



## **Feedback on Climate Change Strategy (September 2021)**

Prepared for

**Stevenage Borough Council**

**By HEART Community Group**

**[www.HEARTCommunityGroup.org](http://www.HEARTCommunityGroup.org)**

**October 2021**

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## Preamble

We understand that Stevenage is a small Council, with finite resources.

Nothing in this report implies any criticism or judgement towards members of the Council.

We are grateful to you for your hard work so far!

We hope you find this report helpful, and would be delighted to make a presentation to Council.

**HEART Community Group**

**11 October 2021**



The Pasque Flower is the County Flower of Hertfordshire. As its name suggests, it blooms around Easter. It is now rare, and endangered.

## Strengths of the SBC Strategy

In your current Strategy, we applaud the focus on:

- Climate Emergency and the need for radical action
- Community-led initiatives
- Social justice and equality
- Community wealth building
- Plans to increase tree cover
- Actions to protect and improve biodiversity
- Buying less stuff
- Working with schools and youth groups
- Sustainable food systems

You've already had some useful feedback from Friends of the Earth, which could be characterised as "How to have a Better 'Column 2' Climate Strategy" (see page 10 for a definition of what we mean by this. So, we won't duplicate that.

Our feedback focuses more on the need to **shift the paradigm, and prioritise Adaptation and Resilience Measures – as well as working towards Net Zero.**

## Weaknesses of the SBC Strategy

Your Strategy is about as good as others we've seen in Hertfordshire, and better than many.

It has some strengths, as detailed in the previous section.

However, you've started with a premise, and the premise is:

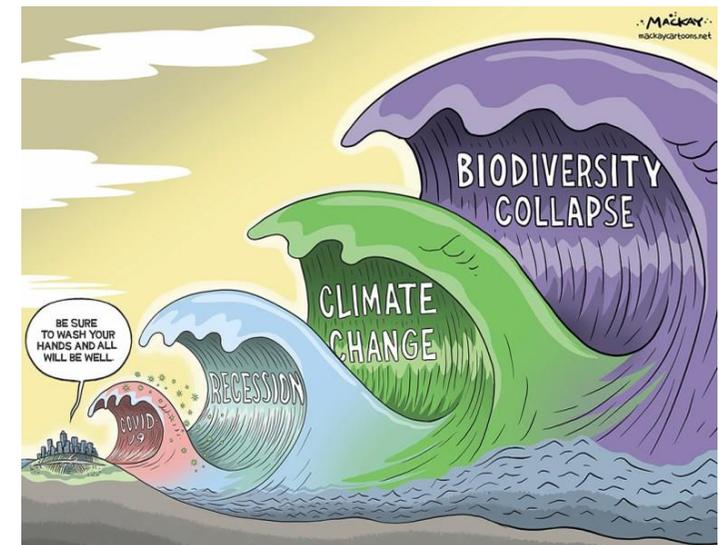
*"How can we reduce emissions and reach net zero?"*

All your actions and strategies understandably flow from this premise. We invite you to question and broaden this starting point. To add the question:

*"How can we prepare and adapt now to create more climate resilient communities across Stevenage?"*

The challenge is not limited to climate change. Society is becoming increasingly fragile. As you know, we are facing a series of interconnected predicaments:

- ✓ Climate Change – and associated extreme weather events
- ✓ Collapse of bio-diversity and eco-systems
- ✓ Zoonotic diseases (e.g. Covid)
- ✓ Economic fragility
- ✓ Increasing social injustice
- ✓ Resource depletion
- ✓ Crisis of Meaning
- ✓ Disconnection and Polarisation



SBC's Climate Strategy does not yet reflect the existential nature of the multiple and inter-connected threats. It assumes that our way of life will pretty much continue on as now – but just “greener”.

We believe there is an urgent need to focus significantly more on Adaptation and Preparation for Resilience now – whilst keeping up all Mitigation efforts.

There is also a moral obligation to begin to consider worst-case scenarios, and the inevitable social injustice that will arise from these. Instead of seeing the climate problem as one felt by future generations, we need to start focusing on what could happen **tomorrow, next month or next year**. To do this, we must better understand, appreciate and acknowledge the vulnerability of modern society – and address this vulnerability at its core.

If we somehow miraculously reached Net Zero emissions **tomorrow morning** – **but we still continued with ‘business as usual’ we would still be in a great deal of trouble**. We must go deeper than that – because of three things:

- Overshoot
- Tipping Points
- Feedback Loops

We need radical transformation. Experts agree that many of the impacts of climate change are already ‘baked in’, regardless of our success in reducing carbon emissions. It is rational to expect that things will get worse before (and if) they get better.

This article from George Monbiot from September 2021 sums it up well:

[Earth's tipping points could be closer than we think. Our current plans won't work | George Monbiot | The Guardian](#)



*“The target that much of the world is now adopting for climate action – net zero by 2050 – begins to look neither rational nor safe”*

## What do we mean by Adaptation?

Imagine a car racing toward a brick wall, too fast to stop in time. The driver has two primary tools—the brakes, which will slow the car down, and the airbags, which will cushion the passengers when they crash.

Mitigation is the brakes—it will slow climate change and reduce the overall magnitude of change. Adaptation is the airbags—it might protect and cushion people and nature somewhat as climate change progresses.

## We need both.

We would recommend that you adopt twin foci – a Race to Net Zero, coupled with a Race to Resilience, as advocated by Baroness Brown:

*“I would like to see us launch a race for resilience. We have a race for zero that's been launched in association with the COP, where we're getting businesses and organizations and community groups and local authorities all signing up to say they're going to get to net zero. I would like to see businesses and local authorities and community groups all signing up to say that we're going to be prepared for the changes that the climate is going to be bring. We've got to be prepared to make sure we live in a successful and resilient country and that we contribute to making the rest of the globe a successful and resilient world.”*

[https://www.youtube.com/watch?v=Sk\\_bCwH4OS8&t=654s](https://www.youtube.com/watch?v=Sk_bCwH4OS8&t=654s)

***Baroness Brown, Deputy Chair of the Committee on Climate Change***



## Global Leaders on COP26: Climate Emergency Demands Policy Shift to Adaptation

In September 2021, Adaptation measures were given an even stronger priority by Global Leaders who met in Rotterdam in the run up to COP26, and concluded:

Global Leaders called for COP26 to elevate adaptation action onto an equal footing with efforts to cut emissions because of the escalating climate emergency.

*“The success of COP26 will be determined by whether, for the first time, climate adaptation is elevated to an equal priority with the mitigation of carbon emissions”*

[Global Leaders on COP26: Climate Emergency Demands Policy Shift to Adaptation - Global Center on Adaptation \(gca.org\)](https://www.gca.org/news/global-leaders-on-cop26-climate-emergency-demands-policy-shift-to-adaptation)

## Why Net Zero isn't Enough

Sir James Bevan, Head of the Environment Agency, says we need urgent need for change if humanity is to survive (Feb 2021)

The climate emergency is already hitting “worst case scenario” levels that if left unchecked will lead to the collapse of ecosystems, with dire consequences for humanity, according to the chief executive of the Environment Agency. He urged politicians to take action to adapt to the “inevitable” impacts of the climate emergency.

[More than Zero: why Net Zero alone won't save the planet - and what will - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/more-than-zero-why-net-zero-alone-won-t-save-the-planet-and-what-will)



## Our Recommendations

Our recommendations all centre around the urgent need for Adaptation *as well as* Mitigation

Your 8 Themes prioritise the Race to Net-Zero. This is great AND we believe you need to place at least equal priority on the Race to Resilience, or Adaptation measures.

The strategy as it stands is what we would describe as a ‘Column 2’ Strategy (see overleaf)

The current strategy suggests that your current understanding of **Adaptation** is limited to:

- Individual behaviour changes – diet, travel and lifestyle
- Skills, jobs and economic recovery

**We invite you to broaden your understanding of Adaptation** to include resilience to worst-case scenarios, including extreme weather events, warming, food security, flooding and large numbers of climate refugees.

The UK Climate Change Committee is clear on the need to understand and act on this. See our summary of their recent reports on climate risk and preparedness.

In addition, as more and more people wake up to just how much of an emergency this is, we will see a massive impact on mental health. Planning how to support people with this should also be part of your strategy.

**Our recommendations could be summarised as strategies to strengthen Local Community Resilience.**

**Before we start with our feedback, take a look at the table overleaf. Which column are you in? Your answer is important, because all of your priorities, actions and strategies will flow from it. This could be an extremely useful discussion to have in Stevenage Borough Council.**

Interestingly, in our conversations with Local Authorities, people will answer “Officially? Column 2”. When asked what their answer *really* is, most say “Somewhere between Columns 3 and 4”.

### Which Column are you in? The 4 Paradigms:

Climate Response:	Column 1 Mainstream (RAPIDLY SHRINKING)	Column 2 Business as Usual but Greener	Column 3 Emergency	Column 4 Collapse Aware
Paradigm:	Business as usual. Yes, it's a problem but not perceived as an emergency. Far away and long into the future.	Everybody must do their bit. Fly less. Eat less meat. Carbon capture and geo-engineering projects. Work towards 2050 Paris Agreement targets. Policy changes imposed by Governments.	Peaceful civil disobedience Extinction Rebellion, School Strikers, Earth Movement <b>Mitigation and Adaptation.</b> If we wait for Governments it will be too late. Transformative Adaptation.	Too late for mitigation due to locked-in warming and feedback loops. Prepare now for community resilience – as well as mitigation in order to 'extend the glide' Deep Adaptation – Outer and Inner <b>We need to build community resilience</b>
Political & Economic System:	Industrial Growth & Extractive Capitalism	BUILD BACK BETTER Capitalism	Citizen Assemblies	Business As Usual System and 'civilised' society collapses – probably messy and very different depending on where you live. Any new economy will be hyper-local and community-based
What's most important NOW?	Recovering Economy post-Covid	Net-Zero by 2050 Being perceived as a 'leader' – resulting in much greenwashing	Advocate and campaign for radical change. Transformative Adaptation	Adaptation & Preparation now for climate-resilience Deep Adaptation. Build community resilience.
Likely outcome?	Carbon emissions still growing. Tipping points passed, 3 – 4 degrees warming baked in	Lots of Greenwashing Economic Growth still the sacred cow	?	Much suffering; social injustice; conflict over scarce resources; mass migration; famine; authoritarian Governments? Dramatic drop in human population. <b>May result in transition to a better way of life (albeit with much suffering in the process)</b>
Paul Chefurka's 'Stage of Awakening'	Asleep	Awareness of one fundamental problem – usually GHG emissions	Awareness of many problems – and interconnectedness of these	Awareness that our predicament encompasses all aspects of Life – including the 'stories' of our industrialised civilization. Pro Life (all Life – not just human). <b>Realisation that we ARE nature</b> , and that it is not simply a resource and dumping ground for humans. Learning to reconnect with our deeper selves, each other, and all of Nature. A shift from 'I' to 'We'.

## Factors to Consider under the heading of Local Community Resilience

1. Community Education, Engagement & Mental Health
2. Food Security
3. A Resilient Local Economy
4. Town Planning
5. Climate Migrants
6. Flooding
7. Risks from Warming
8. Climate Resilient Buildings and Infrastructure

**The future is increasingly TUNA: turbulent, uncertain, novel and ambiguous**

[\*UK Climate Risk Conference: Is the UK on track to adapt to climate change?\*](#)

The risks include health, food security, violent conflict, international law and governance, and public health. The world is more vulnerable to the transmission and amplification of risk than it was.

The potential for disruption is high given the complexity of our global systems today, and the uncertainty of how they will develop over the next decade.

## Community Education, Engagement & Mental Health

### 1.1 Community Education and Engagement

We haven't said a great deal about this – as we're sure that you are already expert in community engagement best practice. We simply point you to some useful resources to explore:

Here are 5 inspiring examples of community engagement in climate action from April 2021:

<https://www.commonplace.is/blog/5-examples-of-community-engagement-in-climate-action>

#### **Creating meaningful engagement with communities on climate change**

Organised by the LGA in partnership with Design Council, the “Creating meaningful engagement with communities on climate change” webinar was the first in a series of four delivered as part of the Design in the Public Sector programme. The series is intended to scale design approaches across the public sector and stimulate new thinking on collective climate change matters.

<https://www.local.gov.uk/creating-meaningful-engagement-communities-climate-change>

#### **Working together to adapt to a changing climate: flood and coast Key learning from an evidence review on community engagement on climate adaptation**

This example focuses on flooding

[https://assets.publishing.service.gov.uk/media/60916d8f8fa8f51b98b1513d/Community\\_engagement\\_on\\_climate\\_adaptation\\_slide\\_pack\\_3.pdf](https://assets.publishing.service.gov.uk/media/60916d8f8fa8f51b98b1513d/Community_engagement_on_climate_adaptation_slide_pack_3.pdf)

## 1.2 Climate Resilience Hubs, or Climate Emergency Centres (CEC's)

Increasingly, these local physical hubs or spaces are popping up over the UK, and they collaborate, network and learn from each other. There are none so far in Hertfordshire.

They are described as *“the establishment of empty buildings as inspirational community hubs for the benefit of people and planet.”* In our view, these are an excellent adaptation measure to encourage in your local communities, and a great way to use empty buildings or shops. Some of the existing examples have taken over closed-down banks and betting shops that were in the High Street. They don't need to be all about the climate either – many have cafes, and offer regular classes, workshops and places for the community to meet. Some councils offer a 100% reduction in property rates payable, which is often seen as attractive by the property owners.

There are a number of physical premises now - including Ilford East London, Staines, Lewes, Swindon, Guildford and Godalming.

There are teams in 40+ towns and cities in the UK who are in various stages of setting up a legal entity such as a Community Interest Company or Charity, and setting up working groups. There is a great deal of useful information here:

<https://climateemergencycentre.co.uk/>

Here's a little film about Guildford's Hub:

[\(478\) We Are Zero Carbon Guildford - YouTube](#)

We particularly love the example in Staines called Talking Tree shown in the image here. A local carpenter created the logo from the wood that had been used to board up the previous empty shop.



### 1.3 Mental Health

Adaptation isn't just about the practical, outer dimension. We speak to many people across Hertfordshire who are struggling with climate anxiety and eco-grief. This will almost inevitably worsen, as outlined in a major recent study.

[Four in 10 young people fear having children due to climate crisis | Climate crisis | The Guardian](#)

[Rise of 'eco-anxiety' affecting more and more children says Bath climate psychologist](#)

**75% of young people are experiencing fear about the future.**

**Three-quarters agreed with the statement “the future is frightening”**

**50% of young people agree or strongly agree with the statement “humanity is doomed”**

**19 September 2021**

The study, entitled Young People's Voices on Climate Anxiety, Government Betrayal and Moral Injury: A Global Phenomenon, has been released. The survey was conducted and analysed by seven academic institutions in the UK, Europe and the US, including the University of Bath, the University of East Anglia, and the Oxford Health NHS Foundation Trust.



In HEART Community Group, we prioritise telling the truth, even when this might be uncomfortable.

Amongst Governments, there is sometimes an understandable wish to 'protect' the public from knowing how bad things really are, in case of panic, wide-spread depression or despair. This is a mistake, in our view.

Anxiety about climate change and its impacts has been discussed more widely in mainstream media in the last few months. For both children and adults, the main message coming from psychologists is that we can become more open about our feelings, rather than suppress them and pretend we are feeling fine. Although greater discussion of that in the mainstream is a step forward, there is an assumption that people positively engage in society because we believe we will make situations better.

Instead, many people engage because we are deeply motivated to reduce suffering, and build community - or because we believe in doing what's good and true, whatever the situation or outcome.

The dominant ideology of modern cultures, where material progress is assumed to be good and uncontested underlies the limited ways motivation is discussed.

Many people want to live according to their unfolding truth, help others in bold ways, and be more creative and expressive precisely because they anticipate greater disruptions to their way of life

### **Scholars' Warning December 2020**

This Scholar's Warning has now been signed by over 700 scientists, scholars and academics globally. It urges us to tell the truth and invite each other into conversations about the possibility of societal disruptions and collapse.

*"As scientists and scholars from around the world, we call on policymakers to engage with the risk of disruption and even collapse of societies. After five years failing to reduce emissions in line with the Paris climate accord, we must now face the consequences. While bold and fair efforts to cut emissions and naturally drawdown carbon are essential, researchers in many areas consider societal collapse a credible scenario this century. Different views exist on the location, extent, timing, permanence and cause of disruptions, but the way modern societies exploit people and nature is a common concern. Only if policymakers begin to discuss this threat of societal collapse might we begin to reduce its likelihood, speed, severity, harm to the most vulnerable – and to nature."*

It's worth watching this short video:

<https://www.youtube.com/watch?v=fOfrHoqXLBO&feature=youtu.be>

Here is a recent well-researched article published in a scientific journal that challenges the mainstream assumption that we shouldn't be discussing extreme disruptions, or even the possibility of societal collapse:

<https://ojs.aut.ac.nz/ata/article/view/187>

**HEART Community Group** includes two core team members who are very experienced psychologists, and we regularly support people – at no cost- who are struggling to come to terms with our predicaments.

We also offer free workshops, webinars and retreats, and we're finding that people really value the opportunity to connect deeply with others and share their hopes and fears. We regularly run RECONNECTION calls on zoom, as well as online workshops focusing on Emotional Resilience.

“The Edge” is a free 4-day in-person retreat for people who wish to inquire, in good company, into the questions:

- So, what's most important now?
- What's my 'thread' to pick up? and
- How can I make a difference?

The experience is designed to support people in being able to stand tall and look our interconnected predicaments in the face – from a place of courage, resilience and creativity.

To deepen their inquiry into what matters most now. It's facilitated by Kimberley Hare in partnership with HEART Community Group. Upcoming dates are 27 – 30 November 2021, with a venue in Hertfordshire. You can find out more here:

[The Edge - Heart of Thriving](#)

*“We need learn how to love better: to love ourselves, each other and nature. We don't love well enough yet. And yet we have so much potential. There is a courage and a heroism in every human heart that can be woken up” Terry Patten*

## Food Security

The UK is vulnerable because of how much of the food we need is currently imported.

HSBC report analysis: "It is widely believed that 50% of food is imported into the UK,"

The 50% statistic underrepresents the reality, In reality, "80% of food is imported into the UK," The lower number "defines food processed in the UK as UK food, even though the ingredients may have been imported. For example, tea is processed in the UK, but we grow no tea — it is all imported. When ingredients are counted as imported, the real figure is over 80%."



### **Pasta shortages after dire wheat harvest attributed to climate change**

8th October 2021

[Pasta shortages in supermarkets attributed to climate change | The Independent](#)



14 September 2021

**Food supplies will struggle to keep pace with the world's growing population as climate change sends temperatures soaring and droughts intensify, according to a report from Chatham House.**

[World Faces Growing Risk of Food Shortages Due to Climate Change \(yahooo.com\)](#)

Wildlife conservationist Chris Packham has described Britain's relationship to food as "broken" after spotting imported pears that were grown in Argentina.

The naturalist made the comments in response to a pot of chopped pears that had travelled over 10,000 miles before arriving in the UK. The pot of pears were stamped: "Pears grown in Argentina. Packed in Thailand."



*"It's broken isn't it? We've broken what we do with food? Pears grow in the U.K. They could grow in our gardens. We could walk out and pick them, wipe them and eat them.  
No chemicals, no processing, no plastic, no planes, no sell by dates, Just fresh fruit.  
God help us."*

Additional links here about food security:

<https://threader.app/thread/1433829191405826052>

## The obvious solution is to grow more food locally.

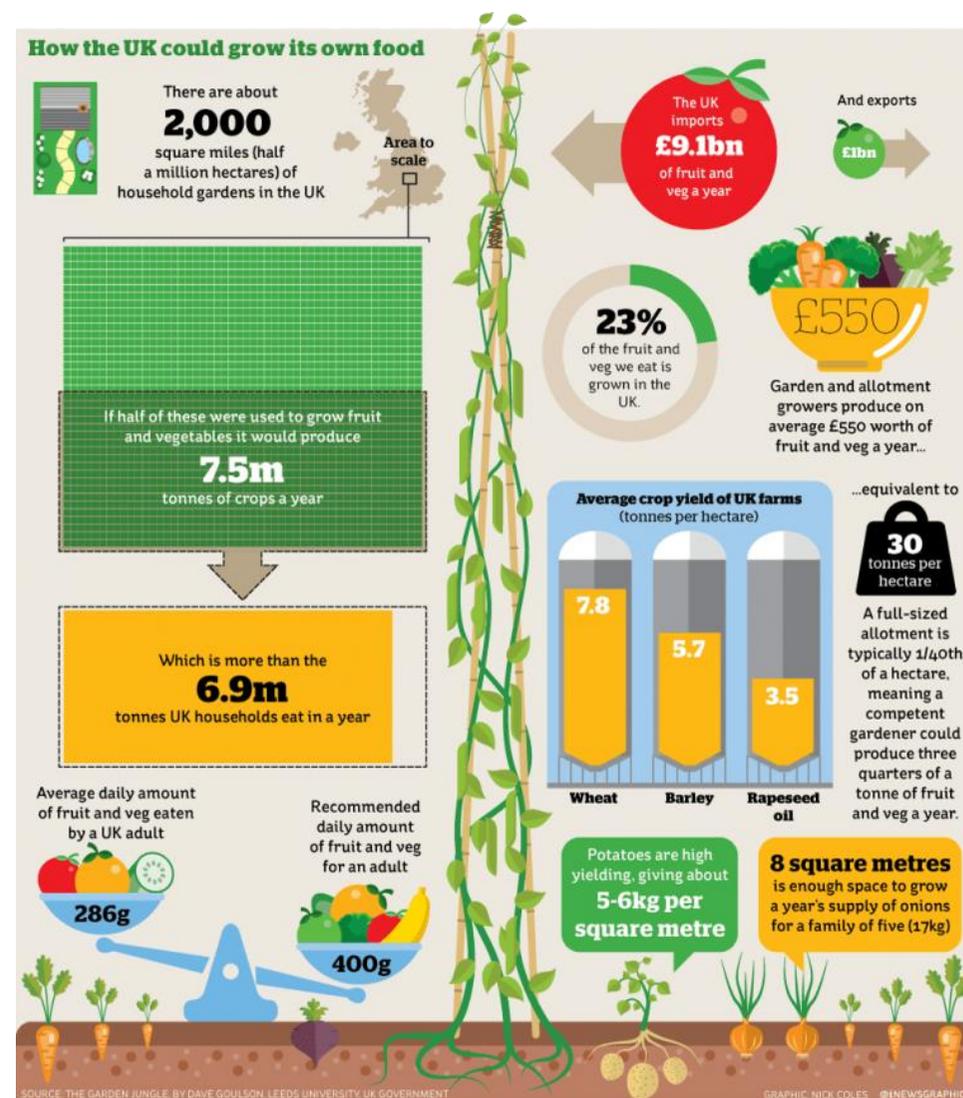
*“People who survive extreme disruptions do so because their supply chains were short and local, and they knew how to DO stuff!”*

The image here shows what could be possible in the UK.

Local Community Gardens are also a fabulous way to encourage community-building, increase resilience and learn the skills many people have never learned.

One of our core team in HEART Community Group, Kate, started a community garden in St Albans, her home town. ‘Grow Community – Sopwell’ is a local group of volunteers in Sopwell ward, St Albans, supporting people to grow their own food at home and in community spaces. They enjoy a bit of cooking along the way – and love to involve all ages including children – in #GrowYourOwn. We enjoy putting on events about growing food and looking after our local community spaces to:

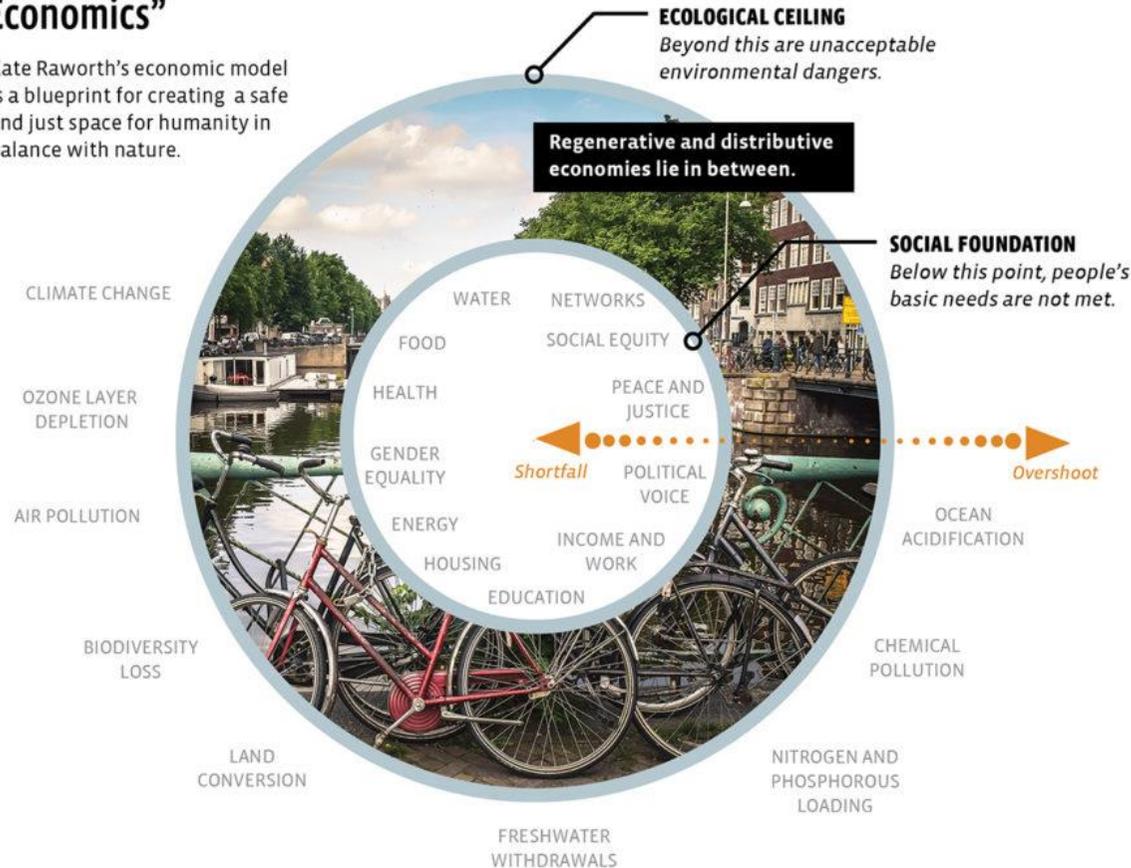
- Promote the benefits of sustainable, localised food production.
- Promote the benefit of reduced food waste.
- Encourage and enable local residents to grow their own food at home and in community spaces, reduce food waste, share surplus food in the community and with local charity groups.
- Promote wildlife conservation and restoration projects and encourage local residents to participate in these projects.
- Connect ongoing initiatives and bring the community together through activities related to the above aims (e.g. growing and preserving food, building infrastructure, competitions, providing food for local events, wildlife events).



## A Resilient Local Economy

### This Is “Doughnut Economics”

Kate Raworth’s economic model is a blueprint for creating a safe and just space for humanity in balance with nature.



SOURCE: KATE RAWORTH, DOUGHNUT ECONOMICS  
 PHOTO BY JACE AFSOON  
 INFOGRAPHIC BY TRACY MATSUE LOEFFELHOLZ/YES! MAGAZINE

Economics experts are increasingly recommending that we must switch urgently to a more circular economy, rather than our current infinite growth economy with its reliance on global supply chains. In our view, one of the best models is Kate Raworth’s Doughnut Economics.

<https://doughnuteconomics.org/>

There are already many cities and towns where this model is being tried, including Amsterdam and Barcelona, with promising signs.

<https://www.youtube.com/watch?v=QSCn3KW-Cas>

This video is highly recommended: Kate Raworth and Roman Krznaric in conversation with Vicki Robin as part of her “**What Could Possibly Go Right?**” podcast series (from 21 September 2021)

## Town Planning

There is growing interest in changing the way local areas plan. The '20-minute Neighbourhood' concept has

Creating places where most of people's daily needs can be met within short walk or cycle

### Multiple benefits include:

- more active, improving mental and physical health
- traffic is reduced
- air quality improved
- local businesses thrive
- people see more of their neighbours = community & cooperation strengthens

The TCPA (Town & Country Planning Association) working in coalition with partners to learn from already implemented 20 minute neighbourhoods, to see how this can be introduced here in context of English planning system. <https://www.tcpa.org.uk/the-20-minute-neighbourhood>



Working with partners the TCPA are creating resources to help councils and communities that want to introduce 20 minute neighbourhoods to their area, including a free guide to creating 20-minute neighbourhoods.

## Climate Migrants/Refugees

Recent analysis shows that climate migration may soon be the biggest climate challenge of our time. See this recent article in the FT from 4 October 2021.

<https://www.paragkhanna.com/migration-will-soon-be-the-biggest-climate-challenge-of-our-time/>

**It has been estimated that for every additional degree of global warming, one billion climate refugees will be created.**

Climate disasters ‘caused more internal displacement than war’ in 2020. Refugee organisation says 30m new displacements last year were due to floods, storms or wildfires. There were more than twice as many people displaced within their own country as forced out of their country as refugees, the IDMC said. The number is the highest on record, but in line with its steady rise over the past decade.

[Norwegian Refugee Council’s Internal Displacement Monitoring Centre \(IDMC\).](#)

During a year that was the warmest on record, 5 million more people were displaced than in 2019.

We obviously cannot advise on how you should handle additional demand in Stevenage over the coming years, and we realise that you will be guided by national Government policy.

We’d simply say there is an urgent case for exploring and considering this.



## Flooding

As you know, climate change means that Flooding is an increasingly likely risk.

The London Fire Brigade responded to 114 calls to flooding across the capital today (4<sup>th</sup> October 2021)

<https://twitter.com/i/status/1445261139701551104>

See here for our Executive Summary of the 3<sup>rd</sup> Risk Assessment (June 2021) from the UK Climate Change Committee:

<https://heartcommunitygroup.org/executive-summary-ccc-risk-assessment-3-june-2021/>



We are not on track:  
The CCC's latest assessments



### EMISSIONS

Not on track to meet Net Zero targets by 2050

Will the government's Net Zero Strategy be

- Ambitious enough?
- Published before COP26?

Top priorities: CCS\*/industry, transport, agriculture & buildings

### RISK & ADAPTATION

Adaptation action has failed to keep pace with the worsening reality of climate risk

Eight priorities identified for action over the next two years

- Including biodiversity, natural carbon stores, agriculture, power supply, overheating buildings, **multiple overseas risks**
- (Well-developed policies are in place for water scarcity & flooding)

Plan for high-impact risks, e.g. **tipping points, cascading risks**

Need for...

**Public Engagement Programme for Adaptation  
UK Resilience Strategy**

According to this Risk Assessment, there are well-developed policies in place already for water scarcity and flooding.

You will know about your own local risk assessment in Stevenage.

Progress-in-reducing-emissions-2021-Report-to-Parliament.pdf; Independent-Assessment-of-UK-Climate-Risk-Advice-to-Govt-for-CCRA3-CCC.pdf ; Progress-in-adapting-to-climate-change-2021-Report-to-Parliament.pdf \*Carbon capture & storage

## Risks from Warming

If we reach an additional 2 degrees of warming over the pre-industrial average, scientists tell us that substantial numbers of people will be dying off heatstroke – in the UK and Europe.

New analysis assesses the impact of climate change on the deadly combination of heat and humidity, measured as the “wet bulb” temperature (WBT). Once this reaches 35C, the human body cannot cool itself by sweating and even fit people sitting in the shade will die within six hours.

As the climate warms in places like the UK, people can take sensible precautions against heat – slowing down, drinking more water, and seeking cool refuges. Air conditioning is one of the last lines of defence but comes with its own problems such as very high energy demands. Cooling systems are expected to dramatically increase electricity demand.

## Climate Resilient Buildings and Infrastructure

Current buildings policies are locking in vulnerability and irreversible impacts. For example, half a million new homes have been built in the UK in the last five years that are not resilient to the high temperatures we’ll see in the future. They all face a costly retro-fit to make them safe and habitable, and it’s FOUR times more expensive to retrofit than it would have been if we’d included these adaptation measures at the new-build stage.

This article by the UN Environment Programme recommends five ways to make buildings climate-change-resilient:

<https://www.unep.org/news-and-stories/story/5-ways-make-buildings-climate-change-resilient>

- Resilience to heatwaves
- Resilience to drought
- Resilience to coastal flooding and sea-level rise
- Resilience to storms, tornadoes, cyclones and hurricanes
- Resilience to cold

## Appendix – Different Types of Adaptation

Adaptation is starting to happen across the UK – but it’s slow, patchy and mostly rather “shallow”.

Here is a table comparing three different approaches:

### 3 Approaches to Adaptation

Shallow Adaptation	Deep Adaptation	Transformative Adaptation
<p><b>Actions to manage the predictable risks of climate change impacts - within the ‘business as usual’ paradigm.</b></p> <p><b>Assumptions: Society will continue largely as it currently is</b></p> <p>Examples:</p> <ul style="list-style-type: none"> <li>• Climate resilient buildings and homes</li> <li>• Flood protection &amp; sea walls</li> <li>• Disaster and emergency planning</li> <li>• Planning for business continuity</li> <li>• Infrastructure upgrades</li> </ul> <p><i>“It’s an engineering problem, and has engineering solutions” (Rex Tillerson, ex-CEO of ExxonMobil and former US Secretary of State)</i></p>	<p><b>Acceptance that business as usual cannot be sustained, and preparing now for what may be a very different way of life.</b></p> <p><b>Assumptions: Collapse is likely and already unfolding around the world</b></p> <p>Works to ‘soften the landing’ and respond lovingly to our predicaments by building resilient local communities. Strong emphasis on psychological, emotional and spiritual responses.</p> <p>20-minute neighbourhoods and local community resilience. Local food and water security. Climate refugees (millions? billions?)</p> <p>See 4R’s</p> <ul style="list-style-type: none"> <li>• Resilience</li> <li>• Relinquishment</li> <li>• Restoration</li> <li>• Reconciliation/Reconnection</li> </ul> <p>Interconnected with everything – including our human ‘stories’ of infinite progress and human domination over nature.</p>	<p>Focuses on transforming society <b>whether or not</b> collapse happens, because the current system is insanely ecocidal and socially unjust.</p> <p><b>Assumptions: None. Works in the uncertainty.</b></p> <p>.</p> <p><b>Work with nature</b> – e.g. restore wetlands and mangrove swamps rather than building ever higher sea walls.</p> <p>Relocalisation, local food production, permaculture, ewilding.</p> <p>Similar in many ways to Transition Town movement – but with more of a macro and political perspective.</p> <p>Involves taking things into our own hands using some of the tools used by XR e.g.</p> <ul style="list-style-type: none"> <li>• Citizens’ Assemblies</li> <li>• NVDA</li> <li>• Guerilla food gardening</li> </ul>

## What is Deep Adaptation?

**Deep Adaptation** is a rapidly growing global community and framework that includes *inner* (psychological and emotional) as well as *outer* (practical) responses and measures. HEART Community Group regularly facilitates webinars on Deep Adaptation, and we are happy to provide more information on what people and communities can do under each of the 4R's:



## Deep Adaptation: The 4 R's

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### **RESILIENCE**

*What is it that we most value and how can we keep that?  
How can we build and sustain our resilience – both inner  
and outer? What's MOST important now?*

### **RELINQUISHMENT**

*What can we give up (even if we value it) in order not to  
make matters worse?*

### **RESTORATION**

*What can we bring back that has been lost?*

### **RECONCILIATION/RECONNECTION**

*What can we do to make peace with, love and support  
others? How can we live with kindness, joy and peace?*