

Permaculture Cairns Newsletter

EMPOWERING COMMUNITIES WITH SUSTAINABLE SOLUTIONS FOR 10 YEARS



Care for the Earth, Care for people, Fair share the excess

Permaculture Cairns Incorporated Web Site: www.permaculturecairns.org.au

PERMACULTURE CAIRNS MARCH MEETING

Monday 18th March 6pm for a 6.30 start

Venue: Endeavour Learning and Lifestyle Building
4 Warner Street Manunda

Members free, please bring some nibbles for the cuppa break, non-members \$5

AGENDA

Welcome to all and what is coming up

Our Special Guest Speaker: Ken Love is the Executive Director of the Hawaii Tropical Fruit Growers Association, which has more than 800 members statewide, and a nonprofit organization with the primary purpose of promoting the interests of the tropical fruit industry in the State of Hawaii. This association recently celebrated their 28th annual Hawaii International Tropical Fruit Conference, which is the leading conference globally in tropical fruit production and marketing.

He has written many extensive publications on various tropical fruits, including jackfruit, rollinia, bilimbi, jaboticaba, soursop, abiu, and avocados.

Known as "the fruit guru", Ken's passion for tropical fruit is evidenced by the exotic tropical fruit posters and chef guides he produces. He works to promote greater diversification programs by using seasonality and elevation in order to reduce the need for external labor, and his research endeavors to help area farmers become more sustainable through diversity, agritourism and value-added product development. His work with chefs and culinary schools has helped to teach the next generation of Hawaii chefs on utilizing local fruit

Followed by the Movie "Fruit Hunters"

Ken was predominately featured in the documentary film *The Fruit Hunters* (2012), featuring movie star Bill Pullman and from the acclaimed director Yung Chang, which is a cinematic odyssey that takes viewers from the dawn of humanity to the cutting edge of modern agriculture.

Meeting closes 8.30pm now time for a chat, a cuppa and a snack with like-minded people

Permaculture Cairns Series of Workshops for 2019

Grow your own food in the tropics

No. 3 PROPAGATION WORKSHOP

Saturday 23rd March 2019 from 9.00am to 12.00noon.

Venue: Endeavour Foundation 4 Warner Street, Manunda



Topics covered in this workshop, seed raising mixes, how to plant seeds, how to prick out and transplant seedlings, potting up and planting out.

What seeds to plant for the tropics at this time of the year.

How to take cuttings from ground covers, shrubs, vines and make divisions.

Introduction to tropical perennial vegetables.

Cost: \$30 for Permaculture Cairns members, \$35 for non members.

Permaculture Membership \$20 singles and \$30 families

You can pay on the day, it is easier that way.

All pots, plant materials for cuttings, Morning Tea & Notes are included.

YOUR MUST REGISTER BY EMAIL or no Notes - info@permaculturecairns.org.au

My experience: Commercial vegetable grower for 6 years, Plant nursery owner/operator for 10 Years. Study:- Certificate in Horticulture 1983, a two weeks Permaculture Design Certificate Course 1992, Microbe Course and Chromatography Course with Mas Humas 2012, Elaine Ingham's online Microscope Course' 2013, Graeme Sait's 4 day Nutri tech Solutions, Certificate in Nutrition Farming 2014, and while attending National Biological Farming Conference 2016 I attended David Hardwick's Workshop on Soils. Other Soil workshops I have attended are with Terrain, Northern Resource Management and FNQ Biodynamics. I have an extensive library on many subjects, but mostly on how to grow food using the biology in the soil. I have a long-established Permaculture garden with lots of tropical perennial vegetable plants.

Permaculture Day 2019

A date claimer

**Hosted by Permaculture Cairns at Endeavour Foundation
4 Warner Street, MANUNDA**

**Sunday 12th May 2019
10am to 3.30pm**

This day is all about building communities, by joining together and sharing our knowledge, methods and ideas. Grow healthy food in a sustainable way and not pollute the planet, learn a new art or craft. be healthier, happier, wiser and more creative,

There will be demonstrations, workshops, displays and talks by individuals from the participating groups.

FNQ Biodynamics- Pruning trees, and What is Biodynamics.

Organic Motion, on the Edible Landscape.

Syntropic Farming, Caitlin on the Vegan diet,

Michael and Linda Alba on fruit trees and tropical plants,

Kym from DAF to show and talk on nasty Weeds in the Tropics,

FNQ Seed Savers on saving seeds,

Richard on Mushrooms, Peter on Sprouts, Andy on Raised Beds,

Len on Wicking beds and Aquaponics for the back yard,

William of Red Neck Timbers will display how he uses recycled timber to make useable items,

Artists on art activities, The Fibrecrafters will show us how to relax and make some useful craft items.

There will be food for sale. Produce for sale.

Plants and seedlings for sale.

Timber items for sale

Arts and crafts for sale

Kids Activities and Sabine with Chooks.

The program is not finished yet, still awaiting confirmations.

So watch this space.

Permaculture Cairns: possible workshop subjects Growing Oyster Mushrooms in kitty litter, Composting, Bokashi TBA.....

Some tips for growing food in a challenging climate

The herbs have survived all the weather could through at them including the Basils Genovese, Holy and Thai, and Anise hyssop, Mexican tarragon, Vietnamese mint, Five in one coleus, Rosemary, Mint, Garlic chives are going really well. Most plants need some loving care now by adding, compost/organic fertiliser some seaweed solution to help them to totally recover.

The casualties were oregano, parsley, sage, thyme, lemon thyme, Rosemary was under some cover and didn't get the full on rain.

Tropical perennial food plants have grown really well and provided food throughout the wet season. The greens - Okinawa, Sambung, Brazilian, Kang Kong. The root crops – sweet potato, cocoyam, taro all enjoying this wet humid weather. Lots of Bananas, Pawpaws, dragon fruit, Rosella, Lemons, Egg plants and Perennial capsicum, chicory ginger, turmeric.

Paddy Straw Mushroom, finally I got some spawn and have harvested mushrooms from two bundles, Caitlin did a bundle at the same time and is eating mushrooms too. They also came up beside the compost bin in which I have composted everything, including meat products, fish and prawn heads, coffee grounds, kitchen scraps the worms wouldn't like, shredded paper and lots of garden greens/browns and sugar cane mulch.

To compost meat scraps, first you need a compost bin without any holes as rats will chew the whole large enough to get into the bin or out of the bin. The bin needs to sit on a one centre wire mesh to stop rodent access. This needs to be done before starting to fill the bin. When adding meat scraps, prawns etc to a bin you will need to dig a hole in the middle of the compost to be sure the scraps are well covered by the compost. Usually gone in a couple of days. .

Now is the time to empty the compost bins in readiness to top up the garden beds before planting out your homegrown seedlings. When starting seedling now, put them in full sun, but move them out of heavy rain, even pot them up until the storm rains have gone. If we have heavy rain the nutrients get leached from the soil, you will need to drench your plants with an organic balanced fertiliser if this happens.

What to plant now –Fruit trees, tropical perennial greens, tropical root crops, beans, snake beans, bok choy, Pak choy, silver beet, rocket, basil, garlic chives, chives, bunching shallots, cucumber, melons, turmeric, ginger, galangal, daikon radish, pandan, comfrey, corn, melons, pumpkin, okra, tomato, capsicum, Kale, broccoli, egg plant, in fact just about anything that will mature in 5 to 6 months. Lettuce may not germinate if temperature is over 25 degrees.

I bought Bok choy and rocket seedlings and planted them in my wicking beds, they are growing very fast. I added some watercress which amazingly survived all the heat and rain. I also bought a small raised bed from Andy's Sheet Metal for planting a Dwarf Mulberry tree and planted some Wong bok, Parsley and Chives around the edge of the bed and they are powering ahead. Moon planting dates for above ground growing crops 9th to 19th March. Edible root crops 24th to 25th March. Dormant period 26th to 30th time to prepare beds for planting.

Cheers and get those seeds in now. Carol Laing

HELP NEEDED BY PERMACULTURE CAIRNS. We have received soil for the kitchen garden at Endeavour but we need help to top up the two raised garden beds. Can you help? Send a message on Permaculture Cairns Group facebook page if you can. Early mornings or late afternoons would be good.
Thanks carol laing

Events in the Region



A DAY TO LEARN HOW TO SOW, GROW, HARVEST, PREPARE & FEAST FROM THE GARDEN TO YOUR PLATE.

INCREDIBLE EDIBLES TROPICAL SUPERFOOD WORKSHOP SAT MARCH 16

TONIELLE CHRISTENSEN / WWW.ORGANICMOTION.COM.AU / 0422 068 995



~ date claimer ~

26th of MAY is the date for a **COMBINED FNQ Seed Savers Event**
with members of the Qld Herb Society from Townsville
more details soooooooooon.....

Mareeba Seed Savers and Gardening Group
~ Meeting Notice ~

Our meetings are friendly and informal. It is a time when we meet to share / exchange seeds and plant material, to swap ideas with and gather knowledge from other gardeners

Our next meeting will be held on
SUNDAY 17th March 2019

Come anytime from 10am to 4pm. We will pack, clean and register seeds, share lunch, then wander through the garden, followed by afternoon tea

~ Venue ~

Jutta Linneweber
21 Walsh Street, MAREEBA

for further information contact Lindy Alba on 4092 116

Please bring a chair and if staying for lunch, cutlery, mug, plate and lunch / afternoon tea to share. Also, any seeds or plant material you have for the give away table and a gold coin donation to cover tea and coffee supplies.

****Also, remember your hat and sensible shoes for the garden walk ****

Special guest speakers at 1pm ~
Michael Alba and Douglas Gillies
Topic: Potting and Propagating Pointers

BIODYNAMICS FNQ EVENTS CALENDAR 2019

MARCH 24th Sunday 10am-3.30pm Practical Biodynamic Basics Setting up a new garden, making compost and Seaweed tea and using the Biodynamic Preparations. Kuranda.

APRIL 28th Sunday 10am –3.30pm Nutriton—Fermentng and Dehydrating. Malanda

MAY 26th Sunday 10am-3.30pm Annual Horn Burial and AGM Kaban

JUNE 23 Sunday 10am-3.30pm Pruning and grafting Tropical Fruit trees TBA

JULY 28th Sunday 10am-3.30pm Tropical Home Gardening Cairns

AUGUST 25th Sunday 10am-3.30pm Planning your seasonal garden Ravenshoe

SEPTEMBER 22nd Sunday 10am–3.30pm Horn Lifting Using the Biodynamic Preparations on your land . Kaban JG & A R Collins

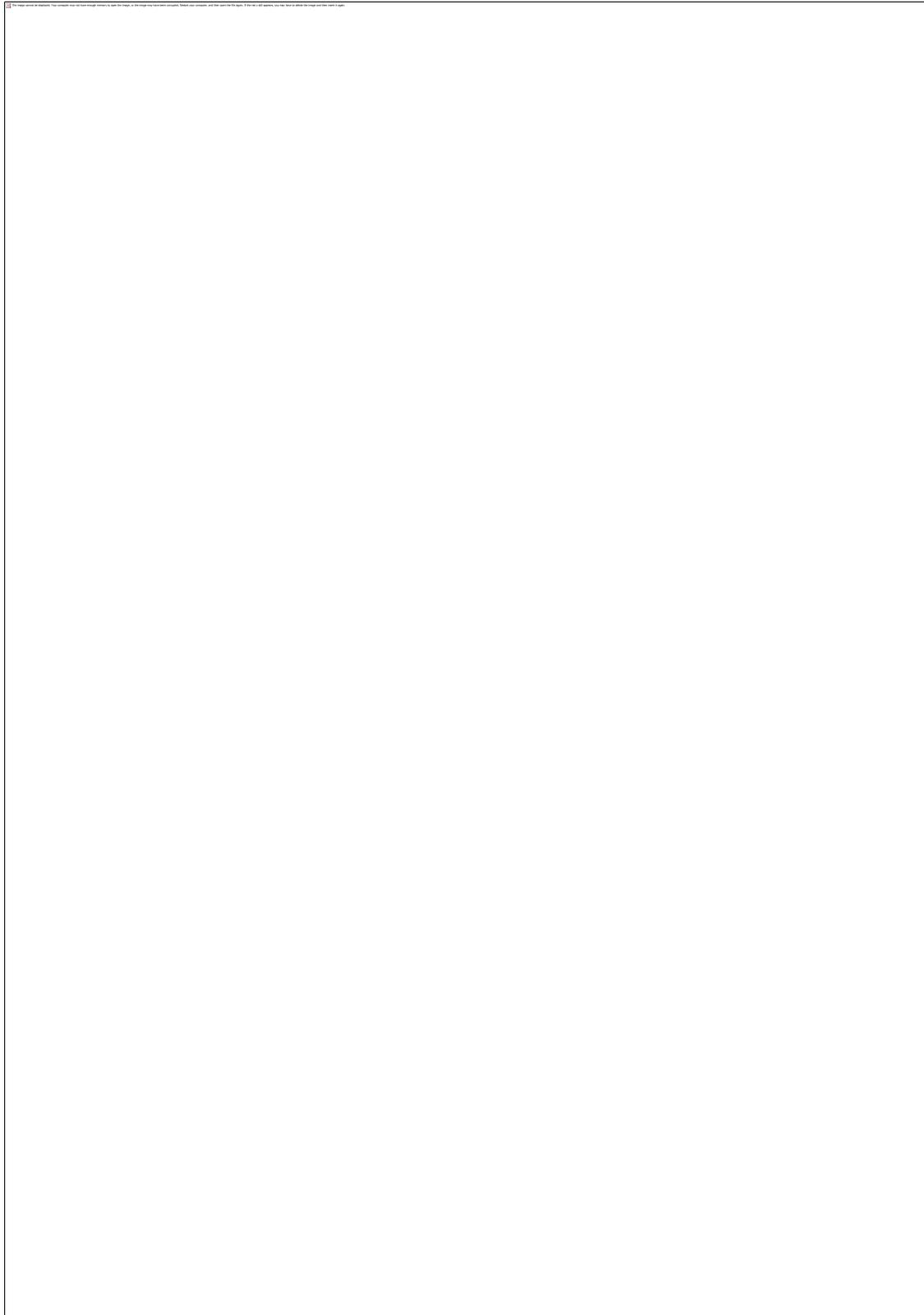
OCTOBER 27th Sunday 10am – 3.30pm Soil Food Web– Building soil biology TBA

NOVEMBER 24th Sunday 10am-3.30pm TBA

Bring chairs unless at Hall. Bring lunch to share, Refreshments provided.

For further info : Call Satya 0425411545

Tricia—0467 089458—plus lifts from Cairns



GRAZING NATURALLY & SOIL BUILDING WORKSHOP



by Dick Richardson

with an intro to soil health by David Hardwick

Tues 9 April, 9am-5pm

**Location: Bruce & Elizabeth Carcary's property
122 Nash Rd, Millaa Millaa**

- Using plants and animal grazing to build soil depth and maturity
 - Flexible, easy-to-replicate paddock-grazing patterns
- Soil properties and soil health and how these affect grass growth
 - Ways to enhance different soils across the region

Dick and David are well-known presenters at field days.

Dick draws on a lifetime of work in ecological grazing practices and resilient ecosystems.

David is an agricultural ecologist & soil management specialist with over 20 years experience in farming and food systems.

**Catered event. RSVP Evizel Seymour by Friday 29 March at:
evizel.seymour@terrain.org.au or on (07) 4095 7108**

This is a joint Upper Johnstone Integrated Project & Digging Deeper Plus event, brought to you by Terrain NRM and funded through the Queensland Government's Natural Resource Investment Program and the Australian Government's National Landcare Program



Three VERY Interesting News Items

Bio-fertiliser: Project Catalyst trial

February 27, 2019

Bio-fertiliser is being put to the test on an Ingham farm where the Figuera family wants to increase yield, stem rising costs and improve soil health.

Sergio and Sharon Figuera are running trials in sandy soils to compare [RegenAG](#) bio-fertiliser and synthetic fertiliser, as well as reduced rates of each and a reduced combined rate.

Their findings are part of the 2019 Project Catalyst Forum recently held in Cairns where 200 cane farmers, researchers, scientists and agricultural industry representatives are sharing cutting-edge farming practices to improve productivity and water quality.



Project Catalyst is a partnership of more than 100 Queensland cane growers, the Australian Government, WWF, The Coca-Cola Foundation and natural resource management groups including Terrain NRM.

It is funded by the Australian Government and The Coca-Cola Foundation.

The Figueras began producing bio-fertiliser three years ago after a RegenAG course. They haven't looked back.

“With input costs a lot higher these days and with pricing volatile in the sugar cane industry we needed to find alternatives,” Sergio said. “Sharon went to a workshop on bio-fertiliser production and made the first batch, and we’ve gone from there.”

He has been supported through Project Catalyst to split one-hectare paddocks into six strips for a three-part trial at three different sites. Outside the trial area, a combination of bio-fertiliser and inorganic fertiliser is used on all of the farm's plant cane and first ratoons, and chemical fertiliser use has reduced from 150k to 140k of nitrogen.

Sergio plans to drop that to 130k next year.

“Over the years we've done a fair bit of damage to the soils by using fertiliser and chemicals and now it's time to wean ourselves off them, steady steady,” he said. “Our aim is to cut back to a level that's more sustainable and profitable.”

He said cane yields hadn't dropped, cane was “hanging in longer” and he'd noticed a greater resilience to rust. His bio-fertiliser trial follows farming changes including controlled traffic, grassing headlands and drains, and planting legume cover crops.

The Project Catalyst Forum includes virtual farm tours, a heavy focus on soil health and trial updates on everything from variable rate fertiliser application to mixed species cover-cropping and zero-tillage planting.

For more information about Project Catalyst, growers can phone Terrain NRM's Michael Waring on 0428 771 361 and visit the [Project Catalyst website](#).

THE BATTLE AGAINST BUGS: IT'S TIME TO END CHEMICAL WARFARE

MARCH 7, 2019 BY [SALAH HAMMAD](#) & FILED UNDER [ANIMALS](#), [BEES](#), [BIODIVERSITY](#), [DESIGN](#), [GENERAL](#), [GMOS](#), [INSECTS](#), [WHY PERMACULTURE?](#)



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[Lizzy Lowe, Macquarie University](#); [Cameron Webb, University of Sydney](#); [Manu Saunders, University of](#)

[New England](#), and [Tanya Latty, University of Sydney](#)

Insects are important wildlife often overlooked in urban habitats. What we do notice are the cockroaches, ants and mosquitoes in and around our homes. All too often we reach for the insect spray.

But not all insects are pests – a wide variety of them help keep our cities healthy. They pollinate plants, feed other wildlife, recycle our rubbish, and eat other insect pests. Insects are [vital to our well-being](#). Unfortunately, like many other wild animals, insects are under threat. A [recent study](#) warned that 40% of the world's insect species face the prospect of extinction, amid threats such as climate change, habitat loss, and humanity's overenthusiastic use of synthetic chemicals.

Australians use large amounts of pesticides to tackle creepy crawlies in their homes and gardens. But our fondness for fly spray has potentially serious [impacts on urban ecosystems](#) and public health. We need a more sustainable way to deal with urban insect pests. Our [recently published article in the Journal of Pest Science](#) outlines some of the ways to do it.

Since becoming publicly available in the 1950s, insect sprays have been a popular way to deal with cockroaches, flies, moths, and ants around the home and backyard, and are also widely used by local councils to keep pests at bay. But what may have been effective in the past won't necessarily work in the future, or may have unintended consequences.

Many pests, such as [mosquitoes](#), are now becoming resistant to commonly used products. In parts of the world affected by diseases such as dengue, this jeopardises our ability to control outbreaks.

Another, perhaps wider, problem is that indiscriminate use of insecticides can kill more than just pests. Many species on which we rely for keeping our backyard gardens, bushland, wetlands and parks healthy can become collateral damage. This includes predatory species that can themselves help keep pests under control. As pest species often reproduce faster than their predators (a pattern that's likely to be [reinforced by climate change](#)), we can get trapped in a cycle in which pest numbers bounce back higher than ever.



Many wasps are predatory and specialise in eating insects that can be pests around the home. Manu Saunders

HOW DO WE DO THINGS DIFFERENTLY?

Fortunately, there are alternatives to chemical pest control that don't harm your household or the environment. For centuries, sustainable agriculture systems have used environmentally friendly approaches, and city-dwellers can take a leaf from their books.

[Integrated pest management](#) is one such sustainable approach. It focuses on prevention rather than treatment, and uses environmentally friendly options such as biological control (using predators to eat pests) to safeguard crops. Chemical insecticides are used only as a last resort.

There are many other farming practices that support sustainable pest control; these focus on behavioural change such as keeping areas clean, or simple physical controls such as fly mesh or netting around fruit trees.

Adopting these methods for urban pest control isn't necessarily straightforward. There might be local regulations on particular pest control activities, or simply a lack of knowledge about urban pest ecology.

For urgent pest situations, it may be more expensive and time-consuming to set up a biological control program than to arrange the spraying of an insecticide. Insecticides take effect immediately, whereas biological control takes longer to have an effect. Prevention, the cornerstone of integrated pest management, requires careful planning before pests become a nuisance.

The goal of integrated pest management is [not to eliminate insect pests entirely](#), but rather to reduce their numbers to the point at which they no longer cause a problem. By this logic, chemical insecticides should only be used if the economic damage caused by the pests outweighs the cost of the chemicals. If you hate the idea of a single cockroach living anywhere nearby, this might require you to adjust your mindset.

WHAT CAN I DO AT HOME?

Don't give pests opportunities. Be mindful of how we produce and dispose of waste. Flies and cockroaches thrive in our rubbish, but they can be [effectively managed](#) by ensuring that food waste is stored in insect-proof containers, recycled, or properly disposed of. Don't leave buckets of water around the backyard, as this invites mosquitoes to breed.

Don't open your door to pests. Seal cracks and crevices in the outside of your house, and ensure there are screens on your doors and windows.

Support the animals that control insect pests – they'll [do the hard work for you!](#) In particular, don't be so quick to kill spiders and wasps, because they prey on pests in your home and



garden.

Spiders like this leaf curler will happily eat a range of pests, including ants, around your home. jim-mclean/flickr

WHAT CAN WE DO AS A COMMUNITY?

Urban communities can learn a lot from sustainable farming. First, there needs to be better education and support provided to the public and policy makers. [Workshops run by local councils](#) and information sessions with local gardening groups are a great way to start.

We can also work together to help debunk the popular myth that most insects are damaging or unwanted pests. Reaching for the fly spray might be easy, but remember you may end up killing friends as well as foes.

[Lizzy Lowe](#), Postdoctoral researcher, [Macquarie University](#); [Cameron Webb](#), Clinical Lecturer and Principal Hospital Scientist, [University of Sydney](#); [Manu Saunders](#), Research fellow, [University of New England](#), and [Tanya Latty](#), Senior Lecturer, School of Life and Environmental Sciences, [University of Sydney](#)

Distributed energy projects awarded nearly \$10 million

On behalf of the Australian Government, the Australian Renewable Energy Agency (ARENA) has today awarded \$9.6 million in funding to 12 projects and studies to further integrate distributed energy resources (DER) into the electricity system.

ARENA is providing \$7.21 million to five pilot projects led by Zeppelin Bend, Jemena, SA Power Networks, Solar Analytics and RACV. Each project will trial novel approaches to increasing network hosting capacity with the objective of allowing the system to operate securely whilst maximising the ability of distributed energy, such as solar PV, to provide energy to the grid.

A further \$2.38 million has also been allocated to seven studies led by CitiPower & Powercor, Dynamic Limits, University of Tasmania, CSIRO, Oakley Greenwood, the Australian National University and the University of Melbourne. The studies will investigate how to successfully integrate high penetrations of DER into the grid and into the energy market.

DER encompasses behind-the-meter technologies such as rooftop solar, home batteries, inverters, controllable loads both in homes and commercial and industrial facilities, electric vehicle charging points, smart appliances and systems (such as fridges, air conditioning systems, hot water heaters and pool pumps) as well as relevant enablers such as smart meters and data services.

Among the five projects funded is the Evolve project led by Zeppelin Bend, funded with the NSW Government, which will see software trialled on the NSW grid that will act as a traffic controller able to send signals to DER assets to increase or decrease their energy output to manage grid congestion.

The seven studies include an ANU study on community energy models and a CSIRO study to prepare a model of the low voltage grid for public use.

ARENA CEO Darren Miller said these 12 projects and studies will help to maximise the potential benefits of DER technologies owned by households and businesses.

“Rooftop solar, batteries and other customer-related energy technologies are set to play a key role in shaping the future energy system. It is projected that up to half of all electricity could be generated by consumers within the next few decades, up from around 4% today. This is a huge change and will require innovations in software, hardware and thinking to achieve the best outcome for consumers,” he said.

“ARENA is extremely excited to be funding some of the best experts in the energy sector to build network hosting capacity technology and further understand the impacts of DER and to identify, and ultimately solve, the technical limits of our electricity grid,” Mr Miller said.

The funding initiative complements work that ARENA is already undertaking in the DER space, including the announcement last year of the Distributed Energy Integration Program (DEIP); an

initiative that has the energy industry working together to enhance the potential of consumer owned energy resources. DEIP is a collaboration of energy peak bodies, market authorities, industry associations and consumer associations.

“We are looking at how we can make the most of of the growth in distributed energy resources as consumer choice expands and changes the way we generate and use energy,” Mr Miller said.

ARENA media contact:

0410 724 227 | media@arena.gov.au

Memberships are now due for 2019, \$20, Family \$30

**Please pay online into our Cairns Penny Permaculture Cairns Account –
BSB 704-966 Account No. 100009440**

And don't forget to put your name on it so we know who you are

Please PRINT – SIGN – SCAN and RETURN by email to info@permaculturecairns.org.au.

Permaculture Cairns

Membership Form 2019



One year's membership fee - 1 Jan – 31 Dec:

- Household membership \$30 Renewing Member
- Individual membership \$20 New Member

Name(s) of all applicant(s) & DOB if under 18yrs:

.....
.....
.....

Postal Address:

..... Postcode:

Phone(s):

Email:

Signature:

Payment may be made at Meetings, at Cairns Penny or Online Direct Deposit to Permaculture Cairns A/c at Cairns Penny in Grafton Street. BSB704-966 A/c No. 100009440 please include your Surname as reference.

If you have a Permaculture Design Certificate could you please complete the following survey.

YOUR NAME:.....

Who was the Course Presenter:.....

When did you do the Course:.....

Where did you do the Course:.....

Enquiries

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