City of Alexandria

Energy and Climate Change Action Plan (eCAP)

Short Presentation for the Waterfront Committee

eCAP can be found at http://alexandriava.gov/Eco-City and it is out for public comment before presentation to the City Council for adoption in May. It is 74 pages long plus appendices: this is a very brief description.

If you do not believe in Climate Change then read no further and deny the work of 10s of thousands of scientists across the world and ignore the actions of all the other first world, and most third world countries.

eCAP is a section of the Alexandria Environmental Action Plan adopted two years ago. Since that date there has been an inventory of carbon emissions in the city. This showed an annual total of 2.172m tons of CO2 for 2005 with, taking business as usual, a rise to 2.329m tons in 2012 and 3.706m tons in 2050.

Of the 2005 inventory approximately 3% came from government operations, including the schools, and 97% from everything else. Of that, 30% came from vehicles, 44% came from commercial buildings and 20% came from residential buildings.

The target, which ties in with COG and other regional targets, is to reduce to 435,000 tons by 2050.

The local consequences of the existing green house gases in the atmosphere are as follows:

Increase sea levels (1-3 feet by 2100)
Increased storm frequency
Increased rainfall in rain events (up to 20% by 2050)
Increased number of days of extreme heat
Changes in biome including new diseases striking further north
Possible water shortages in the second half of the century

Global changes include;

Water shortages causing population movements and possible warfare
Millions of people being moved from coastal areas
Increased season death rates

This is going to happen; by carrying out green house gas reduction measures the aim is to halt increasing impacts in the following century. Meanwhile, localities must prepare adaptation plans.

eCAP lists the measures being taken by City government and ACPS to reduce green house gases. These include reducing energy consumption (ACPS saved $400,000 on its energy bills last year), reducing heat sinks by building green roofs and trying to increase the tree canopy, introduction of electric and hybrid vehicles, and the increasing use of such things as LED lighting. Alexandria is also committed to recycling trash and the remainder is burnt rather than buried in a landfill. This reduces both methane and carbon emissions.

As stated above, 97% of emissions come from non government sources and solutions often have to be regional. Traffic emissions cannot be solved in isolation and green building codes cannot be introduced over and above Commonwealth code from Richmond.

Therefore outreach and education has to be the first attack on the local problem and working with regional bodies the thrust of the wider solution. eCAP lists a number of steps that citizens can take to reduce their personal carbon foot prints. These include habit changes in mode of transport and living, draft proofing buildings and looking at alternative forms of energy.

Adaptation measures include preparing for even greater river flooding levels over and above the nuisance flooding we currently suffer, having measures to deal with greater rates of storm damage and storm water, preparing for potential regional water shortages, having measures to protect people from extreme temperatures and disruption to the quality of life, and preparation for new disease threats.

Detailed adaptation plans are still in preparation as more scientific data becomes available and regional bodies ponder on their responses to the climate change problem.

I am asking the Waterfront Committee to look at the plan and come up with any recommendations or changes while it is in the public consultation period.

Whether the Committee wishes to commend or condemn it, I will leave for our next meeting

Peter Pennington
9 April 2011