

2030 Vision for the Cambridge sub-region

Topic summary: Energy, water and waste

Issues:

- **Waste:** 59% is from construction and demolition. (29% is commercial and industrial, 11% household. Locally, there is some radioactive waste from research institutions.)
- Cambridgeshire is a high-achieving recycling area but split responsibility is problematic.
- Much waste travels to and fro (Cambridge-Peterborough on A14), albeit in different forms.
- **Water:** Region is only just better than semi-arid – not ideal for a growth agenda. 10% predicted rainfall reduction by 2050 with 10% population increase (much more in Cambridge). Water use by business likely to decline. Wetter winters, dryer summers.
- The water-stressed areas in the region have some of the lowest water prices.
- **Energy:** Domestic sector uses more (and more on heating) than commercial sector but energy needs will increase only slowly because new buildings are zero carbon.
- Sub-region has potential for a lot of spare electrical capacity from wind and solar.
- Existing buildings are the main challenge for energy-saving – this is being addressed but too slowly. And too many householders install new bathrooms rather than thermal insulation.

Propositions:

- **Waste:** Early consideration must be given to designing things to reduce and re-use waste.
- Waste should be treated as an asset. Incentives are needed to get people to value it, put a financial figure on it and free up the business opportunities in integrated waste management.
- **Water:** Benefits to the wider environment need to be considered. Environment Agency (EA) has conflicting aims: enabling water supply and also providing it for leisure facilities.
- Structure of water companies should be improved: water is a national resource subject to switching around by companies managed at local level. Integration by EA needed.
- Better integrated management needed for water and energy (it's all interconnected).
- Information needed about availability and competing uses (eg. agriculture or domestic use).
- There should be a contingency plan to obtain alternative water supplies for the sub-region and new development should keep in step with the availability of water to supply it. There should be planning policies in place to prevent development over the chalk aquifer and care taken to ensure that it is not polluted from existing development.
- On new developments, codes drive the issues but controlling the behaviour of users is important. Meters should be used to self-monitor use against recommended norms.
- Much potential to reduce leakage, but it is expensive and other measures may be appropriate.
- The potential for saving water in existing buildings should be exploited.
- Every development above a certain size should recycle water.
- SUDs have benefits beyond controlling flood risk. Preventing cross-contamination from grey water needs research and lobbying (with other groups) to get it into the planning system.
- **Energy:** Cambridge has over 200 energy researchers working on technology and policy. Cambridgeshire Renewables Infrastructure Framework (CRIF) has pointed the way to generate renewable energy locally. Real issues are politics, governance and local investment. Cambridge Cleantech, Cambridge Retrofit and older university's example are important.
- Ways must be found to fit small scale solutions into national frameworks (NPPF impact?)
- Can home power generation be funded differently – as in California by the power companies?
- **General:** Much data available on energy, water and waste (and other topics) but we need to understand it better (eg many others extract from aquifers, not just water companies). As Peterborough has demonstrated, it can be re-presented graphically as an analytical, educational and decision-making tool for the benefit of all (including poorer communities).
- Cambridge's urban footprint should be studied – eg in water for food grown elsewhere.
- Sustainable developments should be rewarded by not having to pay an infrastructure charge.
- Unclear how high-level policies can be implemented – problem of no single authority.
- North West Cambridge must be an exemplar for subsequent local development.
- Attitudes can be changed locally, eg on food waste. But there is a leadership issue.
- Human behaviour is the key – prosperity has generated waste. We have all the technology, but we have to choose how to use it. The interface between technology and people is difficult. We must make it easier for people to behave well – to be good citizens. [ENDS]