

The 20% solution: look up, wise up, cheer up

Laurence Matthews

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How do we keep 80% of fossil fuels in the ground?

The 20% solution :
Look up, wise up, cheer up

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How do we keep 80% of fossil fuels in the ground? Well, how do you keep *anything* in the ground?

How do we keep 80% of fossil fuels in the ground?

Don't dig them up

Don't dig it up. Durr. That was easy!

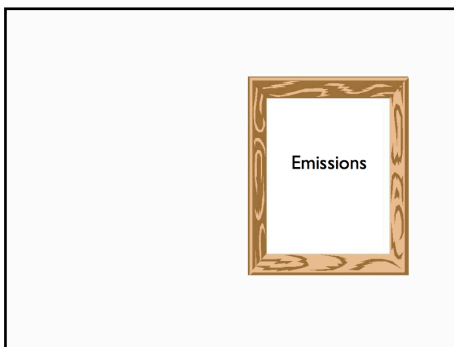
That's the trouble with the word 'we', as in: 'how do *we* keep it in the ground?' Of course, it's not *us*, in this room, who're digging it up. It's *them*: the fossil fuel companies. And they're doing it to make a profit. So how do we stop them? *Not* so easy. How can we influence fossil fuel companies at all? And anyway, which 80% are we talking about? And who decides?

Look up
Wise up
Cheer up

These are not scientific questions - but a scientific, logical approach can help. Today I want to explore how, in tackling these questions, we can look up, wise up and cheer up.

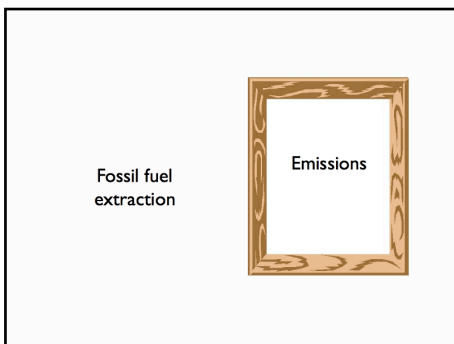


For a long time with climate change we've focussed on emissions, and the UN talks are all about cutting emissions. We have emissions trading.



Emissions, emissions: we've looked at everything through the 'frame' of emissions.

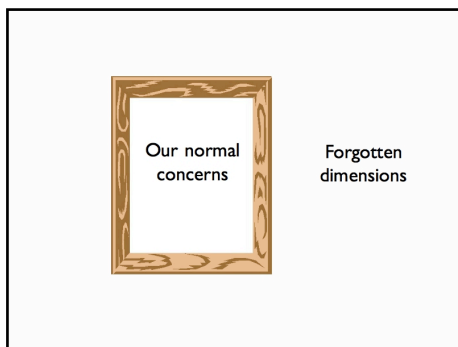
But what lies outside this frame? We only have emissions because fossil fuels are extracted, sold and then burnt. If you look upstream, from the symptoms to the causes, the root cause of emissions is fossil fuels.



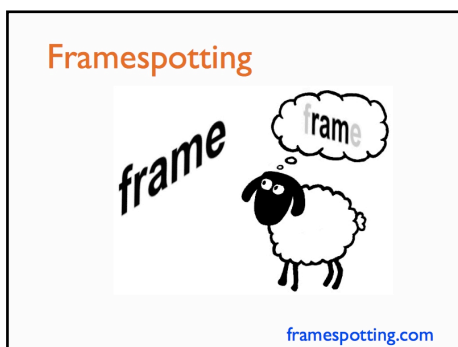
That's why the recent 'keep it in the ground' campaign focuses on fossil fuels.



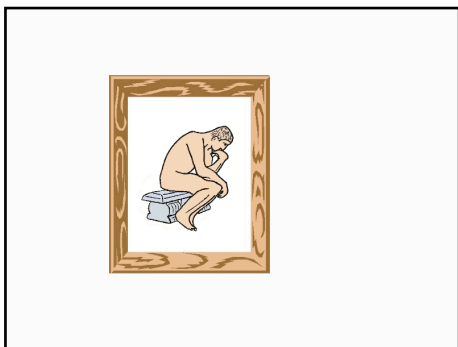
When I say 'look up', this is what I mean. Look up from what you've got your teeth into, and look up, look around, stand back, try to see the bigger picture. All too often we confine ourselves to looking inside a 'frame'.



But what lies outside the frame? What are the ‘forgotten dimensions’?



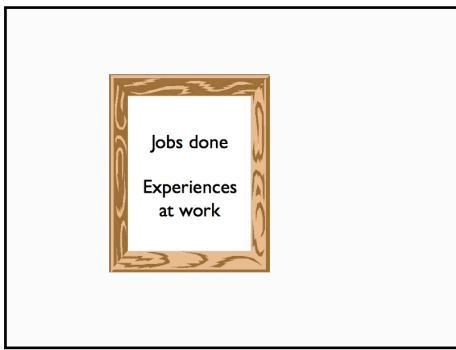
If you look, you can find frames all over the place. When we started looking, my wife and I found so many frames that we wrote a book about it! The sheep on the front cover is concentrating on just the part of the big picture it finds particularly interesting.



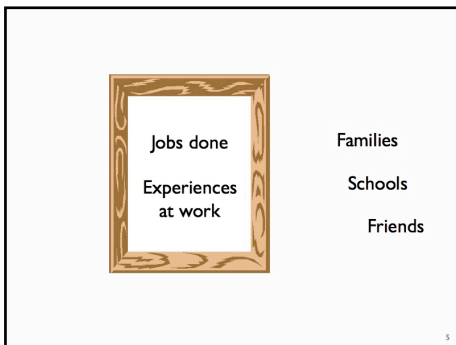
Scientists are prone to this - but so is everyone else. Mathematicians, for example. I started out in life as a mathematician. It says so on the blurb for this talk.

Now, do you believe that? Well, it's not true.

Nobody starts out in life as a mathematician: I started out in life as a *baby*, just like everyone else. Oh. That's nit-picking, you say. You knew what I meant. But that blurb sets up a frame: the frame which equates a life with a career.



Think about what that frame leaves out:

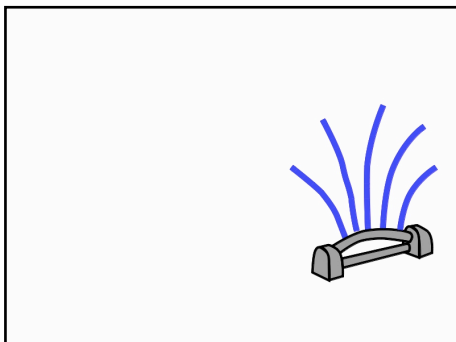


Childhood, family life, the role of mothers caring for children. A life is so much more than a career. Frames can crop up even in everyday conversation.

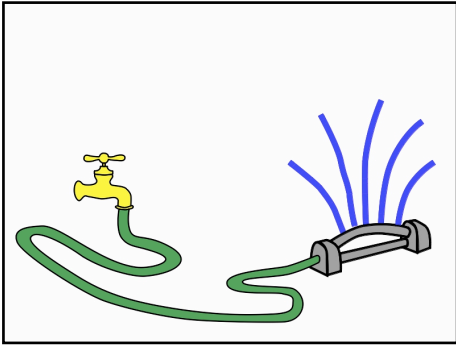


Now let's look for frames in the climate talks. In the book we talk about *seven* frames around climate change, but today I'll talk about just two. We've already seen one: a focus on emissions.

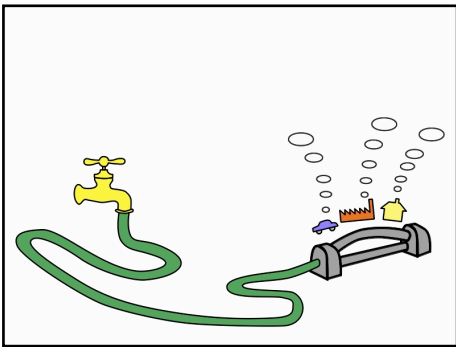
Now escaping a frame like this isn't just interesting - it can lead to new ideas for how to tackle the problem.



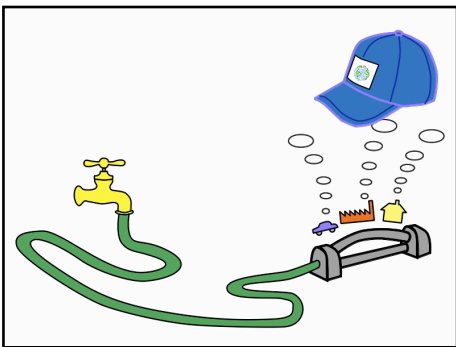
Look. Here's a sprinkler, watering the lawn. To save water, would you block up the holes?



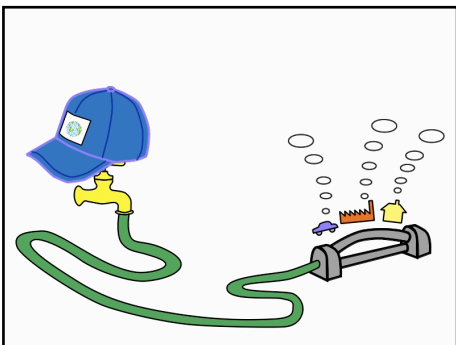
No. Just turn the tap off a bit.



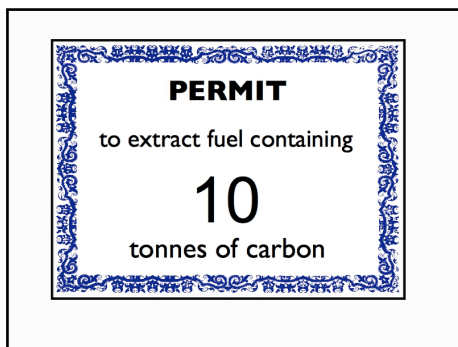
Now all our cars, factories and houses are like holes in the sprinkler ... but instead of water, they emit CO₂.



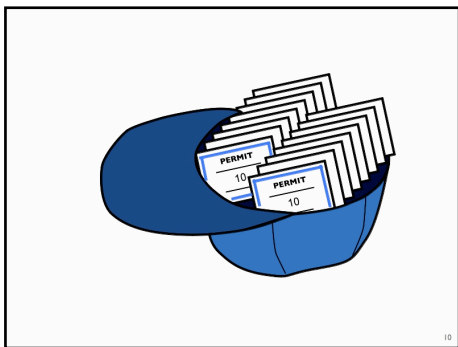
You can try to cap these emissions, by arguing about which holes to block up ...



... or you can just cap the fossil fuels coming out of the tap.

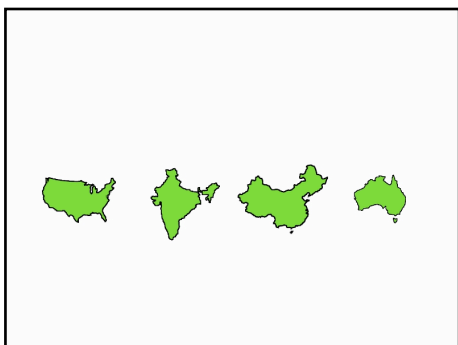


To do this, you make the fossil fuel companies buy permits.

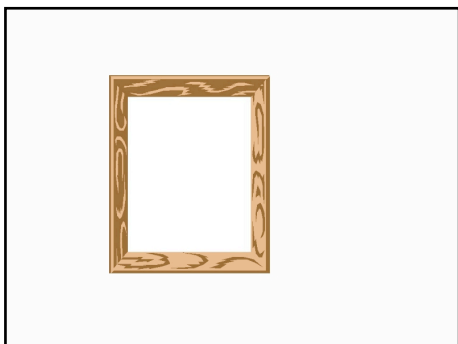


The size of the cap tells you how many permits you sell.

Each tonne of coal, each barrel of oil, generates an exact amount of CO₂ when it's burnt. So we can control emissions without looking at emissions at all; just control the fossil fuels. Forget about the sprinkler holes; the tap does the work.



Of course, it's no good if we do this but China doesn't. The climate talks are trying to tie together commitments between *lots* of countries. The poor countries want help to cope with something that hasn't been their fault. But the USA doesn't want to give money to anyone. And India won't act unless China does. Meanwhile Japan and Australia - whoa, stop. Look up.

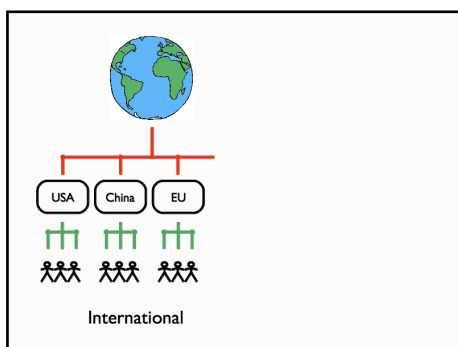


Is there a frame here? Yes. We all tend to look through the frame that sees the world as being made up of countries.

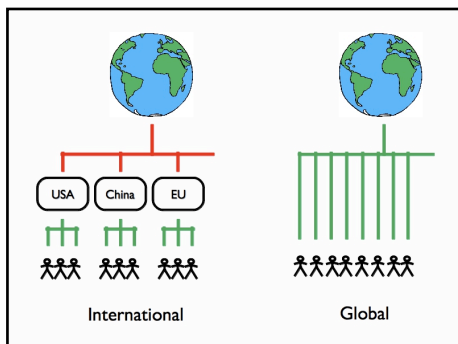


This is the second frame I'll talk about.

Inside this frame the natural thing to look for is international agreements. But what's outside this frame?



Instead of trying to tie together national efforts and targets in an inter-national system ...



... what about a single, worldwide system for the planet as a whole?

A *global* approach would shortcut all the inter-national posturing and game-playing.

And surely global emergencies require global action?



After all, it's global warming, not international warming.

How do we keep 80% of fossil fuels in the ground?

So: here's how to keep 80% of the fossil fuels in the ground. Work out how much emissions we can have each year, so that the area under the curve is the 20% (that's about what's needed to deliver the 2 degrees target). That gives a cap or limit each year for emissions. Issue permits for that amount, and auction these to fossil fuel companies. And do all this globally, by a single body like the UN on behalf of all humanity. And then share the auction money out equally to all the people of the world.

Cap the carbon

by auctioning fossil fuel extraction permits

Share the income

equally to all adults

capandshare.org

That's it. This approach is called Cap & Share. Cap the carbon, Share the income. Let's just go through that again. Cap the emissions - with a global carbon budget, one that will get us to 2 degrees, and each year issue permits for that amount. Fossil fuel companies have to buy permits for the carbon content of the fossil fuel they extract. Then share the auction income out equally.

Why the 'Share' ?



We pay more for fuel
But we get that money back

Now why do we have that final bit, the Share bit? Well, that way it doesn't cost us anything. You see, the fossil fuel companies will put up fuel prices, to cover the cost of buying the permits. So we'll end up paying more for things. But if we share out all the money, we get it all back. We pay higher prices, but we get all that money back. And why share it out *equally*? Well, sharing it out equally is fair, in the same robust sense that one person one vote is fair.

	 A Above average emissions	 B Below average emissions
Cost in higher fuel prices	£ 150	£ 50

But there's a twist here. I said we pay higher prices, but we get all that money back, like a 'carbon cashback'. But that's only what happens on average.

In fact there's a flow of money from rich to poor. Why? Well, suppose A is rich and B is poor. A uses lots of carbon, both directly and indirectly. So A pays more for good with embedded carbon - say £150 a year. B uses a lot less carbon, so is affected less. Say B pays £50 a year more in higher prices.

	 A Above average emissions	 B Below average emissions
Cost in higher fuel prices	£ 150	£ 50
Carbon cashback	£ 100	£ 100
'Profit or loss'	£ -50	£ 50

But the payout is the same for everyone (£100), so the result is that A is £50 worse off, but B is £50 better off. On average it evens out, but if you have a lower than average carbon footprint, like B, you'll come out ahead.

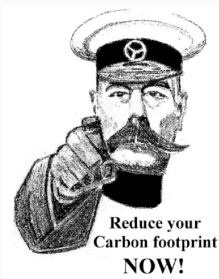
There's a flow of money from 'rich' A's to 'poor' B's	
and there are more B's than A's !	

There's a flow of money from rich A's to poor B's (or more accurately, from high emitters to low emitters). And notice that there are more B's than A's (roughly, because there are many more poor people than rich people). The majority of people will be better off.

Look up
Wise up
Cheer up

Cap & Share is just an idea, but it's an example of what I'd call 'wising up'. It's not enough to be *technically* savvy. Our ideas also need to be *politically* savvy, and *psychologically* savvy.

Do Your Bit



What do I mean by psychologically savvy? Well, take 'the idea of 'doing your bit'. I could say a lot about this idea, but for the moment, just look at the *psychology* of 'doing your bit':

Do Your Bit



Stressed



Guilty



Resentful



Despairing

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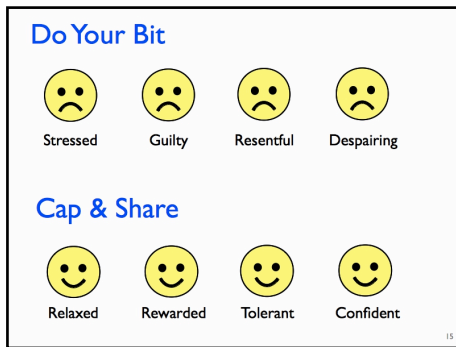
It's no fun; you're always stressed, obsessing about your kettle or your heating.

You feel guilty, because global warming is all your fault.

But even as you feel guilty for not doing enough, you can see many others doing even less, or nothing at all, so you feel resentful.

You despair, because the mismatch between the huge problem and any one person's tiny contribution is all too obvious.

This psychology is *terrible*. Contrast that with C&S:



You can relax and forget about it, go about your daily life. There's no need to monitor your emissions - it's all taken care of by the cap.

Any carbon you use is within the safe overall limit or cap, so you don't need to feel guilty. If you *do* use less carbon you'll save money, but still get the same cashback. So low carbon usage is now rewarded, not undermined.

There's no need to be resentful of rich people using more carbon: it doesn't bust the cap, they're not trashing the planet. And they are now paying for it. It's all part of a shared system.

And you can be confident that climate change is being tackled effectively, which reduces fear of the future; on the contrary you can have a feeling of 'hey, we did it'.

Isn't that a better deal, *psychologically*?



We also have to wise up *politically*. Good ideas are no use if we can't get them adopted. This brings us back to that question at the beginning: How can we influence those fossil fuel companies?

For Cap & Share to work we'd need fossil fuel companies to sign up - to agree to buy permits to cover the (carbon content of) the fossil fuels they extract. Why on earth would they do this?

Political possibilities

- Legislation
- (Self-motivated) consumer pressure
- Climate-safe (cf fair trade)
- Divestment / moral criticism
- Litigation
- Supply chains
- Alliances

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One route is legislation. The UN might request national legislation as a condition for releasing the cashback funds for the population of that nation. One could envisage national populations pushing for this, despite pressure from vested interests resisting it. Remember, the majority of the population gains from this, before we even get to moral arguments.

However, Cap & Share doesn't rely on ratification by nations. Fossil fuel companies might sign up even in the absence of legislation. Why would they do *that*? In order to label their fuels 'climate-safe' (similar to 'fair trade' goods or 'dolphin friendly' tuna). Because those that refuse to sign up are a clear target for divestment campaigns and more general confrontation on moral grounds. This is a clear-cut, unambiguous request: if you don't say yes, then you're saying no. Legal challenges are also an up-and-coming trend.

And it doesn't stop with fossil fuel companies. We can extend this by calling for *other* corporations, starting with energy companies, to be climate-safe too, meaning that they only used climate-safe fuels. NGOs would investigate and highlight supply chains (much as they do now for palm oil).

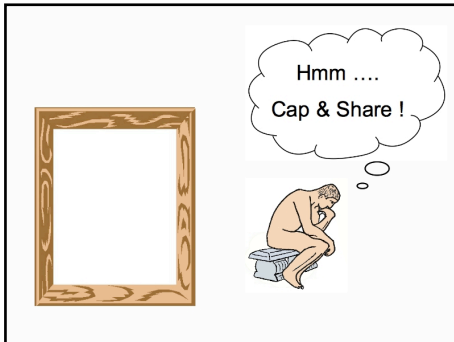
And in all this, the flow of money from rich to poor helps to tackle world poverty and inequality. Politically, that means that climate campaigners can team up with those campaigning against poverty and inequality.

Now, none of these tactics is guaranteed to work; they're simply tools available to overcome the obvious sources of resistance.

To be politically savvy, we have to recognise the power of opposing vested interests, and recruit allies to overcome it. This will be a political fight, but the 'share' element of Cap & Share provides incentives to help line up forces on our side.

Look up
Wise up
Cheer up

Finally, if we look up, and wise up, we'll have good reasons to cheer up too.



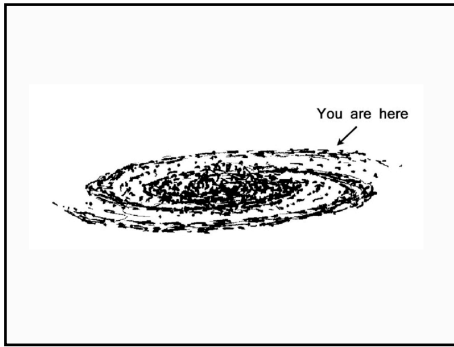
When we stand back, we can come up with new ideas. That can give us the confidence that we've got ideas that are more robust and savvy than we've been used to. It'll still be a fight, but we'll have a fighting chance.



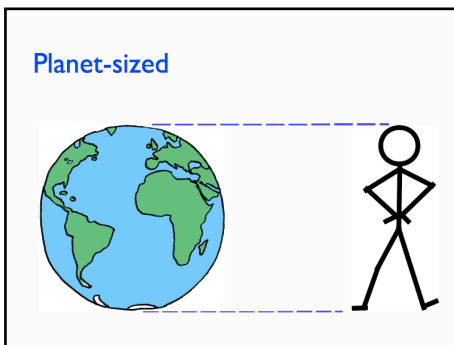
And we're bound to be gloomy if we accept the framing that tackling climate change is a cost, that it's somehow opposed to progress. It all seems hopeless, especially if you think that we might depend for our very survival on financial markets. It's easy to think, 'we're doomed'. But when we regard climate action as insurance, being prepared, being prudent; we can feel more upbeat, we can feel more in control.



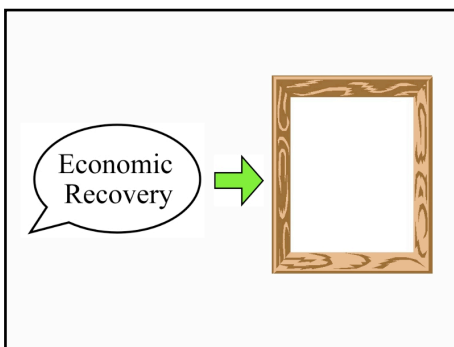
When we treat it as the right thing to do, we can stand tall again, we can look our children in the eye.



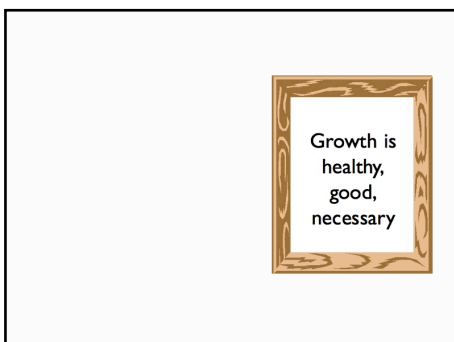
And I'll end by sharing one other thing with you. Stand *right* back, and look at the *really* big picture. We've done pretty well, as a species, haven't we? Flying to the moon, measuring the universe. Onwards and upwards. It's a story we can be proud of.



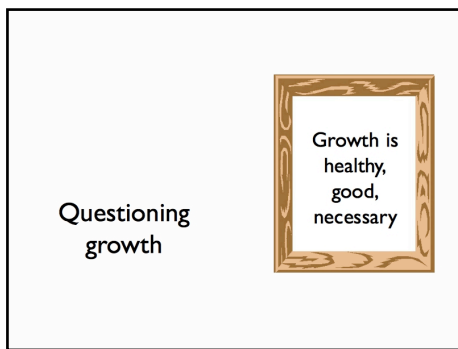
But now we're bumping up against the finite size of the planet. And that's a problem, because we can't stop; we're hooked on growth. We all know that growth can't go on forever on a finite planet, but we try to brush this under the carpet. There's a lot of framing about growth. This framing is everywhere, reinforced by the very language we use.



For example, the phrase 'economic recovery' suggests that a lack of growth is an illness: something you *recover* from.

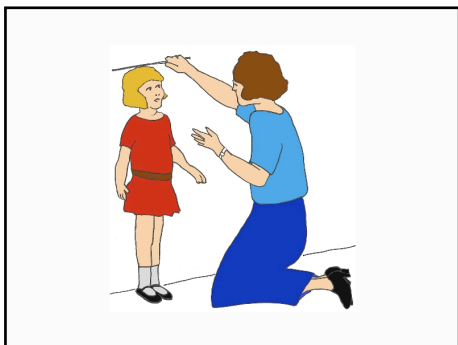


What lies outside this frame?



Questioning growth. In the dominant frame, questioning growth is seen as quixotic, deluded.

We need to get beyond this.



Now, growth isn't *bad*: a child grows, and we celebrate this, perhaps by marking progress up a wall. But in adulthood, growth gives way to maintaining health and developing in other ways. Growth, in other words, is something that happens in childhood, and is good only up to a point. When you outgrow growth, you arrive at maturity.



And this is where we are in our story. In this story, in the long history of humankind, that turning point is here and now. This is the point at which we reach finite limits of the planet, and adapt to this new situation. Here is where we swop growth for being grown up. Here, right now in this generation, is the coming of age of our species.

It's an exciting time to be alive. Let's all make the most of it.

Let's all look up, wise up, cheer up.

Thank you.