Annual Meetings

The next few months are times when existing committees report to their members on progress for 2007-08, and prepare for the year ahead.

Most groups need more support, particularly in the executive roles, so readers are invited to consider what parts they are able to play in contributing to community activities.

Friends of CREEC would be happy to report on member group activities, to help inform the wider community. Send a copy of the AGM highlights if you would like more publicity.

Friends of CREEC Association AGM will be held at CREEC on **Thursday, 21 August at 11am** (Management Board meeting to follow). This is a new time, to suit people who are not happy about going out at night, or who have children to be minded (playground at CREEC) or can get away for an hour or two during school hours.

Friends of CREEC has a membership mailing list of over 75, many of whom we never see, hear from or know about. The AGM is a good time to rectify that gap in our relationship.

Friends of CREEC Annual General Meeting Thursday 21 August 11am

Board of Management Meeting to follow

This newsletter is produced and distributed by volunteers. We believe in its value in communicating information to members of our community who are interested in the environment and the work of CREEC. Contributions welcome

We thank the Moreton Bay Regional Council for their assistance.

Please recycle this newsletter by passing it to friends or neighbours.

Caboolture **R**egion
Environmental
Education **C**entre

This Newsletter is on the web at www.creec.org.au

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The Greek philosopher, Heraclites of Ephesus wrote a book "On Nature" about 500 BC. Among other opinions and ideas, he observed that a person cannot step twice into the same river - because the person and the river are not the same the next time.

This principle applies as well today, to us and the world around us. The environment and the communities in which we live, are always changing. We change through our interactions with others. We learn from each other by listening, sharing ideas and experiencing situations together.

In environmental - natural resource management, the importance of bringing different people and communities together, to develop new approaches and joint solutions to the challenges we face, is very clear.

No longer can we depend on outside expert's disciplinary skills to provide answers to the critical questions we are now asking. The more we learn, the more we realize that the inter-connectedness of social, cultural and biophysical factors means that we must also draw on the experience and knowledge held within local communities.

This mixture of science and real-life experience was amply demonstrated at the Sustainable Living Expo at CREEC. If you weren't there, you missed a golden opportunity to step into the river again, and change the way your future will unfold.

More Power, Less Carbon Emitted JP

Coal-fired power stations have been designed and inter-connected across the electricity grid to meet peak demand without blackouts. Most of the energy in the coal is wasted as low grade heat, so that only 25 - 30% is recovered as electricity. 60% is lost from cooling towers and exhaust stacks, 10% in transmission from coal-field locations to the big cities.

There's a proposal in Sydney to protect against power blackouts by setting up local natural gas-powered power stations and to use the waste heat for treating water and cool the buildings. This could harness 85% of the energy in the fuel, as against the 30% from remote coal-fired stations.

The recent budget reduced Government support for funding of grid-connected photo-voltaic panels on houses. By the end of its new Solar Cities program, there will be an additional 10,000 homes feeding power into the grid. It would require **about a million homes** to offset the need for one power station. With current Government rebates, it can take up to **20 years** to recoup the investment in a photo-voltaic system.

In an emissions trading regime, the economics of household PVs will become more attractive. If we are to reduce greenhouse gas emissions by 60% below 1990 levels by 2050, distributed energy could increase to 20% of total electricity generation by 2050 - equivalent to 50 million tonnes of CO_2 abatement each year (about 10% of current emissions). See www.csiro.au/science/IntelligentGrid for more information.

New Buildings or Renew

Ecos reports that 25 commercial property groups that collectively manage 75% of Australia's leased corporate office space have responded to the Total Environment Centre's invitation to learn how to reduce greenhouse gas emissions by retrofitting, rather than constructing new "green buildings". Five groups have responded so far, accounting for 10% of office floor space, and they expect to reduce emissions by up to 40% over four years.

Environmental Monitoring JP

The world is changing, due to global warming, faster than at any time since the end of the last glacial period 11500 years ago. Both terrestrial and marine environments have been affected. We don't really know by how much.

Our monitoring of changes due to climate change and human activity is inadequate - not enough money or people. Our projects reflect our personal interests, with a focus on iconic or rare species. These are suboptimal indicators of widespread change.

There are some good examples of what is needed on a more coordinated basis over a wider area. Our national carbon accounting scheme is world class, there are long term studies of disturbance in mountain ash forests in Victoria, the effects of habitat fragmentation by pine plantations near Tumut, burning of heath-lands at Jervis Bay and Beerburrum, 400,000 bird lists in the Atlas of Australian Birds, 20 years of aerial survey data of kangaroos, measurements of ocean currents, temperature and salinity in marine environments.

While it is impossible to monitor everything, everywhere, we really do need to improve. Locally we can become involved in **Faunawatch**, a system to record, at frequent intervals, what and how many there are, of our biodiverse birds, mammals, reptiles, amphibians and insects. There are close to 500,000 records in this program. If you prefer to know and understand birds, then CABBOS, a group within the Wildlife Preservation Society in the Caboolture area, has regular monthly field trips, in the company of experts. If you believe that vegetation is a good surrogate for biodiversity, regular surveys of native plants are conducted by the Society for Growing Australian Plants. Starting with the listing of over 1,200 plants in the Shire Atlas, there are records for a large number of individual sites around the Caboolture district. Members gather each Tuesday morning at the CREEC Nursery, if they aren't out on a field trip exploring and updating.

Ring CREEC for details of how to contact local groups, or better still, call in and have a chat.

Biofuels and Global Warming

The journal Science has articles indicating that subsidised biofuel production from corn may actually increase the release of carbon dioxide globally. Farmers are responding to higher grain prices by clearing huge areas of forest and ploughing grassland to grow crops.

Corn-based ethanol nearly doubles greenhouse emissions over 30 years. Corn returns only 1.2 units of energy for each unit of energy invested. Brazilian sugarcane yields 3.6 units. As United States farmers turn to extra corn, they grow less soybeans. There are fewer plants to absorb carbon dioxide emissions, because of the clearing.

Even if all the corn production in USA was converted to ethanol, it would only supply 27% of its current transport fuel demand. To produce the biofuel mandated by the US Government would require a 60% increase in the area planted with corn. This year, 25% of US corn production will go into ethanol , but only 18% of last year's crop of 333 million tonnes. 70% of the crop is used as animal feed.

Green Loans

The Australian Government's budget offered a program of low interest loans up to $10,000 each, to help households install products such as rainwater tanks, grey-water recycling systems, insulation, energy-efficient lighting and roof top solar panels.

The Australian Conservation Foundation describes this as "a great initiative that will eventually help 200,000 households make their homes more energy efficient". There are 8 million households. 6000 of these can access the solar rebate scheme for installing rooftop panels.

Corporate Partnerships

Corporate partnerships with "environmental" groups are increasing at a rapid rate. Not so long ago, environmental initiatives were applauded only by the converted, rarely covered in the media and rejected by business. Nowadays, both the media and the public are interested, wanting to see results, scrutinising effort more closely and getting involved.

Last year $6 million was put into Landcare projects by its corporate partners. They supply cleaning products, recycled paper, reduce the use of plastic bags, and reduce waste products into landfill. The money is available for tree planting and other activities.

Green marketing campaigns have enabled consumers to support particular brands of products, so corporates are responding with their wallets as well.

Did You Know?

Indonesia has become the world's third largest CO_2 emitter, after USA and China. The clearing, draining and burning of their carbon-rich peat forests for oil palm plantations contributes 4% of all annual global greenhouse gas emissions.

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A recycling plant in Melbourne will soon start to recover the mercury, glass and aluminium from most of the 90 million energy-efficient fluorescent tubes and light bulbs disposed of each year in Australia.

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CSIRO has developed a process for recycling plastic yoghurt, ice cream and margarine containers, rather than shipping them to China or sending them to landfill. The reprocessed material is suitable for making pot planters, compost bins, drainage pipe, cable reels and bar stools.

Facts of Life BR

Some toilet facts from the June 2008 G Magazine.

- Only 5% of the toilet paper used in Australia is made from recycled material. 95% is from "virgin" fibre.
- Modern toilets use an average of 6L of water per flush.
- An average person visits the toilet 2500 times a year - that is about 7 times a day - a total of 3 years of your life on the loo!
- 6L flush x 7 x 365 = 15,330L per person per year for toilet flushing.
- World-wide, about 270,000 trees are flushed down the toilet every day as toilet paper.

Storing Carbon - is there a Better Way? BR

The popular press, politicians and the coal industry have had much to say about "clean coal technology" or " carbon sequestration" as being "THE SOLUTION" to rising atmospheric carbon dioxide levels.

Put simply, carbon sequestration involves trapping the carbon dioxide from coal burning power stations and pumping it underground into impermeable rock formations, from which it will **NEVER** escape.

Even if it works (and never is quite a long time!), the technology is still to be proven and can probably only be effectively applied to new high-tech power-stations (which are yet to be developed).

In contrast, the phenomenon of carbon storage in soil has received little public attention. All soils are capable of absorbing and storing carbon. How much is stored is highly variable and depends on many factors such as soil chemistry, moisture, water movement, pH, temperature, what is growing and how the soil is farmed.

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An article in the July-August 2008 Organic Gardener (published by the ABC), written by Jerry Coleby-Williams, looks at recent research into organic farming as a means of storing high levels of carbon in soils.

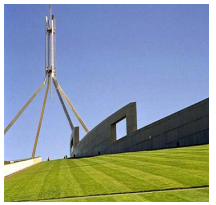
The research shows that organic farming practices can store more than 7 tonnes of carbon dioxide per hectare, much more than many conventional farming practices, some of which release more carbon dioxide than they store.

It is claimed that if all Australia's farmland was farmed organically, we could "lock up" 70% of the country's total carbon emissions.

If we are to succeed in managing global warming and limiting future temperature rise, it is obvious that we must explore and develop many different ways of reducing carbon emissions and of removing carbon dioxide from the atmosphere.

Let us hope that we all realise this and have the foresight to invest in a much wider range of options to cope with global warming.

Green Roofs JP



Remember when we criticised Canberrans for building a new Parliament House and then covering it with grass? These days, green roofs and green walls are very popular in Europe (the Germans started the technology 60 years ago) and North America, and they are becoming a talking point here.

Energy efficiency, stormwater management, thermal insulation, cleaner air and a visual improvement are benefits from green roofs. There's a building in Tokyo with a rice paddy on the sixth floor, an organic vegetable plot, a breeding colony of frogs, a barbeque area and a Japanese garden feature.

Challenges for more widespread use here include diverse building standards, waterproofing, soil characteristics, what to grow, weather variability and just about everything else you can think of.
A good recycling opportunity?