



Benalla Sustainable Future Group

Newsletter 4

November 2013

Benalla Sustainable
Future Group Inc.

PO Box 642

Benalla 3672

President's Column

Climate Change, Bushfires, Wikipedia and Politics

I suspect that if you had been keeping up with the news some weeks ago you have already made the connection between the words in my heading. I find it difficult to describe my astonishment when I heard Australia's Environment Minister Greg Hunt quoting Wikipedia as his authority on the relationship between climate change and bushfires.

Greg Hunt says that Wikipedia provides evidence that the unseasonal bushfires that devastated areas of NSW are not linked to climate change. He based this assertion on the Wikipedia statement that 'Bushfires in Australia are frequently occurring events during the hotter months of the year due to Australia's mostly hot dry climate.'

Prime Minister Tony Abbott also entered the fray when he stated, "These fires are certainly not a function of climate change, they're a function of life in Australia." He also accused the head of the United Nations climate change negotiations, Christine Figueres, of 'talking through her hat' on the issue. This is despite the fact that the Intergovernmental Panel on Climate Change had already found a causal link between climate change and bushfire. In its 2007 report the IPCC states 'Climate change is known to alter the likelihood of increased wildfire sizes and frequencies.'

Australia's own Climate Council (the independent organisation established after the Abbott government abolished the Climate Commission in September) is to release a report that warns of increasing days of extreme fire danger in future across south eastern Australia. The report states, "While Australia has always experienced bush fires, climate change is increasing the probability of extreme fire weather days. Climate change is making hot days hotter and heat waves more frequent and severe." (*The Age*, 25/10/13)

The Fire Services Commissioner of Victoria, Craig Lapsley, also agrees that climate conditions increase fire risk.

What can one say about these pronouncements made by our Prime Minister and the Environment Minister? Only that once again climate change is being politicised and used as some sort of political football or battering ram. Professor Lesley Hughes of Macquarie University, a joint author of the Climate Council report, said it was an "enormous shame" that climate change had become such a hot political potato. "It's too important an issue to be politicised," she said.

The Age Editorial on October 22nd took the same theme with its heading, "*Action on climate is a duty above politics.*" It then goes on to say, "With climate change Australia risks being left behind. Mr Abbott's method is to treat it as a minor priority - as if in doing so, the whole problem will diminish in actuality and in public importance. In fact neither will happen. As the Climate Institute's latest annual survey shows, two-thirds of Australians accept climate change is real and having an impact. **It is crucial that the Abbott government heeds its responsibilities and makes a moral and political commitment to climate change.**" (My emphasis)

John Lloyd

Next General Meeting

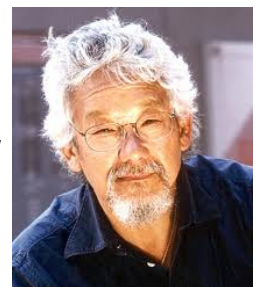
**Benalla Sustainable
Future Group Inc.**

**Thursday 12th December
at 7.30 pm**

**Uniting Church Hall
Carrier Street, Benalla**

Guest Speaker: David Suzuki (via DVD)

**2013 Jack Beale Lecture
'Imagining a Sustainable Future'**



Observations from North America

We recently returned from a trip to Canada and the USA where we saw direct evidence of the impact of global warming on glaciers in Alaska and Canada. In Alaska the Portage Glacier, the most visited tourist destination in Alaska, has been retreating over the last few years. Again in Glacier Bay, a very popular destination for cruise ships where a number of glaciers reach the sea, there is evidence of glacial retreat which has been occurring for a number of years. These tidewater glaciers are a magnificent sight especially when one can approach fairly closely by ship.

Driving through the Canadian Rockies was an amazing experience with snow, ice and glaciers all the way. But here again there was evidence that the glaciers were retreating due to a warming world.

The Arthabasca Glacier at the beginning of the Icefields Parkway is a very large valley glacier that has retreated significantly over the last twenty years. The extent to which it has retreated is marked by signs that record the rate of retreat for every five year period.

In Glacier National Park near the border with the USA there are 25 glaciers remaining from the 150 that were recorded there in 1910 and scientists predict that they will all be gone by 2030. However it was good to see in many of the scenic viewpoints overlooking glaciers interpretive signs that talked about global warming and its impact on glaciers.

During our travels through Canada and California I was surprised by the lack of roof top photovoltaic panels, particularly in California which has a reputation for encouraging renewable energy. However I did get very excited one day when I saw in the distance what looked like a solar thermal power station. As we got closer we could see that it was operating because of the heat haze around the top of the tower. Then we also saw two more domes by which appeared to be under construction. This was the highlight of that day and for a while took our mind off the hassles of driving on the 'wrong side' of the road.

John Lloyd

Zero Carbon Australia Buildings Plan

'Australia's buildings could halve their energy use within a decade, to make a major contribution to reducing the nation's carbon emissions – and save money on energy bills in the long run as well.' This is the major message of the 'Zero Carbon Australia Buildings Plan', the latest report from Beyond Zero Emissions. The report continues, 'We can choose to spend hundreds of billions of dollars to lock in fossil fuel use, or retrofit our buildings for the future now.'

At our October general meeting, Richard Keech, Principal Researcher for the Zero Carbon Australia Buildings Plan, outlined how Australian households could move towards 'energy freedom', i.e. where energy bills are reduced to zero.

The plan suggests this could be achieved through an extensive retrofit of existing houses to make them far more energy efficient combined with the installation of rooftop photovoltaic panels so that they become renewable energy 'power stations'.

Richard outlined a range of strategies to achieve major energy savings in Australian homes. These included a full insulation retrofit, full draft proofing, efficient window glazing, better shading and the use of 'cool' roof paint. The insulation retrofit included upgrading roof insulation and insulating external walls. While installing wall insulation into existing homes has been difficult in the past, new products available make this an easier task. These can be sprayed into existing wall cavities through small holes in the external wall which can be 're-plugged'. Another relatively new product is 'cool' roof paint which is specifically reflective to the infrared band.

The Buildings Plan recommends that Australian buildings go gas free because the belief that gas is a 'low emission' fuel is an illusion. When gas is burnt it produces CO₂ and when gas (methane) escapes it is a much worse green-house gas than CO₂. It is generally recognised that there is at least 5% leakage in gas production and distribution but the real figure is probably much higher. Coal seam gas, which is very controversial, is becoming a greater percentage of general gas usage.

For these reasons the Buildings Plan recommends using higher efficiency electric alternatives which will lead to significant reductions in energy use and avoid the climate and environmental damage caused by gas. These electric alternatives include electric heat pump heating for space heating, i.e. reverse cycle, split system air conditioners. These are five times more efficient than gas. Heat pumps are also recommended for water heating as they use less energy than gas or electric hot water systems. For cooking the plan recommends the use of electric induction cooktops as they have the same performance as gas cook tops but only use half the energy. The replacement of all lighting types with LED lighting is also recommended in the buildings retrofit.

Richard concluded his presentation by explaining that 'energy freedom' could be achieved for households through a combination of the proposed retrofit of existing houses, becoming gas free and installing photovoltaic panels on roof tops.



Tannberg, The Age, 22/10/2013



The colourful crowd gathers for the rally - 'Benalla Wants Climate Action!'

Benalla and District Residents Join National Day of Climate Action

On Sunday 17th November, more than one hundred people attended the Benalla Climate Rally which was organised by Benalla Sustainable Future Group. People came from Yarrowonga, Wangaratta, Mansfield and Euroa to join with Benalla residents and take part in the National Day of Climate Action.

People at the rally demonstrated they were well prepared for a summer of turning up the heat on climate action, by bringing along sun hats and brollies and wearing red and orange.

President, John Lloyd, said that the major focus of this National Day of Action was to send the following message to the Abbott government and all politicians: "It is time to stop playing politics and do something meaningful about climate change - our future depends on it."

BSFG member, Yvonne Szwedyc, spoke about the impact of the Black Saturday bushfires and also highlighted the number of species that would become extinct if strong action is not taken. She also mentioned the level of deforestation and the 'elephant in the room', our ever growing population. Australians are the highest emitters per capita amongst the developed countries

Rob Knowles, a representative of the Fire Fighters Union, also addressed the rally and emphasised that climate change is having an effect on the frequency and intensity of bushfires.

He said, "The bushfire season is starting earlier. Look at the recent NSW fires in October - and the official fire season hadn't even been declared!"

All emergency services personnel are demanding action on climate change because they are the front line services that have to respond to the bush fires, floods and other extreme weather events."

Over one hundred signatures were collected on a petition calling on Cathy McGowan, the Member for Indi, to promote within the federal parliament much stronger action on climate change. This includes increasing to 25 percent the reduction in carbon emissions by 2020, implementing a price and a cap on carbon emissions to help achieve stronger emission cuts and a commitment to move Australia from fossil fuels to more renewable energy.

The Benalla rally was one of more than 100 events held right around the country intended to send the new government a powerful signal that Australians won't stand for going backwards on climate action. People across the nation are turning up the heat, calling on the government to aim higher on climate. 60,000 people rallied across the nation.



On the march down Bridge Street

Community Gardens Blooming in Benalla

Waminda Benalla Community Garden has taken off with big efforts being put in during weekend working bees at 1pm each Saturday and Sunday. The enormous fence out the front has been cut down to a more inviting height with the assistance of Benalla Council field staff who also cut a donated steel tank into rings for raised vegetable gardens.



The garden beds have all been black poly plastic lined to conserve water and assist with disposal of weeds above and below the liner. This will enable these garden beds to trap their own water and these can be topped up with water in sumps from below to minimise loss to evaporation.

Heavy rain was caught and by folding down the liner excess water just drained into flood the decomposing weed layer below.



On the other side of Benalla the Yooralla Community Vegetable Garden has been in development for over 12 months. The project has been managed by Bill Hill and is located at the Yooralla Community Farm, previously CAL Community Farm. Work included levelling the site and laying a gravel base with edged pathways. Additional water tanks were installed and a water reticulation system supplied from town water, tanks and a dam located on the property.



A shaded area has been constructed around a wood fired pizza oven and gas fired barbeque with seating and shade cover. Pizza topped with fresh tomatoes this summer!

There are 19 raised beds of various shapes and sizes and all are now planted. Many garden beds have been planted by Ed Space students who seem to be quite enthusiastic about the garden. Surprisingly one large bed which had been infested with rabbits is now supporting a good crop of potatoes.

There have been other works carried out on the property including fencing, cattle yards and a large shed. 12 poddy calves have been purchased. Also on the site are a pistachio orchard and an olive grove.

These developments have certainly improved the property and it is great to see the progress of another community vegetable garden to compliment the progress achieved during the year at Waminda Garden.

Village Supermarket on Faithfull Street next to the railway line is in the process of installing a water tank and turning over what was originally a herb garden to become a shop front for community gardening. Hopefully local residents can participate and learn more about gardening in this popular high profile location.

The Waminda and Faithfull Street gardens are now being planned out using 3D computer models, planned and coordinated on social media. There are 16 members swapping ideas on line with support agencies such as Tomorrow Today Foundation, Benalla Health and Waminda House. We also meet face to face occasionally and the working bees are full of conversations and ideas. Some amazing skills and abilities are emerging and people are having fun.

There are lots of reasons why people find it hard to garden but when people get together to garden there is less chance of injuries and mistakes and we all motivate one another. Everyone is really helping in whatever way they can and so far it is all a shared contribution and we will get to share all the produce as well. One day when we have tested a few pen and chicken tractor designs, we may even look to carefully include some chickens to assist with composting, pest control and egg production. Priority to date has been to get the garden beds prepared and planted. For more information email callum.morrison@benalla.vic.gov.au.

Peter Maddock and Callum Morrison

Backwards for the Future or Boldly Forward?

Going backwards is surely the only description one can apply to the Abbott government's policies on climate change and environment. Repeal the Carbon Tax, abolish the Climate Commission, abolish the Clean Energy Finance Corporation, abolish the Climate Change Authority and cut so called "green tape" making it easier to gain environmental approval to undertake major projects.

A more positive view of the future was presented by Jason Drew at the *Creative Innovation 2013* forum. Jason Drew is a passionate environmentalist and futurist and he thinks the 21st century is full of opportunity. Following are excerpts from a report of his presentation in *The Age* on 21/10/2013, titled *Boldly into the future*.

"The industrial revolution is over and the sustainability revolution has begun. Sustainable development is out and sustainable retreat is in. This changes the game for everyone. Development is a comfortable word. Revolution is an entirely different matter - everybody and everything is swept up in it and changed by it. The sustainability revolution is by definition all-encompassing and will deliver a complete rethinking of everything we have taken for granted as it sweeps our world."

"This revolution will be more exciting, faster paced and more durable than the industrial revolution. It will smash old industries apart and create brilliant new ones. Revolutions by their very nature often drive unwanted change and some good will be swept away with the bad. It is already creating fascinating new businesses and whole new industries that most of us are not yet aware of."

"The future used to be predictable, an extension of the present. That is no longer the case - the future is not what it used to be. To many it will seem disjointed and hard to understand. That is because for the next decades there will be two concurrent but separate futures. A part of our world will be racing towards a technological future and making innovative leaps that are hard for most of us to understand. The other future is a race towards a complete rethinking of how business works and interacts with 9 billion consumers and Mother Nature. The two futures will merge again, and at that point the future of the 21st century will be sealed, for good or for bad."

"Sustainable retreat will define the 21st century in business. We will be doing things so differently that we consume almost nothing in the process of consumption and even undo damage caused by previous consumption. There will be a new market understanding - the 19th century was about production, the 20th about selling and consumption and the 21st about sharing, repairing, durability and upgrading. Multigenerational product development, a staple business model of the past 50 years, is gone forever and will be replaced by upgradability as the core attribute of all new products." This is surely a future we should be striving for rather than going 'back to the future'.

John Lloyd

Climate Council

One of the first acts of the new Abbott government was to abolish the Climate Commission, the independent body headed by Tim Flannery that was set up by the previous government to provide advice to the public on climate change issues. However when members of the abolished commission decided to establish the Climate Council and seek support from the public the response was amazing. More than \$1 million dollars was donated within a very short time to fund the work of the new body.

The Climate Council is a non-profit independent organisation which aims to provide clear, independent advice to the Australian community. It is fiercely independent and apolitical and does not receive any money from the Government. It relies on donations from the public which will be used to hire a small team of staff and volunteers, including expert researchers to help produce their reports.

Last summer was the hottest on record, breaking over 120 extreme weather records. This is the critical decade for tackling climate change and reducing our emissions. But we can't tackle climate change without a well-informed public - and that's where the Climate Council comes in. Their expert reports help journalists and the public, with timely, expert, and independent information about climate change and its effects on our economy, environment, security, and health.

For more information about the Climate Council, to read their latest reports or to support the work of the council through making a donation go to www.climatecouncil.org.au



Future generations are most effected

Bioenergy for Small Communities

Our guest speaker at the AGM held on the 22nd August was Mr Andrew Lang, a Churchill Fellow and the Australasia-Oceania representative on the World Bioenergy Association. Andrew spoke of the production and use of bioenergy that he observed as he travelled through many countries, but particularly Scandinavia, where the use of bioenergy is deeply imbedded into the mix of energy production systems.

Energy produced from straw and woodchip biomass has in some cases provided enough electricity and heat for 30% of the total energy needs of a whole town. In Copenhagen 300,000 households are heated from bioenergy created by utilising waste materials; it is legislated that these materials must not go to landfill.

In Australia, only 1% of all electricity is produced from biomass, and this is mainly from sugar cane bagasse and landfill and sewage gas, however there are many other materials suitable and readily available to use in bioenergy production such as urban woody waste like used pallets and crates, sawdust and shavings from manufacturing, paper, tree trimmings, green waste and of course in rural areas, materials such as straw and orchard and vineyard waste.

Of all renewable electricity produced in Victoria, approximately 30% is produced from biomass. Bioenergy as a form of renewable energy is slowly increasing with new projects being developed. A recent example can be seen at the Beaufort hospital, where the LPG boilers are being replaced with boilers fired by plantation grown woodchip. Because of a lack of Australian expertise, this boiler is being installed by a NZ company at a cost of \$300,000, about twice what it should cost. However, anticipated savings will be in the order of \$60,000/annum, reducing fuel costs from the \$80,000/annum currently being spent on LPG.

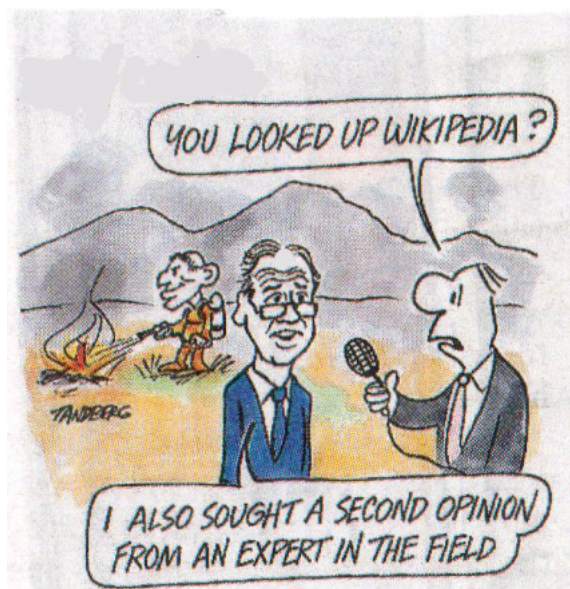
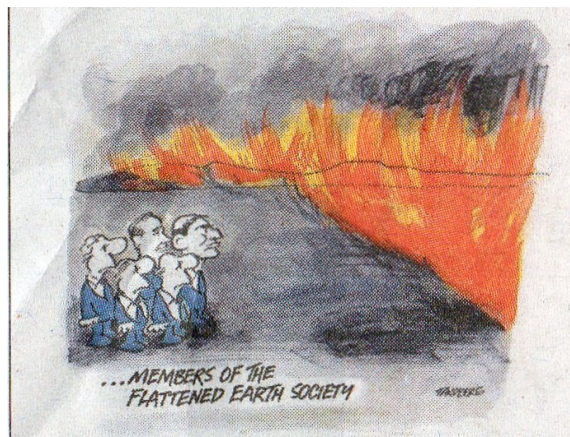
Another large scale project is the \$174 million biomass power station at Carwarp near Mildura, which will generate 35 MW of power to be fed into the grid. Farmers will be able to supply the 215,000 tonnes of biomass required each year with the waste material coming predominantly from almond processing, but also from surrounding activities such as cropping. This biomass steam power station is planned to be fully operational by mid-2016.

Andrew commented that Australia has the potential to produce up to 30% of its electricity requirement from biomass and biowastes. He said that using biomass to produce electricity is cost-competitive with wind power and cheaper than solar, and for heating purposes, biomass is cheaper than fossil fuels.

Andrew further stated that the European Union is committed to increasing biomass mobilisation for energy, aiming for a resultant reduction in greenhouse gas emissions per capita, especially where biomass utilisation is concentrated.

Further information about bioenergy can be sourced from the websites: www.woodenergyvictoria.net.au
www.chaf.org.au www.bioenergyaustralia.com
www.banz.org.nz www.eeca.govt.nz

Bruce Sonogan



Tannberg, The Age, 23/10/2013 & 25/10/2013

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