



Benalla Sustainable Future Group

Newsletter 8
November 2014

Benalla Sustainable Future Group Inc.
PO Box 642
Benalla 3672

Next Meeting

The next meeting of Benalla Sustainable Future Group will be held on Thursday 11th December at 7:30 pm at the Uniting Church, Carrier Street, Benalla where the film 'Disruption' will be shown.

Shot during the 100 days prior to the September 21, 2014 [People's Climate March in New York City](#), the film serves as a cautionary countdown intended to motivate viewers to take action on the issue of climate change.

The audience is taken inside the People's Climate Mobilization Hub, a New York office space where organizers and activists strive to set in motion the largest climate rally in history. Their primary objective is to capture the consideration of world leaders prior to a major UN climate meeting in order to draw worldwide attention to the existing and future threats of changing weather patterns. Experts on climate change, from authors and academics to scientists and community organizers, give viewers a history lesson on the topic at hand and make it clear that weather patterns are an issue of global concern.



BSFG stand at 'A Day in the Gardens'

President's Column Leadership

With all the recent disappointing developments in Australia in relation to climate change, renewable energy targets and Direct Action there will be much in this newsletter that is critical of the actions our governments are taking and their lack of leadership on these important issues.

The recent death of Gough Whitlam, one of Australia's greatest political leaders, has brought back memories of a leadership style very different to what we see today. Hugh White, Professor of Strategic Studies at ANU comments on this in his article, "*Whitlam's daring a lesson for today's leaders*", (*The Age*, 28/10/2014). In discussing Whitlam's leadership White says, "His style of political leadership seems far from what we know today. His speeches from this time explained new realities, advocated new policies and contested his listeners' assumptions with detailed, carefully constructed, thoroughly researched arguments. He aimed to help Australians understand their changing circumstances and persuade them how best to respond. He explained the hard choices we faced. *He aimed to change people's minds, not just pander to their preconceptions.*" (My emphasis).

This style of leadership is sorely missed today and we could be certain that Whitlam would have responded to the challenges of climate change very differently to our current political leadership.

Talking about leadership, another leader, President Obama, while not particularly popular in his own country showed global leadership when addressing the

UN General Assembly at the UN Climate Summit in September. The US President argued the problem of climate change had surpassed terrorism as the biggest threat to life on earth.

"For all the immediate challenges that we gather to address this week – terrorism, instability, inequality, disease – there's one issue that will define the contours of this century more dramatically than any other, and that is the urgent and growing threat of a changing climate."
– President Obama

Mr Obama said the US had a duty to lead on emissions reduction strategies, and he urged other nations to do their part, saying no nation could afford to pretend climate change was not real.

While more than 120 leaders attended the meeting, Prime Minister Tony Abbott, who had built his 2013 election win on a promise to roll back a price on carbon refused to attend the climate meeting. Instead he sent Foreign Minister Julie Bishop to present the case for his Direct Action replacement scheme. He arrived in New York a day later to attend the UN Security Council's meeting on global terrorism.

Many countries were critical of Australia's performance at the climate summit with a general feeling that Australia, along with Canada, was not contributing its fair share to global efforts to reduce climate change.

The Age in its editorial headed, "Government drops ball on climate change", (8/10/2014), says that Australia under the Abbott government has become an international joke on matters related to climate change. The editorial concludes, "This is a highly educated nation, whose scientists have made valuable contributions to the growing body of knowledge on climate change, and it is a wealthy nation with great economic opportunity. *But it is being governed by a party that refuses to acknowledge the vital role it must play at this point in history.*" (My emphasis).

The above was written before the surprise announcement by China and the USA of a landmark deal setting ambitious new targets to cut pollution, and before the G20 where, following this announcement, climate change was definitely on the agenda, despite Tony Abbott's best efforts to keep it off.

To continue with the theme of leadership – here we have two global leaders showing real leadership in dealing with the threat of climate change. "As the world's two largest economies, energy consumers and emitters of greenhouse gasses, we have a special responsibility to lead the global effort against climate change," Mr Obama said in a joint press conference with China's President Xi Jinping.

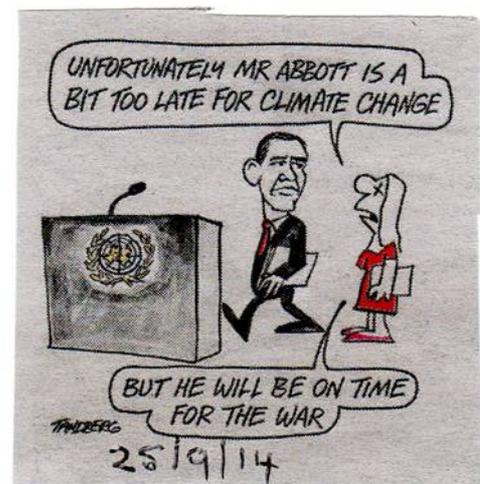
This is leadership on a grand scale with China and the USA effectively declaring they will set the pace for change. The onus is now on other nations to follow – there can be no more procrastination by other countries. "And that goes for Australia, which under the Abbott government, has gone backwards on emissions abatement strategies." (*The Age* Editorial, 'Seize the leadership challenge on climate', 14/11/14)

"Australia used to be at the forefront of global initiatives to cut emissions, but under Mr Abbott's prime ministership there has been timidity and craven reversal. Foreign Minister Julie Bishop describes the approach as "responsible". It is not. It sets a trajectory that causes least disruption to business – and therein lies the problem. Climate change requires urgent action and ambitious targets. Mr Abbott must change his tune and accept the crucial leadership challenge offered by China and the United States. He must on our behalf, reset Australia's targets to reflect genuine commitment to tackle climate change. That will be the world's expectation when the next summit begins in Paris next November."

John Lloyd



Sydney Morning Herald 30/10/2014



Sustainable Housing Forum

The Sustainable Housing Forum, a joint project between Benalla Rural City and Benalla Sustainable Future Group, was held on Saturday 25th October at Benalla Performing Arts and Convention Centre.

The aim of the forum was to help people become better informed about the long term benefits of building sustainable energy efficient houses, and to highlight the fact that it was not too expensive to do so. Benefits include less impact on the environment, greater comfort, reduced energy use resulting in lower energy bills and reduced greenhouse gas emissions.

A further aim of the forum was to provide contacts and information for planning, building or renovating, as well as for retrofitting (upgrading) existing houses for energy efficiency.

The major presenters, building designers Tracey Toohey and Ken Sibley, and builder Lachie Gales, delivered their talks with a great deal of passion and with plenty of real life experience. The 45 people who attended were given a wealth of information as between them Tracey, Ken and Lachie covered such topics as orientation of houses, passive solar design, building size, material selection, thermal mass, costs of different construction methods and materials, and many others.

Richard Morton from SunReal Renewable Energy spoke about energy usage and energy conservation measures, including making use of energy ratings on appliances. He also spoke about options for installing photo-voltaic panels to reduce the amount of electricity consumed from the energy grid.

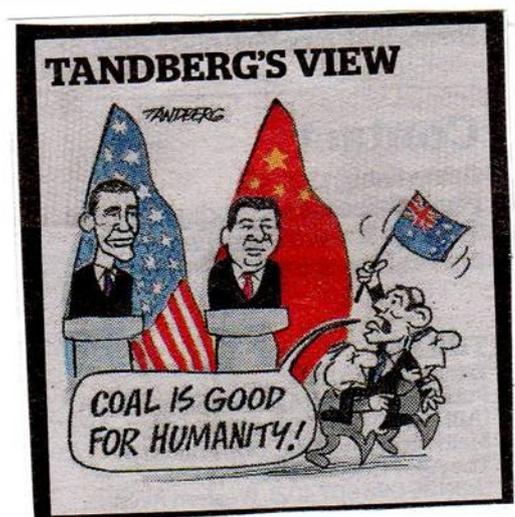
Callum Morrison, the Council's Environmental Health Co-ordinator, presented graphical data on where household water is used and what we can do about it. He also talked about water tanks and their appropriate use (for houses connected to the water mains) and provided some advice on the use of grey water.

Geoff Lodge from Goulburn Valley Community Energy conducted a workshop on retrofitting (or upgrading) existing houses for greater energy efficiency. The options he presented were prioritised to give greatest value for money, the end result being greater comfort and significantly reduced energy bills.

The day concluded with a Q&A Panel Discussion, ably led by the Council's representative Michelle Kent. All presenters were involved in the Q&A and a range of thoughtful and interesting questions were discussed with enthusiastic audience participation.

Warm applause for the presenters concluded the Forum, the participants encouraging both the Council and BSFG to make it an annual event for the benefit of future builders and renovators.

(Editor's Note: Many thanks to John Lloyd who was the prime mover and shaker behind this event. Wonderful support was received from Veronica and Larissa at Benalla Rural City with planning meetings and providing the venue and food).



*Tandberg,
The Age,*

Government aims to slash Renewable Energy Target

It appears that the optimistic speculation last month that the government would abandon its attempt to 'kill' the Renewable Energy Target was wrong. Industry Minister Ian Macfarlane has confirmed that the government intends to slash the large-scale Renewable Energy Target to a "real" 20 per cent target for renewable energy use. In effect this means lowering the large-scale RET to 26,000GWh in 2020 instead of the current target of 41,000GWh. This cut will actually slow the momentum towards wind and solar electricity, as the government surely knows.

Once again Prime Minister Tony Abbott is encouraging a misguided belief that the world can forever rely on burning fossil fuels. Mr Abbott clearly has a lot of faith in the coal industry. "Coal is good for humanity," he said last month, "coal is good for prosperity, coal is an essential part of our economic future, here in Australia and right around the world."

As *The Age* editorial, *Get real on renewables*, (27/10/2014) says, it is true enough that burning coal to produce electricity has been an essential step in the development of industrial society. But it is also true that emissions generated by burning coal have damaged the earth's climate. As *The Age* states, "The task for today and the future is to move beyond a reliance on old technology and to harness the economic opportunities presented by cleaner energy sources. While other nations have recognised the importance of renewable energy, there is a disturbing absence of leadership in this nation."

The government has initiated negotiations with the Labor Opposition to see if a bi-partisan agreement can be reached on the Renewable Energy Target in order to provide some certainty for the renewable energy industry. These negotiations have broken down, with the Opposition saying that the government was not willing to compromise on their plan to slash the RET.

Tim Flannery, writing in *The Age*, (*The smoke signal has been sent, Australia, 13/11/2014*) says, "The Renewable Energy Target flounders badly as the two major parties in Australia fail to see eye-to-eye. This uncertainty has led to a 70 per cent reduction in investment in renewable energy this year. The breakdown of negotiations over the RET again puts Australia out of step with the rest of the world."

Mr Abbott wanted to leave climate change off the agenda for the G20 summit, but thankfully he was overtaken by events. He said the G20 was an economic forum and not the appropriate venue for a discussion of environmental issues. *The Age* says: "His

judgement is mistaken. The environment is intimately bound to the economy, and ignoring the problems caused by global warming will not make them disappear."

The Age concludes its editorial as follows: "Mr Abbott, through his sloganeering for the coal industry and wilful disregard for real and growing benefits of renewable energy, has put himself in a position where no leader should wish to find themselves: standing on the wrong side of history."

(My emphasis - John Lloyd)

Yackandandah aims for 100% renewable by 2022

The small township of Yackandandah is looking to become 100% renewable by 2022, with 201 of 700 dwelling buildings already hosting 600kW of solar. The Indigo Shire that surrounds it has the highest solar penetration of any council in the state.

Spokesman Matthew Charles-Jones says the group will work in three stages: the first is to create a shared vision; the second is to encourage energy efficiency and rooftop solar, as well as battery storage, at an individual household and business level; and the third is to look at local generation and technologies that would solve the problem of night-time demand and cloudy days.

Even before the initiative was formally launched on November 22nd, the response had already been good. "The feedback is that people are really excited about the idea," he says. "They are asking which solar company should they go to, rather than asking what is the value of it."

Yackandandah already has a strong community spirit. It has a community owned petrol station, which has injected \$30,000 back into local projects; the community has installed a 12kW solar system on its roof, with 3kW paid for by the local folk festival as part of its sustainability commitment. There is a community owned hospital, which may also look to solar, and even the local Men's Shed has received a grant to install solar on their new workshop building.

Indi MP Cathy McGowan has also praised the forward thinking of the town. "Rural Australia holds the answer to Australia's energy provisions and Yackandandah is leading the way," McGowan said. "They are showing how communities can get their act together around renewable energy and it's a fantastic opportunity for us to grow businesses."

Renewable Energy Myths

There are many 'myths' about the unreliability and cost of renewable energy which are regularly used by supporters of fossil fuels and climate change deniers. Dr Mark Diesendorf, Associate Professor, Institute of Environmental Studies at the University of NSW in his recent book, *Sustainable Energy Solutions for Climate Change*, details these 'myths' and a factual response to them. Mark was a guest speaker at this year's Swanpool Environmental Film Festival. The following are some of the 'myths' he exposes as false.

<p>MYTH: Renewable energy is too variable or 'intermittent' to reliably make the major contribution to electricity supply</p>	<p>Hourly computer simulations, spanning up to a decade of real data on electricity supply and demand, show that 80–100% renewable energy can supply electricity just as reliably as conventional power stations. Reliability is achieved by having a mix of variable renewables (e.g. wind and solar photovoltaics (PV)) and flexible, dispatchable renewables (e.g. hydro with large dams, gas turbines burning renewable gases and liquids, and concentrated solar thermal power with thermal storage). Geographic dispersion of renewable energy generators and reductions in demand peaks in 'smart' grids further increase reliability.</p>
<p>MYTH: Base-load power stations are necessary and renewable energy cannot provide them</p>	<p>Base-load power stations, such as coal or nuclear, are unnecessary for supplying base-load demand reliably. This is shown by both hourly computer simulations of electricity supply from 100% renewable energy and practical experience with high penetrations of wind power into electricity grids. In a 100% renewable electricity system, reliability is achieved by having a mix of variable and flexible generators, as explained above.</p>
<p>MYTH: Coal-fired power stations must be operated continuously as back-up for variable renewable energy systems</p>	<p>Again, both practical experience and computer simulations bust this myth. In South Australia, where 27% of annual electricity is generated from wind, one of the two coal-fired power stations has been shut down and the other is now only operated for half the year. No additional gas-fired power stations have been installed. Computer simulations confirm that base-load power stations, such as coal and nuclear, are too inflexible to be partners with large amounts of variable renewable energy. The necessary partners are flexible power stations, which can be entirely renewable.</p>
<p>MYTH: Renewable energy is too expensive</p>	<p>Once true, but now no longer. In many countries solar PV has become economically competitive with retail electricity prices and in a few locations it is also becoming competitive in the wholesale market. On-shore wind is competing with conventional power stations in the wholesale market in several countries. Both solar PV and wind are continuing to become cheaper, while coal and nuclear power stations are becoming more expensive.</p>
<p>MYTH: Renewable energy receives huge subsidies</p>	<p>Subsidies to renewable energy have been decreased to the point where they are generally much smaller than the direct economic subsidies to the production and use of fossil fuels and to nuclear energy. In addition, fossil and nuclear energies receive huge indirect subsidies resulting from the failure to include in their prices their huge environmental and health costs.</p>
<p>MYTH: Renewable energy is not ready to replace fossil fuels</p>	<p>A sufficient variety of commercially available renewable energy technologies are ready to replace fossil-fuelled electricity. Of course renewable energy has to be scaled up, however this can be done much more quickly than for fossil and nuclear power stations, because wind and solar technologies are mass-produced in factories and the installation is very rapid. For urban transport, cycling, walking, improved mass transit and vehicles fuelled by renewable electricity can replace most fossil-fuelled vehicles. For rural road and air transport, renewable energy still needs further development.</p>

These and other myths about renewable energy are refuted in more detail in Mark Diesendorf's 2014 book *Sustainable Energy Solutions for Climate Change*. UNSW Press, Sydney, and Earthscan, London.

Divestment - offloading investments in fossil fuels

The divestment movement, i.e. taking money out of investments in fossil fuels is gaining momentum. In Australia large superannuation funds have announced decisions to quit or curtail their investments in coal. Recently Ian Young, Vice Chancellor of the Australian National University, announced that ANU would be offloading \$16 million in fossil-fuel stocks from the university's \$1 billion investment portfolio on ethical grounds. Professor Young said that fossil-fuel reliant companies will not survive the next 20 to 30 years unless they diversify into new energies. (*ANU defends decision to dump fossil-fuel stocks, The Age, 13/10/14*)

ANU is the first Australian university to divest from fossil fuels but in the USA nineteen universities have sold out of investments deemed to be unethical or at risk to the environment, including Stanford University. Other examples include the Rockefeller Brothers Fund which is refusing to invest in fossil fuels while Norway's sovereign wealth fund, the world's largest, is reviewing its position and will report back early next year. As well, Deutsche Bank, Barclays and HSBC have refused to provide loans for the Abbot Point coal port in the Great Barrier Reef Marine Park without United Nations support.

Meanwhile, Erwin Jackson, deputy CEO of The Climate Institute, writing for *The Age* says that climate and carbon risks are fast becoming a mainstream concern on financial grounds, rather than ethical grounds. (*Money talks as investors see the light and dump coal, 14/10/14*) In 2011 Carbon Tracker, a British-based think tank, released a report which found that only about one fifth of the global fossil fuel resources can be burnt if the world is to maintain a good chance of limiting global warming to 2 degrees. The International Energy Agency adopted this approach in 2012.

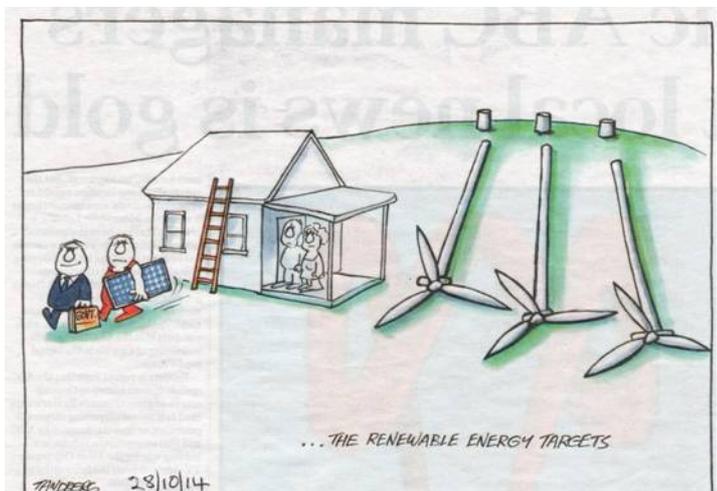
Jackson states, "Much of the remaining fossil fuel resources are sitting on the books of listed companies, contributing to the price of their shares which most of us own through our superannuation." He points out that Australian share markets are particularly exposed to the carbon risk through the local share markets' heavy bias in resources and coal. Research by Carbon Tracker and The Climate Institute shows that if the Australian coal resources of listed companies were burnt that would use up to around three-quarters of the global coal budget that is consistent with avoiding 2 degrees of warming.

Jackson says, "In other words Australia is quite vulnerable to a 'stranded assets' scenario in which previously valuable reserves become worthless. On that

basis it is very likely that some Australian coal assets, in which many of us have a stake (through our super), will have to be written off."

Despite these considerable financial concerns the South Australian Premier, Jay Weatherill, and Prime Minister Tony Abbott have entered into the divestment debate heaping scorn on the ANU for its decision to offload a number of resource stocks from its investment portfolio. Tony Abbott said, "I think this is a bit of unnecessary posturing, frankly. The important thing for investors is to look for good returns and Australian resource companies have traditionally had excellent returns."

Erwin Jackson says, "It is past time for responsible investment managers to assess and disclose the climate risks of their holdings. Investors counting on a 'business as usual' strategy which fails to seriously consider climate and carbon risks will find their funds not only at risk of damage to their image, but to their returns. Investment consultants and fund managers who aren't considering long term trends are not the sort you want to trust your retirement with."



Tandberg, The Age, 28/10/2014

Carbon Footprint

Australia has one of the highest per capita greenhouse gas emissions in the world.

The ACF has done research showing that only about 25% to 30% of our emissions are attributable to our direct emissions at home and transport. The major component of our carbon emissions is embodied in our consumption expenditure; all the things we purchase beyond these direct emissions.

Find the ACF Consumption Atlas at <http://www.acfonline.org.au/sites/default/files/resource/index67.swf>

Check out the main findings <http://www.acfonline.org.au/sites/default/files/resource/res Atlas Main Findings.pdf>

Some time ago I did an analysis of my direct home energy usage for a two week period in October 2011. I also included car use for this period.

Based on these figures my per annum direct emissions would were 4163 Kg CO₂-e as shown below. I have estimated emissions from consumption expenditure by assuming my direct emissions are 25% of my total emissions as per the ACF research.

Emission Source	Kg CO ₂ -e *	Percentage Direct	Percentage Total
Direct Gas	404	9.7	2.4
Direct Electricity	1379	33.1	8.3
Direct from Car use	2380	57.2	14.3
Sub total	4163	100	25.0
Consumption Expenditure	12489		75.0
Total	16652		100.0
* Based on Department of Climate Change National Greenhouse Accounts Factors.			

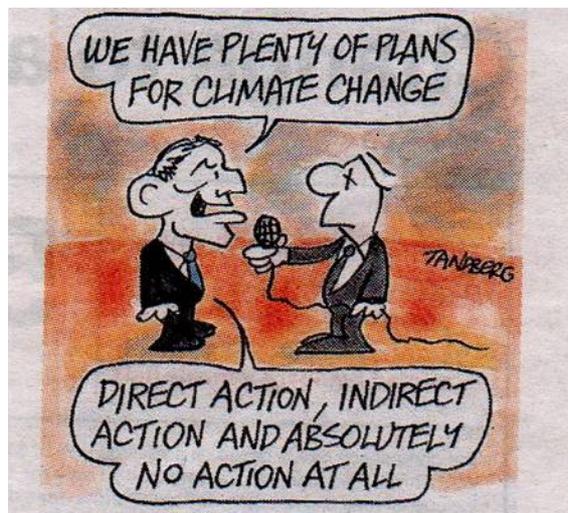
The global per capita carbon budget to keep temperature rise to 2 degrees by 2050 is about 2.7 tonne. To reduce my emissions I could invest in solar hot water and solar power although they only account for 10.7% of my total emissions. I could also reduce my car use which is over half of my direct energy use. My figures are based on 1000 litres of unleaded fuel; about 17,000 km per year at 6litres per 100km.

The biggest contributors to my emissions are from embodied emissions in my consumption expenditure. Food is a large component of our footprint and some diet changes could reduce my footprint. The figures highlight that there needs to be a big reduction in my consumption expenditure and or the emissions intensity of my consumption.

There has been a large uptake of solar on domestic rooftops in Australia. This has initially come about by government assistance. And prices are coming down. There now needs to be a big push for business to go renewable. The adoption of the BZE Stationary Energy Plan would reduce the emissions intensity of consumption goods manufactured in Australia. <http://bze.org.au/zero-carbon-australia-2020>. Although perhaps a lot of these goods are now manufactured overseas, using Australian coal!

Peter Maddock

Tandberg,
The Age,
14/11/2014



Benalla Sustainable Future Group Inc.

Membership renewals are now due for 2014-15

Your membership fees help to provide the necessary finance to run Benalla Sustainable Future Group so that BSFG can continue to provide a valuable role in the community.

Membership fees are used to provide insurance cover for financial members at BSFG activities, to pay for venue hire and guest speakers, to produce a quarterly newsletter and to meet other running expenses.

One year membership of Benalla Sustainable Future Group (BSFG) is \$20 per household or \$15 if already a member of the Bulk Food Co-operative.

Please complete the membership application below and return to BSFG

BENALLA SUSTAINABLE FUTURE GROUP INC. – Membership Application

Name(s): _____

Address: _____

_____ **Postcode** _____

Phone: _____ **Email:** _____

Areas of Particular Interest:

Are you interested in environmental advocacy? Would you like to be informed about the Environmental Advocacy Action Group. If so please tick: **Yes** _____

In applying for membership I/we acknowledge my/our support of the purposes of Benalla Sustainable Future Group and agree to comply with the rules of the association.

Signature: _____ *Date:* -- _____

Please indicate: Renewal ___ or New Application _____

Please note: email is our preferred form of communication and your privacy will be respected.

One year membership of Benalla Sustainable Future Group (BSFG) is \$20 per household or \$15 if already a member of the Bulk Food Co-operative. Please tick if member of Bulk Food Co-op. _____

Payment method Cheque : _--_ Direct Transfer: _____

Please make cheques payable to Benalla Sustainable Future Group Inc.

Direct Transfer: BSB: 063505 Account No.: 10261024 Reference: Surname & initial

Please complete membership form, including membership subscription, or details of direct transfer, and post to:

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