

# SESLHD Environmental Sustainability Plan | 2019-2021



June 2019

Produced by South Eastern Sydney Local Health District

# Acknowledgments

## Acknowledgement of Country

South Eastern Sydney would like to acknowledge the Traditional Custodians on whose land we stand, and the lands our facilities are located on: the lands of the Dharawal, Gadigal, Wangal, Gweagal and Bidjigal peoples.

We would like to pay our respects to the Elders past, present and those of the future.

## Acknowledgment of staff support

South Eastern Sydney would like to thank the broad and diverse range of staff and consumers who contributed ideas and comments in the development of this Plan.

The enthusiasm and commitment shown by all those consulted has been invaluable and we hope to continue to work closely with staff, consumers and partners in implementing the Plan and further developing our work to support environmental sustainability.



# Contents

<b>Foreword</b>	<b>1</b>
<b>Executive Summary</b>	<b>2</b>
<b>Where are we now?</b>	<b>3</b>
<i>Background</i>	3
<i>What is the role of healthcare in sustainability?</i>	5
<i>South Eastern Sydney Local Health District</i>	8
<i>SESLHD Activities</i>	9
<i>SESLHD Staff Consultation</i>	13
<b>Where are we going?</b>	<b>14</b>
<i>SESLHD Vision</i>	14
<i>SESLHD Approach</i>	14
<b>How will we get there?</b>	<b>17</b>
<i>Hotspots</i>	19
<b>Governance and Accountability</b>	<b>20</b>
<i>The role of the SESLHD Environmental Sustainability Committee</i>	20
<i>Other groups</i>	20
<i>Meeting and Reporting</i>	20
<b>Appendix A: Plan on a page</b>	<b>21</b>
<b>Appendix B: Examples of Sustainable Development Assessment Tool Statements</b>	<b>22</b>

# Foreword



Challenges are nothing new to health care. We have a proud history of facing them and delivering positive outcomes. Climate change and its effects on health are a growing global health challenge. Increasingly, public organisations are recognising their responsibility to reduce their impact upon the environment and manage the risks associated with climate change. This includes the physical risks due to the impacts of climate change and the transition risks as our society moves towards a low carbon economy.

Effective action to address environmental sustainability is aligned with our commitment to place patients at the centre of care and to focus on health, wellbeing, and prevention of disease. For health organisations, the inter-dependencies between human health and the environment make these responsibilities all the more relevant. International experience shows that by addressing climate risks there are significant opportunities to improve health and reduce costs.

The negative impacts of climate change on human health are wide ranging. The health impacts of extreme weather such as heatwaves, droughts and storms are already major concerns in NSW. Additionally, there is concern that vulnerable populations are disproportionately affected. The timeframe to effectively reduce and manage current and future impacts is shrinking. Taking action now represents the best opportunity for health care organisations to protect and improve health now and into the future.

Much of SESLHD's Environmental Sustainability Plan reflects the priorities outlined in our "*Journey to Excellence*"<sup>1</sup> and is consistent with many of the shifts in healthcare globally, including the move to more integrated care and a focus on delivering better value. This Plan has been developed in close consultation with staff and consumers, whose continued engagement in this work will be crucial.

The Plan does not represent the start of the journey for South Eastern Sydney Local Health District (SESLHD). The numerous examples of good practice across our District demonstrate an existing appetite for action. The Plan sets out a systematic approach to ensure our combined efforts achieve the greatest value for our communities.

This Plan is intentionally ambitious. Our approach is guided by the best available evidence, a sense of pragmatism, and a desire to be a leader in this critical area of health work. I urge all our partners and staff to join me in supporting the ambitions set out in this Plan so that individual and collective responsibilities can be fulfilled to address the risks posed by climate change.

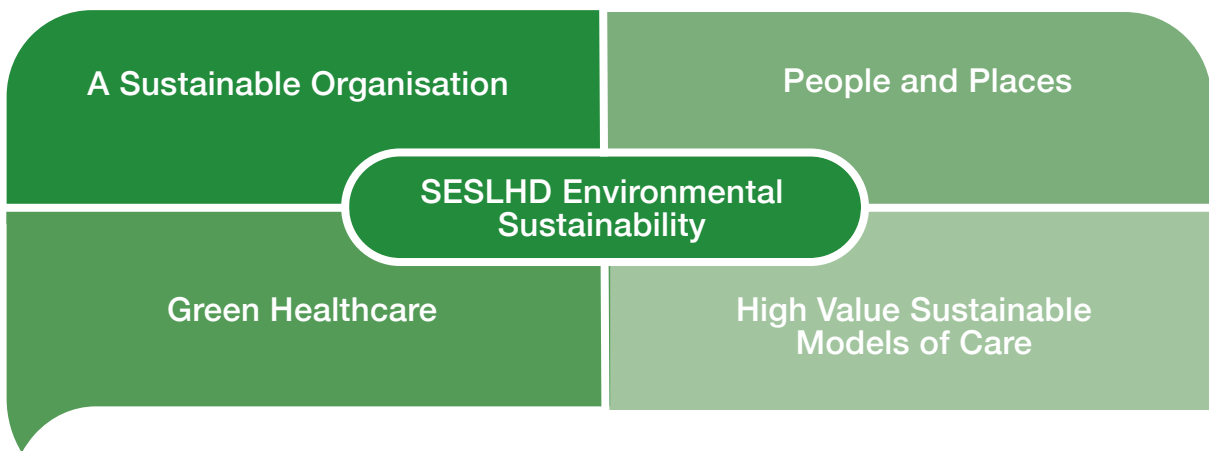
**Mr Tobi Wilson**  
Chief Executive

<sup>1</sup>SESLHD, *Journey to Excellence 2018-2021* (2018), [http://seslnweb/Journey\\_to\\_Excellence/docs/2017/SESLHDJourney-toExcellenceStrategy2018-2021-v13.pdf#search=journey%20to%20excellence](http://seslnweb/Journey_to_Excellence/docs/2017/SESLHDJourney-toExcellenceStrategy2018-2021-v13.pdf#search=journey%20to%20excellence)

# Executive Summary

Climate change and its impacts on health, and in turn healthcare, is a growing global challenge. SESLHD has an opportunity to take a leading role in addressing this challenge. This Plan has been developed in consultation with staff and consumers and has considered the latest evidence including that which specifically relates to Australia and the Australian health care system.

The Plan represents one step towards developing more environmentally sustainable health care and considers the breadth of opportunity for SESLHD to promote a sustainable health care system which supports healthy lives and delivers exceptional care. The following themes provide a framework for our approach:



The framework for measurement, reporting and governance of the Plan will utilise the Sustainable Development Assessment Tool (SDAT). SDAT has been developed by the National Health Service in England based on over a decade of experience around sustainability in healthcare. The tool is centred on ten areas which align with the SESLHD themes are illustrated below:



# Where are we now?

## Background

Australia joined 195 other countries in signing the 2015 Paris Agreement within the United Nations Framework Convention on Climate Change (UNFCCC). Thus committing to developing climate change plans with the primary aim of limiting the global temperature rise to 1.5°C.

In 2018 the Intergovernmental Panel on Climate Change (IPCC) reported that the window of opportunity for meaningful action is small and shrinking; perhaps just 12 years before a 1.5°C target is unattainable<sup>2</sup>. Temperature rises of 1.5°C will still result in negative consequences for health although if this level is exceeded impacts will be harder, more expensive and in some cases impossible to avert. Meeting the 1.5°C target will require change at an “unprecedented” scale<sup>3</sup>. Achieving such a level of change necessitates all sectors, including health, to take action and to do so at scale and pace.

The adverse effects of climate change on health are both direct and indirect and are recognised at Commonwealth (Australian Government-Impacts of Climate Change) and State level (NSW-Impacts of Climate Change). Direct impacts are numerous and Australia is especially susceptible to a number of these including an increase in extreme weather events such as heatwaves and drought and the associated increases in morbidity and mortality<sup>4</sup>. Changes in infectious disease patterns along with increases in existing vector borne diseases such as Ross River Virus are also predicted to rise as temperatures do<sup>5,6</sup>. Beyond the direct impacts climate change threatens economic growth and is projected to lead to a rise in both poverty and food insecurity<sup>7</sup>. Reduced resources may lead to population displacement<sup>8</sup> and potentially increased conflict.

The risks posed by climate change are recognised beyond healthcare and the financial sector, including the Reserve Bank of Australia, describes physical and transitional risks associated with climate change<sup>9</sup>.

---

<sup>2</sup>IPCC, 2018: Summary for Policymakers. In: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P. R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)]. World Meteorological Organization, Geneva, Switzerland, 32 pp.

<sup>3</sup>IPCC, 2011: Summary for Policymakers, p. 21.

<sup>4</sup>Guo Y, Li S, Liu DL, et al. Projecting future temperature-related mortality in three largest Australian cities. *Environ Pollut* 2016; 208: 66-73.

<sup>5</sup>McMichael A, Woodruff R, Whetton P, et al. 2002. Human health and climate change in Oceania: a risk assessment. Canberra: Australian Government Department of Health and Ageing.

<sup>6</sup>Royal Australasian College of Physicians (2016), Climate change contributes to growth in mosquito populations, <https://www.racp.edu.au/docs/default-source/default-document-library/media-releases/media-release---climate-change-contributes-to-growth-in-mosquito-populations.pdf?sfvrsn=0>

<sup>7</sup>McMichael A, Woodruff R, Whetton P et al (2002).

<sup>8</sup>McMichael C, Barnett J, McMichael AJ. An ill wind? Climate change, migration, and health. *Environ Health Perspect* 2012; 120: 646-654.

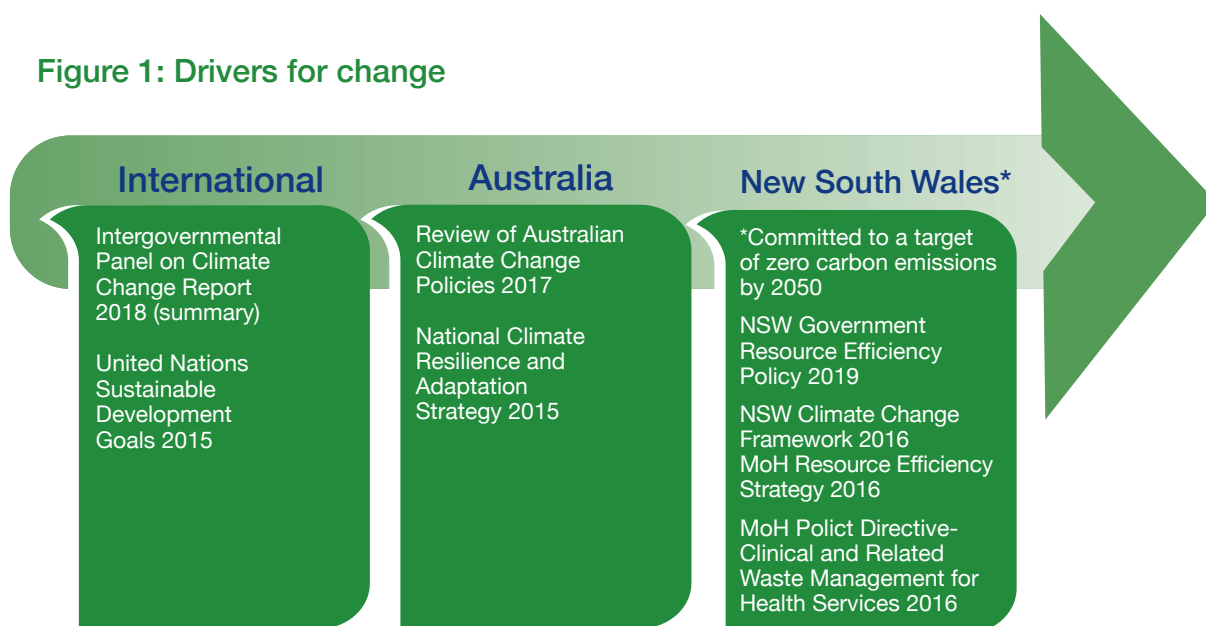
<sup>9</sup>ABC News. Climate change costs will have knock-on effect on interest rates, Reserve Bank warns. <https://www.abc.net.au/news/2019-03-12/reserve-bank-warns-of-impact-of-climate-change-on-the-economy/10893792> accessed 26/03/19.

- ❖ Physical risks are those risks which result directly from climate change. These risks can be both acute and chronic. Acute risks are typically event driven such as flooding. Chronic risks are those associated with longer term changes for example prolonged heatwaves<sup>10</sup>.
- ❖ Transitional risks of climate change are those resulting from the changes required for a shift to a lower carbon economy. These risks include legal and reputational and the level of risk will vary dependant on the time and nature of the changes<sup>11</sup>.

Whilst the health impacts of climate change will be felt globally and across sectors the health burden, both direct and indirect, will be unequally distributed. The world’s most vulnerable will suffer first and suffer most severely<sup>12</sup>.

The impetus for action has a number of policy and regulatory drivers. Some of which are illustrated by figure 1 below:

**Figure 1: Drivers for change**



<sup>10</sup>Taskforce on Climate-related Financial Disclosures (TCFD). 2017. <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-2017-TCFD-Report-11052018.pdf> accessed 26/03/19.

<sup>11</sup>Taskforce on Climate-related Financial Disclosures (TCFD). 2017.

<sup>12</sup>IPCC, 2018: Summary for Policymakers, p15.

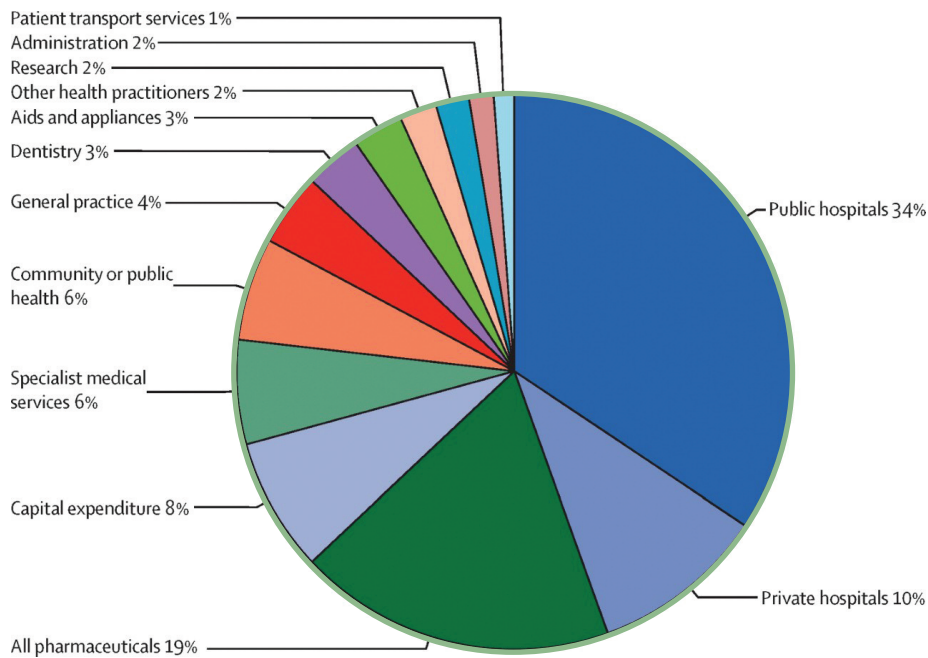


## What is the role of healthcare in sustainability?

The effects of climate change have clear implications for healthcare but the sector itself is a major contributor to carbon pollution. The healthcare sector is estimated to contribute 7% of Australia's total carbon footprint<sup>13</sup>. That is, the healthcare sector's carbon footprint is the same as the total emissions (travel, transport, housing, electricity, gas, food, entertainment, and purchases) of the entire state of South Australia<sup>14</sup>. By way of comparison, the carbon footprints of the UK and USA health sectors are 4% and 10% respectively<sup>15</sup>.

The chart below (Figure 2) shows the carbon footprint of healthcare in Australia. As a major contributor to carbon pollution, and as a sector at the frontline of climate impacts, healthcare has a particular responsibility to reduce its carbon footprint.

**Figure 2: Carbon footprint of Australian Healthcare (Malik et al, 2018)**



What is clear from this graph is the number of factors which comprise the total footprint. Hospitals make up around half of the total with pharmaceuticals contributing a fifth. The traditional 'green' initiatives relating to energy, waste and transport are also important and can deliver some of the change required.

<sup>13</sup>Malik A, Lenzen M, McAlister S, McGain F. 2018. The carbon footprint of Australian health care. *The Lancet Planetary Health* 2018;2(1):27-35.

<sup>14</sup>Malik et al (2018), p32.

<sup>15</sup>Malik et al (2018), p32.

However in the longer term other aspects, including a change in the way healthcare is provided, will be required if SESLHD is to fully realise its potential contribution to net zero carbon targets.

The physical risks posed by climate change can be managed in line with existing risk and disaster management plans<sup>16</sup>. This approach to adaptation in healthcare is important. Systems are often already in place which can be enhanced with local data on projected impacts to ensure that healthcare providers are proactive in reducing negative effects on both population health and healthcare resources<sup>17</sup>. This plan primarily focusses on reducing SESLHD's transitional climate risk alongside the management and mitigation of existing and emerging threats. The impacts of climate change are much broader than the scope of healthcare; however there are numerous examples of our sector showing impactful leadership that extends beyond the hospital door.

## Can healthcare really make a difference to the 'big' issues?

*Healthcare has a strong track record of leading change in complex and challenging areas which have resulted in dramatic positive impacts on health and wellbeing. In each of the examples below significant change stemmed from a small number of people working in health who wanted to make a difference.*

1. Public Health Act UK (1848): Social reformers and physicians led a landmark act in the UK which led to the provision of clean water and good sanitation which led to significant public health benefits.
2. Road Safety: Despite dramatic rises in the volume of motor vehicles during the twentieth century, death rates due to motor travel were reduced by 90% from the 1920's to 2000. Speed limits, seat belts, driving tests and action to reduce driving under the influence of alcohol were all important contributors to this achievement which were championed by public health.
3. Tobacco control: Health research gathered pace in the 1950's and 1960's to demonstrate the strong links between smoking and a range of health conditions. The following decades have seen significant reductions in smoking rates due to interventions such as advertising restrictions, smoking bans and smoking cessation clinics.
4. Smallpox eradication: Some estimates suggest that smallpox caused 300 million deaths throughout the twentieth century. A concentrated programme of vaccination eradicated the disease in 1980.
5. Nuclear proliferation: International Physicians for the Prevention of Nuclear War (IPPNW- An organisation of medical professionals across 64 countries who continue to advocate for a world free of nuclear weapons) was awarded the Nobel Peace Prize in 1985 for its efforts to prevent nuclear war.

The recognition that environmental sustainability is central to good health and that healthcare has a role to play is demonstrated by healthcare examples globally and within our District.

---

<sup>16</sup>Rychetnik L, Sainsbury P, Stewart G. (2018). How Local Health Districts can prepare for the effects of climate change: an adaptation model applied to metropolitan Sydney. Australian Health Review <https://doi.org/10.1071/AH18153>

<sup>17</sup>Rychetnik et al (2018), p2.

## What is healthcare doing elsewhere?

**Sustainable Development Unit (SDU)** The Sustainable Development Unit (SDU) is funded by, and accountable to, NHS England and Public Health England to work across the NHS, public health and social care system. It supports organisations across health and care to embed and promote sustainable development in order to reduce emissions, save money and improve the health of people and communities. They are leaders in this field and an organisation from whom Australia and other countries can learn.

The SDU was established in 2008 in recognition of the role that healthcare can play in contributing to and mitigating the impacts of climate change. Their work includes the wider long term needs of the health system including addressing the physical risks of climate change, health promotion, tackling the wider determinants of health, corporate social responsibility and developing new sustainable models of care.

In less than a decade the SDU has supported the NHS to reduce both its carbon emissions and water footprint by ~20% and reduced the amount of waste to landfill by 85%. In a ten year period it is estimated that sustainable energy measures alone have saved the health system approximately £1.85bn. Over 60% of NHS organisations now have a Board-approved sustainable development management plan.

## Global Green and Healthy Hospitals (GGHH)

HealthCare Without Harm is a global organisation aiming to “transform the health sector and foster a healthy future for people and the planet”. HCWH was established by a small group of clinicians working at a paediatric unit in California who recognised that environmental factors, specifically the impacts of medical waste incineration, were contributing to the conditions that caused children to present at hospital. That is, the same system that treated sick children was directly contributing to their illness. Individuals at a single hospital took action. That was in 1996 and just 20 years GGHH had spread to thousands of organisations in over 50 countries. Global Green and Healthy Hospitals (GGHH) is an initiative launched by HCWH which has created an international learning community focussed on sustainable healthcare. GGHH has over 1000 active members across 54 countries and provides a forum for discussion and sharing along with providing training, resources and advocacy for partners. SESLHD is proud to be a member organisation.

### Health Victoria- Environmental Sustainability

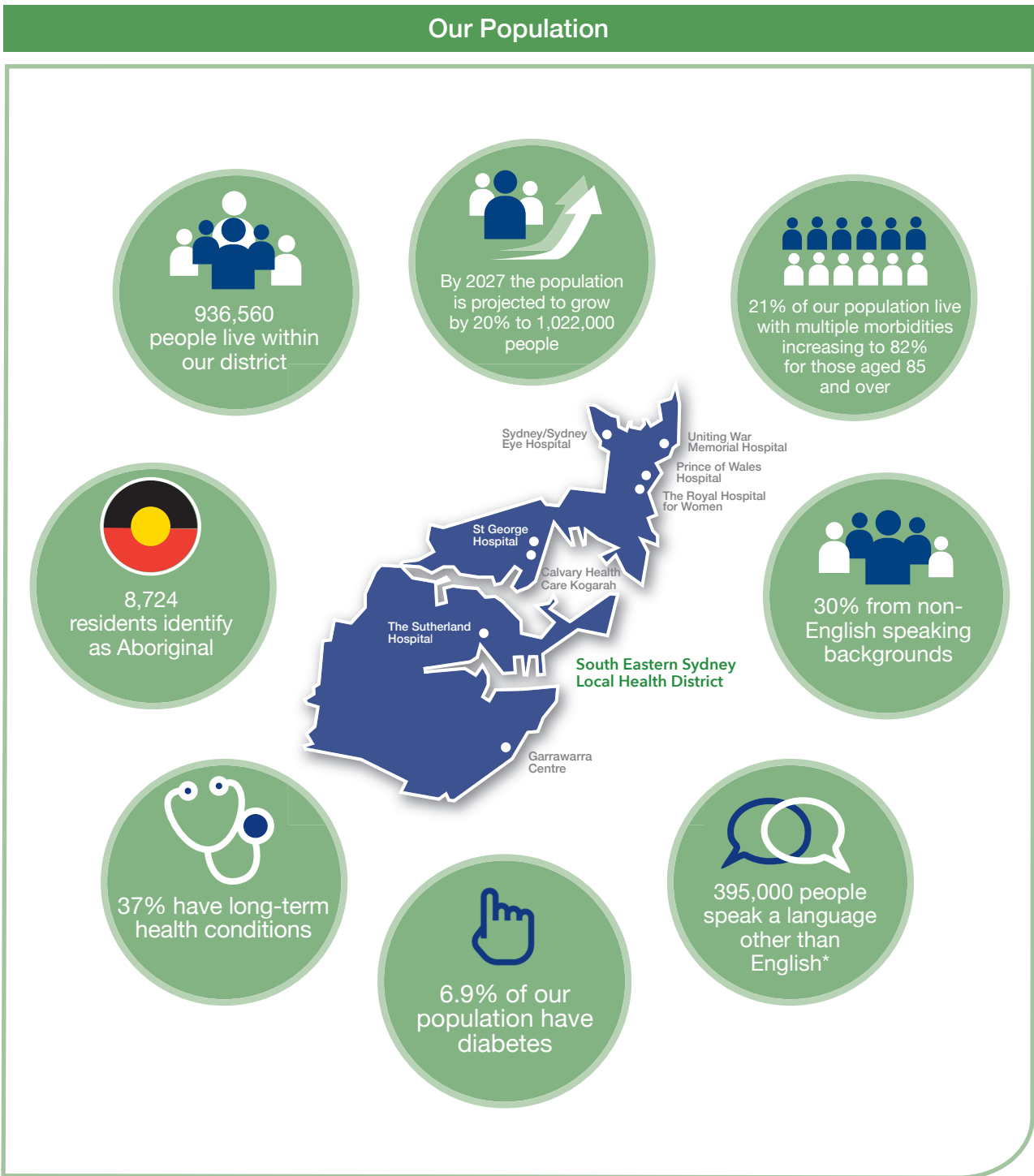
Victoria Department of Health & Human Services has developed an ambitious Environmental Sustainability Plan with a number of clear objectives. These include:

- ❖ establishing a sustainable procurement policy.
- ❖ integrating sustainability and climate risk into existing hospital and health service performance reporting processes.
- ❖ working with stakeholders to increase investment in energy efficiency and solar power across the Health system.

This strategy is the product of extensive work in Victoria over more than a decade aimed at making healthcare more sustainable. The Victorian Plan acknowledges the contribution of recognised approaches to increasing sustainability such as greater use of renewable energy, provision of green space and ensuring adequate adaptation measures are taken. The Plan extends to recognise the value of demonstrating leadership and developing greater accountability around sustainability. A focus on effective use of technology and preventative services is core to the strategy.

# South Eastern Sydney Local Health District

SESLHD is one of 15 Local Health Districts and 3 specialist networks across NSW and has committed to undertaking a “Journey to Excellence”<sup>18</sup>. The priorities of this overarching organisational strategy (shown in Figure 3) resonate strongly with the themes and priorities in this Plan.



\*Top 3 languages spoken are: Mandarin - 67,034 Cantonese 33, 797 Greek - 30,824 Nepalese - 9,812 Bengali - 5,817

## SESLHD activities

This Plan builds on the previous Environmental Sustainability Plan (2013), the ongoing work of staff across the organisation and the sustainability initiatives already underway. SESLHD does not have a Sustainability Unit but does employ a public health physician in a part time capacity as the Environmental Sustainability Lead. Supporting this role is a Sustainability Committee with membership that consists of a cross-section of the organisation. It provides a forum for discussing progress and challenges. This Committee will be responsible for overseeing the implementation of this plan.

The NSW Health Sustainability Forum was co-hosted by SESLHD and the University of Sydney Planetary Health Platform in 2018 and helped to establish a network of sustainability leads across NSW Health in recognition of the benefits of collaborative working. This group meets via teleconference monthly and provides a forum for sharing of best practice and a collective advocacy voice.

In recognising that some of the progress made by healthcare has been related to emissions and waste SESLHD has produced reports in both areas; summaries are presented below:

### Greenhouse Gas Emission Assessment

- ❖ Hospital based healthcare is energy intensive.
- ❖ Electricity usage is high. This is largely due to the nature of many health care activities.
- ❖ Heating and food provision are areas of high spend with potential for action to be taken.
- ❖ A breakdown of energy use by facility, activity and function to inform targeted activities.
- ❖ Fuel use in vehicles is a small component in the overall SESLHD energy footprint.
- ❖ Behaviour change interventions can reduce in energy usage and should be supported by staff awareness training and a strong communications plan.
- ❖ This assessment provides an important baseline to direct, support and evaluate initiatives relating to greenhouse gas emissions.

### Waste

A waste management consultant has worked closely with SESLHD to provide an assessment of our current practice. A District Waste Management Plan (WMP) has been developed which includes a number of actions to improve our waste management, and reduce the financial and environmental costs of waste.

During our baseline year (2019/20), we will work to bring all sites to a common level in terms of compliance, knowledge and awareness. Specific actions to be completed are:

- ❖ All sites to complete operational waste management plans.
- ❖ All sites to undertake due diligence reviews of all waste and recycling streams.
- ❖ Develop new recycling program across all major sites.
- ❖ Develop staff waste education and awareness programmes.
- ❖ Establish formal waste committees at each site with a representative participating in the District waste committee.
- ❖ Commence review of purchasing and supply impacts on waste.
- ❖ Commence the migration to the NABERS Waste Reporting platform.

The Greenhouse Gas Emissions Assessment and SESLHD WMP provide a springboard for action. It is noted that other activities are also taking place across the District. Numerous examples of great work undertaken by staff can be viewed on the Environmental Sustainability page of our website and several case studies are shown in the following pages.

### SESLHD Case Study: 'Green Dragons' at St George Hospital



In an initiative to decrease waste and increase recycling, the St George Hospital Emergency Department (ED) has created team "Green Dragon". Staff recognised that the department created large volumes of waste and although some of it is necessary for clinical purposes, the team wanted to make the department more environmentally friendly.

To date, team "Green Dragon" has developed several initiatives around staff consumables, such as disposable coffee cups, plastic water bottles and cans. ED staff have embraced the initiative with the majority now using their own reusable cups and drink bottles. The team decided against purchasing branded reusable coffee cups due to the cost, instead staff were encouraged to bring in their own reusable cup.

Closed Instagram and Facebook groups have also been established to highlight their environmental activities. The team posted a series called 'Keep Cups of Kogarah', which contained a blurb and photo of Emergency staff with their cup, their preferred coffee and a positive message. Also strategically placed around the ED are small Return and Earn bins for cans and bottles. These are collected in a large wheeled bin and taken to the Return and Earn recycling hub in Rockdale. Any funds raised are going to be reinvested in more recycling initiatives that the team co-ordinate.

## SESLHD Case Study: War Memorial Hospital



In order to support its local Environmental Sustainability Plan, Uniting War Memorial Hospital (UWMH) has joined Global Green and Healthy Hospitals (GGHH).

GGHH is an international network of hospitals, health care facilities, health systems and organisations dedicated to reducing their environmental footprint, while promoting public and environmental health. Members pledge to work under the shared goal of reducing the environmental footprint of the health sector.

UWMH have pledged to work specifically towards the goals of:

1. Leadership – to prioritise environmental health as a strategic imperative
2. Waste – to reduce, treat and safely dispose of healthcare waste GGHH offers educational and interactive monthly webinars on topics ranging from the GGHH sustainability goals to current events of interest, important research and publications.

UWMH's Green Team consists of a range of staff from executive, clinical, environmental services and administrative areas. It is exploring opportunities to address important environmental issues around the campus as well as engaging staff, clients and visitors in seeing the vital importance of environmentally sustainable health care. It is also considering how different models of care may have a reduced environmental impact.

## SESLHD Case Study: The Royal Hospital for Women Recycling Programme



In an initiative lead by the Domestic Services department, a significant percentage of The Royal Hospital for Womens' PVC Intravenous (I/V) bags are now being diverted from landfill to recycling.

In collaboration with the Vinyl Council of Australia, Baxter Healthcare supports hospitals to recycle clean PVC after clinical use. This program is a cost-efficient way to dispose of recyclable materials and reduce landfill.

All ward areas now have 50 litre tubs with appropriate labelling and an initial training program has been provided to each area by a member of the Baxter Healthcare team and the Domestic Services Manager.

Once recycled, Australian manufacturers will receive the granulated PVC to make hoses, safety mats and other products. Recycling PVC also results in reduced carbon emissions. Compared with incineration for clinical waste, recycling a PVC IV bag reduces CO<sub>2</sub> emissions by 77 per cent. When compared with general waste disposal, recycling a PVC IV bag results in a CO<sub>2</sub> emissions reduction of up to 20 per cent.

Currently, over 55 hospitals have signed up for the PVC Recycling in Hospitals program across Australia and New Zealand.



## SESLHD Staff Consultation

Over 500 staff across the organisation have attended training around environmental sustainability and provided overwhelmingly positive feedback (via a post training survey) with 100% of staff (who completed the survey) indicating that they felt that NSW Health organisations should act on environmental sustainability.

In addition there were individual consultations with almost 40 staff members and consumer representatives in the development of this Plan. A summary of the key issues raised is provided below:

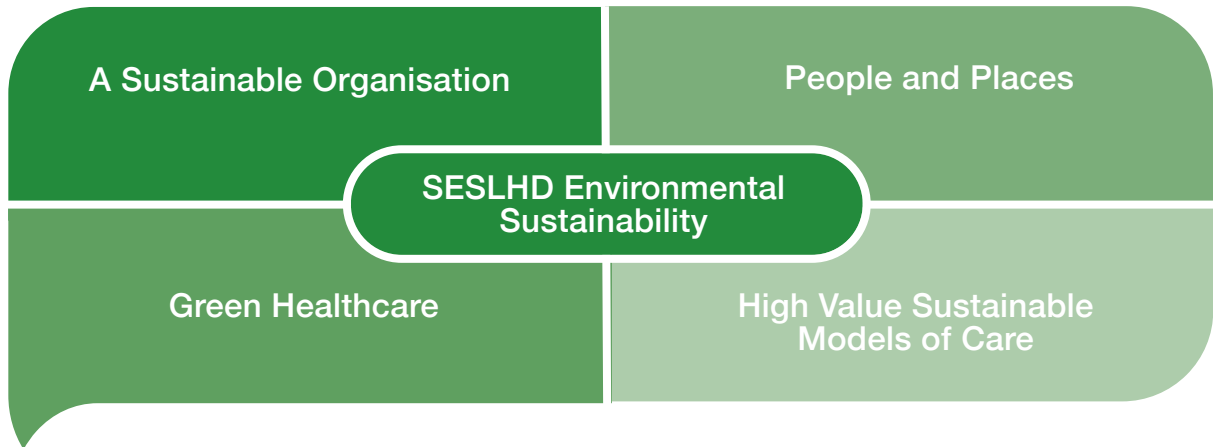
- ❖ **Waste:** a clear and consistent issue for staff who wish to see a reduction in waste and standardisation of processes regarding waste and recycling.
- ❖ **Plastic:** staff expressed concerns relating to single-use items, gloves and in general the large amount of plastic used in our activities.
- ❖ **Sustainable travel:** it was suggested that all facilities should have a plan to encourage more active travel and end-of-trip facilities to support a shift in travel mode.
- ❖ **Green space:** maximising the available green spaces was highlighted as positive for staff and consumer wellbeing as well as having environmental benefits.
- ❖ **Purchasing:** staff noted that there may be opportunities for greater consideration of environmental sustainability through different procurement models.
- ❖ **Recognition:** there was support for sustainability initiatives/champions to be recognised in District and facility award schemes.
- ❖ **Ongoing emphasis:** there was recognition that ongoing communications around this topic would be helpful including taking advantage of opportunities such as World Environment Day and No Car Day.
- ❖ **Measurement:** standardised metrics would allow meaningful comparisons across facilities and activities.
- ❖ **Accountability:** staff consistently queried how SESLHD would take action to progress the sustainability agenda.

In addition to this consultation both the academic literature and examples from elsewhere have been considered in the development of the Sustainability Plan. Where we as an organisation are going and how we will get there are set out in the following sections.

# Where are we going?

## SESLHD Vision: Exceptional Care, Healthier Lives

### SESLHD Approach



The SESLHD approach will see the District focus on four themes which provide opportunities to take effective action across the breadth of healthcare (*see above*). These areas will be aligned with those included in the Sustainable Development Assessment Tool (*see following section*) allowing the organisation to ensure a comprehensive and measurable approach, identifying areas of progress and highlighting priority themes.

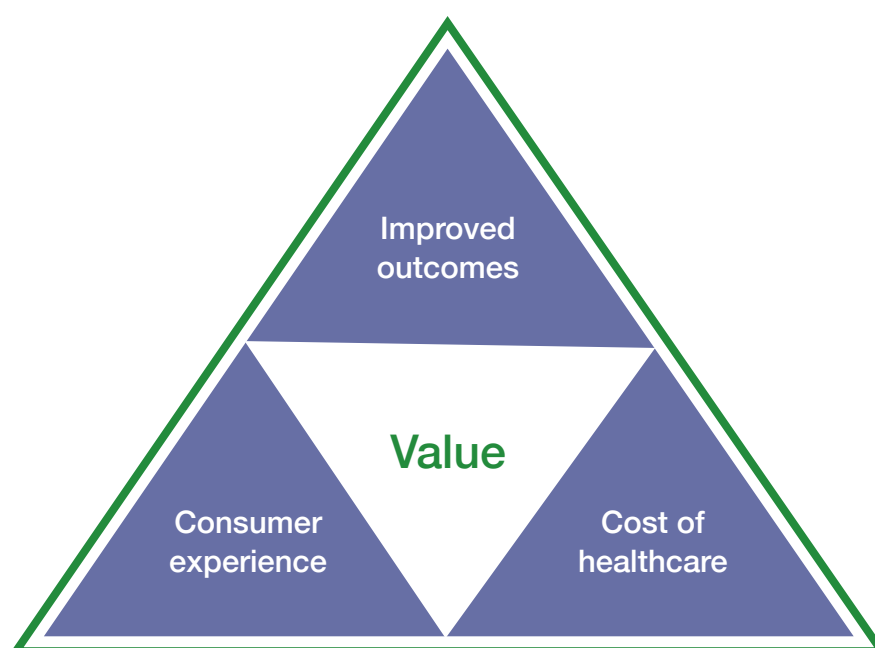
Delivering exceptional care remains at the very core of SESLHD's responsibility to the community. Improved environmental sustainability enhances this aim and helps to ensure we do so in a way that achieves the greatest value for all stakeholders. By considering environmental sustainability in the delivery of care we are helping to ensure healthier lives for our residents now and in the future.

## What is value in healthcare?

Despite having been described as the primary aim of health systems worldwide, there remains a lack of consistent understanding of what “value” means in healthcare<sup>19</sup>. Achieving maximum health outcome per monetary unit of expenditure is consistent across various definitions. NSW Health has adopted the “Healthcare Triple Aim” framework<sup>20,21</sup> to measure value in healthcare and this is recognised in SESLHD’s Journey to Excellence and Quality Plan 2017-2020.

The three components of the healthcare triple aim are:

- ❖ Improving the patient experience of care (including quality and satisfaction)
- ❖ Improving the health of populations
- ❖ Reducing the per capita cost of health care.



In order to meet our objectives and achieve our organisational vision, the sustainability plan is founded on evidence of where our environmental impacts are greatest and the interventions that have been shown to work.

Our approach is based around four thematic areas (Figure 5). These areas reflect the breadth of factors which impact on sustainability and the input from stakeholders in establishing areas of focus. It is anticipated that progress in these thematic areas will improve overall value through the lens of the healthcare triple aim and enable SESLHD to effectively address both physical and transitional risks of climate change.

<sup>19</sup>Porter M. 2006. What Is Value in Health Care? *N Engl J Med* 2010; 363:2477-2481.

<sup>20</sup>NSW Health, Leading Better Value Care. <http://www.eih.health.nsw.gov.au/lbvc/about/leading-better-value-care-program> (accessed on 27/03/19).

<sup>21</sup>Berwick D, Nolan T, Whittington J. 2008. The Triple Aim: Care, Health, And Cost. *Health Affairs* <https://doi.org/10.1377/hlthaff.27.3.759>.

**Figure 5: Thematic areas of SESLHD Environmental Sustainability Plan**

Theme	Examples
<p><b>A Sustainable Organisation</b></p>	<ul style="list-style-type: none"> <li>❖ An Executive approved Sustainability Plan and Executive sustainability champion.</li> <li>❖ Sustainability champions are supported through regular training and information to make their engagement effective and impactful.</li> <li>❖ Developing an active communications strategy to raise awareness about sustainability at every level of the organisation.</li> </ul>
<p><b>People and Places</b></p>	<ul style="list-style-type: none"> <li>❖ At induction, staff are given information about the organisation's sustainability plans and objectives and how they can support them.</li> <li>❖ A totally smoke free organisation and estate plus supporting staff to use smoking cessation services.</li> <li>❖ Maintain grounds and green spaces in a way that minimises negative impacts (e.g. low use of pesticides and sustainably managing organic wastes).</li> </ul>
<p><b>Green Healthcare</b></p>	<ul style="list-style-type: none"> <li>❖ Annual measurement of carbon impact including core emissions such as energy, water and waste to help analyse trends over time and validate performance.</li> <li>❖ Work with partners such as HealthShare NSW and evidence that we are working to reduce the overall carbon impacts of the goods and services that they provide to our organisation.</li> <li>❖ Adopt a system/process in place that identifies suitable opportunities to convert our waste (broadly defined) into a resource.</li> </ul>
<p><b>High Value Sustainable Models of Care</b></p>	<ul style="list-style-type: none"> <li>❖ Support the global drive to reduce the healthcare spend on procedures of low clinical value. Examples of this work in Australia are the EVOLVE and Choosing Wisely programmes.</li> <li>❖ Embed prevention in the development of all our models of care, both internally and with external partners, to address the wider determinants of health and causes of illness.</li> <li>❖ Calculate the environmental / carbon impact of a specific care model(s), to identify the most impactful areas or hotspots which allows us to minimise environmental impact.</li> </ul>

# How will we get there?

This section of the Plan details both the steps we will take and the measures we will use to make progress around environmental sustainability.

The actions within this Plan are largely the responsibility of SESLHD but we recognise that partnership working is fundamental to progress. Climate change has beyond organisational boundaries and our responses should reflect this.

Key partners include NSW Ministry of Health, Local Health Districts, NSW Health Pillar organisations, HealthShare NSW, local authorities and non-government organisations. SESLHD currently participates in a network of Local Health District Sustainability Mangers which aims to consolidate expertise and achieve the greatest value across the healthcare system. Beyond this, the local authorities within our District also represent partners with responsibility for many areas affected by climate change and impacting upon health such as air quality and waste. An example of collaborative working across councils and into the voluntary sector is shown in the box below:

## Western Sydney Regional Organisation of Councils (WSROC) - Turn Down the Heat

- ❖ Western Sydney is hot and is set to get hotter as green fields make way for new housing developments; exacerbating what scientists call the urban heat island effect.
- ❖ Extreme heat causes major liveability and resilience problems with critical impacts for human health, infrastructure, emergency services and the natural environment.
- ❖ Turn Down the Heat is a WSROC-led initiative that takes a collaborative, multi-sector approach to tackling urban heat in Western Sydney.
- ❖ The initiative is guided by the Turn Down the Heat Strategy (launched in December 2018). Developed with the input of 55 different organisations, the Strategy lays out a five-year plan for a cooler, more liveable and resilient future.

Consumers also represent a key partner for us. Consumer representatives sit on the sustainability committee and helped inform this document. We will continue to work closely with our consumers and report publicly our actions and progress in relation to environmental sustainability.

Partnerships are not constrained by geography. Environmental sustainability is a global issue and we have established relationships with colleagues across Australia and beyond. Working with colleagues in England has led to SESLHD adopting the Sustainable Development Assessment Tool (SDAT) which has been developed by the NHS in England. This tool builds on more than a decade of experience in developing evidence based, meaningful measures of performance and addressing the issue in a comprehensive way. This was highlighted consistently during staff consultation.

## NHS Sustainable Development Assessment Tool

The SDAT is an online self-assessment tool to help organisations understand their sustainable development work, measure progress and help plan for the future. It is comprised of ten modules:

- ❖ Corporate Approach
- ❖ Asset Management & Utilities
- ❖ Travel and Logistics
- ❖ Adaptation
- ❖ Capital Projects
- ❖ Green Space & Biodiversity
- ❖ Sustainable Care Models
- ❖ Our People
- ❖ Sustainable use of Resources
- ❖ Carbon / GHGs

An organisation’s sustainable journey is usually unique therefore this new approach using the 10 modules allows a diverse range of users to demonstrate their progress. Progress in sustainability for health and social care is typically measured by quantitative data, e.g. the number of patient contacts, hospital episode statistics, kWh of energy or kgCO<sub>2</sub>e of greenhouse gas emissions. Although this data is very important to collect and use to inform action, it tells only part of the story as it can be difficult to quantify the value of many other aspects of sustainable development.

The SDAT provides a method to assess the harder to quantify value and progress of sustainability, social value and community engagement in a consistent way across health.

The ten modules of the tool align with SESLHD’s thematic areas (Figure 6) and the tool will be adapted for the Australian context.

**Figure 6: SESLHD themes and SDAT modules aligned**



## Hotspots

The SDAT statements will help to guide existing initiatives and prompt actions in areas highlighted as “hotspots”. In year one of the Plan the following ten “hotspots” have been selected as priorities. They have been selected to represent the breadth of the tool and reflect issues highlighted during staff consultation. The complete list of SDAT statements is available online here and some examples are included as Appendix B.

<b>Corporate Approach</b>	❖ We have created a team of sustainability champions who help support sustainability awareness and action across the organisation.
<b>Asset Management &amp; Utilities</b>	❖ We monitor our energy and water use closely, across all our sites (owned and leased) and over time.
<b>Travel and Logistics</b>	❖ We have introduced facilities to encourage active travel (e.g. secure cycle parking, bike lock ups, showers, and lockers) that are accessible to staff and visitors alike.
<b>Adaptation</b>	❖ Our organisation has a clear Adaptation lead, responsible for coordination of adaptation planning, resilience and emergency preparedness.
<b>Capital Projects</b>	❖ We apply whole life costing in the design and construction of new builds and refurbishment projects to ensure that health and sustainable development objectives are prioritised throughout the design process.
<b>Green Space &amp; Biodiversity</b>	❖ We have an Executive approved green space and/or biodiversity action plan / strategy.
<b>Sustainable Care Models</b>	❖ We have calculated the environmental / carbon impact of a specific care model(s), this helps identify the most impactful areas or hotspots which allows us to minimise the environmental impact.
<b>Our People</b>	❖ Our workforce is highly aware of our organisation's sustainable development objectives as a result of learning, development and training opportunities we provide.
<b>Sustainable use of Resources</b>	❖ We have initiatives in place to reduce overall material use in the products we buy and the services we deliver.
<b>Carbon / GHGs</b>	❖ We have set an ambitious targets for reducing our environmental impacts, including carbon emissions.

# Governance & Accountability

## The role of the SESLHD Environmental Sustainability Committee

The Committee, which includes representation from across the organisation and consumer members, will drive this agenda across the organisation and continue to promote the value of improvements in sustainability.

Oversight of implementation of the Environmental Sustainability Plan will be the primary responsibility of the SESLHD Sustainability Committee.

However it is recognised that “ownership” of the plan across the LHD will be crucial and will itself be an indicator of progress. It is anticipated that effectively using the SDAT will be a collective effort which will engage an increasing number of staff and disciplines over time.

## Other groups

Sub-groups who report to the Environmental Sustainability Committee may align with priority areas or specific projects. The existing SESLHD Waste Management Committee is one example; other groups are emerging. There is clearly a need to ensure groups such as the SESLHD Community Partnerships Committee (CPC) and the SESLHD Consumer and Community Council (DCCC) are informed, consulted and engaged with routinely.

There are long-standing consumer and community committees across our organisation, including advisory committees at local hospitals and committees supporting service planning for priority populations such as Aboriginal and Torres Strait Islander people and people from culturally and linguistically diverse backgrounds. These groups will continue to play an important local role, and will be linked into and supported by the governance structures described above.

## Meeting and Reporting

The Environmental Sustainability Committee will meet bi-monthly. This committee will report to the Executive Council and Clinical and Quality Board quarterly. In addition, the Committee will report to the Board twice a year.

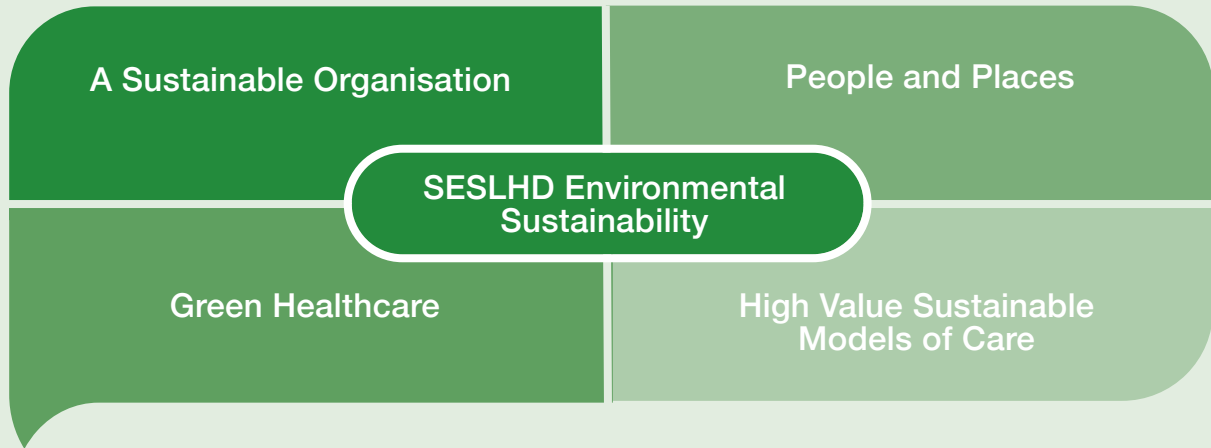
Reporting will comprise progress towards the SDAT statements and an annual assessment. A public report will be available via the SESLHD internet page annually which will include an updated SDAT “score” along with areas identified for priority action in the subsequent 12 months.



## Appendix A: Plan on a page

### SESLHD Vision: Exceptional Care, Healthier Lives

#### SESLHD Approach



### NHS Sustainable Development Assessment Tool

The SDAT is an online self-assessment tool to help organisations understand their sustainable development work, measure progress and help plan for the future. It is comprised of ten modules:

- ❖ Corporate Approach
- ❖ Asset Management & Utilities
- ❖ Travel and Logistics
- ❖ Adaptation
- ❖ Capital Projects
- ❖ Green Space & Biodiversity
- ❖ Sustainable Care Models
- ❖ Our People
- ❖ Sustainable use of Resources
- ❖ Carbon / GHGs

An organisation's sustainable journey is usually unique therefore this new approach using the 10 modules allows a diverse range of users to demonstrate their progress. Progress in sustainability for health and social care is typically measured by quantitative data, e.g. the number of patient contacts, hospital episode statistics, kWh of energy or kgCO<sub>2</sub>e of greenhouse gas emissions. Although this data is very important to collect and use to inform action, it tells only part of the story as it can be difficult to quantify the value of many other aspects of sustainable development.

The SDAT provides a method to assess the harder to quantify value and progress of sustainability, social value and community engagement in a consistent way across health.

## Appendix B: Examples of Sustainable Development Assessment Tool Statements

Module	Statement
<p><b>Corporate Approach</b></p>	<ul style="list-style-type: none"> <li>❖ We report Environmental Sustainability Plan key performance indicators to the Board on a regular basis (at least 6 monthly)</li> <li>❖ We have a clear communications plan around the promotion of sustainable development to staff. This communication makes staff aware of our policies and processes which supports them to make sustainable choices specific to their role.</li> <li>❖ Sustainable development and social value are a material consideration in all business cases.</li> <li>❖ We have embedded ethical and labour standards in our procurement policies.</li> <li>❖ We have a created a team of sustainability champions who help support sustainability awareness and action across the organisation.</li> <li>❖ We have a process to seek ideas from the wider public on how to improve our environmental and sustainability performance.</li> </ul>
<p><b>Asset Management &amp; Utilities</b></p>	<ul style="list-style-type: none"> <li>❖ We regularly report our energy and water usage/performance progress.</li> <li>❖ We monitor our energy and water use closely, across all our sites (owned and leased) and over time.</li> <li>❖ Our sustainable facility lead(s)/energy manager are supported with training, access to CPD events and local/national forums for sharing of best practice/innovation.</li> <li>❖ We have a process to assess buildings/locations (when leasing, procuring or designing) to ensure the building is energy efficient and has adequate public transport.</li> <li>❖ We can demonstrate that our approach is leading to a continual reduction in our absolute levels of energy and water use and therefore reducing carbon emissions.</li> <li>❖ We have a current engagement campaign that encourages staff to be more sustainable at home and promote healthy sustainable lifestyles (e.g. home energy and waste efficiency advice, active travel support etc.)</li> </ul>
<p><b>Travel and Logistics</b></p>	<ul style="list-style-type: none"> <li>❖ We have assessed our transport and travel and have calculated the carbon footprint of our business travel (all road, rail and air) and patient transport services.</li> <li>❖ We have introduced facilities to encourage active travel (e.g. secure cycle parking, bike lock ups, showers, and lockers) that are accessible to staff and visitors alike.</li> </ul>

**Appendix B: continued**

Module	Statement
<i>Travel and Logistics</i>	<ul style="list-style-type: none"> <li>❖ We can demonstrate that our carbon emissions from travel and transport are reducing in line with achieving our local target.</li> <li>❖ Senior level approval is required for all high carbon business travel (e.g. flights or high gCO2/km hire cars).</li> <li>❖ Our staff are provided with information about the cost savings and personal benefits of sustainable modes of commuting.</li> <li>❖ We can evidence at least one example of using new technologies or innovations to minimise travel in the delivery of our services.</li> </ul>
<b>Adaptation</b>	<ul style="list-style-type: none"> <li>❖ The effects of climate change are embedded in our Organisation's risk register, in relation to clinical needs, types of clinical intervention, the quality of our estate and supporting infrastructure.</li> <li>❖ We have an Executive approved adaptation plan/strategy (informed by our climate change risk assessment), which is linked to/or integrated into our SDMP and resilience planning.</li> <li>❖ Our workforce is prepared and trained to deal with different extreme weather scenarios such as staff know how to keep clinical and ward areas cool in the event of hot weather, and how to report high indoor temperatures</li> <li>❖ We have a clear plan / strategy to ensure vulnerable communities are supported during any extreme weather events.</li> <li>❖ We have assessed the financial impacts of climate change to our organisation and the cost of doing nothing, this is clearly communicated to our board.</li> <li>❖ Our organisation has a clear Adaptation lead, responsible for coordination of adaption planning, resilience and emergency preparedness.</li> </ul>
<b>Capital projects</b>	<ul style="list-style-type: none"> <li>❖ We have a set of clear sustainability aims and objectives that are scaled and applied to all capital projects and major refurbishment.</li> <li>❖ Our capital project staff are trained in how they can develop sustainable outcomes within their roles (this also forms part of their job description), such as understanding energy efficiency technologies, use of space, space utilisation and adaptation.</li> <li>❖ We apply whole life costing in the design and construction of new builds and refurbishment projects to ensure that health and sustainable development objectives are prioritised throughout the design process.</li> </ul>

Appendix B: *continued*

Module	Statement
<p><i>Capital projects</i></p>	<ul style="list-style-type: none"> <li>❖ Our design briefs invite/ask for low carbon, low environmental impact proposals/solutions from suppliers and partners.</li> <li>❖ Social value outcomes are embedded into the design specification for new builds and major refurbishments.</li> <li>❖ After a successful sustainable, low embodied carbon and wellbeing enhancing capital project we share best practice with other healthcare organisations of the lessons learnt and key success points.</li> </ul>
<p><b>Green space and biodiversity</b></p>	<ul style="list-style-type: none"> <li>❖ We report on the quality and accessibility of our green spaces and biodiversity regularly, emphasising the value of green space in health environments.</li> <li>❖ We are actively and systematically working to maintain and enhance biodiversity on our estates, for example through monitoring protected species and maintaining high quality green features.</li> <li>❖ Our grounds and green spaces are maintained in a way that minimise negative impacts (e.g. low use of pesticides and sustainably managing organic wastes).</li> <li>❖ We can show evidence (e.g. through surveys and staff feedback) that staff wellbeing has been improved by greater access to green space during working hours.</li> <li>❖ We promote the health benefits of green space to our staff, patients and the wider community.</li> <li>❖ We have an Executive approved green space and/or biodiversity action plan / strategy.</li> </ul>
<p><b>Sustainable care models</b></p>	<ul style="list-style-type: none"> <li>❖ We link sustainability as a dimension of quality with other dimensions of quality when we design/deliver/commission care models.</li> <li>❖ We have quantified the direct financial co-benefits of some of our emerging and more sustainable care models.</li> <li>❖ We have calculated the environmental / carbon impact of a specific care model(s), this helps identify the most impactful areas or hotspots which allows us to minimise the environmental impact.</li> <li>❖ Our staff induction and training refers to more holistically sustainable (clinically, socially, environmentally as well as financially) care models (or equivalent).</li> <li>❖ We have one or more specific case studies of care models that are holistically sustainable (clinically, socially, environmentally as well as financially).</li> </ul>

## Appendix B: continued

Module	Statement
<i>Sustainable care models</i>	<ul style="list-style-type: none"> <li>❖ We capture and share our learning internally and externally, including our mistakes, to support care models in being future proof.</li> </ul>
<b>Our people</b>	<ul style="list-style-type: none"> <li>❖ We have an active communications strategy to raise awareness about sustainability at every level of the organisation.</li> <li>❖ We have a clear and publically available Modern Slavery Statement.</li> <li>❖ We have an action plan to promote and support health choices in all parts of the workplace.</li> <li>❖ We have an agreed training and awareness raising programme focusing on increasing knowledge and understanding of sustainability and social value amongst our staff.</li> <li>❖ Our staff are expected to demonstrate sustainable behaviours in practice throughout their role.</li> <li>❖ Our workforce is highly aware of our organisation's sustainable development objectives as a result of learning, development and training opportunities we provide.</li> </ul>
<b>Sustainable use of resources</b>	<ul style="list-style-type: none"> <li>❖ We capture and monitor waste outputs and their associated costs (carbon, financial and social) closely across different parts of the organisation and over time.</li> <li>❖ We take a pan-organisation approach to ensure a co-ordinated action on waste minimisation (e.g. procurement. FM, Pharmacy, clinicians etc.), each area has specific waste minimisation targets.</li> <li>❖ We have initiatives in place to reduce overall material use in the products we buy and the services we deliver</li> <li>❖ We work with our supply chain to maximise repair and reuse onsite of durable goods within our organisation (e.g. furniture, IT, building materials, walking aids and reusable medical devices).</li> <li>❖ We engage with our staff to support them to minimise waste and expense at home.</li> <li>❖ Our approach is leading to a continual reduction in our levels of waste, relative to the size of our organisation.</li> </ul>
<b>Carbon/GHGs</b>	<ul style="list-style-type: none"> <li>❖ We have set an ambitious targets for reducing our environmental impacts, including carbon emissions.</li> </ul>

Appendix B: *continued*

Module	Statement
<i>Carbon/GHGs</i>	<ul style="list-style-type: none"><li>❖ We have identified which of the products and services that we source have a big contribution to our overall carbon footprint (in use and/or embedded) and can evidence interventions to reduce their impacts.</li><li>❖ We communicate to staff and patients the value we place on being a low carbon organisation due to the adverse effects of climate change on human health.</li><li>❖ Our design briefs invite/ask for low carbon, low environmental impact proposals/solutions from suppliers and partners.</li><li>❖ We have made carbon emissions 'visible' in key identified high carbon activities where patient and staff choice is available to encourage behaviour change.</li><li>❖ We identify and maximise carbon reduction opportunities in all estates investments, particularly in energy and transport.</li></ul>



