

### Our changing climate

Queensland's climate is changing, with average temperatures increasing by just over 1°C in the last 100 years. As the climate continues to change over the coming decades, Queensland can expect to experience:

- higher temperatures, with maximum, minimum and average temperatures projected to rise
- harsher fire weather, reflecting fuel dryness and hot, dry conditions
- more intense rainfall events with high variability in rainfall
- less frequent but more extreme weather events
- more time in drought
- hotter and more frequent extreme heat events
- rising sea levels and more frequent sea level extremes
- warmer and more acidic oceans.

The warming climate is having measurable effects now. For instance, claims data from the insurance industry indicate climate change is already leading to more frequent and more damaging weather events in Australia, including severe storms, hail, bushfires, floods and tropical cyclones. Increasingly scientists are able to attribute extreme weather events to climate change.

### Our journey so far...

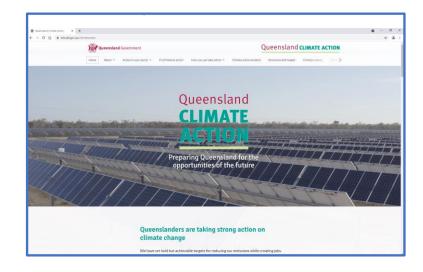
The department recognised early the need to examine our service offerings to ensure they meet future needs and to reduce our own carbon footprint. This was reflected in the department's *Strategy 2030* and the identification of climate change as an enterprise risk. To ensure we took a holistic and integrated approach to responding to climate change, we published our *Climate Change Position Paper* in October 2018 and in line with our role as a sector leader in climate change, QFES drove the development of the *Emergency Management Sector Adaptation Plan for climate change*.

The department's key role in climate resilience and adaptation was acknowledged in the *Adaptation*Communication to COP26 submitted by the Commonwealth Government, which cited Queensland's high resolution projections of climate change impacts, the Queensland State Heatwave Risk Assessment and case studies on climate risks associated with heatwaves and water security.

In 2020 we released the department's first climate action plan, Integrating Climate Change at QFES.



#### Queensland Climate Action Plan



In July 2021, the Queensland Government released the *Queensland Climate Action Plan 2020-2030*. The online Plan outlines Queensland's roadmap to: reach its emissions and renewables targets; create jobs; and drive economic recovery from COVID-19. The release of the *Queensland Climate Action Plan 2020-2030* was the impetus to renew QFES' climate-related work plan and ensure that it aligns to the climate change transition and adaptation actions outlined in the *Queensland Climate Action Plan 2020-2030*.

The changing climate is a major challenge for the emergency and disaster management sector and in response QFES will continue to plan and build community capability and adaptability in line with the Queensland Government's approach.

The department has identified four focus areas for the QFES Climate Action Plan 2022-26, which are outlined below:

Management of Climate Risk - managing climate related risk that might prevent QFES from achieving its objectives by: identifying, analysing, evaluating\_and treating climate risk exposure; monitoring risk controls and managing financial resources to lessen the adverse effects of climate change on our organisation; and harnessing the opportunities that emerge.

Mitigation and Adaptation Efforts - reducing QFES' emissions and preparing for, and moderating, the impacts of climate change on Queenslanders, the emergency and disaster management sector and QFES.

Sectoral Leadership – creating an adaptive emergency and disaster management sector that is fully informed of, and engaged with, the risks and opportunities resulting from a changing climate. The department will also build resilience in partnership with Queensland's communities.

Alignment of Operational Activities, Policy and Program Outcomes to the Queensland

Government's Emission Targets – QFES will ensure that its actions are in line with the intent of the Queensland Climate Action Plan.

#### Targets and performance monitoring

All Queensland Government departments and corporations are required to report on actions that contribute to *Queensland Climate Action Plan's* targets or objectives, including:

- Economic growth and development in a low carbon economy
- Zero net emissions by 2050
- 30% reduction in greenhouse gas emissions by 2030
- 50% renewable energy by 2030
- Reductions in operational emissions
- Greater resilience to climate variability and change
- Support for stakeholder, industry and community-led climate action.

The Queensland Climate Action Plan's Monitoring, Evaluation, Reporting and Improvement (MERI) Framework for climate action in Queensland provides the climate action program logic and identifies appropriate indicators and metrics for use by agencies. Periodic performance stories will be prepared against the actions contained within the QFES Climate Action Plan in consultation with accountable entities.

## **Management of Climate Risk**

Action	How we'll do it	Priority  2022 2023 2024 2025 2026  Short term   Medium term   Longer term	Who'll lead this action
1.1 Utilise climate intelligence to underpin QFES strategic investment, organisational planning and support the emergency management sector	1.1.1 Transpose technical hazard and risk data created by QFES and partners into usable information products for decision makers	Short term   Medium term   Longer term	Director Community Resilience and Risk Mitigation
	1.1.2 Integrate climate change data into the QFES' data analytics pipeline to inform investment and capability planning	Short term   Medium term   Longer term	Director Strategic Intelligence and Planning
1.2 Continue to develop and disseminate contemporary climate change intelligence and knowledge	1.2.1 Release and disseminate the Queensland State Disaster Risk Report	Short term   Medium term   Longer term	
	1.2.2 Release and disseminate Queensland regional risk profiles at suitable intervals	Short term   Medium term   Longer term	Director
	1.2.3 Implement the State disaster risk prioritisation program and online risk portal	Short term   Medium term   Longer term	Community Resilience and Risk Mitigation
	<b>1.2.4</b> Identify and undertake hazard assessments through implementation of the Queensland Emergency Risk Management Framework (QERMF)	Short term   Medium term   Longer term	
1.3 Communicate climate change impacts and actions in a relatable way to the QFES workforce	1.3.1 Develop transmedia content for the QFES' workforce that provides information about climate change impacts by location and hazard type	Short term   Medium term   Longer term	Director Strategic Content Services
	<b>1.3.2</b> Develop and provide information products about what climate change means for future disaster risk and how that risk can be reduced	Short term   Medium term   Longer term	Director Community Resilience and Risk Mitigation
	<b>1.3.3</b> Provide useful information about effective ways that staff and volunteers can reduce their carbon footprint in the workplace and at home	Short term   Medium term   Longer term	Director Strategic Intelligence and Planning

## **Mitigation and Adaptation Efforts**

Action	How we'll do it	Priority  2022   2023   2024   2025   2026   Short term   Medium term   Longer term	Lead for this action
2.1 Provide operational and strategic intelligence to inform prevention, preparedness, response and recovery operations specifically relevant to each severe weather and bushfire season	2.1.1 Provide high-quality bushfire predictive services	Short term   Medium term   Longer term	Director Community Resilience and Risk Mitigation
	<b>2.1.2</b> Develop hazard and risk related products and services that can be utilised through regional planning that incorporate climate change considerations, shared through appropriate channels	Short term   Medium term   Longer term	
2.2 Provide evidence-based climate advice and solutions that reduce climate and disaster risk	<b>2.2.1</b> Support climate, disaster and social science research to inform climate and disaster risk reduction advice provided to the community, our volunteers and partners	Short term   Medium term   Longer term	Director Strategic Intelligence and Planning Director, Community Capability and Volunteering
	<b>2.2.2</b> Undertake hazard-specific assessments that incorporate the impacts of climate change at more locations across Queensland	Short term   Medium term   Longer term	Director Community Resilience and Risk Mitigation
	<b>2.2.3</b> Identify and describe examples of the co-benefits associated with climate change transition and adaptation, as a mechanism to encourage partner agencies and communities to expand their climate risk reduction and adaptation efforts	Short term   Medium term   Longer term	
2.3 Reduce QFES facilities' emissions footprint	<b>2.3.1</b> Reduce emissions by replacing: inefficient and outdated air handling units; existing lighting with LEDs; and inadequate roofing insulation	Short term   Medium term   Longer term	Director Building and Property Management
	<b>2.3.2</b> Seek opportunities to work with owners of buildings leased by QFES to implement energy reduction technology	Short term   Medium term   Longer term	
2.4 Harness opportunities to reduce emissions generated by QFES' fleet	2.4.1 Increase the proportion of QFES' vehicles that can use E10 fuel	Short term   Medium term   Longer term	
	<b>2.4.2</b> Increase the proportion of alternative fuel vehicles and zero emission vehicles within QFES' fleet (including hybrid, electric and hydrogen)	Short term   Medium term   Longer term	Director Fleet and Logistics
	<b>2.4.3</b> Introduce new alternative fuel vehicles and zero emission vehicles into QFES' fleet (including hybrid, electric and hydrogen)	Short term   Medium term   Longer term	
	2.4.4 Promote the use of QFES' electric vehicle pool cars	Short term   Medium term   Longer term	
	2.4.5 Increase the availability of electric vehicle charging stations at QFES' facilities	Short term   Medium term   Longer term	Director Building and Property Management

## **Sectoral Leadership**

Action	How we'll do it	Priority  2022   2023   2024   2025   2026  Short term   Medium term   Longer term	Lead for this action
3.1 Support the emergency management sector to reduce climate change risk and to harness the opportunities presented	<b>3.1.1</b> Lead the identification of broad climate change impacts on the services provided by the emergency management sector	Short term   Medium term   Longer term	Director Strategic Intelligence and Planning
	<b>3.1.2</b> Identify and learn from effective adaptation initiatives occurring across the emergency management sector	Short term   Medium term   Longer term	Director Community Resilience and Risk Mitigation
	<b>3.1.3</b> Engage with QFES' partners to identify priority adaptation issues and needs for the sector	Short term   Medium term   Longer term	
	<b>3.1.4</b> Guide discussion regarding adaptation planning and policy recommendations that reduce climate and disaster risk	Short term   Medium term   Longer term	Director Strategic Policy and Legislation
3.2 Grow QFES' position as a leader in guiding emergency management sector transition and climate change adaptation	3.2.1 Engage effectively with peak bodies in relation to climate change	Short term   Medium term   Longer term	Director Strategic Intelligence and Planning
	<b>3.2.2</b> Provide QFES Emergency Management Coordinators with regional climate summaries relevant to their local and district disaster management groups	Short term   Medium term   Longer term	Director Community Resilience and Risk Mitigation
	<b>3.2.3</b> Assist key stakeholders to review existing natural disaster risk management processes and enhance disaster and climate resilience	Short term   Medium term   Longer term	
3.3 Collaborate with key stakeholders and service delivery partners to maximise climate adaptation and transition opportunities	<b>3.3.1</b> Engage with emergency service volunteers to co-design transition and adaptation strategies that enhance performance, safety and wellbeing	Short term   Medium term   Longer term	Director Community Capability and Volunteerism
	<b>3.3.2</b> Strengthen our approach to influencing building policy and land use planning to minimise development in hazard-prone areas	Short term   Medium term   Longer term	Director Community Resilience and Risk Mitigation
	<b>3.3.3</b> Create opportunities to influence the design and siting of essential infrastructure to make communities more resilient and sustainable	Short term   Medium term   Longer term	

# Alignment of operational activities, policy and program outcomes to the Queensland emissions targets

Action	How we'll do it	Priority  2022   2023   2024   2025   2026 Short term   Medium term   Longer term	Lead for this action
4.1 Seek new ways to deliver emergency response outcomes	<b>4.1.1</b> Monitor the integration of transformative technologies (eg: electric or hydrogen-powered fire appliances) into response arrangements in other jurisdictions and assess the suitability of QFES adopting this technology	Short term   Medium term   Longer term	Director Fleet and Logistics
	<b>4.1.2</b> Take advantage of opportunities to test new technologies and innovations that present to QFES through trusted collaborations and that align with QFES' objectives	Short term   Medium term   Longer term	Director Strategic Intelligence and Planning
	<b>4.1.3</b> Prepare QFES to contribute to a climate positive Brisbane 2032 Olympic Games	Short term   Medium term   Longer term	
4.2 Prepare QFES for operations in a climate-challenged world	<b>4.2.1</b> Identify and quantify climate change risks, consequences and costs for QFES to continue to manage fires, emergencies and disasters	Short term   Medium term   Longer term	Director Strategic Intelligence and Planning
	<b>4.2.2</b> Apply climate and socio-economic scenarios to test the QFES operational model's ability to adapt to climate	Short term   Medium term   Longer term	
	<b>4.2.3</b> Identify opportunities to adapt staff and volunteer capacity, capability and assets in response to the impacts of climate change	Short term   Medium term   Longer term	Director Organisational Capability Doctrine and Lessons Management
	4.2.4 Investigate the impact of climate change on the wellbeing of staff and volunteers	Short term   Medium term   Longer term	Director Operations Support
4.3 Enhance the integration of climate risk into planning	<b>4.3.1</b> Influence state planning policies and disaster management planning through the dissemination of findings of hazard and risk assessments	Short term   Medium term   Longer term	
	<b>4.3.2</b> Continue the development and delivery of the Queensland Emergency Risk Management Framework (QERMF) to ensure that local and district disaster management groups have access to appropriate and current intelligence when assessing their area's hazard and risk profiles	Short term   Medium term   Longer term	Director Community Resilience and Risk Mitigation
	<b>4.3.3</b> Advocate for the development and implementation of a standard guideline for Queensland Government agencies undertaking climate risk assessments.	Short term   Medium term   Longer term	