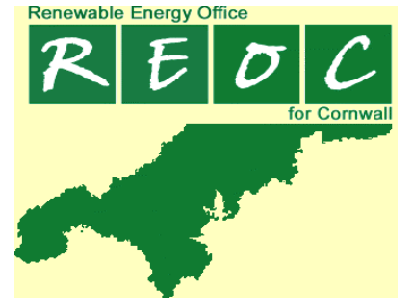


**Renewable Energy
Office for Cornwall**



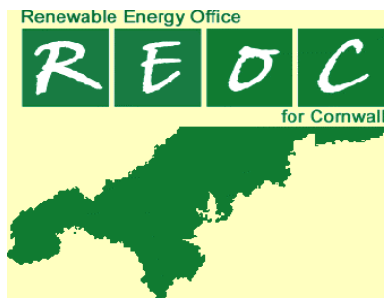
Low Carbon Cornwall:

A Vision for Cornwall in the age of climate change

The Vision

“To achieve sustainable prosperity through the vibrant greening of the economy and innovations in creativity and for living.”

Summary Document



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Low Carbon Vision for Cornwall - Summary

Climate change is here now and beginning to affect Cornwall and its economy, both directly and indirectly. Examples of such effects are extreme climate events such as the Boscastle flooding with an obvious direct impact, and indirect effects include higher oil prices following the loss of US oil capacity from Hurricane Katrina. As climate change increases these impacts will have greater effects on health and business viability.

Climate change is due to increased carbon dioxide in the atmosphere from the burning of fossil fuels, i.e. coal, oil and gas. The rate of increase of CO₂ emissions is increasing leading concerned scientists to predict severe climate changes and disruption within a short timeframe. In addition the impacts of Peak Oil, will rapidly lead to increasing energy prices and reduced security of supply especially in Cornwall, at the “end of the line”. Higher energy prices will impact largely on Cornish households where those on the local average income will soon find themselves spending half their disposable income on energy.

However all these threats are also opportunities and Cornwall can take advantage of the business and community benefits from measures to combat climate change and future-proof the County.

Some 22% of our carbon emissions of over six million tonnes a year from Cornwall, are from food production, processing and transport. This provides an opportunity to grow process and consume more local food, providing thousands of new employment opportunities, and over £2bn worth of increased business activity in our specialist area of expertise. In addition by increasing the organic content of local agriculture we increase the security of the local supply system as well as reducing carbon dioxide emissions.

By undertaking significant energy efficiency measures locally, the county can not only reduce the impact of upcoming energy price rises, we can also increase local business activity and provide an increased skills base for export of methods and technologies. A twenty percent cut would save some 220,000 tpa CO₂ with an average three year

payback and improved health for the poorest. This would provide some £66m pa of energy cost savings and over £200m worth of business activity locally.

The change of local energy supply to renewable energy sources could be accomplished through a range of technologies, including windfarms, household renewable energy devices, biomass heat boilers and power plant and distributed advanced thermal treatment of wastes generated locally. These measures would save one third of Cornwall’s global warming emissions and provide a major boost to local employment and business. This level of activity would produce around an extra 4,000 long term jobs and inject around £2bn investment into the local economy. The high proportion of non fossil electricity also provides the opportunity to insulate local users from some of the expected price rises.

The benefits to the local economy are significant new business opportunities both in construction and investment and in the longer term operation of new plant and equipment providing useful basic supplies to the local region. This analysis only looks at two elements of the carbon emissions breakdown: those of local food and of the energy system. The success of this approach could be demonstrated for other elements of the carbon analysis, with increases in local economic benefits as well as the CO₂ benefits.

Possible savings and economic benefits for Low Carbon pathway

<i>Savings source</i>	<i>CO₂ savings tpa</i>	<i>New Employment FTE approx</i>	<i>Increased business turnover £m pa approx</i>
Energy system			
Energy efficiency	220,000	1,500	200
Renewable electricity supply	2,000,000	4,000	385
Renewable heat supply	375,000	900	109
Biofuels for transport	258,000	90	41
Newquay airport CO ₂ offset	42,000	30	8
Food system			
Organic agriculture	100,000	550	50
Local production & supply	282,000	22,000	2,200
Total savings	3,277,000	29,070	2,993

This approach to economic development in Cornwall helps to future-proof the County against the coming fuel price rises and supply insecurities as well as being a “no-regrets” pathway with major economic benefits.

These benefits add up to an increase in the local vision and increased vitality of household, communities and business. This increased vitality will help individuals to improve their life chances and assist in the achievement of a new Vision for Cornwall