### UNIVERSITY of TASMANIA

**Sustainability Bulletin** 

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#### From recycled carparks to edible campuses

The year has got off to an exciting start at the University of Tasmania, not only with innovation of the new but also exploration into how to effectively reuse the old. Read on for some insights into what's happening across our campuses towards the worthy mission of sustainability.

Fairtrade and Global Organic Textile Standard (GOTS) certified University of Tasmania clothing is now available on UniStore! We join RMIT as the second university to be offering Fairtrade Certified clothing (that we know of) in Australia. During 2023, Trisha Striker undertook a Sustainability Integration Program for Students (SIPS) Fellowship to evaluate Fairtrade Certified clothing. Trisha engaged with students and staff through a workshop and meetings with research staff to understand Fairtrade Certification. Coming Highly Commended in the 2023 Green Gown Awards Australasia, Trisha's SIPS project aimed to ensure the University was not contributing to modern slavery, 'bringing visibility to those who have been made invisible by global supply chains'.

In the north of the island, a quite different kind of car park has been completed for the use of university staff, students and the broader community at our West Park and Inveresk campuses. The surface is Reconophalt, made using a high level of recycled content including waste glass, soft plastics, toner, tyres and reclaimed end-of-life asphalt. The product is made here in Tasmania and is perpetually recyclable; meaning potential greenhouse gas emissions savings could be significant.

CANIE Climate Action Week is coming up 25-28 March, with some insightful online sessions on offer. The Climate Action Network for International Educators created the CANIE Accord to which University of Tasmania is a signatory; a document that strengthens the higher education sector's commitment to urgent action on climate change across the globe. During Climate Action Week, CANIE will host webinars and interactive workshops on topics such as eco-anxiety in the university setting and the future of flight and international travel.

Finally, if you live in Tasmania, the State Government e-transport rebates are still available. There are 3 different ways you can save:

- a \$2,000 rebate on the purchase of new or new-to-Tasmania second hand battery electric vehicles;
- a 12% rebate on the purchase of eligible e-Mobility devices (e-bikes, e-scooters), up to a set cap of \$250 for e-scooters, \$500 for e-bikes and \$1,000 for cargo e-bikes and;
- EV charging has been included in the energy saver loan scheme.



# Tasmanian first: project uses low global warming potential refrigerant gas

The gases that are most typically used to heat and cool our buildings also contribute immensely to the heating of the planet. So, it follows that if we are able to find ways of keeping our indoor spaces comfortable with alternative technologies, we can achieve enormous emissions reductions.

In a first for the state, University of Tasmania will be utilising a new refrigerant gas in a project involving one of Sandy Bay's Law lecture theatres later this year. The newly released blend, called R-454B, has a global warming potential (GWP) factor a whopping 78 per cent lower than the most commonly used alternative (R-410A). The University's Campus Services team will be able to monitor and evaluate the efficiency of the gas over coming months and report back on its benefits.

Reducing emissions from refrigerant gases is one strategic action we are taking to meet our Greenhouse Gas Emissions Reduction Strategic Plan 2022-2030, with the goal of lowering these by 35-45% by 2030. One method we can take is to specify low GWP gases in tenders, contracts and leases.

Through a SIPS project in 2023, the University's Project Engineer (Electrification), Pierre Le Mestreallan worked with SIPS student Thi Thu Binh Hoang to evaluate the refrigerant gases currently being used on campus and the opportunity to reduce emissions through choosing lower GWP gases. This work is already bearing fruit with the innovative choice of low GWP gases in the heating, ventilation and air conditioning (HVAC) system in the Law School. It will also inform the much larger project of electrification across the University.

Mr Mestreallan said, 'it has been a pleasure to work with Thi Thu Binh Hoang on this project, her background as a Chemical Engineer added a fantastic dimension, and I am thrilled to hear that it has had a positive impact on her future career endeavours as well'.

Refrigerant gases are not only used in HVAC systems but also for a broad range of refrigeration and research purposes across the university. Another low-GWP gas (R-134a) is soon to be trialled in our waterfront IMAS building, specifically for existing research equipment. This is not as simple as switching to a new product; our engineers undertake calculations to ensure the equipment will operate correctly with the new gas, negating the need for different equipment to be purchased.

If you have a heat pump or air conditioner at home, you too might have a choice about what gas is used in your system. The most common low-GWP option used across the industry is R-32 but new products (such as R-454B, as will be used in the Law lecture theatre) have much lower GWP and as they are gradually tested for more HVAC systems, will come into greater use. This will remain a key issue as we rely more and more on heating and cooling to keep our homes and work spaces comfortable in increasing weather extremes.



## New Sustainability Placement unit

will provide real-world sustainability experience.

organisations.

This semester, the University is launching a brand new placement opportunity for students in the third year of any bachelor degree that

The Sustainability Placement Experience unit builds on our successful sustainability internship program for students, known as SIPS, that has been running within the University for over a decade.

Through the new unit, students will be able to apply for sustainability placement experiences with community and industry-based

The placement allows students to gain hands-on experience in understanding sustainability in the context of government, private, and not-for-profit organisations and apply the sustainability frameworks they

During this experience, students will also work closely with mentors who are active within the field of sustainability.

have learnt within the classroom to complex real-world challenges.

We are considering a holistic approach to sustainability with projects ranging across environmental conservation, social justice, resilience and climate action. So, if you have a placement proposal please contact: <a href="mailto:sustainability.placements@utas.edu.au">sustainability.placements@utas.edu.au</a> to find out more.



# What happens to my recycling?

The Sustainability team recently took a tour of our local MRF, or Material Recovery Facility, on the outskirts of Hobart. The Cleanaway MRF is the one and only recycling facility in southern Tasmania – sorting council kerbside collections into clean material streams that get sent (mostly) out of the state for recycling and reuse.

Workers at the Derwent Park MRF sort all the cardboard, paper, aluminium, tin plate and coloured HDPE (high-density polyethylene) and clear PET (polyethylene terephthalate) plastics that we throw in our recycling bins. The facility generally finds interstate and international markets for each materials stream and ships it off to its purchasing processor. Glass that is collected from kerbside wheelie bins is not sold by the MRF but collected by Hazell Bros – where it is crushed into recycled glass sand for road base, masonry and pipe embedment – at

a cost to Cleanaway.

Trucks drop off around 100 tonnes of recycling at the MRF every single day. Only 8-10 per cent of this material ends up being sent to landfill; but that's not to say that contamination is not a problem. Workers at the MRF deal with some seriously tricky and dangerous items that find their way into people's recycling bins. Flares, batteries, harmful chemicals and dead animals have been known to turn up at the facility but by far the most common issue is the non-recyclable waste. Can you put your old cutlery in your recycling bin? Plastic-lined cartons? Soft plastics?

Clothes? Mixed-material packaging? No, you can't.

The concept of wishcycling, which emerged in the US around 10 years ago, describes people's misplaced optimism that something they have no evidence to suggest will be recycled, will indeed find its way to an appropriate recycling stream if they just pop it in their yellow-top bin. Unfortunately, while some specific items can be processed by alternative providers when dropped off at designated points – the University's community recycling wall on Sandy Bay campus accepts small e-waste, skincare containers, batteries, spectacles, oral health products, pens, blister packs and disposable razors – our kerbside recycling currently only handles limited types of material. It is essential to keep up-to-date with your council's recycling information to ensure that what you place in your bin doesn't cause a greater problem down the line.



# Learning the secrets to an Edible Campus

On-campus community food gardens have sprouted in many Australian universities over recent years. Here at the University of Tasmania, our community gardens form a vital ingredient in putting our Healthy, Sustainable and Equitable Food Strategy into practice, improving the food security of the people who come here to study and work, among a

raft of other benefits.

consistent human engagement.

To learn what works and what doesn't at other on-campus food patches, our Community Garden Coordinator, Jeff McClintock recently embarked on a study tour of seven mainland university campuses. While he encountered some flourishing gardens and some innovative ideas, many universities share different versions of the same two challenges: effective composting of garden waste and a lack of

Jeff was heartened to find that while we're still learning, the University of Tasmania already has some of the country's most productive oncampus food gardens and most engaged students. We have more ambitious plans, however, moving towards an Edible Campus model with an action plan being developed this year to guide our efforts.

The University already has more than 10 food gardens across our campuses, from single herb beds to Source, the Newnham heritage orchard and the vast urban farm that is the Inveresk Community Garden. This flagship garden also boasts an industrial automated aerobic composter that cranks out high quality, safe compost in just two

weeks.

Pay a visit to one of these food powerhouses next time you're in the area!



# New hub for Sustainability in the south

Where is this fresh, plant-filled, architecturally-designed home for the University's southern Sustainability team and SIPS students? No, it's not a new building! Over the last few months we have been setting our office space up at the river end of the Arts Lecture Theatre on Sandy Bay campus

Every single item of furniture has been sourced from the University's Re-Use program, plants have been propagated and/or provided by staff and SIPS students and we've had three of the doors upgraded to bring in more light. Apart from that, all this arc-roofed beauty (designed by renowned Tassie architect Bill Howroyd, coincidental family member of the Sustainability team member writing this very article) needed was a lick of paint to create a sustainable oasis of productivity.

Subscribe

First Nations peoples around the globe provide the greatest inspiration for sustainable living based on deep connection with, and respect for, our natural world.

We acknowledge the traditional owners of lutruwita and pay our respects to elders past and present.





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