

Kosciuszko Thredbo Pty Ltd is committed to facilitating the long-term sustainable enjoyment of the unique alpine environment for all those visiting Thredbo.

Thredbo has a dedicated team working on ways to reduce our impact on the environment through proper management of waste, energy, water and biodiversity. This summary details Thredbo's recent accomplishments and current initiatives.

Thredbo is continually working to minimise our environmental impact and if you have a suggestion on how our performance can be improved please contact the Environmental Services Department at info@thredbo.com.au.

NEW FOR 2021

- Thredbo is Gold! In 2021 we gained EarthCheck Gold Certification, a first for an Australian Ski Resort. This has been achieved though continual environmental improvement it has been a huge task and great team effort from everyone at Thredbo.
- Thredbo is taking part in a Net Zero Pilot scheme with NSW Government's Sustainability Advantage program. Through this scheme, Thredbo is working with the Energy Efficiency consultant group Northmore Gordon, to make a commitment to Net Zero emissions and plan a pathway to achieving our commitment.
- In 2021 Thredbo will be diverting all old and damaged staff uniforms from landfill by recycling them with Upparel. Our old uniforms that are unsuitable for reuse, can't be repurposed or donated will be shredded and made into new clothing, carpet underlay or playground material.



WASTE MANAGEMENT – Recycling and Reducing Landfill

Thredbo has worked closely with the community to achieve a recycling rate of 36% in 2019.

- Thredbo's used paper and cardboard is compacted into a specific purpose container. By using a compactor, we significantly reduce the number of collections required throughout the year which helps to reduce emissions.
- Thredbo collects used light bulbs and all battery types for recycling.
 We have a public collection point in the Thredbo Information
 Centre.
- Organics Recycling was introduced in 2015, in 2020 a new organics recycling machine has doubled our capacity in food waste recycling. Currently there are over 35 facilities participating around Thredbo resort, consisting of cafes, restaurants, offices and larger lodges. In 2020, over 9,469 kg of organic waste was diverted from landfill.
- Used cooking oil is collected and repurposed into biodiesel and stock feed by a local farmer.
- Scrap metal is reused on site or transported to Cooma where it is recycled.
- Biosolids from the Thredbo wastewater treatment plant are used for soil conditioning on a farm located in the local region.
- Bin Your Butts! Thredbo have given out over 12,000 personal ash trays over the last five years.
- We donate old mobile phones to Phone-cycle who remarket them or if a mobile phone cannot be reused they recycle over 95% of the materials.
- Since 2018, all Thredbo owned outlets have replaced single use plastic with reusable or paper alternatives. Plastic bags have been replaced with non-woven drawstring multi-purpose reusable bags, polyester waterproof foldable bags and paper bags.
- Food packaging, plastic cutlery and straws have been replaced by paper and commercially compostable products in all Thredbo food and beverage outlets.
- In 2019 150 Ski school uniforms were returned to the manufacturer PURE, for them the reuse and recycle the materials.
- In Winter 2020 Thredbo Bakery, Avalanche Café and House of Ullr signed up to Green Caffeen, a reusable swap and go coffee cup scheme that is free for customers. Green Caffeen is an easy way to take away without using disposable coffee cups, helping to reduce the number of cups being sent to landfill.
- From 2020, old staff uniforms that were not able to be reused were cut up and used as rags for the Engineering department to use.
- Boulders that were excavated during the construction of the Merritt's Gondola were reused in Car Park 2, reducing construction waste and creating a habitat for small native wildlife.













ENERGY MANAGEMENT

Thredbo utilises various strategies to minimise energy use, current initiatives are listed below.

- The new Merritt's Gondola uses an industry leading Direct Drive electric motor system resulting in a 5% energy saving over a traditional lift drive system.
- Together with Red Energy and Snowy Hydro, we're proud to be powering all our major resort operations with clean and renewable sources of energy, effective 1 July 2019.
- The Thredbo Leisure Centre solar panel installation
 has been supplying on average 30% of the center's annual
 electricity requirements. In January 2019 the system met 100% of
 the Centre's requirements and in 2020, the solar panels generated
 an average of 20.6% of the total energy used by the Leisure
 Centre.
- Thredbo's snowmaking system has been progressively upgraded and automated over the last decade resulting in 40% less energy use per cubic metre of snow than in 2010.
- The mountain operations ski lift system is another large user of energy. Power factor correction equipment has been installed, increasing energy efficiency.
- Water source heat pumps are used to pre-heat water in the Thredbo Leisure Centre. Water from the snowmaking pond is used as the heat source, pre-heating the water to reduce the amount of gas required to heat the pool water to temperature.
- Solar powered Street Lights have been operating along Friday Drive in front of the Thredbo Alpine Apartments for over five years and are performing well.
- Since 2009 we have partnered with GreenFleet to offset Carbon emissions from Kosciuszko Thredbo vehicles. Since the start of our partnership over 44,000 trees have been planted, offsetting over 11,000 tons of carbon emissions.
- Since 2014, Thredbo guests have been offered the opportunity to
 offset their trip to the snow through the 'My Thredbo Park
 Project'. The Park Project is a forestry carbon offset program for
 visitors where guests can opt-in by purchasing a tree for \$4.00 when buying their lift products.
 Each tree will help to offset the emissions generated by their journey to Thredbo.
- The Sewage Treatment Plant has been controlled with a Supervisory Control and Data Acquisition (SCADA) control system since 2017. The system automates the majority of processes at the plant, helping the operators to run at greater efficiencies. The SCADA system also holds records of all the equipment being controlled allowing for review and planning for improvements.
- Thredbo has a Tesla Electric Vehicle charging station in Resort for guests and staff to use. It is located at the turning circle behind Thredbo Alpine Hotel. If you would like to charge your vehicle, please contact the Hotel on 02 6459 4200.
- Since 2018, upgrades to gas hot water boilers around the resort has been undertaken. These will improve the systems' efficiency and reduce the overall gas usage.











WATER MANAGEMENT

Thredbo utilises various strategies to minimise water use, current initiatives are listed below.

- While Thredbo acknowledges that we use a large volume of water each year for snowmaking purposes, the vast majority of this water is returned to the Thredbo River each Spring when the snow melts.
- A significant reduction in water use has been achieved through the installation of low flow showers, waterless urinals, dual flush toilets and water efficient washing machines. The installation of waterless urinals alone saves approximately half a million litres of water per year.
- In conjunction with local stakeholders Thredbo participates in a Waterwise program, promoting water conservation in the resort. Keeping Thredbo's water consumption in line with 1992 levels, despite large increases in guest numbers.
- Summer watering requirements for village landscaping are reduced by applying mulch to village gardens. This mulch is produced by chipping locally sourced native green waste.
- Thredbo manages the wastewater treatment for the village. With no industry in Thredbo, this means that the vast majority of water used in Thredbo is returned to the Thredbo River following tertiary filtration at the treatment plant.









- Water quality is regularly tested and results are publicly available on the Thredbo website.
- Thredbo works with the University of Canberra's Institute for Applied Ecology, who have provided us with ongoing monitoring of the physical, chemical and biological conditions of the Thredbo River since 1989. This monitoring provides the information and data that allows us to best manage any impacts that the resort operations have on Thredbo River.

BIODIVERSITY MANAGEMENT

- Kosciuszko Thredbo acts in partnership with the NSW National Parks
 Wildlife Service to protect the native and manage the introduced flora and fauna within the resort.
- 7,163 native trees, shrubs, and grasses were planted within Thredbo resort in 2020 calendar year by the Environmental Services and Mountain Department.
- As part of the new Merritt's Gondola and Ricochet mountain bike trail developments a detailed rehabilitation plan has been put in place to help stabilise the soil and provide habitats for native animals.
- Fauna crossings are integrated into any new ski slope and mountain biking trails developed by Thredbo ensuring native species are not impacted by recreational activities.
- 'Elliot' traps are loaned by Thredbo to businesses throughout the resort for the trapping and relocating of native small mammals from village buildings.
- A number of Thredbo staff have been trained in snake relocation to help protect both snakes and guests!



GENERAL

- Thredbo believes "if you can't measure it, you can't manage it". To help measure our Environmental performance Thredbo has worked to become certified under EarthCheck's Destination standard. We first gained Silver certification in 2017 and Gold Certification in January 2021.
- Thredbo has a comprehensive Environmental Management System (EMS) to coordinate and evaluate each of our key areas of business activity. Our EMS incorporates Key Performance Areas (KPAs) such as reducing Greenhouse Gas Emissions. Each department is in charge of annually reviewing their progress towards our resort wide sustainability targets.
- Thredbo staff and community members are encouraged through an initiative called Fresh Tracks to make suggestions of how Thredbo can improve our environmental performance. Fresh Tracks has already resulted in changes to Thredbo's weed spraying program benefiting native flora and fauna.
- EarthCheck GOLD CERTIFIED 2021



- A Sustainability Team meets regularly to engage with the Thredbo community and Chamber of Commerce to ensure everyone is aware and working towards our shared environmental and sustainability goals.
- Spill Kits have been installed around the resort. Staff that handle hydrocarbons, chemicals or oils at work are being trained to safely clean up in the event of a chemical, oil or hydrocarbon spill, to reduce the risk to staff, guests and the environment.

EDUCATION

- Senior Thredbo managers have received environmental training through the NSW Office of Environment and Heritage "Sustainability Advantage" Program to encourage top down leadership of environmental initiatives.
- All seasonal and permanent staff members employed by Kosciuszko Thredbo undertake yearly environmental awareness training to promote an environmentally friendly culture.
- Signage has been installed throughout the resort to encourage public participation in Thredbo's environmental efforts.
- All purchasing staff have been made aware of Thredbo's green procurement program and are encouraged to order environmentally friendly products where feasible.



FUTURE OPPORTUNITIES

Kosciuszko Thredbo is currently investigating opportunities in the following areas;

- Cogeneration opportunities throughout the resort.
- Bio-Energy opportunities throughout the resort and energy from waste options.
- Gas efficiency improvements in Heating, Ventilation and Air Conditioning systems
- Opportunities to join a certified program to offset the LPG usage in Resort
- Thredbo's lift replacement program to consider energy efficiency in the planning process

ENVIRONMENTAL PARTNERSHIPS

Kosciuszko Thredbo has entered into many formal and informal partnerships to help manage our environmental footprint.

























