



Department of Energy, Mines,
Industry Regulation and Safety



Energy Safety Business Plan 2024–25





Acknowledgement of Country

The Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) respectfully acknowledges Aboriginal peoples as being the traditional custodians of Western Australia. We acknowledge the enduring connection Aboriginal people continue to share with the land, sea and sky through both their ancestral ties and custodianship to Country. We pay our respect to Elders both past and present, and acknowledge the value brought to our department through the collective contribution of Aboriginal and Torres Strait Islander peoples across Western Australia.



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The Statement of Intent has been developed as per the requirements of the <i>Energy Safety Act 2006</i> . This section details the Director of Energy Safety's purpose, objectives, functions, performance and the type of advice provided to the Minister.		The financial plan outlines the revenue and expenditure for 2024–25 and includes a comparison of the budget and actual out-turn for 2022–23. It also provides the forecasted quantum of the Energy Safety Levy for 2024–25 and the industry levy statement.	
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The operating environment for Building and Energy is challenging due to the constantly evolving regulatory landscape and resourcing constraints. This section analyses these topics.			

Building and Energy is responsible for performing energy safety activities under the *Energy Coordination Act 1994* (the Act) and the *Energy Safety Levy Act 2006* (WA) (the Levy Act).

Under the Act and the Levy Act, the Director of Energy Safety must prepare and submit a business plan for the forthcoming financial year to the Minister for Commerce (the Minister) by the end of each calendar year.

The plan includes a statement of intent, a list of proposed activities and a financial plan to ensure the Director of Energy Safety – a statutory office within the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) – (the Director) is sufficiently resourced to undertake his statutory functions under the Act.

Foreword



I am pleased to present the plan for 2024–25. This plan is key to identifying the resources and funding required to carry out Building and Energy's planned activities and is required by legislation to be prepared for the Minister each year.

Once the business plan is approved by the Minister, it forms the basis for determining the amount to be levied and how this will be allocated between energy industry participants for 2024–25.

Over the past year Building and Energy undertook a review of gas legislation which led to the adoption of hydrogen appliance standards in the legislation. We also facilitated several other initiatives in the hydrogen space such as ATCO Gas's Clean Energy Innovation Hub.

We also increased our presence in regional areas. Inspections were conducted in more than 20 remote stations and communities, highlighting several issues including non-operational Residual Current Devices. Regional gas inspections in the Mid West and Goldfields focused on complex gas equipment used in commercial installations. We increased our

focus on educating industry and consumers. This included advice on checking licences prior to commencing work, care to be taken when pruning near trees and power lines, precautions to take prior to cyclones, winter gas safety and safety tips for campers.

The pace of transformation and the sustained broadening of the scope of the industry which Building and Energy regulates (fast-expanding renewable energy sector or the proliferation of micro-grids and stand-alone power systems or EV-charging infrastructure) have highlighted a strong need to ensure our regulatory and compliance strategies remain effective at managing the safety of consumers and industry participants.

Building and Energy will be looking to recruit more inspectors to meet the increasing need for its services and to keep pace with the transformation which the energy sector is going through.

The proliferation of stand-alone electrical and gas installations

Under the State's electricity and gas safety laws, energy suppliers are obliged to inspect new and modified consumer installations to ensure that they are in a compliant and safe state prior to commencing or continuing supply.

For the State’s major energy suppliers, like Western Power and ATCO Gas, this obligation is met by their conducting inspections based on approved risk-targeted sampling regimes. Building and Energy oversees and audits these regimes and manages the events of substantial non-compliance identified through the inspections.

Responsibility for inspecting new and modified consumer installations, which do not have a relevant third-party energy supplier (stand-alone installations), falls to Building and Energy. Such stand-alone installations have traditionally been farms and mine sites located in remote and regional areas of the State. These lack access to established distribution systems, but are becoming increasingly common in more developed areas where the combination of solar generation and battery storage are slowly emerging as an economically viable alternative to third-party electricity supply. De-centralised hydrogen production and use, either for traditional combustion purposes or electricity generation through fuel-cells, is expected to add to this trend.

Building and Energy has experienced a steady increase in the number of notices of completion received for work on stand-alone installations requiring inspections. This growth in demand for Building and Energy inspection services is expected to continue to grow.

Network operators and micro-grids

The number of electricity network operators which Building and Energy has been responsible for regulating has historically remained relatively constant. In the past three years, the Economic Regulation Authority has issued distribution licenses to two new network operators. Both of these network operators have been licensed to operate embedded distribution systems within the larger Western Power operated South-West Interconnected System.

This increase aligns with experiences in other jurisdictions and with network operators’ business practices under which private developers are taking on increased

responsibility for constructing distribution systems. Where such construction is on an adequate scale, a private developer retaining ownership and direct operation of a distribution system becomes an attractive proposition. It is anticipated that the emergence and licensing of further such small network operators will become the norm. This view is reflected in amendments to the *Electricity Industry Act 2004*, currently before Parliament, that look to expand the licensing regime into ‘alternative energy services’ which is understood to include the regulation of ‘micro-grids’.

For each such new network operator, Building and Energy needs to ensure an appropriate network safety management system and consumer installation inspection regime is established, implemented and maintained.

Solar installations

The uptake rate for rooftop solar in the State is high. This has, in part, been spurred by the Commonwealth Government’s small-scale renewable energy scheme (the Scheme) which, since 2011, has been rebating to consumers a portion of the upfront purchase and installation cost.

The Scheme itself has served as an effective check on industry as rebates have only been available where pre-approved equipment has been installed by an accredited installer.

The value of rebates available under the scheme has been gradually tapered and is scheduled to end in 2030.

As rebates reduced, Building and Energy observed the scheme has proportionately become less effective as a check on industry, as operators working outside of the scheme have been able to gain a foothold in the market selling cheap low quality equipment and/or using inappropriately trained and licensed labour. Such activities present substantial safety risks to workers and building occupants.

To manage this risk, Building and Energy intends to dedicate inspection resources to auditing solar installers. While this risk has principally manifested in relation to rooftop solar installations, it is recognised as a possible

risk for other high-value products like building-scale batteries and electric vehicle charging equipment, Building and Energy intend to monitor the sale and installation of such equipment and adjust its audit activities as necessary and subject to resource availability.

Electrical vehicle charging equipment

The sale and installation of electric vehicle charging equipment is not as tightly regulated as the sale and installation of common household electrical appliances. Similarly, the installation of electric vehicle charging equipment in a residential setting is not generally treated as notifiable work. The consequence of this is that neither Building and Energy nor relevant network operators have effective oversight of this type of work. These combined issues are problematic in that charging equipment installed may be cheap low quality equipment exposing customers to risk, harm or property damage. This is an ever-present risk in a competitive market with price sensitive consumers of limited technical sophistication. Charging equipment, particularly faster charging equipment, operates at higher voltage and current levels making the consequences of potential faults more serious and unless appropriate assessments of and upgrades to consumer switchboards and electricity supply connections are undertaken, the installation of electric vehicle charging equipment, particularly higher current equipment, can trigger protections designed to prevent overload of a consumer's switchboard and damage to mains connections. This has the potential to render such charging equipment effectively unusable.

To address these risks Building and Energy will modify the existing statutory arrangements to facilitate greater oversight of the installation of electric vehicle charging equipment and to use the information garnered to audit practices and developments in this emerging market segment. This work requires dedicated resources.

Safety of workers near powerlines

The dangers associated with working near powerlines is a well appreciated risk. Building and Energy has historically focused its efforts in this space on ensuring electrical line work is conducted in an appropriate fashion.

Vegetation management around powerlines is a similarly high-risk activity, not only because of the proximity to high voltage conductors but because of the lower levels of risk awareness and training possessed by those engaged in this work. A series of incidents over the past few years have highlighted the need for a more proactive regulatory approach to this work. Subject to resource availability, Building and Energy will seek to improve industry education and establish an auditing program targeted at improving industry practices.

As a final note, I would like to thank and acknowledge the work of all designated electricity and gas inspectors and the broader team at Building and Energy for their efforts and dedication to ensure the safety of all Western Australian electricity and gas consumers and the broader community.



Saj Abdoolakhan

Director of Energy Safety

December 2023

About this Business Plan

This document sets out the 2024–25 Business Plan for the energy safety functions performed by the Building and Energy Division (Division) of the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS).

The business plan focuses solely on the delivery of functions of the Director of Energy Safety and the administration of technical safety regulations made under the *Electricity Act 1945* and *Gas Standards Act 1972*. These Acts and associated regulations set out the minimum technical safety requirements to which consumer electrical and gas installations and networks in Western Australia must be constructed and maintained. The primary objective of the energy safety legislation framework is the safety of energy consumers and the community at large.

The business plan has been prepared to meet the intent of section 4 of the *Energy Safety Act 2006* and includes a statement of intent, the business environment and challenges, including major initiatives, the financial plan, ongoing and planned initiatives, details of the proposed 2024–25 energy industry levy, and achievements.

Upon approval by the Minister, this business plan will form the basis for the determination on the amount to be levied on energy industry participants for 2024–25 and the manner in which it is to be allocated between participants.

The business plan is divided into Building and Energy’s three strategic priorities including Consumer Safety, Industry Safety and Network Safety, as represented in the figure below.

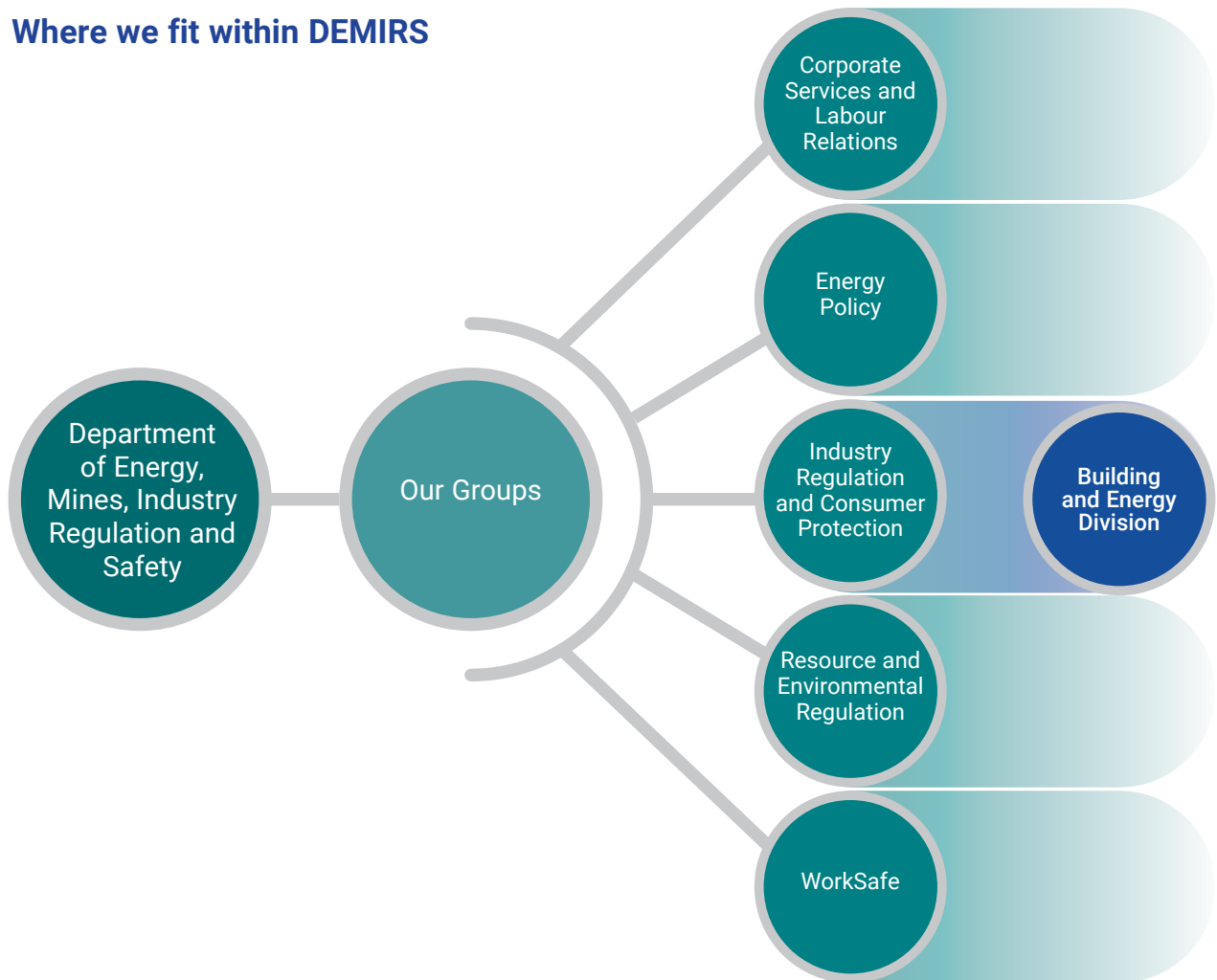
Figure 1

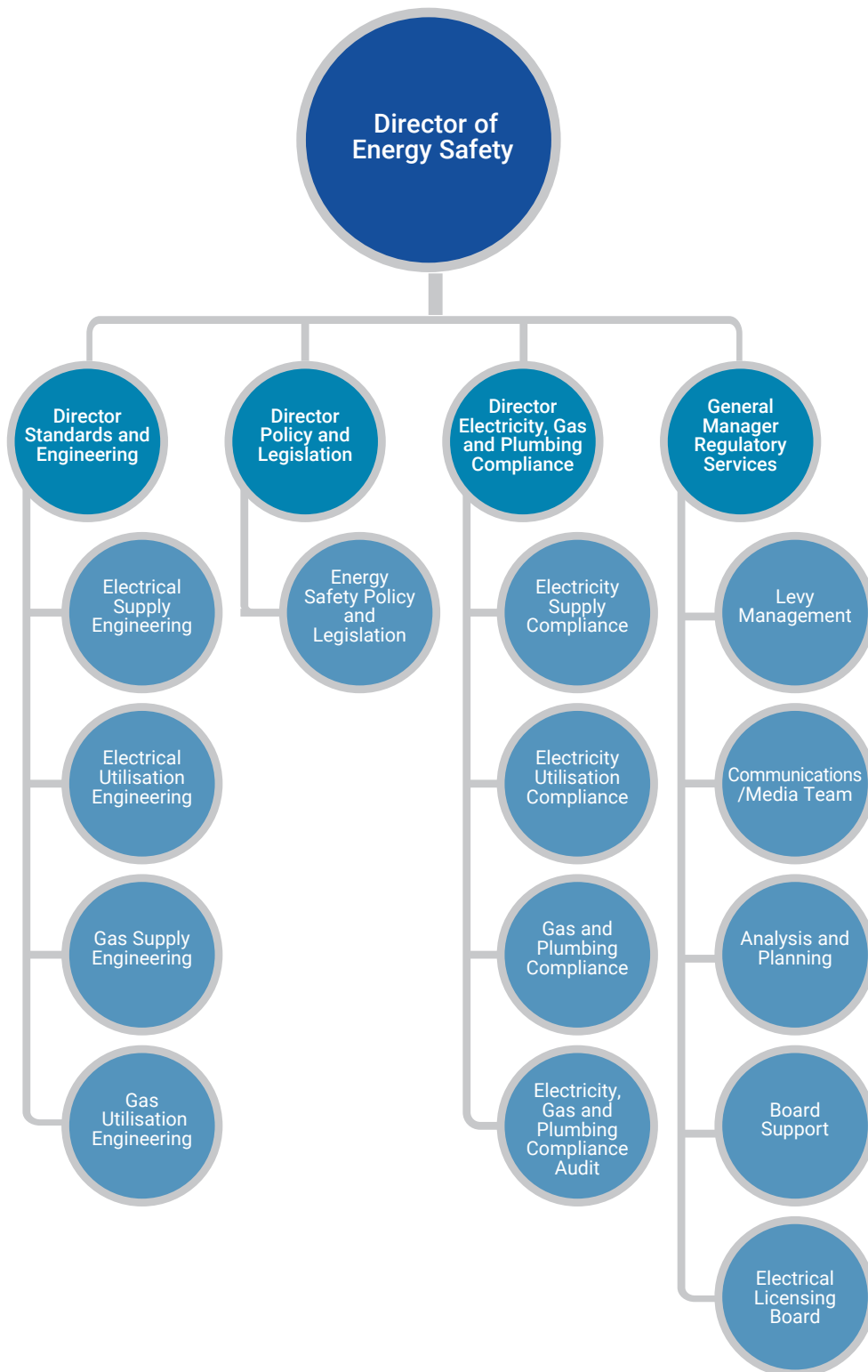


About Building and Energy

Building and Energy was established in January 2018 as a division of the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS). The division is the State's building, plumbing and energy safety regulator. It administers a suite of building and energy safety legislation.

Where we fit within DEMIRS





Statement of Intent

Purpose and approach

Building and Energy embrace the purpose and approach of DEMIRS:



Purpose: Supporting a safe, fair and responsible future for the Western Australian community, industry and resources sector.



Approach: Maximise our impact as a regulator, service provider and policymaker.

Objectives

We share DEMIRS objectives. This intra-departmental alignment drives change across the state, of which Building and Energy plays a pivotal role. The following objectives are pertinent to the Energy Safety Business Plan 2024–25.



Better Places: A quality environment with liveable and affordable communities, and vibrant regions.



Strong Communities: Safe communities and supported families.

Functions

Building and Energy has four key functions (Policy and Standards, Education, Licensing, Compliance), that collectively address the Division's strategic priorities. Functional areas are represented in the outer ring of Figure 1 (page 5). Building and Energy's three strategic priorities include Consumer Safety, Industry Safety and Network Safety.

The Business Plan is divided into these three themes. The fundamental priority underpinning Building and Energy's work is community safety.

The statutory office of the Director of Energy Safety

The Director of Energy Safety (Director) is an independent statutory office established under section 5 of the *Energy Coordination Act 1994*. The Director and supporting staff ensure that the legislation covering electricity and gas safety is effectively administered, maintained for currency and appropriately communicated to stakeholders.

Legislation administered

The Director of Energy Safety and his staff administer the following legislation:

- *Energy Safety Act 2006*
- Energy Safety Regulations 2006
- *Energy Safety Levy Act 2006*
- *Energy Coordination Act 1994 (other than Parts 1A, 2A, 2B, 2C and 2D)*
- Energy Coordination (General) Regulations 1995
- *Electricity Act 1945*
- Electricity (Licensing) Regulations 1991
- Electricity Regulations 1947
- Electricity (Network Safety) Regulations 2015
- *Gas Standards Act 1972*
- Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999
- Gas Standards (Gas Supply and System Safety) Regulations 2000
- Gas Standards (Infringement Notices) Regulations 2007
- *Gas Supply (Gas Quality Specifications) Act 2009 (Part 5)*

Core Energy Safety functions



- Administer electrical and gas worker and contractor licence schemes.
 - Administer electrical and gas appliances control schemes.
-



- Prescribe minimum safe work practices for the electrical and gas industries.
 - Prescribe technical safety standards to which electrical and gas-fitting work must be completed.
 - Prescribe safety requirements for electricity and gas networks.
-



- Set and oversee the inspection regimes for work on electrical and gas installations.
-



- Audit electrical network operators and gas suppliers to ensure compliance with approved inspection system plans.
 - Audit electrical and gas workers and contractors' compliance with legislation.
 - Audit electricity network operators' compliance and gas suppliers' compliance with electricity and gas networks safety legislation.
-



- Investigate breaches of electrical and gas safety laws and pursue prosecutions and disciplinary actions under the licensing schemes.
 - Investigate serious electrical and gas accidents (including fatalities).
 - Investigate electricity and gas network safety incidents.
-



- Educate operatives in the electricity and gas industries.
 - Raise consumer awareness about electrical and gas safety.
-

What we regulate

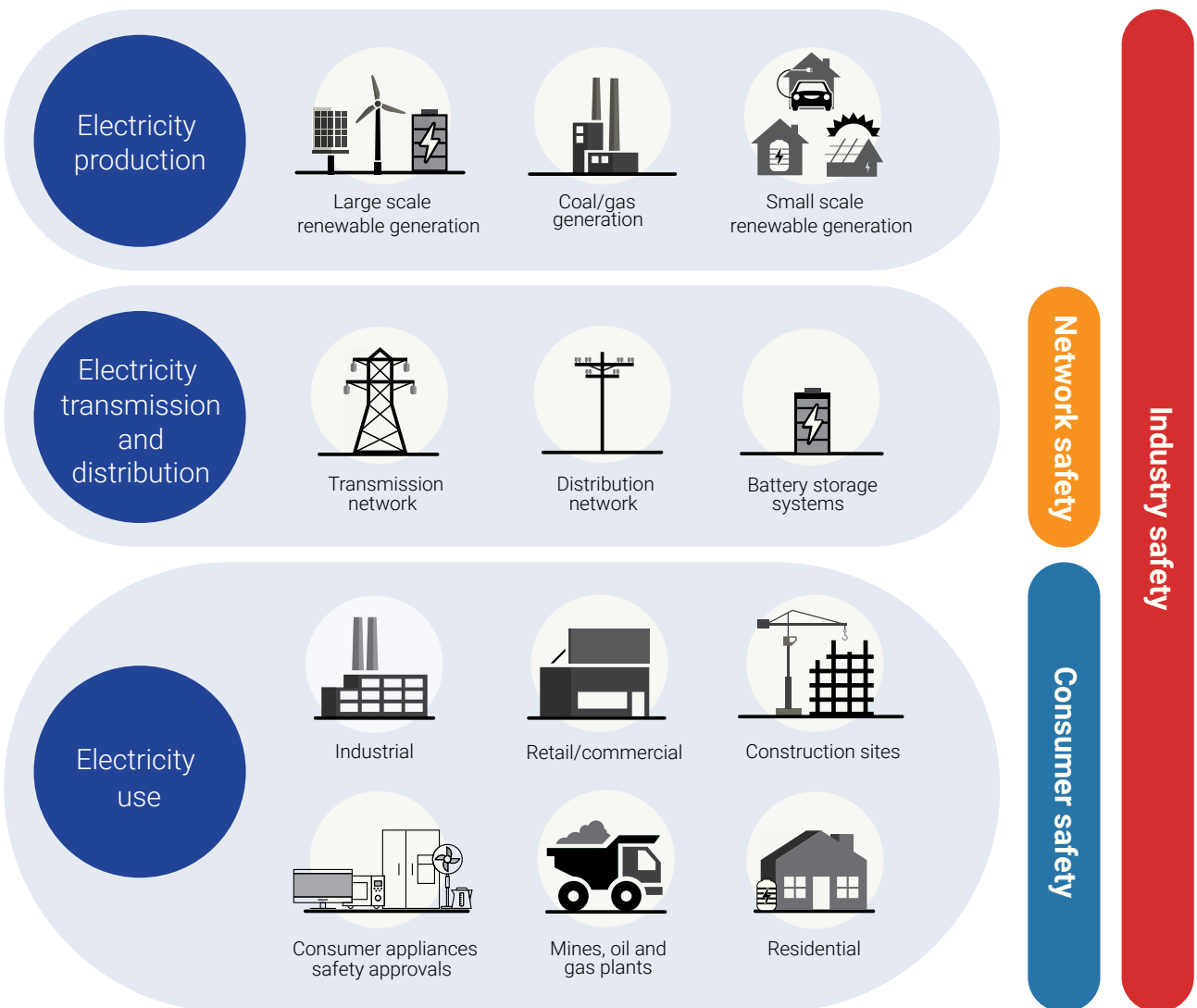
Our regulatory function can be summarised as covering the technical and safety regulation of:

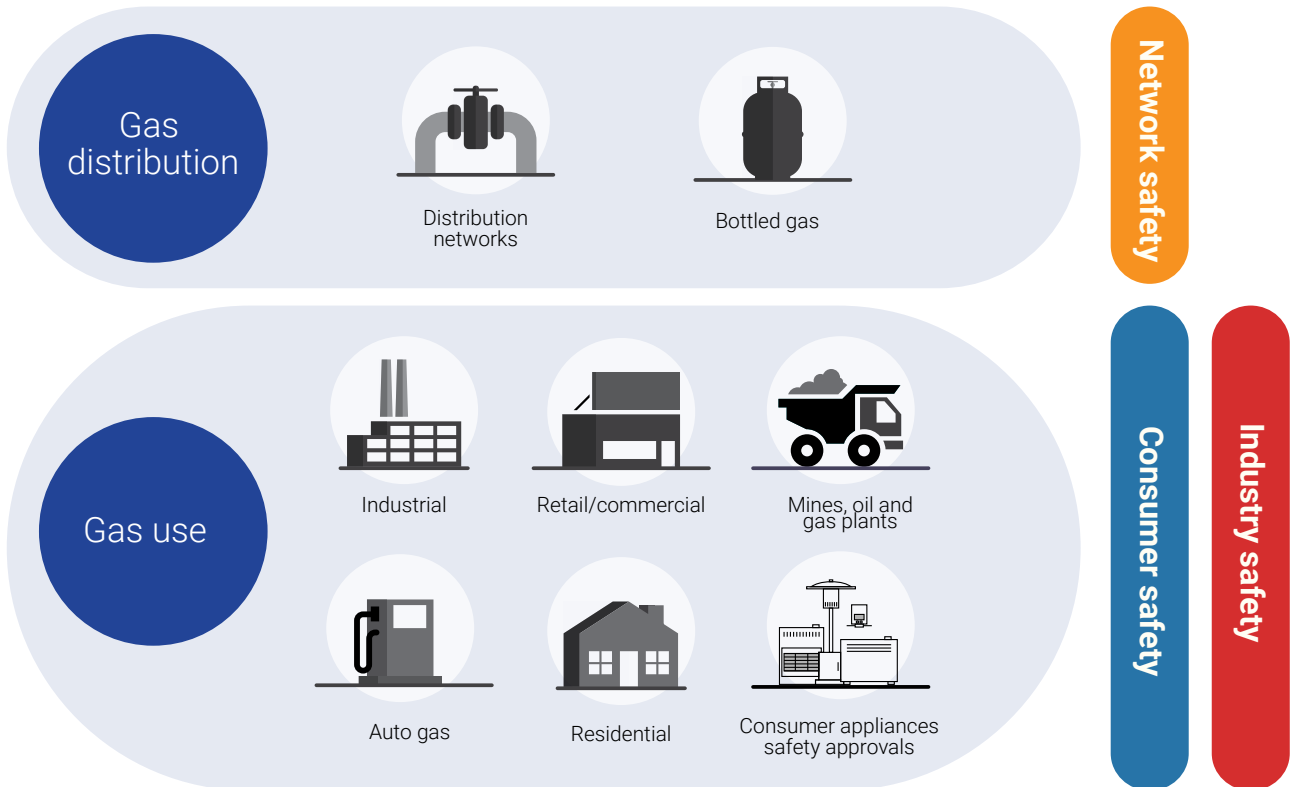
- electricity production;
- electricity transmission and distribution;
- electricity use (consumers’ installations and appliances);
- gas distribution (and gas production plants connected to gas distribution systems); and
- gas use (consumers’ installations and appliances).

The following diagrams provide an overview of the Western Australian electricity and gas regulatory frameworks. Building and Energy also regulates the licensing of electrical and gas workers to ensure only competent workers are licensed to carry out electrical and gas fitting work. Electrical Licensing is overseen by the Electrical Licensing Board.

Building and Energy’s role within the Energy Regulatory Framework

Energy Safety compliance functions





DEMIRS’ departmental performance 2022–23

The DEMIRS’ outcome-based management framework is designed to improve organisational effectiveness. The outcomes are linked to the broader State Government goal – Strong Communities: Safe communities and supported families. Building and Energy contributes to the wider DEMIRS performance against two of its key performance indicators:

- **Key effectiveness indicator**
Stakeholder satisfaction with DEMIRS as an effective industry regulator was 74 per cent against a target of 75 per cent.
- **Key efficiency indicator**
Average cost per transaction to deliver industry advice and regulatory services was \$243, against a target of \$211.

Energy Safety performance

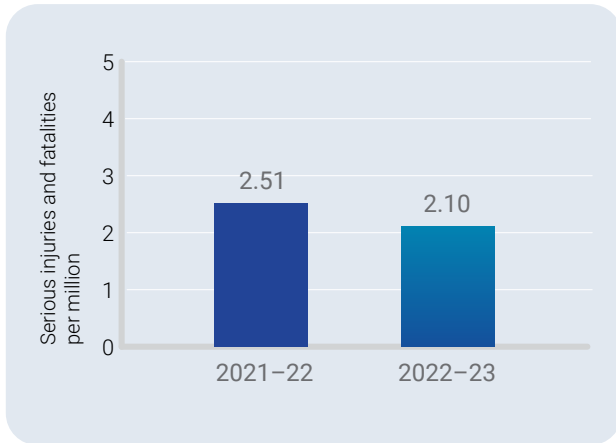
Building and Energy assesses performance at a divisional level through two key performance indicators that measure the number of serious injury incidents involving electricity and gas in Western Australia.

There was a decrease in the number of fatalities and serious incidents requiring hospitalisation, reported for both electricity and gas in 2022–23, compared to the previous year.

1. Key Energy Safety indicator

Electricity

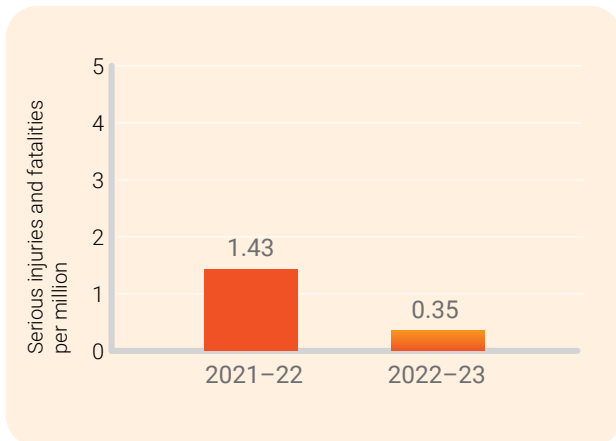
Number of electricity-related serious injuries and fatalities per million population (Target = 0).



2. Key Energy Safety indicator

Gas

Number of gas-related serious injuries and fatalities per million population (Target = 0).



Advice to the Minister

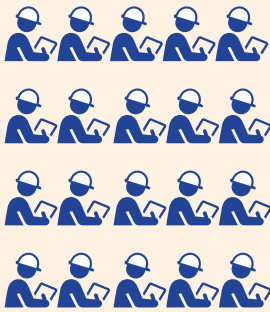
The Director of Energy Safety provides advice and support to the Minister.

The Director of Energy Safety, Deputy Director General of the Industry Regulation and Consumer Protection Group and the Director General of DEMIRS are conduits for interactions between the Minister’s office and the department. Advice and information Building and Energy provide to the Minister includes:

- proposals and status/management reports for major policy projects;
- proposed regulatory actions that may affect the public or businesses;
- information releases dealing with subjects relevant to the Ministerial Portfolio;
- reports on the status of major investigations or audits;
- briefings on contentious energy safety issues;
- responses to enquiries if requested to do so by the Minister or their staff;
- resource requirements and work programs; and
- nationally sensitive energy issues.

2022–23 Snapshot

Inspections and investigations

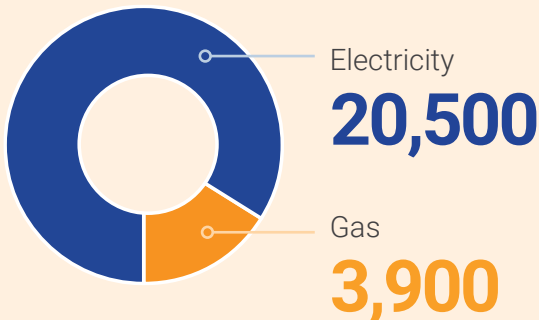


19
Building and Energy
- Electrical and Gas
Inspectors

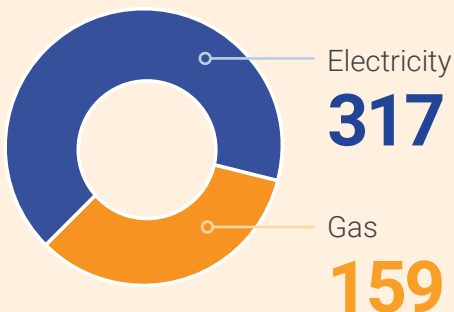


157
Designated Inspectors
(Network Operators
and Type B)

Compliance inspections



Investigations



Industry education and public awareness initiatives



50,000
Stakeholders engaged through
industry communication.



81
Seminars delivered to
industry at:

- industry member nights;
- industry conferences; and
- TAFEs.



3
Media awareness campaigns
delivered.

- Switch the power off before entering the roof space.
- Recall of Swift caravan cooker – 500 series.
- Prohibition of sale of 2010 Jackeroo portable gas refrigerators.



148
Industry training sessions and
advice delivered:

- Advice on licensing matters.
- Training sessions/demos on industry requirements.



54
Industry articles, medial
releases and alerts issued for
industry and public awareness.

Other achievements



- Led a national safety recall of unsafe gas cookers.
 - More than 850 compliance inspections in regional and remote communities.
-



- New guidelines for assessment of hydrogen fuel cells.
 - New updated guidelines for the safe management of high voltage electrical Installations.
 - Provided technical support and facilitated hydrogen blending in natural gas pilot project.
-



- Amended Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 to ensure apprentices and trainee gas fitters are licenced and Certificate of Competency holders can supervise gasfitting work.
 - New policies for gasfitting licensing and permits.
 - Amended the Gas Standards (Gas Supply and System Safety) Regulations 2000 to more effectively define responsibilities of network operators in the decommissioning of a distribution system.
-



- Online portal for digital submission of Network Operators' electrical accident reports to facilitate timely data collection.
 - Audits of two electricity network operator's Inspection System Plans.
-



- Enhancements to eNotice compliance system to enable gas network operators to upload periodic gas analysis reports digitally.
-

Strategic Context

The operating environment

We operate in a highly dynamic environment that demands a balance between maintaining our ongoing activities and adapting to the rapidly evolving technological landscape. Building and Energy has evolved into an agile team to effectively perform its functions in this environment to support a safe, fair and responsible future for the Western Australian community, industry and consumers.

This plan has been developed to mitigate against anticipated business challenges while ensuring the continuation of the current safety regimes for consumers, industry and networks.

Strategic Government initiatives, an evolving energy sector and a responsive regulatory landscape

A constantly evolving regulatory landscape for Building and Energy is influenced heavily by the emergence and/or proliferation of:

- decentralised generation;
- stand-alone power systems;
- microgrids;
- battery storage systems directly integrated and/or connected to the grid via consumers' installations;
- new behind-the-meter supply arrangements;
- electric vehicles and the installation of high capacity charging assets in residential premises;
- the use of relatively high-capacity batteries in consumer devices (e.g. e-scooters and e-bikes); and
- cheaper and more efficient hydrogen fuel-cell technology.

The State's response to national strategies to address climate change and achieve net zero emission targets, as well as State's strategies to transform the energy sector and establish

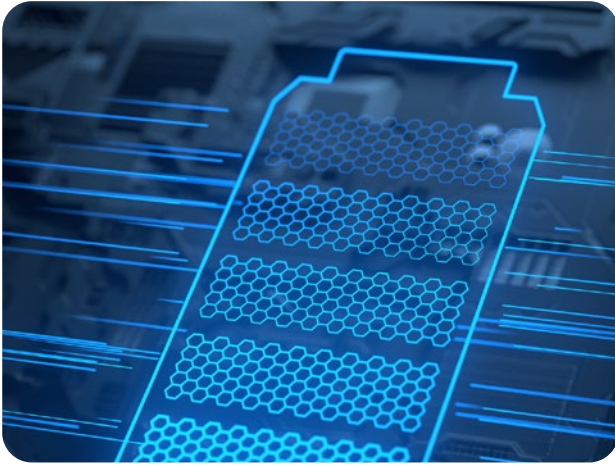
a globally significant battery manufacturing industry, will also require regulatory responses to continue to ensure the safety of the community. In order for this to occur, legislative regimes, technical standards and industry guidance materials will need to keep pace. While policy responses and legislative reform tend to lag technological developments, Building and Energy endeavours to keep this gap as narrow as reasonably possible.

National Battery Strategy and Climate Policy

Western Australia's Future Battery and Critical Minerals Industries Strategy articulates the State Government's vision to increase participation across the battery value chain, with the goal of increasing domestic manufacturing. The strategy aims to:

- transform the State's world-leading mining sector into a mineral processing and chemical manufacturing supplier for battery and critical minerals, including precursor cathode active materials (P-CAM); and
- establish a globally-significant battery manufacturing industry for supply to international markets, and to provide energy security for the State and the nation.

The Western Australian Climate Policy underscores the State's commitment to achieve net zero greenhouse gas emissions by 2050. A core commitment of the policy is the development of Sectoral Emissions Reduction Strategies that will provide robust emissions reduction pathways with tangible actions consistent with the Government's target of net zero emissions by 2050.



The WA Government is also delivering the Energy Transformation Strategy, to provide cleaner, reliable and more affordable electricity for all Western Australians. To further support the State’s emissions reduction strategy, the Government has committed to the retirement of state owned coal-fired power generation by 2030 and a \$3.8 billion investment in new green power infrastructure. The Government has committed \$218 million to manufacture and install up to 1,000 stand-alone power systems (SPS) in regional areas over the next five years. A further 4,000 SPS will be rolled out in the coming decade.

The Government has also made significant commitments to support the uptake of electric vehicles (EVs), with the \$60 million Clean Energy Car Fund, building on the \$21 million State Electric Vehicle Strategy for Western Australia. Western Australia’s Electric Vehicle Action Plan, focuses on actions required for the efficient integration of EV’s into the electricity grid.

Western Australia’s growing local battery market offers an opportunity for manufacturers seeking to co-locate with end-users. Demand for batteries from Western Australia’s off-grid mining and mineral processing operations is expected to be significant. Increasingly, renewable energy and batteries are being used to support the networks in the Pilbara, Horizon Power’s remote towns and isolated power systems for mining loads.



Western Australia’s main electricity grid, the South West Interconnected System (SWIS), is undergoing unprecedented change due to growth in renewable generation. Energy storage will be a key part of managing increasing amounts of variable renewable generation in the State’s electricity grids, with 1,100MW of energy storage anticipated in the SWIS as a result of retirement of coal-fired power generation. While batteries are already deployed in the SWIS, utility-scale transmission-connected batteries will commence playing a role in supporting power system security, with Synergy’s Kwinana battery being commissioned in 2023.

The Government provided a response to the Australian Government’s National Battery Strategy Issues Paper in consultation with key State government agencies, including Building and Energy, Energy Policy WA, and the Department of Water and Environmental Regulation.

In its response, the Government encourages the Australian Government to lead the development of nationally consistent product safety standards for continuously evolving battery types and specifications.

It is clear that, while the fast pace of significant change offers incredible opportunities for the State, the safety regulation of the emerging energy sources, technologies, markets and industries will create a challenging environment in which to operate for Building and Energy. These challenges will need to be met through technical up-skilling and potentially up-sizing and legislative reforms.

Consumer Safety Outcomes and Achievements

Building and Energy manages several initiatives to ensure safety of consumer installations. This ranges from setting technical standards for electrical and gas fitting work, through maintaining an inspection regime to ensure work undertaken on consumer installations are safe, to raising consumers' awareness about the safe use of electricity and gas.

During 2022–23, the following compliance activities were undertaken:

176

Designated Electrical and Gas Inspectors

193,350

Electrical and Gas Notices of Completion received

24,350

Installations inspected in accordance with Inspection System Plans

476

Investigations



Electricity consumer safety and education

National Recall of LG Home Energy Storage System batteries

Building and Energy participates as part of the Australian Competition and Consumer Commission (ACCC) working group for the LG Home Energy Storage Systems Battery national recall.

In October 2022, Building and Energy released the recall information through our Electrical Focus publication (Issue 7) and, in December 2022 conducted a direct mail out to approximately 550 property/home owners where LG Batteries were installed in Western Australia advising of the recall.

LG provided the ACCC working group with a schedule for its voluntary recall, which estimates completion in the first quarter of 2024.

National recall of Electrolux Beefeater Refrigerators

An investigation by Building and Energy into several fires linked to Electrolux Beefeater outdoor display refrigerators identified a design fault in which water can penetrate the sealed electrical control board located on the rear of the refrigerator, posing a serious risk of fire.

On 9 February 2023, the Director of Energy Safety exercised his powers to prohibit the sale, hire or use of the product in Western Australia and recommended that the product be recalled.

On 6 March 2023, Electrolux Home Products Pty Ltd issued a product recall for Beefeater Refrigerator Model Numbers BS28200 and BS28130.



Prohibition of sale, hire or use of Vevor 5-in-1 Heat Press

Inspection of a Vevor 5-in-1 Heat Press identified serious electrical defects, including exposed metal pins carrying 240 volts of electricity at a power outlet on the control unit. The non-compliant machine which is used to transfer designs on to shirts, mugs and hats was offered for sale by a small business owner who had originally purchased the items online from an overseas retailer.

On 10 January 2023, the Director of Energy Safety exercised his powers to prohibit the sale, hire or use of the product in Western Australia and issued a media statement reminding consumers, suppliers and retailers



to be cautious when purchasing electrical appliances from overseas advising that, where possible, these items should be sourced from a reputable retailer based in Australia.

Responsibility for private power poles and lines

There are risks and potentially significant consequences of electrical or structural failure of private power poles and lines, including power interruptions, electrocution and fires. These risks can be mitigated through the proper selection of equipment and regular inspection and maintenance. It is the property owner's legal responsibility (duty of care) under common law to install and maintain private power poles and lines so they do not pose a safety risk to the property occupants, adjacent properties and their occupants or the wider community.

Information has been published to raise consumer awareness about their responsibilities including revised content, updated diagrams and fresh designs for the Private power poles and lines – owner's safety and responsibility flyer and the Guidelines for the safe management of private power poles and lines as well as corresponding web pages.

Switch off the power before entering the roof space

Building and Energy raised awareness of the inherent risks of electric shocks occurring the roof spaces of domestic dwellings.

To spread this important safety message, in 2022 a letter accompanied all electricity bills sent to residential homes across Western Australia. The Director of Energy Safety reminded all residents of the serious hazards and potential for electrical shocks that can occur in roof spaces.

In addition to providing some useful advice to follow before entering the roof space, each house received a sticker to place on the manhole and main switchboard/meter box. By placing these stickers in plain sight of those who may carry out work in a roof space, it will serve as a clear reminder to stay safe and switch the power off.

New or replacement stickers are still available by contacting Building and Energy.



Remote community inspections

Building and Energy completed over 850 regional compliance inspections between July 2022 and June 2023.

Inspections were planned to ensure that several remote communities and stations were included in the program. Remote locations included Mundabullangana Station, Pardoo Roadhouse, Warralong Community, Strelley Community, Munjini, Mulga Downs Station, Willilimarra Community, Cheela Plains Station, Karijini Eco Retreat, Bellary Springs Community, Paraburdoo, Wakathuni Community, Tom Price, Mount Shelia Station (Pindering Eco Retreat), Weymul Community, Sherlock Station, Pyramid Station, Warambie Station, Pippengarra, Mownajum and Ardyaloon.

Several Notices of Defect and Inspectors Orders were issued for issues including vandalism to electrical equipment and non-operational RCDs, while Gas Regional Inspections trips in the Mid-West and Goldfields focused on large Type B gas appliances.

Consumer Education

Building and Energy has enhanced its program to highlight and promote electrical safety within the community. The topics covered include reminders to check electrical licenses, safety warnings following electrical shock from a damaged electrical appliance and the need to take care when pruning near trees and power lines, winter gas safety reminder, tips for Easter campers and a safety warning following the Kimberley floods.

Gas consumer safety

National recall of Swift 500 series caravan cookers

Building and Energy led the National recall of Swift caravan cookers – 500 series, which are used in caravans, campers and motorhomes.

Through a media awareness campaign, Building and Energy outlined the defect and explained the dangers, as well as providing information to consumers on how to check if a cooker is an affected model. Impacted consumers were urged to seek remedy for recalled swift cookers immediately.



We continue to work collaboratively with regulators across Australia and New Zealand, and the ACCC, to actively monitor progress of the recall.

Prohibition of sale of 2010 Jackeroo portable gas refrigerators

Building and Energy investigated a gas-related fatality in Wedge Island in 2020, in which a portable Jackeroo refrigerator was found to be a contributing factor to the accident.

On 23 December 2020, the Director of Energy Safety exercised his powers to issue a prohibition of sale to the manufacturer. Additionally, in 2021–2022 the 'Great Outdoors, Lethal Indoors' safety campaign was launched, in an effort to raise consumer awareness about the safe use of outdoor gas appliances.

In November 2022, Building and Energy became aware that the 2010 Jackeroo model which led to the fatality was still being sold through on-line marketplaces. A further media campaign was coordinated and the Director of Energy Safety issued an additional prohibition of sale for the defective model, directed at the second-hand sales market in Western Australia.



Variations to new gas installation standards

AS/NZS 5601.1:2022 “Gas Installations: General Installations” was published by Standards Australia in September 2022 and came in from March 2023. Building and Energy published guidance for industry summarising the new requirements.

The Director of Energy Safety issued two variation notices to address industry concerns, being:

- an additional three months extension was granted to allow suppliers to build up inventory of gas components that will be required for installations to meet the new requirement to isolate the flow of gas to a building event of a fire emergency, where multilayer pipe is used; and
- the new overhead clearance between a range hood and a gas cooker is 650mm, which aligns with the international standard for range hoods. A variation allows compliance with old requirements for building permits issued before 31 March 2023 (the date the standard comes in force). This is the result of delays in completion of builds due to material supply chain and labour challenges. It had been identified that kitchen cabinetry for some new developments had already been designed and fabricated.

Fire emergency isolation of multilayer pipes

Building and Energy is actively involved in the AG006 Australian Standards Committee, which administers the AS/NZS 5601.1 Gas installation standard.

In response to several incidents in the Australian Capital Territory and Victoria, investigations identified that multilayer gas pipes have less durability and mechanical strength when subjected to fire which can accelerate the spread of fire as a result of its failure.

A revised standard was published in September 2022 and introduced the requirement to isolate flow of gas to a building in the event of a fire emergency where a multilayer pipe is used.

It is a requirement for all Class 1a buildings to install an Excess Flow Valve (EFV), which will shut off the gas supply when the downstream tightness is affected. These valves were not



tested in Australia and were commercially available for retailer distribution. Building and Energy worked with Energy Safety Victoria, ATCO gas, and EFV suppliers to test these valves at ATCO and ensure their effectiveness.

Building and Energy worked on an educational video targeting gas fitters and the broader industry on the new requirements for multilayer pipes.

Guidelines for hydrogen fuel cell technical submissions

Hydrogen fuel cells are classified as Type B gas appliances and are required to be approved prior to installation in consumer installations.

Building and Energy developed guidelines to assist the gas industry in preparing submissions for assessment and approval of hydrogen fuel cells. The guidelines issued in February 2023, outline the minimum technical information to be provided, including:

- details of the hydrogen fuel cell, location of installation and owner;
- risk assessment and engagement of competent person(s);
- details of enclosure and ventilation;
- details of safety instrumentation, leak detectors and the safety discharge valve;
- compliance documentation for any Programmable Electrical System (PES) or Programmable Logic Controls (PLC); and
- demonstration of safety requirements and guidance under Australian and International standards.

Consumer Safety Initiatives

Safe use of BBQs

There have been several incidents involving the use of domestic barbecues, particularly in the summer months in 2023–2024.

To ensure consumers remain vigilant, Building and Energy will continue in its efforts to educate consumers on the safe use of barbecues through a combination of media alerts and attendance at trade events such as camping and caravan expos. A key focus will be promoting the use of liquefied petroleum gas cylinders that have a safer type of cylinder valve and appliance connection known as the LCC27.

Use of gas appliances in public venues

A focus for Building and Energy in 2024–25 will be on the safe use of gas in public venues.

New guidelines will be developed and issued that will address safety and compliance issues and outline minimum installation requirements for using gas in permanent and temporary public venues, such as night markets, music festivals and various exhibitions.

This should assist event organisers, gas fitters and stall owners by providing simple instructions on installation requirements and use of gas appliances and LP Gas cylinders.

Approval of domestic and commercial gas appliances

Under the *Gas Standards Act 1972*, gas appliances in Western Australia must be approved before being sold, installed and used. The approval of gas appliances is subject to compliance with the relevant Australian Standards to ensure they are safe to use and suitable for the Australian environment.

Mass-produced domestic and commercial gas appliances are approved by National Certifying Bodies through a Type Test certification scheme. One-off gas appliances, especially imported ones, undergo inspection and approval through a Tier 2 certification scheme specific to Western Australia.

Building and Energy will review the process and will work to revise the approval scheme to ensure its effectiveness with industry.

Audit and inspection programs

Appliance retailer audit program

The community expects the electrical and gas appliances they use to be safe. Retailers are required by law to ensure that appliances they offer for sale are approved and comply with Australian safety standards.

Building and Energy will continue its appliance retailer audit program during 2024–25, proactively visiting a range of retailers to ensure that appliances displayed for sale are safe and compliant. Building and Energy Inspectors will also provide education on the necessary measures to take to ensure compliance is met as part of the audit.

While there are many regular targets of Building and Energy's audit and inspection programs, 2024–25 will see a particular focus on some emerging technology and infrastructure trends in the energy arena, such as:

- **Electric Vehicle Charger Compliance Strategy**

In November 2020, the Government released its Electric Vehicle Strategy. A major aim of the strategy is to prepare for the transition to low and zero-emission electric vehicles as part of the government's commitment to achieve net-zero greenhouse gas emissions by 2050. The adoption of electric vehicles powered by increasing levels of renewable energy will be fundamental to reducing greenhouse gas emissions in the transport sector.

The Government has committed up to \$20 million to support the creation of an electric vehicle charging infrastructure network to facilitate travel north from Perth to Kununurra, along the south west coast to Esperance and east to Kalgoorlie.

As part of this commitment, the department, through the Energy Policy WA Group, has implemented the Charge Up Workplace EV Charging Grants Program to make it easier and more cost effective for small to medium enterprises, not-for-profit organisations and local government authorities to install EV charging equipment at their workplace.

Building and Energy will play an active role in this space through its EV Charger Compliance Strategy, which will:

- consider legislative reforms required to ensure sufficient regulatory oversight of the installation of EV chargers;
 - see continued collaboration with other jurisdiction regulators to ensure standards are developed and maintained for both suppliers and installers of EV chargers;
 - implement an EV charger inspection program to ensure that EV charger installations are safe and meet relevant Australian standards; and
 - implement a program of EV charger supplier and retailer audits to ensure compliance with relevant Australian Standards.
- **Audits of solar installers**
- Under the Clean Energy Regulators (CER) Small-scale Renewable Energy Scheme, Small-scale Technology Certificates (STCs) create a financial incentive to install compliant small-scale renewable energy systems by reducing upfront installation cost.

The Small-scale Renewable Energy Scheme (SRES) began in 2017 and was set to operate for 14 years until 2030.

The number of Small-scale Technology Certificates (STCs) that are available to system owners are based on the size of array up to a 100kw array and the number of years left in the scheme. Each STC has a value of approximately \$40.

Every year on 1 January the number or STCs available per installation is reduced by a percentage until the scheme runs out. The STCs will only be paid out if all of the criteria as set out by the CER is met and that includes using approved equipment, licenced persons to perform the work and following all applicable standards and state and territory regulations.

As STCs continue to diminish, there is a risk that it could become more financially lucrative for some solar businesses to forgo claiming credits under the SRES, opting to instead use cheap unapproved equipment and substandard installation methods to increase profit margins. This presents an additional risk that the same operatives will use unlicensed personnel to undertake the work and refrain from submitting Notices of Completion, to evade inspection.

To ensure solar businesses remain complaint and install systems that are safe and meet Australian Standards, Building and Energy will need to increase its resources and focus in this area of industry, conducting a targeted audit and inspection program of solar installers.

Review Gas Supplier's Inspection System Plan Guidelines

Section 13J(3) of the *Gas Standards Act 1972* provides for the Director of Energy Safety to issue guidelines setting out the technical, investigative, reporting, administrative and other requirements for the inspection system plans (Plan) of an undertaker or pipeline licensee.

In 2021, the Director issued the Inspection Policy Statement and Plan Guidelines for Gas Suppliers, which sets out the core elements that gas suppliers must address in their Inspection Policy Statement and Plan.

Building and Energy will review the existing guidelines during 2024–25 to ensure that it remains current with industry trends.

Consumer awareness campaign – Purchasing of appliances online



Consumers are reminded that they must remain vigilant when purchasing appliances online, particularly if the seller is based overseas. Without the right checks, items purchased might not meet Australian safety standards or might not work with our electricity or gas systems.

Building and Energy will run a consumer awareness campaign to raise consumers awareness about the risk.

Consumer awareness campaign – Don't fix or use damaged electrical equipment

The risks of electricity are greatest at the point where it does its job – at electrical appliances and the cords connecting them to the electricity supply.

In 2023 there was an incident whereby a child received an electric shock and serious hand burns from a broken fan. Building and Energy will run a safety awareness campaign to highlight the dangers of handling damaged electrical equipment. A key focus of the campaign will be to provide advice to the community to immediately stop using damaged electrical equipment and not attempt to repair it yourself. Always use a licenced electrician to make repairs or dispose of the appliance.

Name	Description	2024–25 Target Completion
Compliance campaigns	<ul style="list-style-type: none"> • Use of gas in public venues. • Gas appliance approvals. 	
Audit and inspection programs	Appliance retailer audit program <ul style="list-style-type: none"> • Electric Vehicle Charger Compliance Strategy. • Standalone electrical and gas installation inspection program. • Solar installer audit program. 	
Review policies, guidelines and legislation	Review Gas Supplier's Inspection System Plan Guidelines.	Ongoing
Emerging technology safety strategies	Strategies to support WA Government's Hydrogen Strategy.	Ongoing
Consumer awareness campaigns	Conduct the following campaigns: <ul style="list-style-type: none"> • Gas BBQ safety. • Purchasing of appliances online. • Don't use or fix damaged equipment. 	

Industry Safety Achievements

During 2022–23, the following industry development initiatives were delivered:

148

Training sessions and advice to industry members

27

Industry publications and e-alerts issued.

81

Seminars and presentations to industry

Safe Management of High Voltage Electrical Installations

Guidelines for the Safe Management of High Voltage Electrical Installations were revised to reflect the new obligations of a Person Conducting a Business or Undertaking (PCBU) and alignment of the high voltage electrical installations (such as industrial complexes, shopping centres, etc.) with provisions of the *Work Health and Safety Act 2020*.



The guidelines outline requirements for PCBUs to manage the design, construction, operation, maintenance and electrical safety assurance of high voltage installations, and is issued by the Director of Energy Safety and endorsed by the WorkSafe Commissioner.

Inspectors Training Course

Building and Energy delivered its training course in August of 2022, with inspectors in attendance from Building and Energy, BHP, Horizon Power, Western Power, Indian Ocean Territories, Atco and Kleenheat.

Topics included:

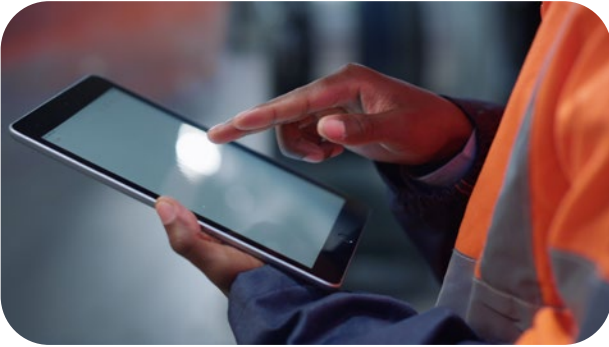
- Legislation
- Code of Practice
- Inspector’s Powers
- Trade Licensing requirements
- Reporting of Accidents
- Legal proceedings – from the field to the courts
- Inspection practices, defects and Inspectors’ Orders

Online accident report portal

A new online accident report portal went live in May 2023, using Building and Energy’s award-winning service platform “eNotice”. The portal enables digital submission of Network Operators’ electrical accident reports (shocks and fires) online.

During the 2021–22 financial year, over 5,000 electrical accident reports were recorded by Building and Energy. The majority of these reports required details to be manually entered and reviewed multiple times to ensure completeness.

The new process has reduced processing time and allows for more accurate and timely data collection.



Improvements to the eNotice compliance system

The Gas Standards (Gas Supply and System Safety) Regulations 2000 (Regulations), sets out obligations relating to the quality of gas supplied to consumers. For gas to be compliant it needs to satisfy the requirements of both gas composition and odourisation. Sampling is required to be carried out periodically and results kept for three years.

Until November 2022, reporting of sampling results and recording these in Building and Energy's database was a manual process.

Improvements have been made to the eNotice online platform to enable gas network operators to upload their periodic gas analysis reports digitally. The system also links to the department's records management system and to the Compliance Management System, ensuring the data will be collected efficiently and stored safely, and can be reviewed by compliance officers through an automated work-flow process.

Proactive industry engagement sessions

Building and Energy conducted more than 70 industry engagement sessions throughout the state (Perth metropolitan, Exmouth, Carnarvon, Geraldton, Bunbury, Manjimup and Mandurah) over 2022–23.

Additionally, 31 presentations were made to Electrical and Gas Apprentices and another 25 presentations to persons undertaking Electrical Contracting/Nominee courses.

In addition, support was provided to key stakeholder industry bodies, such as the National Electrical Contractors Association,

Master Electricians, Master Plumbers and Gas Fitters Association, equipment wholesalers and registered training organisations, with attendance and presentations at various conferences and award presentations. Further activities have included apprentice presentations at Rockingham, Port Hedland and Karratha TAFES.

Policy review – Class G gasfitting permit

The Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 set the requirements to issue gasfitting permits in Western Australia.

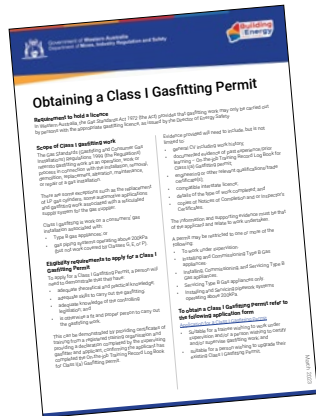
Class G gasfitting permits are required for gasfitting work associated with installation and/or servicing of a consumer's gas installation. Following a comprehensive review of the policies around issuing Class G Gasfitting permits and in consultation with internal and external stakeholders to improve industry safety and keep pace with the developments of the gasfitting units of competencies, Building and Energy developed three Class G gasfitting policies.

Policy review – Class I gasfitting permit

Class I gasfitting is work undertaken on industrial gas appliances and their associated gas installation or gas piping system operating above 200KPa.

The 2023–24 Energy Safety Business Plan identified the need to review the application of Class I permits and the policies related to it.

Building and Energy completed the policy review in collaboration with the Electrical Licensing Board (ELB), industry advisory groups, gas industry participants and registered training organisations to revise the policy.



Changes include:

- a new Restricted Electrical Licensing (REL) policy framework for a Class I gasfitting permit holder being approved by the ELB. This policy covers any electrical work confined to disconnecting and reconnecting a Type B gas appliance;
- introduction of an on-the-job Training Record Log Book for a Class I Gasfitting Permit to demonstrate adequate practical knowledge while working under supervision; and
- clarification of different pathways to obtain the gasfitting permit, which is dependent on the scope of work to be conducted.

Building and Energy will continue to monitor the application and effectiveness of the new policy to ensure it meets industry needs.



Industry safety outcomes

Building and Energy ensures the safety of electricity and gas workers by setting and enforcing minimum prescribed technical safety requirements for electrical and gas work.

Our industry development activities include ensuring:

- technical standards adequately address trends in industry;
- industry is adequately informed about changes to standards and legislation;
- learnings from our investigations are shared with industry; and
- appropriate enforcement actions are undertaken, depending on the severity of breaches of legislation, to change behaviour.

During 2022–23, the following industry safety outcomes were realised:

95%
Electrical installations inspected found to comply with legislation

4,850
Inspectors' Orders and Notices of Defect issued

77%
Gas installations inspected found to comply with legislation

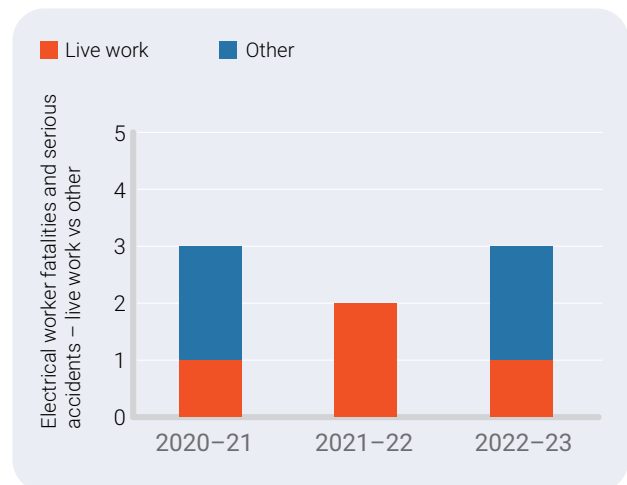
Electrical industry safety

By nature of their work, electrical workers are at greater risk of electric shocks and electrocution than members of the general public or workers in other occupations.

There was one fatality and two serious accidents involving electrical workers in Western Australia in 2022–23. Of these, one serious accident was a result of working on energised equipment.

The Electricity (Licensing) Regulations 1991 prohibit work on energised equipment.

Incidents of serious fatalities and accidents involving electricity occurring in roof spaces are avoidable if the main power is switched off prior to work being undertaken. Building and Energy's public awareness campaign is aimed at reminding workers and homeowners to turn the power off prior to commencing work in roof spaces.



Gas Industry safety

There were no fatalities or serious accidents involving gas workers during 2022–23.

Improving knowledge and skills of the industry and its workers is ongoing through proactive training and education sessions with licenced workers and by sharing learnings from incidents both in Western Australia and in other jurisdictions.

Building and Energy is conscious that the rapid development in the hydrogen space will present new challenges to industry. A number of initiatives are included in this business plan to support the greater role of hydrogen in the future.



Industry Safety Initiatives

Cardiopulmonary resuscitation and low-voltage rescue training for electrical workers

Following industry consultation late 2022, the Minister approved the development of a regulatory framework to require licensed electricians to be trained in cardiopulmonary resuscitation and low-voltage rescue, and to periodically undergo training to ensure that these skills are maintained. It is proposed to update the Certificate III in Electrotechnology so that the training is delivered to apprentice electricians.

Building and Energy is developing the necessary regulatory amendments and will work with industry to implement this framework. This will include consideration of methods of training delivery in metropolitan and regional areas and the development of an audit and compliance program.

Review of the Gas Standards Act 1972 and its regulations

Several aspects of the gas safety regulatory framework require substantive review to modernise and harmonise and address administrative issues. The review will include:

- the efficient operation of the appliance approval and control regimes;
- the regulation of self-supplied installations; and
- the regulation of small and embedded distribution systems.

Building and Energy will seek to commence this review during 2024–25.

Review gasfitting policies

The risks associated with an unsafe gas installation are high, which is why gasfitting work is restricted to licensed workers holding a gasfitting permit. Building and Energy administers the policies that set the requirements for issuing a gasfitting permit.

The pace of change in the energy industry is likely to increase safety risks to the community in both renewable and non-renewable energy sectors. A safe and timely transition to keep pace with revised standards and technology requires an industry with workers with updated skills and knowledge.

In response to the evolving energy industry and the need to ensure industry workers' knowledge and competencies are kept current, during 2024–25 Building and Energy plans to revise the existing gasfitting policies associated with gasfitting work in mobile engines and gas refuelling stations. This will ensure competent gas fitters are performing gasfitting work and maintaining or improving safety outcomes.

Enhancements to the eNotice system

Several further enhancements to Building and Energy's eNotice system are underway, including:

- **Development of an electronic logbook for mine sites and in-house licence holders**

An electrical logbook is provided for in-house electrical installing work licence holders, mine managers and electrical contractors to record details of electrical work where:

- an exemption is granted from the requirement to submit a notice for electrical installing work under regulations 51 and 52 of the Electricity (Licensing) Regulations 1991; or
- the installation is at a mine site and details of electrical work and other information must be recorded as prescribed in the Mines Safety and Inspection Regulations 1995.

Building and Energy will construct a digital version of the electrical logbook through the eNotice platform. It is envisaged that an electronic version will provide a more efficient and effective means to record electrical work. Additionally, it will enable inspectors to review the logbook remotely prior to attending a site to conduct inspections.

- **Expansion of the eNotice online portal to include dual notification to Building and Energy and WorkSafe to allow better reporting of incidents for networks**

The Electricity Regulations 1947 requires Network Operators to investigate incidents of fire or shock, including incidents related to consumer electrical installations.

During 2022–23 Building and Energy developed an online portal for the reporting of electric shocks and fires. The portal has provided streamlined reporting capabilities for network electrical inspectors and enables better monitoring and ability to track trends.

Network operators are also required to report instances of network incidents to both Building and Energy and WorkSafe. Building and Energy will expand the online portal to enable reporting of network incidents to both Building and Energy and WorkSafe, providing a single point of entry for network operators to meet their reporting obligations for both regulators.

Education

Industry education is a key focus and Building and Energy will continue to deliver a number of highly informative industry education seminars during 2024–25, including:

- TAFE and training college visits, which will focus on critical worker safety and consumer safety matters;
- industry presentation nights, which will focus on worker safety and consumer safety initiatives;
- an industry roadshow, which will focus on solar/Battery Energy Storage Systems (BESS) systems; and
- an annual inspectors conference.

In addition to the above, we will continue to provide timely industry bulletins to licensees advising them of upcoming changes, safety recalls and industry updates.

Review of guidelines

It is important that the suite of information produced and made available to consumers, workers and industry are current and revised regularly. During 2024–25, the following information products will be targeted for review:

- **Management of vegetation near powerlines**

Vegetation management around powerlines is a high risk activity that must be carried out by persons who are trained and assessed as competent in accordance with the *Code of Practice for personnel electrical safety for vegetation control work near power lines*.

The Code of Practice specifies safe approach distances and vegetation clearances for workers to ensure safety is maintained while performing the work. It also specifies necessary training courses that Registered Training Organisations (RTO) must provide to vegetation management workers.

Responsibilities for controlling and clearing vegetation around overhead power lines are specified in the Guidelines for the management of vegetation near power lines. The guidelines provide vegetation management information to Local Government Agencies, landowners and occupiers and State Government agencies to ensure public safety risk is effectively managed.

Building and Energy will revise the Code of Practice and guidelines to ensure they remain current, are consistent with legal amendments and cater for evolving industry practices.

- **Guidelines for electrical workers and apprentices**


The 'Safe working guidelines for electrical workers' booklet covers basic electrical safety practices for electrical workers. Critically, it provides guidelines on effective supervision of electrical workers with varying competencies, including apprentices.

The guidelines will be updated to ensure they remain consistent with legal amendments and cater for evolving practices in the industry.

- **Safety Case Approval Guidelines**

The Gas Standards (Gas Supply and System Safety) Regulations 2000 enables the Director of Energy Safety to issue guidelines to assist network operators on how to prepare and submit a safety case.

Building and Energy will update these safety case approval guidelines to reflect recent Regulations amendments and updated prescribed standards. The guidelines will also be expanded to incorporate Gas Plant safety case preparation and submission.

Name	Description	2024–25 Target Completion
Industry awareness campaigns	Proactive industry engagement including annual gas and electrical inspectors forums, TAFE and industry briefings, and publication of safety alerts and newsletters.	Ongoing
Compliance campaigns	Proactive site visits to enforce supervision requirements, especially for apprentices. An inherent focus on remote communities with dedicated inspectors and engagement campaigns. Industry awareness campaign about precaution when working near overhead powerlines.	Ongoing
System enhancements	Enhancements to the e-Notice system to include: <ul style="list-style-type: none"> • electronic log-books for mine sites and in-house licence holders; and • dual notification of incidents to Building and Energy and WorkSafe. 	
Review of guidelines	Review of guidelines made available to consumers, workers and industry.	Ongoing
Electrical and gas worker competency improvements	<ul style="list-style-type: none"> • Investigation into the merit of continuing professional development requirements for electrical and gas workers. 	Ongoing

Network Safety Achievements

Electricity network operators' Inspection System Plans

Building and Energy audited the Inspection System Plans (ISPs) of two network operators during 2022–2023.

The audit of Western Power's ISP focussed on Inspectors Work Practices.

The audits made a number of observations, where improvement could be made, including:

- recommend inspectors complete Low Voltage rescue training;
- recommend greater promotion of Arc-flash awareness;
- emphasised the need for inspectors to use isolation lock-out kits; and
- advice provided on the safe use of ladders to enable ceiling and roof inspections.

Both network operators have provided the Director of Energy Safety with an action plan to remedy the shortcomings.

Gas regulations amendments

Amendments were made to the Gas Standards (Gas Supply and System Safety) Regulations 2000 to more effectively define responsibilities of network operators in the decommissioning of a distribution system.

In 2021 Esperance Power Station notified the Director of Energy Safety of its intention to surrender its Gas Distribution Licence (issued by the Economic Regulation Authority) to cease to become a network operator.

In response, Building and Energy introduced a suite of reforms, which came into effect on 11 February 2023 and clarify a network operator's obligations to decommission a distribution system immediately upon ceasing to operate the distribution system.



The amendments outline the decommissioning activities a network operator must undertake to ensure the disconnected elements are made safe and cannot become unsafe at any time afterwards. The new regulations also adopt standards for purging and impose reporting obligations.

Direction to amend safety case – Esperance Power Station

The Gas Standards (Gas Supply and System Safety) Regulations 2000 (Regulations), govern the safe operation of gas distribution systems. Under the regulations, the operator of a distribution system (network operator) is required to develop and implement safety cases which detail how they will ensure that prescribed safety requirements will be satisfied. The Director of Energy Safety (Director) may direct network operators to make amendment to their safety cases to ensure safety is maintained.

In 2021 Esperance Power Station (EPS) notified Building and Energy of its intention to surrender its Gas Distribution Licence to cease to become a network operator. Building and Energy reviewed EPS' safety case and determined that it did not adequately articulate the measures that EPS will take to decommission the distribution system or manage risks associated with its abandonment.

In August 2022, the Director issued a direction to EPS, under regulation 40, to amend its safety case to explicitly provide for the decommissioning of its distribution system and managing the risk associated with the abandonment of the distribution system.

EPS submitted an amendment to its safety case that adequately addressed the issue.

Charges laid for Wickepin-Narrogin bushfire

During 2022–23 Building and Energy completed its investigation into the Wickepin-Narrogin bushfire, which occurred on 6 February 2022. The investigation found that Western Power’s 22kV overhead conductors clashed causing the bushfire.

Proceedings have commenced against Western Power for alleged breaches of the Electricity (Network Safety) Regulations 2015, which require network operators to ensure, so far as is reasonably practicable, that their network is designed, constructed, operated and maintained so as to ensure that it is safe.

Following the bushfire, Western Power provided the Director of Energy Safety with a plan to reduce the risk posed by power lines in its network of a similar construction to the one that caused the Wickepin-Narrogin incident. Building and Energy has been monitoring Western Power’s progress with the remediation program.

Hydrogen blending in natural gas

Blending low concentrations of hydrogen into natural gas networks provides an opportunity to partially decarbonise Western Australia’s gas sector. The WA Renewable Hydrogen Strategy outlined hydrogen blending in natural gas networks as one of the Strategic Focus Areas for investment in Western Australia. The Western Australian Renewable Hydrogen Fund allocated \$1.9 million for a hydrogen blending pilot project, granted to ATCO which owns and operates the largest gas distribution network in Western Australia.

The project scope is to blend a low concentration of renewable hydrogen into the gas distribution networks. The renewable hydrogen is produced at ATCO’s Jandakot Clean Energy Innovation Hub (CEIH) facility and injected into three gas distribution networks in the vicinity of ATCO’s Jandakot depot (being Glen Iris, Treeby and Calleya Estates networks). These networks collectively supply approximately 2,700 customers. The project scope also covers the design and construction of a new hydrogen and natural gas blending facility at the CEIH.

In collaboration with other government and industry stakeholders, Building and Energy provided technical support and facilitated the pilot project.

Bobalong incident

In January 2020, a linesperson received severe burn injuries while working on a live 22kV high voltage overhead power line at Bobalong.

In 2022–23 Building and Energy’s investigation found that the network operator had failed to ensure that the live line cleaning Work Stick (Wand) used was maintained/tested to AS 5804.3-2010 and complied with ASTM F711 or IEC 60855.

The Director of Energy Safety issued an order under the *Energy Coordination Act 1994*, requiring all service providers who carry out live line work, to ensure that the high voltage live work sticks they use to perform the work, comply with the Australian Standard AS 5804.1.



Network Safety Outcomes

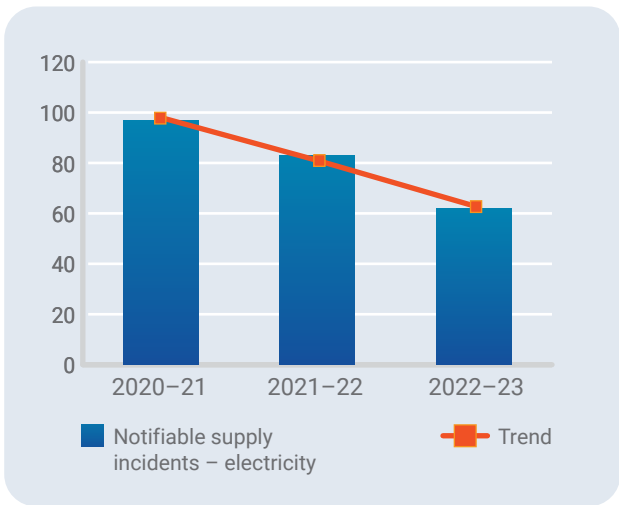
Building and Energy actively monitors network safety incidents and gauges the effectiveness of network operators’ asset management strategies. We also undertake investigations into ‘notifiable incidents’ reported by the electricity and gas network operators and suppliers.



75

Investigations of network operators’ incidents during 2022–23

Number of notifiable electricity network incidents reported

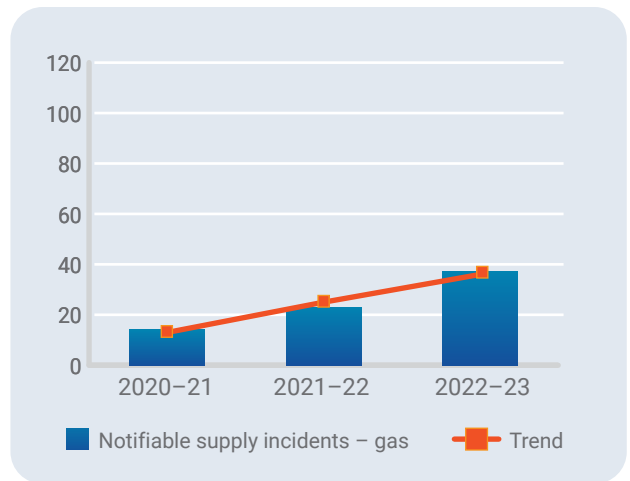


Under the Electricity Network Safety Regulations 2015, electricity network operators are required to notify the Director of Energy Safety of all notifiable incidents which occur on their respective networks. Building and Energy undertakes investigations into these incidents.

A review of the trends of notifiable incidents over the past three years indicates a downward trend.

Electricity network operators are also required to publish their respective Network Safety Performance quarterly. A general downward trend is evident in the number of pole fires, unassisted power pole failures, streetlight pole failures, conductor and stay wire failures in the South West Interconnected System (SWIS), North West Interconnected System (NWIS) and Horizon Power networks.

Number of notifiable gas network incidents reported



There was an increase in the number of notifiable incidents reported on gas networks over the past three years. The number of such incidents are low compared with electricity supply incidents with 37 incidents reported for 2022–23.

The majority of these incidents were caused by third party strikes, resulting from contact with gas pipelines and network assets during excavation work or work in the vicinity of gas network assets. Most incidents caused loss of supply to consumers, main breaks and gas release and, on some occasions fires. One incident resulted in an injury requiring hospitalisation.

Building and Energy will continue to work with network operators to raise consumer and industry awareness about Before You Dig Australia and other controls in place to mitigate such risks.

Network Safety Initiatives

Audit of electricity network operator Electricity Network Safety Management System (ENSMS)

Under the Electricity (Network Safety) Regulations 2015, major network operators are required to develop and implement ENSMS which comply with the requirements of AS 5577 and detail how they will ensure that their networks operate safely and that work performed on their networks is carried out safely.

During 2022–23 an audit of Horizon Power's ENSMS was conducted. A key focus of the audit was to review steps taken by Horizon Power to integrate the Standalone Power System (SPS) Program into its ENSMS in accordance with AS 5577.

The audit data is currently being analysed.

Audit of gas network operator safety cases

Gas network operators in Western Australia operate their distribution systems and plants under a safety case regulatory regime.

Network operators are obliged to periodically audit their safety cases and provide the Director of Energy Safety with reports detailing the audit process and outcome.

Building and Energy Inspectors conduct impromptu inspections, safety case audit and review process. These audits and reviews will continue through 2024–25 to ensure compliance and the safety of the public, consumers and the network.

New network operator for Ocean Reef Marina

On 25 May 2023 the Economic Regulation Authority granted Ocean Reef Renewable Energy Pty Ltd with a distribution and retail licence for the Ocean Reef Marina development. The licence establishes Ocean Reef Renewable Energy as the network operator responsible for the Ocean Reef Marina.

The development will provide for more than 1,000 residential dwellings in a combination of single residential homes, apartments and mixed-use developments as well as up 12,000sqm of retail/commercial floor space.

Building and Energy will work collaboratively with Ocean Reef Renewable Energy to ensure an effective inspection system plan and electricity network safety management system are implemented to ensure the safety of consumers connected to the electricity network.

Transfer responsibility of power services for Aboriginal communities to Horizon Power

The Government announced that from 1 July 2023, responsibility for power services in 117 of Western Australia's remote Aboriginal communities would transfer from the Department of Communities to Horizon Power. This means Horizon Power is the licensed network operator responsible for the network safety of powerline infrastructure in these communities and the safe connection and inspections of consumer premises to electricity supply.

Horizon Power was not previously the network operator of these 117 communities and the electricity infrastructure was designed and operated under a different regulatory framework. Horizon Power has committed to a programme of works to reach full network compliance and appropriate inspection plans and Building and Energy will work with Horizon Power and monitor its progress in meeting its regulatory obligations.

Support the Western Australian Government's Hydrogen Strategy

The safe introduction of new hydrogen technologies is vital to establishing a renewable hydrogen industry. Building and Energy will continue to support and participate in the delivery of this strategy through engagement in renewable fuels industry research, standards writing bodies and collaboration with national regulatory authorities, which are crucial to ensure future regulatory frameworks are appropriate for authorising hydrogen blends, bio-methane blends and 100 per cent hydrogen use considering both distribution networks and end user safety.

Hydrogen blending

Blending low volumetric concentration of hydrogen in natural gas networks is one of the State's strategic focus areas to partially decarbonise its energy sector. Western Australia's hydrogen blending project is one of the pioneer blending pilot projects in Australia.

Building and Energy will continue to actively monitor the progress of the project, which was commissioned in December 2022. Along with the developing national research, the publicly shared information from the pilot hydrogen blending trial will be incorporated and utilised to improve the regulatory framework for blending renewable gases in natural gas distribution networks.

Australian standards for hydrogen

Building and Energy recognises the important role of industry codes and standards. Regulations often prescribe standards that set out the specifications, procedures, material compatibility, quality, performance and, most importantly, safety requirements.

Work on hydrogen standards development is progressing and will continue through 2024–25. Building and Energy is already engaged with Standards Australia's (Australia's peak standards development body) Hydrogen Working Groups, working on multiple standards

development projects covering gas quality specifications, gas distribution networks and end use applications.

International standards identical adaptation or modification to fit Australian context is also considered by the Hydrogen Working Groups to ensure hydrogen standards are developed and fit for purpose.




Building and Energy's participation in Australian standards' development projects, includes work on:

- Gas quality specifications – development of the Australian Standard AS 4564 'General-purpose Natural Gas' to include specifications for future fuels blends such as, hydrogen and bio methane blends.
- Gas distribution networks – development of the Australian and New Zealand standard AS/NZS 4645 to furtherly facilitate safe hydrogen blending and to include the distribution of 100 per cent hydrogen in gas distribution networks.
- End use application, hydrogen appliances – development of a new Australian standard to provide for the technical specification of design, construction and performance of domestic and equivalent gas appliances (Type A) that use hydrogen as a fuel.

National industry research

Building and Energy is actively involved in the Future Fuels Cooperative Research Centre (FFCRC) research to enabling the decarbonisation of Australia's energy networks.

Building and Energy involvement focuses predominantly in research on distribution network and end use applications safety, to ensure that solutions to overcome technical challenges cater for consumers and public safety.

Name	Description	2024–25 Target Completion
Audit of Electricity Network Operator's Compliance	Audit of one electricity Network Operator's Electrical Network Safety Management System (ENSMS).	
Audit of Gas Network Operator's Compliance	Audit of one gas network operator's safety case.	
Assistance and advice to Network Operators	<ul style="list-style-type: none"> • Work collaboratively with new network operators to ensure an effective inspection system plans and network safety management systems. • Monitor compliance of the transition of regulatory obligations of power services from remote Aboriginal communities to network operators. 	
Hydrogen blending in natural gas	<p>Support for the increased proportion of hydrogen in natural gas distribution network including:</p> <ul style="list-style-type: none"> • Changes to regulations and codes of practice. • Amendments to standards. • Education of industry and consumers. 	Ongoing

2024–25 Financial Plan

The following financial plan presents the energy safety associated expenditure and revenue budget forecasts of Building and Energy (both capital and operating), for 2024–25 and three out-years.

It also includes a comparison between the budget and actual out-turn for 2022–23 as well as the approved budget for the current (2023–24) financial year.

The 2024–25 financial plan presents the full costs and revenues of Building and Energy that are attributable to energy safety functions, to ensure:

- consistency and alignment with presentation of the State Budget;
- consistency and alignment with the internal budget of DEMIRS;
- consistency between budget estimates and reporting of actual results, resulting in strong financial management information to assist decision-making and planning;
- the impact of non-cash costs and any cost-escalation factors are understood;
- decisions about revenue sources (i.e. industry levy levels and reviews of tariffs, fees and charges) are made in view of full cost expectations; and
- the full cost of delivery of the energy safety related operations and functions of Building and Energy, which includes recognition that non-cash expenses, such as depreciation and leave liability expenses, are met by revenue from the industry funding model and licensing activity.

While the budget estimates are presented on a full accrual basis, the cash impact is also shown, including cash reserve estimates.

The financial plan provides details of:

- planned operating expenditure, including non-cash expenses such as depreciation and leave liability movement;
- planned capital expenditure;
- estimated revenue from electrical and gas licensing activities and other minor revenue-generating activities; and
- the energy industry levy required to make up the shortfall between expenses and revenues.

Estimates are provided for 2024–25 and the subsequent three years. Projections for the subsequent years are less accurate and are subject to review prior to each year.

Expenditure estimates have been escalated based on known incremental factors (such as salary increments that are established in Awards and State Wage Policy) or on an average at a rate commensurate with the expected rate of the Consumer Price Index (CPI).

Licensing revenue projections have been based on expected licensing activity. Licensing revenues have also been escalated in subsequent years where appropriate by a rate of five per cent, or commensurate with expected CPI levels.

Building and Energy continues to support and facilitate the government's broader initiatives in the energy sector. The pace of transformation and the sustained broadening of the scope of the industry which Building and Energy regulates (fast-expanding renewable energy sector, the proliferation of micro-grids and stand-alone power systems or EV-charging infrastructure) have highlighted a strong need to ensure its regulatory and compliance strategies remain effective at managing the safety of consumers and industry participants.

Besides adapting to changes in the sector, Building and Energy's compliance activities are expanding rapidly and there is a crucial need to be adequately resourced to manage evolving risks. This is reflected in the expenditure forecast for 2024–25. It is proposed that the levy be increased by five per cent to **\$8.364** million for 2024–25 and continues to increase by 10 per cent in the following years thereafter to fund Building and Energy's activities in an evolving energy sector.

Cash reserves held in the Special Purpose Energy Safety Account remained in the acceptable range in 2022–23. The level of cash reserves required to remain at an optimal level is between \$11 million and \$13 million. This is to ensure that sufficient funds would be available to cover leave liability as it falls due, income received in advance, accumulated depreciation to replace assets as they come to the end of their useful lives, unplanned extraordinary expenses associated with major investigations (such as large electricity-caused bushfires) and to provide sufficient funding for energy related operations for at least a quarter should it encounter funding collection challenges.

The 2024–25 financial plan has been set with cash reserves that reflect self-sufficiency and flexibility. The cash levels will require to be assessed for the 2025–26 business plan to ensure that revenues are sufficient to bring the cash balance back within the optimal range.

As has been identified over many years, the most significant risks to the budget are from factors outside of Building and Energy's control that will impact licensing activity. Electrical and gas licence volumes continue to grow, reflecting the resources boom in Western Australia. It has been noted for the past several years that, should the resources sector slow-down affect licensing activity, without another trades-related sector experiencing significant growth, revenues from electrical and gas licensing activity may decline in the long term.

Should this decline become more significant and have a more material impact on revenue forecasts, decisions concerning either the functions of Building and Energy, further commensurate increases to the industry levy, or increases to licensing fees above CPI in order to bring them closer to full cost recovery rates will need to be considered.

The financial plan has been prepared consistent with financial reporting requirements and with internal DEMIRS budgeting processes.

The current year (2023–24) budget estimates reflect the budget approved by the Minister in the 2023–24 Business Plan.

The financial implications of this business plan have been approved by the Expenditure Review Committee as part of the 2023–24 mid-year review process.

2024–25 Financial Plan

Financial Year	2022–23 Budget	2022–23 Actual	2023–24 Approved Budget	Escalated \$			
				2024–25	2025–26	2026–27	2027–28
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Expenses							
1. Recurrent Expenditure							
a) Employee benefits expense	9,095	7,970	9,649	11,162	11,440	11,724	12,017
b) Corporate service charges	3,727	3,909	3,841	4,158	4,262	4,368	4,478
c) Licensing services charges	656	1,388	1,008	1,476	1,513	1,551	1,589
d) Depreciation expense	466	400	308	425	308	308	308
e) Legal services	342	331	273	351	361	370	379
f) Accommodation expenses	1,178	1,344	1,411	1,429	1,465	1,501	1,539
g) IS support/maintenance (CMS)	208	250	343	393	403	413	424
h) IT and minor equipment replacement	46	43	47	49	50	51	52
i) Other recurrent expenses	3,449	1,558	3,000	3,184	3,263	3,346	3,429
Total Recurrent	19,167	17,193	19,880	22,627	23,065	23,632	24,215
2. Capital Expenditure							
a) Software replacements (CMS)							
b) CMS project management							
c) On-line compliance and customer interface functionality							
Total Capital	0	0	0	0	0	0	0
Total Expenses	19,167	17,193	19,880	22,627	23,065	23,632	24,215
3. Income							
a) Industry Levy	7,586	7,586	7,965	8,364	9,200	10,120	11,132
b) Licensing Fees	8,256	8,904	8,099	9,461	9,934	10,430	10,952
c) Indian Ocean Territories	48	0	48	48	49	50	51
d) Other revenues	10	11	10	11	12	13	13
Total Income	15,900	16,501	16,122	17,884	19,195	20,613	22,148
Surplus/(Deficit) for the period	(3,267)	(692)	(3,758)	(4,743)	(3,870)	(3,019)	(2,067)

Cash Balances

On a cash basis the above budget is reflected as:

Financial Year	2022–23 Budget	2022–23 Actual	2023–24 Approved Budget	Escalated \$			
				2024–25	2025–26	2026–27	2027–28
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Estimated Opening Balance	12,975	12,504	10,653	9,988	6,620	4,008	2,247
Industry Levy	7,586	7,586	7,965	8,364	9,200	10,120	11,132
Licensing Fees	8,556	10,248	8,399	9,761	10,234	10,730	11,252
All other revenues	58	11	58	59	61	63	64
Cash expenses	(18,051)	(17,861)	(18,922)	(21,552)	(22,107)	(22,674)	(23,257)
Cash movement	(1,851)	(16)	(2,500)	(3,368)	(2,612)	(1,760)	(809)
Estimated Closing Balance	11,124	12,488	8,153	6,620	4,008	2,247	1,439

Notes and explanations

Note 1: Recurrent expenditure

- a) Employee benefits expense: includes all expenditure associated with Building and Energy's permanent, contract and temporary employees, known salary increases under awards and State Wages Policy and direct on-costs such as leave entitlements and other employee entitlements.
- b) Corporate service charges: Building and Energy relies on central Corporate Services support (covering finance, HR and IT support) to be provided by DEMIRS. The amounts shown are the estimated costs provided by the DEMIRS Corporate Services Division, including employee benefits costs for Corporate Services support employees.
- c) Licensing services charges: Building and Energy relies on licensing processing services to be delivered by the DEMIRS Licensing Services Directorate, with which a Service Level Agreement is in place. The amounts shown are the estimated costs provided by the DEMIRS Licensing Services Directorate, including employee benefits costs for Licensing Services employees.
- d) Depreciation expense: covers the cost of depreciation of Building and Energy's assets, including software systems. The bulk of the depreciation expense relates to the Compliance Management System, which was commissioned during 2014–15 and which has a significant impact on depreciation expense from 2016–17 onwards.
- e) Legal services: these services are provided by the DEMIRS in-house legal team with an allocation of costs for work related to energy safety matters, including employee benefits costs for Legal Services employees.
- f) Accommodation expenses: covers expenses relating to Building and Energy's office accommodation, including lease costs, maintenance and minor works, cleaning and utility costs.
- g) Information Services (IS) support and maintenance, Compliance Management System (CMS): includes recurrent costs associated with support, licensing and maintenance of CMS.
- h) Information technology (IT) and minor equipment replacement: covers routine replacement of desktop personal computers, local printers and related equipment. This has previously been included as part of the capital budget, but minor equipment costing less than the capitalisation threshold is expensed as costs are incurred during the year. This item includes the cost of mobile computing technology used in conjunction with CMS in supporting inspectors undertaking field work.
- i) Other recurrent expenses: includes all insurance costs, superannuation, communications services, safety awareness campaigns, travel, training, printing, management and maintenance of a vehicle fleet, technical services, recruitment, taxation expenses, various consumables and other services necessary for operating an office. Building and Energy will conduct major safety awareness and education campaigns in 2024–25, as detailed in this Business Plan.

Note 2: Capital expenditure

- a) CMS Software replacement reflects the capital costs of completing identified software enhancements.
- b) CMS project management reflects the capitalised internal IS project support costs for implementation of the CMS system enhancements.
- c) Online compliance and customer interface functionality: works on enhancements to CMS or other systems to improve online compliance and customer interface.

Note 3: Income

- a) Industry levy: This is the energy industry levy necessary to ensure the Director's energy safety operations are fully funded to carry out legislated functions. The levy is the amount needed to make up the difference between expected expenditure and the sum of the revenues of (b), (c) and (d) below for all four years of the forecast.
- b) Licensing fees: are derived from electrical worker, electrical contractor, and gas fitter licence fees. The licensing fee revenue is presented on an accrual basis. For 2022–23 licensing fee revenue was \$8.9 million. On a cash basis the amount is \$10.2 million.
- c) Indian Ocean Territories (IOT): DEMIRS has a service agreement with the Commonwealth's Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITCARD) to supply regulatory services to the IOT similar to those it provides on the WA mainland, but at full cost to DITCARD. Building and Energy provides electricity and gas regulatory services under this agreement and the expected reimbursement is shown.
- d) Other revenues: This reflects income from the sale of publications to industry and other minor recoups.

Note 4: Cash balances

Cash balances form part of the DEMIRS bank account and are classified as restricted cash. The cash at bank balance was \$12.5 million at the end of 2022–23, which remains within the targeted cash balance.

It is considered prudent financial management to aim for a closing cash balance at the end of each budget period sufficient to cover potential cash costs (liabilities) where non-current expenses have been recognised. For example, leave liability growth is included in Employee Benefits Expenses and this expense is covered by the industry levy. Cash balances should therefore be sufficient to cover the cash value of the leave liability. The leave liability value recognised is \$1.8 million as at 30 June 2023.

Additionally, it is judicious to allow for fluctuations in revenues across years and/or potential non-receipt of quarterly levy payments, and to provide some level of assurance should there be large unplanned expenditure associated with one or more major investigations. It is considered that \$1 million is a reasonable amount to be held for this purpose.

Depreciation and amortisation of Building and Energy's assets is recognised as an expense each year, in line with normal accounting practice. The depreciation accumulates in recognition that it provides a source of funds to replace the asset at the conclusion of its useful life. Accordingly, the value of accumulated depreciation and amortisation should be recognised and maintained as a cash-holding. The value of accumulated depreciation and amortisation is \$1.5 million as at 30 June 2023.

The licence fees that are received for more than a single year (some for three years, some for five), represent accrued or unearned income that should not represent cash available for expenditure in the year it is received. The total amount (incorporating both current and non-current unearned income) in the Energy Safety Special Purpose Account at 30 June 2023 is \$9.9 million. This is recognised as unearned income and it is reasonable that the bank balance should hold this income as it is not earned until later years.

Based on these factors, the targeted cash balance that is considered reasonable is between \$11 million and \$13 million. It is forecasted that the cash reserves will decrease to below this target in the out years, if the industry levy is only increased by CPI. Building and Energy will continue to monitor the cash position and will provide options to Government in future years should sustainability of the account become an issue.

Industry Levy

Industry levy statement

This Statement is produced in accordance with section 6(1) of the *Energy Safety Act 2006* (the Act).

The Act makes provision for the collection of a levy from energy industry participants. The levy is in accordance with section 6(1)(c) of the Act and the related *Energy Safety Levy Act 2006*. Similar contribution schemes operate for other Divisions of DEMIRS and are levied on the gas and electrical industries in other jurisdictions.

For 2024–25, the proposed Energy Safety Industry Levy will be **\$8.364** million. The Act allows the responsible Minister to determine the levy for the financial year, for notice of this to be published in the Gazette and for the Director of Energy Safety to issue notices of assessment accordingly. All revenue raised from the levy will be used solely for energy safety-related activities.

As required by the governing legislation, this section of the Business Plan details the methodology for the calculation and allocation of the appropriate portions of the levy to individual industry participants.

Industry levy quantum

It is required that the levy be applied at a level sufficient to enable the full costs of energy safety operations to be met. Accordingly, a levy of **\$8.364** million is proposed in this business plan for 2024–25.

This enables sufficient funds for the full structure of Building and Energy's energy safety-related operations, to meet the costs of its liabilities and support and facilitate the Government's broader initiatives in a changing energy sector. This includes a review of the legislative framework to ensure it can adapt to emerging technologies and new trends and expansion in the sector including the emergence of battery energy storage systems, standalone power systems and several initiatives to promote the use of renewable hydrogen.

The proposed levy for 2024–25 represents an increase of five per cent from 2023–24. As explained in the financial plan, this reflects estimated costs and other revenue sources related to energy safety functions for Building and Energy and also considers the optimal cash holding level.

It is recognised that Building and Energy is unlikely to have a full staffing contingent at all times during any given financial year. Historical vacancy rates, coupled with improved recruitment successes in recent years gives reasonable confidence that the vacancy rates will fall and remain relatively low and steady through 2024–25 and beyond, and surplus funds will not be realised from under-expenditure at the same levels as has been experienced in prior years.

Apportionment of levy between energy sectors

The proposed 2024–25 industry levy of \$8.364 million will be apportioned as 67 per cent to the electrical industry and 33 per cent to the gas industry in accordance with section 6(2) of the Act.

Therefore, the total levy contribution to be received from participants in the electrical industry will be \$5.604 million, and from participants in the gas industry it will be \$2.760 million.

Method for allocation of levy within energy sectors

To allocate the levy within each industry sector, the Director will continue to use the model devised for the allocation of the 2006–07 levy after consultation with industry. The model is based on the following:

- a) Levy allocation across the gas sector to be based on the number of gas consumer sites supplied by each gas distribution system licence holder and LP gas distributor supplying LP gas in bulk and in portable 45kg cylinders in Western Australia, subject to a minimum aggregate total of 500 sites. The aggregate may be based on multiple networks.
- b) Levy allocation across the electricity sector to be based on the aggregate number of consumer sites served by each network operator subject to a minimum aggregate total of 500 sites. The aggregate may be based on multiple networks.

In mid-2023, the Director wrote to all participants in both energy sectors requiring them to confirm, in accordance with regulation 4(5) of the Energy Safety Regulations 2006, the number of LP gas and consumer sites connected. Responses were received from all participants.

Based on the information received, the proportion of all consumers supplied by each supplier within both industry sectors was established. This proportion was then used to calculate the annual levy contribution payable by each participant.

A similar survey will be carried out in mid-2024, determining the levy contribution allocations for each supplier for 2024–25.

Administration of the Levy Scheme

A confidential database is maintained of industry site or operator-specific information that provides an audit trail in support of the levy calculations for each participant.

Independent auditors were engaged in late 2021 to verify that the participants had robust systems and processes in place to support the customer numbers reported to the Director, so that the apportionment of the levy was undertaken on a reasonable basis. It is expected that this audit will be conducted every three years.

Although the total levy amount falls due for payment at the beginning of each financial year, industry participants will be invoiced quarterly, as in previous years.

The formal assessment for the year will be communicated to individual participants concurrently with an invoice for the first payment. In accordance with section 17(3) of the Act, if an instalment is not paid at or before the due date, the whole of the annual levy becomes due and payable immediately. There will be no reduction in liability as a result of departures from the industry during the year, or back-accounts for new participants to the industry during the year.

Appendix A: 2022–23 Safety Statistics

Building and Energy actively monitors trends of incidents to inform its risk-based compliance regime.

This section contains statistical information about electricity and gas incidents recorded in Building and Energy’s Compliance Management System (CMS) as reported by industry and the general public.

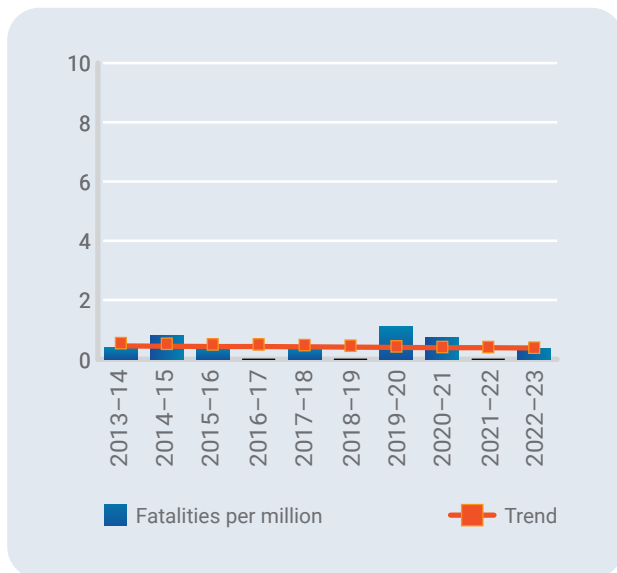
A summary of the trends as of 30 June 2023 is provided in this appendix.

Electrical safety statistics

Electrical fatalities

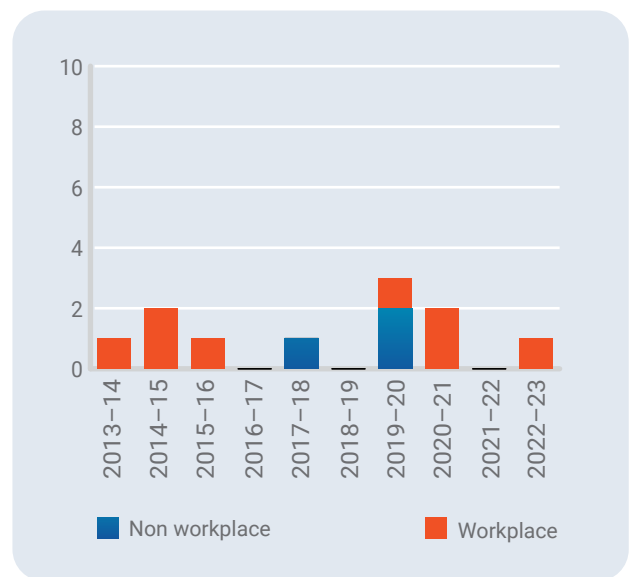
There was one electricity related fatality reported during 2022–23. The number of reported fatalities has been intermittent over the years with a steady declining trend.

Chart A: Electricity related fatalities per million population



Over the ten-year period from 2013–14, over 70 per cent of electrical fatalities occurred in the workplace.

Chart B: Workplace and non-workplace electrical fatalities



Electrical accidents – non-fatal

Accidents have been broadly classified into serious electrical accidents, which include incidents that required hospitalisation for treatment of injuries, and/or require medical treatment where first-aid or medical attention, excluding attendance for a precautionary electrocardiograph (ECG), was sufficient for the treatment of injuries sustained in the incident.

During 2022–23, there were five serious non-fatal electrical accidents reported requiring hospitalisation. The number of such accidents per million population in Western Australia has seen a declining trend over the past 10 years (Chart C).

Several measures have been put in place to improve electrical safety outcomes that may have contributed to the decline in the number electrical accidents. These include, but are not limited to, the introduction of Residual Current Devices (RCDs), implementation of legislation preventing live work by electrical workers, a robust inspection regime, stringent appliance approval requirements and increased consumer and industry awareness through safety campaigns.

Chart C: Electrical accident (hospitalisation) per million population

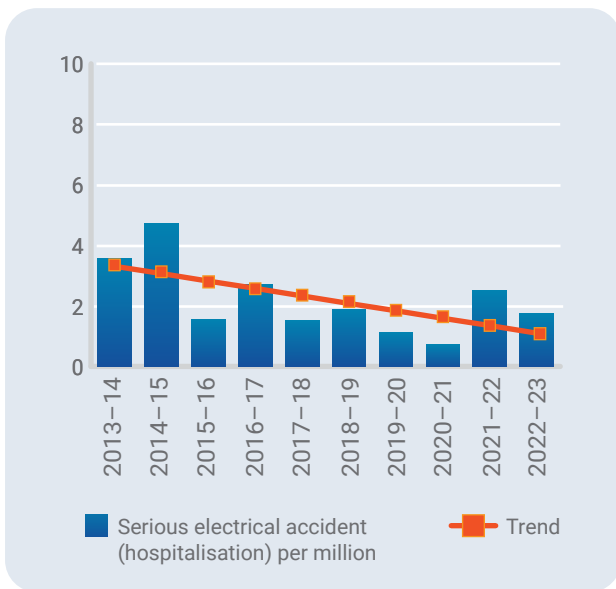
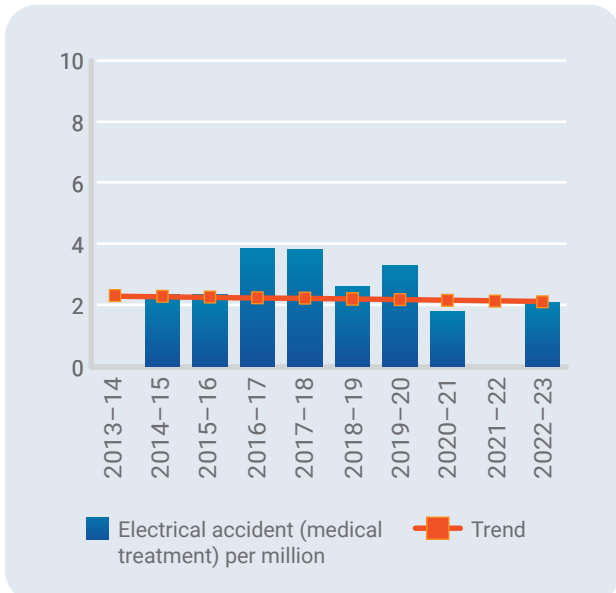


Chart D: Electrical accident (medical treatment) per million population

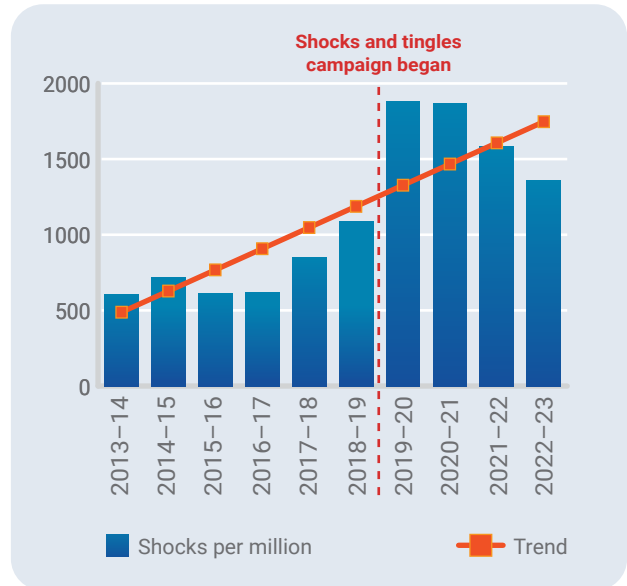


There were six electrical accidents requiring medical treatment reported during 2022–23. Although this is an increase compared to the previous year, the trend indicates a gradual decline.

Electric shocks

An electric shock that does not cause injury or harm may be experienced due to an error by a person (e.g. contracting energised parts), faulty equipment in the home or workplace, or due to a fault or deficiency with the electricity supply network.

Chart E: Electrical shocks per million population



During 2022–23, 3,870 electric shocks were reported. Following an awareness campaign in 2019, heightened awareness and the need to report shocks and tingles resulted in the increased figures in the following years.

Electrical worker safety

Electrical workers are at greater risk of electric shocks and electrocution than members of the general public or workers in other occupations. Despite greater knowledge related to working with electricity, most of the incidents involving electricians result from performing tasks on energised electrical equipment.

Chart F: Fatalities and serious accidents involving electrical workers in WA



Chart G: Fatalities and serious accidents resulting from 'live' work involving electricians in WA



In Chart F above, the trend of fatalities and serious accidents resulting from 'live' work involving electricians is declining. In 2018, new legislation was introduced that prohibits electrical work to be performed on or near an exposed energised part of an electrical installation that can de-energised.

This was followed by an industry safety awareness campaign to educate industry on the dangers of working live and the related new legislation.

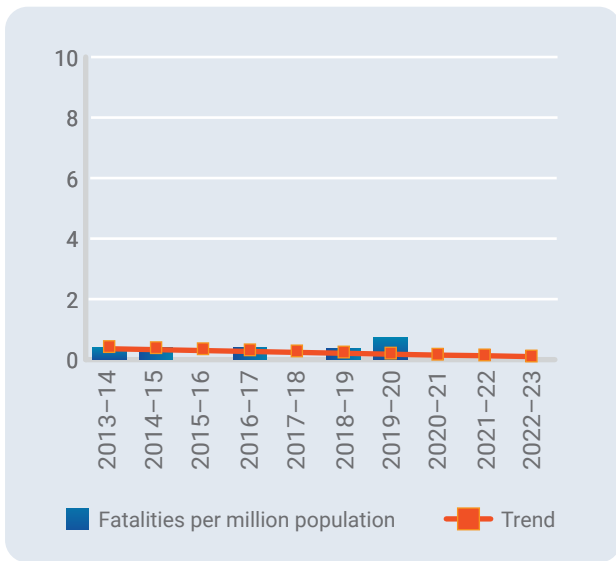
Additionally, Building and Energy conducted a safety education campaign to raise awareness about the electrical dangers in roof spaces and to remind workers and consumers to switch the main power off before entering the roof space.

Gas safety statistics

Gas fatalities

There were no gas related fatalities reported in 2022–23. The trend for gas fatalities indicates a very low number of such incidents.

Chart H: Gas related fatalities per million population



Gas accidents – non-fatal

There was one reported serious accident requiring hospitalisation in 2022–23 and another that required medical treatment.

Chart I: Gas related incidents resulting in serious injury requiring hospitalisation per million population

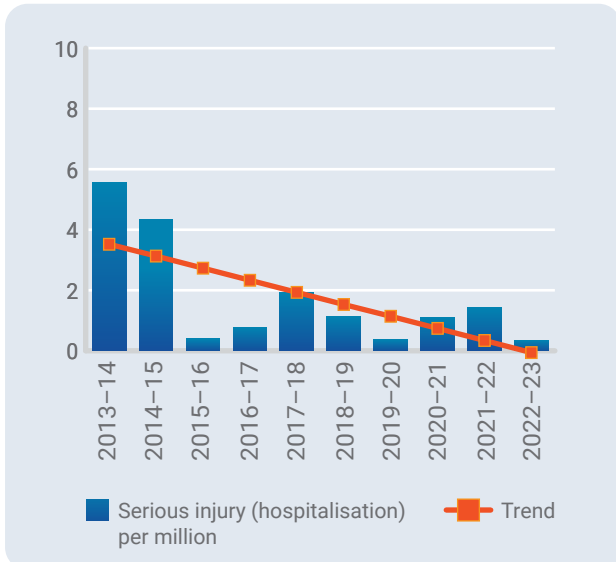
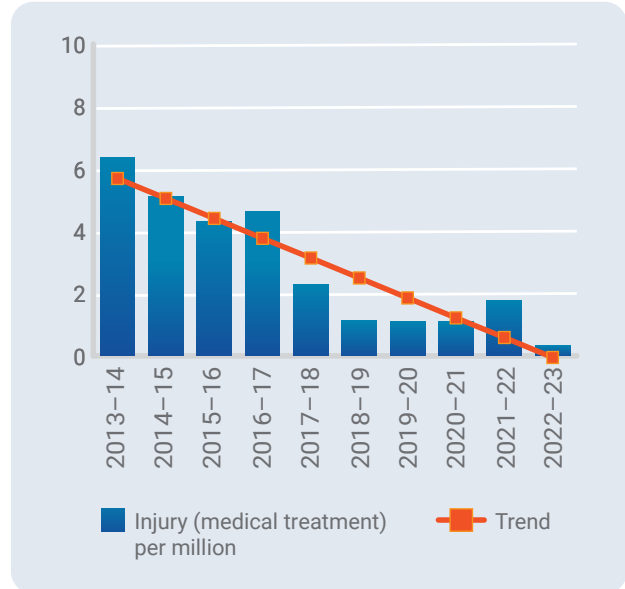


Chart J: Gas related incidents resulting in injury requiring medical treatment per million population



Gas accidents – non-serious injury

There were five incidents which resulted in minor injury in 2022–23. The trend of such incidents indicates a sharp decline over the ten years from 2013–14.

Chart K: Gas related incidents resulting in minor injury per million population



Gas worker safety

Safety outcomes in relation to fatalities and serious injury involving gas workers is generally positive with no fatalities reported over the ten years from 2013–14.

The incidents in the chart below relate only to serious accidents.

There were no serious accidents involving a gas worker in 2022–23.

Chart L: Gas incidents resulting in fatality or serious injury involving gas workers



Government of Western Australia

**Department of Energy, Mines,
Industry Regulation and Safety**

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