

**Government Response
to the Parliament of
Victoria's Inquiry into the
Health Impacts of Air
Pollution in Victoria**

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ABBREVIATIONS

Abbreviation	Definition
ADRs	Australian Design Rules
AHHA	Australian Home Heating Association
AQS	Air Quality Strategy
DEECA	Department Of Energy, Environment and Climate Action
DTP	Department Of Transport and Planning
ECMC	Energy And Climate Change Ministers' Council
enHealth	Environmental Health Standing Committee of the Australian Health Protection Committee
EP Act 2017	Environment Protection Act 2017
EPA	Environment Protection Authority Victoria
EPOC	On Country Environment Protection
GED	General Environmental Duty
ITMM	Infrastructure And Transport Ministers' Meetings
LGAs	Local Government Areas
NEPM AAQ	National Environment Protection Measure (Ambient Air Quality)
NPI	National Pollutant Inventory
OPLÉ	Officers For the Protection of the Local Environment
SVSEG	Strategic Vehicle Safety and Environmental Group
UN	United Nations
VAGO	Victorian Auditor-General's Office
VCAT	Victorian Civil and Administrative Tribunal
VEU	Victorian Energy Upgrades
VicFleet	Victorian Government Fleet
VPP	Victoria Planning Provisions
ZEV	Zero Emission Vehicles

PARLIAMENT OF VICTORIA'S INQUIRY INTO THE HEALTH IMPACTS OF AIR POLLUTION IN VICTORIA

The Parliament of Victoria's Inquiry into the health impacts of air pollution in Victoria was established on 19 February 2020. The Legislative Council agreed to a motion that the Planning and Environment Committee inquire into actions to minimise the health impacts of air pollution. The Committee was originally scheduled to report by 29 October 2020. This was extended due to delays associated with the COVID-19 pandemic.

The Legislative Council Planning and Environment Committee consulted widely, hearing testimony from 45 witnesses at hearings. The then Department of the Environment, Land, Water and Planning, Environment Protection Authority Victoria (EPA) and the Chief Health Officer provided expert witness testimony to the inquiry. The inquiry received 145 submissions from a range of concerned members of the public, community groups and related peak bodies. The Inquiry report, tabled by the Committee on 18 November 2021, along with the valuable insights provided by witnesses and through the submission process, is welcomed by the Victorian Government and will inform its ongoing commitment to clean air for all Victorians.

In October 2022 the Victorian Government released *Clean Air for all Victorians: Victoria's Air Quality Strategy* (the Strategy). The Strategy is Victoria's first overarching plan to address air pollution, which sets out clear, sustainable and cost-effective approaches to target air pollution and improve air quality over the next decade. As the Strategy presents the strategic policy direction and priority actions to improve air quality, the Government is responding to the findings and recommendations of the inquiry by outlining the current position on the matters raised. This Victorian Government response provides an overview of action being undertaken to improve air quality and reduce the impacts of air pollution on health, environment, economic development and population growth.

AIR QUALITY AND VICTORIA'S ENVIRONMENT PROTECTION FRAMEWORK

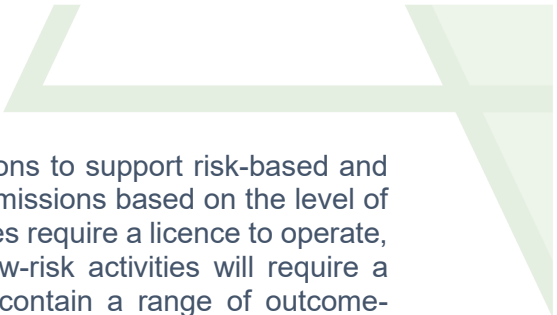
The Victorian Government has introduced stricter air quality enforcement measures with the commencement of the *Environment Protection Act 2017* (EP Act 2017) which came into effect on 1 July 2021. The EP Act 2017 and its supporting regulations make up Victoria's environment protection framework.

The environment protection framework includes enhanced powers for the Environment Protection Authority Victoria (EPA), additional enforcement tools and stronger penalties to hold environmental polluters to account. To support this reform the Victorian Government has invested \$292.3 million to support EPA to implement these reforms over the period from 2016-17 to 2024-25.

General Environmental Duty

Commencement of the EP Act 2017 introduced several new duties to manage environmental risk, the centrepiece being the general environmental duty (GED). The GED requires all Victorians to take reasonable and practical steps to reduce risks to human health and the environment from their activities. A breach of the GED can attract both civil and criminal penalties.

Risk based permissions and licencing



The EP Act 2017 also introduced a tiered system of permissions to support risk-based and proportionate regulatory oversight. There are three tiers of permissions based on the level of risk to human health and the environment. Most heavy industries require a licence to operate, a permission allocated to high-risk activities. Medium and low-risk activities will require a permit and registration respectively. Licences and permits contain a range of outcome-focused conditions which address the risks of the specific permissioned activity.

The EP Act 2017 provides EPA with powers to review existing permissions more frequently and to require standards that align with better practices and technologies. This is to ensure licences and permits are up to date with changing science, environmental conditions and community standards. In line with these powers, EPA has reviewed all licence conditions to ensure they reflect the principles of the Act. Priority licences were reviewed and transitioned in 2021-22, and the remaining operating licences were reviewed and transitioned with conditions consistent with the EP Act 2017 and *Environment Protection Regulations 2021* (Vic). All operating licences can be found on the EPA permissioning decisions register.

The EP Act 2017 provides EPA with stronger compliance and enforcement powers. EPA's *Compliance and Enforcement Policy* clearly articulates its approach to non-compliance, stating that it takes a 'no tolerance approach' and 'will take proportionate regulatory action against those who fail to meet their obligations.' Over time, government expects the management of environmental risks to improve across the state. As the capability and performance of businesses increases, those who fail to effectively manage their environmental risks will face more serious enforcement action.

EPA may also suspend or revoke a permission such as an operating licence, temporarily or permanently, preventing the permission holder from operating under the EP Act 2017. EPA is continuing to work with Victorian businesses, organisations and communities to help them operate under the environment protection framework.

Guidance and tools

The EP Act 2017 also provides for a set of tools, including guidance and better environment plans.

Guidance is a core element of the environment protection framework. To support air pollution managers and specialists, EPA released the *Guideline for Assessing and Minimising Air Pollution* (EPA publication number 1961). This guideline includes material to assist risk assessment of the receiving environment to build an understanding of how emissions from a site adds to the cumulative risks from existing air pollution on human health and the environment. The guideline emphasises the assessment of local topography, meteorology, background air pollution and nearby sensitive land uses. A better environment plan is one of the more innovative tools available to industry. It is a statutory-based voluntary agreement between the EPA and duty holders. The tool is aimed to help address complex compliance issues, especially across multiple sites or duty holders and may help define shared responsibilities and different roles and assist with GED compliance.

The provisions of the EP Act 2017 are taken into consideration in processes to assess major projects, including the Environment Effects Statement process.

CLEAN AIR FOR ALL VICTORIANS – VICTORIA'S AIR QUALITY STRATEGY

The Victorian Government is already taking strong action to reduce air pollution from major sources, and *Clean Air for all Victorians: Victoria's Air Quality Strategy* (the Strategy) sets out how the Government will further reduce air pollution and tackle major pollution sources while supporting communities, the economy and the environment. It builds on work we are already doing to reduce air pollution, including our:

- transformation of Victoria's environment protection and climate change frameworks.
- commitment to increase the share of renewable electricity generation in Victoria to 50% by 2030.
- multi-million-dollar investments in public transport and zero-emission vehicles and fuels.

The Strategy is built around four strategic objectives:

- 1. Targeting the main causes of air pollution in Victoria today**
 - Preventing air pollution from being generated in the first place from major sources such as industry, motor vehicles, wood heaters and planned burns.
- 2. Helping vulnerable Victorians and supporting the broader community**
 - Raising awareness in the community about the impact of air pollution on human health and the environment.
 - Empowering and supporting Victorians to take an active role in reducing our exposure to air pollution emissions.
- 3. Raising the bar on air quality information**
 - Strengthening our understanding of where and when air pollution occurs, and its impact on human health and the environment.
 - Advocating for strong national standards, improving our air monitoring capabilities, and supporting improved accessibility to information for people to take informed action.
- 4. Ensuring a clean air future**
 - The Victorian Government's transition to a clean energy future and investments in innovative technologies such as zero emission vehicles (ZEV) and hydrogen will strongly support our reduction of air pollution.

PRIORITY ACTIONS TARGETING CAUSES OF AIR POLLUTION IN VICTORIA

The Strategy identifies the main causes of air pollution in Victoria today and identified new commitments and ongoing work to reduce emissions. The inquiry makes recommendations in relation to key emission sources identified in the Strategy. Some of the priority actions being delivered in these key areas are set out in this response.

Industry

In addition to Victoria's revitalised Environment Protection Framework, the Strategy includes new actions targeting air pollution 'hot spots' and support for industry to be cleaner. These actions accompany ongoing support for businesses to ensure compliance with the EP Act.

Wood heaters

The Victorian Government's Air Quality Strategy announced a commitment to analyse options for wood heater policy reform to reduce the impacts of wood smoke on human health. This work will consider current policies and instruments available in Victoria and other jurisdictions and will inform future government policy. The Government is considering the next steps in this process.

The Government maintains information and resources to support local communities' understanding of the health impacts of wood smoke, and proper, efficient operation of wood heaters to minimise the generation of smoke. This information promotes assistance available to the community to adopt energy efficient alternatives to wood heaters, through the Victorian Energy Upgrades program.

Motor Vehicles

New motor vehicle emissions and fuel quality standards

The Victorian Government supports the nationally agreed policy to harmonise Australian Design Rules (ADRs) with international regulations where possible and consideration is given to the adoption of the international regulations of the United Nations (UN).

The Victorian Government continues to work with the Australian Government in the introduction of new and amended ADRs that align with policies for the continuous improvement of motor vehicle safety and environmental performance. This includes working with other States and Territories to look at options for developing a harmonised approach to vehicle emissions standards.

The Victorian Government made a submission to the Commonwealth's proposals to introduce more stringent Euro 6 / VI emissions standards and called for the implementation date to be brought forward so that cleaner and more efficient vehicles can be introduced to our market sooner.

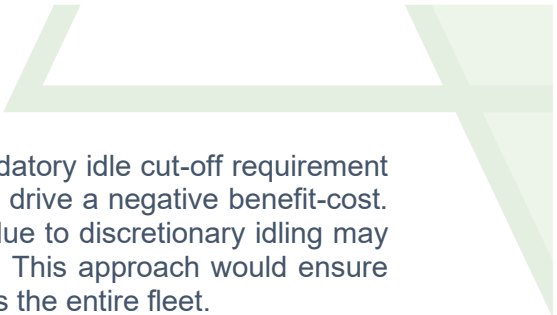
On the 27th of March 2024, the Australian Government introduced its New Vehicle Efficiency Standard. The Standard will incentivise car companies to supply new cars that use less fuel per kilometre and sets an average CO₂ target for manufactures for vehicles they produce. The Standard is expected to come into effect from 1 January 2025 and will have Australia 'catch-up' to comparable markets on emissions reduction by around 2028.

The Victorian Government is actively advocating for improved national standards for fuel quality and vehicle emissions standards, including in heavy vehicles. This advocacy includes:

- Contributing to the development of the National Electric Vehicle Strategy, including advocating for strengthened national standards to reduce emissions from vehicles and working with the Commonwealth Government to reduce emissions from diesel powertrain.
- Participate with other States, Territories and the Commonwealth Government in intergovernmental groups such as the Energy and Climate Change Ministers' Council (ECMC) and Infrastructure and Transport Ministers' Meetings (ITMM) which now has a standing agenda item on zero emissions vehicles and through the Strategic Vehicle Safety and Environmental Group (SVSEG).
- Working in conjunction with the New South Wales Government to deliver the Hume Hydrogen Highway which will deliver hydrogen refuelling stations along the Hume Highway between Melbourne and Sydney. This \$20 million project supported by \$10 million investment from Victoria, will help hydrogen-powered, long-haul heavy freight vehicles to use clean technology such as hydrogen fuel cells.

The Victorian Government will continue to advocate and make formal submissions to the Commonwealth Government to streamline its rule-making process for adopting United Nations Regulations into ADRs.

While the Government supports various emission reduction technology such as idle cut-off, with the Australian market for both light and heavy vehicles considerably smaller than the



predominant UN markets, any proposed introduction of a mandatory idle cut-off requirement unique to Australia would limit potential supply of vehicles and drive a negative benefit-cost. A more effective measure to reduce negative health impacts due to discretionary idling may be better supported through public education and campaigns. This approach would ensure that the application is not limited to just new vehicles but across the entire fleet.

Modernising heavy vehicles and working with local councils to improve roads

The 2023-24 Victorian State Budget allocated \$20 million to improve air quality in the inner west – Clean air for Melbourne’s west initiative - including a \$15 million grants program to modernise the heavy vehicle fleet travelling through the inner west. Successful applicants have access to a grant to permanently have their older, less efficient heavy vehicles taken off the road in lieu of purchasing a cleaner and more efficient option from an approved pool of vehicles. The initiative also included \$5 million in grants to support local councils within the inner west to reseal highly trafficked local roads.

Victoria’s Zero Emission Vehicle Roadmap

The Victorian Government is also working with industry on multiple initiatives to assist the transition to zero emission vehicles (ZEVs) through the [ZEV Roadmap](#).

The ZEV Roadmap, supported by a \$100 million package of policies and programs, will enable the State to take full advantage of the emerging global shift towards ZEV technology. The sustainable targets set by the roadmap include:

- 50 per cent of light vehicle sales to be ZEV by 2030.
- All new public transport bus purchases to be ZEV from 2025.
- Significant contribution to net-zero emissions objective by 2050.
- To encourage the uptake of 400 ZEV’s into the government fleet over 2 years, achieved in May.

Reducing the exposure of sensitive developments to transport emissions through better siting and design

The Department of Transport and Planning (DTP) is reviewing options (over 2024) for introducing new siting and design requirements to reduce exposure risks from transport related air pollution to sensitive uses, including schools and childcare centres seeking to be located near busy roads or rail freight routes.

Any new siting and design requirements would be introduced into the Victoria Planning Provisions (VPP). These amendments would provide guidance to project applicants, support planning decisions by planning and responsible authorities, and Victorian Civil and Administrative Appeals Tribunal processes.

The Minister for Education is exempt from obtaining planning permits for government schools under section 16 of the Planning and Environment Act 1987. However, the Department of Education will liaise with the Department of Transport and Planning, and the Department of Energy, Environment and Climate Action to ensure that policies are in place so that where possible, the siting and design of new government schools is consistent with the intent of planning schemes in relation to traffic related air pollution exposure risks.

At a strategic planning level, in 2021 and 2022 the Planning Policy Framework of the VPP was updated to include land use planning and transport infrastructure responses that contribute to improved air quality by:

- Integrating transport and land use planning to improve transport accessibility and connections.
- Locating key developments that generate high volumes of trips in the Central City, Metropolitan Activity Centres and Major Activity Centres.
- Strengthening land use planning policy to support infrastructure for walking, cycling and public transport.
- Highlighting that wherever possible, that there should be suitable separation between land uses that pose a human health risk or reduce amenity due to air pollutants, and sensitive land uses (residential use, childcare centre, school, education centre, residential aged care centre or hospital).
- Specifying that air pollutant exposure should be minimised for sensitive land uses proposed near the transport system through suitable siting, layout and design responses.

HELPING VULNERABLE VICTORIANS AND SUPPORTING THE BROADER COMMUNITY

The Victorian Government is implementing a variety of measures to help protect vulnerable Victorians from the impacts of air pollution on their health, including in areas where Victorians experience localised instances of poor air quality. Victoria's Air Quality Strategy supports investment in education, technology and infrastructure to reduce emissions and communities' exposure to air pollution.

MELBOURNE'S INNER-WEST

Getting older heavy vehicles off local roads

The Victorian Government responded to the report from the Inner West Air Quality Community Reference Group in 2021. The collaboration that occurred across community groups, local government and residents through the report's development has helped identify key improvements we can make for the health and liveability of the inner west.

The Victorian Government made a number of commitments in response to the Reference Group's report and is undertaking initiatives to improve the air quality for residents of Melbourne's inner west. These initiatives include:

- Port Rail Shuttle Network - \$58 million initiative, avoiding millions of truck trips on roads each year.
- Port Rail Transformation Project - \$125 million project increasing opportunities to move more freight by rail.
- Relocating consolidated container storage to the former Melbourne Market site, which will accommodate freight and logistics uses closer to the Port of Melbourne.
- West Gate Tunnel Project - removing 9,000 trucks each day off multiple local streets and introducing 24-hour truck bans on six key roads around Footscray and Yarraville.
- Melbourne Metro Rail Tunnel Project - will bring more trains, more often, and reduce travel times across Melbourne.
- Encouraging uptake of Zero Emission Vehicles (ZEVs) – target of 50% new sales by 2030 and package of incentives to increase uptake.

Other initiatives to understand air pollution in the inner west and address its impacts include:

- An investment over two years (2021-22 and 2022-23) of \$1.788 million to further improve the early diagnosis and treatment of childhood asthma in the inner west.
- Undertaking studies to better understand sources of inner west air pollution, including a source apportionment study.

- Securing a long-term air pollution monitoring site in Footscray.
- Establishing an urban roadside monitoring station at Brooklyn to research roadside air pollution impacts, including ultrafine particle and black carbon measurement.

Supporting business and communities to reduce emissions.

A key component of Victoria's Air Quality Strategy is the Air Quality Improvement Precincts program, funded for \$2.84 million. The two precincts cover parts of western metropolitan Melbourne, including heavily industrialised areas such as Brooklyn. The inner west precinct covers parts of the Melbourne, Port Phillip, Maribyrnong and Hobsons Bay local government areas. The outer west precinct covers parts of the Maribyrnong, Hobsons Bay, Wyndham, Brimbank and Melton local government areas.

Grants have been made available to fund projects for businesses in the suburbs of Altona, Brooklyn, Derrimut and Laverton North with the aim of reducing dust and smoke. The Victorian Government is considering further options to improve air quality within the two precincts.

More trees for a cooler greener west

DEECA is delivering the More Trees for a Cooler Greener West program, which aims to plant 500,000 trees in Melbourne's West. The first three delivery phases of the program have been completed with phase 4 currently underway. Over 375,000 trees have been planted so far as part of implementation of the program. The program area includes local government areas in Melbourne's west including Brimbank, Hobsons Bay, Maribyrnong, Melton, Moonee Valley and Wyndham.

DEECA provides regular progress updates to the community through website updates, social media posts, media releases and delivery partner communications such as newsletters. The community is also encouraged to get involved in planting days through phase four of the program and future program phases. More information about where community members can attend tree planting events is available on the program webpage: <https://environment.vic.gov.au/more-trees>.

Tree species have been selected for each area, based on expert advice and the need to ensure resilience to changing climate conditions. While DEECA is directly procuring species indigenous to the local area from nurseries in Melbourne's west, local indigenous species are not appropriate in all locations and will not always deliver cooling and greening outcomes that are the core of this program.

The program has been developed and is being delivered in partnership with local government, other land managers (including Parks Victoria, Zoos Victoria, Victoria University, Melbourne Water, Department of Transport and Planning, and Traditional Owners (through Registered Aboriginal Parties)). Many local environment organisations are also involved in the tree planting efforts.

The program is working directly with Wurundjeri Woi Wurrung Cultural Heritage Aboriginal Corporation, Wadawurrung Traditional Owners Aboriginal Corporation and the Bunurong Land Council Aboriginal Corporation. This includes through consultation, direct funding, tree planting projects and nursery work. The program has a dedicated funding stream for local Traditional Owners for planting on Country projects.

The program has also fostered the introduction of the 'Trees for Schools' program in collaboration with Greater Western Water. Eligible schools in the Inner West are able to apply for up to 50 trees to be planted. The program has contributed over 2000 trees to the 500,000-

tree goal while simultaneously enhancing canopy cover, school and community wellbeing and improving air quality.

SUPPORT TO UPGRADE WOOD HEATING

The Victorian Government is assisting Victorians to transition away from domestic wood heaters as their only source of heating. The Victorian Energy Upgrades (VEU) program is currently legislated until end of December 2030 and provides eligible households and businesses access to discounted energy-efficient products and services. New rebates to install energy efficient reverse cycle air conditioners for heating and cooling were introduced on 31 May 2023.

The program previously had a wood-fired heater upgrade activity, requiring the wood-fire heater to be decommissioned. This had historically low uptake. Newly introduced rebates will allow Victorians with wood-fired heaters to access rebates up to \$300 without decommissioning their wood-fire heater.

All Victorians can claim the VEU rebates, including landlords for rental properties.

PROTECTING AND INFORMING THE COMMUNITY DURING MAJOR SMOKE AND OTHER AIR QUALITY EVENTS

The Victorian Government acknowledges the importance of timely, accurate and tailored public health information and advice to minimise exposure to harmful emissions and to ease distress, concern and uncertainty that can arise from major smoke events.

Existing protocols and tools, including VicEmergency and EPA's AirWatch, support communications with communities during an emergency. These tools enable a diverse range of communications based on information and guidance from relevant departments and agencies, such as EPA's air quality forecasts for smoke and other air quality events.

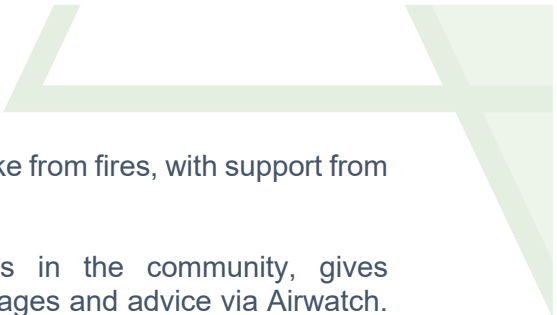
Since its launch in 2015, the VicEmergency suite of channels (website, app, social media and hotline) has provided community warnings and information for all emergencies in Victoria. This includes events of adverse health impacts like air pollution, smoke and thunderstorm asthma. VicEmergency has been continuously updated and improved since its inception, building on learnings and recommendations from reviews and inquiries from emergencies such as the Hazelwood mine fire, thunderstorm asthma and the 2019-20 Victorian fire season.

The Victorian Government also has 11 memoranda of understanding covering over 40 emergency broadcasting stations to support the provision of this information to communities across the state via radio and television. This continues to be an important vehicle for timely communication.

VicEmergency uses a community-tested set of icons to show the location of emergency incidents and events. For consistency and ease of understanding, the symbol used for health hazards relating to air quality is a human health symbol. This symbol is represented as a human form in the diamond (incident) or triangle (warning) icon shape. This reflects community research about the importance of clear symbols that are well understood by diverse cohorts and support individuals and communities to take timely action to keep themselves safe.

Industrial and chemical fires

In late 2016, EPA Victoria became responsible for past, current and potential future health impacts of environmental pollution and waste in Victoria. This includes assessing and



communicating public health risks from air pollution due to smoke from fires, with support from the Department of Health for major incidents.

During emergencies, EPA advises on public health risks in the community, gives recommendations for health protection actions, provides messages and advice via Airwatch, VicEmergency and other channels as necessary. EPA may also provide specific data, analytics and information about an incident and associated health risks to local general practitioners, in consultation with the Department of Health.

EPA has made a range of improvements to their Contact Centre since the Tottenham industrial fire in 2018, including improvements to better capture health symptoms, providing EPA with further intel on the situation. EPA has also worked on strengthening the data applications between Contact Centre and enterprise systems, to provide up-to-date information that informs EPA's regulatory response.

Information on health impacts from major incidents

The Department of Health, in response to recommendation 1 of the Inquiry into Recycling and Waste Management (2019) has improved its capacity to undertake rapid assessment of the health impacts from a major incident through analysis of de-identified data from hospital emergency department presentations combined with other data. This analysis will help improve the health care system's response through better understanding the impacts on communities.

The medical care of individuals is the responsibility of the health care system. Based on the assessment of risks to public health by the EPA, the Department of Health assists NURSE-ON-CALL, Ambulance Victoria and hospital emergency departments to respond to individuals with concerns or symptoms following large smoke events. The EPA and the Department of Health are committed to implementing enHealth's (Environmental Health Standing Committee of the Australian Health Protection Committee) contemporary, best practice and community-focused [Risk Communication Guidance – Risk Communication Principles](#).

Indoor air quality and clean air shelters

As part of Clean Air for all Victorians: Victoria's Air Quality Strategy, Government will continue to review and implement actions between 2022 and 2030 and continue to develop new interventions to target priority areas for reducing air pollution and its impacts on human health, amenity and wellbeing. Government recognises the importance of clean indoor air and the potential for exposure to pollutants in indoor spaces.

In 2024, Government announced funding and support for the *Pathway to Clean Indoor Air in Victoria* project. The project will engage a multi-disciplinary research consortium to evaluate indoor air quality in community spaces around the state, with a range of practical measures to improve indoor air quality set to be piloted in settings including schools, workplaces and public spaces. The project will help establish feasible indoor air quality performance standards and will inform government policy and public health guidance, with long-term solutions including integrating indoor air quality standards into building codes and promoting healthier indoor environments.

This builds on Government's existing support for energy efficiency upgrades and thermal efficiency improvements for homes. While the Victorian Energy Upgrades program does not specifically evaluate houses for indoor air quality the air tightness of a building plays a vital role in preventing pollutants from getting indoors, and tighter buildings may perform better during smoke or pollution events. In addition, Homes Victoria is currently implementing a suite of energy efficiency upgrades to social housing (<https://www.housing.vic.gov.au/energy-efficiency-social-housing>) including draught sealing and replacement of older gas heaters with

reverse-cycle air conditioning. These measures may assist in reducing residents' exposure to pollutants or poor air quality.

The Inquiry also considered the establishment of community clean air shelters in various locations across Victoria as identified facilities where Victorians can seek respite from poor air quality. The Government expects that outputs of the *Pathway to Clean Indoor Air in Victoria* project will provide valuable contributions to future consideration of the needs and requirements of any facilities to be developed or upgraded for such purposes.

Further supporting the development of community clean air shelters, the Department of Health has published [guidance](#) to assist local government environmental health officers, building engineers and emergency management professionals, to plan for community respite to 'cleaner air' when local air quality becomes heavily impacted by smoke. Planning for and promoting cooler and cleaner air spaces, or alternatively the designation of cleaner air rooms inside publicly accessible buildings, is an important adaptation strategy as Victoria faces changes to its climate.

It is important to emphasise that household bushfire survival planning remains essential, and that public health advice about actions to minimise the impacts of smoke on indoor air quality will continue to be provided during significant smoke events.

PLANNED BURNING

Land and bushfire management agencies consider the relative effectiveness and impact of fuel management activities, such as the impact of smoke from planned burns, against the risk and impact of bushfires. The Government works closely with communities, industries and partners to minimise the impact of fuel management, including smoke, during the scheduling and delivery of planned burns. The *Victorian Air Quality Strategy* outlines the Government's commitment to collaborate with partner agencies to reduce and better manage smoke impacts from planned and agricultural burns.

The VicEmergency website and app currently display all Forest Fire Management planned burns when they are ignited, with a direct link to the [Planned Burns in Victoria](#) website. Additional community information notices can be issued when triggers are met via all VicEmergency channels such as the website, application, social media, and hotline when air quality is being affected by smoke from planned burning and other fire related events such as bushfires. This process is led by the Department of Energy, Environment and Climate Action and Country Fire Authority as the bushfire hazard leads, in partnership with Emergency Management Victoria, EPA and Department of Health to ensure consistency.

Progressing Traditional Owners self-determination in land and fire management

The Inquiry acknowledged the need to continue to partner with Traditional Owners to increase use of Traditional Owner land management practices. This includes removing barriers to Traditional Owners exercising their rights to practise culture and care for Country, including cultural fire and cultural landscapes management, is a key aspect of how the Victorian Government supports Aboriginal self-determination.

The Government will continue to focus on enabling Victorian Traditional Owners to manage Country according to their cultural objectives or pathway.

The Government is committed to the vision identified in the [Victorian Traditional Owner Cultural Landscapes Strategy](#). This strategy was developed by Victorian Traditional Owners and launched in 2021 to set out a framework and pathways to lead the planning and management of Country in line with their cultural obligations to care for Country. It provides

core principles, tangible actions and a common language that can provide approaches to future forest and park management decisions including policy and legislative reform.

As part of enabling Traditional Owners to lead and practice their obligations to manage Country, DEECA has supported Traditional Owners to establish a Traditional Owner Led Cultural Fire Leadership Group to promote the ongoing development of strong partnerships with Traditional Owners and other relevant land managers in realising the strategy. As part of the 2021-22 Budget, the Government allocated \$22.5 million, with \$6.3 million ongoing, to reinvigorate Traditional Owner-led cultural land and fire management practices. Over 2022-23 and 2023-24, the program supported ten successful applicants to deliver cultural fire projects across Victoria.

Forest Fire Management Victoria (FFMVic) continues to partner with Traditional Owners to implement the *Victorian Traditional Owner Cultural Fire Strategy*. All cultural burns on the Joint Fuel Management Program (JFMP) have been nominated and planned to be carried out by Traditional Owners with support from FFMVic. A total of 62 cultural burns have been delivered since 2019 with 20 of these carried out in 2022-23, this was a 30% increase on 2021-22 figures.

To further develop and strengthen partnerships with First Nations People, EPA has developed the On Country Environment Protection (EPOC) pilot program. The pilot is a collaboration between EPA and participating first nations organisations to:

- achieve two-way knowledge sharing;
- support recognition of Traditional Owner cultural values as part of environment protection; and
- ensure the protections, powers and opportunities of the environment protection framework support the priorities Traditional Owners have for Country.

INFORMING AND ENGAGING WITH VICTORIANS

AIR QUALITY AWARENESS AND UNDERSTANDING

Air quality education and public information

Clean Air for all Victorians: Victoria's Air Quality Strategy emphasises the Government's commitment to raising awareness in the community about the impacts of air pollution, and empowering Victorians take an active role in reducing exposure to air pollution. Education and information are key to empowering Victorians to better understand the harmful impacts of air pollutants to health, wellbeing and the environment, and actions individuals can take to reduce their contribution or exposure to air pollution.

The Victorian Government is committed to supporting this through improving information and resources available to communities. This includes improving the availability and accessibility of information for culturally and linguistically diverse (CALD) communities and sensitive people (such as those with asthma or underlying health conditions) who live in areas regularly impacted by air pollution.

Motor vehicle engine idling

In addition to actions already outlined on reducing vehicle emissions, the Victorian Government is committed to raising awareness of the potential harm of motor vehicle engine idling, particularly when dropping-off and picking-up children from schools. Victoria's Air Quality Strategy includes the Government's commitment to support education and behaviour change, including for reducing pollution from idling cars at locations where sensitive people

(such as children or people with existing lung or heart conditions) can be concentrated, including schools, childcare centres, and hospitals.

The Department of Education is responsible for delivering learning and development services to approximately 1,550 government schools and regulates approximately 4,320 early childhood services. The Department of Education considers traffic management and ventilation in the design and development of government schools.

LISTENING TO COMMUNITY VIEWS

The *Planning and Environment Act 1987*, the *Environmental Effects Act 1978* and the *Environment Protection Act 2017* regulate land use planning and environment protection in Victoria. Although these instruments operate independently, they work in an integrated way to support effective consultation.

Major industrial developments that pose potential environmental impacts are typically subject to a development licence requirement under the Environment Protection Act 2017 which triggers statutory consultation requirements. Supporting such processes, EPA has a *Charter of Consultation* (EPA publication number 1928), that sets out EPA's commitment to consultation with Victorians. The Charter outlines EPA's consultation criteria and procedures, including the various engagement processes typically used, consultation timelines, and an outline of the principles and steps needed to support effective processes. It also describes what EPA expects from duty holders. EPA has also established Sector Consultation Groups and Community Consultation Groups to provide two-way communication and discussion on managing waste and pollution in Victoria. Sector Consultation Groups include Agriculture, Water, Waste and Recycling, Construction, Small Business, Resources, Energy and Extraction.

The planning system already incorporates extensive, well documented exhibition, notice, objection and review processes associated with planning scheme changes, rezoning and development applications. These are set out under the *Planning and Environment Act 1987* (sections 52 and 57). Exemptions and call-in processes are transparent and well documented. Plain English, up-to-date information to support community input into planning processes is provided on the Department of Transport and Planning website:

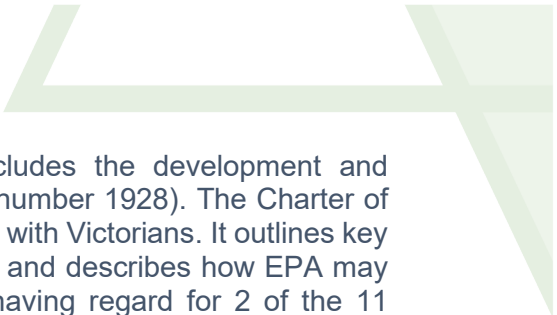
<https://www.planning.vic.gov.au/permits-and-applications/planning-permits/notice-and-referrals>.

To support the effective flow of information from local councils to members of the public, Planning Practice Note 74 provides guidance on 'Making planning documents available to the public'. Complementing consultation processes led by individual planning authorities (local councils), Planning Panels Victoria and the Planning Division of the Victorian Civil and Administrative Tribunal (VCAT) provide a forum for detailed consideration and review of complex or contentious matters. In addition, Planning Panels Victoria can be appointed to undertake an independent review of amendments to planning schemes or other matters such as a planning permit referred or called in by the Minister for Planning, and environment effects inquiries. The process provides for public submissions and hearings. Extensive guidance is available to explain the panel process.

EPA engagement with communities

The EPA and other relevant agencies will undertake meaningful and participatory consultation on projects relating to the air quality of communities.

EPA is already working to enhance and strengthen its consultation and engagement approach across the organisation to ensure community and stakeholders remain core to the protection



and prevention of environment and public health. This includes the development and implementation of a *Charter of Consultation* (EPA publication number 1928). The Charter of Consultation (the Charter) is EPA's commitment to consultation with Victorians. It outlines key parts of our laws that require or may benefit from consultation and describes how EPA may undertake such consultation. The Charter commits EPA to having regard for 2 of the 11 foundational principles of the EP Act 2017: the principle of accountability and the principle of shared responsibility. It was published on 15 June 2021. It will be reviewed and updated as needed.

EPA's Strategic Plan 2022-27, published in July 2022, affirms EPA's consultation commitments, consistent with the Charter. EPA is committed to timely and regular engagement with local communities about decisions that impact them and has put in place performance measures and targets to monitor community awareness of and trust in the work of EPA.

EPA is continuing to build staff capability in community engagement principles and practice. More than 720 staff have completed mandatory community engagement training which will also be provided to new staff going forward.

EPA has also established local community committees in each of its seven regions. These committees provide a forum for discussion of local and state-wide issues of importance, with community members and EPA jointly responsible for setting meeting agendas.

These community committees complement the sector consultation groups established by EPA in 2022 for the following industry sectors:

- Agriculture
- Resources, Energy and Extraction
- Small Business and Manufacturing
- Waste and Recycling
- Water

Consultation with these groups assists EPA to build state of knowledge about good environmental practices, generate feedback about the way EPA manages important issues, and provide for two-way information sharing.

RAISING THE BAR ON AIR QUALITY INFORMATION

Understanding the extent and nature of air pollution Victorians are exposed to, and what impact it is having on their health, is essential to determining how and where to prioritise effort to reduce emissions. The Victorian Government is addressing information issues raised in the inquiry.

Victoria's air quality monitoring network

Recent improvements have been made to Victoria's air quality monitoring network.

EPA will continue to identify future opportunities to further expand the network and deliver upgrades and improvements to the network. The number of air monitoring sites in Victoria has been significantly expanded through the roll out of an extensive regional sensor network providing many more Victorians with localised air quality information near priority communities and locations. Given this recent expansion, EPA's focus for the next phase will be on improving the current network through technology replacement or upgrades. Further expansion of the network would be dependent on available funding and investment priorities.

The air monitoring program was complemented with a study on PM2.5 air pollution sources in inner west Melbourne <https://www.epa.vic.gov.au/about-epa/publications/2060-air-pollution-inner-west-melbourne>. This study provides a better understanding of major sources of pollutants to better target efforts to prevent pollution and protect health.

The upgraded AirWatch website now delivers on the matters raised in the recommendation and provides data to the public in close to real time (hourly). This is nationally consistent and is in line with best practice across the world.

EPA provides data to the community through the Victorian Government open data resource at <https://www.data.vic.gov.au/>. Data may also be requested via email to EPA's contact centre at contact@epa.vic.gov.au.

Improving how air quality information is managed and used

The Victorian Government welcomed and accepted the recommendations of the *Victorian Auditor General's Office (VAGO) Performance Audit – Improving Victoria's Air Quality*. EPA has acquitted recommendations 1-4 and the Department of Energy, Environment and Climate Action (DEECA) has acquitted recommendation 5.

Actions taken to acquit recommendations include:

- An environmental monitoring capability review, which outlined a range of enhancements to the monitoring program including an expansion of ambient monitoring, mobile monitoring stations, modelling, sensors and satellite technology. The expansion of monitoring will provide enhanced scientific evidence to inform the prioritisation and selection of actions to protect communities.
- A revamped process to automatically produce the National Environment Protection Measure (Ambient Air Quality) report, thus reducing the chances for human-error.
- The Environmental Data Information Systems Online Project – a renewed data storage platform to manage air monitoring data. The project streamlines data collection, analysis, and storage while simplifying data sharing.
- Upgrades to the EPA AirWatch website. The enhanced site includes real time air quality data, provides associated health messages, and focusses on an optimised user experience.
- Updates to the Victorian air emissions inventory.
- The development of an action plan to increase the oversight of air quality monitoring conducted by high-risk operators.
- A review of power station licences. This review and update included provisions for the power stations to better monitor their emissions and to make this data available to the community.
- An action plan to address cumulative air emissions and impacts from low risk (non-licensed) sites has been incorporated into EPA's Monitoring and Assessment Plan.
- An MOU for the Officers for the Protection of the Local Environment (OPLE) Pilot Program between EPA and Brimbank and Hobsons Bay City Councils, with OPLEs stationed at both Brimbank and Hobsons Bay City Councils.
- Continuing to work actively with stakeholders including community, industry and Councils (Brimbank, Hobsons Bay and Maribyrnong) via the Brooklyn Community Representative Group, Brimbank City Council's Brooklyn Industrial Precinct Strategy Committee, and other EPA Regulatory programs.
- EPA continues to iteratively review its air quality action plan in Brooklyn to consider further insights and risks.
- The Brooklyn Dust Compliance Action Plan was finalised as of 31 December 2018 to progress towards achieving PM10 compliance against national and state standards surrounding the Brooklyn Industrial Precinct.

In recommendation 5, the Victorian Auditor-General's Office (VAGO) also recommended that EPA and DEECA clarify the roles and responsibilities of relevant Victorian Government agencies with respect to air quality management and develop protocols to ensure accountabilities are understood and coordination is achieved. DEECA has published [Where to Report an Air Pollution Event](#) as acquittal of this VAGO recommendation.

Monitoring of heavy metal emissions in the Latrobe Valley

Data collection and assessment of heavy metal emissions in the Latrobe Valley is already occurring as the EPA requires permission holders to monitor and report their existing point-source emissions from their permissioned facilities. The permissions for these facilities are reviewed periodically to ensure permission conditions remain up to date. For example, in 2021 EPA strengthened monitoring requirements for brown coal power stations in the Latrobe Valley, and introduced new limits for mercury, a key heavy metal of concern to the community. More information on the power station licence review can be found here <https://engage.vic.gov.au/review-brown-coal-power-station-licences>.

Proposed point-source emissions are assessed through EPA's permission application process, where proposed emission levels are compared against relevant policy objectives and potential impacts from the proposal.

Sources of emissions are also base-lined and assessed via the National Pollutant Inventory (NPI). EPA implements the Minamata Convention (an international treaty ratified by Australia that seeks to protect human health and the environment from emissions or releases of mercury or mercury compounds) through its monitoring and compliance activities. More information can be found here <https://www.epa.vic.gov.au/for-business/find-a-topic/minamata-convention-on-mercury>.

Updating air quality standards

The Victorian Government has committed in [Clean Air for all Victorians: Victoria's Air Quality Strategy](#) to continue to advocate for better national air quality standards and practices to minimise pollution.

This work builds on Victoria's existing advocacy for stricter air quality indicators and objectives. For example, EPA led the review of the national standards set for ozone, nitrogen dioxide and sulfur dioxide in the National Environment Protection Measure (Ambient Air Quality) (NEPM AAQ). The review process was comprehensive and considered new evidence on the health effects of these pollutants. The review resulted in amendments to the NEPM AAQ in 2021 to strengthen the standards for ozone, sulfur dioxide and nitrogen dioxide.

Those new standards, as well as two more stringent standards than those in the NEPM AAQ, were incorporated into Victoria's Environment Reference Standard in March 2022. Victoria adopted the two more stringent standards for ozone and sulfur dioxide given our state's projected population increase and the increase in the number of people aged 65 and over. By strengthening Victoria's standards, we will further improve air quality and public health protection.

National agreement has also been reached for a further review of the ozone, nitrogen dioxide and sulfur dioxide standards commencing in 2025, and reviews of the annual PM2.5 and PM10 particle standards are also planned. This will provide an opportunity for Victoria to continue advocating for better national standards and for the standards to be reviewed in line with the latest science, including the updated [World Health Organization Global Air Quality Guidelines \(2021\)](#).

Pollen monitoring and forecasting

The Victorian Government acknowledges the role of pollen monitoring and forecasting in assisting people to improve the management of hay fever and any coexisting seasonal asthma.

In response to the unprecedented epidemic thunderstorm asthma event in November 2016, the then Department of Health and Human Services (now Department of Health), through the Bureau of Meteorology, established a world's first integrated epidemic thunderstorm asthma risk forecasting and warning system. It combines grass pollen forecasts with certain weather inputs to estimate the risk of epidemic thunderstorm asthma events.

To achieve this, the Victorian Government provided funding to develop a network of 8 pollen monitors across Victoria which is the highest number of (seasonally) active pollen monitoring stations across Australia. Data from these monitors is fed into a computer model specifically developed by the University of Melbourne to generate local grass pollen forecasts across all of Victoria. This pollen forecasting capability is the key information that individuals with hay fever and seasonal asthma generally seek. Pollen forecasting information is currently accessible to the community through the Melbourne Pollen website and app <https://www.melbournepollen.com.au/>.

The epidemic thunderstorm asthma risk forecasting system is particularly valuable for those with seasonal hay fever (i.e. those who are allergic to grass pollen) and those with asthma, given they are at greatest risk. These grass pollen forecasts are a useful adjunct to treatments, including preventative treatments, that are currently available for both hay fever and seasonal asthma. On high-risk days, warnings are generated to advise the community, health and emergency sectors and other stakeholders of the risk to support preparedness and avoid the sudden onset of large numbers of people with acute asthma. This includes a primary focus on promoting good symptom control using individually tailored hay fever or asthma treatment plans by General Practitioners or pharmacists.

The department is supporting continuous ongoing improvements in the performance, accuracy, and efficiency of the system currently in place. Through a Commonwealth Government Disaster Ready Fund grant announced in June 2023, the department will work with partners to modernise the existing Victorian pollen monitoring network through installation of automated pollen monitors to improve epidemic thunderstorm asthma risk forecasting. These advanced monitors will generate more accurate, reliable and temporally granular data that will improve the forecasting capability. This initiative will occur across 2 years, commencing in 2024.