

## Towards Resilience 2.0 - by Laurence Moss [copyright free]

The notion of a Climate Emergency focusses our attention on readying ourselves for the likely effects of climate change – the effects on atmosphere, weather extremes, biodiversity loss etc.

Hence becoming '**Resilient**' to those expected changes.

**Resilience 1.0**, the initial response, was to ensure that we prepared our village.

- Are watercourses clear to drain [or prevent] flooding from exceptional rainfall
- Are unhealthy trees identified and trimmed to prevent them from falling and blocking traffic then some more 'what ifs'
- How would we organise to clear excessive snow from our routes? Is there enough grit in the salt bins?

Then a focus on the more vulnerable residents

- How would we help the vulnerable and infirm manage? How will they get food and medicines, and keep warm

So Resilience 'measures' are a checklist of things we need to prepare for in a practical way and for protocols should the worst come to the worst. Be prepared!

### Once these ideas are planned, we come to wider notions of Resilience 2.0 .

Some of these are planning for the kind of Society we hope to emerge from the likely chaos. Many ideas are quite practical whilst some people might think them rather 'romantic', or even pie in the sky.

Carl Sagan said something to the effect that if you cannot breathe the air [ie pollution] or drink the water, then nothing else mattered.

- We need to highlight the **air pollution** – from industry, traffic and domestic coal/wood burning – and the damage it does to our health, and introduce measures to lower pollution levels.
- We need to protect our **water supplies**. Privatisation has enabled Water Companies to pump sewage into our rivers. Agriculture – especially pig and chicken farming, and crops – has either allowed animal waste to percolate down into the aquifers where we source our drinking water, or flush agro-chemicals into our water courses into the sea. We are also very wasteful with the quantity of water we use, and scientists have the measure of 'Day Zero' for water – when we use more that we can provide.

**Housing** – we all need somewhere to live, and the Government identifies a need for 62,000 new homes in this area in the next 20 years.

Suffolk is notable for having about 300,000 households

The latest data on energy performance certificates show that 39% EPCs for lower-tier local authorities in Suffolk were at band C or above, compared to an average of 40% for England and Wales (2021 data). So 61% were D and below. A future target from Government is that you would find it difficult to sell, and certainly not rent a house below level D.

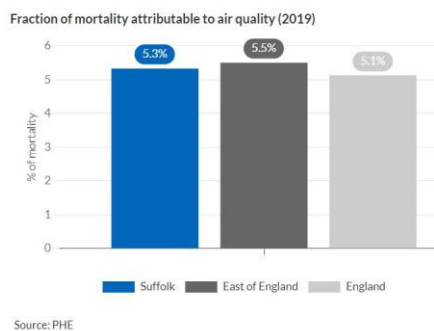
Proportion of households fuel poor 14.3% in East Suffolk

Fuel poverty is closely linked to the thermal efficiency of a home. 14.5% of Suffolk households were in fuel poverty in 2019 (48,684 homes).

It is estimated that around 10% of deaths are due to fuel poverty, and 21.5% to cold housing. This would mean for Suffolk that around 450 excess winter deaths over ten years may be due to fuel poverty, and around 970 deaths to cold housing.

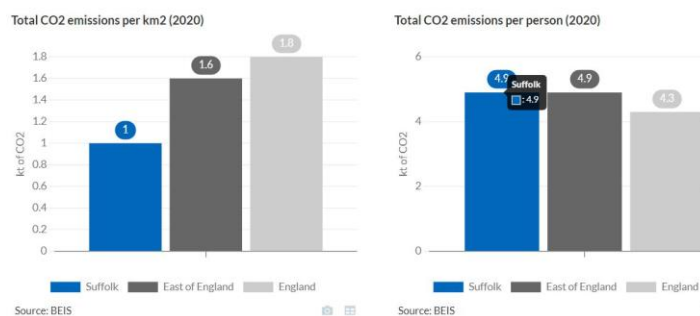
There are several local schemes for the loan of heat imaging cameras which identify the loss of expensive heat from windows/ walls/ roofs -  
 So we need to improve the quality of existing housing, identify places for future building, and identify the demographic for whom they are being built.

**Air pollution** – Without any obvious Industrial pollution emitters, both Suffolk and the East of England have a higher than average [for England] fraction of mortality attributable to air quality [2019]. Why's that?



The greatest source of air pollution used to be Transport – eg. diesel lorries – but that has now been overtaken by domestic heating – eg wood burning and coal/oil.  
 The fuel price problem of 2022/23 will increase the use of wood burning.  
 An improvement in rates of House Insulation can only result in reduced demand for fuels which are ‘burned’.

Carbon emissions are in fact falling for Suffolk, but still higher per person than for England. This is undesirable for our CO2 targets, but let's be clear, this is not a proxy for air pollution.



Air pollution from ‘fires’ contains many dangerous chemicals, even if you have gone out of your way to purchase kiln dried hardwood! The Carbon emission comes from the burning and release of CO2 but the pollution comes from the release of the poisons in the wood.

**Soils:** Our ability to grow our own food depends on the quality of our soils; look at the effort that gardeners put in to improving their soils with compost etc. Modern agricultural methods are a result of the pressure put of farmers to increase yields, especially using biocides and fertilisers, which over the years has resulted in poorer soils and fewer pollinators. Food-miles is a notion of the distance we transport food to our door/shop – the transporting of food usually involves lorries if not jet cargo-planes and the resulting air pollution. For a sustainable society we need to reduce food-miles and try to grow and buy local produce, whether organic or not. [Organic only denotes that the farmer looks after the quality of their soil, and not use chemicals].

**What can you and the Community do about this?**

1. Education and information, whether leaflets like this or posters or publicising where to get the info on a web site.  
 They need to know about the potential problems of Climate Change and their effect on the Community/your village.

2. Grow your own – in the garden or allotment – or encourage local gardeners to sell [or donate] their produce in the village. Avoid food-waste. See Field-to-fork schemes.
3. More people will be burning more wood domestically because of the fuel emergency, but notwithstanding that, one should try to reduce the amount of wood used, especially where you have close neighbours.
4. There should be some local discussion about the replacement for fossil fuels in your district. Heat pumps and solar panels are not everyone's ideal or affordable solution. There are Neighbourhood Energy schemes, sharing costs and power produced, and Community Micro-grids.
5. House insulation, especially external cladding is efficient in insulating houses, but some people have aesthetic objections. The Conservation and Preservation authorities need to be engaged in discussion / pressure to allow some cladding, which will only minimally alter the appearance of heritage housing. The same with double glazed windows. Heat cameras are often available on loan to identify heat-leaking buildings.
6. Land-use is a local issue. The Council/Govt. have identified the number of houses that need to be built in Suffolk in the coming years. Local villages either wait for the developers to make the decisions of what is built and where it's built, or be more proactive. There are communities where they have used local neighbourhood plans to take more control. There are communities where they have built [modern] Almshouses which enable them to specify who can [or cannot] live in them – a tax efficient scheme, exempt from Right to Buy, to ensure that only local people can buy them, and not 'refugees' from expensive London.
7. There are government targets for stopping the sale of polluting or carbon producing items by 2030 or 2035, in line with an attempt to be net zero by 2050. The change to electric vehicles [Evs] is a result of this, and one should expect to pay more for petrol and diesel in future. There is a target to stop selling [new] gas stoves/boilers, and [new] oil boilers, so villagers need to start thinking about [and saving for] a replacement. These targets and the implications for villagers need to be discussed locally if not nationally.
8. Community Benefit Societies exist to help advise local people in schemes of self help with retrofitting houses and generating electricity. There are also sources of help for bulk buying of materials for improving the infrastructure of your village, should you go for a DIY approach.
9. talk to children and young people – it's their future that is being influenced. Talk about coping with change – be prepared to be challenged by their comments, about your coping with change.

### **Sources of information:**

<https://www.suffolkobservatory.info/> - this is goldmine of local data if you need official data to support your campaigns.

<https://www.uos.ac.uk/content/suffolk-sustainability-institute> – our local university – academics researching and teaching for a sustainable Suffolk

<https://www.greensuffolk.org/news/suffolk-climate-emergency-plan/> - greensuffolk is a great source of information about anything green in suffolk – this link is about a climate emergency plan

<https://www.eastsuffolk.gov.uk/news/helping-deliver-sustainable-homes-in-east-suffolk/> East Suffolk Council site

<https://www.warmhomessuffolk.org/> - helping local people get and keep warm.

<https://lowenergybuildings.org.uk/> - links to exemplars of good practice

<https://ifarm.fi/> - farming and technology.

<https://www.groundwork.org.uk/climate-action/> - <https://www.groundwork.org.uk/hubs/east/> very useful green site for all.

<https://energysavingtrust.org.uk/> for practical advice on insulation and saving energy.

<https://www.soilassociation.org/> for information about soils and organics

<https://www.suffolkbis.org.uk/> suffolk biodiversity service

