A note for the York Plan Inquiry

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Climate change forces its way into the headlines

In 2014, the BBC was criticised for downplaying climate change

> False Balance in Climate Reporting Reveals BBC's Sensitivity to Political Pressure

At the same time the House of Commons Science and Technology Committee said:

> We found the role of the BBC, as the leading public service broadcaster, to be central to public understanding but were disappointed to find it lacked a clear understanding of the information needs of its audience with regards to climate science.

The pressure of climate-related events, such as floods, droughts, storms, wildfires & etc. has now meant the BBC takes global warming seriously. Coverage in the past week includes:

> Climate change: 'Bleak' outlook as carbon emissions gap grows
>
> Climate Change: Are we passing some key 'tipping points'?
>
> Climate in crisis

Future generations will bear the cost

Last year the BBC reported Lord Deben, Chair of the Committee on Climate Change in

> Climate change: 'Next generation will bear the cost'.

The BBC was warned similarly by Lord Putnam a decade ago:

> Climate change: What price will future generations pay?

The National Planning Policy Framework and climate change

Under the heading *Achieving sustainable development*, the National Planning Policy Framework (2012) says

> International and national bodies have set out broad principles of sustainable development. Resolution 42/187 of the United Nations General Assembly defined sustainable development as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

In 2019, it is clear that climate change is “compromising the ability of future generations to meet their own needs”.

Paragraph 6 of the NPPF contains:

> The purpose of the planning system is to contribute to the achievement of sustainable development.

And paragraph 7 contains:

> ● an environmental role – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy.

Emissions of greenhouse gases, the main cause of climate change, must be curbed to move to ‘a low carbon economy’ and this is necessary so that future generations can ‘meet their own needs’.

A plan that causes large emissions of greenhouse gases is contrary to the NPPF.

The question here is: What is large?

The fair remaining carbon budget and yearly carbon emissions

Using the IPCC Special Report, Global Warming of 1.5 ºC, I have calculated that the remaining carbon budget per person to keep Earth's temperature rise below 1.5ºC is 47 tonnes CO2e. In Zero Carbon Sooner, Professor Tim Jackson calls this the ‘fair remaining carbon budget’ and estimates its value as 49 tonnes CO2e. However, it should be noted that these figures may be too optimistic (and the budgets smaller) because the climate models, used in the IPCC Special Report, underestimate climate change because of missing feedbacks. . (See Carbon budgets: A straightforward answer from DECC.)

How does this budget – less than 50 tonnes CO2e - compare with yearly personal emissions likely in the York Local Plan? Fortunately, there is a documented example in York, which can give a pointer to this.

The example is the housing development at Derwenthorpe. This development was billed as ‘sustainable’ and efforts were made to reduce energy use and consequent emissions. Thanks to funding from the Joseph Rowntree Foundation, research by the Stockholm Environment Institute (SEI) looked at the carbon footprints of a sample of residents. The average footprint was 14.52 tonnes CO2e per resident. This is enough to exhaust the fair remaining carbon budget for 1.5ºC in less than 5 years.

Worse, the SEI research did not take account of the greenhouse gases emitted as a result of the building the development: the embodied carbon in the buildings. This is likely to be in the region of 27 tonnes CO2e per resident, meaning the average new resident of Derwenthorpe exhausts a personal fair carbon budget in roughly two years.

I had interesting correspondence with York City Council in 2008 regarding the embodied carbon in buildings in 2008. I understood YCC had bought software that might help in the assessment of embodied carbon, I have found no reference to embodied carbon in the planning documents that I have downloaded.

Government carbon accounting is dishonestly misused

There are valid reasons why the UK Government asks the Department of Business, Energy and Information Services to compile greenhouse gas emissions on a territorial basis. This measure only counts emissions that directly arise from activity within the UK. It omits the emissions from making imports - such as cars from Germany, steel from China or cement from India. Emissions from international aviation and shipping are also omitted.

In contrast to the emissions associated with UK consumption as mentioned above, territorial emissions are easier and quicker to estimate. With estimates from other countries, the global picture of total emissions can be more easily assessed. However, it is misleading to rely on falling territorial emissions for the UK to claim world leadership in the fight against climate change: Ignoring the effects of the UK's imports on climate change is dishonest. To claim climate leadership, the UK must show emissions caused by UK consumption are falling sufficiently fast. They are not.

A tonne of steel used in the UK contributes to 'compromising the ability of future generations to meet their own needs', whether it is made in India or Scunthorpe.

Causes of personal high carbon emissions

There are many ways in which town planning can shape sustainability. One is to demand that developments do not contravene the NPPF by creating large quantities of greenhouse gases and so 'compromising the ability of future generations to meet their own needs'.

This means preventing building with high embodied carbon.

It also means that there should be little provision in housing developments for private vehicles because car owning households have very high carbon footprints. Indeed, the House of Commons Science and Technology Committee has noted:

> In the long-term, widespread personal vehicle ownership does not appear to be compatible with significant decarbonisation.

The Committee may have rejected the idea that even battery electric vehicles (BEVs) can play a significant part in decarbonisation – at least until until electricity is less carbon intensive and the emissions from manufacture are much smaller. In May this year, Carbon Brief published an article giving the CO2 emissions of a Nissan Leaf EV as 115 gm CO2e per kilometre: Driving average distances (11,141 kms/yr) over an average lifetime of (13.9 years) means that one Nissan Leaf in the UK is responsible for 17.8 tonnes of CO2e. For the time being, the widespread use of EVs cannot have enough impact on decarbonisation.

Most of the development in the York Local Plan allows for widespread ownership of personal vehicles and building with high embodied. It is enabling lifestyles with high carbon emissions at a time when climate change is threatening a sixth mass extinction.

The wealthy create more carbon emissions than the poor

Professor Mark Tewdyr-Jones caused a stir in the media by suggesting that York and three other northern cities should be now considered part of London. This relates to and issue of equity to York's current residents, which I have addressed in my submission – and another attempted submission. This version of the York Local Plan will have the effect of allowing wealthier people to come to York exiling the less wealthy to housing in surrounding places like Selby and further afield.

The choice of Housing market Area (HMA) and the calculation of the Objectively Assessment of Need (OAN) drives the plan to this result. The HMA includes the City of York and the area of Selby District Council but the work of Professor Tewdyr suggests that London should be also be considered as part of the HMA. The OAN does not adequately address this issue, if at all.

Affluent people generate much higher emissions than poor people and it is certain that importing wealthy people to replace the exiled poor will increase the consumption emissions of York residents. The total effect is a matter for further research.

The current plan should be rejected.

This Local Plan clearly encourages lifestyles with high carbon emissions, which will be 'compromising the ability of future generations to meet their own needs.

This is contrary to the NPPF.

The current plan should be rejected.