How Green is My City?

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“Climate of hope: US cities lead the way.”¹ A mistake, surely? Here in Europe the United States is not usually seen as being in the vanguard of campaigns against global warming. However, even President George W. Bush has turned a little greener recently although not yet adopting the vivid shade of, say, Al Gore or Bill Clinton. So perhaps the mayor of Seattle, Greg Nickels, is not mistaken in his optimism about what cities can achieve collectively via forums such as the US Mayors’ Climate Protection Agreement.¹ In the UK, the major political parties are tripping over themselves in the race to be seen as the one with the most aggressive policies on greenhouse gas emissions. Indeed, so powerful is this political consensus that one could be forgiven for fearing for a shortage of carbon dioxide (CO₂) at some future date. The budget of March 21, 2007 saw a further assault on gas-guzzling vehicles and the week before had witnessed the arrival of the Climate Change Bill, which mandates reductions in CO₂ of 26–32% by 2020 (the European Union’s target is only 20%) and of 60% 30 years after that.² Such targets are certainly ambitious, but even if achieved would be meaningless unless other countries follow suit; the UK’s contribution to CO₂ is only 2% of the world total. The Bill is not concerned with cities specifically but just as single nations can only achieve so much, so it is with cities, and we should be asking if there are limits to what urban government can do.

The US mayors’ initiative is not the only example of cities acting for themselves ahead of or instead of national and international action. For instance, in London we have Mayor Ken Livingston’s climate change plan, launched in February of this year.³ This envisages limiting emissions to 600 million tons over the next two decades, amounting to a massive 60% cut by 2025. Achievable? Livingston reckons that if every light bulb in London were energy-efficient, CO₂ emissions would be reduced by 575,000 tons a year. However, he cannot enforce that by himself. In the USA, cities may fail to meet a target of greenhouse gas emissions cut back to 1990 levels without complementary state and federal policies or, even worse, with the reining-in of the activities of those cities that are fighting global warming.^{4,5}

Now that the world’s population has shifted from being predominantly rural to predominantly urban, it is more important than ever that in any town-versus-country debate, effects of population size alone are separated from effects of urbanicity or “city-ness.” Country dwellers use energy, too. This separation can be difficult. Of course, lights blazing away in unoccupied office blocks at night are wasteful. On the other hand, public transport is better developed in cities and therefore more used than in the countryside. Another greenhouse gas is methane, which is usually seen as an agricultural by-product, although its generation by municipal waste-treatment plants has been the subject of research. Historically,

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energy-consuming heavy industry was associated with city development, but these days urban employment patterns are different, in the western world anyway.

The Intergovernmental Panel on Climate Change (IPCC), in its most recent assessment of February, 2007,⁶ does not use the cataclysmic language into which its predictions are so often translated. Because more than one climate-impact model is used, IPCC predictions cannot escape uncertainties—for example, a top-of-the-range estimate of global temperatures increasing by as much as 6.4°C by the end of this century compared with 1980–1999, or as little as 0.3°C. Also, there are articulate scientists who do not accept that global warming is all or mostly man-made, let alone of largely urban origin.⁷ Curiously, the political consensus can sometimes appear more confident than the scientific one. In one sense, it does not matter if the link between CO₂ and global warming is not as secure as some might wish. The IPCC estimates that annual CO₂ production from fossil fuels averaged 26.4 Gt (10⁹ tons) in 2000–2005. Oil, natural gas, and coal reserves are not unlimited, so energy saving and alternative sources are needed whatever the effect on the climate and wherever (city, countryside, factory, or suburbia) energy is used.

Medically, the most explored (but not the only⁸) impact of climate change has been heat-related illness^{9–14} and mortality, and much of the focus has been on cities. The heatwave in the European summer of 2003 was associated with unexpected deaths, especially in the elderly, and led to early-warning systems and preventive actions.^{12–14} As population health generally improves, this may also offset the worst effects of serious temperature change.¹⁰ The impact of global warming on health in cities does not have to be a disaster if there is proper preparation and investment in prevention. However, it is no denigration of urban research being done on these topics or of the efforts of eco-friendly mayors to remind ourselves that neither the causes nor the consequences of unwelcome climate change are unique to cities.

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