

Welcome to the Newsletter

Welcome to the Sustainable Systems & Solutions newsletter. It is designed to support people in engaging and furthering their participation in embracing a more sustainable way of living - it will share the stories of individuals and businesses who are taking action, and provide resources and tips to support behavioural change.

First a little bit about who we are – we are three like-minded people who have teamed up together in the hope of contributing to a more sustainable future and making some difference to the world we live in.

Sarah Lowe has a background in design and working with business's most valuable resource - their humans! Sarah is focused on empowering people to take action and to engage in practices which mitigate climate change. Being depressed and overwhelmed by our current situation is achieving little and while the 500 top polluters have a role to play, 20% of emissions come from householders, so there is a role for all of us.

Andrew Watson is a carbon accountant with 25 years experience in rural and urban permaculture. He has a passion for conservation of energy and the growing of food plants. Andrew loves to see the skills needed for a low energy future spreading throughout the wider community. The amount of wasted energy, water and soil in homes, businesses and government is something Andrew sees as a crime and he enthusiastically shows how efficiencies can be achieved.

Judy Micklewright has a background in information technology and business sectors and for many reasons has now come to the world of sustainability. Judy wishes to contribute something to furthering a world that can be truly sustainable and support humanity going forward. We cannot wait for

governments and corporations to solve the problems - they take too long, get caught up in all the politics, debates and their own agendas - it will be too late! It is up to each one of us to take responsibility for whatever we can do in our own sphere of influence and just get on with it.

Visit [Sustainable Systems & Solutions website](#) to get more information about our current skills and projects.



Consumption Fact



- 1 slice of **bread** = 28L water
- 20MJ embodied energy in one loaf of bread = 7,500KJ of energy for us

Sustainable Stories

Sunday the 11th of September heralded the 10th anniversary of 'Sustainable Home Day'. This year it coincided with the launch of Sustainable Living in Kingborough's (SLiK) 'bulk purchase of solar hot water systems'. Sarah and Andrew opened their home to over 70 people.

Sarah explained; "We are 4.5 years into a 5 year plan which started in 2007 when we bought our 556 sq.m Blackmans Bay property". The open day illustrated community hunger to find ways to live a simpler lifestyle with a smaller footprint. Hence this Newsletter - it is designed to convey the practical and positive steps being taken in homes and businesses every day. From this home and business, the Newsletter will migrate on to other homes and businesses to provide readers with an overview

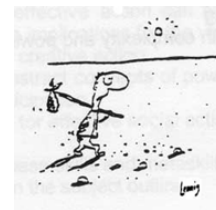
of what's possible and what can actually come of taking up this type of lifestyle. "There are many extras that come along, which are unexpected, when you take this type of journey" says Sarah.

"We moved from a 12 acre, Cygnet permaculture property that we endeavored to run on weekends, both of us working full time in Hobart".

It is double brick with bedrooms and bathrooms downstairs and brick veneer living, kitchen, laundry and study upstairs. Solar passive design helps with heat gain but single glazing and an uninsulated, very flat ceiling means loss of warmth in winter and some gain in warmth on warmer Tassie days.

The garden was priority one. Existing food plants were banana passion fruit, large lemon, apricot, alpine strawberries and a few veggies. We fenced the veggie garden from the four chooks and took out exotics and natives and planted black passionfruit, kiwifruit (large and small), apricot, mulberry, fig, apples, hazelnuts, cape gooseberry, peach, pears, plums, rhubarb, asparagus, strawberries, myrtle berries, walnuts, lime, mandarin, lemon, olives, feijoas, globe artichoke and avocado.

So what are the 'extras' that came along you might ask? Creating a sustainable home grew into creating a sustainable life. Within a year Sarah had resigned from a full time job and was working for herself from home - the conversation had shifted to "what can we do without?". "I was discovering with the maturation of my children that there were other things I wanted to pursue - like art and writing family history, further learning and living well in my community" says Sarah.



"there are no finished answers but only striving forward at each moment and simply opening to a larger life."

What is a carbon price?

A carbon price (or carbon tax as it is sometimes referred to) puts a price on the carbon released when fossil fuels are burned. It takes into account the cost of the environmental damage in the price of fossil fuel use.

In Australia fossil fuels are currently deemed to include coal and petroleum. The carbon price, determined by the government, is to initially be a monetary sum of \$23 for each tonne of carbon produced when a coal or petroleum fuel is burnt. The price is to be levied across Australia's 500 largest polluting companies and will begin from 1 July 2012. Agriculture is exempt from paying the carbon price. The price will rise yearly by 2.5% above inflation and it is intended the carbon price will move to a carbon market (emissions trading scheme) from mid 2015.

The aim of a carbon price is to reduce the amount of carbon emitted into the atmosphere by:

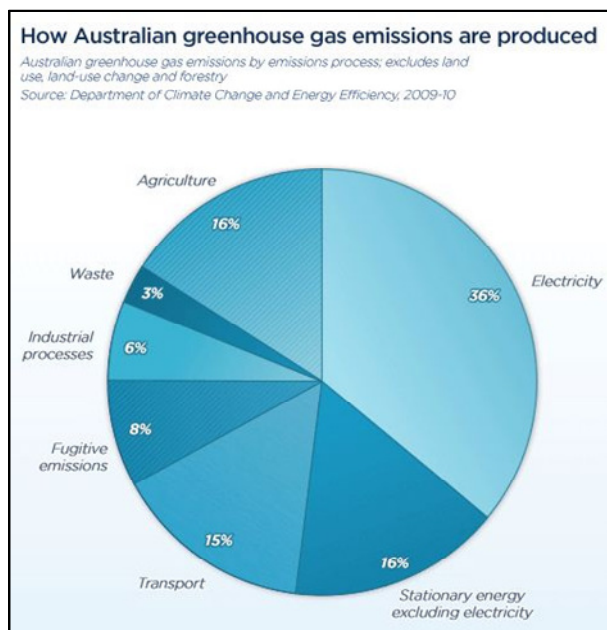
- Creating incentives for development and use of technologies with lower carbon emissions (focus is on production or supply side)
- Reducing demand for fossil fuel derived energy and emissions-intensive products by individuals and businesses, who it is hoped will take into account the price of

fossil fuel based energy and make choices around energy usage accordingly. For example, cars bought, appliances used, and implementation of more energy efficient practices both at home and work (focus is on demand side)

In other words to create a financial incentive for businesses and households to cut their greenhouse gas footprints.

Subsidies via tax cuts, pension rises and welfare payments, will be given to low and middle income earners to alleviate increased prices.

Several countries already have a carbon price of one form or another. These include Finland, Sweden, Norway, Denmark, The Netherlands, Italy, Switzerland, Ireland, Japan, India, and Costa Rica. Some local areas within countries have also introduced one, for example, the provinces of British Columbia and Quebec in Canada, and the towns of Boulder (Colorado) and San Francisco in the USA.



Sustainable Living in Kingborough



For those of you who live in Kingborough, a sustainability group was established in July 2010 to meet the needs of residents living in the Kingborough municipality. The group is known as *Sustainable Living in Kingborough* or SLiK for short. There are a number of activities being undertaken. To find out more about SLiK go to <http://www.slikinfo.org/>

Solar Hot Water Bulk Buy

One activity that may be of particular interest to residents in Kingborough is a project to enable the bulk purchase of solar hot water systems. Kingborough Council kindly awarded a grant to enable SLiK to recruit a project manager for this project. The project is underway and a supplier has been selected.

See <http://www.slikinfo.org/Solar-Hot-Water-Bulk-Buy.html> to register your interest or for more information about this.

Below is an approximate cost comparison for a standard electric hot water system v. a solar hot water system.

Standard hot water system (3.6kW in use 6 hours/day, on a hot water tariff (41 or 42) at \$0.15/kWh:

$$21.6\text{kWh/day} \times \$0.15157/\text{kWh} = \$3.27/\text{day}$$

or

$$\$3.27 \times 365 = \$1,194/\text{yr}$$

Solar hot water system comprising evacuated tubes on frame using free sun's energy to do approximately 80% of year round water heating:

$\$1,194 \times 20\% = \$238/\text{yr}$ (saving of $\$956/\text{yr}$)
Payback period for system at net cost of $\$3,800$ (cost of SLiK bulk buy standard system less rebates):

$$\$3,800 / 956 = 4 \text{ years}^*$$

*If you are on a higher tariff and as energy prices rise payback will be shorter.



Bits 'n Pieces

Some interesting links:

Why energy efficiency and conservation is important to our future:

<http://www.postcarbon.org/article/415728-conservation-there-is-no-alternative>

The Story of Stuff - a great little 20 minute, fast paced, fact filled video that looks at our production and consumption patterns. It shows how all the stuff in our lives affects communities at home and abroad and can lead to many environmental and social issues.

It may change the way you look at all the stuff in your life forever!

<http://www.storyofstuff.org/movies-all/story-of-stuff/>



Handy Tip

Seal plastic bags with old bottle tops - it is air proof and water tight.

Cut up a disposable water bottle and keep the neck and top, as in photo



Insert the plastic bag through the neck and screw on the top to seal



The bag is made air tight, water will not leak, it is easy to open, and the top and screw cap can be used over again!



Please let us know if you don't wish to receive this Newsletter and we will remove you from our list. Likewise - please pass it on to others you think might be interested.

Our next Newsletter will cover:

- What is "sustainability"?
- Sarah and Andrews story continued
- Showcasing a business
- Other tips and hints