



Government of Western Australia
Department of Mines, Industry Regulation and Safety



Energy Safety Business Plan 2021–22



This Business Plan was approved under
Part 2 of the *Energy Safety Act 2006* by
The Hon John Quigley MLA
Minister for Commerce
December 2020

Contents

Foreword	4
Statement of Intent	5
1. Departmental objectives	5
1.1 DMIRS' purpose is:.....	5
2. The Role of the Director of Energy Safety.....	6
3. Legislation administered	7
4. Information and advice to the Minister	7
About Building and Energy	8
5. Building and Energy structure, Directorate functions and resources	8
5.1 Organisational structure (energy safety activities).....	8
5.2 Energy safety compliance framework.....	9
5.3 Energy Safety compliance functions.....	10
Performance indicators, safety statistics and key achievements	13
6. Performance indicators.....	13
6.1 Regulatory work indicators.....	13
6.2 Key performance information.....	14
7. Electricity and gas safety statistics.....	15
7.1 Electricity and gas safety statistical outcomes.....	15
8. Key achievements.....	22
8.1 Shocks and tingles safety awareness campaign.....	22
8.2 Completion of the investigation into the multiple fatalities on Wedge Island.....	22
8.3 Proactive measures to limit encroachments of built structures near network operator assets	22
8.4 Guidelines for electricity network operators' Inspection System Plans	23
Business environment and challenges	24
9. Western Australia's energy industry environment	24
9.1 Size and growth of the industry – number of licensed operatives.....	24
9.2 Volume of installation work performed by electrical and gas operatives	26
9.3 Compliance inspection of electrical and gas installations.....	26
9.4 Volume of compliance work undertaken by Building and Energy	27
9.5 Inability to attract and retain technical staff	27
Initiatives to manage the challenges	28
10. The period ahead – significant issues impacting Energy Safety	28
10.1 Major policy initiatives.....	28
10.2 Other initiatives	29
10.3 Corporate projects and issues.....	31

11. Regulatory operational matters	32
11.1 Inspections of installations not connected to a network and the Indian Ocean Territories	32
11.2 Investigations of breaches to the legislation	32
11.3 Investigations of serious accidents and fatalities	32
11.4 Investigations of network incidents	33
11.5 Monitoring of gas and electricity consumer appliances	33
11.6 Audits of Network Operator Inspection System Plans	33
11.7 Audits of electrical contractors and gas fitters	33
11.8 Australian Standards development work	33
11.9 Regulator liaison	33
Financial Plan	34
12. 2021–22 Financial Plan	34
12.1 Notes and explanations	37
12.2 Cash Balances	38
Industry Levy	40
13. Industry Levy Statement	40
13.1 Industry Levy Quantum	40
13.2 Apportionment of Levy between energy sectors	40
13.3 Allocation of Levy within energy sectors	40
13.4 Administration of the Levy Scheme	41
Appendix A – Specific obligations	42
Appendix B – A brief outline of 2019–20 activities	44
1. Significant Energy Safety Activities in Western Australia	44
1.1 Operative licensing activities	44
2. Prosecutions and Infringement Notices	45
2.1 Prosecutions	45
2.2 Infringement Notices	45
3. Major policy work	46
3.1 Committee participation	46
3.2 National regulatory reform projects	47
4. Statutory Reporting and Statistics	47
4.1 <i>Electricity Act 1945</i>	47
4.2 Electricity Related Incidents and Fatalities	48
4.3 <i>Gas Standards Act 1972</i>	49
4.4 Gas Related Incidents and Fatalities	50

Foreword



The Executive Director of Building and Energy, a division of the Department of Mines, Industry Regulation and Safety (DMIRS), is designated as the Director of Energy Safety (Director), an independent statutory office created under the *Energy Coordination Act 1994*.

The *Electricity Act 1945*, the *Gas Standards Act 1972* and their respective set of regulations establish the Director as the regulator principally responsible for ensuring the safety of electrical and gas appliances, consumer installations and distribution networks in Western Australia. These acts also vest the Director with broad occupational licensing functions. The electrical licensing functions are performed in concert with a statutory board, the Electrical Licensing Board.

The Director fulfils these energy safety functions with the assistance of the staff employed by Building and Energy. The costs associated with performing these functions are met by those who benefit from them through a combination of licensing fee revenue and the proceeds of an industry levy, the Energy Safety Levy.

The Energy Safety Levy was established by the *Energy Safety Act 2006* and *Energy Safety Levy Act 2006*.

The *Energy Safety Act 2006* requires the Director to prepare a Business Plan each year for the Minister's approval and subsequent tabling in Parliament. The Business Plan serves to inform the Parliament of the important work being undertaken by the Director and Building and Energy. This is necessary as the Energy Safety Levy is ultimately reviewable by Parliament.

This document is the Business Plan for the 2021–22 financial year.

In addition to the matters required to be addressed under the *Energy Safety Act 2006*, this Business Plan identifies areas of particular regulatory focus for the 2021–22 financial year.

The COVID-19 pandemic has had broad societal, economic and financial impacts. Building and Energy has not been immune to these impacts. This Business Plan takes into account the actual impacts experienced to date and potential impacts which may be experienced in the 2021–22 year.

Upon approval by the Minister, this Business Plan will form the basis for his determination on the amount to be levied on energy industry participants for 2021–22 and the manner in which it is to be allocated between participants.

Saj Abdoolakhan
Director of Energy Safety

December 2020

Statement of Intent

This Statement of Intent is required by the *Energy Safety Act 2006*. It establishes the strategic framework under which the Building and Energy division (Building and Energy) operates within the Department of Mines, Industry Regulation and Safety (DMIRS) and outlines how it intends to contribute to the delivery of the priorities and purpose of the Government in the broader context of being a regulator, a service provider and a policy maker in delivering energy safety outcomes for Western Australia.

In addition, this Business Plan sets out the requirements for the administration of the Energy Safety Levy (Levy). The Levy, in conjunction with revenue from electrical contractor, electrical worker and gas fitter licence fees, provides the operational and capital funding required to perform the functions of the Director of Energy Safety.

1. Departmental objectives

DMIRS, of which Building and Energy is a division, assists in achieving the Government's strategic goals of:

- **Better Places** – A quality environment with liveable and affordable communities and vibrant regions.
- **Strong Communities** – Safe communities and supported families.

1.1 DMIRS' purpose is:

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

The approach of DMIRS to delivering on this purpose is to **maximise our impact as a regulator, service provider and policy maker.**

Building and Energy both contributes to and embraces these strategic priorities, purpose and approach.

Building and Energy recognises that it contributes as a regulator, service provider and policy maker, and that it assists in delivering this purpose as part of the Industry Regulation and Consumer Protection Group, through the DMIRS Outcome Based Management Framework, Service 3 – Industry Advice and Regulation: **the provision of advice and regulatory services to the Western Australian community in the areas of consumer protection, building and plumbing, electricity and gas, and labour relations.**

The priority focus for Building and Energy is to:

- maintain regulation that is clear, relevant and enforced;
- behave consistently and transparently;
- create relationships that encourage compliance;
- foster public trust and confidence;
- deliver quality services at the lowest cost possible;
- reduce the complexity of the customer journey through government;
- use digital technologies to improve the customer and staff experience;
- respond to customer feedback;
- manage our policy environment to drive behaviours that are in the public interest;
- predict then address emerging policy challenges;
- gather the latest intelligence on the operating environment; and
- explore new approaches to achieving regulatory intent.

In focusing on these priority areas, Building and Energy will contribute to positive impacts including:

- regulated entities know and play by the rules;
- individuals and businesses have the confidence to operate in Western Australia;
- better regulatory outcomes at a lower cost to the community;
- public confidence is high in our areas of responsibility;
- we know and monitor our costs and keep them lean;
- customers have fewer touchpoints when doing business with us;
- customers and staff find it easier to do business;
- customers are satisfied with their treatment;
- business, community and industry behaviour supports policy intent;
- disruptors are identified early enough for pre-emptive policy action;
- intelligence is regularly shared and used for public benefit; and
- new ideas on how to address regulatory challenges are on the policy agenda.

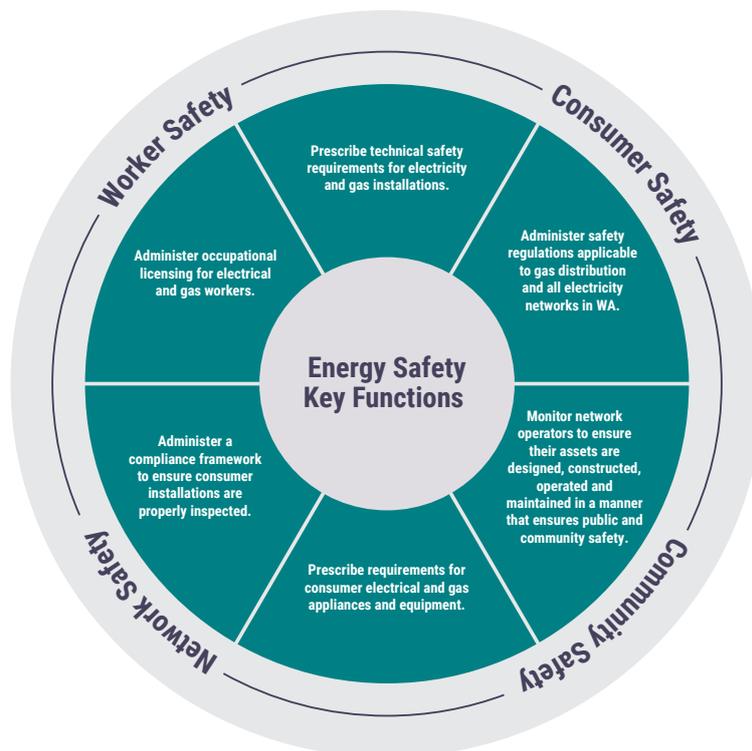
2. The Role of the Director of Energy Safety

The Director of Energy Safety (Director) is an independent statutory office established under section 5 of the *Energy Coordination Act 1994*.

The Director ensures that the legislation covering electricity and gas safety is effectively administered, maintained for currency and appropriately communicated to stakeholders. The Director provides executive direction and leadership of the energy safety activities of Building and Energy.

Building and Energy administers 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 WA must be constructed and maintained. The primary focus of the energy safety legislative framework is the safety of energy consumers and the community at large.

Building and Energy performs six key functions to ensure the safety of energy consumers, energy workers and the wider community:



Building and Energy:

- develops policies concerning energy industry technical and safety issues, in some cases through membership of national technical standards and regulatory coordination forums; and
- provides advice to the responsible Minister, including proposals for improvements to technical safety legislation.

3. 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)*

4. Information and advice to the Minister

The Director provides advice and support to the Minister.

Interaction between the Minister's office and Building and Energy takes place through the Director of Energy Safety, the Deputy Director General of the Industry Regulation and Consumer Protection group of DMIRS and the Director General of DMIRS. The Director Standards and Engineering; Director Policy and Legislation; and Director Electricity, Gas and Plumbing Compliance may respond directly when circumstances require.

Advice and information provided to the Minister by Building and Energy includes the following:

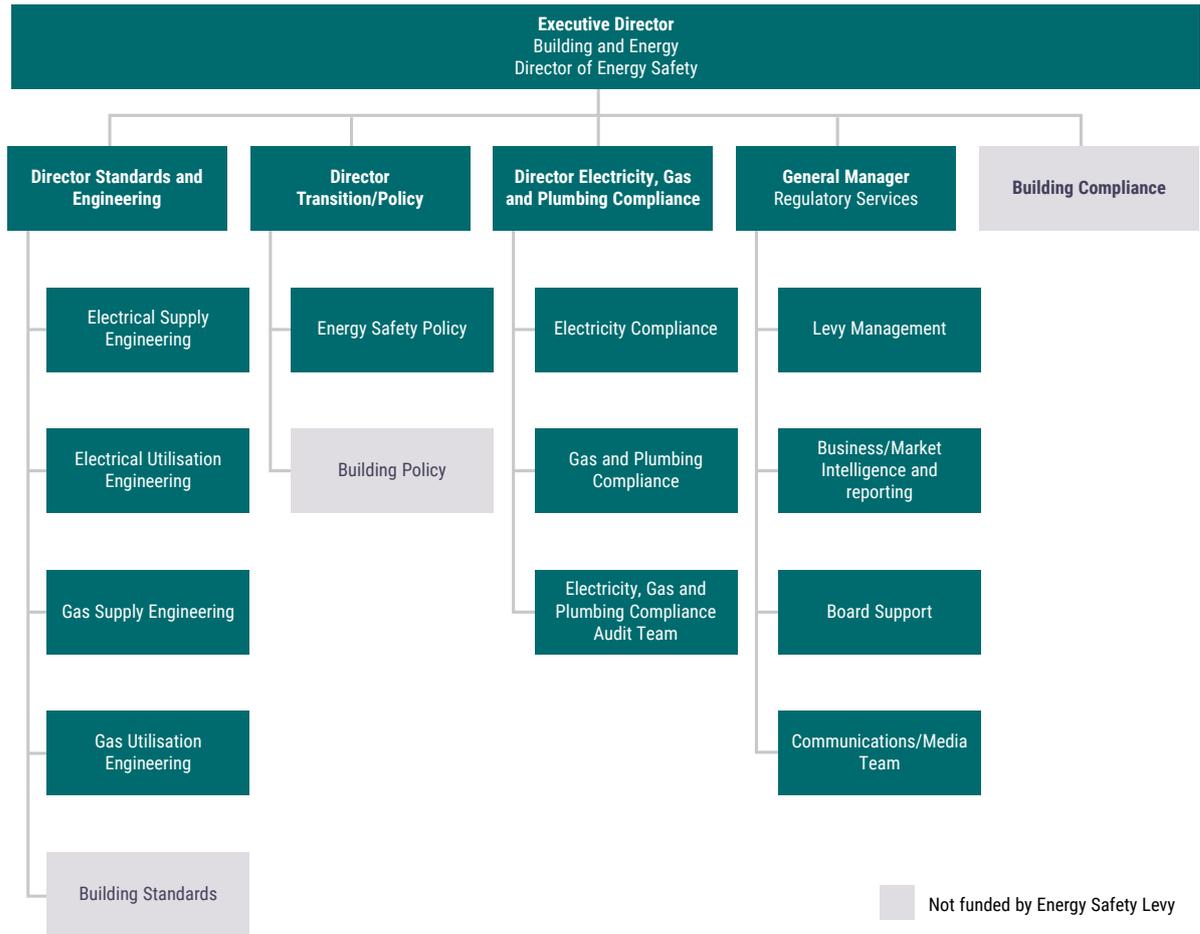
- proposals for major policy projects, such as new legislation or amendments;
- reports on the status and management of major policy projects;
- proposed regulatory actions that may affect the public or businesses;
- information releases dealing with subjects relevant to this Ministerial portfolio;
- 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 his staff, which may involve correspondence and/or meetings;
- resource requirements and work programs; and
- nationally-sensitive energy issues (e.g. major regulatory reform projects).

About Building and Energy

5. Building and Energy structure, Directorate functions and resources

Building and Energy is located in the Mason Bird Building on the corner of Sevenoaks Street and Grose Avenue, Cannington. It is headed by the Executive Director Building and Energy, who is the designated Director of Energy Safety.

5.1 Organisational structure (energy safety activities)



The operations of the former Building Commission and EnergySafety divisions merged to form Building and Energy in January 2018.

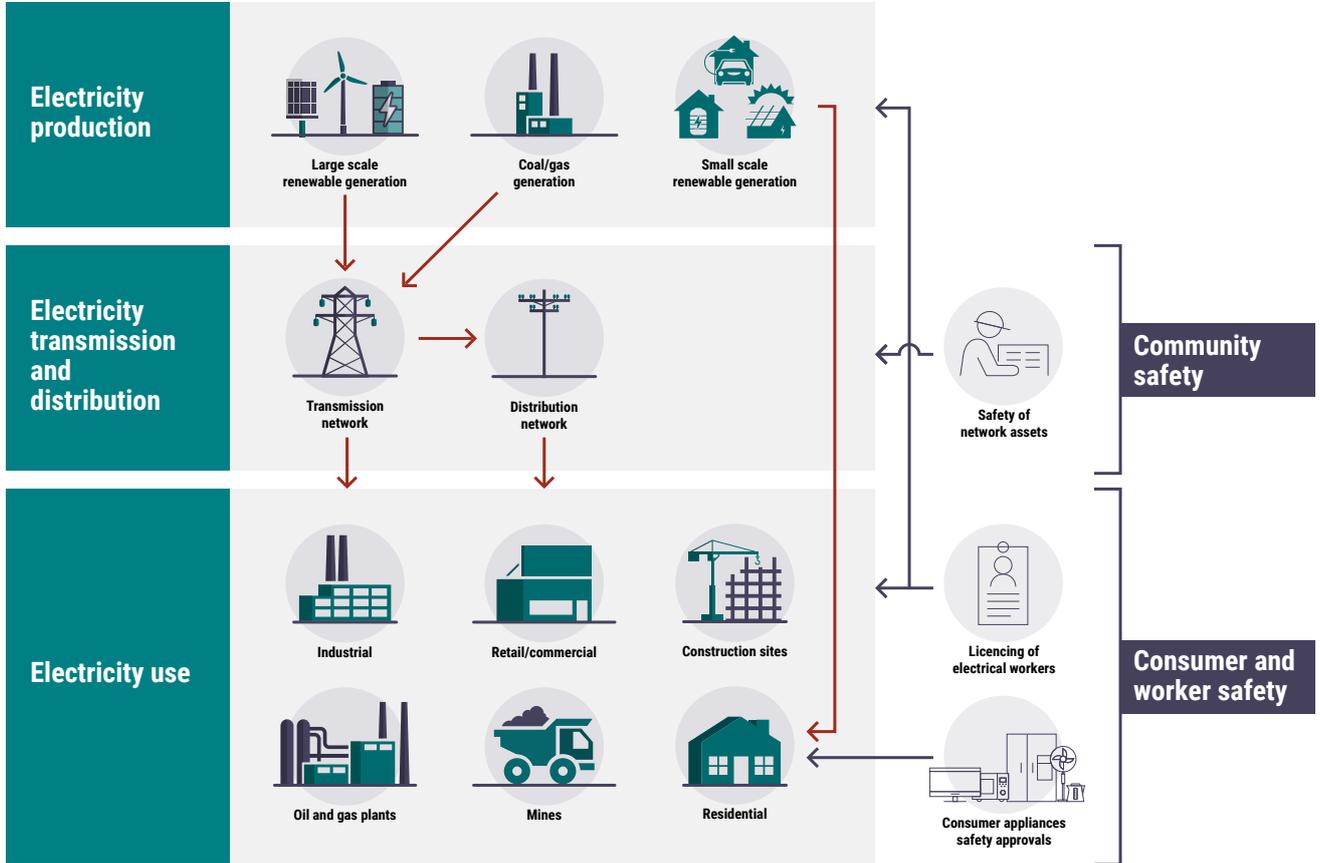
The regulatory functions of the Director of Energy Safety have not significantly changed. The structure will continue to allow for the future development and maintenance of critical technical expertise relevant to each of the energy industry sectors.

While the merger has meant that each directorate of Building and Energy now performs a broader set of functions, the functions referenced here reflect only those relating to energy safety.

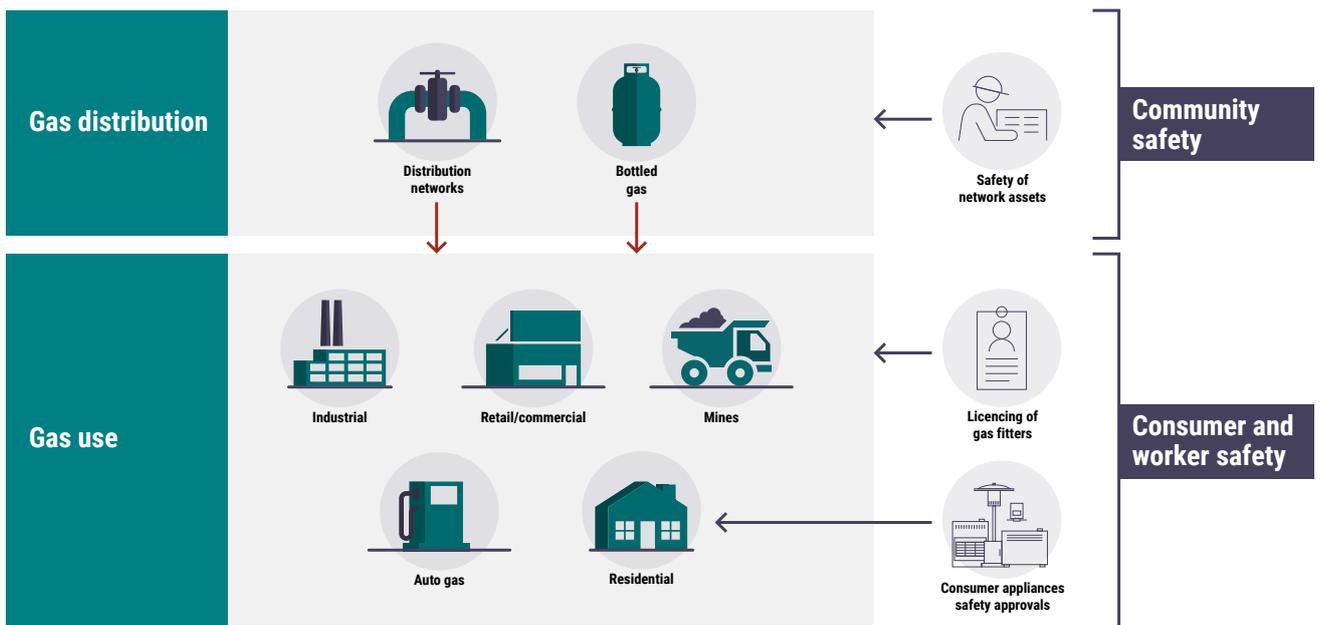
5.2 Energy safety compliance framework

The following diagrams provide an overview of the WA electricity and gas regulatory frameworks with the functions of the Director noted on the right hand side.

Energy Safety compliance functions



Gas regulatory framework



5.3 Energy Safety compliance functions

5.3.1 Safety of consumer installations

Building and Energy's strategies for safe installations focus on ensuring that low voltage electrical and gas installations are safe when they are built, repaired and maintained by competent, licensed and registered tradespeople, who follow technical guides and comply with legal requirements and prove the installation is safe to use through mandatory testing.

Gas appliances, piping, electrical cables, switches and other parts of an installation must comply with Australian Standards for safety.

When electrical or gas fitting work is undertaken in a domestic residence, the owner is usually not competent to judge whether the work is being performed safely or that any new electrical or gas installations are safe to use. Similarly, a person in control of an industrial workplace (consumer installation) may not have the technical aptitude to ensure the electrical or gas fitting work is being done safely. It is therefore imperative that the legislation is effective in ensuring electrical work and gas fitting work meet prescribed technical safety requirements and deliver safe electrical installations for consumers.

Under electrical and gas safety legislation, electrical contractors and gas fitters must certify that the work they have undertaken is complete, is safe, complies with the legislation and is ready for connection to the energy supply. This certification is made by submitting a signed compliance notice to the relevant gas supplier or electricity network operator or, where installations are not connected to a network, to the Director. These notices are the main indicator of work activity in industry and are the trigger for installation inspections.

To have confidence that work is being performed safely by operatives to the required safety standards and to a trade-finish, network operators are required to inspect all work for which they receive a notice or a sample of this work if they have an approved Inspection System Plan. The sampling system is based on the historical safety performance of the operatives, volume of work they undertake, and the complexity of the installation work undertaken.

All inspectors employed by network operators are designated by the Director of Energy Safety under the *Energy Coordination Act 1994*. Under their Inspection System Plans, network operators and gas suppliers are required to conduct a preliminary assessment of defects and breaches they uncover during their inspections. The less serious cases are generally dealt with by inspectors issuing Inspector's Orders and Notices of Defect, requiring corrective actions be undertaken. The more serious breaches are referred to the Director for further action.

Building and Energy's electricity and gas inspectors review the referrals from network operators and gas suppliers and decide on the compliance actions required. They will generally complete the investigations.

Building and Energy receives all notices for work undertaken on installations not connected to an electricity network or a gas supplier's system. A large proportion is for work associated with resources projects. Inspections of these installations are undertaken by Building and Energy's in-house inspectors, who also conduct inspections of retail outlets selling appliances and domestic properties for compliance with particular safety laws, such as the use of RCDs. It also audits the network operators' and gas suppliers' approved Inspection System Plans on a regular basis to ensure they are complying with those plans and maintaining an adequate system of inspection.

Building and Energy devotes significant resources to investigating serious accidents and fatalities.

5.3.2 Safety of consumer appliances, equipment and building products

Electrical equipment ranges from consumer goods, such as washing machines, televisions and smart phones through to large industrial machines. Switches, plugs and switchboard components in a building are also electrical equipment. Gas appliances are typically used in domestic settings, and include water heaters, cooktops, space heaters, and outdoor appliances such as barbecues. Commercial catering appliances are typically used in commercial kitchens and restaurants.

Building and Energy administers legislation which aims to minimise the hazards of electricity and gas and to reduce the risks of electric shocks, fire, explosion, burns and asphyxiation. Consumer exposure to the risks of electricity and gas is greatest when using their energy appliances.

The legislation prohibits the sale of household electrical and gas appliances unless approved by an Australian regulatory authority. The Director maintains and publishes registers of prescribed items requiring approval, as well as the minimum safety requirements which such equipment must meet. Prescribed electrical and gas equipment is required to meet relevant Australian and New Zealand Standards, be independently tested and approved for sale by an Australian safety regulator. Similar requirements apply across jurisdictions in Australia.

Building and Energy undertakes audits of retail outlets to ensure appliances prescribed by the Director bear the required certification labels and are safe. There continues to be a trend for gas and electrical appliances to be sourced from overseas, often via non-traditional purchasing practices, such as the internet. Many of these appliances do not meet Australian Standards and are unsafe. Building and Energy is involved in removing these items from sale and educating the public on the safety risks posed by unsafe appliances.

5.3.3 Safety of electricity and gas networks

Electricity and gas are supplied to households, businesses and industry through large networks. Pipelines convey large quantities of fuel gases for industrial purposes and to consumers. Electricity poles and wires are easily identified in the streetscape and countryside, but gas networks and large pipelines are usually hidden underground. All need to be designed, built, operated and maintained to prevent dangerous failures, and all are susceptible to damage by environmental and man-made threats.

Building and Energy administers safety regulations applicable to all electricity and gas distribution networks which have implications for community safety.

Gas and electricity network operators have extensive assets located in road reserves and other areas open to public access. It is essential that these assets are designed, constructed, operated and maintained in a manner that ensures public and community safety. Failures of asset management systems have in the past led to several major accidents, to which Building and Energy has had to devote significant investigation resources.

Building and Energy actively monitors network safety incidents and gauges the effectiveness of network operators' asset management strategies. It engages proactively with electricity and gas network operators to ensure they maintain sound asset management systems. Identifying, describing and assessing public safety risks associated with electricity and gas distribution are critical components of Building and Energy's role.

Gas network operators are required to develop Safety Cases to manage their risks. Similarly, electricity network operators are required to develop and implement Safety Management Systems to manage their network's safety.

Under electrical and gas safety legislation, gas suppliers and network operators must notify the Director of Energy Safety of all serious incidents. Building and Energy investigates all such notifiable incidents and devotes significant resources, which often require technical specialist skills.

5.3.4 Safety of electricity and gas workers and workplaces

Building and Energy ensures the safety of electricity and gas workers by enforcing prescribed safety requirements and providing guidance on safe work practices.

A licensing system is in place to ensure only competent workers carry out electrical and gasfitting work in WA. The Electricity (Licensing) Regulations 1991 and Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999 provide that electrical and gas work in consumer installations may only be carried out by persons with the appropriate worker's licence, unless it is a type of work that is exempt by regulation.

Only those who meet national competency standards are eligible to be licensed. A disciplinary process is also in place to ensure that only competent workers remain licensed. The competency standards cover work practices, equipment and installation.

The legislation prescribes the minimum safety standards to ensure safe electrical and gas installations. It also prescribes work practices which must be adhered to by licensed electrical and gas workers and contractors to ensure their own safety and those of their co-workers.

The Electricity (Licensing) Regulations 1991 was amended in 2018 to prescribe the minimum safe work practices when working on or near energised electrical installations. The legislation also prescribes the minimum supervision requirements which must be afforded to electrical workers undergoing training.

Performance indicators, safety statistics and key achievements

6. Performance indicators

6.1 Regulatory work indicators

The following performance indicators provide an overview of the type and volume of Building and Energy's regulatory work, as well as the influence of this work on energy safety outcomes.

6.1.1 Electricity	19–20 Target	19–20 Actual	20–21 Target*
Measures			
Electricity related deaths	0*	3	0*
Electricity related accidents ¹ (including fatalities)	12	13	12
Electrical installations inspected and found non-complying (includes matters not directly affecting safety)	10%	6.7%	10%
Number of audits of electricity network operators' Inspection System Plans ^{2&3}	2	1	1
Investigations under Acts and Regulations ³	300	226	200
Seminar, Education Program and Training (licensees, network operators and public) ³	100	55	50

6.1.2 Gas	19–20 Target	19–20 Actual	20–21 Target*
Measures			
Gas related deaths	0*	2	0*
Gas related accidents ¹ (including fatalities)	8	8	8
Gas installations inspected and found non-complying (includes matters not directly affecting safety)	7.5%	2.1%	7.5%
Number of audits of gas suppliers Inspection System Plans ²	2	4	2
Investigations under Acts and Regulations ⁴	500	343	300
Number of Type A and type B gas appliance variations–exemptions granted	20 ^a	0	20 ^a
Presentations to industry or other groups	50	122	50

△ Target based on current edition of AS 3814-2009 and known future gas turbine installations in power stations

* Building and Energy aspires to a target of zero fatalities but has no direct control over accidents and fatalities. It strives through education, policies and enforcement to prevent any fatalities.

- 1 Accidents are defined as serious safety incidents where a person has received some type of medical treatment (other than just precautionary assessment tests) from a health professional, in a hospital or similar.
- 2 Inspection System Plans of energy distributors have a life cycle of several years and hence compliance audits are timed to fit with that cycle.
- 3 2020–21 targets for electricity measures have been revised as the branch has lost a third of its inspectors in the year and does not have a full complement of inspectors and engineering staff.
- 4 The target for investigations in the gas branch have been revised to reflect consistency of processes across the electricity and gas areas.

6.2 Key performance information

During 2018–19, DMIRS transitioned to a new outcome-based management framework. The framework represents strategic direction and alignment to government goals. Energy Safety outcomes are linked to the Government's goal of **Strong Communities: Safe communities and supported families**. This connects to the DMIRS desired outcome of: **Supporting a safe, fair and responsible future for the Western Australian community, industry and resources sector**.

DMIRS adopted high level, aggregated key performance indicators (KPIs), for which the following apply to the energy safety functions.

6.2.1 Key effectiveness indicator

The indicator applicable to Building and Energy to measure its effectiveness in achieving the desired outcome is:

- Satisfaction with DMIRS as an effective industry regulator.

To determine our influence in delivering effective regulation to support sustainable industry development an annual stakeholder satisfaction survey (survey) was introduced in 2018–19. This survey was planned to be conducted during April/May 2020.

However, due to the COVID-19 coronavirus emergency, it was not considered appropriate to conduct the survey during a period when many of our stakeholders were being adversely impacted by trading and social restrictions. An exemption from reporting the results of this KPI was approved by the Under Treasurer.

6.2.2 Key efficiency indicator

Key efficiency indicators demonstrate how efficiently we are conducting our activities and can be represented as an average cost per service transaction. Building and Energy was assessed under the indicator:

- Average cost per transaction to deliver industry advice and regulation services.

A transaction is defined for this indicator as:

- an action by DMIRS to provide a service or regulatory action to an external stakeholder, initiated by either party.

An action refers to community education and media services, addressing an enquiry, determination of an application, licence or registration, resolution of a complaint or conciliation, and finalisation of compliance actions such as an investigation, inspection, audit, and/or legal matter, all of which are only counted once finalised (e.g. investigations are counted based on the date that the investigation was finalised).

The target for this KPI was based on a methodology which has since been amended after the targets were published in the 2019–20 State Government Budget, and therefore the 2019–20 result is not comparable to the target (\$153). Some forms of transactions were added or removed from the measure. For example, new activities were delivered by DMIRS as part of the State Government's COVID-19 response. These activities were not related to Energy Safety functions.

Key effectiveness indicator	2018–19 Actual	2019–20 Actual
Average cost per transaction to deliver industry advice and regulatory service	\$184	\$206

This efficiency indicator is highly aggregated. Many of the transaction categories included were affected by industry, community and our response to COVID-19. Some of our activities were paused, as they were deemed non-essential, while others increased in demand, such as DMIRS consumer advisory and conciliation services.

The average cost per transaction to deliver industry advice and regulation services was higher (12 per cent) than that recorded in 2018–19. This is driven by a higher cost of the service (9 per cent) and fewer transactions (2 per cent) than in the previous year.

6.2.3 Key indicators – Energy Safety

A desired outcome related to energy safety is:

- A community in which the use of electricity and gas is regulated and safe.

The indicators used by Building and Energy to internally measure its effectiveness in achieving this desired outcome are:

	18–19 Actual	19–20 Target	19–20 Actual	20–21 Target
The number of electricity-related serious injuries and fatalities per million population	3.82	0 ⁵	4.90	0 ⁵
The number of gas-related serious injuries and fatalities per million population	3.82	0 ⁵	1.88	0 ⁵

7. Electricity and gas safety statistics

7.1 Electricity and gas safety statistical outcomes

Building and Energy is continually developing its data and analytics capability to become more risk focused, evidence based and targeted in its regulatory activities.

Each year, Building and Energy publishes statistical information about electricity and gas incidents occurring during the previous financial year. An analysis of such data found that gas and electricity related incidents involving energy consumers have been trending down over time.

The electricity and gas safety outcomes for Western Australia are summarised below, based on incidents reported by industry and the general public. The reported incidents are recorded in Building and Energy's Compliance Management System (CMS) and the data presented in this Plan reflects the information available as of 1 July 2019.

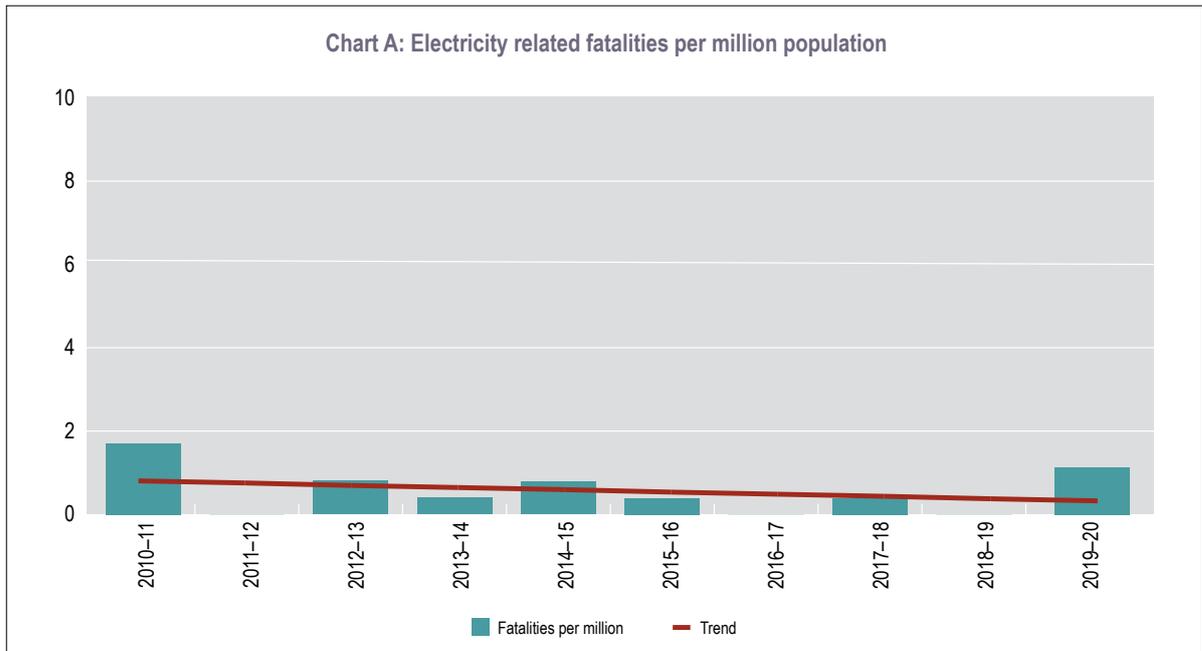
⁵ The budget targets are set for these indicators at 0 as the desired outcome to be achieved is to have no serious injuries and fatalities.

7.1.1 Electrical safety statistics

Electrical fatalities

During 2019–20 there were three fatalities reported in Western Australia where electricity was involved.

Despite the increase compared to the previous year, the number of fatalities per million population related to electricity continues a declining trend over the 10-year period.



This general improvement over a long period can be attributed to the effectiveness of sustained industry-wide efforts to improve safety outcomes, including Building and Energy’s legislative reforms and compliance activities.

In 2018, legislative amendments were passed requiring RCD protection of every individual power and lighting circuit in homes. These amendments along with safety awareness campaigns are demonstrating improved safety outcomes. Electrical inspectors continue to proactively inspect homes displayed for lease or sale, to ensure compliance with RCD laws to improve public safety.

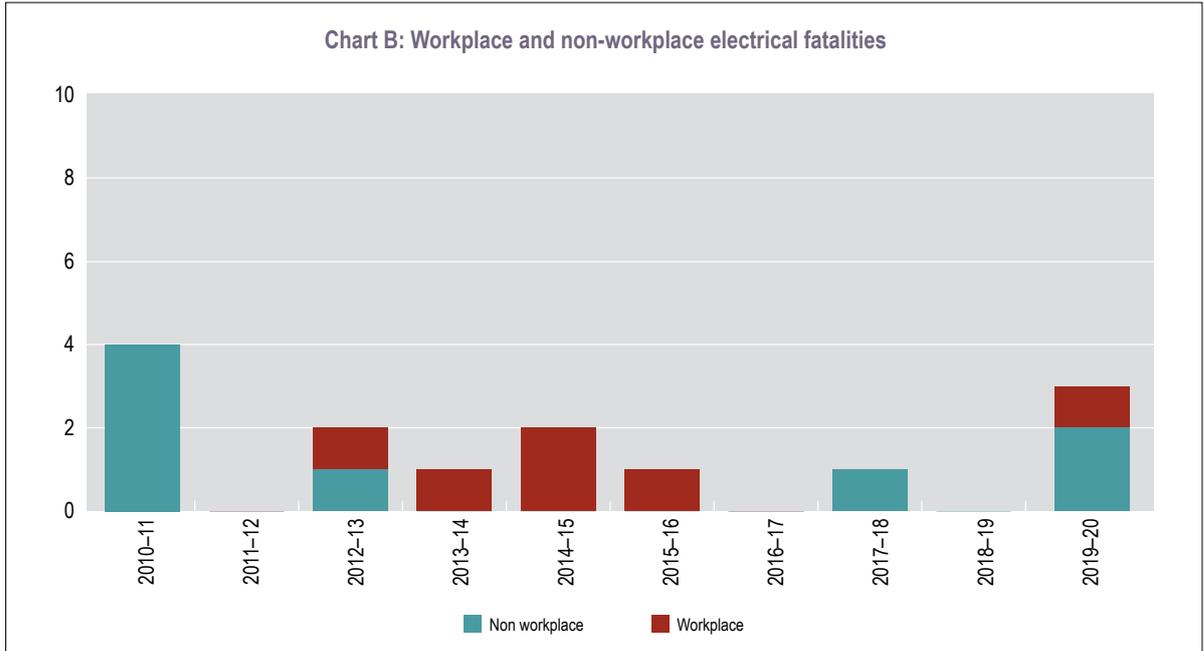
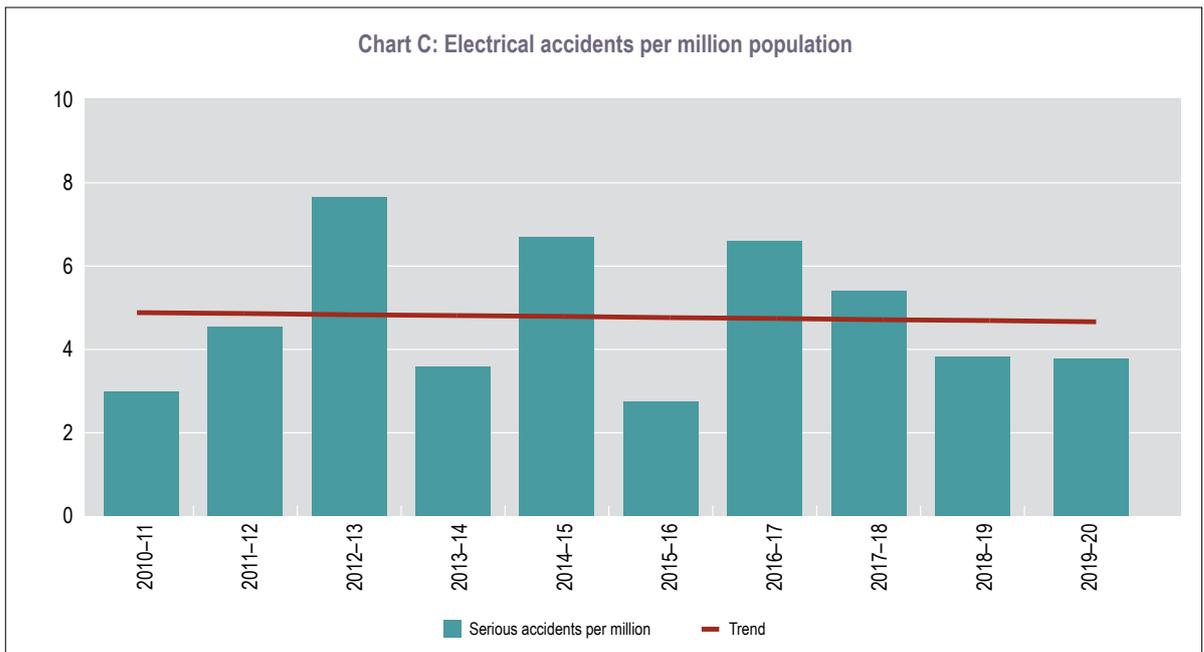


Chart B above provides an indication of workplace and non-workplace fatalities over the 10-year period.

Electrical accidents – non-fatal

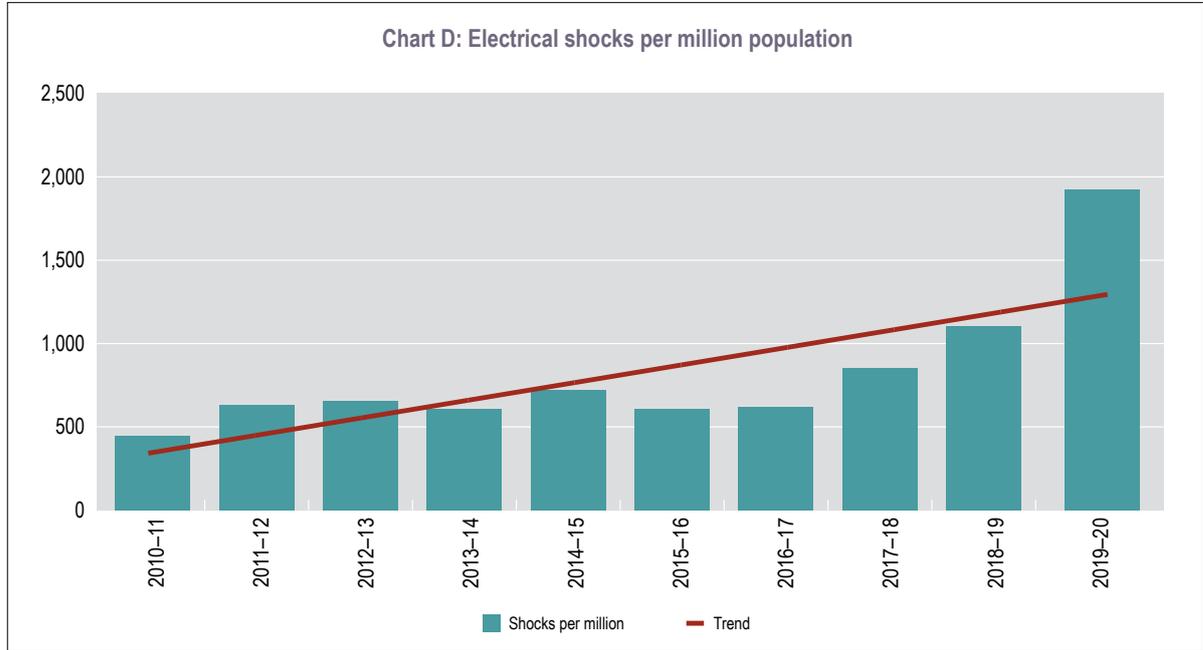
The number of electrical accidents (non-fatal) per million of population in WA has remained steady over the past 10 years (Chart C). During 2018–19 and 2019–20, there were 10 non-fatal accidents reported.

Accidents have been broadly classified into serious electrical accidents, which typically require the victim to be hospitalised for treatment of injuries, and electrical accidents (medical treatment) where first-aid or medical attention, excluding attendance for a precautionary electrocardiograph (ECG) is sufficient for the treatment of injuries sustained in the incident.



Electric shocks

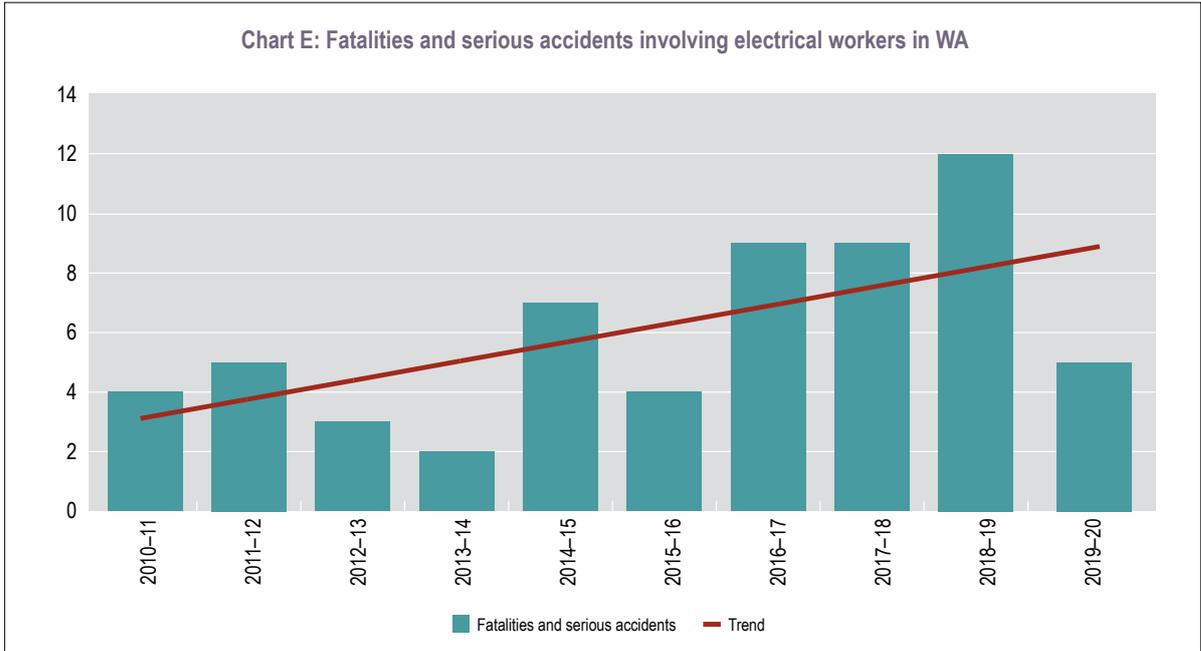
Generally, an electric shock that does not cause injury or harm may be experienced due to an error by a person (e.g. contacting energised parts), faulty equipment in the home or workplace, or due to a fault or deficiency with the electricity supply network.



During 2019–20, there were 5,104 electric shocks reported compared with 2,889 in 2018–19. This represents a 77 per cent increase compared to the previous year. The shocks and tingles advertising campaign was conducted during 2019–20. The increase in reported shocks is attributed to a greater general public and industry awareness about the importance of reporting such incidents resulting in an increase in the proportion of incidents that are reported to network operators.

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.

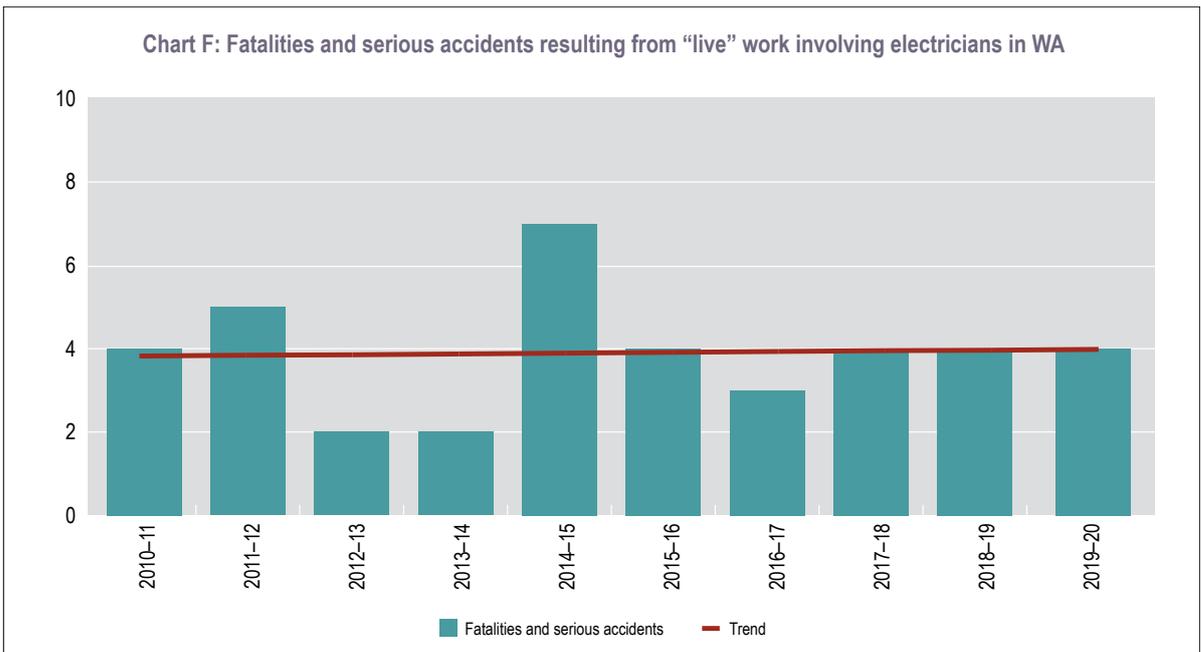


The trend for fatalities and serious accidents involving electrical workers (Chart E) shows an increase over the 10-year period.

Two initiatives to address these incidents were implemented in 2017–18. New regulations restricting work on energised electrical equipment and a new Code of Practice for persons working on or near energised electrical equipment were published. New guidelines were published on the appropriate levels of supervision to be applied to electrical apprentices.

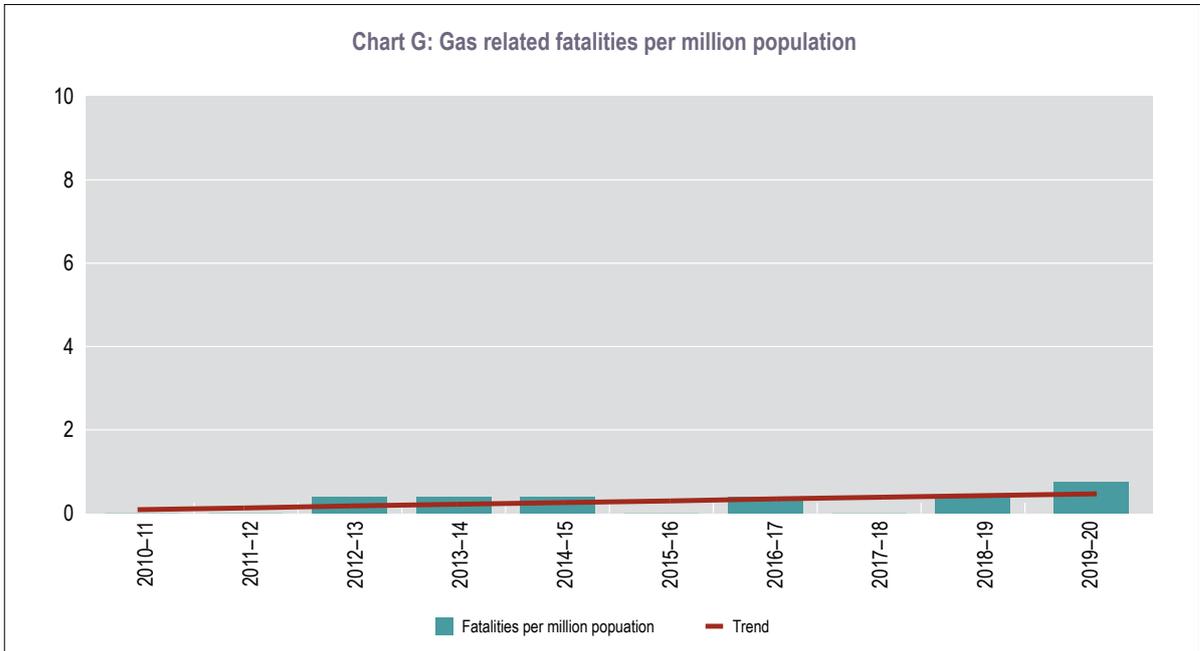
The number of fatalities and serious accidents resulting from 'live' work (Chart F) has remained consistent over the past three years, but there are still an unacceptable number of these events.

The spike in 2014–15 is due to the Morley Galleria Shopping Centre explosion where two electrical workers died, and two others were seriously injured.



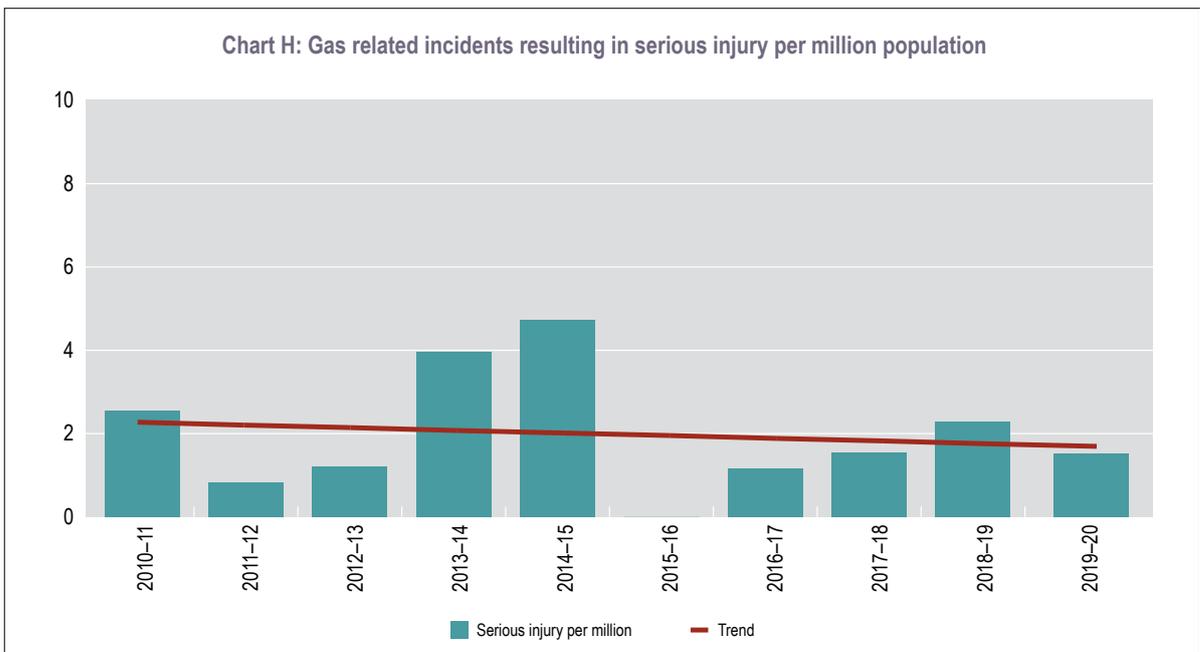
7.1.2 Gas safety statistics

The two gas related fatalities reported in 2019–20 were related to the same incident, which involved mobile camping equipment.



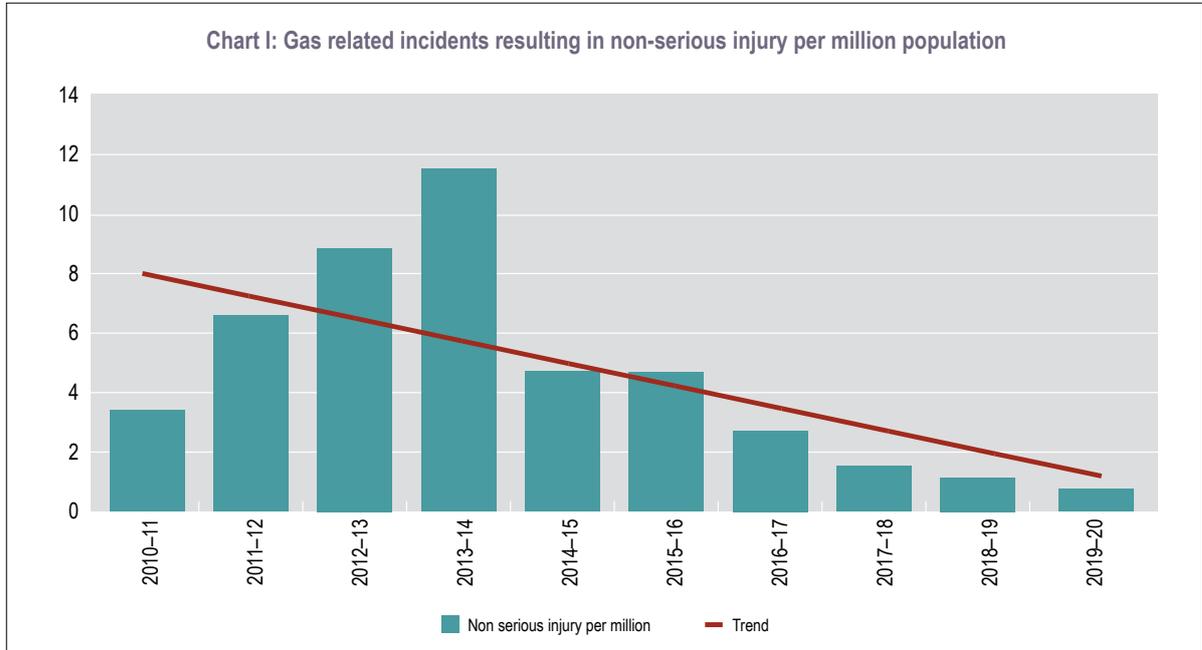
Gas accidents – serious injury

The number of serious injuries per million population has shown a declining trend over the reporting period. Building and Energy has increased its efforts to improve public safety awareness about the dangers of gas and the importance of using it safely. From the trend, it is evident that Building and Energy’s proactive campaigns are being effective.



Gas accidents – non-serious injury

Incidents that do not result in a fatality and/or do not require the victim to be hospitalised or seek medical treatment have been categorised as those resulting in non-serious injury. The overall trend shows a significant decrease during the 10-year period and positive improvement in recent years.



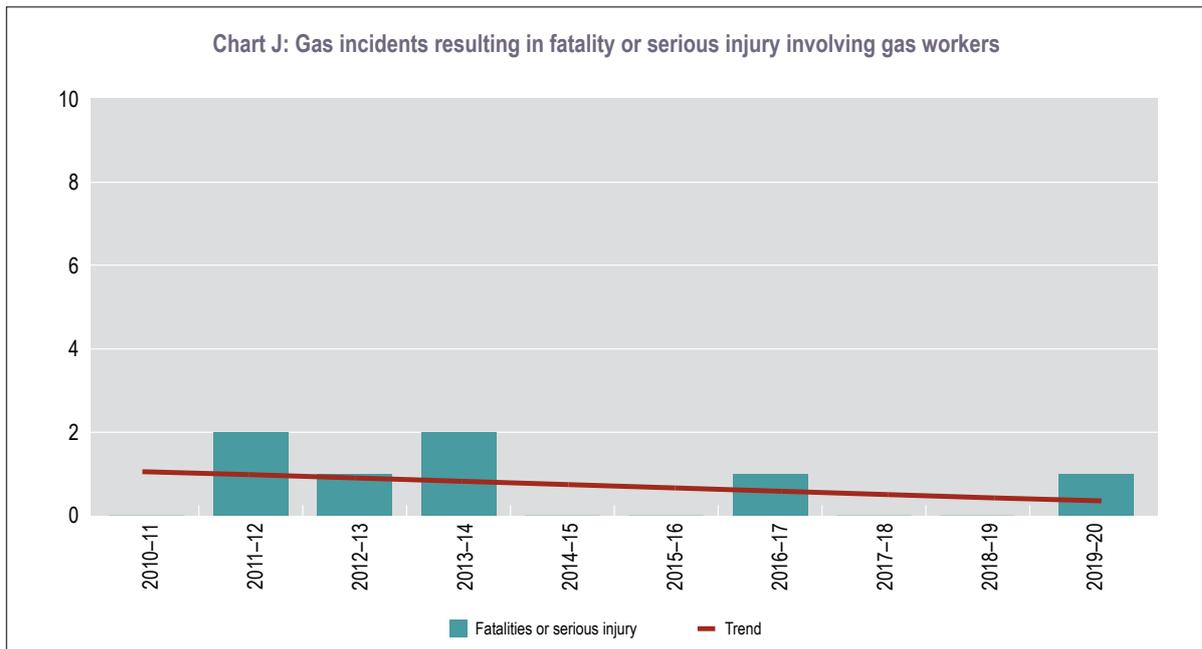
Gas worker safety

There have been no gas-related fatalities involving gas workers over the 10-year period.

The results shown in Chart J below relate only to gas incidents that caused serious injury.

It is noted that serious injuries involving gas workers are significantly lower in comparison with electricians.

In general, workplace practices and procedures for gas workers appear rigorous and effective in ensuring safety of workers.



8. Key achievements

8.1 Shocks and tingles safety awareness campaign

Building and Energy launched a public safety campaign, in collaboration with network operators Western Power and Horizon Power, to urge Western Australians to take potentially life-saving action by immediately reporting all electric shocks or tingles to their electrical network operator.

The public awareness campaign was conducted using various media including television commercials, billboards, digital and social media. It was hugely successful in gaining a high level of public interest and engagement. The campaign led to a significant increase in the number of electric shocks reported to the network operators. Network operators have also been very responsive, which saw the early detection of many defects which could have led to injuries or deaths.



8.2 Completion of the investigation into the multiple fatalities on Wedge Island

Building and Energy has completed its investigation into the tragic accident which led to the deaths of a father and his 11-year-old son in a tent near Wedge Island, north of Perth.

Building and Energy's investigation found the accident resulted from the use of a portable liquefied petroleum gas (LP gas) operated refrigerator in a tent. The findings of the accident serve as a serious reminder about the dangers of using mobile gas appliances in indoor spaces, such as tents.

Building and Energy has as a result commenced several initiatives to prevent such re-occurrences. It has increased its proactive inspections of camp sites and caravan parks and is developing a wide-range of public awareness initiatives to increase awareness about the importance of using gas appliances safely.

8.3 Proactive measures to limit encroachments of built structures near network operator assets

The risks and potential consequences of an electrical incident involving building encroachments near network operator assets are significant, especially for high voltage. The danger justifies stringent safety design criteria for buildings to prevent injury to persons and major damage to electrical installations and buildings.

In 2019–20, Building and Energy issued the *Guidelines for the safety of buildings near network operator assets*, under Section 33AA of the *Electricity Act 1945*, to assist property owners, building surveyors, planners, architects, builders and local governments. It provides guidance about the factors which should be taken into consideration when designing buildings, signs and other structures near electricity infrastructure.



8.4 Guidelines for electricity network operators' Inspection System Plans

Regulation 253 of the Electricity Regulations 1947 provides for the Director of Energy Safety to issue guidelines setting out the technical, investigative, reporting, administrative and other requirements for electricity network operators' inspection system plans.

Guidelines which set out the core elements which electricity network operators must address in their respective Inspection System Plans were previously published by the Director in 2013. Inspection System Plans complying with the 2013 Guidelines were approved by the Director in 2015 and have been in use for 5 years.

During 2019–20, Building and Energy has been reviewing the effectiveness of approved Plans and investigating measures to improve the efficiency and efficacy of the inspection regimes. This work culminated in the development of new Guidelines being released by the Director in December 2020.

Business environment and challenges

9. Western Australia's energy industry environment

Emerging technologies, an ever-increasing reliance on imported consumer electrical products and the aging of the energy infrastructure in Western Australia will continue to influence Building and Energy's workload.

The volume of work undertaken depends on several key factors:

- the size of the industry, i.e. the number of licensed operatives;
- the volume of installation work undertaken by electrical and gas operatives;
- the defect rate in the work undertaken by licensed operatives;
- the number of energy-related incidents;
- the complexity of investigations; and
- the performance of network operators in managing their public-safety risks.

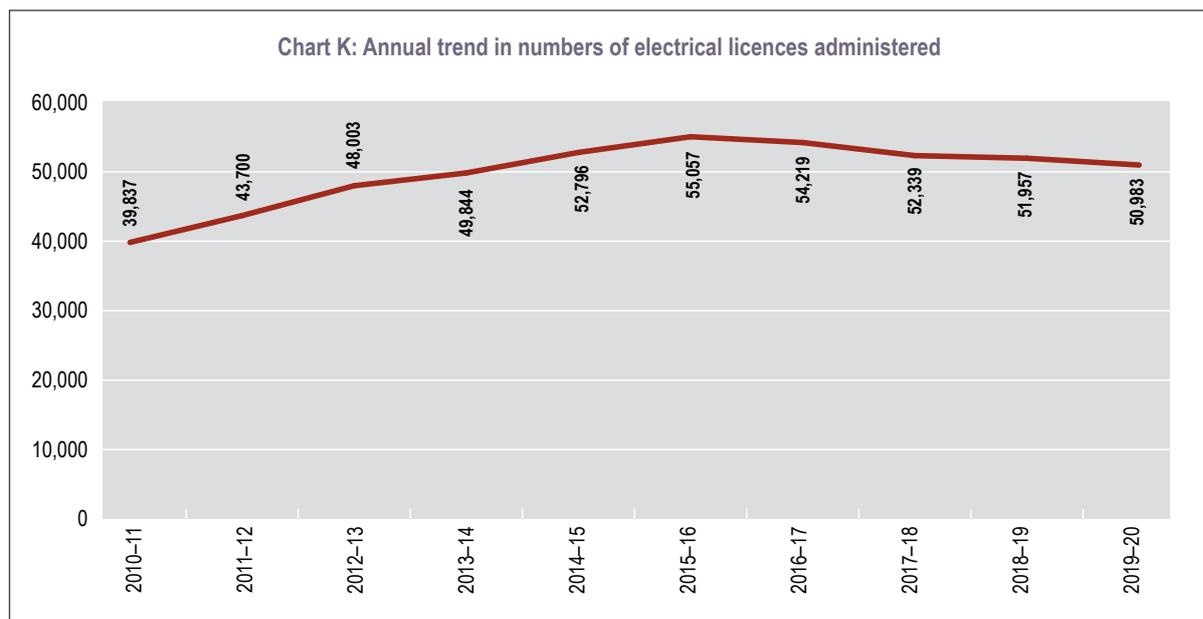
It is well documented that there has been a downturn in the State's resources sector and reduced construction activity in Western Australia. However, these have not eased the regulatory burden on Building and Energy. Work-demand trends to date show no sign of abating.

9.1 Size and growth of the industry – number of licensed operatives

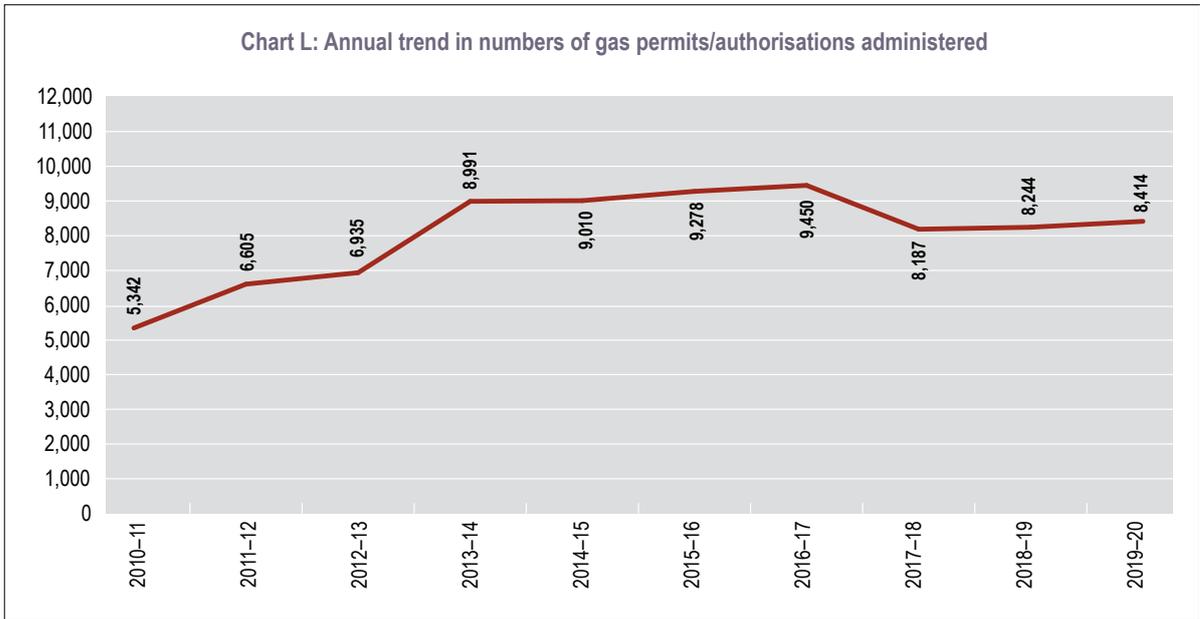
From the number of licensed operatives in Western Australia, it is clear the size of the gas and electrical industries has contracted slightly in recent years. The number of licensed electrical operatives grew steadily since 2007–08, plateaued during 2016–17 and has dropped off further in 2019–20. The number of gas permit/authorisation holders increased from 2010, but has declined since 2016–17.

The decrease in the number of operatives in the industries seems to have resulted from the impact of the cooling mining investment cycle that began in about 2015.

In 2007 (the year after industry funding was implemented), there were 29,872 electrical worker's licences. In 2020, there were 50,983, an increase of 71 per cent over the period.



In 2007, there were 5,765 gasfitting permits and authorisations. In 2020 there were 8,414, an increase of 43 per cent over the period.



Increased population coupled with the expansion of domestic building and construction work, means that the long-term increasing trends are not likely to significantly drop over the next three to five years, although a slow-down in the rate of increase was expected and is now being realised. This has become apparent in the number of electrical licences and gas permits/authorisations administered.

The above aggregated numbers show a 31 per cent increase in the total number of licenced operatives in WA in the past 10 years.

During 2021–22, Building and Energy will work with regulators in other jurisdictions to implement the decision by National Cabinet to progress Automatic Mutual Recognition of occupational licences across Australia, including electrical and gas licences and permits.

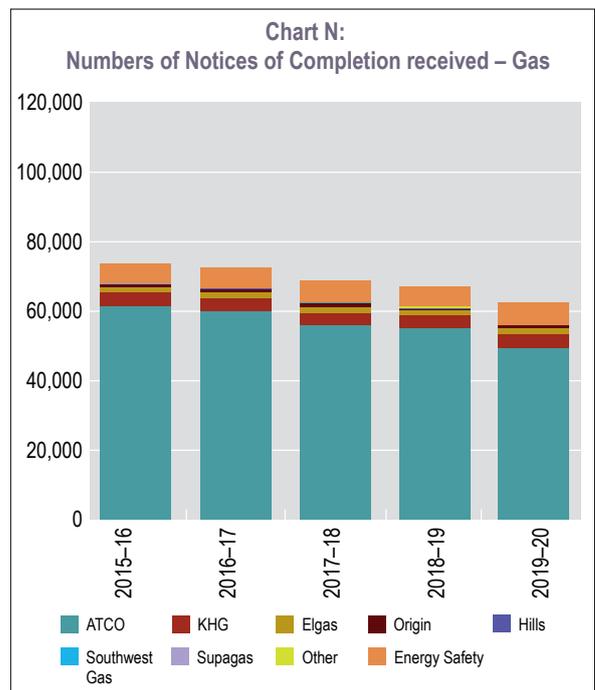
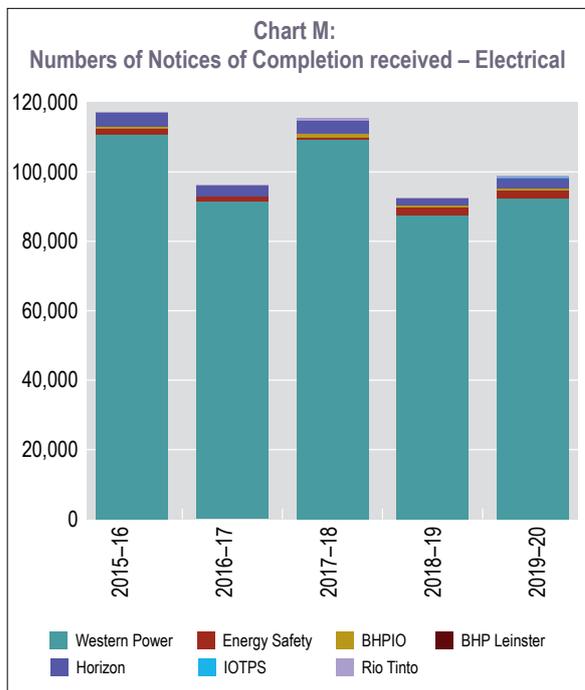
9.2 Volume of installation work performed by electrical and gas operatives

Under electricity and gas safety legislation in WA, electrical contractors and gasfitters must certify that the work they have undertaken is complete, safe, complies with the legislation and is ready for connection to the relevant energy supply. This certification is made by submitting a Notice of Completion (notice), to the relevant gas supplier or electricity network operator and, where installations are not connected to a network, to Building and Energy.

These notices represent the primary indicator of the activity in industry and are the trigger for installation inspections.

The number of notices received by Building and Energy and electricity network operators for major work increased from 92,594 in 2018–19 to 98,814 in 2019–20.

In the gas area, the number of notices received by Building and Energy and the gas network operators decreased from 67,212 in 2018–19 to 62,497 in 2019–20.



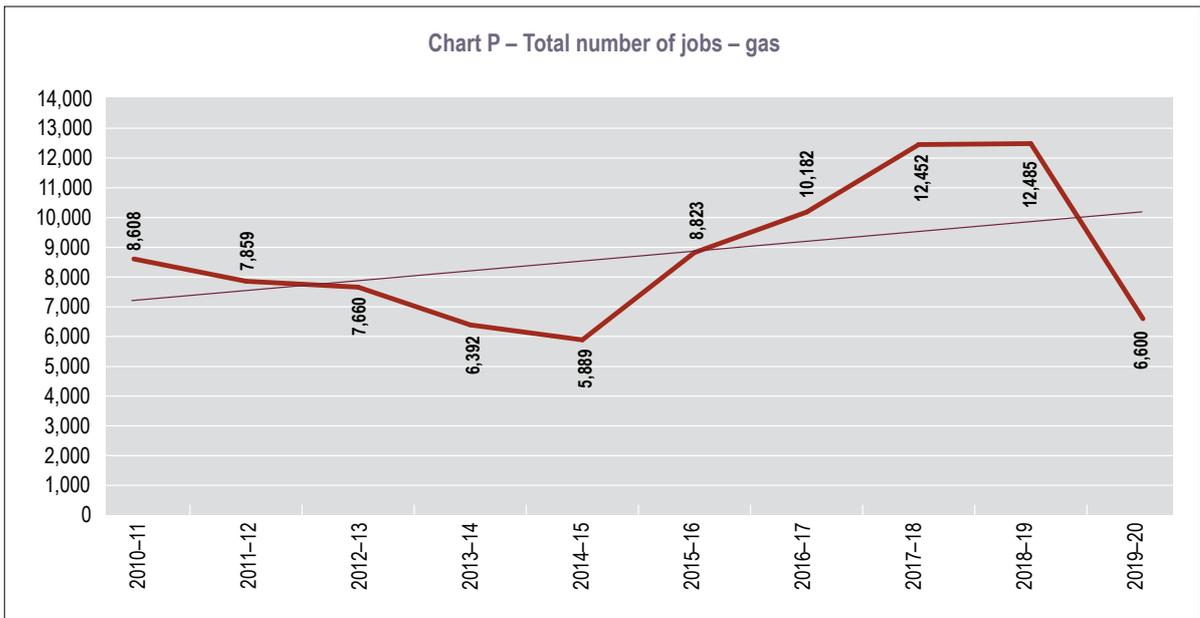
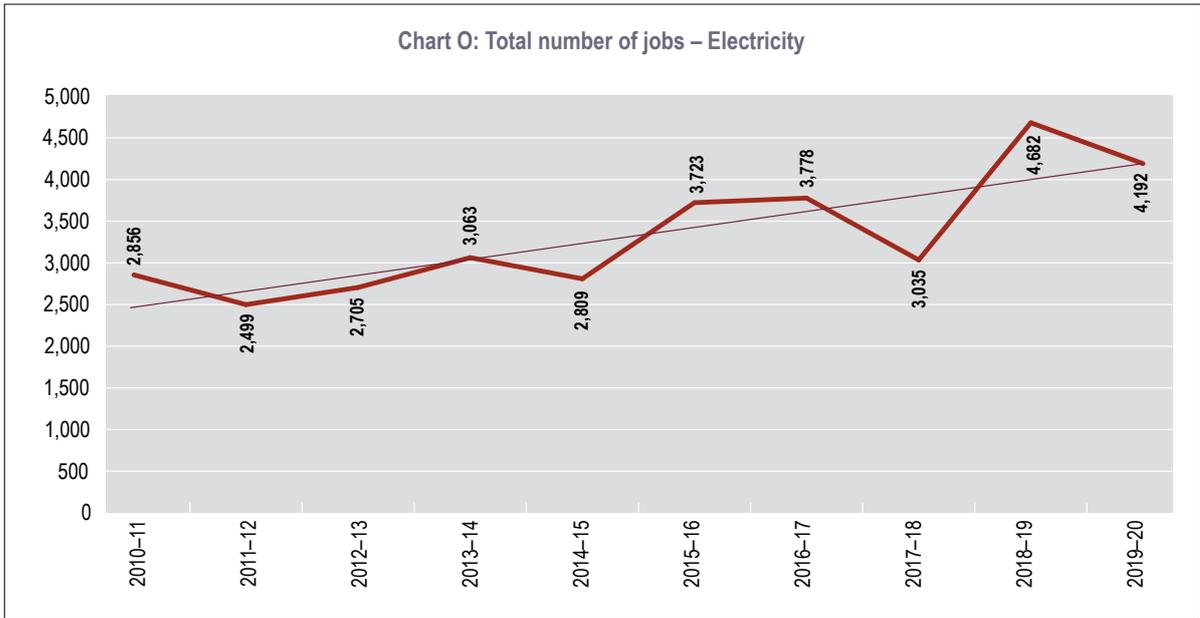
9.3 Compliance inspection of electrical and gas installations

To gain sufficient confidence that work is being undertaken by operatives safely, to the required safety standards and to a trade-finish, a sampling system, based on the historical safety performance of the operatives, volume of work they undertake and the complexity of the installation work undertaken, is used.

Under their Inspection System Plans, gas and electricity network operators are required to conduct a preliminary assessment of defects and breaches they uncover during their inspections. The less serious cases are generally dealt with by an inspector issuing an Order requiring corrective actions to be undertaken. The more serious breaches are referred to Building and Energy for further action, and they generally trigger an investigation.

On average, 25 per cent of electrical installations and 5.5 percent of gas installations for which a notice is received is inspected annually by electricity and gas network operators respectively.

9.4 Volume of compliance work undertaken by Building and Energy



Note: The above graphs indicate the electricity and gas workloads. Due to differences in type of jobs, their classification and complexity, the overall numbers cannot be compared between electricity and gas. However, they indicate the trend in workload for each energy sector.

Job types vary between electricity and gas in their classification and complexity. They may include (but are not limited to) advice, training, audits, compliance inspections, investigations, notifications, projects, infringements, prosecutions and disciplinary actions.

The number of jobs for electricity have decreased slightly in 2019–20 compared to 2018–19. The significant reduction in gas jobs is due to an amendment in the categories of jobs as they are recorded in the compliance management system.

9.5 Inability to attract and retain technical staff

Building and Energy has been facing significant challenges to attract and retain technical staff to undertake its regulatory functions. As at 1 December 2020, Building and Energy has five vacant electrical inspector positions and two electrical engineer vacancies. Some changes of practice, prioritisation and rescheduling of work programs over time has become necessary while the Human Resources Branch continues to work towards finding a solution.

Initiatives to manage the challenges

10. The period ahead – significant issues impacting Energy Safety

The functions of the Director have significantly expanded since establishment on 1 January 1995, including taking on major additional responsibilities such as gas network regulation (2000), electricity network regulation (2001) and gas heating value regulation (2007).

Industry funding for energy safety functions has now been in place for 14 years and a major focus in the period ahead is to maintain appropriate staff resources and expertise to enable continued delivery of the regulatory and safety outcomes expected by the government, community and the gas and electricity industries.

10.1 Major policy initiatives

To address the challenges ahead, Building and Energy proposes to implement or continue the following initiatives during 2021–22:

10.1.1 Review of the *Electricity Act 1945*

In April 2020 the Government released its Distributed Energy Resources Roadmap which details its proposed overhaul of the Western Australian electricity market's regulatory framework to better manage ongoing structural and technological changes. While the implementation of this reform program is being led by Energy Policy WA, principally through amendments to the *Electricity Industry Act 2004* and its associated regulations, some such amendments will require facilitating amendments to the *Electricity Act 1945*.

Building and Energy will prioritise such work in 2021–22 to ensure that the electrical market and electrical safety legislative frameworks continue to operate cohesively and that the Government's strategic policy objectives are achieved.

As part of this project, Building and Energy will be seeking the Minister's approval to undertake a review of the *Electricity Act 1945* (the Act). The review will examine how effective the Act is in dealing with new trends in electricity generation, distribution and use, as well as its interaction with other legislation. Building and Energy will further seek to repeal and replace Part IV of the Act in order to adopt the nationally consistent Electrical Equipment Safety Scheme into Western Australian law.

10.1.2 Proposed amendments to the *Electricity (Network Safety) Regulations 2015*

Building and Energy has become aware of issues with some definitions, offences and ancillary provisions in the *Electricity (Network Safety) Regulations 2015* which are causing uncertainty with regard to the scope of network operator obligations and the Director of Energy Safety's ability to prosecute for apparent failures under the legislation.

A suite of proposed amendments has been developed to resolve these issues. This suite of proposed amendments also seeks to expand the scope of the *Electricity (Network Safety) Regulations 2015* to capture newer supply arrangements, such as 'stand-alone power systems', which are being rolled out by network operators in sparsely populated regional areas.

Drafting of the proposed amendments has been approved by the Minister and is currently underway.

10.1.3 Review of the Electricity (Licensing) Regulations 1991

Several amendments will be proposed to the Electricity (Licensing) Regulations 1991. These include amendments to:

- the ‘fit and proper’ requirements;
- make it easier for apprentice electricians to start working upon commencement of their apprenticeships;
- allow for the duration of contractor licences to be extended to align with other licences issued by DMIRS; and
- establish a right of appeal to the State Administrative Tribunal with respect to decisions of the Electrical Licensing Board.

10.1.4 Review of the Gas Standards Act 1972

In November 2020 the Government released its Renewable Hydrogen Roadmap which proposes, among other things, to blend hydrogen at a rate of 10 per cent into the natural gas supplied to residential and commercial consumers through reticulated networks. The *Gas Standards Act 1972* is being reviewed to determine what measures will be necessary to accommodate this proposal. In this vein, a suite of proposed amendments to the Gas Standards (Gas Supply and System Safety) Regulations 2000 is being finalised. With regard to the Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999, new gasfitting standards will have to be developed to ensure the safety of consumers’ gas appliances and new subclasses of gasfitting permit will need to be considered for authorising persons to carry out hydrogen related gasfitting work.

10.1.5 Enhancements to the compliance enforcement regime for electricity and gas safety

Building and Energy will examine the feasibility of amending legislation to expand its ability to issue infringement notices for less serious offences under the *Electricity Act 1945* and the *Gas Standards Act 1972*.

Given the lag between the time of electrical or gasfitting work being carried out and Building and Energy being notified of any issues with that work; the time required to undertake investigations and the strict time limits imposed under the *Criminal Procedures Act 2004*, Building and Energy’s ability to issue infringement notices is currently quite limited.

10.1.6 Proposed mandatory skill maintenance for licensed electrical workers

The National Electrical and Communications Association of WA, the Electrical Trades Union and key industry stakeholders who are represented on the Electrical Licensing Board, have advocated for the introduction of mandatory skills maintenance or professional development requirements for licensed electrical workers. Building and Energy will work with the Electrical Licensing Board to develop a regulatory impact analysis to examine the issue.

10.2 Other initiatives

10.2.1 New electricity network operators Inspection System Plans

The Electricity Regulations 1947 require network operators to inspect all new or modified electrical installations prior to connecting or reconnecting them to a supply of electricity unless connection without prior inspection is permitted under an Inspection System Plan approved by the Director of Energy Safety.

The Director published new Inspection System Plan Guidelines in December 2020. Building and Energy will engage with network operators to assist them in developing their Inspection System Plans to comply with these new Guidelines.

It is anticipated that network operators will be implementing their new Inspection System Plans in 2021–22. Once this occurs, Building and Energy will start a fresh compliance auditing program.

10.2.2 Guidelines for gas network operators' Inspection System Plans

The *Gas Standards Act 1972* provides for gas network operators to prepare and submit an Inspection Policy Statement and Plan to the Director of Energy Safety. This ensures the safety of a consumer's gas installations and gas appliances and monitoring the work of those who carry out any operation, work or process of the nature of gasfitting on the gas installation of a consumer supplied with gas. The Act also provides that the network operators' Plans have to comply with Guidelines published by the Director.

During 2020–21, Building and Energy has been reviewing the effectiveness of approved Plans and investigating measures to improve the efficiency and efficacy of the inspection regimes.

To assist gas network operators to comply with their obligations under the legislation, the Director of Energy Safety will publish new Guidelines for Inspection System Plans during 2021–22.

10.2.3 Public safety awareness campaign about the correct use of portable outdoor gas appliances

Portable liquefied petroleum gas (LP gas) appliances are designed to be used in open outdoor areas only. To burn cleanly and efficiently, one cubic metre of LP gas requires 24 cubic metres of air. Burning LP gas indoors or in a semi-enclosed space causes incomplete combustion where the main product is toxic carbon monoxide.

Carbon monoxide (CO) is a colourless, odourless and tasteless poisonous gas that can cause death or chronic illness. CO is produced when incomplete combustion of natural gas occurs, due to an appliance not being properly maintained or used incorrectly or due to inadequate ventilation.

Over the past 18 months, Building and Energy has seen an increase in incidents where outdoor portable gas appliances have been used indoors. The use of these appliances indoors can lead to serious accidents, including fatalities.

Building and Energy will develop a safety awareness campaign in 2021–22 to raise public awareness about the issue.

10.2.4 Public safety awareness campaign about the importance of maintaining open-flued gas heaters

Partial combustion of natural gas can produce CO, a colourless, odourless and tasteless gas that can cause death or chronic illness if it spills or leaks from gas heaters. Some open-flued gas heaters have been known to spill CO into a room under certain conditions. A blocked flue or chimney, negative air pressure, or non-compliant installation could create the conditions that lead to tragic consequences. There have been several deaths from CO poisoning across Australia.

Building and Energy proposed to run an awareness campaign in 2020–21 to inform consumers about the life-safety risks posed by poorly installed and maintained open-flued gas heaters. Due to other priorities, this was deferred to 2021–22.

10.2.5 Shocks and tingles safety awareness campaign - extended

Building and Energy will continue the hugely successful shocks and tingles safety awareness campaign during 2021.

10.2.6 Don't DIY safety awareness campaign

Research shows that people are most tempted to do small electrical Do-It-Yourself (DIY) jobs around the house, such as changing power points or light switches, but it isn't worth the risk. Aside from the danger, the legislation requires electrical work to be undertaken only by licensed persons.

Building and Energy will run a safety awareness campaign during 2021–22 to remind consumers about the dangers of DIY electrical work. It will also assist consumers to identify licensed electrical contractors.

10.3 Corporate projects and issues

The statistics show that, even with a backdrop of long-term trending increases in compliance work and population growth, the long-term trend of incidents and fatalities related to the use of and work with electricity and gas has been downward.

For several years, Building and Energy has experienced rapid workload growth. This coupled with difficulties in attracting and retaining suitably qualified and experienced inspectors and technical staff, led to lower priority work not being undertaken and a significant backlog of higher priority work.

Staff establishment available to Building and Energy has not increased commensurate with the increased workload being experienced and recruitment efforts to fill specific compliance-related roles had historically proven relatively unsuccessful.

Building and Energy implemented several initiatives to respond to the ever-increasing workload in an environment of limited resources, while still maintaining sufficient monitoring and response capacity to the trends in serious injuries and fatalities. These include initiatives to reduce red-tape burden, increase automation and implement electronic means for enhancing productivity wherever possible, as well as making it easier for licence-holders, the general public and network operators to interact with the appropriate areas of Building and Energy.

Since 2017–18 Building and Energy has experienced more success in recruitment to technical and inspector positions. While there are significantly fewer vacancies in these areas, during 2021–22 Building and Energy will continue in its recruitment strategies to ensure the filling of any vacant technical positions.

10.3.1 Compliance Management System updates

To reduce manual processing of compliance-related work, enhancements to Building and Energy's Compliance Management System (CMS) were commissioned from 2015–16 to replace components of the software.

The enhanced CMS has improved productivity and efficiency and supported a more mobile inspection workforce across the gas and electricity directorates.

Like all compliance tools, it is imperative that CMS remains flexible and adaptable to a constantly changing environment. As a result, CMS will need regular updates and enhancements to ensure it continues to meet the needs of the compliance directorates. CMS will need to adapt to new trends in technology, industry's performance, and changes to the legislation and compliance processes. Building and Energy has sufficient funds to meet the expected costs of these updates.

10.3.2 Licensing services

During 2017–18 the Licensing Services Directorate was established in DMIRS. This Directorate takes carriage of licensing processing activities for those divisions that issue occupational licences, including the range of electrical and gas related licences.

While the processing of applications is a service that is provided to Building and Energy, the decision-making responsibilities of the Electrical Licensing Board and the Director remain within Building and Energy. The required support to these functions is managed within Building and Energy through an appropriate policy framework, procedures, guidelines and Service Level Agreements.

10.3.3 Public communications

Statistical analyses of electricity and gas safety data indicates generally improving long-term trends for fatal incidents. It has been demonstrated that lack of safety awareness leads to higher numbers of accidents. The Energy Bulletin was published as a paper-based magazine until 2016 and circulated to 14,000 electrical contractors and gas fitters. From 2016, the Energy Bulletin was published digitally for all licensed operatives. In 2019, the Energy Bulletin was replaced by the Electrical Focus and the Gas and Plumbing Focus. Both publications are available on the website or to any interested parties who wish to subscribe. They are currently circulated to more than 50,000 recipients.

Throughout 2020–21 Building and Energy will continue to work with the media team to develop innovative and cost-effective means to communicate with energy workers and the wider public.

11. Regulatory operational matters

Operational work undertaken by Building and Energy includes responding to requests for advice, responding to complaints, carrying out minor investigations and, as appropriate, making decisions on whether to issue a warning, an infringement notice or to prosecute a person or business.

Some activities require significant resources and an immediate response that occasionally may disrupt operational work.

These include:

11.1 Inspections of installations not connected to a network and the Indian Ocean Territories

Inspectors inspect electricity and gas installations not connected to a network, such as pastoralists' facilities, remote aboriginal communities, mine sites, on Rottneest Island and, under a Memorandum of Understanding with the Commonwealth Government, the Indian Ocean Territories (Christmas Island and the Cocos [Keeling] Islands). A large proportion of this work is associated with resources projects. Inspections of these installations are undertaken by Building and Energy's inspectors, when resources are available.

11.2 Investigations of breaches to the legislation

When electricity network operators' inspectors or gas suppliers' inspectors uncover a breach of the legislation, they generally refer the matter to the Director for compliance action.

Building and Energy devotes significant resources to conducting investigations into breaches of legislation and preparing briefs for enforcement actions and/or possible prosecution.

11.3 Investigations of serious accidents and fatalities

All investigations of serious electrical and gas related accidents and fatalities are undertaken by Building and Energy's inspectors. These generally are technically complex and require allocation of significant resources. Building and Energy draws resources from its in-house engineers and, in some cases, experts from other fields (timber, structural etc.) are called on to assist with these investigations.

11.4 Investigations of network incidents

In recent years, significant resources have been devoted to several complex investigations, including the Toodyay and Parkerville bushfires and the Albany gas explosion.

Investigations of major incidents generally require many hours of senior inspector and engineer expertise and time.

11.5 Monitoring of gas and electricity consumer appliances

Building and Energy inspectors routinely visit retail outlets to ensure appliances which are prescribed by the Director are safe and bear the required certification labels. There continues to be a trend for gas and electrical appliances to be sourced from overseas, often through non-traditional purchasing practices that are becoming commonplace, such as the internet. Many of these appliances have been found to not meet relevant Australian Standards and are, therefore unsafe.

Building and Energy is involved in removing these items from sale and educating the public on the safety risks posed using unsafe appliances.

11.6 Audits of Network Operator Inspection System Plans

Under the existing compliance framework, electricity network operators and gas suppliers are required to implement their Inspection System Plans as approved by the Director. Building and Energy devotes significant time auditing these approved Plans and in monitoring their effectiveness.

The performance of Installation Inspectors employed by network operators is closely monitored. These inspectors are authorised (designated) by the Director of Energy Safety and perform the vital function of checking the compliance of consumers' electrical and gas installations in accordance with an approved Inspection System Plan following work by electrical contractors and gas fitters.

They conduct an initial investigation and then report cases of non-compliance to the Director for potential enforcement action. In accordance with the terms of their designation, these inspectors are obliged to comply with a Code of Conduct published by the Director.

Targeted audits will be undertaken to ensure that all network operators carry out their installation inspection functions in accordance with statutory obligations.

11.7 Audits of electrical contractors and gas fitters

Annual programmed and targeted compliance audits are planned to be conducted on a sample of electrical contractors and gas fitters (including authorisation holders).

11.8 Australian Standards development work

Resources are allocated to assist Standards Australia with the development and maintenance of Australian Standards related to electricity and gas safety. Engineers and technical staff represent the interest of safety regulators on several technical committees at national level.

11.9 Regulator liaison

Building and Energy is a member and strong participant of both the Gas Technical Regulators Committee (GTRC) and the Electrical Regulatory Authorities Council (ERAC).

GTRC is an association of government departments responsible for the safe use of gas. The committee includes representatives from each State and Territory in Australia and New Zealand.

Similarly, ERAC is a forum which allows electrical safety regulators to discuss issues of common interests and share information about safety trends and policy development strategies.

Senior Building and Energy staff members participate in regular forums and meetings of the GTRC and ERAC.

Financial Plan

12. 2021–22 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 2021–22 and three out-years.

It also includes a comparison between the budget and actual out-turn for 2019–20 as well as the approved budget for the current (2020–21) financial year.

The 2021–22 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 DMIRS;
- 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;
- accurate income estimates are made for some licence types that can be paid/renewed over various periods (either one year, three years or five years); 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;
- the energy industry levy required to make up the shortfall between expenses and revenues; and
- full-time equivalent (FTE) staffing numbers employed in undertaking energy safety functions.

Estimates are provided for 2021–22 and the subsequent three years. By their nature, 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 licensing activity growth or decline, and take into account the expected effect of the economic climate on prospective numbers of licensing applications and renewals. Licensing revenues have also been escalated in subsequent years where appropriate by a rate commensurate with expected CPI levels. This will need to be monitored to ascertain any potential impact of efficiencies realised through the amalgamation of licensing functions and better use of technology.

It is recognised that Building and Energy is unlikely to have a full staffing contingent against its 55 energy-related function FTEs at all times during any given financial year. However, historical vacancy rates in the operational, technical and inspectorate areas, coupled with improved

recruitment successes in recent years, give reasonable confidence that the vacancy rates will remain relatively low and steady.

With respect to employee benefits expense (salaries) estimates, it is expected that there will be an ongoing vacancy rate in the order of 3.6 per cent (or two positions).

Although cash reserves held in the Special Purpose Energy Safety Account remained high to the end of 2019–20 (for the reasons detailed at section 12.2), the level of cash reserves is required to remain at an optimal level (in the order of \$10 to \$13 million) to recognise leave liability, income received in advance, accumulated depreciation to replace assets as they come to the end of their useful lives, cover for 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 2021–22 Financial Plan has been set to continue to be sustainable with cash reserves that reflect self-sufficiency and flexibility over the forward estimates period that will see the optimal level of cash maintained.

Lower than anticipated expenditure and higher revenues than forecast during 2019–20 has resulted in higher cash reserves than is optimal. Building and Energy therefore proposes that no increase to the levy is required in 2021–22 to meet forecast expenses. There is still sustainability in Building and Energy's ability to carry out its functions and maintain the necessary cash balances.

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 grew at a significant rate for the 10 years or so up until early 2016, reflecting the resources boom experienced in that time in Western Australia. A significant number of electrical licences are currently issued to persons with an interstate address. 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 over several years. The challenges faced by industry as a result of COVID-19 have resulted in a decline in the licensing revenue earned to date in 2020–21 and this has been factored into the forecasted licencing revenue for 2021–22.

This has not significantly impacted Building and Energy's financial position. There has been a slight slow-down in the long-term rate of growth that had been experienced over previous periods. 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 DMIRS budgeting processes.

The current year (2020–21) budget estimates reflect the budget approved by the Minister for the year in the 2020–21 Business Plan.

The Minister's approval of this Business Plan is accepted as approval for the 2021–22 budget as indicated.

Financial Year	2019–20 Budget	2019–20 Actual	2020–21 Approved Budget	Escalated \$			
				2021–22	2022–23	2023–24	2024–25
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
1. Expenses							
1.1 Recurrent Expenditure							
a) Employee benefits expense	7,751	6,616	7,806	7,861	7,939	8,019	8,099
b) Corporate service charges	2,517	2,989	3,376	2,814	2,863	2,913	2,964
c) Licensing service charges	795	664	885	900	916	932	949
d) Depreciation expense	620	509	626	400	420	420	420
e) Legal services	174	52	198	373	380	386	393
f) Accommodation expenses	815	1,193	904	1,214	1,236	1,257	1,279
g) IS support/maintenance (CMS)	192	114	196	201	204	208	211
h) IT and minor equipment replacement	42	21	43	44	45	46	47
i) Other recurrent expenses	2,655	1,684	2,682	3,390	3,449	3,510	3,571
Total Recurrent	15,561	13,843	16,716	17,197	17,452	17,691	17,933
1.2 Capital Expenditure							
a) Software replacements (CMS)							
b) CMS project management			250	267			
c) On-line compliance and customer interface functionality			0				
Total Capital	0	0	250	267	0	0	0
Total Expenses	15,561	13,843	16,966	17,464	17,452	17,691	17,933
2. Income							
a) Industry Levy	7,225	7,225	7,225	7,225	7,225	7,225	7,225
b) Licensing fees	7,000	7,150	8,012	7,701	7,836	7,973	8,112
c) Indian Ocean Territories	46	23	47	48	49	51	52
d) Other revenues	51	114	52	53	55	56	57
Total Income	14,322	14,512	15,336	15,027	15,164	15,304	15,446
Surplus/(Deficit) for the period	(1,239)	668	(1,630)	(2,437)	(2,288)	(2,387)	(2,487)
Approved FTE	55	55	55	55	55	55	55
FTE actual/estimate	52	52	52	52	52	52	52

Financial Year	2019–20 Budget	2019–20 Actual	2020–21 Approved Budget	Escalated \$			
				2021–22	2022–23	2023–24	2024–25
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
Estimated Opening Balance	9,878	15,489	15,832	14,963	13,926	13,003	13,003
Industry Levy	7,225	7,225	7,225	7,225	7,225	7,225	7,225
Licensing fees	7,313	7,500	8,362	8,051	8,131	8,223	8,332
All other revenues	96	23	99	101	104	107	109
Cash expenses	(14,291)	(15,269)	(15,690)	(16,414)	(16,382)	(16,621)	(16,863)
Cash movement	343	(522)	(4)	(1,037)	(923)	(1,067)	(1,197)
Estimated Closing Balance	10,221	14,967	15,828	13,926	13,003	11,936	11,806

12.1 Notes and explanations

12.1.1 Recurrent expenditure

- a) Employee benefits expense: include all expenditure associated with permanent, contract and temporary employees, known salary increases under awards and direct on-costs such as leave entitlements and other employee entitlements.
- b) Corporate service charges: Building and Energy relies on central DMIRS Corporate Services support (covering finance, HR and IT support) to be provided by DMIRS. The amounts shown are the estimated costs provided by the DMIRS Corporate Services Division.
- c) Licensing services charges: Building and Energy relies on licensing processing services to be delivered by the DMIRS Licensing Services Directorate, with which a Service Level Agreement is in place. The amounts shown are the estimated costs provided by the DMIRS Corporate Services Division.
- 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 have previously been chiefly provided by the State Solicitor's Office, however some legal services are now provided across DMIRS by an in-house legal team with an allocation of costs for work related to Energy Safety.
- 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 the 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 the 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. Significant safety awareness and education campaigns have been planned for 2021–22, resulting in an increase in budgeted expenditure.

12.1.2 Capital expenditure

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

12.1.3 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 revenues: are derived from electrical worker, electrical contractor, and gas fitter licence fees. The total revenue per year fluctuates over a five year cyclical basis, as the electrical worker fees are for a five year term and renewals are not equally distributed over the period.

The licensing revenue is presented here on an accrual basis. For 2021–22 this is \$7.7 million. On a cash basis the amount is \$8.0 million. There has been a decline in the licensing revenue earned to date in 2020–21 and this has been factored into the forecasted licencing revenue for 2021–22.

- c) Indian Ocean Territories (IOT): DMIRS has a service agreement with the Commonwealth's Department of Infrastructure, Transport, Cities and Regional Development (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.

12.2 Cash Balances

Cash balances form part of the DMIRS bank account and are classified as restricted cash. The cash bank balance was \$15 million at the end of 2019–20 and this balance has historically grown and stabilised at this level due to:

- underestimates of revenues;
- the underspend of the budget, mainly due to the long-term inability to recruit required staff resulting in continuing vacancies and the subsequent inability to complete projects; and
- licensing income received in advance.

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 presently \$1.79 million.

Additionally, it is prudent to allow for fluctuations in revenues across years and/or potential non-receipt of quarterly levy payments, and to provide some level of insurance 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 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 should be recognised and maintained as a cash-holding. The value of accumulated depreciation is presently (at 30 June 2020) \$651,000. The merger of two oracle systems as a result of machinery of government changes has resulted in a reduction of accumulated depreciation.

The licence fees that are received for more than a single year (some for three years, some for five), represent an 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 2020 was \$7.5 million. This is recognised as unearned income and it is reasonable that the bank balance should hold this income.

The reasonable, targeted cash balance at any given time should be in the order of between \$11 million and \$13 million. The 2021–22 Financial Plan will see a sustainable maintenance of cash reserves slightly higher than this optimal target range over the life of this Plan. This assumes no significant drop off in revenues from licensing fees.

Industry Levy

13. 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 DMIRS and are levied on the gas and electrical industries in other jurisdictions.

For 2021–22, the proposed Energy Safety Industry Levy will be \$7.225 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.

13.1 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 \$7.225 million is proposed in this Business Plan for 2021–22.

This enables sufficient funds for the full structure of Building and Energy's energy safety related operations (less a forecast vacancy rate of two FTEs, or 3.6 per cent), meet the costs of its liabilities and continue to undertake projects to build on new compliance systems to enhance on-line capability and to progress integration with external systems of energy suppliers and operators.

This represents no increase from 2020–21 and reflects estimated costs and other revenue sources related to energy safety functions for Building and Energy and also considers the optimal cash holding level.

As detailed earlier in this Plan, 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 2021–22 and beyond, and surplus funds will not be realised from under-expenditure at the same levels as has been experienced in prior years.

13.2 Apportionment of Levy between energy sectors

The proposed 2021–22 industry levy of \$7.225 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 \$4.841 million, and from participants in the gas industry it will be \$2.384 million.

13.3 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:

- 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 WA, subject to a minimum aggregate total of 500 sites. The aggregate may be based on multiple networks.

- 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 2019–20, 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 2020–21, determining the levy contribution allocations for each supplier for 2021–22.

13.4 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.

In 2016–17, independent auditors were engaged 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, and it was anticipated that it would be undertaken again during the early stages of 2020–21. However, due to constraints related to COVID-19, this is expected to occur during late 2020–21 or early 2021–22.

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) (b) 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 – Specific obligations

The legislation provides for the Director to:

- Ensure safety of consumers’ electrical installations and appliances by:
 - licensing electrical workers and electrical contractors through the Electrical Licensing Board;
 - enforcing prescribed technical standards for electrical work;
 - requiring electricity network operators to conduct consumer installation safety inspections in accordance with prescribed requirements and auditing this work to ensure compliance;
 - conducting safety inspections of consumers’ electrical installations that are not connected to electricity networks; and
 - inspecting electrical appliances and equipment offered for sale, to check compliance with prescribed safety requirements.
- Ensure safety of consumers and industrial gas installations and appliances by:
 - licensing gas fitters;
 - enforcing prescribed technical standards for gasfitting work;
 - requiring gas network operators, gas pipeline licensees and liquefied petroleum gas (LP gas) cylinder distributors to conduct consumer installation safety inspections in accordance with prescribed requirements and auditing this work to ensure compliance;
 - overseeing the work of external inspectors approving industrial gas appliances;
 - conducting safety inspections of consumers’ gas installations that are not connected to gas networks or are not supplied with LP gas directly from a gas distributor; and
 - inspecting gas appliances and equipment offered for sale, to check compliance with prescribed safety and efficiency requirements.
- Ensure safety and acceptable performance of electricity transmission and distribution infrastructure by:
 - monitoring electricity network operators’ asset management practices;
 - monitoring electricity network operators’ compliance with their respective safety management plans;
 - monitoring the safe work practices of network operators’ employees and contractors, including attendance to incidents; and
 - investigating network operators’ asset failures, network accidents causing injury or death and fires ignited by network operator assets.
- Ensure safety and acceptable performance of gas distribution infrastructure by:
 - auditing gas distribution network operators’ design standards and constructed networks for compliance with prescribed safety requirements;
 - monitoring the safe work practices of network operators’ employees and contractors, including attendance to incidents;
 - monitoring the quality of gas provided to consumers generally, for compliance with prescribed requirements;
 - investigating consumers’ complaints about gas supply reliability and quality; and
 - auditing network operators’ compliance with prescribed meter management requirements, to ensure acceptable meter accuracy.
- Appoint and monitor the performance of all electrical and gas inspectors in the State, including those employed by network operators.
- Ensure the safety of electrical and gas workers by enforcing prescribed safety requirements and providing guidance on safe work practices.
- Issue exemptions or variations to certain regulatory requirements (electrical and gas).
- Investigate electrical and gas safety incidents.
- Enforce statutory requirements through advice, warnings, infringement notices, and prosecutions and, in the case of licence holders, through disciplinary action.

- Respond to consumer complaints about electrical and gas technical and safety matters.

Additionally, the Director:

- provides energy-related policy advice and support to the Minister, State Government and the DMIRS Director General;
- provides technical advice and support to the Department of Finance’s Public Utilities Office, Economic Regulation Authority (ERA) and the Energy Ombudsman; and
- promotes electrical and gas safety to the public, businesses and tradespersons in the electricity and gas industries.

Appendix B – A brief outline of 2019–20 activities

1. Significant Energy Safety Activities in Western Australia

In addition to the key achievements highlighted in Section 9 of this Plan, the following activities are also significant and have an impact on the energy safety operations of Building and Energy.

1.1 Operative licensing activities

Licensing services are provided by DMIRS' Licensing Services Directorate. Building and Energy manages this service delivery through a licensing policy framework, Service Level Agreements and liaison between the Electrical Licensing Board and the Director of Energy Safety, and the licensing service provider.

DMIRS continues to provide timely turn-around from receipt of applications to the issue of licences, however considerable work pressure remains in this area and is continually monitored.

On 13 November 2020, National Cabinet agreed in principle to establish an Intergovernmental agreement on Automatic Mutual Recognition of Occupational Licences. Automatic mutual recognition (AMR) is expected to commence by 1 July 2021.

The scheme is intended to apply to all registered or licensed occupations covered by existing mutual recognition arrangements. In WA, a wide range of occupations fall within scope of AMR, including electricians and gasfitters. Widespread consultations will occur and the implementation will commence during 2021–22.

1.1.1 Electrical licensing

As at 30 June 2020, there were 45,250 electrical workers and 5,733 electrical contractors registered.

The Electrical Licensing Board grants licences to eligible electrical operatives and conducts competency assessments of operatives when necessary. It also recommends disciplinary action when appropriate.

1.1.2 Electrical Licensing Board

As at 30 June 2020, the Board's membership comprised:

Mr P Beveridge – Chairman.

Mr P Carter – representing the interests of electrical workers.

Mr. G Kelly – representing the interests of electrical workers with restricted licences.

Mr C Sweeting – representing the interests of electrical contractors.

Mr M Andric – representing the interests of large businesses, who are consumers of electrical services.

Dr N Kosteck-Baranski – representing the interests of small businesses, who are consumers of electrical services.

Dr. F McGaughey – a residential consumer of electrical services.

Ms M Mammone – nominated by the Director of Energy Safety.

The Electrical Licensing Board met 22 times during the year.

1.1.3 Gas Licensing

As at 30 June 2020 there were 8,414 persons registered for gasfitting work.

Licensing applications are processed by staff of the Licensing Services Directorate under delegated authority, as in the case of electrical licences.

2. Prosecutions and Infringement Notices

2.1 Prosecutions

Prosecutions follow investigations by inspectors and review and authorisation by senior management of Building and Energy. Investigations are often initiated by inspectors of the electricity and gas distributors, as part of their consumer electrical or gas installation inspection work.

The following tables provide summaries of prosecutions finalised during 2019–20.

2.1.1 Prosecutions – Breaches of Electricity Related Legislation

Summary for the period 1 July 2019 – 30 June 2020

Legislation	Section / Regulation	Number of Offences	Fines \$
<i>Electricity Act 1945</i>	s 33B(2)	1	5,766.50
Electricity (Licensing) Regulations 1991	r.49(1)	3	63,899.44
Electricity Regulations 1947	r.242(1)(b)	2	118,032.80
Total		6	187,698.74
Total		6	80,732.20

2.1.2 Prosecutions – Breaches of Gas Related Legislation

Summary for the period 1 July 2019 – 30 June 2020

Legislation	Section / Regulation	Number of Offences	Fines \$
Gas Standards (Gasfitting and Consumer Gas Installations) Regulations 1999	r.18(2)	3	9553.30
	r. 20(1)		
	r. 21(a)		
Total		3	9553.30

2.2 Infringement Notices

Building and Energy issues Infringement Notices as this system provides an efficient and cost effective compliance regime for selected breaches. The system covers both the gas and electricity industries and deals with matters of non-compliance in electrical and gas installations.

There were 6 (2 Electricity and 4 Gas) Infringement Notices issued for the year.

The following tables provide summaries of Infringement Notices issued during 2019–20.

2.2.1 Infringement Notices – Breaches of Electricity Related Legislation

Summary for the period 1 July 2019 – 30 June 2020

Legislation/Regulation	Section / Regulation	Number of Offences	Fines \$
<i>Electricity Act 1945</i>	s 33B(2) and 33D	2	10,000
Total		2	10,000

2.2.2 Notices – Breaches of Gas Related Legislation

Summary for the period 1 July 2019 – 30 June 2020

Legislation	Section / Regulation	Number of Offences	Fines \$
<i>Gas Standards Act 1972</i>	r 13A(2)	3	3000
Gas Standards (Gas Supply And System Safety) Regulations 2000	r 7(1)	1	10,000
Total		4	13,000

3. Major policy work

3.1 Committee participation

Aside from major work on several key technical standards committees, Building and Energy continued to be involved in a number of national regulatory coordination and other technical standards bodies.

- The following is a summary list:
 - National Regulatory Coordination Bodies
 - Electrical Regulatory Authorities Council (ERAC)
 - Gas Technical Regulators Committee (GTRC)
 - National Equipment Energy Efficiency Committee (Committee E3)
 - Energy Supply Industry Safety Committee (ESISC) (representing the Government of Western Australia)
- National Standards Councils, Boards and Committees
 - Member of Standards Australia (representing the Government of WA)
 - Council of Standards Australia (representing the Government of WA)
 - Standards Australia Standards Development and Accreditation Committee
 - AG-006 Gas Installations
 - AG-008 Gas Distribution Networks
 - AG-011 Industrial and Commercial Gas Fired Appliances
 - AG-013 Gas Components
 - ME-046 Gas Fuel Systems for Vehicle Engines
 - ME-15 Storage LP Gas
 - EL-01 AS/ NZS 3000 (Wiring Rules)
 - EL-001-20 AS/NZS 3018 Domestic Electrical Installations
 - EL-001-44 AS/NZS 4836 Safe working on LV electrical installations
 - EN-004 Energy Network Management and Safety Systems
 - EL-002 Safety of Household and Similar Electrical Appliances and Small Power Transformers and Power Supplies

- EL-043 High Voltage Electrical Installations
- EL-052 Electrical Energy Networks, Construction and Operation

3.2 National regulatory reform projects

Development of national regimes for electrical appliance safety approvals, gas appliance safety approvals, national electrical and gas occupational licensing, and the harmonisation of energy supply technical and safety regulation is ongoing and will continue to demand significant attention.

4. Statutory Reporting and Statistics

The following statistical information is required to be reported and is reflected in the DMIRS' 2019–20 Annual Report:

4.1 Electricity Act 1945

The *Electricity Act 1945* (the Electricity Act) sets out a licensing regime for the electrical trade that serves the Western Australian community, regulates electricity transmission and electrical appliances. DMIRS administers a range of functions under the Electricity Act including the granting and renewal of licences, compliance activities and a range of education and advisory services.

The Director of Energy Safety (the Director) is the responsible authority under the Electricity Act.

Section 33 of the Electricity Act requires the Director to report on a number of matters:

- a) *The number, nature, and outcome, of the –*
- i) *investigations and inquiries undertaken under this Act by, or at the direction of, the Director:*

Outstanding as at 1 July 2019	2295
Compliance Inspections.....	2066
Investigations	229
Commenced 2019–20	3671
Audits	1
Compliance Inspections.....	3313
Investigations	357
Concluded 2019–20	3931
Audits (Network Operator)	1
Compliance Inspections.....	3703
Investigations	227
Outcomes	3974
Completed - no action required	1998
Corrective Action Request	5
Further Inspection(s) Required	2
Further Investigation Required.....	20
Infringement - Issue	3
Inspector's Order - Issued	35
Not Electricity Related.....	1
Not Inspected - attended site, not possible.....	16
Not Inspected - site not attended.....	1731
Prosecution - Lapsed	6
Prosecution - Proceed.....	7
Provide Advice - RCDs	77
Provide Advice	19

Referred to Network Operator	20
Stop Sale Notice - Issue	1
Warning - Verbal.....	6
Warning - Written	27

Note: Compliance actions may take more than one year to complete. Therefore, some prosecutions recorded above may relate to investigations carried out in an earlier year.

An investigation may result in multiple outcomes which may occur before the investigation is completed; therefore, the outcome total will not be consistent with the numbers of investigations undertaken.

i) matters that have been brought before the State Administrative Tribunal under this Act by the Director:

There were no matters brought before the State Administrative Tribunal (SAT).

b) the number and nature of matters referred to in paragraph (a) that are outstanding:

As at 1 July 2020, there were 2,034 matters outstanding. Of these, there were 1,672 Compliance Inspections; and 362 investigations.

c) any trends or special problems that may have emerged:

There were no evident trends or special problems.

d) forecasts of the workload of the Director in performing functions under this Act in the year after the year to which the report relates:

The department is currently carrying out a review of the Inspection System Plan Guidelines for Network Operators, which were last reviewed in 2013. Under Regulation 253 of the Electricity Regulations 1947 (Regulations), Network Operators are required to establish and maintain an effective system of inspection for consumer installations to their network. To enable the network operators to develop adequate Inspection System Plans (ISPs) the Director of Energy Safety is required under the same set of Regulations to issue guidelines setting out the technical, investigative, reporting, administrative and other requirements for network operators' ISPs.

e) any proposals for improving the performance of the Director's functions under this Act:

There are no proposed changes at this stage.

4.2 Electricity Related Incidents and Fatalities

The following were reported to the Director during the year:

Electric shocks.....	5104
Serious electrical accidents (hospitalisation)	2
Serious electrical accidents (medical treatment).....	8
Fatalities.....	3

4.3 Gas Standards Act 1972

The *Gas Standards Act 1972* (the Gas Act) sets out a licensing regime for the gasfitting trade that serves the Western Australian community, regulates gas supply and gas appliances. DMIRS administers a range of functions under the Gas Act including the granting and renewal of licences, compliance activities and a range of education and advisory services.

The Director of Energy Safety (the Director) is the responsible authority under the Gas Act. Section 13(c)(a) of the Gas Act requires the Director to report on a number of matters:

a) *the number, nature, and outcome, of the -*

i) *investigations and inquiries undertaken under this Act by, or at the direction of, the Director:*

Outstanding as at 1 July 2019	181
Audits	4
Compliance Inspections.....	35
Investigations	142
Commenced 2019–20	702
Audits	4
Compliance Inspections.....	457
Investigations	241
Concluded 2019–20	826
Audits	4
Compliance Inspections.....	479
Investigations	343
Outcomes	837
Appeal - Rejected	1
Appeal - Upheld	1
Commissioning Gas Extension Approved	8
Completed - No Action Required	511
Corrective Action Request	1
Further Investigation Required.....	9
Gas Interpretation - Approved	1
Incident Report/Hazard Alert - Issue	1
Infringement - Issue	5
Inspector's Order - Cancel	2
Inspector's Order - Issued	113
Not Gas Related	4
Not Inspected – attended site, not possible	8
Not Inspected – site not attended	20
Not Investigated.....	7
Provide Advice	19
Warning - Verbal.....	61
Warning - Written	65

Note: Compliance actions may take more than one year to complete. Therefore the outcomes recorded above may relate to investigations carried out in an earlier year. Also there can be more than one compliance action for an investigation.

ii) *matters that have been brought before the State Administrative Tribunal under this Act by the Director:*

There were no matters brought before the SAT under the Gas Act.

b) *the number and nature of matters referred to in paragraph (a) that are outstanding:*

As at 1 July 2020, there were 61 matters outstanding. Of these, there were 4 Audits (gas suppliers); 15 Compliance Inspections and 42 Investigations.

c) *any trends or special problems that may have emerged:*

There were no trends or special problems that emerged.

d) *forecasts of the workload of the Director in performing functions under this Act in the year after the year to which the report relates:*

The department is working towards Inspection Policy Statement and Plan Guidelines in accordance with s.13J of the Act. These plans allow gas suppliers dispensation from 100 per cent inspection requirement (s.13) before commencing gas supply to consumer installations. The Guidelines will be implemented after stakeholder consultation and the plans activated after an appropriate implementation period. Although gas suppliers currently work to an approved plan, guidelines for their production aims to promote a consistent approach to inspection across the Western Australian gas industry including methods to identify and rectify defects, investigative conduct and incident reporting.

e) *any proposals for improving the performance of the Director's functions under this Act:*

Information sharing powers between gas and plumbing inspectors will be streamlined through regulation. Availing this information will enable greater identification of defects and unlicensed gas and plumbing work. The aim is to increase public safety and maintain safe workplaces.

4.4 Gas Related Incidents and Fatalities

The following were reported to the Director during the year:

Incidents.....	51
Serious Accidents (Hospitalisations).....	2
Serious Accidents (Medical Treatment).....	2
Minor Injury	2
Fatalities.....	2

Government of Western Australia

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

Building and Energy

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