

An aerial photograph of a vast forest in Tasmania. The foreground is filled with tall, slender trees with green and yellowish-brown foliage. In the middle ground, a thick layer of white mist or fog fills a valley, creating a sense of depth and atmosphere. In the background, a range of blue-toned mountains stretches across the horizon under a cloudy sky. The overall scene is serene and emphasizes the natural beauty and environmental focus of the document.

A Climate Plan for Tasmania

Tasmanian Greens



Photo Credit: Rob Blakers, Upper Florentine

A Climate Plan for Tasmania.

Cassy O'Connor MP | Greens' Leader

As Tasmanians, we understand that climate change is the most important issue facing us today.

The science is clear that our climate is shifting, and the future will likely be one with more heat waves, more extreme rainfall, higher sea levels and fewer frosts. Our cities, our oceans, our farms, our forests, and our health will be impacted. And **how we choose to plan for this future makes all the difference.**

In every great challenge, there is opportunity. If we act now there are a number of competitive advantages our state can reap – economically, socially and environmentally. We can be smart and plan for this future to ensure Tasmanians have energy security, healthy lives and a strong, thriving economy for generations to come.

Tasmania today finds itself in a unique position. As a highly developed island state with a civic-minded population, we have the agility, the expertise and the opportunity to lead the nation on climate change action. Our emissions per capita are well below the national average. Our renewable energy ratio is the nation's highest. **Our natural wonders have seen Tasmania emerge on the world stage as a "clean, green" destination.**

The Greens Climate Plan outlines how **Tasmania can show climate leadership** to becoming an island state powered entirely by renewables, protecting our vast forest carbon reserves, introducing a wider network of public transport options and engaging communities in **envisioning this future.**

The path ahead will not be easy, but we have a choice right now to **make climate action a priority in all our decisions that affect the state.** We can preserve our forests for their economic as well as their carbon sequestration and natural value, we can save our waterways from further degradation, and we can ensure funding flows to research and education.

Together, we can enable a climate resilient future for Tasmania.



Government and Governance

KEY PRINCIPLES

- ▲ The Tasmanian government can and should be a climate leader.
- ▲ Climate change must be an integral consideration in all relevant decisions.
- ▲ Innovative change can minimise economic and lifestyle disruption.

GOVERNANCE AND LEADERSHIP

Establishing meaningful governance and leadership structures is the first essential step required to coordinate a comprehensive multi-sectoral response to climate change.

The Greens will immediately **restore the Ministerial portfolio for Climate Change**. This will send a strong message of leadership and signal to the community that government recognises global warming is the single biggest threat to the Tasmanian way of life, but that it also presents us with an opportunity to adapt and prosper in a low carbon future.

The Minister will work with Cabinet to ensure that the **operations and activities of all government bodies are best practice** in regard to emission reductions and climate adaptation. This will include an overdue process of **divestment from fossil fuel assets**.

In Tasmania, the Government is the entity with the largest demand for engineering and construction services. In order to lead by example, and to foster the further development of climate smart workforce skills, State Capital Projects will be required to **utilise climate friendly techniques and materials**, as well as ensuring they are suitable for withstanding the future impacts of climate change.

The Minister will direct agencies, and encourage Government employees, to **adopt climate friendly practices**. This will be supported by clear directives for **agencies to reduce resource use**, including paper and consumables, water, power and fuel. The Minister, working with cabinet, will **develop clear targets to measure agency progress**.

RESEARCH AND COMMUNICATION

The Greens recognise that Tasmania's capacity to assess future risks and plan for climate change relies on the work of climate scientists, both globally and in Tasmania.

The Minister for Climate Change will take immediate action to **ensure the State's reputation as a global climate hub is not further damaged** by the Federal Government's cuts to the CSIRO. The Minister will continue to **advocate for key scientific positions** at the Marine and Atmospheric Research divisions to be restored.

In order to build our future knowledge base and inform effective adaptation response across Tasmania, **restoration of funding to Climate Futures**, as well as the reinstatement of the government advisory body, **the Tasmanian Climate Action Council**, are priorities.

Engaging with the community in a sincere, sustained conversation about the impacts of climate change, being prepared for future climate disruption, and being prepared and willing to be part of significant, multifaceted change in order to respond to climate change will be an ongoing priority.

This work would be supported by the development of effective communications strategies and the **provision of accessible, scientific tools** to deliver key mitigation and adaptation messages, drive community engagement and acceptance of measures taken to respond to climate change, and for empowerment and action on climate at all levels of the community and economy.

CLIMATE CHANGE ACT

The Minister for Climate change will work with all stakeholders and the community to strengthen the *Climate Change (State Action) Act 2008*.

The will include setting **Tasmania's total emissions target to net zero emissions by 2030** as well as the establishment of **interim, four yearly reduction sectoral targets** and a requirement for progress to be evaluated at each review on the basis of available climate data and science.

Short-term, economy-wide sectoral targets and emission reduction plans would also be established, particularly for high emissions sectors such as agriculture, transport and stationary energy.

Annual reporting on Tasmania's total and sectoral emissions will also be required to include actual emissions, net emissions, as well as Tasmania's contribution to the national emissions' profile.

The Act will adopt **a set of principles**, including:

- ▲ **Acknowledgement that climate change is anthropogenic;**
- ▲ **Acknowledgement of the responsibility of all Governments to take decisive action towards reducing emissions, protecting carbon stocks and increasing carbon sequestration activities;**
- ▲ **Acknowledgement of Tasmania's unique position to establish itself as a carbon sink for the nation and the rest of the world; and**
- ▲ **A commitment to transition to 100% renewable energy.**

Mechanisms for real change, rather than just measuring targets, will be imbedded in the Act. A process for **Climate Impact Assessments** on all major projects will be established, with the specifications for these assessments outlined in regulations. The objective of these assessments will be to require, wherever practicable, the use of the most efficient technology and practices.

Provisions will also be adopted to provide for an **ongoing analysis of the impacts of climate change on key sectors**. This will be used as a basis for development of regular, contemporary mitigation and adaptation plans.

Environment and Natural Assets

KEY PRINCIPLES

- ▲ All Tasmanians hold stewardship of the environment and natural assets.
- ▲ Degradation of the environment, biodiversity, and climate at the expense of future generations and economic sustainability is unacceptable.
- ▲ Conservation can help create sustainable employment and a healthy economy.

FOREST MANAGEMENT

The Greens are **committed to a contemporary forest management policy** underpinned by the protection of biodiversity, carbon storage and the principles of ecosystem services.

This would involve an overdue **end to the industrial scale logging of all native forest** and an end to logging in high conservation value forests.

Constructive **work with private landholders** will take place in order to apply best practice land management principles that maintain and increase carbon sequestration in the landscape.

We must **update the Forest Carbon Study**, as well as actively seek out market opportunities for Tasmanian forest carbon on both voluntary and involuntary markets. In addition to this work further

feasibility research must be commissioned into methods of **capitalising on increased market interest** in investing in environmental and resource sustainability, such as Permanent Forest Bonds.

Government policy settings must **encourage environmental restoration and carbon sequestration projects** on both public and private land, particularly former plantation areas and land that is no longer suitable for agricultural purposes.

The Greens will make the **protection and increase of valuable soil carbon stocks** a priority through policies underpinned by proven sustainable land management techniques.

We must also explore funding streams through the Commonwealth Emissions Reduction Fund and on global carbon markets to **secure ongoing revenue and skills' development in landscape restoration**.

WATER RESOURCES

A Green Government will undertake a **rigorous assessment of the state of Tasmania's drinking, agricultural, energy and industrial water supplies and projected future use**, as well as assessing the future impacts of climate change on water supply and quality and **developing a water conservation plan for the State**.

The Government will work with water management bodies to **publicly promote prudent water use across the community** and investment in water efficiency measures.

An increase in groundwater monitoring in the salinity hotspots of the Midlands, Central Highlands and Dorset regions to improve the adaptability and sustainability of Tasmania's agricultural sector in an age of climate disruption will be implemented as a priority.

MARINE RESOURCES

The establishment of a comprehensive system of **no-take Marine Protected Areas** in Tasmanian waters is overdue. Such work is critical in order to maintain biodiversity, strengthen climate resilience in the marine environment and improve the sustainability of fisheries. The Greens will initiate a consultative and transparent process in order to begin this work.

ENVIRONMENTAL PRACTICE AND MONITORING

The Greens would ensure adequate resourcing to **map and plan for the impacts of climate change** on significant economic, social, environmental and heritage natural assets.

Review existing land use, environmental and resource allocation **legislation and policy** in terms of sustainability, with particular regard to the likely future impacts of climate change.

LANDSCAPE PLANNING

The management of our landscape and resources are critical considerations. We will undertake a **statewide mapping project** in order to allocate allowable extraction activities across the state, as well as areas for potential forest and soil carbon restoration projects.

Agriculture

KEY PRINCIPLES

- ▲ Sensible regulations minimise market disruption and promote sustainable, forward thinking economics.
- ▲ Incentives encourage and enable uptake of low carbon technology and practices.
- ▲ Consumers can drive positive sustainable change.

FOOD SECURITY

In an era of climate disruption food security is a significant issue. It is imperative that work begins immediately in order to ensure the ongoing viability of our agriculture sector and equal and plentiful access to high quality produce.

The Greens will ensure that all Tasmanians have **access to safe, affordable and locally grown produce**, particularly in areas of socio-economic disadvantage.

To further this objective, the Government will work with local producers to **establish food distribution networks** in local markets and community centres.

We will promote the **establishment of urban and rural food hubs and community gardens** to improve local access to quality produce and strengthen Tasmania's food security into the future.

The Greens will increase funding to Neighbourhood Houses and community organisations to **establish food gardens in areas of food poverty** related to isolation and socio-economic disadvantage.

We will work with industry to review and implement **value chain efficiency measures** in order to ensure long term financial viability of our agriculture sector.

In order to ensure ongoing access, a Green Government will **undertake a risk assessment of increased foreign ownership of agricultural lands** in Tasmania and the potential impacts on Tasmania's long term food self-sufficiency and natural asset conservation. We will also develop a transparent policy response to the findings of this report.

We will also ensure biosecurity is funded for ongoing research into **emerging and future biosecurity risks associated with climate change**, and is funded to combat these threats.

CROP INNOVATION

Adapting to changing climate conditions is essential for the ongoing viability of crop production.

The Greens will establish strong overarching frameworks for the sector by strengthening the relationship between climate scientists, peak bodies, government, and farmers to **support practices which take into account, and adapt to, the causes and impacts of climate change**.

These objectives will be furthered by **developing and maintaining communication platforms** to ensure easy dissemination of information and best practice principles to industry participants.

A Greens Government will drive change by **investing in innovation** to promote solutions to climate disruption across the primary industries in Tasmania and strengthen the sectors' resilience to climate and market disruptions.

We will also **reward environmental stewardship** and offer opportunities for farmers to share their climate change mitigation and adaptation strategies, knowledge and experience.

In order to achieve a competitive advantage in an era of climate disruption we will continue to work with the Tasmanian Institute of Agricultural Research to **develop a range of crops** that are both climate resilient and can absorb greater levels of atmospheric carbon. This will be supported by a strategy to **encourage crop diversification and permaculture farming principles** to build soil carbon, improve soil health and minimise unsustainable water use.

We will also work with the Tasmanian Institute of Agriculture and farmers to **build our knowledge base on the application of biochar in agricultural soil and cattle-feed**, while simultaneously exploring the viability of broad scale **conversion of compost, genuine wood residue, and other waste materials into biochar**.

IRRIGATION

The Greens will work to ensure ongoing sustainability of the sector by implementing **improved monitoring of irrigation water resources** as well as modelling of future demand and availability. This will be supported by the establishment of a strong monitoring and **accountability framework** to ensure we know where all water comes from and where it goes.

The Greens government will continue to work in partnership with industry and stakeholders to research and fund **irrigation system and technology innovation**, as well as to improve regulations, policy and planning to **ensure fair and equitable access** and whole-of-system security.

LIVESTOCK EMISSIONS

Current evidence suggests that a **20% reduction in emissions from a business as usual scenario in livestock production** is achievable through technological and operational methods without requiring production sacrifices. These methods include selective breeding, feed supplements, and diet optimisation. The Greens will adopt this target by 2027.

The Greens will consult with the sector to develop an evidence based **livestock emissions reduction action plan**, as well as to identify and **fund research into promising technologies and practices** which may reduce emissions.

We will also work to **promote current Emissions Reduction Fund (ERF) opportunities** for the sector, and work with the industry to **propose new evidence-based methodologies**.

In addition to ERF funding opportunities, we will assist in the development of marketing tools, such as certification schemes, to **market climate friendly produce**. As our reputation grows for high quality produce, there is opportunity to expand this to include the climate friendly status of our produce.

Clean Energy

KEY PRINCIPLES

- ▲ In order to maintain its status as a world leader in renewable energy, Tasmania must continue to innovate and invest in new technologies.
- ▲ Tasmania can be 100% renewable and self-sufficient in its electricity needs.
- ▲ Energy efficiency is a cornerstone to reducing our energy needs and achieving energy security.

ENERGY TARGETS

One of the most critical components of a climate strategy is to develop ambitious and achievable renewable energy targets.

The Greens will require Tasmania to produce at least **100% of our electricity needs from renewable energy as soon as possible**, and to be a net exporter of renewable electricity by 2022.

We will move to reduce electricity consumption by setting a **1% reduction per annum** target for the state.

The Greens will also implement **strategies to reduce electricity use** and the money Tasmanians spend on power by introducing an energy saving scheme and educating communities about energy efficiency.

SMARTER VEHICLES

A Green Government will adopt the target of a **30% reduction of Tasmania's use of liquid fuels** on 2015 levels by 2025. In order to work towards this target we will **provide education for low-fuel use driving and introduce fuel efficiency targets**.

As a Government we will also lead by example by gradually transitioning the **Government vehicle fleet to 100% electric**, and encourage the adoption of electric vehicles in the tourism sector.

We will work with emissions intensive Government Businesses, such as Metro Tasmania and TasRail, to set policies and targets to ensure that **new fleet purchases contribute to reduced emissions**.

In order to support private purchases of electric vehicles we will **roll out electric vehicle charging infrastructure** at strategic locations statewide by 2020 to encourage increased uptake of low carbon transport and reduce Tasmania's reliance on imported transport fuels.

The Greens will adopt a **Green Vehicle Duty Scheme** based on the ACT model, which implements charges based on vehicle emissions intensity, and would adapt the same principles for a **Green registration fee system**.

As a complement to these schemes, the Tasmanian Climate Office will be tasked with **developing a website that provides information on the emissions, fuel economy, as well as duty and registration charges** for various vehicle models.

We will also engage with the rental car industry to explore incentives to **encourage the adoption of an electric fleet for the rental car industry in Tasmania**.

ENABLING A RENEWABLE FUTURE

A Green Government will pressure the Federal Government to roll out policies that **promote investment in renewable energy** generation, including wind and solar. We would also **push for tariff reforms** that are fair, productive and that will enable Tasmania to achieve a secure and renewable energy supply.

The Greens will also implement State policies to achieve the same goals, including implementing a **medium to large-scale feed-in tariff and reverse auction mechanism** to drive the necessary investment in medium to large-scale renewable generation capacity.

We will develop a **workforce skills plan** to make sure Tasmanians can take up the opportunities of the dramatic expansion in renewable energy generation, and ensure that we have a plan for **managing the generation of excess renewable electricity**.

Long term planning for the sector is critical, as such we will review Tasmania's existing transmission network to allow for substantial increases in renewable energy generation. We would work with TasNetworks to progressively **implement a Smart Grid**. At a regional level we will enable remote community **establishment of renewably powered micro-grids**.

The Greens will empower all **Tasmanians to generate their own renewable energy**. We will **establish a solar feed-in tariff price** that will encourage 50,000 Tasmanian homes and businesses to have rooftop solar by 2020 and **install rooftop solar systems** on low-income households, and recoup the costs from electricity generation.

We will construct a **community access solar garden in George Town**, in Tasmania's North East, which is home to the state's best solar resources, with daily solar radiation on par with coastal regions in southern mainland states.

We will seek to undertake the community access solar garden project in conjunction with researchers at the University of Tasmania to examine the impact of the project on participants.

MANAGEMENT OF ENERGY GBES

Energy infrastructure is critical for the Tasmanian economy and for the wellbeing of Tasmanians. The Greens acknowledge this, and commit to **keeping strategic energy assets the property of Tasmanians**. We will also guarantee **adequate resourcing for Hydro Tasmania** to maintain and improve existing hydro generation assets.

Re-investing in our infrastructure is critical. Over time, the greens will increase the proportion of annual profits from TasNetworks and Hydro Tasmania that are **re-invested into Tasmania's secure renewable future**.

The greens will also **establish an independent statutory authority, RenewTAS**, to facilitate potential renewable investment from around the world, and to conduct reverse auctions for medium to large-scale renewable energy projects. A Green Government will commit to making sure the **interests of the community and the environment** are the central focus of every renewable energy project.

REDUCING TRAVEL DEMAND

The Greens will work to develop a much needed **Public and Active Transport Strategy**. This strategy will work towards reducing emissions and also serve to ease the growing congestion problems in the south of the State.

In order to achieve this we will prioritise new funding and reallocate a percentage of the State roads' budget toward **improved, integrated public transport infrastructure**.

We will work with Local and Commonwealth Governments to **deliver Light Rail from Hobart to Brighton, ferries from Hobart to the Eastern Shore, and bus corridors** in major urban centres. This will be supported by **cross mode ticketing for bus, light rail and ferries**.

We will develop a **Hobart City Master Plan** that will inform public transport investment decision and the city's development in the context of climate change.

The Greens will adopt several transport targets, including **a reduction on travel demand** within the community by promoting other ways of connecting, facilitating a **shift from private car-based transport to public or active transport** by promoting walking and cycling through the provision of appropriate infrastructure, and setting targets to increase the amount of **road freight that travels by rail**.

This will be supported by investment in alternative transport. The Greens will introduce a **fund matching pool for local councils for pedestrian and bicycle friendly projects**, such as expansion of walking tracks, bike lanes and other infrastructure.

We will also establish a **comprehensive review of the Tasmanian bus network** examining barriers to access, and whole of system inefficiencies and gaps with a commitment to act on the review after completion. This would be supported with creation of **bus lanes and priority for buses at traffic lights**, as well as the introduction app-based scheduling.

We will also initiate a Tasmanian carpooling project. The project will involve assessment of options for creating an **App based carpooling system** involving credits and priority parking. Various global State-run projects such as the Enabled Pan-City Mega-Carpool proposal will be assessed for viability.

Planning, Infrastructure and Housing

KEY PRINCIPLES

- ▲ Planning and infrastructure investment must be based on risk assessments that account for climate impacts, and be adaptive and flexible to ensure climate resilience.
- ▲ Construction of the built environment and new housing must consider long time horizons for climate impacts.
- ▲ While it is the responsibility of all of us to minimise our carbon footprint the Government should prioritise helping those households with the

PLAN FOR CHANGE

The Greens will **make sure Tasmania is prepared for increased population and resource sustainability pressures** as a result of new arrivals seeking respite from climate change impacts on mainland Australia and overseas.

This work will involve wide consultation on the **development of a settlement strategy for Tasmania**. This strategy will define growth boundaries as well as limit land clearing, urban sprawl, traffic congestion, natural resource depletion and consequent growth in greenhouse emissions.

As part of the settlement strategy, Tasmania would be promoted as a **destination for climate refugees** from neighbouring countries in the Pacific. This work would be supported by a **State Policy on Climate Change, and a State Policy on Settlement, Transport and Infrastructure**.

We will also **Review the Statewide Planning Scheme** to ensure it is not a vehicle for increased emissions and does not expose households, communities, businesses and investors to known climate risk through weak, development at any cost planning provisions in to the future.

SUSTAINABLE AND RESILIENT DEVELOPMENT

The Greens will work cooperatively with councils to develop policies and incentives that **encourage sustainable development**, including maximising use of existing infrastructure, reducing urban sprawl and the need for new supporting infrastructure, as well as encouraging sustainable transport patterns.

Our plan will also include the development of Statewide Design Standards that **minimise risks to the built environment from climate related hazards considering long time horizons**.

The Greens will work with the building and construction industry, as well as skills' training institutions, to **develop excellence in affordable, green building design** and job opportunities for Tasmanians.

SUSTAINABLE, LIVEABLE AND AFFORDABLE COMMUNITIES

The Greens will ensure that communities are able to adapt to climate change without bearing substantial costs.

In order to achieve this we will **update and extend the guiding principles in the Residential Development Strategy** to all new suburban and community development to improve sustainability outcomes, urban liveability and housing design.

We will also **adopt a minimal resource use lifecycle approach** to sustainability in social housing projects and **roll out videoconferencing facilities in schools** to provide communities with efficient conferencing facilities.

RESILIENT HOUSEHOLDS

A Green Government will fund the Tasmanian Council of Social Services (TasCoSS) to work across the community sector and with climate and social policy researchers to **develop a climate resilience plan for disadvantaged households** and communities who are socio-economically more vulnerable to adverse adaptation consequences.

The Greens will fund **energy efficiency upgrades** for low income households, and **work towards setting 7-star minimum standard** under the Nationwide House Energy Rating Scheme for new dwellings.

We will also work to ensure **all new affordable housing** and homelessness developments are built to the highest thermal efficiency standard and apply 21st century liveability principles.

Emergency Management

KEY PRINCIPLES

- ▲ Climate related extreme weather events are already impacting our communities and landscapes.
- ▲ Robust scientific information on extreme weather events is critical for emergency management.
- ▲ A long-term vision will build resilience to extreme weather events and the risks that come with them.

FIRE MANAGEMENT

A Greens Government will work with the Tasmania Fire Service, Parks and Wildlife Service, the SES and the Commonwealth to **strengthen Tasmania's rapid response remote firefighting capacity**, ensuring climate-related dry lightning fires are hit hard and early before extensive permanent damage is done to Tasmanian communities and wilderness assets.

Part of this work must involve increases in funding. The Greens will **increase resourcing to the Tasmania Fire Service** to build on emergency coordination and remote firefighting capacity.

We will also **increase resourcing to the Tasmanian Parks and Wildlife Service** to provide for investment in fire and natural resource management across Tasmania's reserve system.

We must adapt to changing weather patterns, as such the Greens will **permanently extend the fire permit season** statewide to account for, and adapt to, lower rainfalls and increased likelihood of extreme fire events.

These changes also result in more frequent and intense remote fires. The Greens will work with the Tasmanian Fire Service, Parks and Wildlife Service and Geoscience Australia to explore **better early detection methods for remote fires**.

Finally we will ensure **that fuel reduction burning is planned** and conducted through a scientifically and strategically sound statewide approach, with adequate public notification of air quality impacts.

COMMUNICATIONS

Communication, both with the public and between agencies, is critical for the success of emergency responses. The Greens would immediately **review communication and assistance request protocols** to ensure that adequate assistance is requested from other States as early as possible in the event of emergencies.

We will **develop a centralised website** to communicate extreme weather events and to provide consistent public updates on response activities. We will also explore methods of further proactive dissemination of information.

In order to facilitate transparency we will ensure that Tasmanian **emergency response policies and guidelines** for all relevant agencies are well documented and publically available. We will also **ensure periodic review of these guidelines** and policies based on Tasmania's experiences and global best-practice, as well as automatic triggering of a review after significant climate events.

Waste and Resource Efficiency

KEY PRINCIPLES

- ▲ Altering waste management practices is one of the easiest, cheapest, and least disruptive ways to reduce emissions.
- ▲ Contributions to waste management efforts should provide incentives to minimise waste generation.

RESPONSIBILITY

The Greens will develop a waste management policy underpinned by a **polluter and user responsibility model**. This model would emphasise that those who benefit from the production of waste bear a reasonable proportion of the responsibility for payment, remediation or prevention.

Policy settings that ensure longer product lifespans would be developed. Part of this project would include working with stakeholders to develop legislation requiring **Extended Producer Responsibility**.

A Greens Government will work with all levels of Government to develop policies that promote **product designs that ensure longevity and waste minimisation**.

We will work to develop **community education projects**, which include programs such as the promotion of composting, to reduce waste.

The Greens will implement a statewide **Container Deposit Scheme and a Waste Levy** to be hypothecated back into waste management and landcare projects.

REDUCING AND MANAGING WASTE

The Greens will immediately develop milestone targets for **transitioning away from landfill**, with a final target of zero percent by 2030.

In the interim, we will provide continued research and implementation of **better methane capture technology in landfills**. While this is underway, an options paper on **sustainable alternatives to landfill** will be commissioned.

Adopting strategies to deal with end of life tyres is critical to address the growing amount of waste. The Greens will **develop a set of rigorous standards for end-of-life tyres** and legislate to require proper disposal.