Environmental Sustainability Strategy

2022 - 2027

Town of
Port Hedland

Advice

This document may contain images of Aboriginal and Torres Strait Islander people who have passed away.

Disclaimer

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Town of
Port Hedland

The Town of Port Hedland would like to acknowledge the Kariyarra, Ngarla, and Nyamal people as the Traditional Custodians of Hedland lands. We recognise their strength and resilience and pay our respects to their Elders past and present.

We extend that respect to all Aboriginal & Torres Strait Islander people of the local community and recognise their rich cultures and continuing connection to land and waters.

Town of Port Hedland

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Message from the Mayor

I am pleased to present the Town's first *Environmental Sustainability Strategy*, our plan for protecting our natural environment while supporting social and economic growth.

Environmental sustainability has long been embedded in the Town's planning framework and other strategic and operational practices. In recent years, there has been a considerable focus on greening our town and developing more sustainable coastal, facility and waste management practices.

As a local government, we must be more transformative in the way we interact with the environment or risk unsustainable practices where our environment is threatened or irreversibly damaged. Circumstances where potential scarcity of water, loss of biodiversity, air quality degradation, higher temperatures, more extreme weather events and rising sea levels, all have significant implications for how we live our lives, our health, global equity, and food supply.

Urban centres like Hedland, are part of a broader movement, ethically bound to act sustainably within our own footprint and reign in the collective effects of unsustainable practices on the global environment. Every urban centre is unique, having shared but also different environmental challenges, varying social, economic, and environmental agendas and complexity in regulatory and policy environments that influence the capacity to manage environmental sustainability.

As a local government, it is not easy balancing social, economic, and environmental factors to secure sustainable development. It takes a continued effort, evidence-based practice, and preparedness to test new approaches. Local Governments are one important cog in a global environmental sustainability movement, but it takes collaboration with State and Federal Governments, industry, businesses and our community, all working together to create positive impact.

We are fortunately placed to be operating in an environment where international commitments to sustainable development and climate change action exist, along with national and State supporting policy and investment frameworks and emissions reduction commitments across Government and the resources and pastoral sectors. This ensures we are moving forward but according to the United Nations, Covid has set us back in achieving internationally agreed sustainability goals and we need further traction.[1]

The Town's *Environmental Sustainability Strategy* provides pathways for systemic transformation in our practices and the way we deliver infrastructure and services. Embedded in this framework are opportunities for shared learning and expert guidance.

Let's walk together to secure protections for our natural environment whilst living healthy and prosperous lives.

1. United Nations, *The Sustainable Development Goals Report 2020*, Foreword, p2.

How has this strategy been prepared?

The Council and Town Executive committed to preparation of an Environmental Sustainability Strategy, an integral framework to drive more sustainable environmental practices.

The Strategy builds on extensive consultation across environment, community, economy and culture under the *Hedland Huddle* and *Shaping Hedland's Future* campaigns which established community aspirations for the *Strategic Community Plan 2022-2032* and the Town's *Local Planning Strategy 2021* respectively. The broader planning framework, Town strategies, operational policies, master plans and place plans were reviewed internally.

A literature review was conducted across related global, national, and local government policy platforms, comparable local government environmental sustainability strategies, and sustainability frameworks for the small to medium-sized business sector. The latter being key contributors to the local economy.

Consultations were conducted with key stakeholders within the Town.

A draft strategy was submitted to Council and publicly advertised, with feedback incorporated.

Contents

Our region

Our environment

Average daily temperatures in the Pilbara exceed 30 degrees between December and March (Summer and Autumn) with and average daily maximum of 35 degrees from October to March. During the Winter months (June to August), temperatures average 20 degrees with coastal areas such as Port Hedland having a smaller annual temperature range than inland areas. Annual rainfall is between 300mm and 350mm per annum.[2]

The Town of Port Hedland is situated within three bioregions; Dampierland, Pilbara and Great Sandy Desert. Dampierland is characterised by gorges, ranges and plains and populated with acacia thickets, scattered trees, grasslands and savannas.[3] Pilbara, by coastal plains and inland mountain ranges, inhabited by mulga low woodlands, or snappy gum over bunch and hammock grasses.[4] Great Sandy Desert, red sand plains, dunefields and remnant rocky outcrops populated by spinifex grasslands, low woodlands and shrubs.[5]

Riperian vegetation is key to the health of waterways, with swale vegetation assisting to filter the Town's stormwater system. Vegetation in and around swales and drains is assessed and managed to enable the efficient operation of the Town's drainage network, with public safety being prioritised.

The Town of Port Hedland includes floral, vegetation and faunal values identified under State and Federal environmental legislation, including Priority Ecological Communities such as threatened and priority flora, and faunal species, for example Green Turtles and Flatback Turtles which colonise Cemetery Beach and Pretty Pool in Port Hedland.[6]

Important wetlands exist including the De Grey River and Leslie Saltfields system. Mudflats are ecologically important for migratory and shorebirds, including some endangered species, as well as Mangrove stands.

While some vegetation within Hedland is pristine such as at Pretty Pool Creek, there are large areas of significant degradation, predominantly in the northern section of the coastal reserve, due to human influences and invasive weeds. A lack of leaf litter affects faunal habitat.[7]

The Town has an extensive coastline, which has been altered due to dredging and infrastructure works associated with the Port. A discontinuous limestone barrier on the coast, low-lying topography, coastal river systems (particularly in the east) and risk from cyclones, makes it extremely vulnerable to erosion and inundation, which is subject to exacerbation under climate change scenarios.

Air quality is a significant issue, both ambient and from Port related activity, with planning controls recently implemented by the State Government under the West End Improvement Scheme No.1 to restrict residential growth in the West End. The majority of the Town of Port Hedland is sited in a bushfire-prone area.

2. Regional Development Australia Pilbara, *Climate Change and the Pilbara Economy: An Overview*, October 2020, p10.
3. Government of Australia, Department of Agriculture, Water and the Environment, *Dampierland Bioregion*, p1.
4. Ibid, *Pilbara Bioregion*, p1.
5. Ibid, *Great Sandy Desert Bioregion*, p1.
6. Town of Port Hedland, *Local Planning Strategy (Environmental Profile)*, 2021, p192.
7. Town of Port Hedland, *Town of Port Hedland Townsite Coastal Foreshore Management Plan*, 2021, p41.

Our community

The Town's population is estimated at 15,684, with approximately 18.59% of the population identifying as Aboriginal. The Town has a low median age of 32, a high proportion of households with children and high expendable weekly income. While the population increased by 13.42% between 2016 and 2021 Census, growth is not always linear being strongly linked to fluctuations in the economy.[8] The Town's Local Planning Strategy forecasts population growth to 18,500 and 27,085 by 2041 under a conservative and aspirational growth forecast respectively and is currently tracking in line with a high growth scenario.

Hedland hosts a large fly-in, fly-out workforce, that is generally accommodated in transient workforce accommodation facilities with approximately 3,000-4,000 beds located locally in Hedland and an estimated 2,000-3,000 beds in remote camps.

Population growth coupled with separation distances between Port Hedland and South Hedland places increased demand on the Town's services and infrastructure. Further, with an industry funded voluntary buy-back scheme of eligible residential properties impacted by dust in the West End under the Hedland Maritime Initiative, growth is placing pressure on affordable land and housing supply.

To facilitate sustainable development, the new Local Planning Strategy which informs the new Town Planning Scheme No.7, includes an evidence-based strategic spatial plan to effectively manage community, economic, built, and natural environments. Significant structure planning has occurred for new developments, masterplans for community infrastructure renewal and upgrades, and place plans for town activation and improved connectivity.

In Port Hedland, coastal and aquatic environments, and nature and public open spaces are highly valued for social connection, passive and active recreation, connection with the environment, regional identity, and education.

Our culture

Aboriginal people have actively managed their land and waters for over 60,000 years and have a profound spiritual and reciprocal connection with the environment. The Kariyarra, Ngarla and Nyamal are the original inhabitants of the Town of Port Hedland. Kariyarra country incorporates land west of Port Hedland to the Sherlock River and South to the Yule River and is bound by Ngarla country to the north and Nyamal to the east. A Kariyarra Native Title claim exists over Port Hedland, Yandeyarra Community and several pastoral stations and mining leases.

Ceremonial sites and songlines transgress Kariyarra country and the river system is home to the mythical water serpent, the Warlu. Where the five tidal creeks meet the ocean in Port Hedland, these are known as Marapikurrinya or living waters.[9]

Aboriginal people are entrusted responsibility to care for their land and have intimate knowledge of how it functions. The way in which we impact or manage land must respect and engage Aboriginal groups on country to ensure sustainable development and the preservation of environmental values that form part of their identity.

8. Australian Bureau of Statistics, *2021 Census Community Profiles*. Available at: https://www.abs.gov.au/census/find-census-data/community-profiles/2021/LGA57280

9 Kariyarra Aboriginal Corporation, *About Kariyarra.* Available at: https://www.kariyarra.com.au/about

Our economy

The Pilbara is one of the premier mining regions in Australia. Gross Regional Product for Port Hedland was $7.58 billion at June 2021,[10] with the Port of Port Hedland accounting for 61% of Western Australia's iron ore sales in 2021[11] and export tonnage of 546.1 million tonnes in 2020-21.[12] The Port intends to increase iron ore capacity to 660 million tonnes.[13] Also shipping salt, fuel, Lithium and rare earths, the Port is one of the 'most significant pieces of economic infrastructure' in Australia.[14] For the period 2018-19 (pre-Covid stimulus packages), the Port and its supply chain were estimated to have generated $1.1 billion for the local economy, $42.8 billion in GRP for the region, $44.5 billion or 17% of the WA State GSP, and boosted Australia's GDP by $64.1 billion.[15]

The outlook for minerals exports remains strong and the Pilbara has many competitive advantages for a more diversified economy supported by a facilitative policy environment. This includes but is not limited to, an abundance of renewable energy resources and commitments by the State and large miners to net zero emissions across 2030-2050, and large reserves of battery minerals with many developed countries committing to phasing out combustion engines in the next 10-20 years.[16] There is also a growing interest in environmental tourism, coupled with cultural, pastoral and industrial tourism opportunities.

The Town's *Economic and Tourism Development Strategy 2021*[17] centres on four pillars of economic growth:

- Advocating to Governments for infrastructure funding to underpin economic development.
- Marketing and promoting the area for lifestyle, business investment and tourism.
- Providing community and social infrastructure to support future liveability, population growth and retention.
- Using the Town's regulatory and planning role to support and encourage new business investment and opportunities.

10 .ideconomy, *Town of Port Hedland Economic Profile*, Gross Regional Product.

11 Government of Western Australia, Department of Jobs, Tourism, Science and Innovation, *Western Australia Iron Ore Profile,* May 2022, p5.

12 Pilbara Ports Authority, *2020-21 Annual Report*, p4.

13 Government of Western Australia, Department of Jobs, Tourism, Science and Innovation, *Western Australia Iron Ore Profile*, May 2022, p5.

14 ACIL ALLEN Consulting, *The Economic Significance of the Port of Port Hedland*, 2020, pi.

15 Ibid, pp2, 36.

16 The Climate Center, *Actions by countries to phase out internal combustion engines.* Available at: https://theclimatecenter.org/actions-by-countries-phase-out-gas/

17 Town of Port Hedland, *Economy Development and Tourism Strategy 2021*. Available at: https://www.porthedland.wa.gov.au/Profiles/porthedland/assets/moduledata/consultations/5212420a-7ecb-4951-b6b9-cd5ed445f07d/1.7/ToPH_Economic_Development_Tourism_Strategy_Spreads_Updated.pdf

Challenges and opportunities

The challenges and opportunities in growing our economy and community whilst sustaining environmental values are complex but in the words of the United Nations, targeted action is of 'critical importance for humanity and the planet.'[18]

While the Town has limited control over high environmental impact industries such as mining and pastoral, considerable work is being undertaken by these sectors independently, and with Government, to reduce emissions. This includes projects to lower energy costs and carbon footprint, particularly through renewable energy sources and more energy efficient processes within the resource sector, and carbon farming projects for pastoralists. State Government also recently announced it would draft a Bill to facilitate further opportunities to decarbonise by the resources sector.[19] Foreign investment decisions based on countries and industries with superior environmental performance will also likely influence sustainability initiatives in the resource sector going forward.

The Town of Port Hedland will continue to monitor environmental impacts of mining developments in line with referral provisions under legislation.

Further challenges and opportunities include:

- Water scarcity, water sensitive urban design and the capacity for effective reuse of greywater and wastewater for non-potable purposes.
- Effects on environmental degradation of fossil fuel dependent energy sources, materials in buildings and transport infrastructure, and increasing patterns of consumption and waste and how we can better manage impacts in the context of renewable energy resources, electricity grid system constraints, remoteness, limited markets, and cost.
- Better urban design so we can protect, regenerate, and respond appropriately to the natural environment and climate change impacts within the context of town growth and economic diversification.
- Ensuring our vision of a sustainable Town remains at the forefront, adapting, changing, and maturing our approaches to improve sustainability outcomes.
- Creating momentum for a collective response that incorporates Government, the Town, community, utility providers, business, industry, and cultural knowledge in facilitating a more sustainable future.
- Making certain that the Town continues to embed 'triple bottom line' decision-making by ensuring that our choices and recommendations consider environmental, economic, and social impacts.

18 United Nations, *Transforming our World: the 2030 Agenda for Sustainable Development*, Resolution adopted by the General Assembly on 25 September 2015, p1.

19 Government of Western Australia, *Draft Bill to help WA's resources industry reduce emissions*, Media Statement, 9 March 2022. Available at: https://www.mediastatements.wa.gov.au/Pages/McGowan/2022/03/Draft-Bill-to-help-WAs-resources-industry-reduce-emissions.aspx

Environmental sustainability explained

Environmental sustainability requires an integrated approach that considers environmental factors in social and economic development. It is based on the concept that each of these domains needs to be in balance if humans are to live a quality life.

The most universally accepted definition of environmental sustainability is that adopted by the United Nations which summarised, is to act in a way that ensures future generations have access to natural resources on equal, if not better, terms than current generations.[20]

Environmental sustainability supports pursuing social and economic development while responsibly acting as part of a global partnership to conserve, protect and restore our environment, including valuable ecosystems.

20 The Balance Small Business, *What is environmental sustainability?* Available at: https://www.thebalancesmb.com/what-is-sustainability-3157876
and
United Nations, *UN environment strategy for environmental education and training*. Available at: https://www.unep.org/about-un-environment/policies-and-strategies/un-environment-strategy-environmental-education-and

Our vision

The Town's strategic vision, embedded in its *Strategic Community Plan 2022-2032* is 'Together, we create a thriving, resilient and inclusive future for our diverse community.'[21]

The Strategy focuses on building generational prosperity, economic and environmental sustainability, and our community through collective action. In other words, it commits through the various components of the plan to sustainable development in Hedland. Development that builds prosperity, honours culture, treasures and protects our natural environment and delivers resilient infrastructure and built form. A Hedland, where individual and institutional capability is leveraged, and we work together to achieve the community's aspirations outlined in the plan.

21 Town of Port Hedland, *Draft Strategic Community Plan 2022-2032*.

Key principles that guide implementation of the strategy include:

Good governance
Sound planning and coordination to achieve strategy outcomes.

Evidence-based
Ensure decisions are based on analysis of relevant, up-to-date data and best practice approaches to environmental sustainability.

Consultative and collaborative
Facilitate active engagement and collaboration with community stakeholders and members that are affected or interested in environmental sustainability.

Knowledge sharing
Facilitate opportunities that provide for broad information exchange on environmental sustainability and understanding of cultural environmental values.

Transparent
Transparent and accountable decision-making on activities and outcomes achieved under the strategy.

Innovative
Consider new and creative opportunities and the applicability of approaches trialled in other jurisdictions to achieve environmental sustainability outcomes.

The above principles align with those in the *Strategic Community Plan 2022-2032*.

The Town in a global context

'We have mapped the road to sustainable development; it will be for all of us to ensure that the journey is successful and its gains irreversible.'[22]

The United Nations defines sustainable development as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.'[23]

In 2015, the General Assembly of the United Nations, comprising 193 countries, adopted the *2030 Agenda for Sustainable Development*, committing member countries to implementation of 17 universal and integrated sustainability development goals (SDG) and 169 targets.[24]

In 2019 with just over 10 years remaining on the agenda and the world not on track to meet the SDG goals by 2030, the United Nations called for a 'decade of action' to meet the timeframe.[25] Renewing an earlier call for action globally and locally,[26] it championed governments and local governments to embed sustainability across their governance structures and regulatory frameworks, and for the community and other stakeholders to mobilise to achieve sustainable development.[27]

In 2020, COVID-19 disrupted progress in the achievement of the SDG and climate change was confirmed as progressing at a much faster rate than anticipated.[28] The United Nations called for member nations to hold firm in their conviction and find 'transformative pathways in turbulent times', leveraging the goals to achieve a better post Covid environment, focused on growth and sustainability.[29]

Why prepare an environmental sustainability strategy?

Loss of biodiversity values, environmental degradation and climate change impacts call for immediate action.

The Environmental Sustainability Strategy provides the overarching framework for the Town of Port Hedland to prioritise and embed environmental sustainability practices across its facilities, operations, planning framework, policies and programmes that impact the environment.

It is a key tool that will deliver measurable, logical, and continuous improvements in the Town's environmental performance, taking account of local and regional conditions across our society, economy, and environment.

22 United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, Resolution adopted by the General Assembly on 25 September 2015, p12.

23 United Nations Brundtland Commission, *Report of the World Commission in Environment and Development: Our Common Future*, 1987, p16.

24 United Nations, Department of Economic and Social Affairs, Sustainable Development, *Transforming our world: the 2030 agenda for sustainable development*. Available at: https://sdgs.un.org/2030agenda

25 United Nations, *Decade of Action*. Available at: https://www.un.org/sustainabledevelopment/decade-of-action/

26 United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, pp9 and 11.

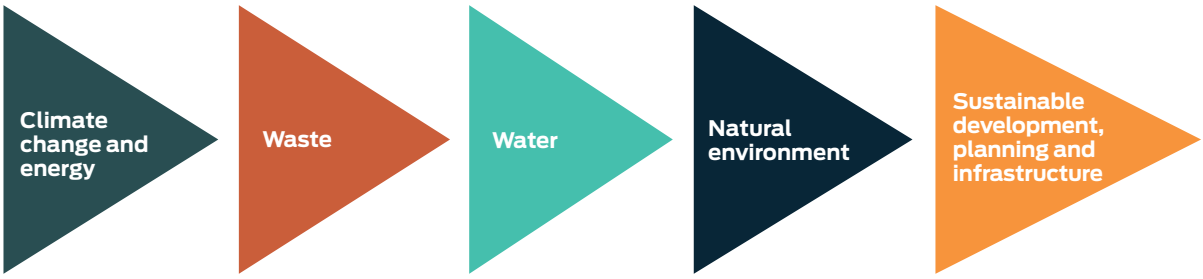
27 United Nations, *Decade of Action*.

28 United Nations, *The Sustainable Development Goals Report 2020*, Foreword, p2.

29 United Nations, *The Sustainable Development Goals Report 2020*, p3.

Our approach to environmental sustainability

The Strategy tables ground sustainability strategies under the following five key impact areas:



Strategies are aligned to objectives for each impact area and are assigned one or more performance measures. Introductory text for each table outlines threats to sustainability, why sustainability is so important, and where relevant, the applicable policy framework.

The strategy tables include information on the Town's achievements in environmental sustainability and opportunities for improved performance, including in collaboration with community and other stakeholders.

Delivery of the strategy framework will require leadership by:

Committing to sustaining biodiversity and ecological outcomes and mitigating and responding to climate change impacts.

Delivering and measuring performance on incorporated strategies.

Identifying and delivering programs to address gaps in staff and community sustainability education across the breadth of the strategy.

Strengthening collaboration in designing, delivering, and embedding sustainability outcomes.

Leveraging technologies for enhanced sustainability performance, information exchange and engagement on sustainable practices.

Reviewing governance frameworks to integrate sustainability principles across the Town's business practices and operations.

Leveraging the Town's regulatory role to ensure better environmental sustainability outcomes.

Conducting relevant research to ensure evidence-based approaches to environmental sustainability are adopted.

Applying for funding opportunities and advocating for change to enhance local capacity to improve sustainability performance, including through submissions to Government on emerging opportunities.

Focus Area 1:
Energy and Climate Change

UNDP – Goal 7, Goal 11, Goal 12, Goal 13, Goal 14

Climate change is viewed by the United Nations as 'one of the greatest challenges of our time' with significant capacity to undermine countries' ability to achieve sustainable development.[30]

Australia is a signatory to the Paris Agreement (2016), a global response to climate change that aims to hold the increase in global temperature well below two degrees above pre-industrial levels and pursue efforts to limit temperature increase to 1.5 degrees.[31] Global temperature currently sits at slightly over one degree but is forecast to increase to 3.2 degrees by the end of the century without significant change to emissions.[32] Each degree brings with it more destructive economic, social and environmental consequences.

The Town is geographically disposed to risk from climate change due to forecast potential for increased temperatures, intensification of cyclones, sea level rise, storm surge and inundation, and bushfires. This could result in further impacts to human health; declining water resources; damage, loss, and increased maintenance of natural and built assets; ecosystem vulnerability; higher insurance costs; disruptions to business continuity; and declining international investment, if Australia is not seen to be responding appropriately to climate change.

The Town has been progressively adapting to climate change impacts since 1992, with renewed focus on protection of water resources, coastal risk management, more sustainable building design, and greening programs over the past three years.

While adapting to climate change is important, mitigation is key. One of the greatest contributors to Australia's carbon emissions is fossil fuel dependent energy production,[33] with electricity generation accounting for just over 35% of Australia's emissions in 2016[34] and global demand for energy increasing. While Government and industry are working actively to reduce emissions, the State Climate Policy views local governments (and the community) as a key partner at the forefront of addressing climate change and building community resilience and safety.[35]

The Town has integrated low-carbon energy options through installation of LED lighting, solar equipment, progressively transitioning to hybrid vehicles, and supporting active movement through a network of cycle paths. The town is geographically placed as a centre for renewable energy, with strong potential to enhance its solar capability for residential and Town facilities and support projects through its planning framework that result in renewable energy transition, including hydrogen.

Tackling climate change takes a collective movement and a strong enabling framework that effectively supports emissions reduction and climate change adaptation.

30 United Nations, *Transforming our world: the 2030 Agenda for Sustainable Developmen*t, Resolution adopted by the General Assembly on 25 September 2015, p5.

31 United Nations, *The Paris Agreement*. Available at: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

32 United Nations, *Emissions Gap Report 2019*, p27.

33 CSIRO, *Australian Emissions*. Available at: https://www.csiro.au/en/research/environmental-impacts/climate-change/climate-change-qa/sources-of-ghg-gases

34 Parliament of Australia, The Senate, Environment and Communications References Committee, *Current and future impacts of climate change on housing, buildings and infrastructure*, 2018, p117.

35 Government of Western Australia, *Western Australian Climate Change Policy*, 2020, p24.

Actions undertaken

1	Prepared a Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) to provide a decision-making framework to respond to immediate and longer-term risks from natural and climate change impacts.
2	Constructed one rock armour seawall, and commenced construction of two more, in Port Hedland to protect against erosion over a 50-year lifespan.
3	Installed electric vehicle charging capability (and solar hot water systems) on 15 new staff houses, the Town Depot, and JD Hardie Centre.
4	Completed the Sutherland Street shared path extension and commenced stage one of the Wilson Street shared path linking South Hedland to Port Hedland, to support walking and cycling.
5	Upgraded 6,750 metres of footpath and lighting and commenced a review of pedestrian access ways, to support improved pedestrian and cycling connectivity.
6	Secured partner funding for a storm tide markers, mapping, and community education project to improve understanding and preparedness for impacts of storm tide.
7	Planted 235 trees along Wallwork Road, the first stage of a $750,000, program, planting 1,200 trees to bring shade and amenity to major vehicle and pedestrian routes.
8	Assessed the feasibility of Solar PV and construction of a solar farm to supply renewable energy to Town facilities and housing.
9	Progressively upgraded lighting at Council facilities and public open space with more energy efficient LED lighting, and supported Horizon Power in a funding application to transition street lighting to LED.
10	Commenced integration of sensor technologies for lighting in new and upgraded facilities and solar sensor lighting at some facilities.
11	Transitioned over 30% of the corporate fleet to hybrid vehicles and one forklift to fully electric, to reduce emissions.
12	Use pool blankets for aquatic centres to reduce energy costs of pool heating.

Objectives

- Improve sustainable practices and resilience to climate change
- Reduce emissions from Town infrastructure and operations
- Support the development of low carbon projects
- Lower energy usage

Focus Area 1:
Energy and climate change (continued)

No	Action	Measure	Sustainable practices and resilience to climate change	Reduce emissions	Support low carbon projects	Lower Energy usage
Energy efficiency						
1	Establish and report on targets to reduce the Town of Port Hedland's net greenhouse emissions from facilities and staff housing relative to 2022 levels by 2027.	Annual CO_2 reduction	✓	✓	✓	
2	Conduct an energy audit on high energy use facilities and prepare an energy efficiency action plan to identify remediation options, including integrating smart technologies to reduce and report energy consumption, motion sensor lights in parks, etc.	Energy audit conducted Reduction in energy consumption	✓	✓		✓
Energy transformation						
3	Where appropriate, install rooftop solar on any new or newly refurbished town facility and staff housing with a minimum seven years' operational life expectancy.	No. of solar installations on new/refurbished facilities Annual CO_2 reduction	✓	✓	✓	
4	Assess in partnership with Horizon Power the feasibility of the Town's development of a solar farm and battery storage solutions to supply electricity to Town facilities.	Assessment conducted Annual CO_2 reduction	✓	✓	✓	
5	Examine with TAFE and other educational centres, opportunities to leverage or integrate training in sustainability to support pathways to employment.	Collaborative opportunities established	✓			

No	Action	Measure	Sustainable practices and resilience to climate change	Reduce emissions	Support low carbon projects	Lower Energy usage
Transport						
6	Improve pedestrian and cycling connectivity, lighting, and signage aligned to the priorities in the Pilbara Cycling Strategy 2050 and prepare a five-year footpath and lighting plan to establish other pedestrian and cycling networks.	No. of priorities met in the Pilbara Cycling Strategy Footpath and lighting plan completed Meterage of pedestrian and cycle paths delivered	✓	✓		
7	Consider development of a Local Planning Policy for electric vehicle charging infrastructure, bicycle infrastructure and end of trip facilities being a requirement for new commercial/ industrial development and workforce camp approvals, and cycle and pedestrian infrastructure in new Structure Plans and urban and industrial subdivisions.	Planning policy completed	✓	✓		
8	Incorporate bicycle parking infrastructure in key locations and include information on cycling networks on the Town's website and relevant digital applications.	No. of locations of installation of bicycle infrastructure Digital platforms incorporate cycle networks	✓	✓		
9	Review corporate fleet and plant with a view to onboarding more energy efficient vehicles, and examine opportunities for electric vehicle (EV) servicing in Port Hedland.	No. of additional energy efficient vehicles onboarded by type Estimated emissions reduction Established availability of EV servicing	✓	✓		

Focus Area 1:
Energy and climate change (continued)

No	Action	Measure	Sustainable practices and resilience to climate change	Reduce emissions	Support low carbon projects	Lower Energy usage
Climate change						
10	Investigate and join a national climate change organisation, develop a climate change policy, and consider sustainability site visits for staff.	Membership approved Climate change policy completed No. site visits conducted	✓			
11	Embed climate change in risk management planning and auditing frameworks.	Frameworks amended to incorporate climate change	✓			
12	Appoint a Sustainability Officer to deliver and report against the Town's Sustainability Strategy and identify additional best practice approaches that minimise the Town's environmental footprint.	Sustainability Officer appointed	✓			
13	Establish a Sustainability Committee to discuss sustainability ideas, facilitate collaborative arrangements for sustainability and environmental outcomes, and inform the sustainability and climate change education program.	Sustainability Committee established	✓			
14	Examine opportunities with PHCCI and other relevant stakeholders for the development of sectoral mitigation and adaptation strategies and sustainability training for the small to medium-sized enterprise sector.	No. and type of programs established	✓			
15	Support programs that build resilience and adaptive capacity to climate change risks and explore opportunities to incorporate Aboriginal knowledge in assessing and adapting to climate change.	No. and type of programs established No. of programs where Aboriginal knowledge is integrated	✓			

No	Action	Measure	Sustainable practices and resilience to climate change	Reduce emissions	Support low carbon projects	Lower Energy usage
16	Deliver stages 2-4 of the Town's tree planting program.	No. of stages delivered No. of trees planted	✓		✓	
17	Develop a Communications Plan to improve community engagement, knowledge, and practices on sustainability and climate change and to report on the Town's sustainability performance.	Communications plan prepared No. of communications activities undertaken by type No. of relevant hits on webpage/ social media	✓			
18	Conduct a map and gap exercise of existing sustainability education in Port Hedland with a view to enhancing sustainability and climate change education and resources for community, sports clubs, businesses, schools and day care centres.	No. of education sessions delivered No. of programs supported	✓			
19	Support the development of renewable energy and hydrogen projects, innovative technologies and other carbon offset opportunities through advocacy, projects and the planning system.	No. of low carbon projects supported	✓	✓	✓	
20	Develop a sustainable events and clubs policy.	Policy completed	✓			
21	Provide a grant or award scheme for community and business sustainability initiatives	Grant/award scheme offered	✓			
22	Support and, where appropriate, partner with organisations, such as Horizon Power and Water Corporation to encourage community involvement in mitigating the effects of climate change.	No. of programs supported	✓	✓		

Focus Area 2: Waste

UNDP – Goal 11, Goal 12, Goal 13

We must avoid waste and make waste work for us.[36]

Waste is everyone's business with the waste sector one of the highest contributors to greenhouse gas emissions.

Solid waste at Hedland's landfill consists of municipal, commercial and industrial (C&I), and construction and demolition waste, with C&I comprising 37% of waste and volumes fluctuating in line with the economy.

Current consumption patterns in the developed world and the trend towards disposal are generating unsustainable levels of waste with Australia one of the highest contributors per capita in the developed world, and Western Australia's performance below the national average.[37]

Town data forecasts that if the current tendency towards disposal over waste avoidance and recovery is maintained in Hedland, then annual disposal rates of between 102,310 and 113,740 tonnes by 2038 will be achieved under a low and high growth scenario respectively. While the Town reuses and recycles waste resources including through innovative pathways, substantial opportunity exists to improve sustainable waste management practices and leverage the value of waste as a commodity.

National and State waste policies support rethinking by the community of waste as a resource, part of a circular economy focused heavily on waste avoidance and where not possible, repeated use of resources, with disposal the least preferred option. Recovery of value from waste materials offsets the impacts of extraction and processing of raw materials, creates jobs, reduces contamination, and saves money in a high-cost environment by extending the life of the landfill.

National and State waste policies establish significant waste avoidance and recovery targets and enforce greater rigour in waste data collection to guide decision-making, including infrastructure investment. Coupled with the State's Waste Levy, these approaches aim to significantly reduce the level of disposal at landfill. While neither the targets or levy currently apply to remote regional centres, given challenges around local markets and high transport and operating costs, potential exists for their extension. Regardless, Australia being a signatory to global sustainability and climate change agreements, and as waste generators or managers, the Town and community have a collective and ethical responsibility to reduce harm to our health, environment and economy, maintain liveability and ensure intergenerational equity by managing waste more effectively.

The strategy includes an enhanced focus on waste avoidance within the Town; recycling and reuse targets; collaborative local waste recovery arrangements; and waste education for changed waste management practices, including recycling, better management of waste contamination and illegal dumping.

36 Waste Authority, *Waste Avoidance and Recovery Strategy 2030: Western Australia's Waste Strategy*, undated, p4.

37 Government of Western Australia, *Office of the Auditor General, Waste Management – Service Delivery, 2020*, p3.

Actions taken

1	Prepared a five-year draft Waste Strategy.
2	Approved the Landfill Establishment Reserve for succession planning for a new waste facility to meet town growth and incorporate sustainability improvements, while effectively rehabilitating the existing facility.
3	Collectively recycled approximately 15,000 metres of kerbing and concrete path and applied this as base course material for a carpark and footpaths.
4	Recycled 1,000 tonnes of metals and batteries and captured 4,000 tonnes of organics.
5	Recycled approximately 40 tonnes of tyres during the 2021/22 financial year, intended to be cost neutral for the Town by 2022/23.
6	Reused 29,000 tonnes of clean fill and 7,000 tonnes of concrete for cover and cell walls at the landfill respectively.
7	Commenced comingling recycling collections from residential and commercial premises in partnership with Cleanaway in 2021, resulting in an estimated diversion of 15% of waste from landfill.
8	Accepted bulk recycle drop-offs for green waste, metals, tyres, demolition waste, electronic waste and batteries.
9	Procured a specialist review of options for enhanced materials diversion from the landfill.
10	Conduct an annual cyclone green waste collection to reduce environmental and building impacts.
11	Continued to recycle e-waste after cessation of the National Television and Computer Recycling Scheme program funding.
12	Allocated two full-time staff to litter collection, with a view to improved amenity and preventing litter entering conservation zones.
13	Bin tagging programs were conducted by Cleanaway.
14	Attended to illegal dumping in response to reports.
15	Conduct daily and annual regulatory audits to ensure site compliance with licence requirements.
16	Improved cross contamination, fire risk and future recovery management through better cell management of waste streams and compaction rates.

Objectives

- Reduce waste generation
- Recover more value from waste
- Support local waste recovery markets
- Protect the environment through better waste management practices

Focus Area 2:
Waste (continued)

No	Action	Measure	Reduce waste	Recover value	Support recovery markets	Protect Environment usage
Avoid waste						
1	In collaboration with Town staff, examine further opportunities for the Town to reduce waste generation and improve reuse and recycling in facilities and operations.	No. of opportunities identified Estimated reduction in waste	✓	✓		
2	Consider opportunities that support waste avoidance, recycling, recovery and disposal.	No. of opportunities established	✓	✓	✓	
Recover resources						
3	Investigate placement of recycling and Containers for Change bins at key locations in Port and South Hedland.	No. of bins installed by category	✓	✓	✓	
4	Implement a community recycling centre providing for a tip shop and community recyclables.	Recycling Centre delivered	✓	✓	✓	
5	Investigate local or regional business opportunities for recycling, reuse and treatment in Port Hedland giving due regard to source separation to reduce contamination of supply at landfill.	No. of local recycling business opportunities investigated No. established	✓	✓	✓	
6	Consider regional collaborative opportunities with local government authorities for knowledge sharing in best practice waste management, funding, procurement/product stewardship, equipment and site sharing.	No. of regional collaborative opportunities established	✓	✓	✓	✓

No	Action	Measure	Reduce waste	Recover value	Support recovery markets	Protect Environment usage
7	Consider further opportunities for beneficial reuse of materials onsite at landfill and in Town infrastructure and operations.	No. of additional opportunities for beneficial reuse established		✓		
8	Establish and report against targets for reuse, recycling and treatment of categories of waste from landfill giving due regard to the National Waste Policy 2018 targets, cost, location of markets and complexity of regulatory approval.	Targets established Report against targets	✓	✓	✓	✓
9	Investigate Emissions Reduction Funding and other climate change funding incentives for new practices and technologies adopted by the Town which reduce emissions.	No. of applications made No. and value of grants achieved	✓	✓	✓	✓
10	Support private investment in materials recovery industries in appropriate locations.	No. of requests No. supported			✓	
Protect						
11	Prepare a landfill operations and closure plan and transition plan for future landfill in line with best practice standards.	Plans completed	✓	✓	✓	✓
12	Consider the feasibility of opening the landfill seven days per week to enhance access and reduce illegal dumping.	Reduction in incidents of illegal dumping		✓		✓
13	Report annual emissions from landfill with a view to stabilising growth and reducing emissions.	Annual emissions reported Statistical data evidences stabilisation or reduction in growth of emissions				✓

Focus Area 3: Water

UNDP – Goal 6, Goal 12, Goal 15

Economic and population growth and urbanisation place unrelenting pressure on the quality and supply of water and water-dependent ecosystems.

The Port Hedland Regional Water Supply Scheme supplies Port and South Hedland, Finucane Island and Nelson Point with potable water obtained from the Yule and De Grey bore fields. These aquifers also support river pools with important ecological and cultural value. Both are dependent on episodic cyclones and Autumn thunderstorms for recharge, which is unreliable, with new water sources requiring costly infrastructure. Under climate change, surface and groundwater sources are forecast to potentially become more variable in the future due to a drying climate.

Resource development is a major driver of water demand, and associated population growth on urban water demand. In Hedland, urban water is used for residential, light industrial, commercial, dust suppression and public open space. Water licensing, allocation limits and efficiency plans are applied to resource projects, with water reserved by Water Corporation for drinking water.

The Town and Water Corporation have collectively improved water efficiency through sustainability education; water restrictions; total water cycle management planning; smart metering technologies; upgrading water infrastructure; water efficiency measures in new builds and public open space; and offering community waterwise programs.

With water the new 'Gold', a scarce resource under threat from a drying climate, significant capacity exists to further influence urban water usage and ensure sustainable urban planning and development decisions that integrate better water management. This requires a renewed effort from Council, community and other sectors that draw on the Town's urban water supply.

The Strategy includes additional water efficiency and management measures including expanding existing efforts, auditing sustainability performance, water efficiency education, and updating the South Hedland Flood Study.

Actions taken

1	Integrated total water cycle management planning in the new Town Planning Scheme No.7, and best practice water management in Structure Plans for Athol Street and the Stables in Port Hedland.
2	Applied Special Control Areas in the Town Planning Scheme No.7 to development in areas at risk from coastal hazards and Public Drinking Water Source Areas.
3	Prepared Local Planning Policy 11 Stormwater Management and Local Planning Policy 07 Coastal Planning Policy to facilitate best practice design of stormwater systems in new developments in Hedland.
4	Raised the minimum habitable floor level for developments above the 100-year average recurrence level for flooding.
5	Partnered with Main Roads Western Australia in an engineering study of options and costs to improve the capacity of the stormwater management system in the West End to drain water to sea in an inundation event.
6	Introduced smart water management technologies for leak detection and other controls for the Town's irrigation systems and Gratwick and South Hedland Aquatic Centres and the splash pad.
7	Installed a 50,000-litre water tank at the JD Hardie Centre and various tanks at Strike Park, Marapikurrinya Park, Shay Gap Park, Colin Matheson Oval and Kingsford Smith Industrial Estate, to service those locations and surrounds with tanks installed in a total of 23 locations to provide greater water efficiency.
8	Integrated reuse of treated effluent and grey water for irrigation in the design concepts for the South and Port Hedland Integrated Sports Hubs.
9	Prepared landscaping guidelines to ensure selection and grouping of plant species based on climate, soil, and water responsive design, and shading, to facilitate micro climatic conditions and water efficiency.
10	Use water efficient ground covers in place of lawn (where appropriate) and undertake a regular program of mulching to garden beds to reduce water loss.
11	Integrated natural shading and water sensitive urban design principles in planting and irrigation regimes in the Spoilbank Marina Masterplan.
12	Provide a liquid waste recovery point for industry, with a higher level of treatment afforded through infrastructure investment and engagement of wastewater service specialists, to provide recycled water for dust and fire suppression at landfill and facilitate additional incoming waste capacity.
13	Currently constructing a second wastewater pond to increase wastewater reuse at the landfill.
14	Completed a recycled water quality management plan for wastewater reuse and monthly monitoring for quality management to ensure no contact risk exists.

Objectives

- Enhance water efficiency and reuse
- Protect valuable water resources and ecological and cultural dependent values
- Respond to the drying impacts of climate change
- Deliver economic and sustainable public open spaces

Focus Area 3:
Water (continued)

No	Action	Measure	Enhance water efficiency and reuse	Protect water resources	Respond to Climate change impacts	Economic and sustainable public open spaces
Monitoring and reporting						
1	Consider further opportunities for better water management including monitoring technologies for water use at facilities or within irrigation systems.	No. facilities with smart technologies integrated Reduction in water consumption	✓	✓		
Educating and engaging						
2	Provide best practice planning advice for developments to ensure incorporation of water sensitive urban design principles and compliance with relevant State and local planning policies.	Qualitative	✓	✓		
Resource efficiency						
3	Maximise the use of fit-for-purpose recycled water.	Documentary support provided for new water recycling plant	✓	✓		✓
4	Update the South Hedland 2010 flood study and identify areas where drainage could be improved.	South Hedland Flood Study updated Drainage improvements undertaken	✓	✓		
5	Conduct a water management audit and develop a water efficiency action plan to identify areas for water conservation and/or reuse at Council facilities, in public open space and in Council operations, with potential for the Town to work towards being an endorsed waterwise organisation.	Water efficiency audit conducted Action plan completed Water efficiency achieved	✓	✓		

No	Action	Measure	Enhance water efficiency and reuse	Protect water resources	Respond to Climate change impacts	Economic and sustainable public open spaces
Water sensitive facilities and urban design						
6	Maximise integration of water sensitive urban design in new developments and town-based facilities.	Qualitative	✓	✓		✓
Public open space and ecological health						
7	Adopt best practice sustainable strategies and methodologies in the design, implementation, and management of public open space.	Qualitative	✓	✓	✓	✓

Focus Area 4:
Natural environment

UNDP – Goal 11, Goal 13, Goal 15

The Town of Port Hedland has an arid-tropical climate with warm dry winters and warm to very hot summers, with rainfall predominantly January to March, the result of tropical storms and cyclones which can trigger storm surge and localised flooding.

Preservation of the coastal foreshore, including its ecology and biodiversity, cultural value and as a place of science and learning, holds significant value for residents and visitors to Port Hedland. Floral and faunal values and wetlands are uniquely part of the identity of the Pilbara. Sustainable and economic public open space supports quality of life in the Town and facilitates community connection.

Effectively managing the natural environment is complex and compounded by heat, relatively low rainfall, high rates of evaporation, cyclones, urbanisation, and climate change. As mentioned, achieving the requisite balance between our society, economy and environment is key to the sustainable development of our Town and communities.

Key themes have emerged during recent community consultations underpinning Town strategies, the planning framework and place plans on our natural environment. These include:

- leveraging the public realm to celebrate the Pilbara's natural landscape and creating comfort through natural shading;
- enhancing vegetation and natural habitats and engendering awareness and respect for these unique values;
- creating opportunities to directly interact with the environment;
- cultural interpretation and knowledge sharing on management of the coastline;
- providing collaborative opportunities for participation in environmental design and management;
- better energy, waste and water management practices; and
- enhancing dust management.

Recently, the Town's work within the natural environment has centred on greening and landscaping; protecting environmental values from development and human influences; and establishing and delivering on standards to ensure economically and environmentally sustainable parks.

Going forward there will be an enhanced focus on themes raised by the community around foreshore management, cultural and environmental collaborations, protection and management of biodiversity, and greening strategies, including as dust buffers.

Actions undertaken

1	Prepared a Foreshore Management Plan to identify and prioritise short-term actions to protect the foreshore and support longer term adaptive strategies in the CHRMAP.
2	Rationalised off-road vehicle access at the Spoilbank and Four Mile Creek, employing natural barriers to protect the ecology of the dunes.
3	Upgraded Gray Street Port Hedland to minimise proliferation of off-road tracks and damage to environmental values at 6 Mile Creek.
4	Managed light spill from streetlights during the Flatback Turtle nesting and hatching seasons.
5	Committed to deliver in partnership with Lotterywest and FORM, the Commons in South Hedland, an outdoor zone with endemic landscaping.
6	Prepared a Public Open Space Strategy to classify parks and provide minimum standards of provision and maintenance to ensure economically and environmentally sustainable parks.
7	Prepared comprehensive landscaping guidelines to guide Council practices and designers, developers and residents in creating and maintaining sustainable landscapes.
8	Provide residents with a free street tree for shading and greening neighbourhoods.
9	Zoned turtle nesting beaches, mangrove environments, threatened and important ecological communities and public drinking water source areas ‘Environmental Conservation’ to limit adverse development impacts.
10	Adopted environmentally friendly treatment and engineering solutions to prevent ponding, for mosquito and sandfly control.
11	Employed an Environmental Health Technician to improve environmental and contaminated waste assessment and protect from spillage.
12	Expanded the fox trapping and feral cat trapping programs.
13	Prepared a comprehensive invasive weed strategy.

Objectives

- Protect the natural environment
- Support environmental regeneration
- Improve understanding of environmental and cultural values
- Support natural solutions to climate change

Focus Area 4:
Natural environment (continued)

No	Action	Measure	Protect natural environment	Support environmental regeneration	Improve environmental understanding	Support natural solutions to climate change
Planning and reporting						
1	Review the Public Open Space Strategy to allow regional variation to 10% public open space based on climate zone and sustainable public open space management.	Strategy reviewed Submission to Government completed	✓			
2	Ensure protection of existing, and integration of new trees, in new subdivisions in Port and South Hedland.	Qualitative	✓	✓		✓
3	Extend the maintenance period and landscape maintenance bond for developers of public open space from 24 months to five years to ensure appropriate establishment of plants.	Maintenance policy amended		✓		
Management						
4	Signpost off-road vehicle access at authorised locations to encourage use of more formalised pathways and restrict and enforce unauthorised access.	No. of signs erected at No. of locations	✓			
5	Minimise the use of harmful treatments in controlling invasive species and ensure integrated pest and weed management practices are adopted by the Town and contractors.	Qualitative	✓			
6	Protect turtle nesting areas through effective management of light spill from development and streetlights.	Qualitative	✓			
8	Undertake a determination under the Town of Port Hedland *Dogs Local Law 2021* to prevent dog access to beach areas during the turtle season.	Determination approved by Council	✓			

No	Action	Measure	Protect natural environment	Support environmental regeneration	Improve environmental understanding	Support natural solutions to climate change
9	Prepare and deliver a biodiversity strategy for retention, protection and management of biodiversity values within the townsite boundary.	Biodiversity strategy completed Actions undertaken	✓	✓	✓	✓
Regeneration						
10	Prepare and deliver a greening strategy to enhance shade and reduce thermal radiation from ground surfaces within public and private realms within Hedland.	Greening strategy completed Actions undertaken		✓	✓	✓
Engagement						
11	Collaborate with Aboriginal Traditional Owners and environmental groups to facilitate education, activities and projects that enhance community engagement and understanding of Hedland's complex ecology and cultural significance of nature spaces.	No. and type of Aboriginal engagements established	✓	✓	✓	
12	Utilise landscape planting, art and infrastructure to interpret and enhance cultural heritage and connection to environment.	Qualitative			✓	
13	Work with industry to share information on best practice sustainability and climate change management.	No. of engagements	✓	✓	✓	✓
Leadership						
14	Support the State Government's climate change project.	Support provided	✓	✓	✓	✓

Focus Area 5: Sustainable development, planning and infrastructure UNDP – Goal 8, Goal 9, Goal 11, Goal 12

'We have mapped the road to sustainable development; it will be for all of us to ensure that the journey is successful and its gains irreversible.' [38]

While sustainable development incorporates issues raised elsewhere in this strategy, it is heavily contingent on the strength of urban planning and built design. Done well, it comes with innumerable benefits such as more sustainable and climate responsive design and greater comfort; better protection and interaction with environmental features and ecosystems; well-integrated and engaging spaces; and cost savings.

The State Government provides a rigorous framework for sustainable land use planning and development and for managing coastal risks. These policies inform the local planning framework which aims to ensure lands planning and infrastructure development effectively balances social, economic and environmental factors. While broad reaching in its scope, the new local planning framework aligns housing and infrastructure delivery to long-term land use planning and provides flexible responses to development to preserve, protect or integrate natural systems.

Hedland faces some historic challenges in urban design and built form. Going forward, opportunities exist to improve sustainable development outcomes in the town and address critical challenges, including climate controlled, functional public spaces; built design's capacity to mitigate and respond effectively to climate change impacts while remaining affordable; and reducing the environmental footprint of our facilities. This will involve in part, education on sustainable built and urban form, and integrating sustainability principles and strategies across policy and operational practices including design, procurement, projects and asset management, and through the assessment of developments under the planning framework and other legislation.

38 United Nations, *Transforming our world: the 2030 Agenda for Sustainable Development*, Resolution adopted by the General Assembly on 25 September 2015, p12.

Actions undertaken

1	Prepared a new Local Planning Strategy and Planning Scheme to ensure sustainable use and development of land, including aligning infrastructure planning to long-term land use planning.
2	Prepared Local Planning Policy 07 Coastal Planning to support Town decision-making on developments on land identified as being at risk from coastal inundation and erosion.
3	Implemented a Special Control Area (SCA7) in the Town Planning Scheme to provide guidance on land use and development within areas subject to coastal erosion and inundation.
4	Introduced minimum 10% landscaping for new industrial developments in the Town Planning Scheme to reduce urban heat island effect in industrial areas.
5	Council resolved to investigate innovative, affordable and sustainable models of housing as one of five priorities to address the critical housing shortage in Port and South Hedland.
6	Incorporated sustainable design principles in the Town's depot and JD Hardie Centre upgrades and the South and Port Hedland Integrated Sports and Community Hubs.
7	Prepared the Athol Street and Stables Structure Plans, recognising coastal processes and cultural values associated with Pretty Pool Creek and dust impacts in the West End of Port Hedland.
8	Delivered an asset management improvement program to better match assets to service levels, ensure appropriate asset lifecycle demand and meet community expectations going forward.
9	Worked collaboratively with Government and community on the preparation of the Spoilbank Marina Masterplan, incorporating interpretive art, hard structures and planting, to celebrate and leverage Hedland's distinctive coastline for ecology, ecotourism and biodiversity education and culture.
10	Prepared position statements for Mining Tenements and Crown Land, confirming that where available under statute, the Town would object to proposed developments that may adversely impact the environment.
11	Established a Design Review Panel, to provide independent expert technical advice on proposed developments, including optimising the sustainability of the built environment and urban landscape.
12	Developed a Workforce Accommodation Policy to support sustainable design of operational workforce accommodation in an urban setting.

Objectives

- Sustainability principles inform governance and operations
- Environment and climate responsive urban design is achieved
- Climate risks to built and natural assets are managed

Focus Area 5: Sustainable development, planning and infrastructure (continued)

No	Action	Measure	Embed sustainability principles	Environmental and climate responsive design	Manage climate risks to assets
Housing					
1	Promote affordable climate responsive design principles for new or existing developments through the planning system and Council's sustainability education.	Guidance information prepared through the planning system Climate responsive design principles Integrated in education program	✓	✓	✓
2	Focus on subdivision developments within a 400-metre walkable catchment of the City Centre to encourage active transport methods.	No. of subdivision developments approved within 400-metre walkable catchment of City Centre		✓	
City infrastructure					
3	Identify and utilise public coastal infrastructure that is more resilient to coastal hazards, is recyclable (where applicable) and which protects dune ecosystems, vegetation and cultural values.	No. and type of installations		✓	✓
4	Deliver the recommendations of the South Hedland Place Plan to ensure a more identifiable, attractive and connected Town Centre with more climate controlled and functional public spaces.	Recommendations implemented	✓	✓	
5	Progress the recommendations of the Spoilbank Masterplan for landside activation to deliver a public realm that appropriately interfaces with culture and environment.	Recommendations implemented		✓	✓
6	Improve project planning and development of staff technical knowledge of climate responsive design and materials suited to Pilbara conditions.	No. training sessions delivered	✓	✓	✓
7	Cluster and design facilities for multi-use purposes to enhance economic and sustainability outcomes.	Qualitative	✓		✓

No	Action	Measure	Embed sustainability principles	Environmental and climate responsive design	Manage climate risks to assets
Procurement					
8	Prepare a sustainable procurement policy and integrate sustainability criteria within relevant tender and contractual documentation for build, services and goods contracts.	Sustainability principles embedded in procurement documentation	✓		
9	Support the development of local supply chain opportunities for Council goods and services.	No. of local supply chains established	✓		
Planning					
10	Develop a sustainability guidance statement to encourage sustainability initiatives in residential and commercial developments, including relevant Town-owned facilities.	Guidance Statement prepared	✓	✓	✓
11	Embed sustainability criteria in project planning processes, ensuring the requisite balance is achieved between sustainability, economic and social outcomes.	Project planning templates updated to incorporate sustainability principles	✓	✓	✓
12	Integrate in the Town's asset management framework sustainability principles, ensuring triple bottom line outcomes are applied in policy settings.	Asset Management Framework updated to incorporate sustainability principles	✓		✓
13	Refer relevant development applications to the Design Review Panel for a sustainability assessment.	No. of applications referred for a sustainability assessment	✓	✓	✓

Implementation and monitoring of our strategy

The Town's Sustainability Strategy operates within the broader context of the Town's *Strategic Community Plan 2022-2032*, Corporate Business Plan and Operations Plan.

The Strategy will be delivered under the auspices of a Sustainability Committee and Sustainability Officer, appointed by the Town. Advocacy and collaboration will be key to its achievement, given environmental sustainability is a cross-cutting issue affecting the community and other sectors. The strategy will be delivered, and progress monitored, as follows:

- An Action Plan will be prepared to support implementation and reporting on identified strategies.
- Resourcing will form part of the annual budget process and the Town may leverage Government carbon offset and other relevant funding sources.
- A Communications Plan will facilitate effective information exchange and community and stakeholder engagement.
- Progress on the strategy will form part of quarterly reporting to Council on the Strategic Community Plan.

The Strategy will be regularly reviewed to ensure it meets its objectives and considers emerging issues that may influence its direction.

Get involved

The development of this strategy reinforces that many organisations, businesses and individuals are doing remarkable work to improve environmental sustainability in this town and address global climate change impacts.

The Town recognises that for the Town's vision of a more sustainable future to be achieved, we must work together.

Sharing expertise and strong collaborative arrangements will be central to realising strategy outcomes and informing and responding to new opportunities. This is key in the context of a global focus on sustainability and climate change where new information demands adaptability.

If you are interested in getting involved in the Town's sustainability journey, then please contact our team:

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