SDG HUNTER REGION
TASK FORCE

Hunter Region Voluntary Local Review

PROMISE IN PERIL

Leave no one behind. That defining principle of the 2030 Agenda for Sustainable Development is a shared promise by every country to work together to secure the rights and well-being of everyone on a healthy, thriving planet. But halfway to 2030, that promise is in peril.

The Sustainable Development Goals are disappearing in the rear-view mirror, as is the hope and rights of current and future generations. A fundamental shift is needed – in commitment, solidarity, financing and action – to put the world on a better path. And it is needed now.

- UN 2023

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Foreword

Two of the primary challenges faced globally, nationally in Australia and here in the State of New South Wales are climate change and growing inequality. As governments take on the challenge of global warming and the many extreme impacts it has on our weather and our wellbeing, we must focus on critical actions that reduce our footprint on this fragile world. At the same time, we see growing inequality between and within nations with rising levels of poverty, a cause for concern for all nations.

In 2016 the United Nations recognised the urgency of a global response to this twin crisis and announced Agenda 2030 and the Sustainable Development Goals (SDGs) to build on the global achievements of the Millenium Development Goals.

The SDGs combine objectives relating to climate change, sustainability, equality and the eradication of poverty. The 17 Goals and related targets and indicators provide us all with a framework to guide our actions and to focus our attention on the solutions to create a sustainable and equitable world, nation, state and community. This must be a world where we can all enjoy the benefits of a modern productive economy, without irretrievably damaging our environmental heritage for future generations. From the individual citizen to the many levels of government, we all share a responsibility to contribute to the achievement of the SDGs.

I am privileged to be a member of a state government committed to both environmental and social justice and to be able to focus on the remit of my role as Minister for Climate Change, Energy, the Environment and Heritage. In that capacity I am delighted that my Department has been able to take a leading role in the production of the Voluntary Local Review conducted by the Hunter Regional SDG Task Force. The Task Force has brought together multiple agencies and organisations in the Hunter Region of New South Wales to promote and accelerate the achievement of the SDGs. In an innovative partnership, supported by state and local government, academia, the private sector, NGOs and charities, this report has provided the first assessment of the contribution to the SDGs by this diverse but collaborative region.

One of the key functions of this approach to 'localisation' of the SDGs has been to promote them across the region and to engage many parties in reviewing their own potential contribution. This is reflected in the partners identified in this report and their generous contributions of time, energy and funding to this report and to the online dashboard which will become an important barometer of climate and social justice in the region as we progress towards 2030. Clearly, there are many challenges that must be resolved on this journey. Economic diversification and transition will be essential as we move to a low-carbon economy and this will require social and cultural change which I will be very pleased to lend any weight I can to this process.

The Hon Penelope (Penny) Sharpe (MLC)

Minister for Climate Change, Energy, the Environment and Heritage.

Acknowledgement of Country

The Hunter Region SDG Task Force and its partners acknowledge the traditional owners of the land on which we operate and pay our respects to elders past, present and emerging.

We acknowledge the 60,000 years of continuous culture and stewardship of the land, air and water of the region and recognise the knowledge and custom that has protected the environment for future generations.

We humbly hope that we are able to learn from this respectful relationship with people and the environment.

Authoring Credits

The completion of this Voluntary Local Review (VLR) report has been a collaborative process.

Professor Dave Adamson, OBE (Honorary Professor University of Newcastle NSW), is the primary author with editing by Professor Will Rifkin (Emeritus Professor, University of Newcastle).

Jonathan Wood, Senior Project Officer, Sustainability Advantage, Department of Climate Change, Energy, the Environment and Water has been the driving force behind the project and kept the momentum for all participants.

Data has been developed by a team at the University of Newcastle led by Professor Will Rifkin.

Thanks are due to all team contributors - Dr Kyle Stevens, Riley Wells, Amy Huff and Dr Praveen Kuppan.

The online dashboard of data has been assembled by Majah Brooks and Swastika Shukla, both from the City of Newcastle. Without their support the dashboard would not have been possible.

Partner Acknowledgements

The organisations identified below have been members of the Hunter Region SDG Task Force and active supporters of the VLR report and online dashboard. Support has included considerable time input and funding of the research and data collection which have made this report possible.

Introduction

The Hunter Region of NSW, Australia is not a formal administrative region but has a strong territorial identity which has fostered an increasingly collaborative civic culture.

The Hunter Region SDG Task Force reflects that culture and came into existence to promote the adoption of the SDGs in the activities of public, business and voluntary organisations.

This VLR is presented by the Hunter Region SDG Task Force (hereafter the Task Force).

Early in the formation of the Task Force, conversations identified the aspiration to develop a VLR, and this was eventually formally discussed, and a project agreed on at a World Urban Campaign, Urban Thinkers Campus in May 2020.

From the beginning, the role of the VLR, whilst primarily to understand and provide data to demonstrate the way that the SDGs were supported in the region, was also about promotion of the SDGs. The VLR exercise was seen as a method of engaging business and civil society with Agenda 2030 and illustrating how all organisations could contribute to the achievement of the SDGs. Fundamentally, it was about raising aspiration and action. Consequently, an early decision was made to develop a publicly available 'dashboard', which makes the VLR data accessible and able to be interrogated online at different spatial levels. This dashboard, and the ability to drill down to assess challenges and progress at the level of local government area as well as at the regional scale, will make an important contribution to SDG awareness and action in the region. It is an important endeavour to 'localise' the SDGs in the region.

This VLR has not followed the conventional pattern of authorship by a single city or local authority. Rather, it has been driven by a coalition of state government, local government, business, not-for-profit and non-governmental organisations and their representatives or members. The exercise has also engaged with organisations beyond the membership of the Task Force. The Hunter Region consists of ten local authorities that collaborate and are members of the Hunter Joint Organisation. Their commitment to the production of this VLR has been fundamental to its success. Additionally, three, third-year, multi-disciplinary student teams based at the University of Newcastle have developed a range of case studies of organisations in the region committed to SDG alignment, furthering awareness of the role that local organisations can have in achieving the SDGs.

A core challenge in this exercise has been the development of a set of indicators to measure progress towards the SDGs. A series of workshops was held in 2022 to determine how the high-level indicators of Agenda 2030 could be 'translated' to more localised indicators of progress towards the achievement of the SDGs. Over 100 representatives of agencies took part, and an extensive set of indicators was developed, covering sixteen of the SDGs, with a qualitative analysis provided for SDG17.

Members of the Task Force were then approached for funding to commission the gathering of data on each indicator. Their generous contributions enabled the formation of a team of researchers at the University of Newcastle (NSW) under the leadership of Emeritus Professor Will Rifkin, and hosted by CIFAL, a United Nations Institute for Training and Research (UNITAR) affiliated centre at the University.

The researchers were initially tasked with exploring which of the proposed indicators were supported by data sets that were available at the correct spatial level and in appropriate time intervals and, where not available, to suggest alternatives that could add to the narrative of SDG alignment in the region. The tables presented here have been provided by the interdisciplinary team and represent the first comprehensive baseline measure of SDG-related activities in the region.

The Report of the UN VLR Expert Group Meeting in 2021 (UN, 2021) strongly recommended close collaboration between VLRs and the Voluntary National Reports (VNR). To date, this alignment has not been possible given a hiatus in Australian national reporting following the 2018 VNR. However, where relevant and possible, this report provides national data to permit some comparisons between the Hunter Region and national trends, as well as comparison with the wider NSW state.

Learn more about the Hunter Region SDG Task Force at www.huntersdgtaskforce.org

The Hunter Region of New South Wales

The Hunter Region is situated approximately 250 kilometres north of Sydney and ranges from the coastal city of Newcastle to the rural community (as defined in the Australian Index of Remoteness) of Upper Hunter Shire, some 175 kilometres inland to the west.

There are regional centres at Singleton, Cessnock and Muswellbrook.

The Local Government Areas (LGA) of Lake Macquarie, Newcastle and Maitland are combined for statistical purposes by the Australian Bureau of Statistics (ABS) as the Significant Urban Area (SUA) of Newcastle-Maitland, with a population of 508,437. That effectively encapsulates a large urban and suburban area that is home to around 66% of the Hunter Region's population. Consequently, the large majority of residents of the Hunter region live within 20 kilometres of the coast.

The Hunter Region consists of ten local government authorities.

TABLE 1: HUNTER REGION LOCAL GOVERNMENT AREAS (POPULATION SIZE)

Local Government Area	Population (2021)
Lake Macquarie	213,845
Newcastle	168,873
Mid Coast	96,579
Maitland	90,226
Port Stephens	75,276
Cessnock	63,632
Singleton	24,577
Muswellbrook	16,357
Upper Hunter	14,299
Dungog	9,541
Total	773,205
Source: Australian Bureau of Statistics Census 2021	

The City of Newcastle is the major urban area and a centre of commercial, administrative, manufacturing and service sector activity. Having experienced rapid deindustrialisation in the 1990s to 2010s, with closure of a large, integrated steelmaking complex and decline in associated industries, the city has emerged successfully from a coal mining and steel production heritage to be a modern city with a diverse economy. However, that economy remains dominated by one of the largest coal exporting ports globally, reflecting the major mining operations in the Hunter Region. That contributes significantly to the region's economic output and ties the region to international trade, primarily with the leading industrial powers of Asia-China, Japan, Korea and India.

The place of coal export in the economy also presents the region with a challenge of transitioning certain sectors of the economy to industries that are less carbon-based, given global, national and state targets for net zero carbon emissions by 2050.

Australia, historically and currently, experiences high levels of international migration, particularly to the state capital cities, including Sydney. This has created a significant demand for housing, leading to Sydney becoming one of the most expensive cities globally. The proximity of Newcastle and its coastal lifestyle to Sydney, offers a more cost effective alternative and recent years have seen a rising demand for housing and a consequent rise in the cost of both homes for purchase and for rental.

The city authority has adopted a sustainability program since the publication of its Carbon and Water Management Plan in 2011 (City of Newcastle, 2011).

The intervening period has seen continuous sustainability policy development and an associated program of reductions in energy use by city facilities and operations. Additionally, the city authority has maintained a progressive social program targeting key urban issues of sustainable transport and smart city initiatives, alongside programs to address housing and homelessness. The city formally adopted the SDGs in 2017, and they have become an integral component of city policy and service delivery. The city has a Net Zero carbon target for the government's operations set for 2030.

Other LGAs in the Hunter Region have a strong sustainability agenda. Lake Macquarie was the first council in Australia to publish a Circular Economy Policy and Framework and has introduced innovative initiatives to 'design out waste and pollution, keep products and materials in use at their highest possible value and regenerate natural systems' (Lake Macquarie Council, 2021). The Hunter Joint Organisation of Councils has also introduced a circular economy strategy to support its 10 member councils. Private sector and non-governmental organisations in the region have also shown a strong commitment to sustainability and SDG alignment. The formation of the Task Fforce and the financial support for the production of this VLR evidences the awareness of and support for Agenda 2030 in the region. However, despite the strong basis of collaboration, the region experiences major sustainability challenges.

The economic dependency on coal mining and export is felt throughout the region, from the regional communities of the Upper Hunter to the coal exporting Port of Newcastle. Coal mining dependent communities can be resistant to change and sceptical about the promise of alternatives, although recent years have seen a growing discussion in public, policy and industry arenas of economic diversification and transition away from a fossil dependent economy. The NSW government's Regional Plan: 2041 identifies a diversification program and 'repositions the Hunter to focus on renewable energy and the circular economy' (NSW Department of Planning and Environment, 2022). Objective One identified in the document focuses on the transition process. This focus is distinct from previous plans, where the identification of the potential growth of coal mining and its centrality as an 'endowment' in the local economy was stated in

the Hunter Regional Economic Strategy 2018-2022, commissioned by seven Hunter local authorities, supported by the NSW Government.

The emergence of transition thinking is also evident in civil society organisations. The Hunter Jobs Alliance is a collaboration of nine Trade Unions and three community environmental organisations advocating for 'just transition' with protection for skills renewal and well remunerated jobs for the region's industrial workers (Hunter Jobs Alliance, 2022).

Similarly, the Committee for the Hunter, a business and civil society member organisation, is advocating for strategies to make the Hunter a global exemplar region for 'Net Zero and Clean Energy', achieving strong jobs growth from the transition process. A key feature of its strategy is the development of a Hydrogen Hub producing 'green' hydrogen from a range of renewable energy sources. This approach is also the focus of AGL, Australia's oldest and largest electric power utility and the operator of two large-scale coal-fired power stations in the region. These power stations provide a significant proportion of the state's electricity, mainly through high voltage power lines running the 200 kilometres to the Sydney metro area. The Liddell station closed in April 2023, and a feasibility study is exploring the development of a Hunter Energy Hub based on grid-scale batteries, solar thermal storage, wind and pumped hydro renewables to take advantage of the grid connection infrastructure in place. The strategy has also seen the closure of the nearby Bayswater station brought forward by ten years to 2030.

This emergent culture for change bodes well environmentally for the region providing it can be realised and converted into rapid development of key projects. Challenges include the rising demand for electricity and the financing and planning clearances needed for development of renewables.

The Impact of the COVID Pandemic and Other Contextual Factors

The process of data gathering for this VLR commenced in 2022, and much of the data selected refers to 2021 (particularly results of the Australian Census of that year). It took place during various COVID-related controls on movement, economic activity and school attendance, all of which may have had an impact statistically. Throughout the report, we attempt to draw attention to likely impacts of COVID and, where possible, to quantify them.

The historical context is also important in relation to lasting effects of the Global Financial Crisis (GFC). Impacts of the GFC were visible but muted in Australia, and its long-term effects are rarely mentioned in economic discussions. Of greater importance is global trade, particularly given the strong demand in China for Australia's natural resources, such as the Hunter's coal or Western Australia's iron ore, and agricultural commodities such as beef, grain and wine. Accordingly, interpretation of trends in SDGs in the Hunter Region reflect local conditions and local initiatives but also national trends and international influences.

In summary, this Voluntary Local Review has been developed by the Hunter Region SDG Task Force. It is the first collated statistical overview of the Hunter Region and the first to consider local economic and social dynamics deploying the lens of the Sustainable Development Goals. In this respect, it provides a baseline against which Agenda 2030 can be measured as we progress to 2030. It is our hope, subject to the continued support of partners, to provide biennial updates towards 2030, which will support a final evaluation of achievements in 2030. The interactive dashboard that accompanies this VLR can be viewed on the Task Force website at www.huntersdgtaskforce.org/hunter-dashboard. There, you can also view source data.

Note 1: For each of the 16 Sustainable Development Goals, we have presented the Indicators we have selected, where possible utilising the United Nations target and Indicator but also adopting more locally defined Indicators where required.

Note 2: Our assessment of health-related Goals immediately encounters a statistical challenge, in that statistics are mainly available for the Health

District, which encompasses a number of LGAs from outside the Hunter Region. The region sits within the Hunter New England Health District, which contains highly rural areas and areas with higher First Nations populations, both of which are generally associated with poorer health profiles. However, with 80% (773,205 of 962,390) of the Health District population resident in the ten Hunter LGAs, we accept the data presented as the best available and suggestive of important trends, but subject to the caveats identified. A note is provided in the text to indicate where such caveats need to be applied.

Note 3: This report takes a light approach to referencing to avoid overburdening the reader with multiple citations. The authors have referred to nationally available research in the general narrative and provided full references only where it is a critical contribution to the analysis provided.

Note 4: The terms 'developed' and 'less developed' nations are used in this report, reflecting their currency in international literature and UN reporting. We do not imply any hierarchical relationship in the use of these terms and we recognise the legacy of colonialism and globalisation in determining unequal patterns of economic development globally.

SDG 1 No Poverty

End poverty in all its forms everywhere.

Indicator 1.2.1 Proportion of population living below the national poverty line
Indicator 1.3.1 Proportion of the population covered by social protection floors/systems

"Since 2015, global poverty reduction had already been slowing down. The impacts of the COVID-19 pandemic then reversed three decades of steady progress, with the number of people living in extreme poverty increasing for the first time in a generation."

- UN 2023

INDICATOR 1.2.1
PROPORTION OF POPULATION LIVING BELOW THE NATIONAL POVERTY LINE

Poverty is a relative concept, and the Hunter Region is an affluent community in comparison to, for example, sub-Saharan Africa, where a direct experience of absolute poverty is common. However, within Australia, significant differences of income exist and there are concerning trends of rising poverty levels.

With the highest Hunter Region levels of poverty in the early 2000s, largely as a result of deindustrialisation and consequent economic hiatus, poverty levels have begun to rise again in the period since the launch of the SDGs.

This trend is also reflected in a rise at an Australian and New South Wales level. No disaggregated LGA data is available for the Hunter Region.

TABLE 2: HOUSEHOLD INCOME BELOW 50% OF NATIONAL MEDIAN INCOME
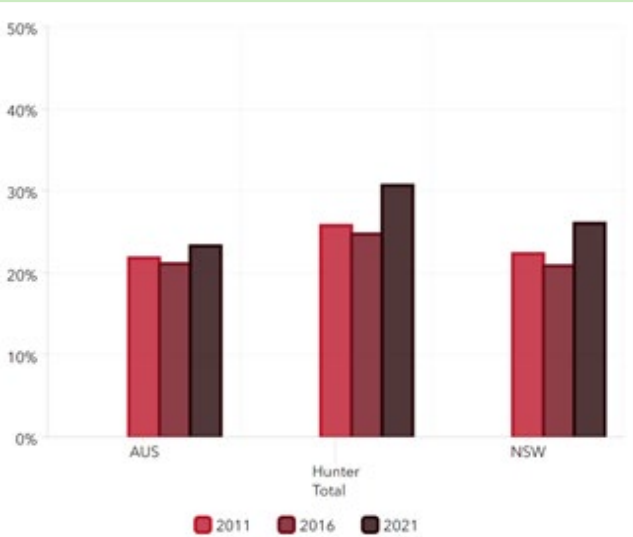
Source: Australian Bureau of Statistics Census 2021

Census data is used to provide a reliable basis for future comparability. A recent broader 'snapshot' study by the Australian Council of Social Services (ACOSS, 2022) reveals how the COVID pandemic complicated this picture as the contradictory impacts of both an economy that approached recession and temporarily increased welfare payments worked in opposite directions.

INDICATOR 1.3.1
PROPORTION OF THE POPULATION COVERED BY SOCIAL PROTECTION FLOORS/SYSTEMS

Australia has an extended social welfare safety net but ranks 18th of the OECD nations in welfare expenditure as a proportion of GDP. The proportion in 2019 was 20%, around the OECD average, and an increase from

17.6% in 2017 (OECD, 2020 and 2023). This figure does not include the effects of temporary payments introduced in March 2020 in response to the pandemic. The fall of the national poverty rate to 12% in 2020 is a consequence of those temporary, COVID-related increases in welfare payments, indicating that a key determinant of poverty in Australia is the level of social benefits such as Job Seeker, Youth Allowance and New Start.

The inaugural report of the newly established Interim Economic Inclusion Advisory Committee (IEIAC, 2023) judges these schemes to be 'seriously inadequate' and has recommended significant increases in these basic allowances, but those recommended increases are yet to be fully implemented by government. Consequently, although all Australian residents will have access to social protection systems, the adequacy of provision is questioned by key national agencies.

Place plays an important role in shaping the experience of poverty, as patterns of economic activity rise and decline over time. Consequently, the Hunter Region has a wide range of spatial variation in advantage and disadvantage. The Local Government Areas of Newcastle and Dungog are in the 8th highest percentile in the Australian Socio-Economic Indexes for Area (SEIFA), which combines four indexes of relative advantage and disadvantage. In contrast, Cessnock, Muswellbrook and Mid-Coast lie in the 3rd decile, with concentrations of disadvantage in large social housing communities, for example, at Muswellbrook South, which is largely coterminous with a Statistical level 1 (SA1) that falls in the lowest percentile of the Index.

In summary, the Hunter Region has recently replicated the national trend of rising levels of relative poverty. The causes can be identified as stagnant wages over an extended period, alongside a long-term decline in the real income derived from social benefits. Regrettably, these factors are determined by national level processes and are not within the sphere of influence of regional or local authorities.

The localised disparities identified are also a result of these national processes overlaid with the decline of the industrial base in the region and skills mismatches between the population and the emerging patterns of employment. There is additionally, a 'residualised' low-income population living in social housing that is largely dependent on social benefits as the primary source of income.

SCAN HERE TO VIEW AND INTERACT WITH THE DASHBOARD DATA

SDG 2 Zero Hunger

End hunger, achieve food security and improve nutrition and promote sustainable agriculture.

Indicator 2.1.1 Prevalence of undernourishment

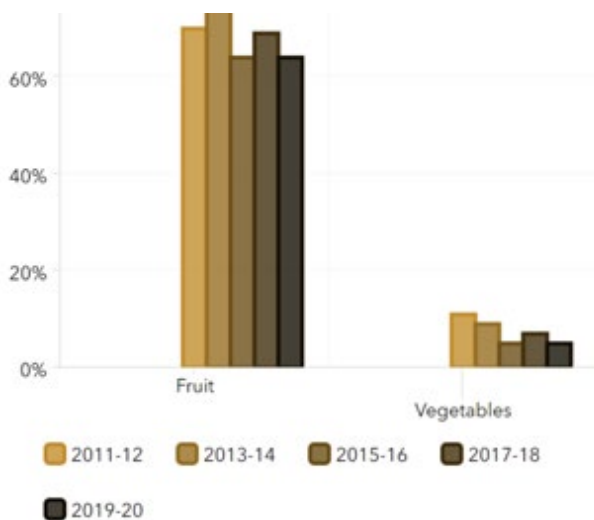**Indicator 2.1.2 Prevelance of food insecurity**

"The number of people facing hunger and food insecurity has been on the rise since 2015, with the pandemic, conflict, climate change and growing inequalities exacerbating the situation."

- UN 2023

INDICATOR 2.1.1
PREVALENCE OF UNDERNOURISHMENT

SDG2 is most clearly associated with the eradication of global hunger, a process begun with the Millenium Development Goals, which are credited with halving the number of people living with hunger globally. Whilst such hunger is often life-threatening and, in crisis famine areas, often fatal, the last decade has also seen rising levels of food insecurity in 'developed' nations, including Australia. In developed nations there are greater concerns with malnourishment rather than undernourishment. Table 3 presents data for the dietary intake of children in the Hunter New England Health District.

TABLE 3: CHILDREN'S DIETARY INTAKE OF FRUIT AND VEGETABLES AS PROPORTION OF RECOMMENDED INTAKE (HUNTER NEW ENGLAND HEALTH DISTRICT)

Source: Hunter New England Health District

INDICATOR 2.1.2 PREVALENCE OF FOOD INSECURITY

Food insecurity occurs where individuals and families lack financial resources to access food on a regular and sustained basis. This may result in meals being regularly missed or the use of low-cost unhealthy foods that have negative health impacts, including obesity and related conditions, such as Type II diabetes. Establishing levels of food insecurity at the local level is difficult and is generally not mapped in official statistics. Some insight into the scale of the problem can be gained by firstly looking at the national picture of food relief provided.

TABLE 4: PROPORTION OF AUSTRALIAN POPULATION EXPERIENCING FOOD INSECURITY

Legend: 2016 | 2017 | 2018 | 2019 | 2021
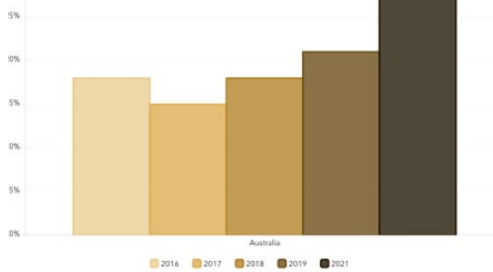
A more local picture can be gained by looking at patterns of access to locally provided food relief. Although no picture is available for the Hunter Region as a whole, the level of support provided in the Greater Newcastle area shows a consistent rise since 2016. Whilst the increase can be partially explained by improved organisational capacity and increased donations for dis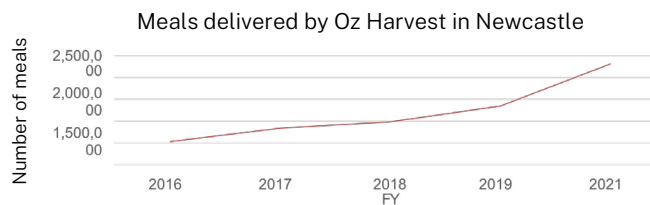tribution, it can be generally indicative of rising demand. This trend is also reflective of the national increase in food insecurity, shown in the previous table (Table 4).

TABLE 5: NUMBER OF MEALS DELIVERED GREATER NEWCASTLE AREA

Meals delivered by Oz Harvest in Newcastle

Globally, the consumption of low-quality, low-cost foods by low socio-economic groups is reflected in rising rates of obesity in the developed world. We have examined overweight and obesity status as an indicator of malnourishment in the Hunter Region. The prevalence of overweight/obesity in the Hunter New England Health District is higher than for the state of NSW. Additionally, the trend at state and regional levels is upward.

TABLE 6: OVERWEIGHT/OBESITY RATE OF ADULT POPULATION

Legend: 2016 | 2017 | 2018 | 2019 | 2020 | 2021
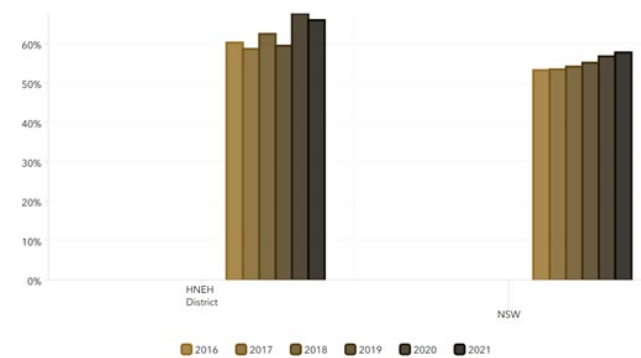
Source: Hunter New England Health District

In summary, whilst no resident of the region should suffer absolute hunger, there is a developing trend of food insecurity, which is creating greater dependence on foodbanks and similar initiatives. Whilst it is difficult to gain a reliable local figure for the proportion of the population using these services, the reported rising service delivery is indicative of worsening food insecurity.

SCAN HERE TO VIEW AND INTERACT WITH THE DASHBOARD DATA

SDG 3 Good Health and Wellbeing

3 GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote health and wellbeing for all at all ages.

Indicator 3.4.1 Cardio-vascular and diabetes deaths*
Indicator 3.4.2 Suicide and emergency mental health*

"The pandemic and other ongoing crises are hindering progress in achieving Goal 3, exacerbating existing health inequalities and threatening progress towards universal health coverage"
- UN 2023

As part of a developed nation with an advanced public health system and a high incidence of health insurance, the Hunter Region has, in general terms, a strong health infrastructure with a concentration of hospitals in the urban centre of Newcastle, as one might expect.
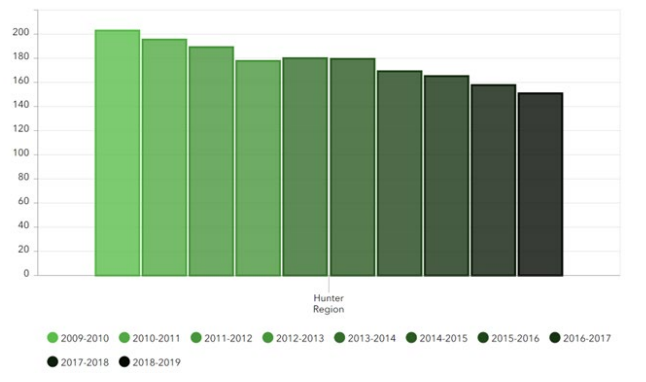
The majority of UN Indicators for this goal are focused on nations where universal healthcare is, at best, an aspiration. Consequently, incidence of the communicable diseases identified in Indicators 3.3.1 to 3.3.5 are not seen as critical national issues in Australia. However, in the First Nations community there are concerns for the recent emergence of tuberculosis clusters and the continued prevalence of preventable diseases, including rheumatic fever and trachoma.

Where relevant we have used a UN SDG Indicator but have also substituted and augmented with more general indicators of health trends where necessary. We have selected two key non-communicable diseases as the most apposite measure of general population health.

INDICATOR 3.4.1
CARDIO-VASCULAR AND DIABETES DEATHS

A notable decline in cardio-vascular related death is likely the result of the deindustrialisation of the region, with lower proportions of the population in manual occupations, alongside reductions in the prevalence of smoking, and improved surgical and drug treatment regimens that have emerged globally.

TABLE 7: LONG-TERM TRENDS IN CARDIOVASCULAR DISEASE: DEATHS PER 100,000

● 2009-2010 ● 2010-2011 ● 2011-2012 ● 2012-2013 ● 2013-2014 ● 2014-2015 ● 2015-2016 ● 2016-2017
● 2017-2018 ● 2018-2019

Source: Hunter New England Health District

Diabetes-related deaths are presented for the Hunter New England Health District and the comparative figure for the state of NSW. Rates in the region are marginally higher and may reflect the higher prevalence of diabetes in First Nations communities in the region. Additionally, diabetes is more prevalent in a low socio-economic status community, generally, and that can be seen to have an influence here. (See data for SDG1). A higher likelihood of having diabetes can be exacerbated by low income, leading to a higher mortality rate, due to challenges in accessing healthcare and in getting support to maintain interventions in diet, exercise and mental wellbeing to manage the condition.

*ALL INDICATORS ARE FOR HUNTER NEW ENGLAND HEALTH DISTRICT UNLESS OTHERWISE INDICATED. SEE NOTE 2 ON PAGE 12.

**TABLE 8: DIABETES RELATED DEATHS: HUNTER NEW ENGLAND AND NEW SOUTH WALES**

Source: Hunter New England Health District

INDICATOR 3.4.2
SUICIDE AND EMERGENCY MENTAL HEALTH

Mental health in the region is a critical measure of population health. The number of those seeking emergency mental health support has shown a steady increase since 2014. The rate for the region is marginally higher than for NSW. The growth in 2020 and 2021 may reflect impact from COVID lockdowns but are also indicative of a long-term trend of increasing emergency mental health presentations. Other relevant factors are an increased awareness in Australia of mental health as an important issue, an increase in availability of support services (e.g. from NGOs), and a reduction in stigma associated with seeking mental health support or with identifying one's challenges – or those of a family member - as being mental health issues.

TABLE 9: EMERGENCY PRESENTATIONS FOR MENTAL HEALTH SERVICES PER 100,000 POPULATION
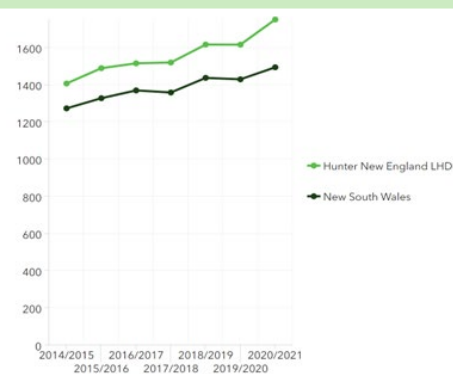

Suicide rates have increased steadily, and the region records a higher rate than NSW generally. This difference may reflect the higher proportions of First Nations Australians in the Hunter New England region. Nationally, 5.3% of First Nations deaths are by suicide, compared to only 1.3 % of the non-indigenous population (AIHW, 2023).

TABLE 10: SUICIDE RATE PER 100,000 POPULATION

Overall, the life expectancy of First Nations people is significantly below that of the general population, and improvements in life expectancy are the primary objective in Outcome One of the Federal Government's Closing the Gap strategy (Commonwealth 2023).

TABLE 11: LIFE EXPECTANCY IN NSW
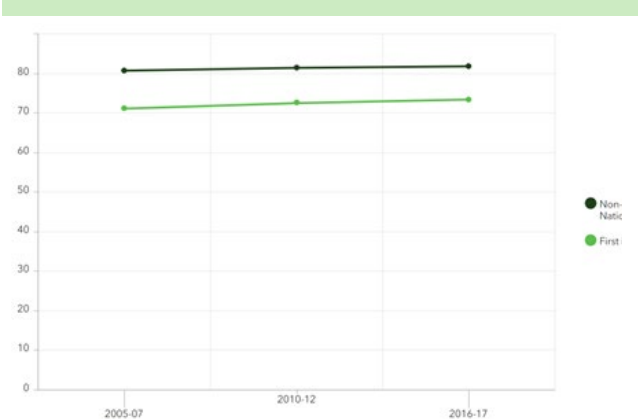
In summary, some indicators of physical health are showing improvements over time, e.g. cardiovascular disease, and some indicators identify rising challenges, e.g. obesity. Statistics on mental health challenges are regrettably on the rise, signifying a general population level decline in mental wellbeing.

Key concerns across the board exist in relation to how well the region's First Nations population is doing, relative to regional and national averages, and why the gap is not closing for many of the targets in the Federal Government's Closing the Gap strategy.

SCAN HERE TO VIEW AND INTERACT WITH THE DASHBOARD DATA

SDG 4 Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

Indicator 4.1.2: Year 12 school completion rates
Indicator 4.2.1: Proportion of children developmentally on track
Indicator 4.2.2: Participation in Early Childhood Education
**Indicator 4.3.1: Participation in vocational and tertiary education**

"Even before the COVID-19 pandemic, the world was already off-track to achieve its education targets. If no additional measures are taken, only one in six countries will meet Goal 4 and achieve universal access to quality education by 2030."

- UN 2023
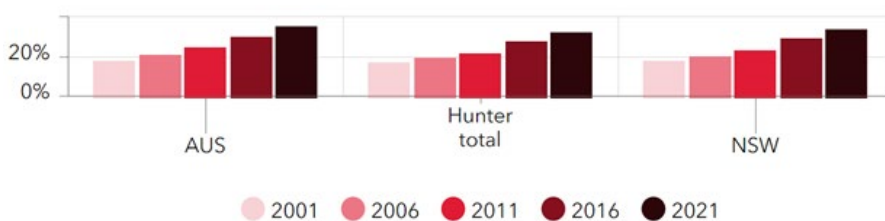
INDICATOR 4.1.2
YEAR 12 SCHOOL COMPLETION RATES

A key measure of any educational system is the proportion of the population achieving high school graduation (Year 12). That proportion has steadily increased throughout the Hunter Region since the early 2000s. However, beyond the city of Newcastle, there remains a notable gap, particularly in the more rural LGAs where completion rates fall as low as 31.65%.

TABLE 12: PROPORTION OF THE POPULATION COMPLETING YEAR 12 EDUCATION
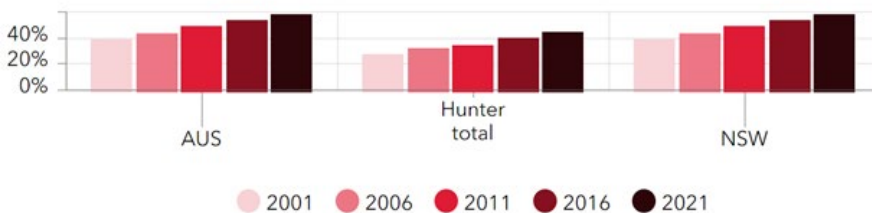
A similar improvement is evident for the First Nations population, however, the gap in completion rates (2021) remains significant at 37% for the non-Aboriginal population and 29% for the First Nations community. Year 12 completion is a key target of the Closing the Gap Strategy that is yet to be achieved.

**TABLE 13: PROPORTION OF FIRST NATIONS POPULATION COMPLETING YEAR 12 EDUCATION**

Gender based disparities also remain, despite the upward trend in school completion rates with a male completion rate of 32% and a female completion rate of 42%.

INDICATOR 4.2.1
PROPORTION OF CHILDREN DEVELOPMENTALLY ON TRACK

Increasingly, there has been a focus on pre-school education and the potential for increasing services and improving outcomes for those with developmental delay. The data for development delay is subject to minor fluctuations, both by location and by the developmental category (Communication, Emotional, Health, Language and Social). This is in part at a statistical level likely to reflect intake cohort variation. However, there is an overall minor decline in the proportion of children developmentally on track. Although a relatively small, (2.75%) decline between 2015 and 2021, it is of concern. The mechanism behind this shift is not immediately evident from the data here, although COVID-19 impact with associated school closures may have contributed to the 2021 data. However, the trend is evident pre-COVID and will require further research to explore potential contributory factors.

TABLE 14: PROPORTION OF CHILDREN DEVELOPMENTALLY ON TRACK (COMBINED COMMUNICATION, EMOTIONAL, HEALTH, LANGUAGE AND SOCIAL)
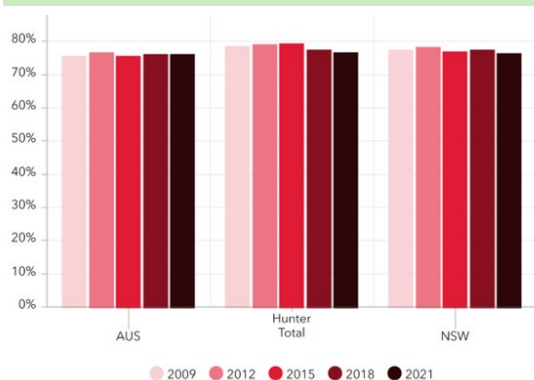
Paradoxically, there has been a growth in the numbers of children attending Early Childhood Education, which is generally regarded as a major contribution to levelling developmental disadvantage and is now a key focus of the federal government. There is a likely time-lag between increased early years education and improved childhood development.

INDICATOR 4.2.2
PARTICIPATION IN EARLY CHILDHOOD EDUCATION

TABLE 15: PROPORTION OF ALL CHILDREN IN EARLY CHILDHOOD EDUCATION (ECE)
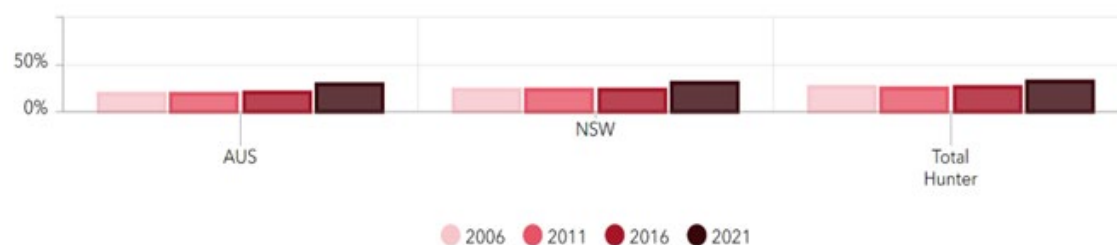
As in other aspects of education, First Nations children are less likely to access the benefits of Early Childhood Education, potentially a result of the absence of services in more remote communities. However, there is a positive trend, indicating that the 'gap' is gradually closing.

TABLE 16: PROPORTION OF FIRST NATIONS CHILDREN IN EARLY CHILDHOOD EDUCATION
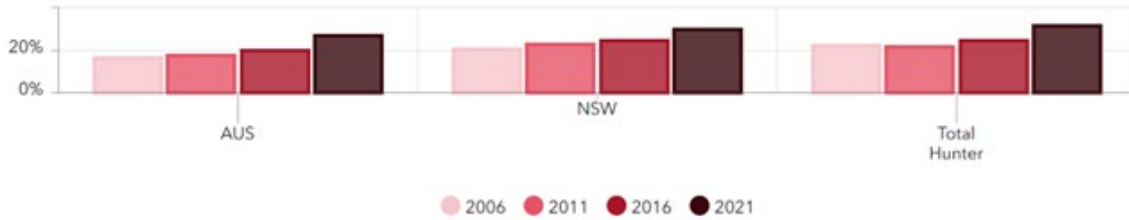
INDICATOR 4.3.1
PARTICIPATION IN VOCATIONAL AND TERTIARY EDUCATION

A final measure of the success of educational provision is the proportion of the population either in tertiary education or with a tertiary educational qualification. The higher rate in the City of Newcastle LGA reflects its economic diversification and growth as an administrative and educational centre. The lower rates in the more rural areas also demonstrate the general challenges of accessing further and higher education, which can have an impact on potential employment outcomes. Those impacts are of particular interest in the Hunter Region, as the economic base shifts away from mining – where certain, well-paid jobs do not need tertiary training – toward alternatives where job prospects can depend on tertiary qualifications.

TABLE 17: PROPORTION OF THE POPULATION IN TERTIARY EDUCATION OR WITH A TERTIARY EDUCATION QUALIFICATION
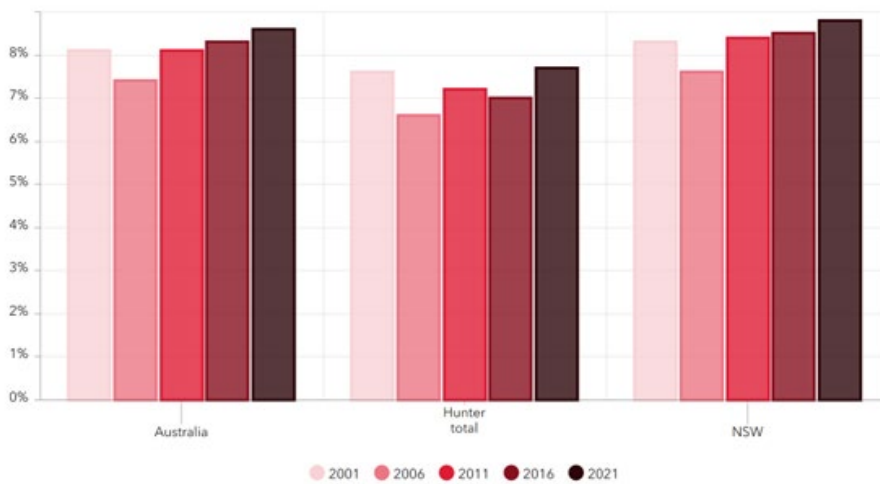
SDG 5 Gender Equality

Achieve gender equality and empower all women and girls.

Indicator 5.1.1: Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex
Indicator 5.4.1: Time spent on unpaid domestic labour
Indicator 5.5.1: Women in government/managerial roles

5 GENDER EQUALITY

'The world is not on track to achieve gender equality by 2030. At the global level, none of the 14 indicators "met or almost met" the targets, and only one is "close to target". At the current rate of progress, it is estimated that it will take up to 286 years to close the gaps in legal protection and remove discriminatory laws, 140 years for women to be represented equally in positions of power and leadership in the workplace, and 47 years to achieve equal representation in national parliaments'
- UN 2023

INDICATOR 5.1.1
WHETHER OR NOT LEGAL FRAMEWORKS ARE IN PLACE TO PROMOTE, ENFORCE AND MONITOR EQUALITY AND NON-DISCRIMINATION ON THE BASIS OF SEX

Australia, as in many 'developed' nations, has a legislative framework to promote and protect gender equality.

The Workplace Gender Equality Act 2012 sets out the legal requirements of employers and established the Workplace Gender Equality Agency (WGEA) which monitors workplace equality. However, as elsewhere, legislation does not guarantee equality and, while progress has been made, there are equality challenges remaining (WGEA, 2021).

The Workplace Gender Equality Act 2012 requires non-public sector employers with 100 or more employees to submit a report to the Workplace Gender Equality Agency each year on matters of workplace gender equality pertaining to six Gender Equality Indicators:
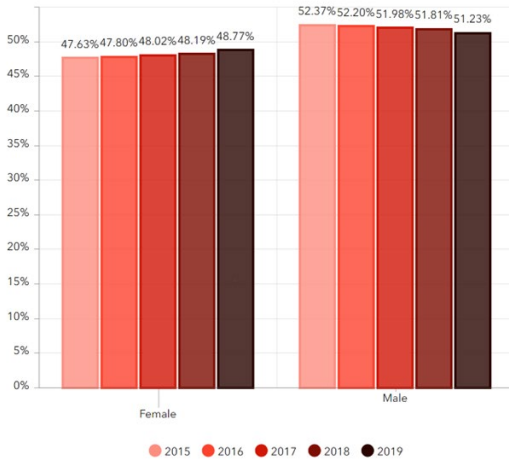
1. Gender composition of the workforce
2. Gender composition of governing bodies of relevant employers
3. Equal remuneration between women and men
4. Availability and utility of employment terms, conditions and practices relating to flexible working arrangements for employees and to working arrangements supporting employees with family or caring responsibilities
5. Consultation with employees on issues concerning gender equality in the workplace
6. Sexual harassment, harassment on the ground of sex or discrimination

Trends since 2015 show gender workforce participation is approaching parity, with slightly under 2.5% difference between male and female jobs in the local economy.

The participation rate reflects the number of individuals in the workforce – those working and those looking for work (the unemployed) – divided by the total number of persons in the working-age population, ages 15-64.

Having almost equal numbers in the workforce does not guarantee equal pay and, whilst there have been improvements in recent years, the gender pay gap remains significant and requires concerted measures to improve the financial position of women. Low female pay has a lifetime implication, from the impact of low income on daily personal and family life chances, to the low income derived from superannuation payments in old age. Consequently, older women are currently the fastest growing group of those experiencing homelessness in Australia.

TABLE 19: THE GENDER PAY GAP (% DIFFERENCE IN WAGE LEVELS (HUNTER REGION AND NEW SOUTH WALES))
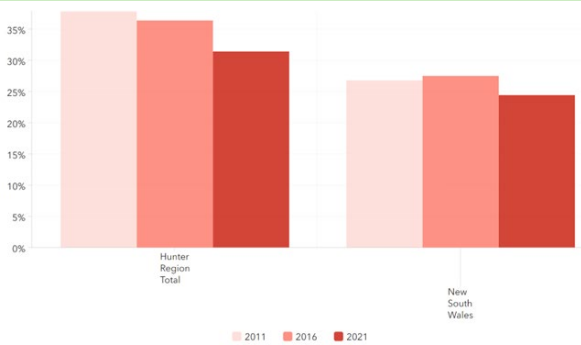
INDICATOR 5.4.1
TIME SPENT ON UNPAID DOMESTIC LABOUR

It is also the case that, historically, women contribute significantly more than men to unpaid domestic labour and care work. This remained the case during the pandemic period which has been referred to as a 'shecession' or a 'momcession', signifying the impact on women of school closures and work from home arrangements, where women were often required to do domestic work, occupational work, childcare and home schooling (OECD 2021).

TABLE 20: FEMALE AND MALE CONTRIBUTIONS (MORE THAN 30 HOURS PER WEEK) TO UNPAID DOMESTIC AND CARE WORK (NUMBER)
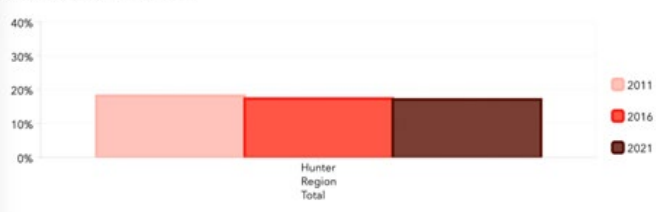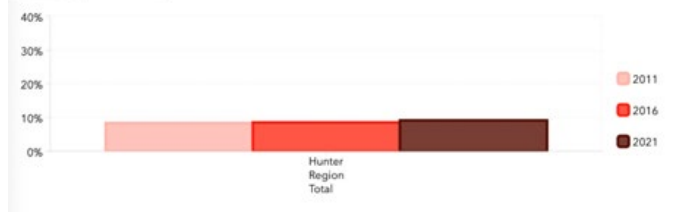
INDICATOR 5.5.1
WOMEN IN GOVERNMENT/MANAGERIAL ROLES

Participation of women in decision making roles is also an important measure of equality. The political system in Australia is open to female participation, but traditional values and attitudes often pose major barriers to achieving parity of representation. That can be particularly true within specific political parties, where selection processes can be prejudicial to women. In the two levels of government examined here, local and national, there has been a long-term trend towards parity.

TABLE 21: WOMEN IN LOCAL POLITICAL ROLES (HUNTER REGION LGAS)

Percent of women elected to councils in the Hunter
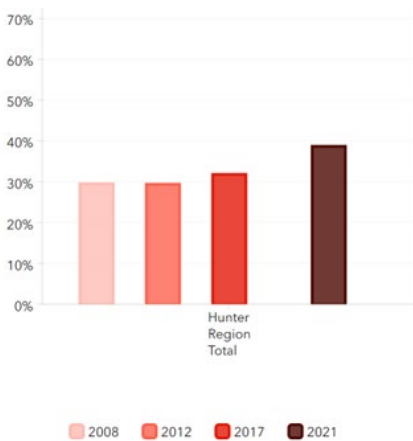
The largest gain in the region is in the City of Newcastle LGA where 69% of councillors are women. The lowest proportion of women councillors is in Port Stephens LGA, with currently 10%. In the current Federal Senate, almost 60% of representatives are women.

TABLE 22: WOMEN IN NATIONAL POLITICAL ROLES
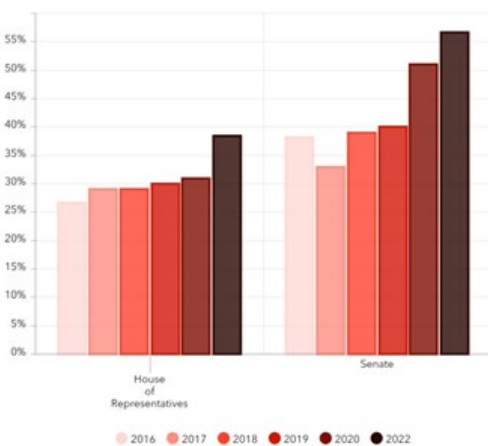
An additional indicator of gender equality is the representation of women in managerial roles in the workforce.

TABLE 23: WOMEN IN MANAGERIAL POSITIONS AS PROPORTION OF ALL MANAGERIAL POSITIONS

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AND INTERACT WITH THE
DASHBOARD DATA
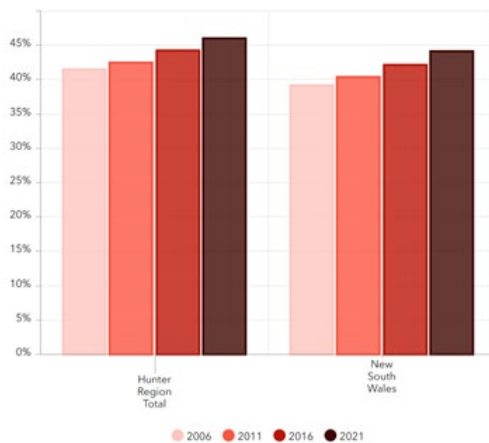
6 CLEAN WATER AND SANITATION

SDG 6 Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all.

Indicator 6.3.1: Treated and recycled wastewater
Indicator 6.4.1: Changes in water use efficiency

'Water scarcity is a growing problem in many parts of the world, and conflicts and climate change are exacerbating the issue. In addition, water pollution is a significant challenge that affects both human health and the environment in many countries."
- UN 2023

An adequate supply of clean, potable water and effective treatment of human waste have, in the 'developed world', contributed significantly to health improvement over the last century. For most G20 nations, both services are taken largely for granted by the majority of the population. That is also true for the metropolitan locations in Australia. However, the vast scale of the country and extreme distances between settlements exposes some rural and remote locations to poor water supply and sanitation services. That is particularly true of remote First Nations settlements and is a contributory factor to some of the poor health outcomes experienced in those communities.

The Hunter Region generally has access to mains water supply and sewerage facilities. However, in the upper reaches of the Hunter Valley, individual household supply may be reliant on rainwater collection or bore water wells, and sanitation will be based on septic tanks. Even for homes and businesses connected to 'town water' (from the local utility), supply can be limited during droughts. That was seen at times in recent years when at least one community in the Upper Hunter Shire had to rely on water being delivered by truck.

INDICATOR 6.3.1
TREATED AND RECYCLED WASTEWATER

For the majority of the region's population, water supply is provided by Hunter Water, a State Owned Corporation (SOC). Hunter Water covers the lower Hunter Region. In the Upper Hunter Region, water treatment and supply is by the local authority. The proportion of wastewater safely treated is expected to be 100%, which has been achieved until 2017. A very slight decline has occurred since 2017 largely as a result of flood episodes. The figure becomes lower during flooding events, when stormwater volumes are too great to be handled by treatment facilities. The facilities can handle some volumes of stormwater, to a capacity determined to cope with the most likely rainfall and flooding events, but a 50-year flood might cause overflow. So, increases in extreme weather events are considered in planning treatment capacity and related budgeting.

A further measure of water efficiency is the use of recycled water by the water utility. Again presented only for Hunter Water, this figure represents a comparatively minor component of supply. Hunter Water reports that about 10 per cent of the effluent that they receive is treated to a recycled water standard and supplied to recycled water users which are industrial, not residential. One of the largest users is a coal loading facility at the port, which uses the water to help reduce the volume of coal dust released from stockpiles awaiting export.

The volume of recycled water supplied by Hunter Water is shown over the page. The variations year-to-year can reflect changes in the effluent volume received (e.g. more stormwater going to the treatment plants) and changes in customer demand for recycled water (e.g. more need for dust suppression in drier years). The recycled water is not mixed with drinking water as the social license for doing that has not been achieved in eastern Australia.
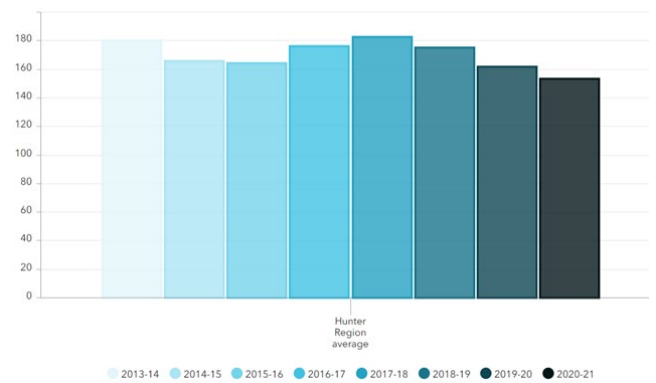
INDICATOR 6.4.1
CHANGES IN WATER USE EFFICIENCY

Improved water efficiency is essential, particularly in localities liable to encounter drought conditions, including parts of the Hunter Region. The term 'efficiency' tends to be used, in lay terminology, to refer to water demand by households and industry. If we focus on the residential sector, it is important to recognise that the single greatest use of water for many households is watering the garden because the tap is open for an extended period of time. So, greater water consumption can occur in drier years (e.g. drought).

This breakdown in water use is evident in the Hunter Region. The more rural LGAs, where houses can have larger yards, record significantly higher water use per dwelling than the more urban and suburban areas.

The overall trend in water use seems to be declining over time, as water utilities invest in public information (such as about more efficient garden planting and watering strategies) and efficiency programs (such as in reducing leakage from the distribution system). However, there are significant changes from year to year influenced by rainfall and lower demand for garden and lawn maintenance.

TABLE 25: WATER USE PER DWELLING (K/L PER YEAR)

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7 AFFORDABLE AND CLEAN ENERGY

SDG 7 Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable and modern energy for all.

Indicator: 7.1.2: Proportion of solar hot water, PV systems, electric vehicles
Indicator: 7.2.1: Proportion of energy production from renewable sources
Indicator: 7.3.1: Daily household expenditure on energy

"To ensure access to energy for all by 2030, we must accelerate electrification, increase investments in renewable energy sources and invest in improving electricity grids.".
- UN 2023

Access to affordable and reliable energy is a basic requirement of life and regrettably one not shared globally. As a developed nation with an extensive energy network, Australia has not faced a major issue with supply of energy, beyond occasional transmission failure, particularly between states or after extreme weather events. A decade of federal government failure to promote renewable energy and a favouring of continued coal powered generation has meant that Australia lags behind many developed nations in its adoption of renewable energy.

In the Hunter Region, there was considerable federal government opposition to the decision by AGL, the largest generator in Australia, to close its Liddell Power Station and bring forward the closure of the nearby Bayswater Power Station to 2030. However, the current federal government is promoting an energy transition, one that involves investment in renewables and hydrogen technology, including in the Hunter Region. Plans discussed for the sites of the retired coal power stations include significant development of renewable energy and hydrogen production and use, due to the presence of high voltage power lines, which carry much of the power generated in the region to the Sydney metro area. There are also plans to develop the renewable energy capacity west of the region – in newly designated renewable energy zones, with transmission into the Hunter Region to create hydrogen, power industry, or provide more renewable electricity for the Sydney metro area.

INDICATOR: 7.1.2
PROPORTION OF SOLAR HOT WATER, PV SYSTEMS, ELECTRIC VEHICLES

In contrast to government failure to invest in renewables, investment in household solar energy is high, with almost one-third of households (3 million) having installed rooftop solar panels, currently producing 20GW supply (Clean Technica, 2023).

TABLE 26: PERCENTAGE OF HOUSEHOLDS WITH ROOFTOP PV SOLAR (HUNTER REGION)
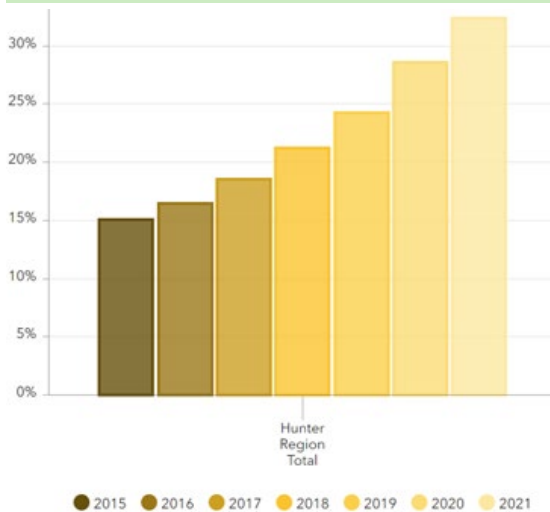

In comparison with PV installations, the older technology of solar hot water heating is in decline as older systems are being retired and not replaced, presumably due to cost and a lack of sufficient government incentives. Rooftop space is going toward solar PV installations, increasingly with battery storage.

TABLE 27: NEW SOLAR HOT WATER INSTALLATIONS (CALENDAR YEAR)
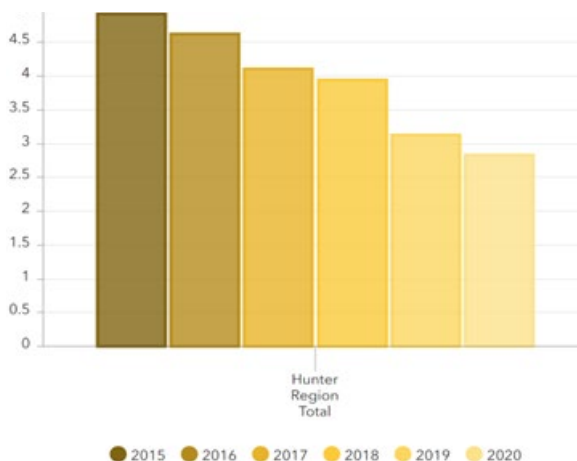
The previous federal government did much to discourage the take up of Electric Vehicles (EVs). The lack of emissions standards provided no incentive for manufacturers to market EVs in Australia, and there has been little investment in charging infrastructure. The limited EV charging infrastructure poses a particular problem given the considerable distance between major cities and other settlements in Australia. In the Hunter Region, we can see this process in the distinction between Newcastle city, where investment is occurring in charging stations, and the more rural LGAs in the region. However, the take-up, even in the city, remains very low in comparison to European EV ownership.

TABLE 28: PROPORTION OF ELECTRIC VEHICLES
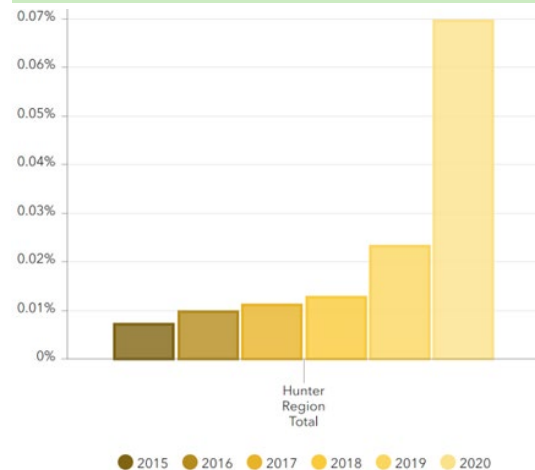
INDICATOR: 7.2.1 PROPORTION OF ENERGY PRODUCTION FROM RENEWABLE SOURCES

An unfavourable national policy environment has inhibited the acceleration of a transition to grid-based renewable energy, with the state of NSW using less than 30% of all energy from renewable sources. However, the election of a new federal government in 2021 has instigated renewed commitment to energy transition and this should accelerate as recently revised targets are realised.

TABLE 29: NSW PROPORTION OF ENERGY PRODUCTION FROM RENEWABLES
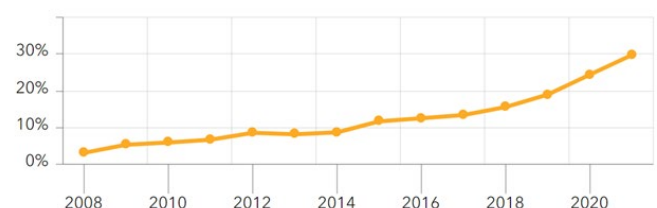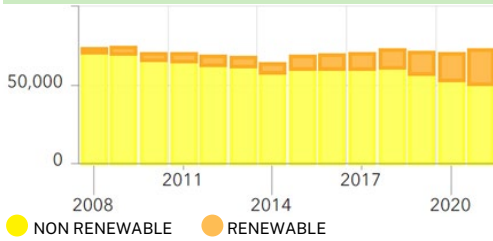
INDICATOR: 7.3.1 DAILY HOUSEHOLD EXPENDITURE ON ENERGY

Until recently, overall energy costs for households were declining as some of the investments in renewables were impacting energy pricing. However, the global spike in energy prices following Russia's invasion of Ukraine has significantly increased energy inflation. This is not yet reflected in the table below.

TABLE 31: AVERAGE DAILY SPEND ON RESIDENTIAL ELECTRICITY: HUNTER REGION

For many households, the rapid global increases in energy costs in 2022-23 have been challenging, coupled with rising costs for food and general inflation. A RMIT University study (Willand et al, 2023) has identified that 25% of Australian families are struggling to pay energy bills, resulting in self-rationing to avoid disconnectio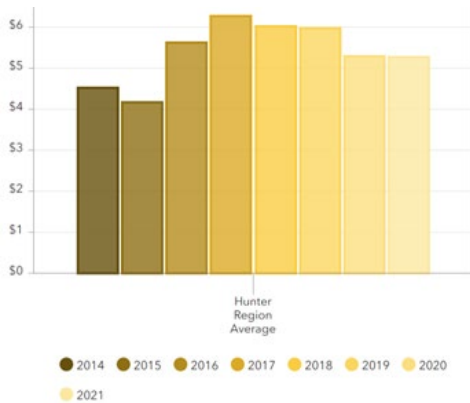n. These sorts of household cutbacks have potential health impacts, particularly on the elderly and on children living in homes that are not cooled or warmed effectively.

For the future, there is a hope that energy prices can fall as renewable electricity takes advantage of 'free' wind and sun, as households switch to appliances powered by renewable electricity in place of natural gas for space heating, water heating and cooking, and as new homes are made more energy efficient. However, these advances tend to benefit those who can afford solar panels, new appliances and new homes, with those on lower incomes needing to await a growing market of energy-efficient, second-hand houses and goods.
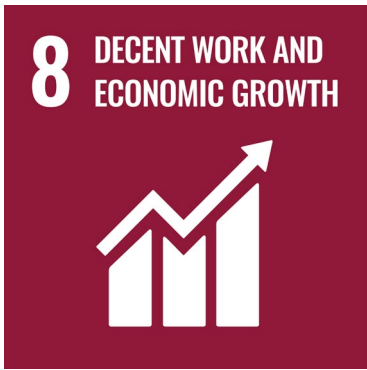
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SDG 8 Decent Work and Economic Growth

8 DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

Indicator 8.5.2: Unemployment rate
Indicator 8.6.1: Proportion Not in Employment, Education or Training
Indicator 8.8.1: Fatal and non-fatal occupational injuries per 100,000 workers

'Growth in global real GDP per capita is forecast to slow down in 2023, putting at risk not just employment and income but also advances in equitable pay for women and decent work for young people."
- UN 2023

The Australian economy has achieved very low rates of unemployment recently, and the Hunter Region reflects that overall trend. The low unemployment rate is partially explained by the absence of temporary visitors and migrants in the labour force due to the extended closure of national borders during the COVID pandemic. However, the Hunter Region receives a relatively small share of international migrants, when they do come to Australia, with the Sydney metro area receiving by far the greatest proportion in NSW.

Many businesses report difficulties filling vacancies post-COVID, particularly in sectors such as catering, tourism, health and the care industries. However, low wage jobs in any sector are hard to fill in metro areas, such as the Newcastle metro area, due to steep rises in housing costs in recent years. Health and social services is the sector with the greatest employment in the Hunter Region.

INDICATOR 8.5.2 UNEMPLOYMENT RATE

TABLE 32: GENERAL UNEMPLOYMENT RATE (ALL CATEGORIES)

Hunter Total
○ 2006 ● 2011 ● 2016 ● 2021
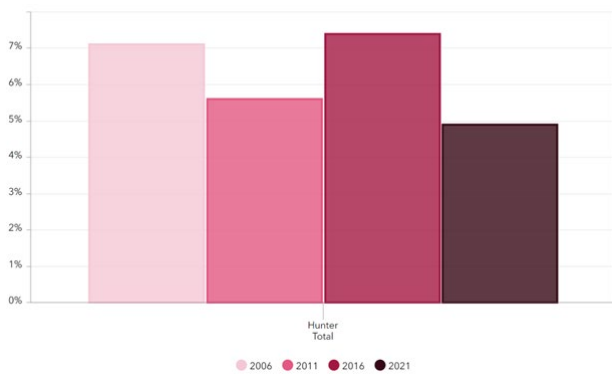
TABLE 33: UNEMPLOYMENT RATE (FIRST NATIONS POPULATION)

Hunter Total
○ 2006 ● 2011 ● 2016 ● 2021
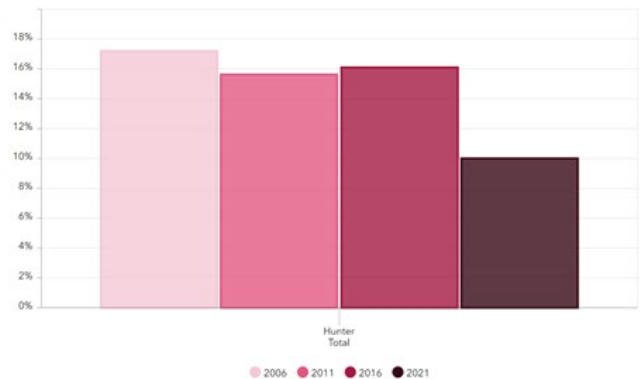
Unemployment rates for First Nations people remain consistently higher than for non-First Nations people. In 2021, the rate of unemployment for First Nations people was double that of non-First Nations people at 10%.

INDICATOR 8.6.1 PROPORTION NOT IN EMPLOYMENT, EDUCATION OR TRAINING (NEET)

Also of great concern is the proportion of young people (16-29) who are designated as NEET.

The proportion across NSW has been declining over the last decade. However, the figure for the Hunter Region has held steady, with a slight rise during the last 5-year census period to 2021. That might be explained by the lack in a regional area of access to opportunities - either a lack of job options or a lack of the means, such as transport, to take advantage of them.

TABLE 35: FATAL AND NON-FATAL INJURY RATES (MALE)

2015-16 ● 2016-17 ● 2017-18 ● 2018-19 ● 2019-20

TABLE 34: PROPORTION OF PERSONS IN THE WORKFORCE (15-29 YEARS OLD) DESIGNATED NEET
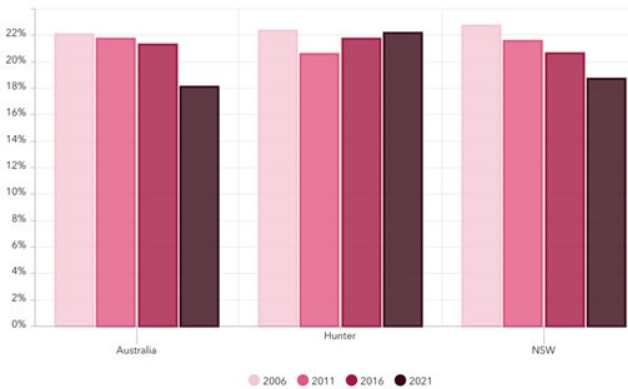

2006 ● 2011 ● 2016 ● 2021
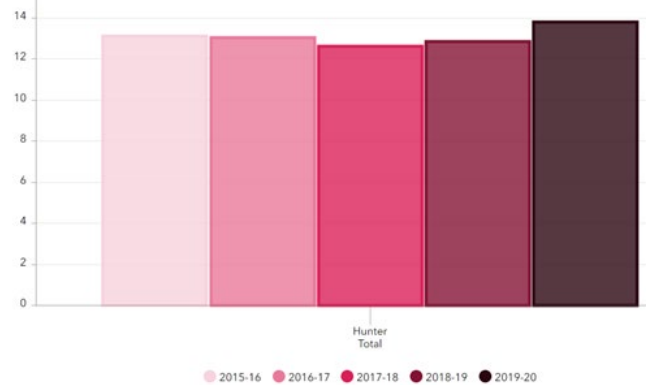
TABLE 36: FATAL AND NON-FATAL INJURY RATES (FEMALE)

2015-16 ● 2016-17 ● 2017-18 ● 2018-19 ● 2019-20
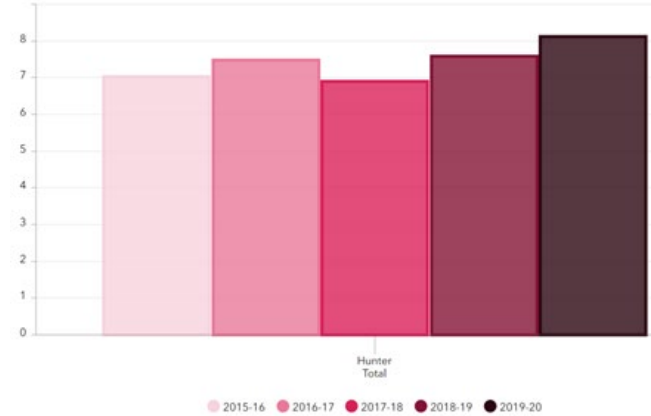
INDICATOR 8.8.1 FATAL AND NON-FATAL OCCUPATIONAL INJURIES PER 100,000 WORKERS

Generally, death and injury rates in key occupations should decline over time as improved safety legislation, monitoring and enforcement create safer workplaces.

Any decline in safety is likely to be the result of inadequate training, poor monitoring and enforcement, and the persistence of unsafe workplace cultures.

It should also be noted that single incidents can skew rates considerably. However, it should be noted that the rate is significantly higher for males (14 in 2019-2020), than for females (8 in 2019-2020). This reflects higher rates of male employment in key industries including construction, mining and heavy manufacturing.

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SDG 9 Industry, Innovation and Infrastructure

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation.

Indicator 9.2.1: Value added as a proportion of GRP per industry sector
Indicator 9.2.2: Proportion of employment in industry sectors
Indicator 9.4.1: Greenhouse gas emissions per unit of value added

"In the aftermath of the pandemic, data shows that higher-technology industries recovered faster and proved to be more resilient, pointing to the need to promote innovation and technology transfer in a way that benefits all countries."
- UN 2023

The Hunter Region has generally transformed from having a strong base in older industries, such as steelmaking, to an economy with less focus on manufacturing, which has declined generally across Australia.

The region now has a more diverse and modern economy, with a larger service sector. However, coal mining on a significant scale, due to the high quality of the coal, the amount that is close to the surface and can be mined cost effectively, and the highly efficient capability to move and export the coal, continues to provide the biggest portion of the region's contribution to the national GRP.

INDICATOR 9.2.1 VALUE ADDED AS A PROPORTION OF GROSS REGIONAL PRODUCT (GRP) PER INDUSTRY SECTOR

TABLE 37: SECTOR SHARES OF THE REGION'S CONTRIBUTION TO THE GRP (TOP 5 SECTORS)
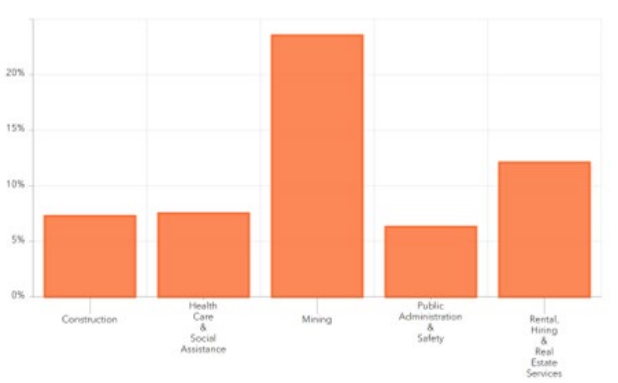
INDICATOR 9.2.2 PROPORTION OF EMPLOYMENT IN INDUSTRY SECTORS

TABLE 38: EMPLOYMENT BY SECTOR (5 HIGHEST CONTRIBUTORS TO GRP)
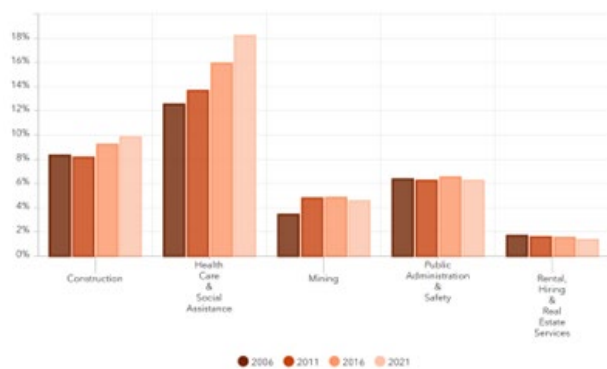
The economic predominance of mining in the region is not reflected in the scale of employment opportunities. A larger proportion of the workforce is employed in Construction, Health and Care & Social Assistance which has seen considerable growth in the last 20 years.

INDICATOR 9.4.1
GHG EMISSIONS PER UNIT OF VALUE ADDED

Reduction in GHG emissions has become the core strategy of climate change mitigation, with many nations setting 'zero carbon' targets, where carbon refers to carbon dioxide equivalent (CO2e) of all GHGs combined.

The New South Wales government confirmed its carbon reduction path in the Climate Change (Net Zero Future) Act 2023 No 48 which establishes a 50% reduction in emissions by 2030, 70% by 2035 and a Net Zero target for 2050. This followed similar Australian Federal government commitment, announced in 2022.

CO2e emissions estimates for the Hunter Region have shown a steady reduction in relation to GRP. The decline is most visible in the high emissions' LGAs with extensive coal mining activities, which have all recorded falling CO2e output. The decline will accelerate as coal-fired power stations in the region are decommissioned. The closure of Liddell power station in 2023 is not yet reflected in the reduced emissions. Muswellbook LGA has the highest emissions but between 2016 and 2021 has seen a nearly 50% fall from 9.8 kilo tonnes per $1 million GRP to 4.5 kilo tonnes. This significant drop in emissions per dollar of GRP mainly reflects the greater earnings from the coal exported, rather than any environmental benefits. These Scope 1 and 2 data do not reflect Scope 3 emissions deriving from the full coal industry supply chain.

The environmental lobby group, Market Forces, claimed in 2021 that coal exported though the Port of Newcastle would result in 396 million tonnes of CO2e emissions globally (Millington, 2021). It has not been possible to independently verify that figure.

TABLE 39: TONNES CO2E EMISSIONS PER MILLION DOLLARS OF GRP GENERATED FOR SCOPE 1 & 2 EMISSIONS

● 2016 ● 2017 ● 2018 ● 2019 ● 2020 ● 2021
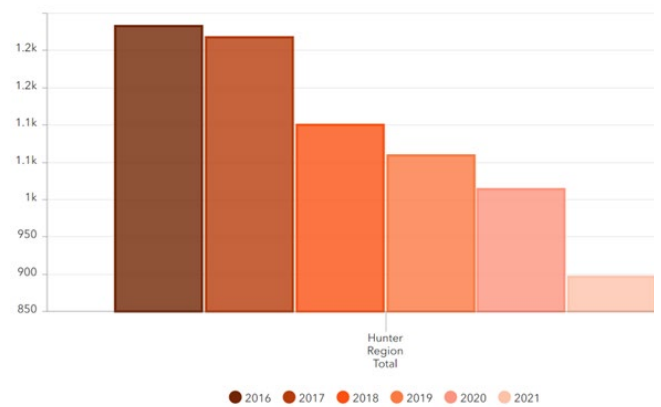
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SDG 10 Reduced Inequalities

Reduce inequality within and among countries.

Indicator 10.1.1: Gini coefficient and percentage share of income of top 5% of earners
Indicator 10.2.1: Proportion of households below 50% of median national income (gender and disability)

"Achieving Goal 10 requires concerted efforts to address the root causes of wage disparities and unequal access to resources both within and between countries"
**- UN 2023**

Rising inequality has been evident both within nations and between nations over the last 30 years (Adamson et al, 2022). Numerous factors have contributed to this trend. In developing countries, labour deregulation, trade union reforms, casualisation of labour and international outsourcing of production have all contributed to the decline of key patterns of employment accompanied by a general flatlining of wage rates over many years. Australia has experienced some of these influences but has avoided the major rises in poverty levels seen, for example, in the UK.

INDICATOR 10.1.1 GINI COEFFICIENT AND PERCENTAGE SHARE OF INCOME OF TOP 5% OF EARNERS

Inequality has been generally measured by the Gini coefficient. A coefficient value of zero represents the perfect sharing of income where everyone has an equal share. A coefficient value of one represents where one person owns all income. Consequently, the lower the value the more equal a society is. The Hunter Region Gini coefficient remains the same in 2020 as it was in 2012 (0.48) with only minor fluctuations in between. The Gini coefficient for NSW and Australia is also relatively unchanged.

TABLE 40: GINI COEFFICIENT HUNTER REGION
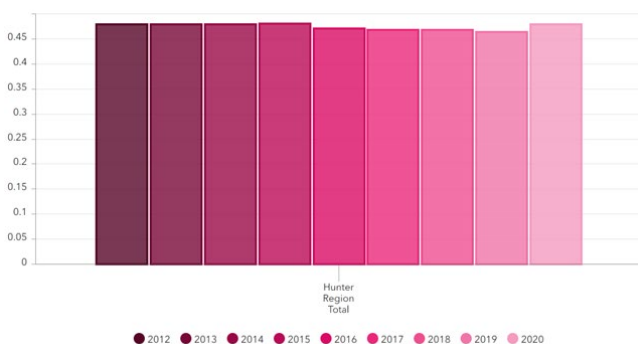
TABLE 41: TOP 5% OF EARNERS' SHARE OF OVERALL INCOME
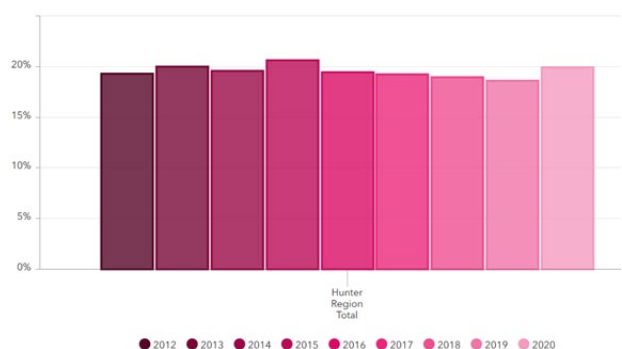
Similarly, we see a steady rate of the percentage share of income by the top 5% of earners with only minor fluctuations.

INDICATOR 10.2.1
PROPORTION OF HOUSEHOLDS BELOW 50% OF MEDIAN NATIONAL INCOME (GENDER AND DISABILITY)

There are a number of factors that influence the likelihood of experiencing low income, usually by impacting an individual's place in the labour market. We explored in relation to SDG5 the influence of gender inequalities and we can see that replicated in the disparity between proportions of males and females with incomes below 50% of median national income.

In 2021 nearly 15% of women earned less than 50% of national median income compared to under 4% of men. This reflects the gendered patterns of employment and the lower levels of remuneration experienced by women. Whilst partly the consequence of pay inequality, the disparity also reflects the low incomes and dependency on government benefits of lone parents, given the majority of lone parents are women. Having responsibility for children can restrict the types and hours of employment, which can limit income, and it can reduce the ability to take on second or third jobs.

There is also increasing evidence of 'pension poverty', as well, for low paid female workers who are widowed or divorced and have not accumulated sufficient superannuation balances in their own right.

TABLE 42: PROPORTION OF WOMEN EARNING BELOW 50% OF MEDIAN INCOME
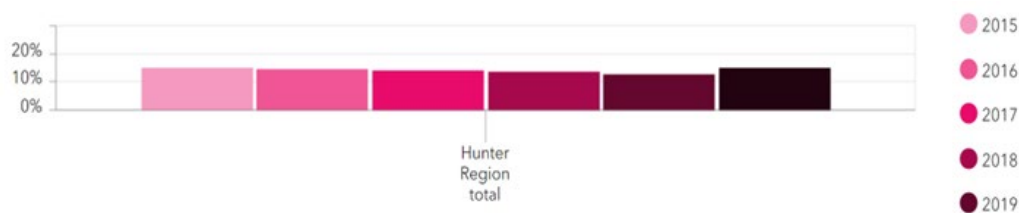
TABLE 43: PROPORTION OF MEN EARNING BELOW 50% OF MEDIAN INCOME
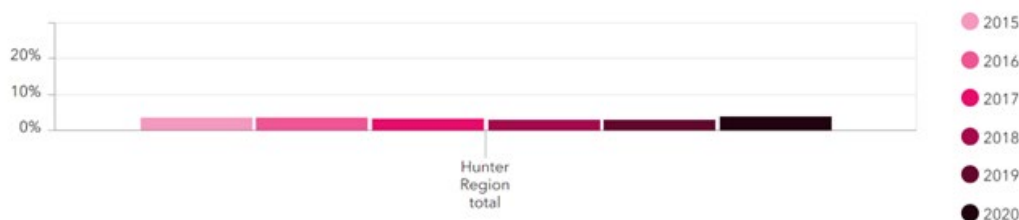
Disability is also a primary cause of low income as people experiencing disability are disadvantaged in the labour market by levels of personal and institutional discrimination. In 2021 nearly 42% of people reporting a disability were earning below 50% of median income compared to only 24% of people not reporting a disability.

TABLE 44: PROPORTION OF PEOPLE REPORTING A DISABILITY EARNING BELOW 50% OF MEDIAN INCOME
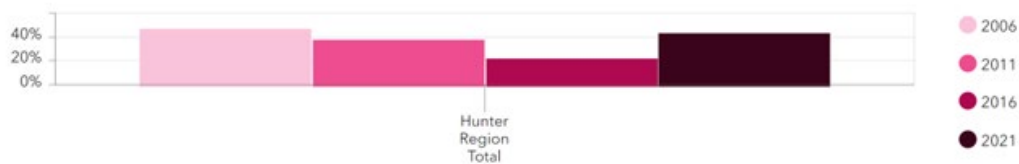
TABLE 45: PROPORTION OF PEOPLE NOT REPORTING A DISABILITY EARNING BELOW 50% OF MEDIAN INCOME
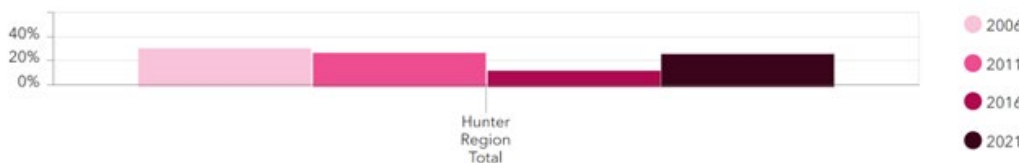
The unemployment rate for people reporting a disability is also higher than for those without a disability. People with a disability are twice as likely to be unemployed (10%) compared with those without a disability (4.6%) in January 2022 (AIHW, 2022). Consequently, we can identify major disadvantages experienced by people reporting a disability.

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SDG 11 Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient and sustainable.

Indicator 11.1.1: Homelessness
Indicator 11.2.1: Public transport use
Indicator 11.6.2: Particulate pollution

"To achieve Goal 11, efforts must focus on strengthening capacities for planning urban development, improving access to public transportation and enhancing waste management."
- UN 2023

SDG11 provides an overview of quality of life and has been termed the 'accelerator' of the New Urban Agenda. With over 80% of the Australian population living in urban settings (86.36% in 2021), the sustainability of our cities and communities is a vital component to mitigate climate change and its impacts. In the context of cities, we must also consider social sustainability and levels of social cohesion and belonging.

INDICATOR 11.1.1 HOMELESSNESS

A key component of any 'no-one left behind' urban strategy is to ensure universal access to safe and affordable housing. The human right to 'adequate' housing is enshrined in Article 25 of the 1948 Declaration of Human Rights and Article 11.1 of the 1966 International Covenant on Economic, Social and Cultural Rights. The United Nations definition of that right is more than simply a roof over your head and includes a key right to live in 'security peace and dignity'. Further elaboration is provided in the 1997 United Nations Committee on Economic, Social and Cultural Rights Comment Paper which recognises the 'freedoms' of protection from forced evictions and interference in home, privacy and family. Additionally, it confers entitlements to security of tenure, affordability and habitability.

A key urban failure in the developed world has been the rising tide of homelessness. The Hunter Region is no exception. There is a general upward trend in the majority of LGAs in the Hunter Region with the highest levels in the urban coastal LGAs, particularly Newcastle. That in part reflects a tendency for people experiencing homelessness to locate themselves closer to services and support agencies, including food banks and night shelters which are more available in urban locations.

More recent attempts to measure homelessness through a series of 'street counts' have identified the growth of 'bush camps' in more rural areas, however, safety issues have prevented entry to the camps to determine the exact number of people residing there.

TABLE 46: PERCENTAGE OF THE POPULATION EXPERIENCING HOMELESSNESS BY LOCATION
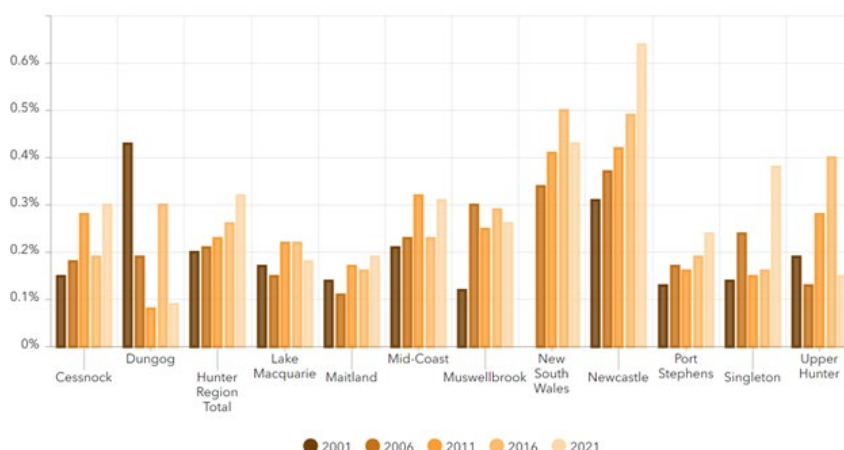
The extent of homelessness underlines the existence of a major housing crisis characterised by low vacancy rates for private sector rentals and a significant shortage of social housing. This crisis has grown over the previous decade as rising housing costs have impacted even middle-income families. Social policy patterns have done little to resolve the housing challenge experienced particularly by low-income families. A recent change of federal government has renewed focus on housing needs, but current proposals are insufficient to tackle the severe shortfall in supply of social and affordable housing.

A second factor determining access to safe and affordable accommodation is the level of rents charged within the Private Rental Sector. Rental stress occurs where the costs of renting for the lowest four deciles (lowest 40%) of the income distribution pay more than 30% of their income for accommodation. This 40/30 measure reflects that the impact of paying 30% of income on rent for a very low-income family is considerably worse than for a high-income family.

Regrettably, there is no valid data source at the LGA spatial level, or even for the Hunter region, prior to the 2021 Census which has estimated the level of rental stress for the first time.

Previous national estimates have been provided by the Australian Institute of Health and Welfare (AIHW and are shown in Table 47 (reproduced from AIHW, 2024). This data demonstrates the different rates of housing stress between state capital cities and the rest of the states across the nation. In this context, the Hunter Region is located in the 'rest of the state'with Newcastle designated a second tier city. However, its proximity to Sydney (approximately 200 kilometres) where house prices and rentals have consistently risen, ensures a 'ripple' affect from the Sydney housing market, which has raised both home purchase and rental costs in Newcastle and the surrounding region.

TABLE 47: HOUSING STRESS: STATE CAPITAL CITIES AND REST OF STATE
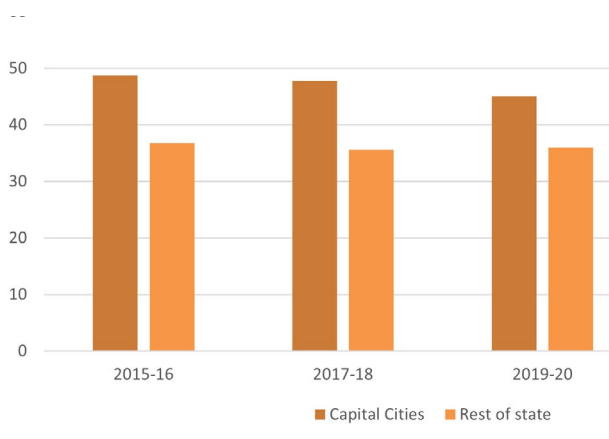
The period since this data reports on has seen a major rise in housing stress, partly a consequence of the COVID-19 pandemic but also reflecting longer term price rises in the housing market, particularly the Private Rental Sector (PRS).

With approximately one third of Australian households renting, rent inflation has contributed significantly to the current cost of living crisis. Between September 2022 and September 2023, capital city rents rose by an average of 10% and the 'rest of the state' rents rose by 7.8% (AIHW, 2024). There has been little or no abatement in this rate of increase since that time.

The 2021 data (included in the 2021 Census for the first time) show considerable variation across the ten LGAs of the Hunter Region. The highest level of rental stress is in the Mid Coast LGA (46%) and the lowest is in the Upper Hunter LGA.

INDICATOR 11.2.1 PUBLIC TRANSPORT USE

In terms of environmental sustainability, transportation makes a significant contribution to the volume and make up of greenhouse gases (GHGs) released.

Public transport offers a method to enable travel whilst reducing carbon production, when compared to use of private vehicles fueled by petrol or diesel and even electricity. We have seen a significant decline in public transport use during and since the COVID pandemic.

Transport preferences would have been significantly impacted by COVID-19 lockdowns, office, school and university closures, and general reluctance of the population to utilise public transport. However, a slow decline in public transport ridership was evident in the region pre-COVID.

Bus   Ferry   Light Rail   Train

● 2016 ● 2017 ● 2018 ● 2019 ● 2020 ● 2021 ● 2022
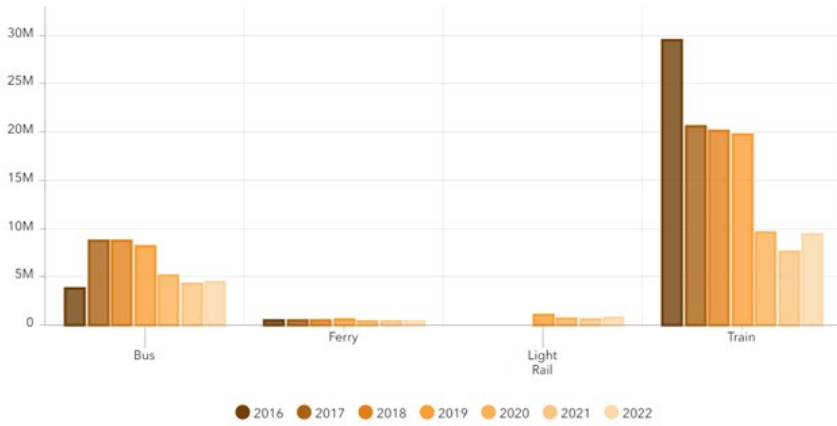
11.6.2 PARTICULATE POLLUTION

A critical measure of urban quality of life and impact on health outcomes is the level of fine particulate air pollution evident. Measurement locations in the NSW air quality assessment system are available for Newcastle (coastal location), Singleton (mid valley location) and Muswellbrook (upper valley location).

In other words, the levels of particulate pollution in the air are measured where there is concern, that is, near the source of the particulates (i.e., the mines in Singleton and Muswellbrook), with dust coming from both coal and soil 'overburden' (the material removed to get at the coal) and piles of coal at the Port of Newcastle awaiting export. Domestic wood burning heating systems also add to the particulate levels in rural areas. The Lake Macquarie location is impacted by the Eraring coal-fired power station. All locations have concentrations of population. (i.e. the city of Newcastle). Assessment of the constitution of particulates in Newcastle suggests that a majority comes from nearby sand dunes, with about 10% of the dust identified as coal. Australia has numerous sources of dust with more dust during dry years as well as particulate concentrations rising during bushfires.

TABLE 49: PARTICULATE AIR POLLUTION: KEY LOCATIONS

Concentration of fine particles (ug/m³PM2.5)   Concentration of fine particles (ug/m³PM10)

Lake Macquarie Muswellbrook Newcastle Singleton

☐ 2016 ☐ 2017 ☐ 2018 ☐ 2019 ☐ 2020
☐ 2021
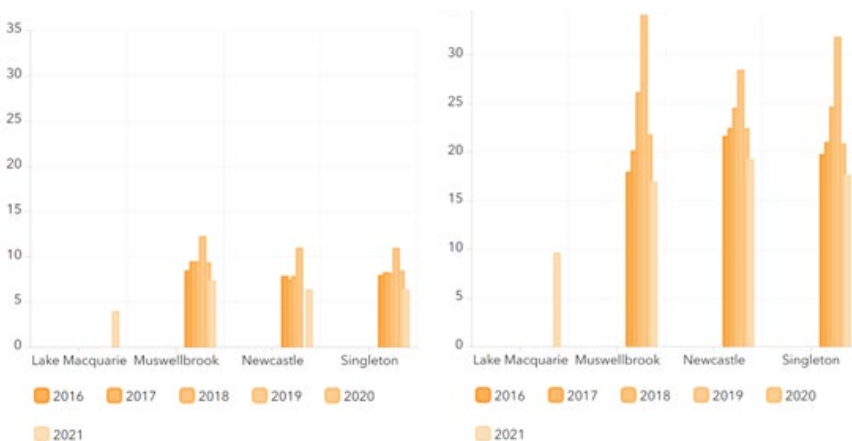
The 2019 peak reflects the considerable smoke pollution occurring from one of the worst bushfire seasons recorded. Consequently, the particulate pollution level reflects not only the effects of mining on nearby population centres, which can be affected by a change in the industries that the region relies on, but also the influence of the weather, which the region cannot affect except by reducing its contribution to global climate change.

SDG 12 Responsible Consumption and Production

Ensure sustainable consumption and production patterns and reuse.

Indicator 12.4.2: Residential Waste Generation
Indicator 12.5.1: Residential Waste Recycling rates

"The COVID-19 pandemic has had significant impacts on consumption and production patterns, with disruptions to global supply chains and changes in consumer behaviour. Responsible consumption and production must be an integral part of the recovery from the pandemic"
- UN 2023

Assessing the Hunter Region's impact on SDG12 has proven to be very difficult with an almost complete absence of data that aligns well with the ten UN Indicators of this goal. The data available give a regional picture of waste, greenhouse gas emissions per capita and water consumption which we have deployed as a surrogate measure of responsible consumption. We were unable to examine the issue of responsible production, other than to point to several case studies that demonstrate the increasing tendency of local organisations to seek carbon reduction opportunities and to support the environmental and social objectives of Agenda 2030. Consequently, we have assembled a core set of localised indicators as a surrogate measure of responsible consumption.

In any consideration of the human impact on climate and nature, the pattern of consumption, particularly in the 'developed' nations is an overriding concern. From consumption of unrepairable consumer goods and electronics to rates of food waste, consumption patterns far outstrip the long-term availability of resources and raw materials and impose a heavy burden on the environment, bio-diversity and human health. The management of waste is a challenge that every city and its surrounding region face. Recycling remains a poor option compared to reducing waste in the first place.

There is a strong focus on the circular economy in the Hunter Region. The Hunter Circular Hub was launched in October 2023 to promote circular economy strategies in the ten member local authorities of the region. Circular economy initiatives undertaken by local, state and federal governments should over time reduce the upward trends in consumption and waste evident since 2019.

## INDICATOR 12.4.2 RESIDENTIAL WASTE GENERATION

Residential waste is a useful indicator of household consumption patterns and has remained consistently higher in the Hunter Region than for New South Wales generally. It is anticipated that emerging circular economy strategies will reduce this level in the medium term.

TABLE 50: TOTAL WASTE HUNTER REGION AND NSW STATE (KG PER PERSON PER WEEK)

● 2014-2015 ● 2015-2016 ● 2016-2017 ● 2017-2018 ● 2018-2019 ● 2019-2020 ● 2020-2021
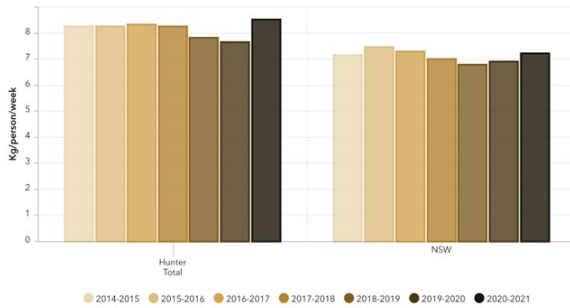
When we examine the types of residential waste generated we can see a pattern of increasing waste overall, with less recyclable waste than in the recent past.

TABLE 51: RESIDENTIAL WASTE GENERATED PER CATEGORY (KG PER PERSON PER WEEK)

○ Organic Waste
○ Recyclables
● Residual Waste
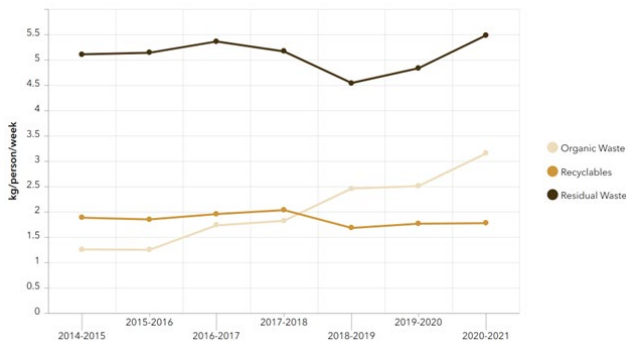
INDICATOR 12.5.1 RESIDENTIAL WASTE RECYCLING RATES

Whilst reducing waste should be a core objective of any sustainability program, in the face of continued manufacturing, packaging and consumer behaviours, recycling can make a necessary contribution to mitigation of the impact of waste on landfill rates and wider environmental damage. Overall recycling rates for the Hunter Region have remained consistent with a peak in 2018-19. However, there is considerable variation between local authorities, with Lake Macquarie achieving diversion of around 55% of waste from landfill toward recycling. Several of the more remote authorities achieve a little over 20% recycling, possibly reflecting the lack of scale and logistics capability for their dispersed population.

TABLE 52: PROPORTION OF ALL WASTE RECYCLED

● 2014-2015 ● 2015-2016 ● 2016-2017 ● 2017-2018 ● 2018-2019 ● 2019-2020 ● 2020-2021

SCAN HERE TO VIEW AND INTERACT WITH THE DASHBOARD DATA
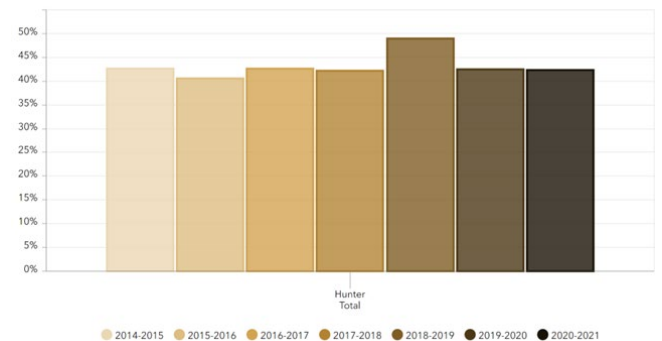
13 CLIMATE ACTION

SDG 13 Climate Action

Take urgent action to combat climate change and its impacts.

13.1.1 Persons directly affected by natural disaster
13.2.2 Greenhouse gas emissions per capita by sector

"The world is on the brink of a climate catastrophe, and current actions and plans to address the crisis are insufficient. Without transformative action starting now and within the current decade to reduce greenhouse gas emissions deeply and rapidly in all sectors, the 1.5°C target will be at risk and with it the lives of more than 3 billion people."
**- UN 2023**

13.1.1 PERSONS DIRECTLY AFFECTED BY NATURAL DISASTER

Contrary to some popular beliefs that climate change is a problem for the future, the Hunter Region is already experiencing major impacts from extreme weather events. With the obvious examples in 2019 of extensive bushfires and then serious flooding events, Australia is experiencing major challenges to the long-term viability of many communities. For the Hunter Region, flood and fire events are a long-term challenge for local authorities and communities. From 2015/16 to 2022/23, there have been 36 declared natural disasters, including either severe weather/flooding or bushfires in the Hunter Region (defined as impacting at least one of the ten Hunter LGAs and assigned an Australian Government Reference Number).

Table 53 depicts how many LGAs were affected by a declared natural disaster each year during this time period. Note that one declared natural disaster, such as a bushfire, might have affected multiple LGAs in the region.

TABLE 53: HUNTER LGAS AFFECTED BY EACH DECLARED NATURAL DISASTERS

Count of disaster by year and LGA
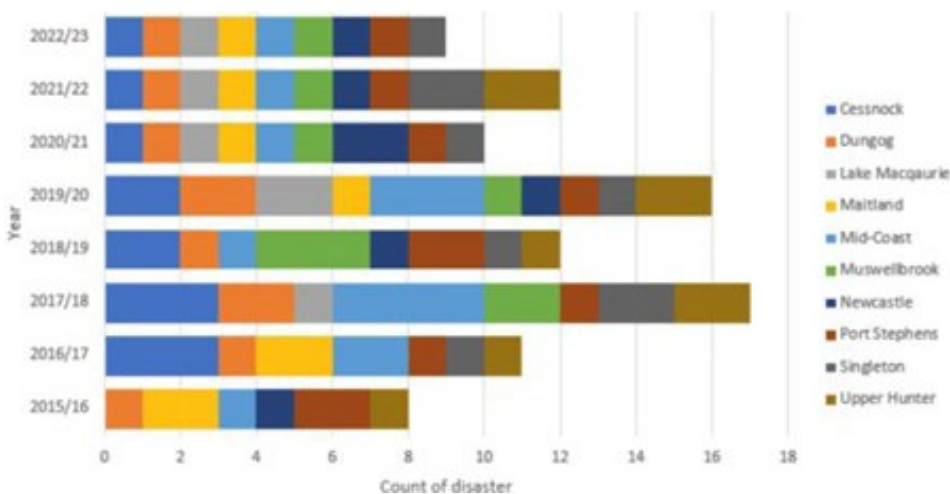
A clear indication of the impact of natural disaster events can also be seen in the request for support from State Emergency Services (NSW SES). Separate data is not available for the local authorities of interest here or for the Hunter Region as a whole, but the demands on the wider NSW SES is indicative of experience in the Hunter Region.

A clear indication of the impact of natural disaster events can also be seen in the request for support from State Emergency Services (NSW SES). Separate data is not available for the local authorities of interest here or for the Hunter Region as a whole, but the demands on the wider NSW SES is indicative of experience in the Hunter Region.

Calls to the NSW State Emergency Service
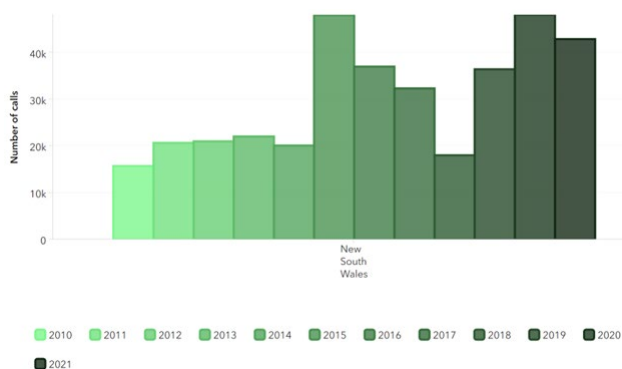
Whilst peaks in call numbers are episodic and determined by the impact of extreme events, we can see in the long-term trend an increase in the frequency and the severity of events indicated by the pattern for years 2016 to 2021. Exceptional fire seasons and flooding events evident in New South Wales are replicated globally.

INDICATOR 13.2.2 GREENHOUSE GAS EMISSIONS PER CAPITA BY SECTOR

The primary target of Climate Change action globally is the reduction of greenhouse gases (CO2e) with increasing attention to methane released by sources such as cattle, degradation of organic waste in landfills, leaks during natural gas production and distribution, and fugitive emissions from coal mines. Regrettably, CO2e emissions for the Hunter Region have been steadily increasing. Both Scope 1 and Scope 2 emissions show an upward trend and it will be some time before we are able to identify the impact of current mitigation strategies.

Table 55 identifies the three highest emitting industrial sectors and are significantly higher than coal fugitive emissions (16,000Kt), waste (5,000Kt) and general industrial emissions (12,000Kt).

TABLE 55: SCOPE 1 EMISSIONS (TOP THREE EMITTING ECONOMIC SECTORS) 2015/16 TO 2018/19
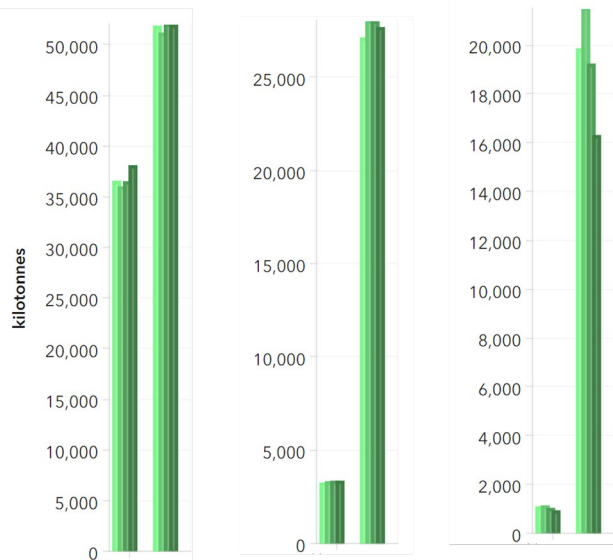
Scope 1 emissions as kilograms per capita demonstrate a similar pattern, with the Hunter average figure for all industries remaining constant throughout this four-year period (2015-2019). The figures do not yet account for the 2022 closure of the Liddell coal fired power station.

Despite a period of inaction on climate change mitigation at the national level there has been strong local action emerging in the Hunter Region. Local authority commitments to Net Zero targets, circular economy initiatives, SDG alignment and waste reduction targets all contribute to a collaborative climate action commitment in the region.

The Hunter Region SDG Task Force, the production of this VLR and linked online dashboard are examples of collaboration across multiple economic sectors. The participating organisations are variously committed to decarbonisation strategies and to the promotion of the SDGs.

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SDG 14 Life Below Water

Conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Indicator 14.1.1: Estuary water quality
Indicator 14.3.1: Estuary water quality (Acidity)
Indicator 14.1: Threatened aquatic species

"Destructive trends in ocean health have not abated. The ocean, the world's largest ecosystem, continues to be endangered by rising acidification, eutrophication, declining fish stocks and mounting plastic pollution"
- UN 2023

INDICATOR 14.1.1 ESTUARY WATER QUALITY

The Hunter Region has an extensive coastline with complex geographical features, including estuaries and inlets. Water quality data is available for those LGAs with estuaries and shows a maintenance or improvement of quality, with the exception of a fall in quality in Lake Macquarie.

Lake Macquarie covers 648 square kilometres and is the largest body of water in the region. It has a narrow outlet to the Southern Pacific Ocean, but it is not fed by the region's major river, the Hunter River. The shores of the lake host two 2GW coal-fired power stations, one being the largest power station in the country. They use Lake Macquarie's water for cooling and source coal from nearby underground mines. The burning of coal has resulted in millions of tonnes of fly ash deposited on the lake's shore and in wetland areas. Effects of this fly ash on water quality and on health of nearby communities are an ongoing concern. Water quality on the lake can be understood to reflect runoff during wet years – stormwater and sewerage overflows - but also deposition of dust on the lake during dry years.

The Local Government Area of Port Stephens has a small population but extensive estuaries and coastline that attract tourists, holiday residents and retirees. The waters are from two rivers, a major creek, and the Southern Pacific Ocean. The openings to the ocean in Port Stephens are much larger than for Lake Macquarie, and the local population is lower. So, one would expect pollutants to be washed away more readily by tides and flows. However, there is a strong concentration of industry inland in the LGA, as well as a major military airbase. The base's historical use of firefighting foam has resulted in runoff containing PFAS, a persistent chemical, which has contaminated nearby land and water.

The Mid-Coast Council area features coastline and creeks and little population or industry. Dungog is away from the coast and features creeks. Maitland is an inland locality, and has the Hunter River running through its central business district. Newcastle is on the coast, with the Hunter River and a major creek flowing through its harbour. It historically hosted a major integrated steel plant (closed in the year 2000) and retains certain heavy industries to this day, related to steel and chemical manufacturing. Riverside embankments were contaminated by the steel industry, but water quality has been improved in recent decades.

Grading explanations

Grade A - Excellent (shown here as 100)

Grade B - Good (shown here as 80)
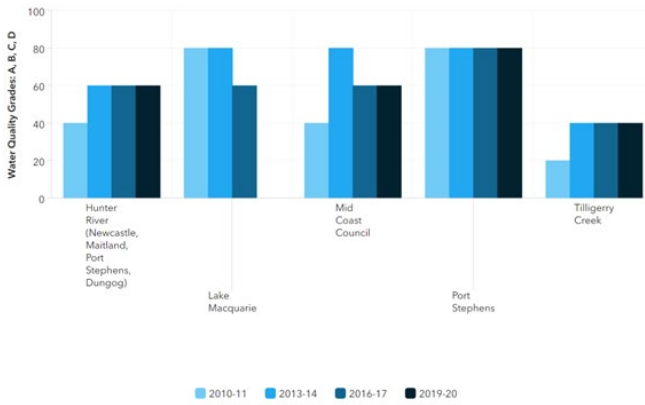
Grade C - Fair (shown here as 60)

Grade D - Poor (shown here as 40)

Grade E - Very poor (shown here as 20)

The grade is based on algae concentration, water clarity, pH, salinity and a number of other factors.

TABLE 56: ESTUARY WATER QUALITY

## INDICATOR 14.3.1: ESTUARY WATER QUALITY (ACIDITY)

Acidification has been an important measure of water quality and potential climate change impact on marine life. Again, we present here data for estuary waters for the relevant LGAs. In monitoring this data, there would be concern if there was a trend toward lower pH values that reflected increased acidification from greater amounts of dissolved CO_2 in the ocean. That said, any significant or persistent shift in pH level either down or up could have adverse effects on life below water.

TABLE 57: ESTUARIAL WATER ACIDITY (AVERAGE)

Average marine acidity (pH)
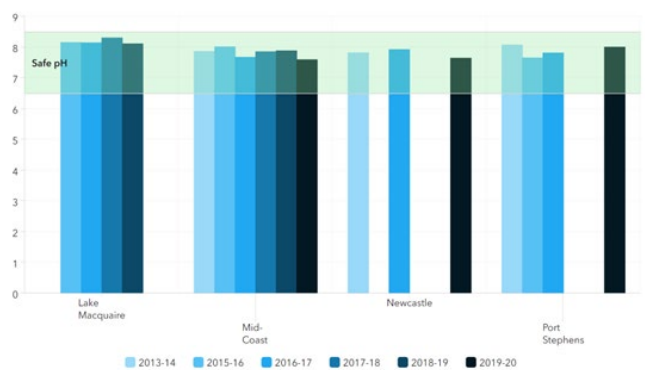

Whilst there are no national or state targets for the reduction of plastic pollution in coastal waters, there are collections of onshore plastic waste in the region. However, there is no consistent data for the amount of waste collected. So, we have developed an indicator based on the number of recorded beach cleanups per kilometre of coastline for the relevant Hunter Region local authorities.
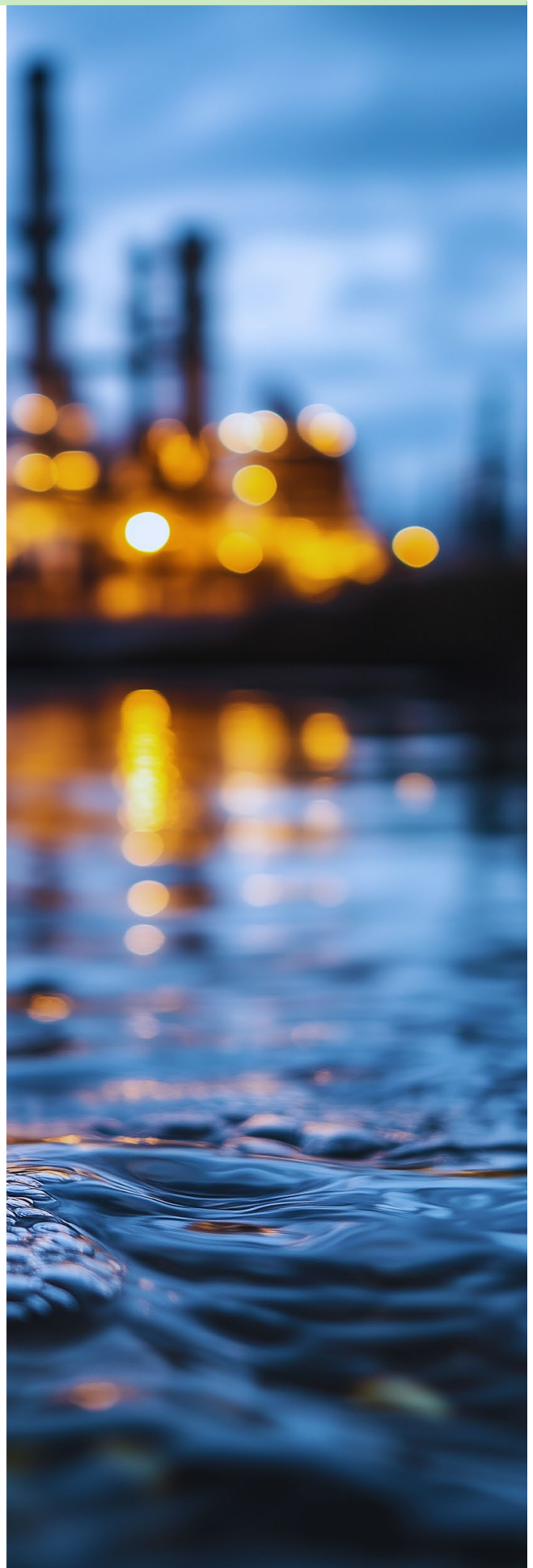
The more populated areas of Newcastle and Lake Macquarie show more cleanups per kilometre. One would imagine that increased attention to ocean pollution would see an increase in the number of cleanups per kilometre from one year to the next. That is not what this data is showing, however.

TABLE 58: CLEANUPS PER KILOMETRE OF SHORELINE

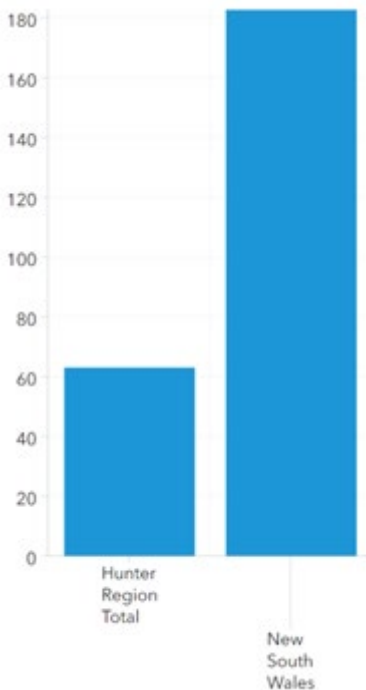## TABLE: 59 AQUATIC SPECIES AT RISK OF EXTINCTION
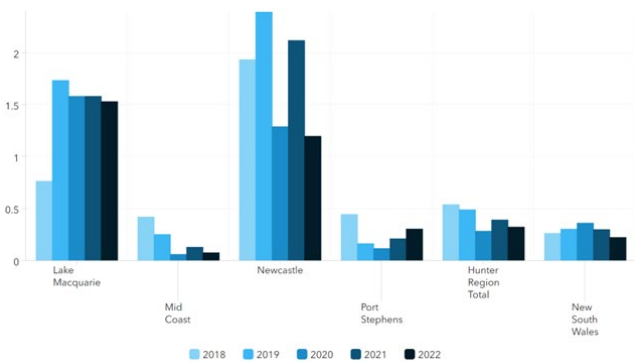
There are implications for species diversity related to water quality and the Hunter Region regrettably experiences the globally evident risks caused by water temperature rises, pollution and acidity,

Changing marine and river environments have placed pressure on a number of species now facing extinction as habitats have shrunk or become degraded in other ways. The following table provides details of the current numbers of aquatic species at risk in the Hunter Region.

Finally, a potential glimpse into the future of Life Below Water can be gained by considering the measures that are in place to protect water quality and maintain biodiversity and species. Designation of coastal waters here includes any marine area up to three nautical miles (5.55km) from the shoreline. "Protected waters" are any marine areas managed to conserve marine biodiversity and support marine science, including marine parks and aquatic or nature reserves.

TABLE 60 : COASTAL WATER PROTECTION

Percentage of coastal waters that are protected (2021)
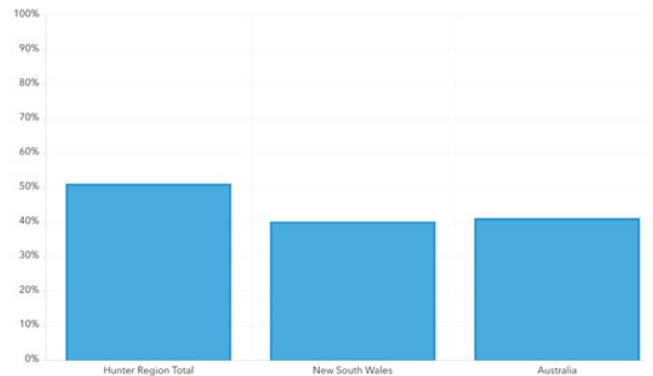
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SDG 15 Life On Land

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Indicator: 15.1.1 Land area categories

Indicator: 15.1.2 Percentage of protected area

Indicator: 15.5.1 Threatened species

"The world is facing a triple planetary crisis of climate change, pollution and biodiversity loss. The trend in forest loss, land degradation and the extinction of species is becoming worse, posing a severe threat to the health of the planet and people."

- UN 2023

INDICATOR: 15.1.1 LAND AREA CATEGORIES

In 2014, a bioregional assessment of the Hunter Region commissioned by the Australian federal government showed just over 64% of the subregion was covered by forest, including dry sclerophyll forest, riverine forest, woodlands, wet sclerophyll forest and rainforest. The figure in 2011 was found to be 61%, indicating a small increase by 2014. In 2022, 1,285 hectares of land in the Hunter Region were added to the national park estate, increasing the proportion of protected areas in the Hunter Region to a total of 22%. This figure is up from 20% in 2016.

Compared to other regions in NSW, this overall figure is relatively high with the NSW state average of 10.2%, although the national figure is 22.7%. The Hunter's 23%, reflects the relatively undeveloped western portion of the region, as well as the large proportion of land under conservation. Any loss of vegetation in the Hunter could be attributed to increased clearance for agriculture, larger areas being mined, or development of suburban housing estates. Agriculture in the region has been characterised anecdotally as vines, equine and bovine – winegrowing, horse studs and cattle grazing.

The areas devoted to these activities have not grown significantly in recent years. Mines expanded during a mining investment boom until about 2014, but mining companies are now discussing closures more than further expansion, and government agencies and environmental groups are suggesting the need for a regional strategy for mined land rehabilitation. Growth has been occurring in suburban housing estates, with Maitland being the second fastest growing locality in Australia at the 2016 census, by percentage growth. Its population and the number of dwellings have continued to increase as have the figures for certain other LGAs in the region.

## INDICATOR: 15.1.2 PERCENTAGE OF PROTECTED AREA

These economic activities can be seen as the main threat to land that features natural vegetation. The percentage of land in the region that is declared as protected, has remained steady, which can be seen as good news for native species.

TABLE 61: PERCENTAGE OF LAND AREA DESIGNATED AS CONSERVATION AND NATURAL ENVIRONMENT

Land area by category
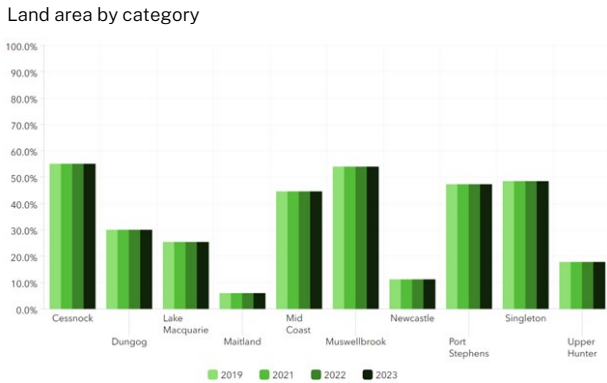
Despite the presence of significant areas of protected land, extinction risks for key land-based species are a major cause for concern in the Hunter Region, as in much of Australia.

TABLE 62 : PROTECTED LAND AS A PERCENTAGE OF TOTAL AREA

Protected land as a percentage of total area
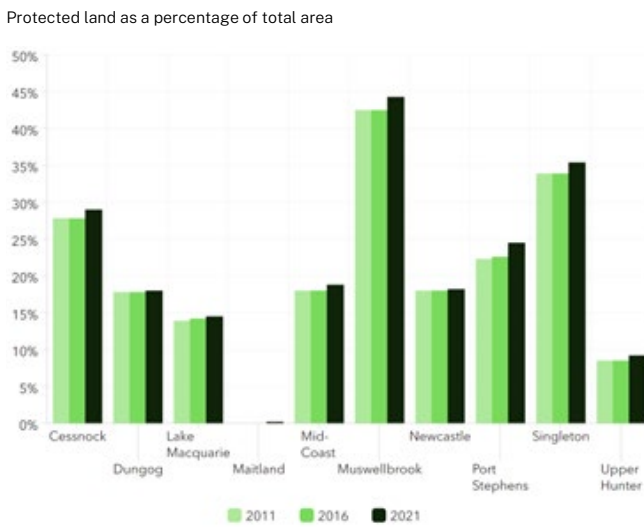
INDICATOR: 15.5.1 THREATENED SPECIES

Over the last 200 years, more than 100 animal and plant species in Australia have become extinct. In NSW alone, there are close to 1,000 animal and plant species at risk of extinction.

In assessing the number of species at risk, it has not been possible to disaggregate the figures for land-based animals from figures for some aquatic species. Consequently, there is a component of double counting certain species identified in the data for SDG 14. Another challenge has been in assessing changes over time in the numbers of species at risk.

To some extent, the figure at any point in time to the present depends not only on the impact on the ecosystem of the species but also on whether that ecosystem has been studied at all. In other words, the more ecosystems that are assessed, the more species will be found that are at risk.

TABLE 63: HUNTER REGION THREATENED SPECIES

Number of threatened species (aquatic and terrestrial) by threatened status in NSW

- VULNERABLE
- HAS ENDANGERED POPULATIONS
- ENDANGERED
- CRITICALLY ENDANGERED
- EXTINCT

Can one conclude whether ecosystems are getting better or worse over time?

The stressors on land use and effects of land use on aquatic ecosystems can be seen to be increasing.

Our awareness of, and data on, effects is increasing, as well, and the number of hectares of protected areas is also increasing. The hope is that protective measures are implemented with sufficient speed to avert negative effects from greater land use.

SDG 16 Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide justice for all.

Indicator: 16.1.1 Victims of violent crime

Indicator: 16.2.3 Victims of sexual violence

Indicator: 16.3.2 People on remand

Indicator: 16.4.1 Crime rates

Indicator: 16.5.1 Corruption

"Moreover, structural injustices, inequalities and emerging human rights challenges are putting peaceful and inclusive societies further out of reach."

- UN 2023

INDICATOR: 16.1.1 VICTIMS OF VIOLENT CRIME

Crime rates represent the key challenge to peace in a settled and regulated nation that does not face the rigors of war and civil conflict. Violent crime in particular poses a significant risk to community and individual wellbeing. The Hunter Region is subject to the legislative and regulatory environment of the state government of New South Wales, as well as the general criminal law of Australia. Statistics on crime are collated by the state government, as it oversees the local police force.

TABLE 64: CRIMES OF VIOLENCE RATES BY GENDER PER 100,000 POPULATION

Women victims of crime per 100,000 women

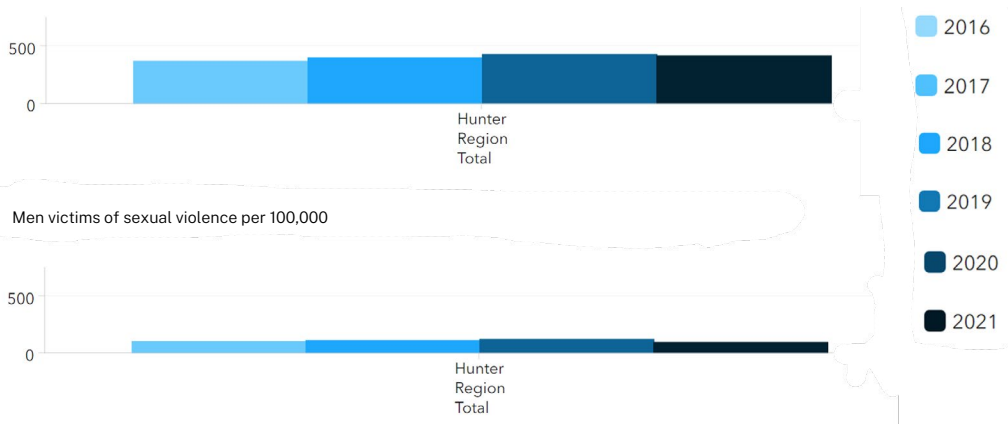
Men victims of crime per 100,000
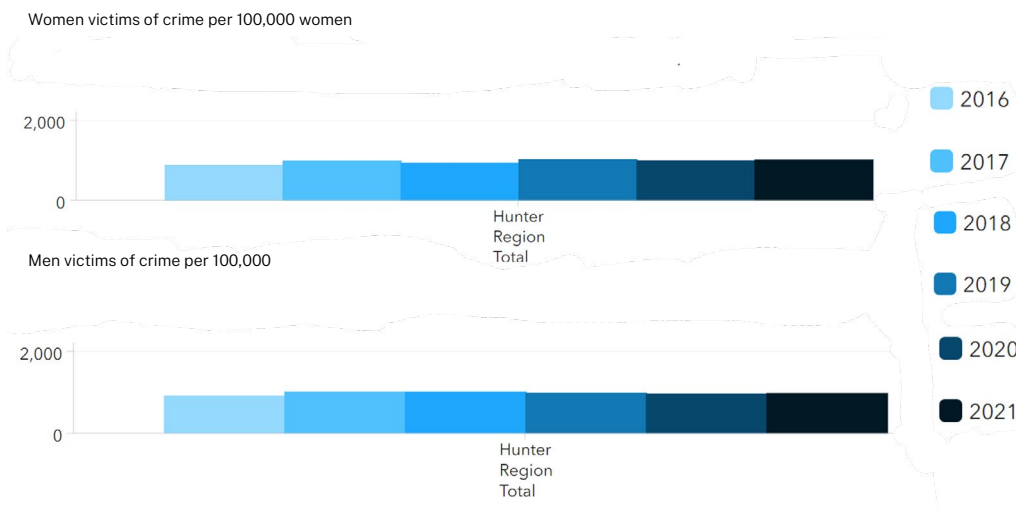

INDICATOR: 16.2.3 VICTIMS OF SEXUAL VIOLENCE

In terms of general violent crime there is little difference in the experience of men and women. However, there is considerable disparity in the rates of crimes of sexual violence, with implications for equality and female safety, along with the psychological impact of higher levels of fear of crime for women.

TABLE 65: CRIMES OF SEXUAL VIOLENCE

Women victims of sexual violence per 100,000 women


Men victims of sexual violence per 100,000
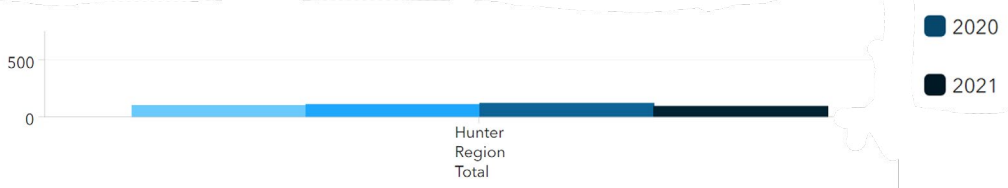
INDICATOR: 16.3.2 PEOPLE ON REMAND

A critical measure of the justice system is the time taken for alleged offenders to reach trial and sentencing. The rate for NSW of people on remand pending trial and/or sentencing has increased in recent years. This rise can be partially explained by the delays introduced into the court system by COVID lockdowns. However, the figure is not currently showing a decline to pre-COVID levels, which were already high.

TABLE 66: JUSTICE SYSTEM RATE OF PRISONERS ON REMAND

Percentage of adults in custody in NSW that are on remand
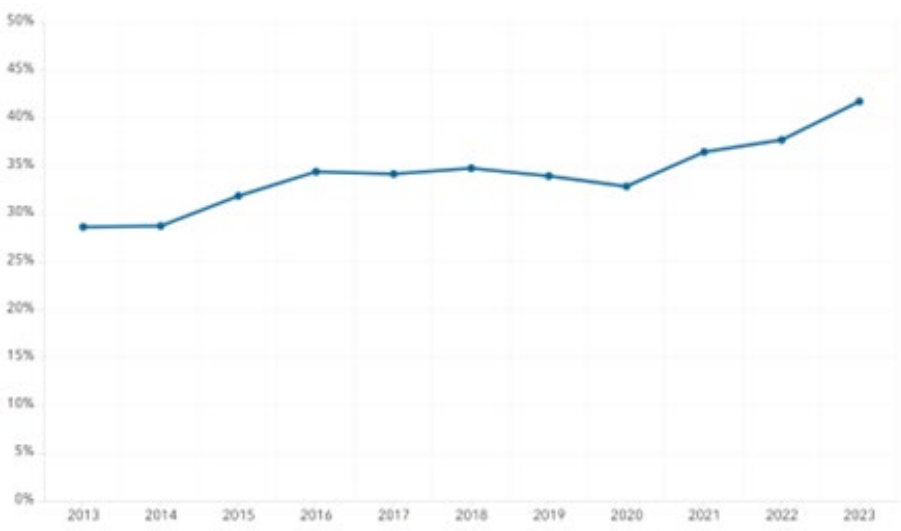
INDICATOR: 16.4.1 CRIME RATES

Within the overall picture for the region, we can also see considerable variation, with high rates of crime evident in both urban and rural local authorities. The variation between the lowest rate of violent crime and the highest represents a difference of nearly 400 (male victims) and 638 (female victims) per 100,000 population.

When the number or rate of reported violent crimes increases, it can be seen through a positive lens because of more attention to violent crimes and more reporting of such violence. Alternatively, it can be seen through a negative lens as resulting from more violent crimes being committed. It is also the case that many studies have identified the 'dark figure' of crime where many crimes go unreported (Buil-Gil et al, 2021), making it difficult to fully report rates of crime. Despite these limitations we can identify trends in the general rates of different categories of crime. Given the figures show that four times the number of women are reported to be victims of sexual violence than men we can identify this as a major social and cultural challenge that is receiving increasing attention at a national level.

INDICATOR: 16.5.1 CORRUPTION

White collar crime tends to escape scrutiny in many crime studies but can be indicative of the level of scrutiny and accountability for both public and private institutions The incidence of corruption can provide a measure of the strength and integrity of local and state institutions. Recent high-profile cases of political corruption have raised public awareness of the issue.

No data is available at the Hunter Region level but a review of data for NSW reveals an increasing trend of reports of corruption to the Independent Commission Against Corruption (ICAC). Established by legislation in 1988, the commission has jurisdiction over public bodies and government at the local and state levels, including elected politicians.

While it is notable that 90% of NSW local authorities have 'conflict of interest' controls, we are unable to assess their implementation and rigour of application.

TABLE 67: COMPLAINTS TO THE INDEPENDENT COMMISSION AGAINST CORRUPTION.

The New South Wales public sector was ranked third out of 19 public, private and non-government agencies across Australia (Brown, 2008) in terms of integrity, indicating a positive evaluation of protection of those raising concerns in the public sector. More recently, examples of corruption at senior levels of government have emerged prompting investigation by the state government's Independent Commission Against Corruption (ICAC).

SCAN HERE TO VIEW
AND INTERACT WITH THE
DASHBOARD DATA

SDG 17 Partnership for the Goals

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development.

The general indicators for Goal 17 do not translate to the regional level. However, we have identified the major role for local partnerships for achieving Agenda 2030.

The formation of the Hunter Region SDG Task Force is a clear demonstration of the strong culture of partnership in the region.

With 14 partner organisations and engagement with a wider group of organisations (different departments in local governments, NGOs/civil society groups, businesses), the Task Force has actively promoted efforts to achieve the SDGs in the Hunter Region. The production of this VLR has been a central strategy to increase awareness of the SDGs and promote their adoption by a wide range of organisations in the region. Spanning public, private and third-sector organisations, the Task Force has promoted a more collective response to the SDGs and fostered collaboration.

Similarly, the Hunter Joint Organisation (of councils) demonstrates the collaborative relationship between the Local Government Authorities in the region and their collective aspirations for the circular economy and the environmental sustainability of the region.

The City of Newcastle has aligned itself with achievement of the SDGs. The Lord Mayor's High level group on sustainability has brought together major organisations in the city to collaborate on delivery of the SDG objectives.

A further partnership with strong commitments to sustainability and transition to a low carbon economy is the Committee for the Hunter. Formed in 2019 and modelled on other multi-sector regional organisations around the country and elsewhere in the world, it has over 60 organisational members committed to ensuring that the Hunter is a sustainable and prosperous region.

The Committee has particularly advocated for the region as an exemplar of a sustainable economy grounded in renewable energy and associated green hydrogen production. Additionally, The Hunter Jobs Alliance brings together nine trade unions and three community environmental organisations to advocate for a 'just transition' to an economy independent from fossil fuel based energy.

The presence of these partnerships and the collaboration within and between them provides a strong basis for delivery of the Sustainable Development Goals in the Hunter Region.

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