – is not in favour of this message as their material interests could be harmed by the transition.*** The fossil fuel industry is following the same playbook as the tobacco industry and is setting the narrative – e.g. it's better that we extract fossil fuels from our own oil fields than import it from x, y, z. That 'sounds right' – we are going to consume it anyway so better that we do it closer to home.

We suffer from pluralistic ignorance. Most people support onshore wind, cycle lanes, LTNs but they assume they are the minority because of the polluted information environment. ***The screaming hysterical reaction to trying to reduce traffic – even though all the evidence is in favour of all the many co-benefits. All the evidence is on our side. However, BBC gives equal weighting to all opinions even when not based in proper evidence just anecdotal case studies which are more compelling than the evidence. Stories are much more effective!***

We need to counter polarisation with an empathetic attitude, which may be extremely challenging. Some may bring Christian or Buddhist mindset. ***We need to think outside the box. More LinkedIn posts won't do it – the arts can reach wider.***

8 – Information overload

Information overload is real, but we are not exposed to a balanced selection of evidence and views. Digital algorithms push people even deeper into echo chambers. Communication online entrenches divides.

In terms of how the brain processes information we cannot attend to everything at the same time. Multitasking is a myth. Attention theories go way back to William James, 100+ years ago, you can only spotlight your attention on one thing at a time. ***We are getting to the point with the bombardment of messages that people are almost checking out or sitting back and looking for what's the easy way to work out what is important. This is where AI comes in. Most people are feeling overwhelmed by the sheer volume of information they are being asked to make sense of.***

Not seeing the whole picture is compounded by the way we receive information, in bubbles on our phones, the algorithms that push us ever further into one extreme, and the political climate with populist narratives in our mainstream media compounded by the toxic environment online, polarisation, no nuance. We need group spaces where people can come together away from their phones, where there is a diversity of ages, genders, races, cultures, and see each other eye to eye.

There needs to be greater focus on the younger generation. The cell phone is the meeting point for a lot of people. The death of third spaces means that there is no place for young people to meet after schools. Everything costs money, so unsurprisingly everyone meets online. ***As a chronically online teenager, I've seen massive change from people engaging in climate change around 2020 to more far right extremists… Who owns the algorithms? We need to hold oligarchs who own problematic media to account, they are not Gods. There needs to be tougher regulation.***

We need to find some way of breaking down barriers. How can we allow people to come together in person in a way where they can talk about stuff in a non-confrontational way? This is becoming urgent because we are seeing real polarisation in our political sphere. ***The centre ground used to be where you would win elections. Not sure now.***

Where are we going to get with this knowledge world? The internet was huge in 1990s. Each is a step in human progress. Post truth, AI, early manifestations of new knowledge world. Right now, we are in the thick of the knowledge wars. Evidence based decision making? What does that mean? Whose evidence? Gathered by whom? The tribal positions that people are in today make the whole concept of evidence based decision making strange.

9 – Lack of good information

Misinformation and disinformation are extremely difficult to counter. In an age of information overload getting a message across is harder than ever.

Education and communication must be prioritised. The public need better access to information to make the right consumer choices. ***I would start in schools in opening children's minds to evidence and balanced arguments.***

Messages about the ways we need to change our behaviour in response to the climate and nature crises need to be communicated clearly so that they can be taken on board by public. ***I work with people on low-incomes and there is very low awareness. We need much better messaging.*** We need a large-scale behaviour change campaign. ***During Covid the majority did comply because everything was explained properly.***

If people could make more informed choices, they would make better choices. ***Traffic light systems on food everybody understands that. How do we move away from throw away fast fashion? We need to make it simple, clear and easy to do the right thing.***

Most people are unaware not because they are wilfully blind but because they don't have access to the information, they need to make informed choices and be part of the solution rather than a continuing part of the problem. We cannot make an ethical environmental choice about what we buy we can only make an economic choice. We need proper food labelling. ***Pictures of cheery farmers in fields with happy cows is rubbish. The scale of industrial farming, the impact it has on biodiversity and pollution and loss of habitat is not appreciable.***

There are many urban myths, misunderstandings about battery technologies. National Grid has a website to disabuse people of the idea that if everyone had an electric car it would fall over but that is still public perception. We need to need to educate the public and operators who need to make big decisions based on often inadequate information. Where do you get truthful information about a market at such an early stage? We need to engage with universities. ***We live in a fishbowl. We are talking to people already informed and preaching to the converted! We need to get outside those circles.***

It is a huge comms challenge. Political consensus has broken but we are also dealing with a totally different comms landscape. Brandolini's law, the "bullshit asymmetry principle", states that the amount of energy needed to refute nonsense is an order of magnitude larger than that needed to produce it. It is easy to put out some bullshit. So much harder to refute. Once you have to say "It's a bit more complex than that…" you've lost people! Even if people are looking for the facts, they may get five different views from experts, and it is really difficult to know which one to believe. War in Middle East and high energy prices does compute for people. But then people are being told high energy bills are because of net zero and the turbines.

II – Integrating heart and mind

HEALING THE SPLIT

10 Thoughts and feelings

11 Facts don’t change behaviour

12 Telling better stories

MAKING IT REAL

13 A preserve of the middle class

14 Buying permission from people

14 Buying permission from people

BALANCING HOPE AND FEAR

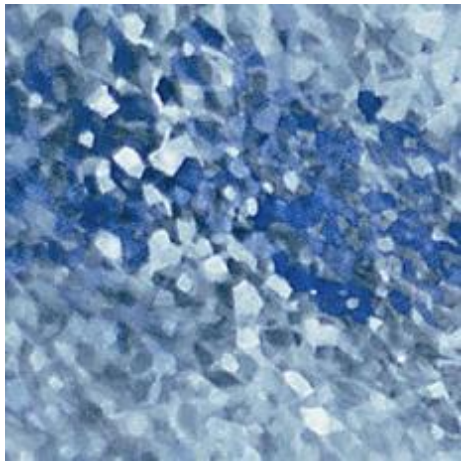
16 Telling the truth

17 Fostering active hope

18 Honouring feelings



Easing the burden of consciousness



HEALING THE SPLIT

The idea that emotion and rationality are opposites is a legacy of the Enlightenment, traced to Descartes' dualism. However, both thoughts and feelings are integral to decision-making. A rational evidence-based approach is useful in developing policy, but we need to engage emotion in how we talk about it. Successful campaigns around aids, seat belts, drink driving engaged people with compelling stories. The climate movement has focused on research and stats with insufficient attention to communication. Work is underway to address this. The INFUZE project in Leeds is developing a set of emotional design principles. GMCA integrates a "personas-based approach" in its messaging.

"I have revised my approach to public speaking. In the past I would have talked about the facts and then offered people the opportunity to play a practical role in making changes in their everyday lives. Now I open every address with "why are you here?" is it the stats or is it the way you feel? Until we connect with people on an emotional level we can't win. The backstop has to be the science, but we have to make the connection with our everyday lives."

Chris Packham CBE

10 – Thoughts and feelings

The opposition of emotion and rationality grew out of the Enlightenment. The separation of thoughts and feelings can be traced to Descartes, but we can undo that. Most decisions are made from how we feel.

Whilst we must acknowledge scientific progress, science itself is not sufficient. What is the unit of love, of joy? Feelings are critical, unhappy people don't recover as well as happy people. We have severed a natural connection but revaluing that and feelings and contentment will be critical to tackling the climate and nature crises. ***The only thing we measure consistently is money. This is what goes wrong in nature projects.***

We are living too much in the left brain (Ian McGhilchrist). The left brain is action orientated "going through your inbox and to do list", right brain sees the bigger picture. If you were a bird left brain picks grain out of pebbles, but right brain would also be seeing bigger picture e.g. better pile of grain or avoiding predator. Connecting with the arts can unlock the right brain.

In Copenhagen a sculptor built tall benches on the harbour front so tall to depict sea level rises caused by climate change in the future. The sculpture of the bench is very rational because it depicts sea level rise, but at the same time it totally responds to your emotion because you can climb up and sit there with your legs dangling. ***The more we can work with the connection and entanglement of thoughts and feelings the more powerful it will be.***

Engagement of feelings important but a balance is needed. What paralyses people is the overwhelming traumatic nature and a sense of powerlessness. A personal story hooks people in, then some key figures but then tying that with some key actions. ***The brain has two different types of memory: facts and figures connect to semantic memory; a personal story connects to emotional autobiographic episodic memory. If you can engage both systems and then engage the executive function, the frontal lobe, into a making sense understanding and then into an action. That becomes a whole brain activity that is what creative thought is based on. One in isolation is not sufficient.***

We are fooling ourselves if we don't think thoughts and feelings are deeply embedded. We don't realise we are making an emotional decision when often it is a rational one. It is not possible to make a technocratic decision about something that has such wide-ranging consequences as for example building a third runway at Heathrow. ***I don't just think it's practically impossible, I think it's theoretically impossible for us to ever understand the complexity of these decisions in enough detail to be able to have the technocratic answer.***

The idea that we should reduce things to a utilitarian level has no basis in observation so why do we do it? A lot of scientific practice actively seeks to dismiss the type of evidence that relies on emotion and the things that drive human behaviour.

Yin Yang – how do we get back feminine energy? A lot of the models we use were developed when women weren't really in the workplace. Putting more feminine energy into how we work would create a better balance of thoughts and feelings.

11 – Facts don't change behaviour

We need a rational approach to developing policy but to engage emotion in how we talk about it. We need to be integrating thoughts and feeling at policy level.

Scientific facts don't change people's behaviour. The language of figures loses most of the audience. The Brexit debate was dominated by emotive misinformation on one side and fear-based facts on the other. Remain was rational facts and figures, Leave was about taking back control all emotion ***No one read the House of Lords report, they just looked at big buses! We pitched facts and stats against cake! Of course we lost… We need to provide more cake!***

Civil servants present factual information, but Ministers may have an emotional response based on how their constituents may respond. If the message is fact based, the messenger appeals to our emotions. ***Chris Witty delivered weapons grade facts in a way that talks to our emotions… NB – We can't give up on the rational evidence now that it is being challenged by the far right!***

The framing is crucial. We tend to focus on the policy whereas what resonates with people is the purpose an intervention. The rise in fuel prices has driven far more people to look at future proofing their homes, batteries, heat pumps, how they can reduce their heat bills and exposure to fossil fuel prices. This summer heatwaves might get people to look more at passive cooling. ***On the climate we are still on the side of trying to sell facts and data to people who do not understand. It only takes one or two negative bits of media about e.g. EVs to take things backwards.***

We need a rational science-based approach to developing policy but there is a lot of nuance in terms of how people engage with the transition. The emotional side needs to come through in how we talk about it. ***On active travel we are very good at telling a positive story about how the government strategy will make people healthier, cleaner air. On EVs need a transition now from industry engagement, all about the regulations how to decarbonise road vehicles, to what this means for people's lives moving beyond the early adopters to all the benefits, cleaner air.***

We need to engage with people in a non-confrontational way. The way people form their identities is more individualised today, so challenging these can feel like a personal attack. Many people would rather live in a world where their emotions and values are supported rather than one that is true but challenging. Once the evidence starts to challenge the narrative frame where they feel comfortable, they retreat rather than engage. However, there must be a way to find common ground. To have integration of values and evidence, there needs to be some form of confronting. The arts can be a helpful vehicle.

We should employ communications specialists to think holistically about how to communicate these massive issues to people in ways that are tangible to them in their everyday lives. We need an integration of communication. It should be in sport – the World Cup should have been an opportunity to talk about the climate and nature crisis. ***The best job I could get on TV would be a climate protestor in Albert Square because nothing is discussed in wider media about these sorts of issues. Everything is siloed.***

12 – Telling better stories

The climate movement has invested heavily in research and policy but has not been good at engaging emotion and might be about the lose the democratic mandate.

Environmentalists tend to be scientifically based, from a narrow section of the community, and are not good at telling stories. They've looked at the data created a language that no-one else connects with and concepts which no-one else understands. Net zero is a perfect example of this. ***I've sat through so many environmental presentations with the graphs of doom. Everything points in a depressing direction, and you get immune to it. There is no point in leading with a gloom and doom message. The great speech didn't start with "I had a nightmare"! All the great orators have great stories and inspiration and have aspirational aspects.***

We need a good narrative and to engage on an emotional level. ***There is lots of good data but the missing piece is the story telling. For example, smart motorways are safer than dual carriageway with a hard shoulder but people don't feel that. We've not been getting the message across in a way that cuts through.***

National communications campaigns around aids, seat belts, drink driving are all examples of how to engage with people in compelling stories. People binge watch on television when they are emotionally engaged. Drink driving seeped into culture. Using soap operas, e.g. Coronation Street had a designated driver – effectively role modelling. We need this for the climate crisis. The film *Don't look up* powerfully gets across the climate message through an engaging and highly watchable story.

The Institute for Transport Studies at the University of Leeds are working with the Royal College of Art on the **INFUZE** project developing a set of emotional design principles – getting people to tell them how they want to feel when they use the transport system or how they want their neighbourhood to feel. They use values and principles as a mechanism for doing that and have also built a pack of emotion cards to start to engage with people on questions. ***It really made me think differently about how people would feel about 20% more cars in their city. A range of very negative emotions! That is not a discussion we normally have with people and is opening up new methods and tools for the profession***

GMCA has researched extensively how people with different personas and backgrounds deal with climate change and integrates a "personas-based approach" and audience segmentation into its strategic environmental plans. Most important is creating a place where people feel they will get a truthful message. ***If people don't know where to go for truth, they will a) be easily fooled and b) will eventually get to a point where "if I can't trust anyone, I won't listen to anyone"***

Things get built by engineers but need to be brought to life by telling a story. ADEPT has published a guide **Talking Climate** to help local authorities develop messaging that resonates with people's everyday lives. Engaging on an emotional level helps FirstGroup connect better with its staff and its customers. ***The EV transition has brought pride back in the bus for employees, for our bus drivers. "We want to be the company that helps the nation love and use the bus"***



MAKING IT REAL

Net zero is too often seen as the preserve of the middle-class. People will resist the climate message if they are struggling to pay the bills. We need to "buy permission" from people. The emphasis needs to be on issues that relate to people's lives, building climate resilience and how the transition can save them money and deliver tangible benefits. Local community and environmental issues resonate better than polar bears. Rise in the price of oil and gas has driven more people to look at future proofing their homes and how they can reduce their exposure to fossil fuel prices. Actions requiring heavy upfront costs are not seen as fair or feasible for low income households.

"We are at an inflection point. I don't talk about the net zero transition, I talk about "this really exciting thing". Hope sells better than anything else. Life is getting better. Your electric car is already cheaper than an ICE alternative, we are at the beginning of the exponential S curve on electric vehicles and heat pumps. You want to leave people feeling better about themselves and the world.

"Sales 101 – you have to buy permission from people. If you don't say it's going to save you money, the working assumption is that it will cost you money. We are going to save the world as a by-product of saving people money".

Edward Morello MP, Co-Chair of the Net Zero APPG & Chair of ClimateTech APPG

13 – A preserve of the middle class

People will resist the climate message if they are struggling to pay the bills. Net zero is too often seen as the preserve of the middle-class.

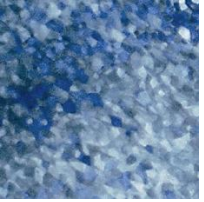
Environmentally friendly products tend to be more expensive. If people haven't got the luxury to care about the environment, it makes them more vulnerable to the fictional anti net zero messages that give them permission to ignore the issue. Tech language has been weaponised. ***We talk in an echo chamber. We aren't communicating properly to the public. We need to talk in terms that people can understand about what matters to them.***

There may be a large group of people for whom sustainability and green spaces make sense and are desirable but for many it doesn't make any sense. There is an increasing divide between those who get it and those who don't. Unless we start working to getting people who don't understand to get it, we are just preaching to the already converted. ***It is important to tailor messaging carefully to different audiences and avoid a jarring mismatch. The economic GVA argument works well with Westminster elite audiences, but less so if you've just been laid off because of the net zero transition.***

We need to show how life can be better. This is being played out in Aberdeen with jobs in oil and gas sector. There is a huge piece of work to show for example an oilrig welder in the North Sea will be compensated. A clear message that came from **Citizens Panels** for the Climate Change Committee was that actions that required heavy upfront costs not feasible or fair to those on low incomes. There is a clear sense of social justice that these groups must be supported through upfront grants or interest free loans. That is not to say that everything has to be equal. ***There is real value in the way markets pull though investment from those who have more means at an early stage which helps scale them up and drive prices down to help others benefit later in the transition.***

Electrification is the name of the game so public buy in for the systemic changes needed is fundamental. We must frame this in a way that the public finds compelling. We've been part of the problem. Just stop oil has really annoyed people. Feels elitist and well-meaning but out of touch not well represented by all demographics. How do we bring all groups together? We need to harvest more incentives – not just financial also social – to get people to change.

I'm not sure that consumers get the bigger picture. What we find at the AA is that the most effective way to engage with our members is not saving the planet but saving them money. There has been a direct correlation with war in Iran and searches for used EVs which have gone up 78% last three month compared with previous three months.



14 – Buying permission from people

It is vital that people are brought along the net zero journey with tangible benefits. The best thing government can do to counter misinformation is ensure that people feel benefits.

Renewable energy is a huge success story. The price of solar panels is 90% down and gives people real hope. An electric car is generally cheaper to run and has a lower overall cost of ownership than a petrol car over time (NB upfront purchase costs can be higher). We should say for half the price of drilling for oil and gas in the North Sea we can build all the renewable energy we need. ***We need to get away from narrative of saving the planet. We are going to save the world as a by-product of saving people money.***

We have to make the transition 'nice' not just 'better'. Better is top-down language. We have to show how it will be nice with good case studies etc. Climate change action around some greater good, quasi-religious, simply won't persuade enough people to change their behaviour. Need to talk in concrete terms not 'net zero'. Everyone cares about potholes, but people don't make the connection between potholes and climate change. ***Perhaps this is an interesting opportunity!***

We should be much clearer with people that we have to upgrade the grid anyway because we are using more energy. 25 years ago, the average household had barely 5 connected devices. Today most people have 20/30 or 50 connected devices. ***Those who want to undermine the transition would link it purely to costly transition, but the reality is that we are using way more electricity.*** Councillors get push back because the need for grid build out it hasn't been articulated. ***We need to say this is the truth. If we don't, we won't have enough electricity. We will have power outages. This doesn't have to be about saving the planet.***

Local community and environmental issues resonate better than an interconnected world and polar bears. Need to root this debate in issues that relate to people's lives. We need to appeal to people's selfishness. Foregrounding climate change and not explaining that this is about nature and people local environment has been a mistake. In research terms as well, climate research has been at the expense of wider environmental issues. ***We know that people get much more engaged on issues around local air quality and environmental conditions than climate change.***

We are also not necessarily ambitious enough in putting forward sustainable solutions. When given a real choice people can be prepared to spend more. ***The Food Programme Radio 4, looked at motorway service stations and their food. More expensive, healthier and more sustainable options are surprisingly popular. We aren't giving people that real choice.***

15 – Bringing the message home

Rising energy security concerns have supercharged the economic case for net zero. People understand the need for energy independence.

Paradoxically Trump's war in Iran might help. It's a different conversation now that energy security has risen up the agenda and cost of renewables has plummeted. The Iran War exposes dangers of fossil fuel economy, exposing stark levels of corruption – this demonstrates that it is a system which is unhealthy and if we took out fossil fuels, we would be safer and more secure and prosperous. ***We've started talking about the de-fossilization of transport as opposed to decarbonisation.***

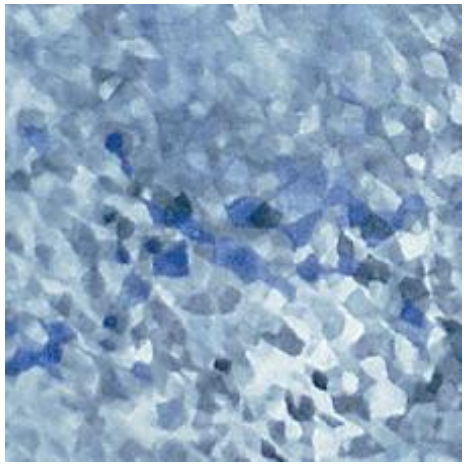
The rise in fuel prices has driven far more people to look at future proofing their homes, batteries, heat pumps etc. ***The heatwaves might get people to look more at passive cooling. We need to provide incentives with free accountable technical advice.***

Focusing on energy security following Iran War and Strait of Hormuz closure is a good example of engaging emotions. If you get people to be honest – comes down to national security and money. Vegetarianism is one of the most impactful things individuals could do for the climate. ***But no one wants to be bashed around about begin vegetarian!*** Unless can say things like, it is cheaper, we import so much of what we eat when it's meat, it is easier to buy local, better for the UK economy etc. ***But generally, I would caution against make these points to public unless with as few steps as possible can bring back to security and economy***

What works? Talking about tangible benefits to people, from a person led perspective. The argument to come off fossil fuels is not just about climate, it is about the economy, national security, global competitiveness, patriotism and not being left behind. ***There are so many levers to pull. Energy affects everything – energy security works across all voting intentions and is biggest one to lead with.*** Ideally, we would hear from adopters of green technologies, or "my company does x, y z". A place-based perspective works best. The economic growth angle is fine but how do you tell those stories? How do you bring those numbers to life for people? Jobs in my area etc. ***People don't care whether they've got a green job, they care that they've got a job in their local area.***

TikTok: we have to grab people's attention in the first few seconds. We are beyond explaining in long form what it's all about. It has to be quick form because people are changing the way that they get their news. ***This is a huge step change from what professional sectors have done before. They have tended to staid and academic. But controversy gets the clicks!***

With information overload getting your message across is harder than ever. To implement change, you have to be incredibly targeted and personalised to cut through all the noise. ***People say this stuff is expensive to do, but it's really expensive not to do it!***



BALANCING HOPE AND FEAR

Hope is more motivating than fear. It is vital to tell the truth and get across the urgency whilst ensuring that people feel they have agency and avoiding creating the impression that it's too late. The People's Emergency Briefing articulated the risks then moving on to more positive empowering messages. Local neighbourhood plans can be an effective tool for engaging the community in vision led planning, giving residents the opportunity to envision what their future could be based on decisions now. Alternative futures are possible. We need to foster active hope – hopeful for the future whilst being mindful of the climate emergency and avoiding complacency.

"Hope and fear go directly to the struggle we have as journalists. How do we balance the terrible risks and say all is not lost. I do believe that we are turning this around. Huge damage is done, but we are remaking the world in a better way. We cannot just dwell on the damage without an element of hope because it becomes emotionally overwhelming, impossible to take on board and disempowering.

There has to be a dose of realism but we must find an element of hope so people can engage with the story in a balanced way. We've stopped writing doom laden stories because people have stopped reading them."

Matt MacGrath, BBC Environment Correspondent

16 – Telling the truth

Climate change is the Number One risk; it is important to keep climate in the discussion. People still care about climate change and that is born out in different polls across different voters.

We shouldn't shy away from talking about the risks of climate change but equally we need to demonstrate the difference climate investment will make. ***Our conversation on the ground is nowhere near as bad as the media will have you believe. They over platform sceptics far more than really exists. A balance would be 20% denial because everything we see is that people want to see climate action, and young people even more so.***

Post war social contract has broken down. It is hard for people to get their minds around – therefore striking the balance between terrifying people and giving them hope. Hope for a better future, less pressure on NHS, healthier lives, enjoy our green environment, better biodiversity. If we don't act the future is bleak, but if we do the future is bright. ***Too often people bring up immigration when I'm on the doorstep. But if you're anti-immigration, you won't want more places to become uninhabitable! There is scope here if you focus on how climate change will affect all of us.***

Trust in the information that is being provided is foundational. The trust needed across all areas is very low. ***Climate emergency? People look out of the window and don't see much evidence. Local authorities have declared climate emergencies and then done nothing.*** Who is the messenger? How much do you trust the person? We need a broader range of messengers. Local grassroots organisations play an important role and can be empowered, and through families and communities build trust.

Net zero is not well understood and has been politicised. There is a question about whether we should drop it. The debate is split. Should we "tell it like it is" or focus more on the co-benefits? There is validity in both sides of the argument.

However, net zero is a scientific term. The solution is to link more strongly the language around net zero to climate change and make it more tangible in terms of benefits, such reducing air pollution. ***We need to hold the ground. If there was (Heaven forbid!) a referendum it is vital that the arguments are all there. Don't outlaw net zero but always say what's for! If the why is "so we can get to net zero" your comms are wrong.***

How can we equip people with the right nuggets? There are basic questions that the sector needs to be fluent on. MPs need educating too. Anyone working in energy should have a fluent answer on why energy bills are so high. But we don't, we stumble.

17 – Fostering active hope

Hope is more motivating than fear. We need to tell the truth and get across the urgency whilst ensuring that people feel they have agency. We must avoid creating the impression that it's too late.

We need a vision of how we can be living in a better world. We need to tap in on positive emotions. Alternative futures are possible. We need to foster active hope – hopeful for the future whilst being mindful of the climate emergency and avoiding complacency. Action is the antidote to fear. We create hope. The question of agency is very important. People can feel overwhelmed so if there is something they can do even if just in their own lives, they feel better, grass roots work is incredibly important.

People are still overwhelmed by the scale of the challenge and don't believe anything they do will make a difference. ***Humans don't do well when they panic. We need to bring all sides together.***

Local neighbourhood plans can be an effective tool for giving the community the opportunity to envision what their future could be based on decisions now. **Bridging the Gap** was an extensive research project that sought to better understand how to deliver 'car light' development through a vision-led planning approach. ***If we can find a way to align a vision of the future world as both meeting the needs of communities and working towards a low/ zero carbon future, then perhaps we can persuade politicians to make the right policy, regulation, and investment choices.***

Adoption of roof top solar all over the world is self empowering and giving a sense of agency. Even in places like Aberdeen and Wales where you don't have much sun you've got 6-8% houses doing this. People are doing it for economic reasons, but it's giving them hope and power and agency. ***And that sense of agency is what we all need. People make these decisions in their thoughts based primarily on economic reasons but putting those solar panels on will change their hearts.***

Motivating feelings include can fear – people are scared. The People's Emergency Briefing articulates the risks then moves on to more empowering messages. In France a short booklet recommending that people should be prepared to address all kinds of crises (including climate impacts, also war). They are being the "protective state", they are trying to galvanise trust by being honest and instilling some kind of fear in people, so they get prepared.

We need a balanced scorecard of thriving nature and happy people, and these units count just as much as money. So many of our fears come from money and loss of status and security. Fear stems from fear of not having enough, being cast out. There is more than enough if we can look beyond money.

18 – Honouring feelings

We need to find a way to manage our feelings so that we don't become overwhelmed by them. Climate change can't just be another thing to worry about.

Public concern about climate change is high (c. 80%). They understand that this is serious, and it's likely to get worse before it gets better but if we leave people with that, they just feel hopeless and that there is nothing they can do. ***In every conversation about fear, you need to give people a bit of hope and vice versa. If you just do hope people will think not living in the real world.***

Fearmongering and too much doom and gloom turn people off. There is an overload of fear, including wars and other risks which feel like a more immediate threat to our safety and wellbeing. There is a proven and clear link between hope and the will to survive and life improvement. Life expectancy increases with hope.

I've got an EV and solar panels, and I try to be as responsible as I can, but this sense of crisis permeates everything, and I don't find it helpful.

I am heartbroken about the way nature has deteriorated and the way the world is compared to when I was a child. We are screwed; I have no hope.

We have to find a way to manage our feelings, so we don't become overwhelmed by them and just end up crying in a corner, and worrying about our children and weeping over them, because I don't think that is helpful either.

People who have made it their life's work feel motivated, but many people feel overwhelmed and don't want to think about it. It is hard to get interest and focus – but there were noted spikes during the heatwave with phone ins on LBC, BBC. There will be many more opportunities when climate impacts are hitting when it will be a good time to talk about climate change. This is a crisis, but many people feel powerless and don't understand the positive difference they can make. We need to think about moments when we can move the dial.

There is a huge piece around reassurance, thanking people for the progress that has been made but now they need to tell their neighbours and wider family and friends and become ambassadors themselves so it's not just politicians elected officials and pressure groups.

As a transport organisation we want to people to travel by sustainable modes, but when we are messaging things out, we are very conscious we can't bash them over the head with messages that might just paralyse them and have a negative mental health impact in terms of the choices that they are making because some people are just surviving not necessarily thriving and the cost-of-living crisis is extremely real.

III – Being at one with nature

FROM EXTRACTION TO REGENERATION

19 Climate change is the symptom

20 The systems that support life

21 Moving to a regenerative economy

RESETTING VALUES AND PRIORITIES

22 Fostering good growth

23 Being kind to people and planet

24 Measuring what matters

RECONNECTING WITH THE NATURAL WORLD

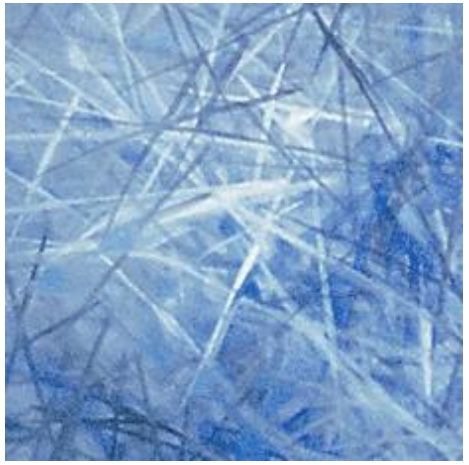
25 Access to nature

26 The emotional connector

27 Re-establishing the connection



A fierce and slicing pain



MOVING FROM EXTRACTION TO REGENERATION

Climate change is not the problem it is the symptom. If we ravage the earth for critical minerals to decarbonise the economy there will be serious unintended social and environmental consequences. The fundamental challenge is to move from an extractive to a regenerative mindset. We must not prolong an exploitative imperialist way of operating. We need to move to a circular economy and incentivise more regenerative processes on the part of manufacturers and agricultural producers. How can we value and protect nature? How can we become proper custodians of the fundamental systems that sustain life? We cannot have perpetual growth. Nature must be our inspiration.

"We cannot keep pushing our problems elsewhere, our waste problems, our problems stemming from ultra consumerism. We need to keep an idea in our mind of the whole life of things and of where things come from and to look at our economy as a whole. It is vital that we treat this as a system.

"Our food strategy looks at where does our food come from, how we as a Council can have a strategy to buy local produce, to look at the whole thing as a circular entity. In terms of the big construction that's going on in the city, we are asking developers to think in a more circular manner about their own consumption and their own waste. This is not hugely controversial – people can get behind common sense stuff."

Cllr Katie Dye, Chair of the Climate Emergency Advisory Committee, Leeds City Council

19 – Climate change is the symptom

Climate change is not the problem it is the symptom. The fundamental challenge is to move from an extractive to a regenerative mindset.

If we ravage the earth for critical rare earth minerals to achieve net zero, there will be serious social and environmental consequences. How will that impact on the Global South? We must not prolong an exploitative imperialist way of operating. The more you optimise for one thing the more likely you are to get unintended consequences.

We need to explain to people what it means to have very nutrient rich soil because it is fertilised all the time and what that means when we have more flooding and a lot of that is washed into the rivers which changes the species in the river, because if it is too nutrient rich some species won't survive. All these things are interconnected changing ecosystems, affecting biodiversity and that has impacts for fishing food production etc. This needs to be set out explained much better to people.

We need to do more to support agriculture and farmers to make positive decisions. ***If you give farmers options to farm more sustainably and save money they will grab it with both hands. I grew up on a farm, and my family are still famers, and they practice an extremely extractive model of farming, but they would also see themselves as guardians of a tradition and the land. They have to balance making a living with protecting the resource they have. I do have huge sympathy.***

Our capitalist economic system doesn't recognise the finiteness of the natural capital of the world. Education needs to play a massive part ensuring the workforce is joined by advocates of more holistic approach who understand regenerative practices and the importance of working to restore soil health, biodiversity, and ecosystem balance.

In balancing the tensions between climate and nature demands, nature-based solutions should be higher up the list. However, we must not push the ecosystem out of balance. ***I'm wary of making assumptions that what is natural is good because we so far removed from the wider ecosystem.*** Everything is finely balanced, and everything has its place. ***Cows were introduced into Australia with disastrous consequence. Grey squirrels wiped out red squirrels.***

Nature needs to be our inspiration. The economy can't grow forever. ***We fool ourselves that we can have perpetual growth, but we can't. How do you posit a non-extractive non perpetual growth model which will be more cyclical like nature. How do you turn that into something that isn't just a hippy sandal wearing view of the world?***

20 – The systems that support life

We see nature for exploitation rather than a fundamental system that supports life. How can we develop models that leave nature intact and provide economic benefits to people?

How can we husband nature and become proper custodians of the fundamental systems that sustain life? How can the 'Natural Capital Accounting' framework be applied more consistently to optimise for natural capital gain and health gain? We need to value the things that nature gives us, and we need to do it in a more serious way. 'Ecosystem services' describe the essential, direct and indirect benefits that humans freely receive from healthy natural environments. ***Putting a monetary value on nature is a contested area but until we've got an alternative world view, seeing nature as infrastructure, as an essential finite asset is a good start.***

We need to see nature as essential infrastructure. Infrastructure is a collection of assets. There is a huge amount of capital waiting to invest but nature tends not to be at sufficient scale **Rebuilding Nature** seeks to address this challenge by developing a nature network recognised as critical national infrastructure. Fundamentally nature is movement and life. Nutrients and species all need to flow but can't because they are being randomly cut up.

We need complex models to put proper value on not cutting down rain forest and provide return for that. Innovative work is underway, but the whole area has been rife with scams. In Malawi you see children on the side of the road selling charcoal which they have made by cutting down trees. How do you smooth things out? What do you do to give these people the opportunities that they see others have? How do you protect nature in all this? ***This is one of those cases where I turn my head away. I know it is happening and I don't know what to do.***

Every engagement we have with nature needs to be positive, life affirming and regenerative as opposed to extractive. We need nature to flourish wherever we live and work. Hospitals surrounded by wild nature so that people can go out and be in nature. And we need to think about demand management. Demand must be tempered by the envelop in which we are living.

The idea that we all have enough water to water our gardens, for baths and long showers, for endless datacentres, for endless goods that you can just click on Amazon and non-biodegradable stuff from Temu and Shein, is for the birds. We are too limited in our thinking currently. I don't know how change will happen, but all the key indicators are going the wrong way. We literally cannot continue as we are.

21 – Moving to a regenerative economy

We need to move to a circular economy with onus on more regenerative processes on the part of manufacturers and agricultural producers. The incentives need to be right.

Climate and nature have been kept separate from each other even though they are the same. Climate is the weather nature is the environment and they require integrated solutions. If you restore a wetland, not only are you preventing floods from happening but you are also improving your carbon stores. ***We see nature as a part of the economy, but in reality, the economy is part of nature because it exists in the natural world. The economy is not the world; nature is the world. We should embrace more of a circular economy, allow nature to restore itself, we need regenerative agriculture.***

A circular design supports nature and a fair and just transition to net zero. We can build out obsolescence rather than build it in, make products that will last. We can't deliver this purely on pricing. If we say we need only to price in externalities, we have failed. We need to design in a product that can be re-used, thereby creating 'loops of value'. Products that are designed intelligently for circular re-use and that are designed to hold value. ***I am obsessed with the circular economy because this provides some of the answers. How do we design into products and services our economic model something that is done in a circular rather than a linear way. We are still trying to retrieve an economy after it has gone wrong. We need to get it right at the outset.***

For large companies that sustainable outlook "we are doing the right thing for the planet" is a selling point. Consumer pressure has been really helpful in getting businesses to be green but lately this has been falling off a bit. Because of cost of living, consumers are less likely to spend more on a chocolate bar that has been regeneratively sourced. ***We haven't seen companies stepping away from those commitments yet, but if you extrapolate that trend out there will be a point where companies may start thinking we've tied our hands together for no reason. If that competition to be green falls away, and you don't get the drive from the consumer, and you have a government antithetical to the agenda, capitalism will kick off again and you will just see massive extraction of resources and going backwards.*** As the industry stands it is very siloed. However, progress can be made within the current system. Regenerative practices make business sense as well, they are both profitable and sustainable. ***Tony Chocoloni is a market leader. Market leading characteristics should be normalised.***

We are too limited in our thinking currently. We need to be regenerative and grow the potential of the system. The true solution would be to get back to a more indigenous respectful relationship with nature but also creating a new synthesis – bringing the best of what we have learnt albeit through destructive processes. If we husband nature properly, we can create interventions that will allow nature to flourish so that people would say, ***"Hooray the engineers are here, we are going to get even better nature and quality of life."***



RESETTING VALUES AND PRIORITIES

Economic activity will be generated by the net zero transition. Many people currently see 'green' and 'growth' in opposition, but we can't grow the economy sustainably unless we protect the environment. Too much focus on GDP neglects social and environmental priorities, including climate change mitigation and adaptation. Wales and Scotland have broader national strategies than England, focusing on long-term systemic wellbeing, inclusion, and the safeguarding of future generations. Developments must ensure Biodiversity Net Gain. Nature is not a blocker to housing development but a necessity for resilient towns and neighbourhoods.

"I think the good growth message is sinking in, good sustainable green growth in the widest sense of the word. It's about building houses which are energy efficient and don't overheat, and we are way behind the curve on that. We should be building houses with overhanging eaves and with external shutters, the same as they do in hot countries. We shouldn't be building any roof without photovoltaics and solar thermal on the roof. Again, that should be mandated for.

"Building good stuff is easy as long as we force the hands of the developers. I think the message about the value of nature and access to blue and green spaces is becoming a far more universal message within our country. But until we have a government that has the courage to legislate to stop houses being built that don't meet the standards needed, we won't make progress."

Cllr Bridget Smith, Leader South Cambridgeshire District Council

22 – Fostering good growth

We can't grow the economy sustainably unless we protect the environment. Protecting the environment is not a nice-to-have. It is mandatory.

Nature is not a "blocker to housing development" but rather a necessity for building resilient towns and neighbourhoods. ***The "war on bats and newts" was completely missing the point. We are poorer if nature is destroyed!***

Developments must ensure Biodiversity Net Gain. Nature based solutions create a virtuous circle: improve the environment, attract businesses and grow the economy without the detrimental economic impacts that were once thought inevitable. Important key principles and pathways for net zero carbon, nature and land, water, circular economy and climate change adaptation are set out in the **Oxford to Cambridge Region Environmental Principles**. ***"A healthy environment and a strong sense of place are the cornerstones of a thriving regional economy."***

How can private sector incentives be better aligned with social and environmental objectives? Developers may want to develop on cheap green sites, but this causes car dependent developments out of town. High-density and transit-oriented developments around London public transport hubs generally yield stronger financial returns and planning support for developers. The Government wants to fast-track more homes near stations. The new **National Planning Policy Framework** published in August 2026 gives a default 'yes' for homes within reasonable walking distance of well-connected stations.

Our whole growth model is based on population growth, but population is not growing. In Italy, Germany, UK the population pyramid is going the wrong way. ***We in the UK and developed economies of the world have been living through a 250-year Ponzi scheme. We assume constant growth. We have a presumption of more people doing economically productive activity. But we have ageing populations and have been living beyond our means for decades with diminishing returns.***

We need to be more questioning of the predominant economic model and political culture. ***Our political culture of growthism says that as long as headline GDP is moving up you can get away with anything.***

We need to foster growth that is fair, inclusive and environmentally sustainable. ***We spend £98 billion on owning and insuring cars and they sit there and depreciate. It is a massive misallocation of capital. We could do so much more investing that money in mobility, public, shared and active travel and increasing productivity without compromising on people's ability to get around.***

23 – Being kind to people and planet

Looking after nature needs to be put in a context that economists can understand. The question is how to convert the intangible benefit we all get from nature into something that is tangible to the market.

We must as a priority address the inequity already in the system ***It is a bit tricky when people at the leading edge of the transition are people who are already well off now getting a slightly better deal!***

South Gloucestershire County Council translated social value into commercial value. They have worked to convert the social value coming from natural capital into a financial value and so they can present that as a financial benefit figure and seek investment based on that financial figure. Their scheme **Investing in Communities, Climate and Nature (ICaN)** enables businesses, individuals, and groups to invest in nature and invest in their future by contributing towards the costs of delivering local climate action and nature recovery schemes. ***We are asking investors to invest in these projects not because they will get a financial return but so they can take credit as an organisation for the natural capital benefits to society. Designed to align with ESG CSR commitments from large organisations so they can see the equivalent financial benefit coming from their contribution, whether it's x million tonnes of carbon saved, or particulates removed from the atmosphere or impact on flood minimisation.***

Dieter Helm's work on valuing natural capital demonstrates how the environment must be placed at the core of economic planning. ***However, it hasn't gained the sort of traction it should have done. Most people don't even know what biodiversity is!***

Greater focus is needed on valuing and prioritising vital social and environmental impacts. How can we switch the focus to healthier food produced from regenerative landscapes creating space for nature and sequestering carbon? ***How about a metric for nature always to go alongside the GDP one? GNP – Gross Natural Product – a simple understandable metric to make mainstream discussion about the state of nature and biodiversity!***

Growth is inherent to people so can we put that growth not so much in physical things but in terms of knowledge, education, music so we are still satisfying urge to be creative in different way? How can we create greater social value? ***A self-evident truth for me is that most of our town centres are becoming empty because people want to buy online. We need to reimagine our town centres as service centres – doctor, entertainment, beauticians. We need a centralisation of urbanisation, bringing people back into an urban core which reduces the need to build on brown or greenfield.***

24 – Measuring what matters

Our economic system doesn't factor in social and environmental costs and benefits. What gets measured gets valued. Too narrow a focus on GDP growth neglects vital social and environmental priorities.

Much of what we do is framed by thinking of ourselves as consumers in a capitalist economy, but as humans we are naturally collaborative. The economic case for lift-sharing is not supported by HMT because it will impact on tax from fuel. However, once wider benefits, social wellbeing, fairness, equity are accounted for it becomes "way positive". However, economists tend not to value social impacts. There is an important task in valuing those impacts. They might not increase tax revenue but will save money elsewhere e.g. NHS. There would be a huge upswing in sharing economy if those values were understood. ***Personally, I have a real issue with GDP growth. The idea of continuous growth in a finite system makes no sense. So, you could cut the population, cut consumption, or share more. You can share stuff infinite times. Through sharing we could cut the amount we consume by 70%. But if you reuse a product that does nothing for GDP. Basing everything our happiness, our economy, on GDP makes no sense at all!***

A New Look at Making Sustainable Transport Work for Everyone shows how to redesign transport business models on sustainable principles, creating value from social and environmental transport outcomes. We need to review what we value in appraisal. ***We need to walk more but at the moment walking has zero value in appraisal!***

Different metrics and economic models could be explored. Bhutan measures national progress through the Gross National Happiness (GNH) rather than GDP. Economist Richard Layard (Lord Layard) influenced Conservative Leader David Cameron to move beyond measuring national success solely by Gross Domestic Product (GDP). Commoning business models were leveraged during the early evolution of the internet to prevent it from being monopolised by big players. There is debate around degrowth, but there isn't yet a model understood by economists that demonstrates a link to individual life benefits. ***This seems like a missed opportunity but in the work that I do, we are not allowed to talk about degrowth. Businesses assume that growth is necessary.***

The climate movement needs to be careful not to switch people off. We need to rebuild the cross-party consensus achieved in 2008 when only five MPs voted against the Climate Change Act. ***Kate Raworth and Tim Jackson are on absolutely the right track. Late-stage capitalism isn't doing us any good but good luck with changing any of that. Our politicians and our entire system of government is predicated on that model.***

Is it really a new economic model we need or is it that the WW2 consensus is collapsing and wealth has been allowed to concentrate in a handful of billionaires?!



RECONNECTING WITH THE NATURAL WORLD

Access to nature is vital for physical and mental health, but people living in advanced economies are out of touch with nature, spending ever more time looking at their screens. Covid showed how people with access to green spaces did better than those living in dense urban areas and highlighted serious equity issues. The UK is one of the most nature depleted nations, but surveys consistently show that people in the UK care about nature. RSPB is the biggest membership organisation in country. The climate and nature crises should be linked. Nature matters to people of all political persuasions. A nature-based campaign would have broad appeal.

"The way to connect people with nature, I feel very strongly, is food. Essentially, we've got three books when we're kids. We have a book of companion animals. We love those. We cuddle them. We keep them in our home. They're called cats, dogs, and bunnies. We have a book of exotic animals. We revere those, and we keep them in zoos, and we go and gawp at them as if they're some sort of treasure to put on a pedestal. Lastly, we have farm animals. We don't give a damn about those. We just eat them. They're meat, and that's it. The problem with that is it sets up a judgmental framework in people's minds from a very young age that they can partition."

Chris Packham CBE

25 – Access to nature

Access to nature is vital for physical and mental health. However, people living in advanced economies are out of touch with nature, spending ever more time looking at screens.

It is not "societally normal" to want to engage with nature. Nature has become a luxury. People assume you will spend your life in a building or a car or a curated landscape. Then you will go on a trip to "see nature". ***It is a huge problem and so embedded that anyone trying to do things differently is seen as a bit hippy. We have let our garden go wild and are seen as weird.***

However, the importance of access to nature is becoming a more universally accepted message. Nobody should walk more than 15 minutes from a green space. Community gardens could be a great way of connecting people offline. ***10 years ago, when I suggested re-wilding verges, I got massive push back, but that conversation has gone. People have shifted their perception and appreciate the butterflies.***

Covid showed how people with access to green spaces did better than people in dense urban centres. It also highlighted serious equity issues. The higher level of deprivation the higher the chance of lack of access to quality green space. If you are not connected to nature by age 12 it is very hard to establish link. This is acute for children in urban areas. ***A group of five-year-olds visiting Alan Hansen's farm did not realise that milk comes from cows and bacon comes from pigs.*** We have two sets of societies, rural and urban, and a lack of understanding. ***Why are we importing milk when we can grow it at home and there is a climate crisis?***

There remains a clear class divide. There is concern about the off-site use of nature and development. If you are building cheaper housing, you are less likely to invest in the nature recovery aspects on site. Buying something into a fund that is elsewhere is going to increase inequality because those who are on lower income are not going to benefit, even if a "lung" is installed elsewhere. Access to nature should be factored in at outset of new developments. Transport and urban land use planning to maximise nature should prioritise public transport. ***Too often in new house building blades of grass are traded off against carparking.***

Access to green space is crucial but there can be competing demands on the city centre and difficult trade-offs. Public transport has smaller footprint on nature and supports denser liveable places that can protect biodiversity. We have built urban sprawl out of town shopping centres etc knowing about the challenges. We need a mindset change. Good examples of this shift can be seen in new railway lines seeking to link up green and wild spaces. ***But it's the tip of the iceberg. A postage stamp of green park is not the same as a national forest. Whilst we talk about this new national forest, this fragmented forest across the growth corridor, and the talk of the forest city out to the east, this is positive, but we've lost the link with nature fundamentally. It's not it the purview of the average person because ability to access to nature is very low and this has broken the link with nature.***

26 – The emotional connector

Nature is the emotional connector. The climate and nature crises should be linked. A nature-based campaign would have broad appeal across people of all political persuasions.

The UK is one of the most nature depleted nations anywhere on the planet. However, surveys consistently show that people in the UK care about nature. RSPB is the biggest membership organisation in country. A nature-based campaign should be an easier space to occupy and can be done in the classroom. ***There is lots of low hanging fruit and ways to get people energised!***

Vast swathes of nature are people's back gardens, but these are not deployed as a critical part of nature recovery which they could be. ***We don't do "no mow May" in our back gardens!***

The Climate Coalition puts love for the things that are under threat at the centre of their campaigns. Every February, through **Show the love** people across the UK share green hearts with their politicians to show what they love and want to protect.

We need more green spaces for cycling. **Cycling UK** want to make cycling more accessible for all by removing physical, practical, and psychological barriers that prevent underrepresented groups from riding bikes. They have been giving **free bike checks** following the fuel crisis ***If cycling is to be more accessible to all, people to need to be able to cycle off-road.***

For the **Blue Marine Foundation** connecting people with the sea is a key theme. In Jersey they have **snorkel trail** which every child has been on. A poll on how many people would like a marine reserve around Jersey 85% said yes! Jersey has approved one of the British Isles' most ambitious marine protection plans, nearly quadrupling safeguarded waters to over 21% from 2026, protecting vital habitats and positioning the island as a leader in ocean conservation.

Having a connection through your food system and something you rely on daily, is a powerful way to connect with nature. **Mossgiel Organic Dairy** in Scotland think about the cow, they don't separate cows from calves. ***We need a waterfall of all these sorts of businesses to re-establish connection and give people agency!***

The growth of farm shops is evidence that people want to be able to buy fresh fruit and vegetable locally. Buying local is also more efficient from a transport delivery perspective and cuts down emissions in transport ***It's what people want anyway so there is a way of re-establishing connection with nature and being more efficient at the same time. It's only really going back to how we used to do things!***

27 – Re-establishing the connection

Re-establishing connection with nature is the most healing thing we can do. The wisdom of indigenous communities could help us.

We need to overcome old erroneous thinking that when you are fully embodied you are primitive and not considered respectable. There could be a great healing if we can bring all sides together without it being destructive. It's a process of remembering, connecting with the innate wisdom that is still in our DNA. ***Our grandmother, grandfather wisdom is still here. Not in our modern chaotic culture, which is more like an adolescent out of control, but the grandparent wisdom still exists in humanity in indigenous cultures and communities. That wisdom is still here.***

Nature brings an emotional response. People feel more at peace with nature. Nature is the stress release. ***This links to everyone feeling busy and not really living and being. How much time do we have away from our screens? How much time do we have to go beyond ourselves and connect with other, the broader community and nature as well with a sense of belonging?***

This is about peace and justice as well as climate and nature. There is a relationship here about whether we've got a collaborative world or a competitive world. The competitive world sets people up into the greed cycle, to grab what they can – short attention span. A business will destroy nature to get a competitive edge. If we fundamentally shift to a more collaborative peaceful orientation for the general good, then that sets a fundamentally different agenda where there is space for nature, space for coming together rather than exploiting nature and using everything for financial gain. ***For me connection with nature is very important, I like to spend time in nature and feel depleted if I don't. I have brought together our teams that work on nature and climate change.***

Part of re-establishing the connection would be a national response commensurate with the scale of the climate and nature crises. On the one hand you have scientists issuing dire warnings, setting out huge risk to our social and economic wellbeing. On the other hand, you get politicians proposing a few technical swaps. That mismatch makes people not take it seriously. There is a large register of urgent nature restoration work that needs to be done – peatland restoration, reforestation and wetlands restoration – that doesn't deliver any immediate financial returns and would be best done by volunteers.

I am keen on the idea of national service for school leavers – doing nature restoration for a year. If you had a government that said this is an emergency, "this is the coldest summer for the rest of your life!", it should not be hard to make happen. We have administrative architecture in place that processes teens out of school into further education etc.

IV – Healing the whole system

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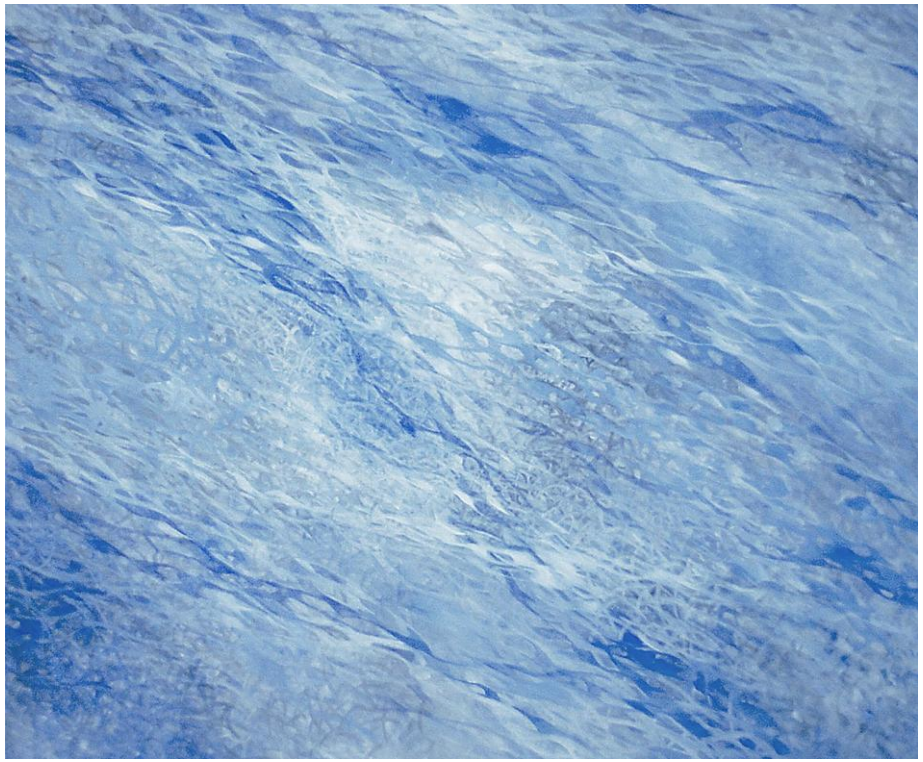
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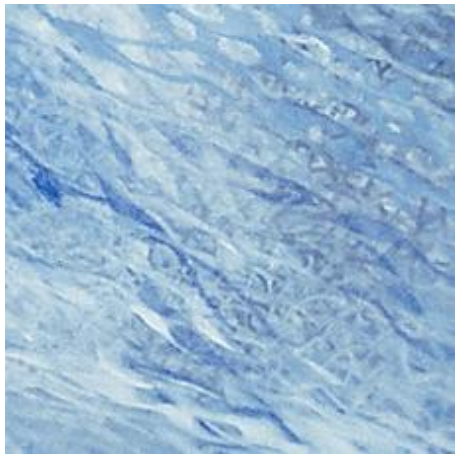
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Flying through the air



TACKLING THE ROOT CAUSES OF PROBLEMS

Anthropogenic climate change is caused by society's dependence on fossil fuels and exacerbated by consumerism and the failure to price properly for carbon. We have the technical solutions we need, but vested interests are stymieing progress. We also face a social crisis. Widening extremes of wealth and poverty are undermining the very fabric of society. The cost of goods and services should cover their true environmental impact, but we must ensure that low-income households are not penalised. We are too heavily indebted as a country to be make big changes to the economic system without spooking the markets. A more pragmatic approach may be to move to an outcome-based model.

"I'm a glass half full person and believe that we should do everything we can to make the world better. I'm also a realist and in some areas we are too far down the path with some things that are irreversible. We are going to need to talk and act on things like cooling and CCS.

"We don't have a climate crisis we have a carbon crisis that is creating a climate crisis. If we don't refocus on carbon then we are not going to be able to accept the positive action that is needed to reduce our carbon usage. You can't have a wind turbine without a concrete base which requires carbon. Manufacture of EVs, renewable energy components, lightweight composite materials still need some oil and gas. We can't be ideological. There is a need for pace and pragmatism."

Graham Leadbitter MP, Shadow SNP Spokesperson for Energy Security and Net Zero

28 – Fossil fuel dependency

The cause of anthropogenic climate is our dependency on fossil fuels and the way to rectify that is to switch to clean renewable energy. The question is how we get clean energy on a scale that has not been seen before.

In theory it should be possible to generate infinite amounts of energy in a clean way. The globe is a closed system. The one thing that comes into the system from outside is radiation. This makes the case for renewable energy. My preferred solution is that we should move to a completely renewable energy system which will also relieve some of the social and economic pressures that we have today.

Nuclear may be needed as an interim solution and there are resource implications for harvesting the renewable energy to support the massive increase in electrification of heat and transport that will be needed. We also need to carefully think about what the unavoidable impacts of climate change will be and invest in nature and our natural infrastructure to help us cope.

What are the market conditions for renewable energy to flourish? Climate change is exacerbated by consumerism and a failure to price properly for carbon. We must ensure that the cost of goods and services covers their true environmental impact. Could carbon pricing be seen as a panacea? ***First bitcoin, now AI, we just keep finding ways of consuming more energy. If only we could price properly for carbon, we could still be able to do all these things and the tax revenues would help fill up depleted public finances. If there was a silver bullet this is it!***

I would hold out the hope that rather than having some grand joined up theory of everything, going to a more effective price on carbon that works across the world would work, provided it is done globally. Putting a price on carbon is the one top-down solution that could work.

Notwithstanding the challenge of implementing a global carbon price one of the biggest barriers is wealth inequality. We must ensure that low-income households are not penalised. Mitigation strategies involving carbon pricing must reflect a progressive system. Raising fuel duty will hit the poorest households who are unable to afford an EV the hardest. Road pricing is a good microcosm of the challenge. Economics is fixable as long as you tax progressively but even people supportive of climate change policies are wary of the distributional impacts of road pricing. Social justice issues need to be carefully weighed to ensure alternatives. Carbon intensive sectors employ more than four million. If we shift away from fossil fuels, we need to transition employees to green adjacent jobs.

We are seeing a broadening gap between the haves and the have nots. How do we deliver net zero without damaging public trust? Frequent flyer levy feels more attractive, ensuring those with broader shoulders carry a greater burden. We need to make sure the interventions prioritise people who can't help themselves. No body who can afford to pay e.g. for solar panel should be getting govt subsidy. It pays for itself in 7 years and adds value to the property.

29 – Consumerist culture

The key question is which levers have the biggest impact. Consumerism is a big part of the climate problem and is exacerbating inequality. How can we address some of the worst excesses of our consumerist culture?

We are wired to believe that having nice things makes us happy. We can fly anyway, have anything, do anything we want which we couldn't 100 years ago. We've lost our link to the world with the loss of our connection with nature and instead we try to fill the void with things consumer products to layer on meaning. Until we stop wanting to buy more things we cannot heal the whole system as that is what is driving climate and nature breakdown.

It has to be wrong that something that is sourced locally is more expensive than something that is flown across the world. Then there is the issue of what bit of plastic is so important that it needs to be flown across the world just to scratch a consumer itch that ends just ends up in landfill.

Aspects of our consumerist culture are encouraging sharp increases in environmentally unsustainable levels of consumption. For example, since pandemic deliveries have gone through the roof. People are continuing to consume encouraged by free delivery. However, there is no such thing as a "free delivery". Delivery drivers should be on minimum wage and if they were we would be paying three times as much for delivery. A study in France looking at Paris and Bordeaux identified that over 50% of riders delivering hot food didn't have enough money to buy hot food on days in the year. Meanwhile it is very often people who are time poor and not earning enough to buy good food that are getting food delivered.

The whole picture is the level of exploitation throughout the system. I see what's happens out there. I see who's making the money, and I see who's not making the money. I don't have to walk far from where I live to see where some of these guys are living, and I just know it isn't right.

The supermarket supply chain is ridiculously efficient. ***When contract of a company delivering for a major supermarket came up for renewal the profit was less than 1%. Cost plus contract. You get the money for doing the work if you can prove you did the work then you get this tiny margin on top, but very often the company will do the work to get say that they have the major supermarket in their portfolio. They screw the suppliers down everything is as tight as possible…***

How do we tackle electronic and other household waste? The onus should be on the supplier or retailer to recycle take old fridge or mattress away. We don't pay care workers, bin men etc enough so people forced to get things as cheap as possible. ***Everyone deserves a fair wage. Why does everybody buy stuff on Amazon? Because they do volume and they manage to get it a few pence cheaper. But Amazon don't pay their staff enough and are renowned for poor working conditions.***

30 – Focusing on outcomes

We need to work within the levers we have. Capitalism, or poorly regulated capitalism, is at the heart of the problem but focusing on this makes it harder to change the things we can change.

The saying "It's easier to imagine the end of civilisation than the end of capitalism" is spot on because capitalism has proved incredibly resilient and resistant to attempts to mitigate it let alone change it. We need to work within reality and the levers we have. We are too heavily indebted as a country to be make big changes to the economic system without spooking the markets. ***Changing the whole system is an enormous task but will it give us what we need? With my pragmatic chief executive hat on, I would say let's address the things we can address now.*** A pragmatic approach may be to move to an outcome-based model rather than an input-based model. ***People aren't stupid they want better, cleaner, greener. How do we decide on the outcomes? Ask the audience! Ask people what they want.***

We need to focus on the right outcomes and work backwards from there. What are the right outcomes? Attractive places with good biodiversity that people want to live in. We need the right skills and capabilities to achieve that. Different procurement models could also be helpful. The way we make decisions is in a very traditional economic framework. ***Some of the agencies that procure can be a catalyst for unlocking wider social and environmental benefits, factoring in and giving greater weighting to benefits such as better health, biodiversity, air quality etc. I would recommend using different procurement models.***

DfT uses Publicly Available Specifications (PAS) to ensure outcomes that are both greener and more efficient. We could go further and change the way success is measured. That would involve giving the right targets to all departments. Instead of just reducing congestion and journey times, DfT needs to be set targets for reducing emissions. Webtag still puts more value on time saving than mode so public transport and active travel schemes so much harder to justify. ***Fundamentally, we've got to step back and say - we've got an affordability crisis, NHS crisis, obesity crisis, congestion, air pollution problems, climate and nature crisis, cost of living, affordability, equality issues, what are the solutions that can solve those? Walking, cycling and affordable public transport tick all those boxes so we should be focusing investment on those.*** Where can we tick the most boxes? ***If we can focus on making the vehicles going into the cities cleaner that will deliver wider health benefits that will save money for NHS etc.***

Economic decision making in government is based on the costs of tackling climate change not the costs of inaction, but shifting government's focus toward the cost of climate inaction reveals that transition benefits routinely outweigh upfront costs. For example, the costs of flooding should be factored into decision making. ***How do you eat an elephant? In bite sized chunks! Finance is where you need to go. Getting rid of coal is a good start. If coal mines are regarded as stranded assets they lose value. Hard as Trump regime tries, they can't eliminate renewable energy because wind and solar are cheaper!***



DELIVERING A WHOLE SYSTEMS TRANSITION

How do we think and plan holistically? How do we design places to live and work that deliver on a vision of quality of life, health and prosperity for all? We need more integrated policy across transport, housing, planning, environment, energy and other infrastructure investment. A place-based needs to be at the heart of a whole systems transition. It is easier to develop integrated plans at a devolved/regional level. The trend towards Mayoral Strategic Authorities is positive but central government still has a key enabling role. Capability and capacity are constraints. Clear national direction is needed to support local leaders in delivering necessary but potentially unpopular measures.

"We talk about building houses, but we don't talk about place making. We talk about nature and flooding and the effects of climate change, but we are not building the preventative part of that into our infrastructure. We don't need 1.5 million homes. What we need are communities to sustain 1.5 million family units – if we think of place then we wouldn't just think about houses, we should think about the green and blue infrastructure to go with development along with active travel and employment. We plough in with sticking plaster solutions when we need to zoom out and see the big picture."

Sarah Gibson MP, Environmental Audit Committee Member

31 – A holistic challenge

How do we think and plan holistically? This is a holistic challenge that requires contributions from every area of society and every part of government.

There is not always alignment across government departments. Ministers can lead and work with other departments but require strong leadership and coordination from the centre especially where there are tensions such as when preserving jobs in high carbon sectors risks stymieing progress e.g. ZEV mandate. ***If there are opportunities to tick off multiple lots of boxes that is very appealing – e.g. an industrial strategy that lines up with identifying the sorts of green industries where the UK might have a relative competitive advantage in that can be an opportunity.***

It should also be noted that integration is a two-way street. Better integration across the board doesn't always serve environmental imperatives, especially when major priorities such as defence, health and social care are factored in. ***Clean Power 2030 is the right target, but we are now looking a diluting EV mandate in the middle of a war. A systems approach would leave stones turned over. If we want an electrical vehicle industry, we need an industrial policy for that not just an EV mandate. We need innovation, research, skills pipeline being addressed. Efforts are being made on batteries, but you've got to join the dots, and it doesn't help to have a pay per mile tax introduced too early. Road pricing is the ultimate destination, but it doesn't work right now to signal tax when you are trying to drive up sales…***

There is also a lack of strategic coherence across different systems and strategies. For example, water networks can't operate without power, but power networks don't place that as a priority in their planning. We need integrated policy across transport, housing, planning, environment, energy etc. How do we grapple with things in a more co-ordinated way? **Adept Live Labs 2** explores the "hidden costs" of the assets that make up our highways infrastructure with particular focus on the embedded carbon footprint.

Transport is a "derived demand", people need to access to goods and services. **Triple Access Planning** is a useful framework for planning how to gain access to support all our needs whether by spatial proximity, digital connectivity or physical mobility. We tend to focus too much on transport and supply and not enough on demand. This framework helps correct that. ***The 15-minute neighbourhood is a great concept, but we don't grasp the nettle. So much of local authorities' budgets is used to transport students. There are travel implications of inaccessible out of town hospitals, shopping centres.***

We need to be making places resilient, climate adaptable and mitigating climate change all at the same time or we are going to be creating a world where very quickly many places are going to become unliveable. Not just in the Maldives but here in the UK

32 – A place-based approach

A place-based approach needs to be at the heart of a whole systems transition. It is easier to move beyond government silos and develop integrated plans at a devolved and regional level.

How do we design good places to live and work that tackle climate and nature crises and deliver on a vision of quality of life, health and prosperity for all? This needs to be done beyond silos of transport, skills, environment, housing and planning. It is also vital to bring in local people, because "one size doesn't fit all". We need people to have pride in their sense of place, beyond political divides. ***Co-ordinated communications, early engagement with stakeholders would help to shape the policy and deliver better outcomes. Engagement is usually brought in too late. We need to do it at an early stage.***

We need to change the way infrastructure is planned. It needs to be a joined-up effort. ***I trained as a town planner and then went into engineering. I see plans being developed without true thought about impact on infrastructure. For a whole systems approach we need to get all the professions together at the earliest opportunity with the community to work out a vision for the area. I'm in favour of a vision-led approach and it has to be joined up. So often you see a local plan out for consultation and National Highways is just a consultee!***

The way systems interact is constantly changing. For example, if we end up with datacentres powered by SMRs what is the public benefit in local areas? ***We are in a second phase of thinking about data centres. How can we internalise those externalities in a positive way where the community benefits?***

Groningen in the north of Holland, famous for fantastic cycle lanes, is taking things to a whole new level. It is shifting from a city designed for cars to one where streets are treated as vibrant, rich ecosystems. ***The chief planner has said their new city plan was not just going to incorporate biodiversity it was going to be based on biodiversity.***

Stronger devolution is central to a place-based approach but ideally this should be by natural catchment areas not just administrative boundaries. ***We are going to not end up with overlapping geographies for health and police and local authorities – we have administrative boundaries not proper catchment areas. We are just making life increasingly difficult for ourselves. We are designing everything on the past rather than what we need going forward***

The way systems interact is constantly changing. A key question is how does the state sector keep up. ***AI now leading the charge but what about massive carbon impacts, implications for society. Who gets the benefit. If we end up with datacentres powered by SMRs what is the public benefit that we can expect to see in our area and for our community?***

33 – Empowering local leaders

The trend towards greater devolution and Mayoral Strategic Authorities is widely seen as a positive step but central government still has a key enabling role.

Governments need to stand behind cities and have public investment packages that attract private investment and recognise where public investment is needed to ensure we don't impose upfront costs on people and we deliver in a place-based rather than a piecemeal way. ***Heat pumps should be approached as public works programmes. If it is left to the market, you are just going to create greater inequity – those who can afford it will do it others will get left behind.***

The Net Zero Neighbourhood Model shows how to invest on a place-based basis by bundling smaller projects into larger, investable propositions for private finance. ***Our economic strategy has climate as a thread that runs through everything we do. We are creating investable propositions for climate infrastructure, whether that's heat networks or new public transport investment or nature. We approach them as economic propositions as part and parcel of our approach to economic development within the city. We need to be delivering multiple co-benefits for every £1 we spend.***

Capability and capacity are key constraints. So much money is going into social care that authorities are having to strip back on some essential place-based activity. ***Someone tarmacking over their drive will have more negative impact on the environment because there will be more water run off and if it heavily rains there will be flooding elsewhere. It feels like we end up dealing with the crisis point at the end rather than at the beginning. We need people to understand what is needed on an individual level to prevent bigger problems down the line but that takes resource that we don't have.***

Clear national direction and leadership is needed to support local leaders in delivering necessary but potentially unpopular measures. For example, if we want to reduce transport emissions we need to disincentivise car use. For policy makers the tension is between carrots and sticks in delivering modal switch. The standard local authority says we need more walking, cycling and public transport but if that means unpopular measures come up they against a big political barrier, and there is lack of connectivity between transport policy and delivery. ***The inconvenient truth is that bold policies are needed. Most sign up to tackling climate change. But so much of what people want is perceived to be challenged if they have to give up their car.***



ACTING IN SOCIETY'S LONG-TERM INTEREST

How can we hold multiple societal goals together including: addressing the climate and nature crises, reducing inequality, strengthening the economy, national defence and energy security, and responding to the risks posed by AI and other disruptive changes? Political courage is needed to tackle the big issues. Charismatic leaders can make the case for change but are limited by five-year political terms, businesses operating on short-term cycles and the power wielded by wealthy unelected actors. What is the role of independent bodies and/or deliberate democracy in holding major decision makers to account and ensuring that decisions are made in the long-term interest of society?

"I believe in seeing is believing. It's one thing seeing Bangladesh flood, it is another thing seeing an urban street in the middle of Waltham Forest flood and the damage that does to people's homes. There are simple things we can do – rain gardens water butts – that can make the difference of a few ml of flood water but that can make the difference between losing your home and not losing your home. ...

"The experience in a local London street is that actually we can manage, our lives will not be turned upside down. These are simple measures people can get behind which demonstrably work."

Cllr Clyde Loakes MBE, Leader London Borough of Waltham Forest 2003-2009 & Deputy Leader 2010-2026

34 – Political leadership

We need convincing leadership because a lot of this rests on persuading people to forego things or make changes for a longer-term gain not necessarily directly to them but for wider societal benefits.

Politics in the UK is different to five years ago. At time of COP26 tackling climate change was a priority, but we are now missing a bit of political leadership to sell the vision and remind people of their connection across the globe. That is not being played out very publicly because of cost-of-living concerns and this makes it hard for policymakers to drive projects through. ***But I like to think you can tackle people's immediate problems whilst also framing it in a context of global community***

What do we stand for as a nation? ***We stand for standing up for the planet. We stand for taking a leadership role in looking after the planet which others can do and emulate… This country is full of amazing people doing amazing things***

We need convincing leadership to combine the science, the data, the evidence with hearts and minds. Charismatic leaders can make the case for change, as Mayor of Paris Anne Hidalgo demonstrated during her tenure, forcing through a strong case for green transformation. We need political courage to tackle the big issues. ***Yes, we want jobs, but we want quality of life, healthy people, nice places to live and good education. When did those things stop being important? People talk about small boats but that is a reaction to hollowing out of public services and everything people care about. Top of people's list is doctors' appointments, NHS, quality of their towns.***

Wales and Scotland national strategies much broader than England focusing on long-term systemic wellbeing. Inclusive growth, three-legged stool of sustainability from the 1970s – environmental economic and social. The landmark Well-being of Future Generations (Wales) Act 2015 legally requires public bodies to improve social, economic, environmental and cultural well-being. England is more tunnel visioned about growth and productivity, this filters down through all levels of government. ***The language has changed, for local authorities it is all about growth no longer so much about climate and nature. Climate and nature should be red lines; it's our life support system. People do care. Politically we don't need to be here. There is a lot more space for governments to widen the narrative and talk about these things.***

People need to know that their leaders have a plan. A politician who has a vision and can articulate it clearly will make it work. We need a national vision or project of some kind. ***There is no great British project (for good or ill) so people are retreating into nationalism, populism. Scottish people voting for SNP, Welsh, NI the same. Just buying things isn't enough. There are forces at work trying to dismantle the post-war consensus of social services and social mobility.***

35 – Power to the people

Our democratic practice limits people power. We need more ways for people power to express itself. For many the whole system feels rigged.

"Whoever I vote for the government always gets in" … "The poor pay taxes; the middle class pay accountants and the rich pay politicians"… How do we move our thinking on from quick fixes? We have global hegemony for a modal of governance for societies and economies that is not capable of responding effectively to an environmental crisis on the scale we are facing. Siloed government is creaking at the seams. Incentives are all wrong at the consumer and producer level. We have a system that rewards greed ***"The scum floats to the top"***

The climate tends to be white and middle class. We need to strive to involve all parts of society but there may be social and economic barriers. ***Deliberative democracy is very interesting. It was front and centre of Ed Miliband's book Go big: How to fix our world.***

Citizens assemblies or juries, or participatory budgeting, can be an extremely tool, especially when done in a collaborative way. Bringing together a randomly selected group of people without an agenda from all walks of life representing all sections of the population and a whole spectrum of views to deliberate on tricky ethical problems. Experience has shown that these groups are capable of considering the evidence and discussing it dispassionately and coming to a consensus view. What works well in terms of the dissemination of recommendations is interviewing people about how they came to their decision or changed their mind on being presented with the evidence. ***They consistently come up with recommendations that may fall short of what the science requires but go FAR beyond what any serving politician would be willing to countenance.***

Citizens assemblies can be very powerful, but they need a clear route to decision-making. In France, Citizens Assembly recommendations got massively watered down. In the UK was only select committees that did them, so government didn't have to implement anything. **Sortition Foundation** is campaigning to replace the House of Lords.

People's Plan for Nature is a UK-wide citizen-led vision and action plan created to protect and restore the natural environment. ***We took input from 30,000 people and asked them: What do you love about UK Nature? What would you miss if it disappeared? Who is doing great stuff. We presented this to a citizens assembly recruited through sortition. From this we came up with recommendations which the organisation took forward.***

One limitation of citizens assemblies is that they tend to end in a vote. ***Voting is a divisive act not a unifying act. How do you make decisions without a vote? You go on talking until it becomes overwhelmingly clear.***

36 – Long-term thinking

We need to foster a culture that encourages political courage. We need strong cross-sector collaboration that supports decision making in society's long-term interest.

Our five-year merry-go-round of politics is not equipped to deal with the major challenges we face. With the right political leadership, people can be inspired to act in enlightened self-interest. But our political system isn't well designed to generate those leaders. We to think longer than the cycle of one Parliament. ***The recent high turnover of PMs hasn't helped!*** We need a political environment where people can make long term decisions and that comes back to a broader sense of belonging, rebuilding trust in our politicians and giving them the space to make the right decisions. This is a system wide issue. ***We held deliberative workshops on energy reduction, and the biggest message was "the Government needs to do it, make it happen."***

Company boards should be thinking about the long term. There is an inherent tension in that climate change is a boiling frog problem. It is here and now but it is also a future problem and less urgent. However, insurance premiums are only calculated on a 12-month horizon. ***You'd think they'd be all over climate change but they are only looking at 12-month horizon.***

We need to look properly ahead. How can we hold multiple societal goals together including: addressing the climate and nature crises, reducing inequality, strengthening the economy, national defence and energy security, and responding to the risks posed by AI and other disruptive changes? We need a political environment conducive to long term decisions. In Australia **Results** is aimed at lobbying government on poverty targeting the key people, providing the evidence base. ***We can't expect this to come from a system predicated on short term election cycles, corporate reporting cycles. We need a body that does the thinking, that lays out the longer-term agenda, the critical things, and then lobbies on those in a very intentional way.***

Leadership is needed at many different levels. It often falls to local authorities to deliver what can be unpopular measures such as measures to reducing traffic and encourage modal switch. ***When there is a backlash central government typically doesn't show leadership. But scientists and experts aren't great at putting their heads above the parapet either. I was appalled by lack of engagement by teachers and doctors on active travel stuff – they could have been really powerful ambassadors, but they were nowhere! We need to get out of the blame game and create better policies that work through to delivery.***

How do you have a dialogue that understands different points of view? 'Common Consent' provides a methodology by which you can have polar viewpoints but over a course of several discussions you come to a common consent, a shared view and the shared responsibility follows from that. ***The blame game stops when you get all the relevant actors round the table to think through the development of policies that can be successfully delivered.***

V – Becoming citizens of one world

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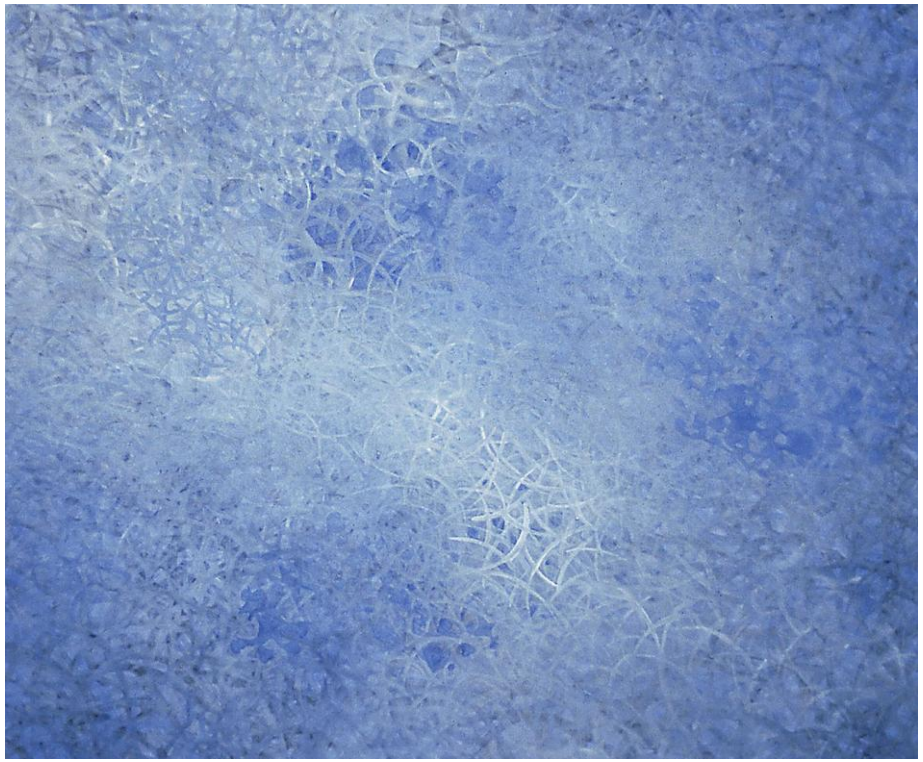
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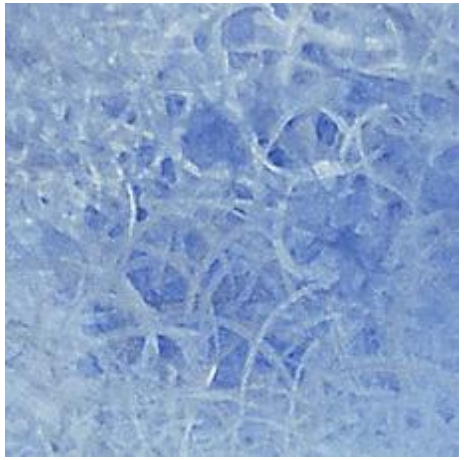
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Clouds melt away



FOSTERING A ‘ONE WORLD’ MINDSET

How can we build greater empathy and respect for people globally? Whilst it is a worthy ideal, asking people ‘to become citizens of one world’ is likely to be counter-productive. People don’t naturally identify with internationalism, particularly if they are struggling to pay their bills. We need to start with where people are, their local area and environment, ‘act local think global’. People feel overwhelmed and need encouragement that the changes they make can make a difference. Social media reinforces divisions. We need more coverage in the mainstream media of the devastating impacts of climate change on people’s lives. Town twinning might be a way of connecting people across the world.

“From our perspective, whilst we are a small part of global emissions, we have huge soft power and a legacy of being ahead of the curve and leading by example. We should be showcasing what we do well and learning from others in the areas where we need to adapt, such as keeping cool. Yes, we are only a small part of the picture but if we can show that we can decarbonise, we can export our expertise and encourage others to make a difference. We have a voice as the UK that we can use.”

Sarah Gibson MP, Environmental Audit Committee Member

37 – Think global act local

People don't naturally identify with internationalism, particularly if they are struggling to pay their bills. We need to start with where people are, their local area and environment, 'act local think global'.

How can we build greater empathy and respect for people globally? Humans are wired to operate in communities of 30-100 people, not much bigger than that. So, saying that we need to work with communities all over the world is not a message that will land easily for people. People know it's a global crisis and they do care but do not feel empowered to do anything about it. ***People are empowered to vote in their local actions, join voluntary groups, clean the park and those need to be valued even though what most people can do is trivially small. Social norms like curb side recycling working well.***

If you can't pay for food shop, it is hard to become citizens of one world. You can only aspire to that when all your basic needs are met (Maslow's Hierarchy). We need to prioritise and value local. Tackling climate change might be a happy consequence of people being part of their own community, of having thriving bioregions and communities. The impacts of climate change are local anyway, and focusing on climate resilience is a more effective way to reach a wider audience and is new way in. Civic engagement is critical and the worsening biodiversity crisis means the issue is getting more traction than five years ago.

A recent study **Decarbonising suburban transport** shows how decarbonising transport in the suburbs provides more than environmental benefits, it helps create neighbourhoods that are safer, cleaner and more attractive, with better connections to the places people need every day. ***If you do the right thing locally a side effect is saving the planet. Reducing transport emissions in Swindon is not going to stop global warming. The point is that everyone needs to do their bit.***

Benchmarking can encourage healthy competition. ***Which counties are good at this? How can your area get up to that standard? A fairer world, with clear KPIs and lots of examples best practice!*** People can feel overwhelmed, so we need to make it clear that small changes can make a big difference. If a million people did x it would have y impact. Dr Michael Mosley's **Just One Thing** concept usefully suggests finding the one thing you could most usefully do and sticking to it.

This is beautifully illustrated by the famous **Tale of the Starfish** The story of a girl who tries to save a beach of starfish washed up by a terrible storm by throwing them back into the sea one by one . ***Someone says you're not making much difference, are you? She then throws another one in and says, "Well I've saved that one's life". Slowly you make a difference.***

38 – Engendering global kinship

The UN Sustainable Development Goals were designed as a universal roadmap. However, top-down targets do not easily fit with local contexts. We need to find other ways make connections globally.

There are more than 8 billion of us on this planet. Most ordinary people recognise that the world is populated by other ordinary people just trying to get on with their lives…. However complex the world is I still have a place in the world, and I identify with that and that there are 8 billion other people around the globe who have an equal stake in the world.

Migration is set to be a huge issue, so breaking down barriers and improving integration will be increasingly urgent. A hotel in Leeds with asylum seekers that has caused much bad feeling, racism and nastiness locally demonstrated that perceptions can change. Efforts to bring the community together through shared activities, food, football games, overwhelmingly changed perceptions for those who have taken part. ***The evidence from Seacroft clearly shows that when people meet people they tend to get on! We've got more in common than what divides us.***

How can we engender a sense of global kinship? ***It won't come back until programmes like on Panorama and the media "silence" ends. Social media reinforce divisions.*** When people are getting their information through an algorithm what hope can there be of seeing the world as one? ***All the controllers of social media are not in the most affected countries. You don't hear stories about why people are risking their lives to come to Europe on boats. They're not even people they're just migrants.*** We need more coverage in the mainstream media of the devastating impacts on people's lives. ***It is disappointing how little coverage there is. When you talk about extreme weather events and damaging impacts you need to link it back to climate and ecological crisis***

When resources are constrained, people's instinctive response is to form a group that has priority over scarce resource. Whilst vast majority may not be racist instinctively, they will buy into nationality, race or skin colour if it gives their "group" priority over other people. As climate change sterilises land and displaces people there will be increasing competition for scarce resource. ***I grew up in a world where there was understanding of how we need to come together and I now see the world becoming more divided and I feel really sad about that… Sharing is a great way to start to cultivate a mindset that we are one world and all in it together. We share the air, we share the climate with everyone, but we are ruining it by being so individualistic.***

If you want to deal with this problem, you have to deal with it globally. Twinning in aftermath of WW2 was used to build strong connections. Town twinning for the 21st Century might be a way of connecting people with different parts of the world. ***The arts, and feature film in particular, non-labelled 'climate narratives' are vehicles to shift the mindset and embed a global perspective.***

39 – Is ‘one world’ possible?

Whilst ‘becoming citizens of one world’ is seen as a worthy ideal it is a very long way from where people are.

Asking people to become citizens of one world is likely to be counterproductive. It could come across as elitist and ‘waving a red rag to a bull’ to the anti net zero lobby! *I wish it could happen, but it won’t. Not in Greenpeace’s experience. Saving the planet never been enough to trump the cost of living. We would love internationalism rather than nationalism to be part of people’s identity but it’s only ever relevant for a tiny fraction of the population.*

Most people’s lives are not that. It would not be wise to use up political capital on that discussion. *I think it is a ridiculous concept, even though social media ought to make it possible. If you waste valuable time and energy trying to establish that narrative you will be missing the opportunity to do so much more on a neighbourhood level. That is where attention needs to be.*

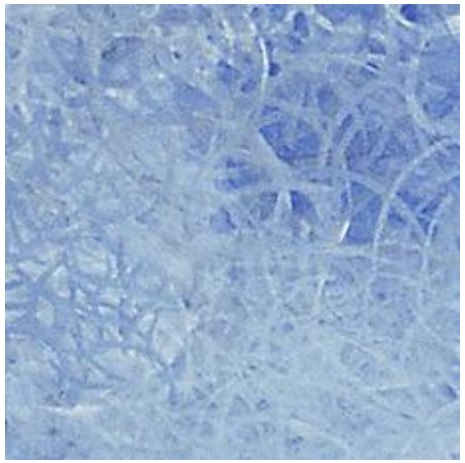
‘Citizens of one world’ does not resonate for many people. *It wouldn’t go down very well with the citizens group we are working with. There is a shared desire for Leeds to be a better place but underneath that there are loads of different motivations. I’m not sure people want to be identified like that. We find it hard to get people to identify beyond Leeds.*

We must meet people where they are. What’s in it for them? *Start with their local area and make the connection with their local environment. Only when you’ve established that link do you earn the right to talk about the global picture… Don’t put people on a guilt trip. Create space for people to have an awareness of a wider world.*

There is no way of envisaging what a “One World Government” could even look like from where we are now. *The UN is manifestly not going to run the world. If it means I am going to be as sensitive to needs of people, all over the world as I am to my family that is not realistic either. If it means creating equality there would be massive push back from the many who would stand to lose. But it is a fact that we are all in it together.* With climate impacts and rising migration, where will people go? *This is too difficult. I genuinely can’t imagine a version of we are all one world which is also one of zero conflict. I don’t know how that would work. Some part of the world will be harder hit, but we will all be affected. How can we make this less horrible?* We have to try.

I completely agree with the goal, but this is why I despair because we are moving further and further away from being one world

Climate change is a huge collective action and collective justice problem that could be described as the ultimate existential test of humanity and whether or not morality is even real. Becoming citizens of ‘one world’ therefore has to be the right goal. It’s a global minority of very privileged people that caused 100% of the problem. We should all accept that that is the goal. It may not be achievable in any of our lifetimes but that is the goal.



BUILDING COALITIONS OF THE WILLING

The Paris Agreement was a high point for global cooperation on climate change. A decade later we are in a very different place. There is a role for 'coalitions of the willing' to accelerate progress and bridge the Global North and South gap. We need political leadership to sell a vision and remind wealthy nations of their responsibility. Given the UK's leadership role historically, any rowing back would impact on others' ambition. How the UK become a vanguard nation and an example of doing things differently? People are motivated by social justice. How can that sentiment be harnessed? On the whole things get done by business. As climate impacts worsen there is greater focus on resilience.

"Geopolitical alliances are under threat. In response, we must build and strengthen other forms of partnership, including those between cities, regions, mayors, governors, states and the NGO sector. Encouragingly, businesses and the private sector are more engaged than ever before. Much of the financial services sector now supports the transition, and most industries have set meaningful targets. Our task is to harness this momentum and continue to make progress where we can."

Alex Sobel MP, Chair of Joint Committee on Human Rights, Chair APPG Fair Elections & Chair Global Deforestation APPG

40 – Cultivating global citizenship

People are motivated by social justice. How can that sentiment be harnessed? Rich societies are chiefly responsible for the climate crisis and have a responsibility towards poorer countries who weren't responsible.

Following the Paris Agreement there was increasing acceptance that we can and must move towards a zero carbon future. **Zero Carbon Britain: Making it Happen** showed that we have the tools to rise to the climate challenge and create a healthier and happier society and that this required concerted effort involving all parts of society and levels of government. Public support for climate action depends heavily the transition being seen as fair for everyone. People don't like unfairness.

A decade later we are in a very different place geopolitically, but people are still motivated by social justice, and they need the tools to act. ***Small living is going to become a necessity. Think about what you don't need to do. You can turn the lights off every time you leave a room but if you are going to fly to the Caribbean for your holiday every year you might as well not bother.***

Global inequality is deeply entrenched. How do people stay with the difficult emotions when faced with these stark injustices? How do we get that sense of citizenship, how do we get people to understand better what others are going through? ***On a personal level how do I come to terms with the huge privilege of my life in relative terms compared with people living in the Global South?***

How do we find the similarities not the differences between us? How can we instead find what resonates with everybody? How can we connect with our land through sharing and preservation? How can climate action relieve anxiety? ***The anxiety we feel may be because we have lost the connection of being an embodied person at one with our land.***

Everyone in the world should have two tonnes of carbon a year, that would be just about sustainable, and that includes someone in deepest Africa and someone in the UK. Currently we in the UK are consuming around10 tonnes, in the US 20 to 30 tonnes! If people want to consume that amount, they ought to pay a very high price. ***Should we not all be given a personal carbon allowance – and have a carbon calculator? Otherwise, how can I understand how my lifestyle is impacting. Could we all do an annual carbon report, just like an annual tax return?***

But who is going to make a carbon allowance happen? It is too unpopular for political parties including the Green Party to take on board. ***I came up against a brick wall - or rubber wall! In the current climate you can't tell people what to do and what not to do. I decided that I wanted to know how to reduce my emissions and that it might be interesting for others too. So instead, I wrote a book: How to Reduce your Carbon Emissions … and save money on your bills***

41 – Strengthening coalitions

In an increasingly fractured world, there is a role for 'coalitions of the willing' to accelerate progress and bridge the Global North and South gap.

The progress the world has made on climate change is probably the best example of one world international cooperation the world has ever seen. The Paris Agreement was a high point for global cooperation on climate change. However, in the current climate we may make more progress through multilateral/ bilateral agreements on accelerating technologies and climate finance. Leaders from the Global South must be heard. It is helpful that the Santa Marta process is working with both Global North and South on the transition away from fossil fuels. ***Cash, coal, cars and trees – Boris had the right idea about coalitions of the willing! Create clubs that people will want to join. We can't let perfect be enemy of the good.***

Ensuring a fair and just transition will be a major challenge. We've created a global economy and a fight for resources to fuel it. Some countries are in catch up phase. We need a new approach to the developing world. We need a dynamic lens to see where countries are now not how they were (China should no longer qualify!) Once investors see a real benefit money flows. These are often pension funds. ***We need bankable projects that actually deliver a return. By not having to do the same dirty journey we did, we can help developing countries frog leap over the fossil fuel stage. We should give green power and clean water to women globally!***

Re-directing finances away from development and aid to defence will be a big challenge for the COP process. Reparations in a world of constrained resources will be a very hard nut to crack. Climate action is taken for value, values or compliance. ***Values were in vogue a few years ago but are less so now. I agree that there is a moral obligation to those who have done the least to cause it. I feel that, but not everybody does. From here on in, how do we do less damage? Once we get to a steady state, then we can think about reparations.***

This may be a moment in time where we have minimum consensus, but we still need to focus on what we can all agree on. We need to bring people together across divides and have an honest candid discussion. ***UNFCCC for many years now has been meeting and we've got broad agreement on problem and solution needed but not on doing anything. I don't know whether it is possible to do any better than that. Trying to generate international collaboration is really hard.***

42 – Walking the walk

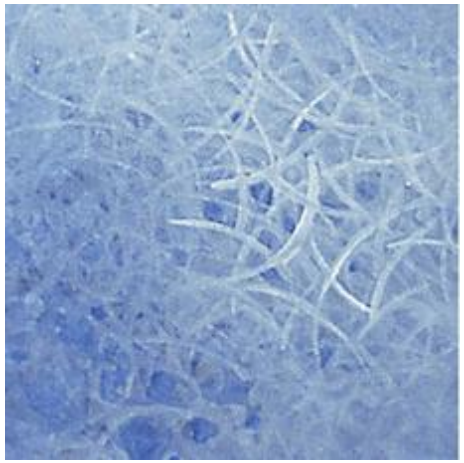
There are examples of international efforts that have delivered real results, but it is difficult to find transferable solutions that easily apply to tackling climate change. It falls to nations and businesses to walk the walk.

Montreal Protocol tackling ozone depletion is one of the rare global treaties to achieve universal ratification. We are also seeing genuine progress in the ocean space. The ocean is the world's largest ecosystem, largest carbon sink and largest oxygen producers and without it the world would be at least 36C hotter. When the **Blue Marine Foundation** was set up in 2010 only 0.1% of the ocean was protected and it is now over 10%. Overfishing is increasingly recognized as a major, yet highly fixable, driver of carbon emissions.

Are there transferrable lessons? The hole in the ozone layer could be fixed by largely technical solutions. The transition away from fossil fuels is much more complicated, because the whole global economy is heavily dependent on fossil fuels and solutions need to be economy wide. The seafood industry does not mirror the multi-trillion-dollar scale or the systemic foundational integration of the fossil fuel industry. ***If we were to get all the high seas free from industrial fishing 2/3 of the oceans, the number of beneficiaries of fishing on the high seas are minute and already heavily subsidised.***

How do we at a nation state level emphasise the positive aspects of the transition? How can we become a vanguard nation and make the UK an example of doing things differently? Having an optimistic vision, bringing together the benefits then gives us the moral right to take a leadership role and inspire others. Renewable energy is as much about energy sovereignty and security as about tackling climate change. ***We need to ensure that we share the best technology globally. How do we ensure we have access to the best technology to solve the crisis at fastest pace to help us decarbonise?***

On the whole things get done by business. Nearly 9 in 10 UK businesses are already feeling the financial fallout of climate change. As climate impacts worsen there is greater focus on building resilience. Most businesses need to do more to reduce emissions from their supply chain (Scope 3) but increasingly there is a recognition of the need to have a transition plan. ***COP is imperfect but it has had a real impact. If you say ESG you get to speak to Head of Sustainability. If you say transition finance and decarbonisation you get to speak to the C Suite.***



WINNING HEARTS AND MINDS

This is a good moment to think about how we can move forward as there will be a natural reversion at some point. People will push back when they don't like the world they are seeing, with hotter summers, wetter winters etc. Politicians and the media consistently underestimate public support for climate action. A holistic well thought through properly joined up integrated communications campaign is needed with messaging tailored for different groups and focused on actions people have agency over. "Vote with your ballot vote with your wallet". The most powerful generation is the one growing up now. Politicians come and go. Leadership needs to be bottom up.

"We have no choice. It's all of our business whether we like it or not and there are going to be more and more climate refugees. But this can't be the only part of the message to the public. It is too often presented as a message of giving something up. I live in a city where people live in poverty, and I can't ask them to give anything else up, they've given up too much already.

"We have to be global citizens as part of one world whilst delivering for our own people addressing inequality. I believe we could be doing that right now and delivering tangible benefit. National governments need to support local governments to deliver, and it will be the delivery that gets the consensus. Then we can fulfil our moral responsibility globally as we in the Global North caused this in the first place."

Cllr Susan Aikten, Leader of Glasgow City Council

43 – Moving forward

Politicians and the media consistently underestimate public support for action on climate change. Hotter summers, wetter winters, more extreme weather events and damaging impacts will shift the dial.

We are not on a linear path we have peaks and troughs but if you took out the peaks and troughs and plotted a general graph line we are moving forward in the right direction. We are more aware than we have ever been. Paris was a peak, followed by a trough. But we won't go back to the great smog in London.

People will push back when they don't like the world they are seeing. There is a disconnect between what people actually feel and what politicians think they are thinking and this has been problematised by vested interests.

The only way to win hearts and minds is for people to feel included. It is important to understand different perspectives. Convincing Reform voters is different environmentalists. ***There is no "we", we must be careful about generalising!***

How do we decolonise knowledge production? Leaders from the Global South need to be heard. If we keep on reproducing Western perspectives on knowledge we are not going to get very far. ***I have a friend telling me it's 46C every month – that is not normal, why don't we talk about this more?***

We need to imagine what it's like to be the CEO of a major oil or gas company, reporting to the stock market once a quarter and only talking to other oil and gas execs. ***How can we understand them better and help to persuade them to focus on clean energy instead?***

How can we have a dialogue that understands different points of view? Indigenous communities have elders, who would listen to everything discussed in a large town meeting and then deliberate amongst themselves and come back with a plan. ***The town trusts the wisdom of the elders. We've lost that, it's not part of our culture, also needs to be intergenerational because there is increasingly polarisation between the generations, people only speaking to their own age.***

How do we give people permission to let go of tit for tat exchanges and transactional relationships? How can we appeal to our better natures? How do we understand that without a collaborative approach we won't survive?

"The arc of the moral universe is long, but it bends towards justice" (quoted by Obama, Martin Luther King, originally coined by the abolitionist minister Theodore Parker).

44 – Grassroots leadership

The most powerful generation is the one growing up now. Politicians come and go. Leadership needs to be bottom up. It's young people's vision that counts. "Vote with your ballot vote with your wallet".

There is an inability to grasp the global connectivity of all our lives. We need to reverse the idea of "why should we bother because they're not doing it over there etc.?" If more than 25% of the general public can be convinced that a change needs to be made governments will have to act. ***"We hold the balance of power. We vote for them."*** It's young people's vision that counts. ***Hannah Ritchie comes in with a real dialogue. We must prioritise those younger voices***

Climate change is heavily politicised. What people do have agency over? ***"Vote with your ballot vote with your wallet"***. Vote for politicians who will address climate change and don't waste your money on products that will destroy planet. ***The hope may be in younger people e.g. an increasing proportion of young people are choosing not to drive but to use public transport instead.***

This summer, 1.6-2 million people got involved in **Green Big Green Week** (GBGW), **London Climate Action Week** (LCAW) was bigger than ever, but elite audiences still think people don't care. 56% of GBGW had never engaged before but got involved for a plethora of different reasons (e.g. local community, something to do with the children etc.) but left wanting to stay involved. ***Maybe politicians are being wilfully blind. How can we surface the fact that many are really engaged and showing up in different ways?***

All generations care about climate change. We must not exacerbate difference and perceived tensions. We need a genuinely intergenerational groundswell of support for climate action. Older people are not part of the problem. RSPCA membership is very high. Over 50s care about nature and are just as switched on to issues around climate change as younger people. Older people are also used to a mentality of re-using, re-cycling, 'waste not want not', knowing how to darn a sock etc. **Our Grandchildren's Climate** provides a voice for older people to express what sort of climate they want to leave for their grandchildren

You see the kindness of strangers everywhere, but vocal minorities gain cut through We suffer from pluralistic ignorance. The overwhelming majority of the world's people – **89%** – want governments to take stronger action on climate change but don't know they are the majority because media coverage doesn't reflect that. Deliberative democracy could help to build a groundswell.

The world has turned on its dark side, there is a reactionary wave going on, but we can have progressive waves too (e.g. Me Too, 1% occupation of Wall Street, rising in Egypt) but there is insufficient organisation behind them, so they run out of steam. These waves will keep coming. The question is how can they be harnessed? Trump's cuts to US Aid will have devastating consequences. The pendulum will swing.

45 – Spreading the word

The only way we will solve the problem will be by working together. We need a narrative that everyone can find their own reasons to support, suspending intellectual disagreements for the sake of a common good.

We will not "win" if we ask everyone to abandon their ideologies and prejudices. If that is a condition, we will have lost. If you get the basic point right people can invent their own reasons for agreeing.

The Popular Front during the Second World War showed how different conflicting groups could agree to fight on the same side. If it is right that thriving nature and strong economy are both desirable, it ought to be possible to find arguments that resonate with different people and viewpoints and don't require them to give up their prejudices. There may be plenty wrong with the current economic system, but changing the whole basis cannot be a necessary condition for progressing this agenda. It comes back to evidence, the messaging of that evidence, how to get beyond the politics.

There is a huge job for comms. As a species we find it hard to change our minds and are better at cure than prevention because we can't change our minds until it is too late. ***And that is where we are failing against those with unlimited amounts of cash. The "other side" are playing by the Goebbels playbook that if you tell a lie enough times it becomes the truth***

We need a holistic well thought through properly integrated communications campaign with messaging tailored for different groups and focused on actions people have agency over. ***Who should start the comms? How do we get orchestrated comms? If we wait for government, we will be waiting forever.***

The sense of individual responsibility and the part each of us need to play hasn't sunk in yet. Politicisation of the agenda hasn't helped, but there is still inertia. ***People know that the planet is heating up, but they still want to go on holiday. Climate impacts are hitting home but we haven't really changed our behaviour (still flying etc.). We are "drinking in the last chance saloon". I haven't really changed my behaviour. What will it take? What is the tipping point for people to start to wake up to the crisis?***

How do we avoid the worst dystopian nightmare of humanity descending into each for his own, erecting bigger and bigger barriers? The effect of climate change will exacerbate the already dire geopolitical climate. The arts will play a critical role. Feature films tend to be international and are less likely to be censored. When you are trying to marry up hearts and minds, people respond way more positively to positive messaging – do this – as opposed to negative – don't do that. Story telling can be a powerful vehicle and help us to solve this crisis as one world working together.

For many years I have concluded my addresses with: "We are one species on one planet with one big problem and one last chance to sort it out". If we don't see that and allow vested interests to run the division machine, we are screwed. We have to shut down this raft of disinformation that comes from vested interests. This has to be our 'Independence Day' – the alien is climate breakdown and the nature crisis.



SETTING THE CHALLENGE

- **Consultation List**

- **Alex Sobel MP**, Chair Joint Committee on Human Rights and Chair Global Deforestation All-Party Parliamentary Group
- **Edward Morello MP**, Co-Chair Net Zero All-Party Parliamentary Group & Chair Climate Tech All-Party Parliamentary Group
- **Graham Leadbitter MP**, Shadow SNP Spokesperson for Energy and Net Zero
- **Sarah Gibson MP**, Environmental Audit Committee Member
- **The Baroness Lister of Burtersett CBE**
- **Fiona Harvey**, Environment Editor, The Guardian
- **Matt Mcgrath**, BBC Environment Correspondent
- **Chris Packham CBE**, Naturalist & Television Presenter
- **Cllr Bridget Smith**, Leader of South Cambridgeshire District Council
- **Cllr Susan Aitken**, Leader of Glasgow City Council
- **Cllr James Gibson**, Executive Member for Environment, Leeds City Council
- **Cllr Katie Dye**, Chair of the Climate Emergency Advisory Committee, Leeds City Council
- **Cllr Clyde Loakes MBE**, Leader London Borough of Waltham Forest 2003-2009 & Deputy Leader, London Borough of Waltham Forest 2010-2026
- **Tom Hyne**, Strategy Lead, Net Zero Strategy, Department for Transport
- **Liz Jacobs**, Deputy Director, Local & Regional Transport Analysis, Department for Transport (DfT)
- **Morna Cannon**, Director of Environment, Climate and Sustainability, Transport Scotland
- **Eoin Devane**, Acting Director of Net Zero, Climate Change Committee

- **Aaron McMahon**, Lead Analyst, Climate Change Committee
- **Jonny Mood**, Director, Value for Money Performance Audit, UK National Audit Office
- **Lenka Stejka,** Senior Policy Advisor Transport, National Infrastructure and Service Transformation Authority
- **Venn Chesterton**, Deputy Director, Innovate UK
- **Megan Black**, Head of Logistics and Environment, Transport for Greater Manchester
- **Mark Atherton**, Director of Environment, Greater Manchester Combined Authority
- **Hannah Bartram**, CEO of ADEPT
- **Nigel Riglar**, Director of Environment and Community Services at South Gloucestershire Council
- **Barry Wyatt**, Climate, Nature and Place Manager, South Gloucestershire Council
- **Edward Leigh**, Transport Policy and Projects Team Leader, North Herts Council
- **James Golding-Graham** Head of Decarbonisation and Innovation, England's Economic Heartland
- **Lucy Jacques**, Head of Transport Policy & Strategy, North East Combined Authority
- **Professor Jillian Anable**, Chair in Transport and Energy, Institute for Transport Studies, University of Leeds
- **Professor Glenn Lyons**, Mott MacDonald Professor of Future Mobility, University of the West of England
- **Professor Peter Jones OBE**, Professor of Transport and Sustainable Development in the UCL Centre for Transport Studies
- **Professor Mette High**, Director of the Centre for Energy Ethics & Professor in Social Anthropology, University of St Andrews
- **Professor Nick Eyre**, Emeritus Professor of Energy & Climate Policy, University of Oxford
- **Professor Karen Lucas**, Professor of Human Geography, University of Manchester

- **Professor Greg Marsden**, Professor of Transport Governance, Institute of Transport Studies, University of Leeds
- **Professor Phil Goodwin**, Emeritus Professor of Transport Policy at UCL and UWE
- **Professor David Begg**, Visiting Professor at Plymouth University & Former UK Government Advisor
- **Professor Gail Robinson**, Cognitive and Clinical Neuropsychology, Queensland Brain Institute
- **Dr Douglas Parr**, Policy Director at Greenpeace UK
- **Rachael Orr**, CEO, Climate Outreach
- **Helen Meech**, Executive Director, The Climate Coalition
- **Juliet Michaelson**, Co-Director, Possible
- **Claire O'Neill**, Co-Founder & CEO A Greener Future
- **Clare Brook**, CEO, Blue Marine Foundation
- **Leo Murray**, Chief Executive, Riding Sunbeams
- **Trewin Restorick**, Founder, Sizzle Innovation
- **Stephen Joseph OBE**, Transport Policy Consultant
- **Dr Huw C Davies**, CEng FIMechE FHEA, Coventry University
- **Edmund King OBE**, President, The Automobile Association
- **Sue Percy**, CEO, Chartered Institution of Highways and Transportation
- **Caroline Abrahams CBE**, Charity Director, Age UK
- **Trevor Hutchings**, CEO, REA, The Association for Renewable Energy and Clean Technology

- **Rachel Solomon Williams**, Executive Director, Aldersgate Group
- **Philip Sellwood CBE**, Chair, Zemo Partnership
- **Joe Hurst**, Director, Zemo Partnership
- **Neil Stockley**, Head of Public Affairs, Zemo Partnership
- **Juliette Sanders**, Chief Communications Officer, Energy UK
- **Steve Gooding**, Director, RAC Foundation
- **Tomas Gärdfors**, Head of Transition Finance, Addleshaw Goddard
- **Fiona Howarth**, Founder & Director, Octopus Electric Vehicles
- **Janette Bell**, Managing Director First Bus at First Group
- **Jon Tivey**, Head of Environment First Bus at First Group
- **Martin Dean**, Managing Director UK Regional Bus Division, The Go Ahead Group Ltd
- **Paul Campion**, CEO at TRL
- **Phil Southall**, Managing Director Strategy and Performance, Go Ahead Group PLC
- **Hilary Chipping,** Chair, Bedford & Milton Keynes Waterway Trust
- **Janet Greenwood,** Founder, Leading by Nature
- **Ali Clabburn**, Founder & CEO, Mobilityways, Liftshare and C-Lab
- **Richard Dilks**, Chief Executive, CoMoUK
- **Ben Plowden**, CEO, Campaign for Better Transport

- **Peter Bradley**, Managing Director, UKCOA
- **Sarah Mitchell**, CEO, Cycling UK
- **Chris Todd**, Director, Transport Action Network
- **Jonathan Bray**, Fellow, Foundation for Integrated Transport
- **Lisa Hopkinson**, Director, Transport for Quality of Life
- **Xavier Brice**, Director of Planning & Sustainable Infrastructure, SLR Consulting
- **Thomas Ableman**, Founder, Freewheeling
- **Jo Field**, Chief Executive, JFG Communications
- **Rob Jack**, Managing Editor & Publisher, Passenger Transport
- **Anthony Smith**, Director, Consumer Focus
- **David Hytch**, Park Gate Consultants
- **Tony Duckenfield**, Beyond Logic Consulting
- **Lynn Basford**, Managing Director, BasfordPowers Limited
- **Ian Wainwright**, Independent Consultant at Future City Logistics
- **Derek Halden**, Director at DHL Loop Connections
- **Keith Mitchell**, Senior Consultant, Stantec
- **Andrew Morrison**, Chief Economic Advisor, Bradshaw Advisory
- **Tim Campbell**, MD at Campbells Consultancy

- **Paul Grindlay**, former Civil Servant at DESNZ and DEFRA
- **Gwenaelle Joubert,** Independent Consultant
- **Dario Porras Garcia**, Research Associate, Organisation for Economic Cooperation and Development (OECD)
- **Ali Zaman Khan**, MSc Development Studies, LSE (Co-Organiser: Setting the Challenge Focus Group*)
- **Artemis Giourou**, MSc Gender Rights and Human Rights, LSE (Co-Organiser: Setting the Challenge Focus Group*)

***Setting the Challenge Focus Group | Discussion Points**

1. What kind of world do we envision for ourselves? How can governments, businesses and society better navigate the many complex interconnected crises we face?
2. How can we foster a more informed, evidence-based and balanced public debate around tackling the climate crisis? What is needed to improve media/information environment?
3. How can we build fairer and more equitable economic systems that allow humans and the environment to thrive? How can we move from an extractive to a regenerative mindset?
4. How can we prevent short-term thinking and political expediency from driving critical decisions? What could be the role of independent bodies and/or deliberative democracy?
5. In an increasingly polarised and fractured world, how can we build greater empathy and respect for people everywhere and increase global support for climate action?
6. We need a radical realignment of how we perceive ourselves in relation to others and the environment on which we depend. Do you agree and what is needed to bring this about?