

Inconvenient Truths - Nottingham City Council's Climate Change Policy

Introduction

On Monday 9th October the City Council is to discuss and vote on a comprehensive package of climate change policies. On the morning before the official council meeting there is an open consultation discussion on these policies. The committee papers can be downloaded from:

<http://open.nottinghamcity.gov.uk/comm/agenda.asp?1642>

Reading the list of policies it seems very impressive and wide ranging and there are many individual points which are very positive ...but..... on a deeper consideration the effect is underwhelming - particularly when put in the context of the scale of the problems facing us.

Planning for too little too late

Before judging the policies it's necessary to look at the scale of the task facing the City Council – and facing all of us who live in Nottingham - as well as the speed at which the tasks of 'climate change adjustment' must be achieved.

As one might expect the City Council Report accepts and follows the national government. It 'welcomes' - the national government policy goals - which are to "reduce greenhouse gas emissions by 60% by 2050". A few years ago this was generally accepted as what would be necessary to not exceed a 2 degree C global temperature increase. However, the problem with this goal is that it (a) considerably underestimates the scale of the reduction required and (b) by setting the target for 45 years in the future avoids the immediate challenge for the next 5 years - which is the real and quite massive challenge.

In other words, the City Council, following national government policy, is trailing behind the latest climate change science. The scientists are warning that the action that must be taken is very much greater and very considerably faster than thought a few years ago if there is to be any hope of not exceeding a 2 degree C increase in global temperatures above pre-industrial levels. (The 2 degrees has itself somewhat arbitrarily been chosen as a target based on a judgement that while it might be dangerous, it will probably not be catastrophic - in the sense of going beyond the brink of 'run away' climate change where the process runs out of control possibly to an 'abrupt tipping point' which might, for example, cut off the warming effect of the Gulf Stream to Western Europe).

60% for 2050 is an out of date figure

However, in regards to the 60% reduction figure - this is based on an assumption that a doubling of CO₂ emissions from pre-industrial levels to about 550 parts per million of CO₂ will mean a high chance of not exceeding a 2 degree C increase in global temperatures. Although the politicians haven't acknowledged it the climate scientists now regard the figure as out of date. They are now telling us that the figure to be aimed at is not 550 ppm CO₂ but 400ppm CO₂ - and even that may be far too high:

“...the latest scientific understanding of correlations between concentration and temperature suggest that even at 400ppmv CO₂, there is, approximately, a 50% chance of exceeding the 2°C target. The implications of this emerging scientific consensus for the UK's stated position on climate change are difficult to exaggerate. Unless the UK and the EU are to abandon their commitment to 2°C, they must continue to either fudge the implications, or acknowledge that “aiming for a global average temperature increase of no more than 2°C” demands that they establish targets in line with stabilising atmospheric concentrations of CO₂ at levels as close to 400ppmv as possible.”

http://www.tyndall.ac.uk/publications/briefing_notes/Livingwithacarbonbudget.pdf

Moreover this dramatic reduction has to be achieved almost immediately. In September 2006 the respected Tyndall Centre for Climate Change Research released a report that had been commissioned by the Friends of the Earth. Its concluding paragraph reads as follows:

“Finally, if there is one important message we want to re-iterate from the research, it is the absolute urgency with which we must act to curb dramatically our carbon emissions. It is an act either of negligence or irresponsibility for policymakers to continually refer to a 2050 target as the key driver in addressing climate change. The real challenge we face is in directing society towards a low-carbon pathway by 2010-12, and thereafter driving down carbon intensity at an unprecedented 9% per annum (around 6% per annum in terms of absolute carbon emissions), for the following two decades.”

It is in this context the recommendations of the city council are utterly, overwhelming, totally....INADEQUATE. They are plans for too little, delivered too late. (This is of course an inadequacy that Nottingham city council shares with just about every policy making authority in the world).

The Need for a Crash Programme – over the next 5 years and then thereafter

It is difficult to overstate the scale of the emergency that we face - internationally, nationally and locally. The city is not faced with the need to make dramatic reductions over the next 45 years but over the next 4 to 6 years. In this regard, even its apparently dramatic goal of making itself "carbon neutral" in 10 years would be taking far too long! ('Carbon neutrality' is a concept that is not all it seems to be either - on this more later...)

There are to be sure a huge list of policies to be found in the council papers - appendix A contains about 60 recommendations of which 49 are acceptance.

However, a closer look reveals that:

The Big Spending Departments Dragging their Feet – or Ignoring Climate Change

Progress in the bigger spending departments that make up 3/4 of the city council's activities are sketchy at the best - in the field of social services, housing and health in particular the response is more than threadbare, it is almost totally absent, apart from preparing for the health effects of summer heatwaves on vulnerable people - even though climate change ***and*** the massive costs of adjusting to it represents a major threat to the most vulnerable people in the city. (Fuel Poverty is on the increase after several years of falling - and this is partly the result of rising energy prices that are, in turn, partly the result of rising carbon prices in the European Unions Emissions Trading Scheme). It clearly has not occurred to the City Council or the Social Services Department that adjustment to climate change will involve costs – and when they fall on vulnerable people these people will need help with coping.

Nor is Social Services alone in requiring a kick up the backside. Leisure and Community Services, it appears, have at best, a piecemeal approach to climate and environmental issues. Recommendation Number 42 is a clear rebuke to their managers for failure to act on previous appeals to get the department's act together act together on the environment – even though it is this department that is urgently required to help mobilise the population of the city of Nottingham for the host of measures needed to deal with this emergency.

Of course, Education is the biggest spending department of all. It can point to 30 Eco-schools and examples of some energy efficiency measures and recycling - however there are 120 schools in the city limits and the response to the recommendations in Appendix A show a

clear reluctance and/or inability, because of lack of powers, at Departmental Level to encourage the others to act more decisively.

Policies not thought through

A close reading of the policy proposals also reveals that some have not been thought through. Part of the problem in this regard is that far from regarding Climate Change and Energy Use as **the** overarching policy imperative around which all departmental policies and strategies must in future be moulded, the council wants to graft on climate change as an added consideration within its existing policy priority framework.

The result appears hasty and unconsidered in regard to details. An example of this superficial thinking, which grafts climate change into other policies, is the idea of extending "*Nottingham in Bloom*" so that it encompasses roof gardens, trees for shade and Bio-Fuels. While it is clear that vegetables grown locally reduce food miles it's not entirely clear how more flowers in roof gardens will help mitigate climate change. Of course, more trees for shade on hot days makes sense - but the extension of Nottingham in Bloom to encompass "biofuels" appears to be odd. Bio-gas digesters from waste from Nottingham city parks might produce a tiny amount of fuel – but....

.....to make any significant contribution at all to carbon neutral space heating requirement there would have to be a massive forestation programme to provide anything like an adequate amount to significantly impact on real fuel consumption in the city - as well as a massive programme to install wood burning stoves. A good idea, wood pellet stoves are definitely a positive - but is the scale of action required any more anything to do with 'Nottingham in Bloom'?

Or perhaps the policy makers wanted us to understand bio-fuels created from rapeseed oil? Unfortunately, on reasonable assumptions it would require a land area equal to that of the entire UK under rapeseed to run just 25 million cars an average 9,000 miles a year on biodiesel. It's not unreasonable to assume then that one would have to put the entire county of Nottinghamshire under rapeseed oil to keep the city and counties cars running – or a very considerable area, which would then not be available for food crops, to make any significant contribution. By comparison a million daffodil bulbs are a tiny operation.

But then perhaps the city can always import its fuels – Appendix A notes that Nottingham City Transport could get bio-fuels "from Hull" transported on the River Trent. And where are the Hull suppliers of biofuel getting their supplies from, one might ask. In Europe, rapeseed oil is a primary source of biofuel. But it is considerably more expensive to produce than palm oil, a popular alternative. Palm oil is a key export for Indonesia which, together with Malaysia, is the world's leading producer of crude palm oil, responsible for 85 percent of production. However, in order to supply just 1 percent of the EU's fuel needs, a 3 million hectare plantation would be required, according to a new study by the World Wide Fund for Nature (WWF) - and this would involve clearing huge areas of rainforest.....with a very negative effect on climate change on balance. The point to being made here is that if we are to take the policies on bio-fuels seriously we need to go into the detail like this – and one is left wondering when reading the policy papers whether the councillors or their officials have an adequate awareness of these kind of crucial details.

Carbon Neutrality – what does it actually mean?

These doubts extend to whether Nottingham's policy makers really know what they are doing when they commit themselves to becoming a "carbon neutral" organisation in ten years time. As already mentioned, from the point of view of the climate science and the 2 degree C

target, 5 years is the necessary time scale. But that's by no means all that needs to be said. Here again there is a lot of devil in the detail:

Before they commit themselves to it do they know what carbon neutrality means? I don't see any explanations here. In fact, 'Carbon neutrality' is the new eco-label used to appeal to climate aware consumers and politicians. Crucially, it does not mean that all the activities of the city council as an organisation would always involve zero carbon emissions. No politician or official expects to be entirely doing without their cars or the occasional flight to a conference for example – these will unavoidably involve some fossil fuels. Whenever a new school is built it will require concrete and steel – and hence carbon emissions in building it.

So how is this resolved in a carbon neutral organisation? The answer is that an organisation can be 'carbon neutral' and still be involved in activities that emit carbon dioxide and other greenhouse gases. This is achieved by having any carbon emissions generated at one place offset by carbon savings made somewhere else - which would most likely not be in Nottingham at all, and is more likely than not to be abroad - out of sight and away from close scrutiny a 'carbon neutral' Nottingham might have its 'offsets' as tree plantations in developing countries for example.

Carbon Offsetting – Working with slippery concepts

'Carbon neutrality' thus depends on having "carbon offset" schemes in place to deal with what are termed 'unavoidable' emissions. (Obviously 'unavoidable' is itself a concept that needs probing - in practice, 'unavoidable' will become what it is decided to match against an offset scheme). Offset activities can vary widely; the most frequent are planting trees and energy conservation activities. However this is a very slippery concept because it is a policy that depends, crucially, on (1) the methodology for calculating the amount of carbon that 'needs to be offset' for 'carbon neutrality' to be attained - and then, (2) a second calculation, calculating how much of another activity (e.g. tree plantation or energy saving) is required to achieve the cancelling out equation.

So there is not one calculation that can go wrong, be fudged or entered up fraudulently - there are two....

In practice what this is likely to mean is that the city will make a contract with an organisation selling carbon offsets. These companies often offer carbon calculators to work out how much their customers 'need to offset' for each type of activity. Thus if a councillor flies to a conference the offset will be calculated using a standardised procedure which tots up the councillor's share of emissions for the flight. This is a common feature of such arrangements. Unfortunately, different calculators by different companies and researchers come to wildly different conclusions about how much carbon any activity like a flight involves. (Indeed the science on this matter is unclear as carbon emitted at high altitudes has a greater effect on global temperatures but it is difficult to estimate by how much). Clearly, this will give the scrutiny panels a lot of work. And it won't stop there....because there are then huge problems in calculating what is required in making the second stage of the equation.

There's a reasonable wikipedia description of some of the second stage issues at:

http://en.wikipedia.org/wiki/Carbon_Neutrality

According to wikipedia

"Some controversy surrounds carbon offsets, in particular tree planting projects, due to the uncertainty about the science and accounting of sequestration coupled with criticism from community groups living near projects who have in some cases been adversely affected.

Other community groups -- many from developing countries -- actively seek tree-planting materials and technical assistance. Then they voluntarily plant the trees to restore the productivity of their lands.

"Systems of accounting differ somewhat on what constitutes a valid offset between voluntary reduction systems and mandatory ones. Accounting of offsets may address the following basic areas, and it is in these areas where differences of opinion between emitters, regulators, enviros, and project developers typically exist:

Baseline - what scenario of emissions would occur in the absence of a proposed project?

Surplus - are the reductions already required by some other law or regulation?

Additional - Would the project have happened anyway?

Permanent - are some benefits of the reductions reversible (e.g. from cutting down trees)?

Leakage - does implementing the project cause higher emissions outside the project boundary?"

The words 'outside the project boundary' are not defined in wikipedia but mean, for example, the emissions from the people who are forced to move to make way for Nottingham's 'offset plantation', for example, and who might be obliged to take up a more carbon intensive lifestyle in an urban slum somewhere else.....

Much of the criticism are of forestry schemes in particular - for example that in some circumstances clearing the land to plant trees actually disturbs the soil in a way that releases more CO₂...or how you account for the fact that the trees that you are planting die eventually, releasing their CO₂ into the atmosphere again. (Given projections for an accelerating climate change it isn't unreasonable to think that quite a lot of the trees might die because of the climate change process itself - there are serious fears for the effects of drought on the Amazon at this time, for example.)

Is planting trees the answer?

There are serious dilemmas therefore. It is an example of the superficial thinking in this report that planting trees are frequently referred to as a way of mitigating climate change....well yes...sometimes, maybe. Certainly it is a very welcome idea to plant a lot of trees, as suggested, for the shade. To plant fruit trees would grow fruit close to home and reduce food miles. Trees can also produce bio-fuels for wood boilers. But we must beware of a simple minded idea that, ipso facto, tree growth mitigates climate change by absorbing CO₂. That is CSE climate science – and barely even at pass grade. The true situation depends on a lot of circumstances. To say that planting trees offsets fossil fuel use has been compared to the idea of drinking water to offset rising sea levels - clearly what you drink comes out quickly and eventually runs back into rivers and the sea. It is part of a cycle. In the same way planted trees are part of an active carbon cycle which takes place on the earth's surface. The next stage after growth is that the trees die and release the carbon. This may be in a relatively short time, particularly if there is a drought and they burn. The active carbon cycle is not comparable to keeping fossil fuels inactive as hydrocarbon rocks, liquids or gases locked up under the ground...

At the very least then the city, and campaigning groups, should be looking very critically at offset schemes.

Economic Development and Growth Policies which undo energy efficiency gains

Another concern with the city's policies is that they are all premised on the assumption that growth should be aimed for. There is a complete failure to think through the consequences of Nottingham's economic development strategies. To be sure there are lots of proposals to ensure that new developments like buildings are more energy efficient and there's a proposal to insist that all new developments have a 10% embedded renewable energy requirement.

However, living with a dramatically reduced carbon budget, poses major challenges from now on - which cannot be all attained only by increasing the efficiency of energy use. To use an analogy - if the energy efficiency of a car is doubled the effect is cancelled out if it travels twice as far - and rendered even more futile if there are twice the number of new, cheaper to run, energy efficient cars sold, and on the road. The energy efficiency revolution has to be combined with a 'sufficiency revolution' - to stop the growth and then reduce the sheer volume of material consumption. Otherwise efficiency measures are more than cancelled out.

In this regard Nottingham's economic strategy is highly damaging – what you will not find mentioned in this report are the plans that the new Broadmarsh Centre will double its shopping space, so that it equals Birmingham's Bullring, pulling in more customers from much further afield - while Trinity Square at the north side of the city centre is also being developed, as one can hardly fail to notice. There are hundreds of retail and leisure companies who are waiting for space in Nottingham and the city is taking steps to accommodate them by sanctioning an enormous and immensely energy and carbon intensive building boom. It is obvious that the extra travel and the extra consumption involves more energy use plus more greenhouse gases from the products that are sold. (Of course, a lot of the electronic toys and gizmos on sale were made in China - where the emissions involved in their production took place - which doesn't stop the emissions there being part of the global problem).

Energy Used in the Growth Process

As I pointed out at the discussion on Climate Change Policy organised after the showing of Al Gore's film, Inconvenient Truth, about half of energy use in an economy is associated with the growth process. This is rather like the energy used in a car – the fuel consumption is highest during acceleration. The growth process entails new processes and activities - involving new buildings, new machinery, new installations, new equipment and new processes - if you want more to sell more, you need more shops and in the process huge slabs of concrete and steel are erected - after that concrete has been produced with all the emissions involved in their production. The climate credibility of Nottingham city council is rather thin when one looks at the cranes and the changing sky line of the city centre.

The City that never sleeps – or turns the lights off

Nor is this all, on economic grounds the city has profiled itself though its night time economy. A number of years ago Nottingham declared itself to be a "24 hour City" - although this has enormous energy implications you will not find it discussed in the climate change document. A manic city that doesn't sleep at night uses more lights, more transport through the night, more workers using energy in work processes on night shifts in clubs, 24 hour shops, factories and hospitals, more ambulances - altogether a lot more emissions (not to mention light pollution, more accidents caused by tiredness and many health effects caused by the long term effects of sleeping outside of natural rhythms).

A mistaken emphasis on big organisations

The failure to understand the economic implications of climate change extends also to the apparent policy assumption that the solutions to the problem are high technology – to be

delivered by the city's large organisations. Nothing is further from the truth – it is these large organisations who have led us into this mess and they are mainly not fit for purpose in dealing with it. This is because there is a connection between scale and energy use – large organisations are usually geographically spread and operate over large distances – both internally and in terms of receiving supplies and supplying markets. Their transport, communications cost and hence energy usage is therefore large. They operate from large building establishments which typically require much energy in construction and in operation. They are also highly inflexible to local level conditions – with a tendency to impose homogenous procedures, irrespective of place. A McDonalds in Peking has much the same dishes as in Nottingham – which means that many non local ingredients must be brought in. Renewable energy systems are, by contrast, highly geographically specific – wind turbines must be located in the right places, unique places. Energy efficiency and water measures in buildings must also be designed and adapted to unique locations – not McDonalised, nor McNottinghamTrent University-sized. This requires local level decentralised approaches that depend on local level observation, local level skills and local level initiative. If cultivation, waste and garden patterning are also to be designed to fit the unique locations then the need for local level decision making becomes even greater.

The climate change technological revolution is not so much high science or high technology - rather it involves intermediate or low technologies in a decentralised process involving many small organisations and individuals. This will be even more the case when oil and gas depletion kick in even harder(see later).

A Wrong Emphasis – High Science and High Technology

Recommendation no. 58 says a huge amount about the assumptions, the culture and thought patterns of the city elite: " We recommend: (a) that Nottingham's development as a Science City should be geared towards the development of alternative technologies which minimise the impact we have on our climate and the wider environment; (b) that we work closely with the universities in exploring the possibility of becoming a centre for environmental research and development".

While it is true that there are opportunities for high level research and technological development there is absolutely no recognition in this document that many, perhaps most approaches to energy saving and carbon mitigation are low impact, low and intermediate technology solutions which require extensive training at manual and skilled trades level - in gardening, horticulture, building, plumbing, electricians etc - e.g. in organic growing, green approaches to sewerage, wood heating systems, installing solar thermal and solar electric systems, low impact building techniques etc. Manual and skilled manual employment is the very area of employment in which the city has been deficient for the last 30 years as its manufacturing sector has run down - leading to a chronic social crisis in the city's sink estates.

The failure to notice or understand the climate role of the community and voluntary sector

The beginnings of this local level community environment economy using manual skills has in many cases been pioneered by the voluntary and community sector – for example on allotments. These 'seedling' activities are crucial for restructuring the city around ecological imperatives. However, although “transforming neighbourhoods” is a policy theme in the city climate policy papers, the many small seedling eco-projects around the city are barely acknowledged in the council's policy papers. One can, charitably, read a mention of these local level initiatives as being implied in various references to the development of Green and Open Spaces – but you will not find the word “allotments” used once in this document – nor the word “community garden”.

What makes the pathetic response of the social and health services management to the climate change issue so galling is that for several years a host of voluntary sector organisations involving thousands of people have developed environmental and gardening projects at a neighbourhood level. They have had an explicit holistic agenda of promoting local food production (and hence reducing food miles) while also promoting healthy eating, greater physical activity for health, wellbeing, social capital formation, arts, culture, training and job creation for disadvantaged people. Some projects have also made connection with schools and young excluded people – as well as young people in the criminal justice system – while simultaneously addressing climate change through developing local food supplies. Where are they mentioned in this document that continually “congratulates” the city council itself for its ‘proud’ and ambitious achievements? I couldn’t find them there.

This isn’t a matter of offended vanity – it’s a failure at the level of the city elite to understand the importance of these initiatives for future strategy over climate change, a failure to recognise how to engage the ordinary people of Nottingham – including the most vulnerable people. It is the result of what appears to be the autistic self absorption at the elevated levels of the city’s policy and managerial hierarchy. Of course, the tiny numbers of the elite cannot be everywhere all at once – a local level decision making approach is by its nature decentralised to the lowest level – the emphasis of the city’s policy to “work with the largest 20 local organisations to extend the impact of environmental management” is because the city’s managers can only talk to a limited number of others, their peers. However, this is not where the action mainly is or will be.

Holistic Neighbourhood Strategies that cut across policy boundaries

As the neighbourhood level projects cross-cut so many fields they fall outside the city council’s highly specialised division of responsibilities - however it is just this holistic approach that is needed if approaches to climate change are to be viable. For example, eating local seasonally available food from farmers markets or allotments - rather than already prepared foods from supermarkets with huge food miles (and emissions) - means that people will need to be able to prepare and cook their food. This is both a healthy eating diet agenda (health), a self care and independence agenda(social services), it requires acquiring skills (training and education) and matches the environmental and climate change goal – but since it falls into so many fields it clearly doesn't fit or figure as a city council goal!

At the same time local greater rainfall in winter and drought in summer may be a challenge to the city’s gardeners. If, as the report indicates, there is a rising water table, then pumping up water from this table with windpower may be an important integration of food production and renewable energy development locally.

The Failure to consider the impact of oil and gas depletion on climate change.

In the last few years the consciousness that world production of oil and gas will peak very soon has increased. The idea has crept into policy papers and it is, for example, accepted by the French government, which dates peak oil at 2013. Perhaps more impressive still is that the peak oil idea is being accepted by the Pentagon. (See: “**The Pentagon and Peak Oil. A Military Literature Review**” by Sohbet Karbuz at <http://www.energybulletin.net/18056.html>)

Depleting oil and gas supplies makes our situation worse, not better. It is already clear that, as oil and gas become scarcer more coal will be used as a substitute. Since coal is the dirtier fuel that will mean, all other things being equal, that greenhouse gas emissions will rise. For any given amount of electricity used, the greenhouse gas content will be rising – unless the power source is from renewables.

Every three months, the UK DTI (Dept of Trade and Industry) publishes an update of UK energy statistics in a report called *Energy Trends*. Amongst other things, it details what percentage of electricity is produced from each primary source – coal, natural gas, net imports, nuclear and ‘oil, renewables and other’. It is no secret that to get through last winter without a gas-supply ‘incident’, the UK had every available coal-fired power station working full-throttle whilst cutting back on the gas-fired power stations as much as possible (see *Energy Trends*, June 2006 (PDF, 816 Kb), Chart 5.1 - Fuel used for electricity generation. This is available at <http://www.dti.gov.uk/energy/statistics/publications/trends/index.html>

The available data shows an approximate swing of 10% from natural gas to coal for Q1 which was last winter and it looks like this swing has remained for the rest of the year (2006). As of end of June 2006, UK gas production was down about 15% compared to the first six months of last year. At the time of writing it looks like it will show the swing from gas to coal is an all-year-round feature.

There is now voluminous information about the imminent peaks of oil and gas production. Suffice it here to say that there are more and more countries whose oil production is now in decline. The USA produces less than half of what it produced in 1970, despite advances in extraction techniques, and countries such as Egypt, Indonesia, Norway, Venezuela and the United Kingdom are all in decline, joined soon by Denmark, China, Mexico and others. In 2006, according to Chris Skrebowski of the Petroleum Review, 40% of conventional oil production will come from countries in decline and 10% in imminent danger of decline. Perhaps most significant of all are reports that Saudi Arabia may have just peaked. For these reasons many experts think that oil production will peak somewhere between 2005 and 2010. Meanwhile gas production has already peaked in Europe taken as a whole - and it is anticipated by many experts that gas production will peak in the world taken as a whole in about 2019. On current official estimates by 2020 Britain will be nearly 80% dependent on imports for its gas.

The failure to foresee the costs of adjustment for the city’s vulnerable populations

These points are connected to the complete failure by social services and the city elite to recognise the emerging trends and how they will effect vulnerable people in the city - hence a complete failure to organise any advance protection. A recent report in the Guardian made clear that rising energy prices is particularly effecting low income groups - both through the rising price of fuel and rising food prices. The advisory body for the government on Fuel Poverty has recognised that, after several years in which Fuel Poverty has been falling, the trend has been reversed. This is partly because of rising prices which are a consequence of the European Unions Emissions Trading Scheme. Gas depletion in the North sea has meant a significant switch (10% last winter) from natural gas to coal in electric power generation in the UK which has required the purchase of more emissions trading certificates - and put up electricity power prices. Of course, gas prices have also risen in their own right. Of course, this discourages electricity consumption which is to the good from a climate point of view - but it has considerable implications for low income households. The question of who bears the cost of climate change adjustment has utterly failed to figure in any central or local government discussions - in consequence the default position is, as always, that the poor will take the hit – in other words the vulnerable people in our city - a fact that the city's political elite (and social services managers) have ignored.

In conclusion

It is unfair to expect the City Council to get it all right. It is unfair to expect it to be able to solve all our problems. The City operates in policy and economic contexts that require growth otherwise the Nottingham economy as part of the national and international economy will not contract in an orderly fashion, but will collapse and there will be mass unemployment.

Yet there is a paradox here – there is a huge amount to be done – and that implies a huge amount of work, quite enough to keep everyone very busy – if this work is not done there will be catastrophe. If this work is not organised, within the framework of a coherent political economic strategy and policies then that is a failure of the political and economic elite – locally, nationally, internationally.

The situation we all face requires national and international action to cap the amount of fossil fuels entering the national and international economy according to their greenhouse gas contents – while at the same time ensuring that the costs of adjustment do not fall disproportionately on those least able to cope. Carbon capping associated with fair burden sharing will have to be complemented by monetary reforms to prevent aggregate demand collapsing as the economy copes with a tighter and tighter energy budget. An important dimension of this will be bringing the international monetary system in alignment with the international energy caps – creating an international currency tied to the limited right to emit greenhouse gases would help. At the other end, at a local level, the development of supplementary local money systems will help create the necessary liquidity when the economy faces the severe strains associated with a carbon and energy crisis. (The value of locally issued currencies was clearly shown in Argentina in its economic crisis of a few years ago – they helped a large number of people escape the worse poverty and will be something to look into as the energy and climate crisis continues to evolve).

Despite these caveats Nottingham city and its political authorities will have to play an important place in the adjustment process. All the serious writing recognises that sustainable economics is about re-developing local economies and meeting more needs closer to home – thus saving on energy and emissions.

As regards the policy recommendation, following the current fashion in public relations presentation the council's papers claims that it is 'proud and ambitious' for Nottingham. However, it cannot be accepted that, measured against the scale and urgency of the challenge, what is being proposed is sufficiently ambitious. Also, although many schoolchildren and schools may rightly feel proud of their eco-schools, and while many officials and workers in the city council may feel proud over the individual policies that they have championed and achieved, nevertheless, the city council as a corporate entity, has no right to claim any pride in its record or in these plans.

A number of years ago the City Council scored a public relations coup in the world of local authority politics by getting its name associated with the "Nottingham Declaration on Climate Change". It then sat on its corporate hands for several years while the current leadership of the council sidelined environmental policy and initiatives to concentrate on education, crime and economic development – all without any recognition that climate and environmental initiatives might have some relevance to these.

If one visits the 'Respect for the Climate' section at www.nottinghamcity.gov.uk it's all about how good the city council are for organising the Nottm Declaration. There's a press release about Mike Edwards going to an international conference to speak on this. Yet we know that they've only looked seriously at acting on the Declaration themselves in the last year.

Suddenly climate issues came back on the political agenda and because Nottingham City Council is associated with the "Nottingham Declaration" a policy of sorts has been cobbled together. For all the reasons specified it could be a lot better....well, better late than never – now they have 5 years to change it beyond recognition.

Brian Davey

Feasta in Nottingham

(Feasta is the Foundation for Sustainable Economics – www.feasta.org)