

Sustainability in Healthcare

The Challenges of setting up a Sustainability Program and Committee within a Local Health Network

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**ACIPC
INTERNATIONAL
CONFERENCE**

17-20 NOV 2024

MELBOURNE
CONVENTION AND
EXHIBITION CENTRE,
VIC & ONLINE



ACIPC
Australasian College
for Infection Prevention and Control





HOW DO YOU PERCEIVE THIS?

CHANGE... is the driving message



Improving environmental sustainability in health care will reduce the environmental impact of the sector, ensuring that the health system is better equipped to support the health of Australians into the future, and reduce the associated health impacts of poor environmental outcomes such as climate change.



The health sector is at the forefront of responding to health risks to the community as a result of climate change, however, we are also a major contributor to climate change

Health sector – A MAJOR contributor to environmental health problems:

- Products & technologies it deploys
- Resources it consumes
- Waste it generates – Clinical and Single-Use
- Buildings it contracts and operates
- Significant source of pollution
- Low Value Care- Over testing and Over prescribing

Growing convergence of solutions that foster public health and environmental sustainability

Drivers for Change

Australia's healthcare system contributes around **35.8 million tonnes** of Carbon Dioxide equivalent (CO₂e) emissions annually



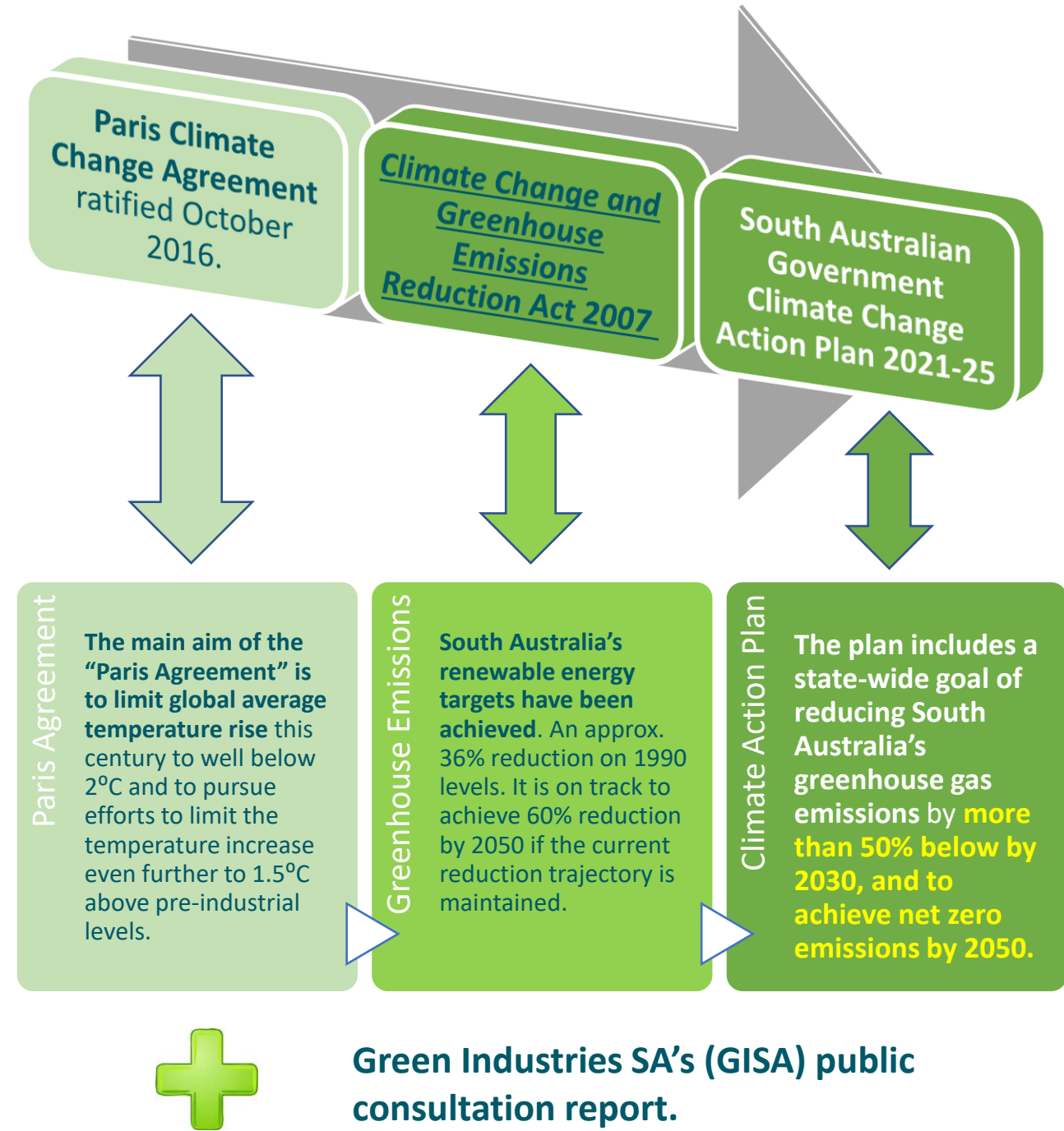
This is equivalent to the amount of Carbon Dioxide that the **entire population of Brisbane uses in a year !**

<https://pursuit.unimelb.edu.au/articles/healthcare-shouldnt-cost-the-planet>

The CLINICAL WASTE FOOTPRINT is one of the LARGEST in Healthcare



Policy & legislative context





STEP 1...Engagement with Key Stakeholders

In 2016 we identified a common issue...WASTE

- An audit was conducted on waste in the Operating Room
- Conversations around options to landfill divert began with internal stakeholders and external contractors
- A process was developed to reduce landfill through separation of waste – this must not impact workflows...vitally important !!



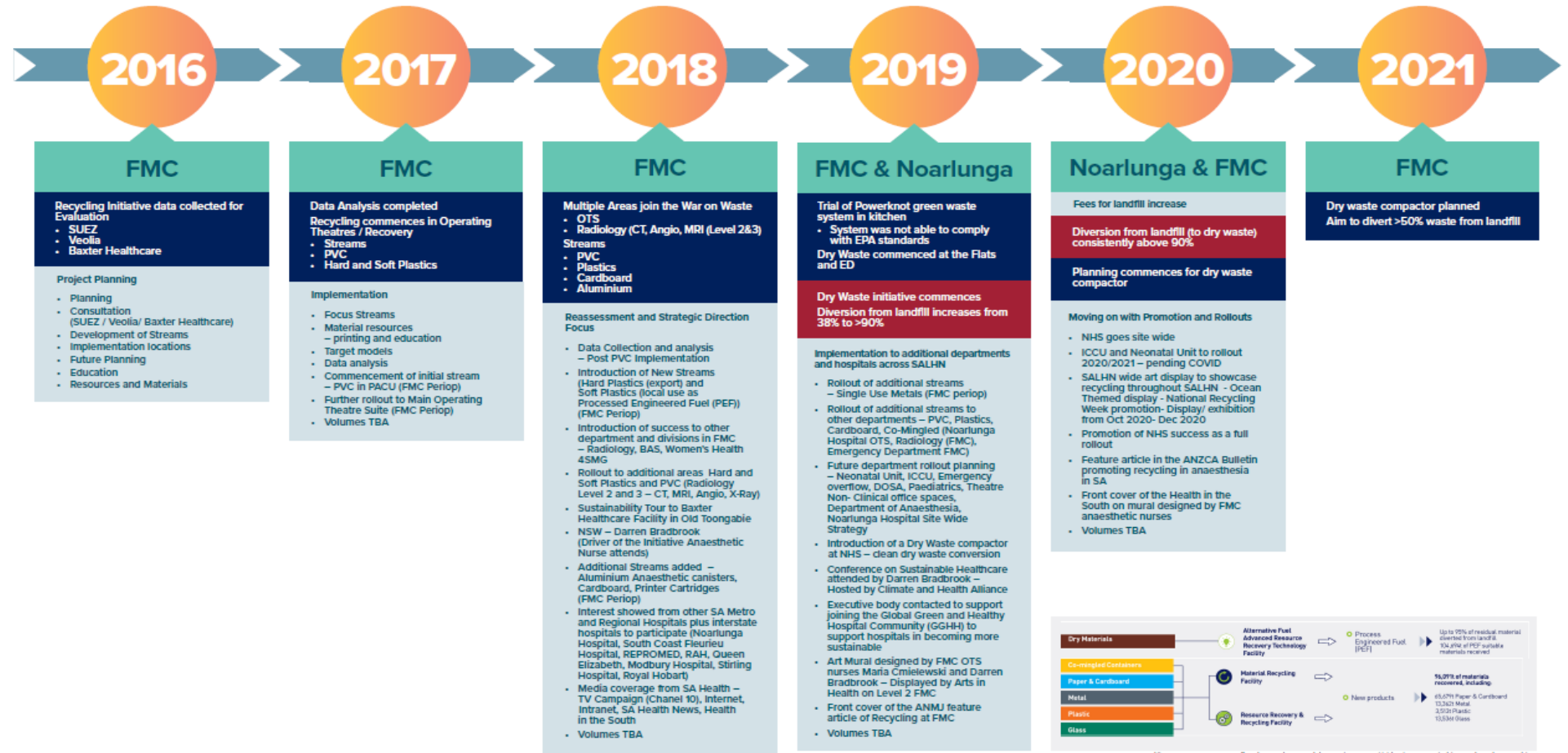
The first GREEN TEAM was founded...

Planning and Implementation.. The Building Stage



Health
Southern Adelaide
Local Health Network

SALHN Recycling Timeline



<https://www.sa.gov.au/our-areas-of-activity/health-care/health-care-waste-management/sustainable-waste-management/sustainable-waste-management>

The Grinding Halt....

DIVERSION

Global Pandemic fallout...



The amount of medical waste generated from COVID-19 since the outbreak is estimated to be **2.6 million tons/day worldwide.**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8835138/>

There has been a **9,000 per cent** jump in face mask litter across the world during 2020 / 2021

<https://www.abc.net.au/news/2022-02-17/clean-up-australia-launches-citizen-science-face-mask-drive/100839120>

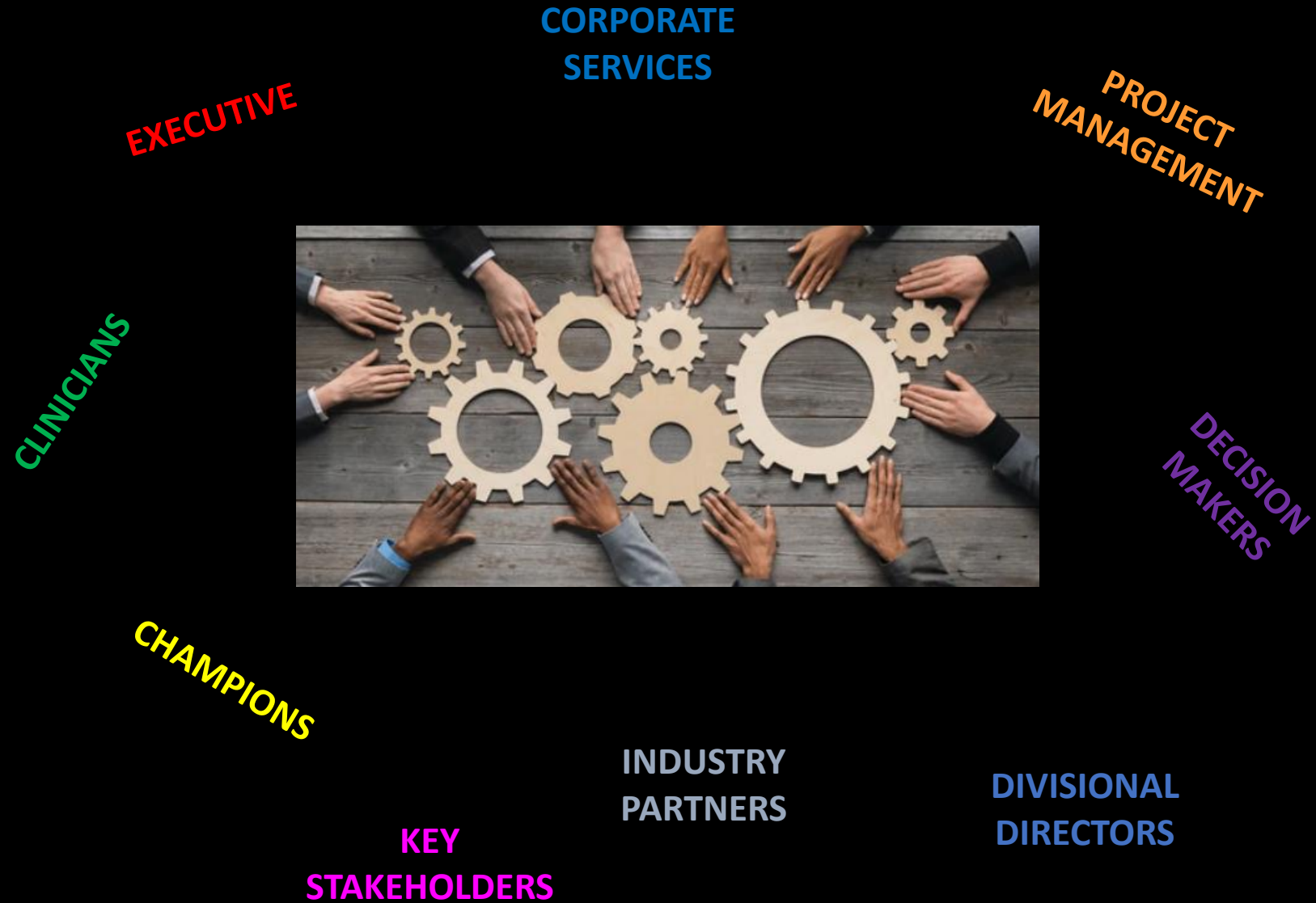
Operating rooms are a massive source of greenhouse gas production for hospitals, representing **70% of their waste** and generating **up to 6 times** as much carbon compared to the rest of the health system.....

<https://www.sciencedaily.com/releases/2022/05/220506151436.htm>





COLLABORATION & ENGAGEMENT



Environmental Sustainability Committee

Established in 2023, the Environmental Sustainability Committee (ESC) aims to provide leadership and coordination for sustainability initiatives across SALHN.

The ESC will be responsible for the following:

- 1. Develop a Sustainability Strategy for SALHN:** The ESC will develop a sustainability strategy that outlines SALHN's goals and targets for reducing its environmental impact. This strategy will be reviewed and updated annually.
- 2. Identify and implement Sustainability Initiatives:** The ESC will identify opportunities for reducing energy consumption, water usage, and waste generation across SALHN. The committee will work with relevant departments to implement initiatives that promote sustainable practices and reduce SALHN's environmental footprint.
- 3. Monitor and report on progress:** The ESC will monitor and report on SALHN's progress towards achieving its sustainability goals. The committee will provide regular updates to SALHN executive, management and staff on the status of sustainability initiatives.
- 4. Engage with stakeholders:** The ESC will engage with external stakeholders, such as local councils, environmental organizations, and other healthcare institutions, to share knowledge and best practices and collaborate on sustainability initiatives.
- 5. Provide Sustainability education and training:** The ESC will develop and deliver sustainability education and training to SALHN staff to raise awareness of environmental issues and promote sustainable practices.

Establishing an Environmental Sustainability Committee for SALHN is an essential step in addressing the healthcare sector's environmental challenges. By promoting sustainable practices, health services can reduce their environmental footprint, save costs, and demonstrate their commitment to the health of both patients and the planet.

SALHN was the first LHN in South Australia to have a **FULL SITE** Resource Efficiency and Mechanical Plant audit undertaken

SALHN's BASELINE AUDIT



The baseload and operating loads (Figure 5) are observed to remain relatively constant throughout the year (inc. both summer and winter periods) at about 2,500 kW and 3,250 kW respectively, which indicates that most of the plant operates 24/7.

Six months of gas consumption data was obtained for FY23 (as displayed in Figure 6). A total of ~63,738 GJ was consumed and the gas load profile (Figure 7) shows that between 6 GJ & 9 GJ is consumed daily.

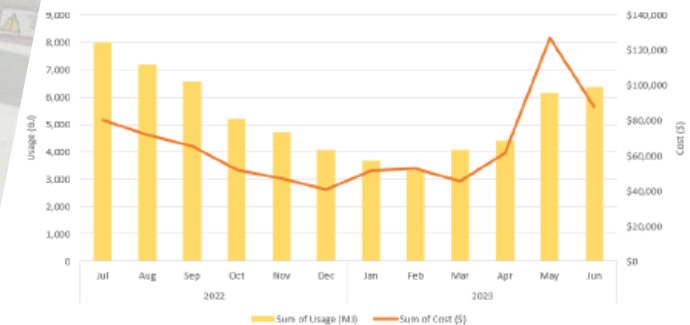


FIGURE 6 – MONTHLY GAS CONSUMPTION AND COST FOR FY23

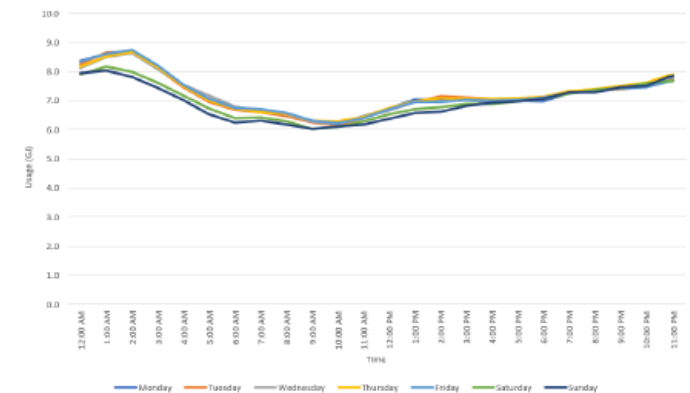


FIGURE 7 – DAILY MEAN GAS LOAD PROFILE FOR FY2023

DIVISIONAL AUDIT CHECKLIST and NAF

SALHN Environmental Sustainability



Divisional Audit Checklist

Start small but think BIG!

This audit checklist outlines potential environmental sustainability actions for your department. The headings in this list align with the Values listed within SALHN's Environmental and Sustainability Strategy 2024-27. You can also use this list to identify projects you can implement to create a more environmentally sustainable workspace.

1.	Leadership/ Governance	No	In Progress	Yes / Complete
1.1.	Do you know who your Sustainability Divisional Lead is?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.2.	Do you know who your department representative is for the Environmental Sustainability Committee?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.3.	Do you have a Green Team in your area or is Sustainability listed as an agenda item for your department meetings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.4.	Have you held a 'Climate health and Sustainability' talk/presentation in your department?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.5.	There is an environmental sustainability statement within our new staff induction packs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Food and Organics	No	In Progress	Yes / Complete
2.1.	I know where to find the Needs Assessment Form for our organic/ food waste.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2.	Does your area align with the SA Health Policy regarding Reusable items?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3.	Have you recently reviewed your pantry items PAR level for food wastage?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Energy and Infrastructure	No	In Progress	Yes / Complete
3.1.	Are computers switched off overnight/or in 'sleep mode' when not in use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.2.	Is the photocopier turned off at end of the day -everyday?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.3.	Do you turn off lights or other non-essential equipment when you leave rooms/spaces?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.4.	Is the photocopier defaulted to double sided (duplex) printing and greyscale?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.5.	Our area continues to look at ways to digitise all paper-based systems where possible.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Waste and Resource Recovery	No	In Progress	Yes / Complete
4.1.	I know where to find the Needs Assessment Form for our recycling / waste needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.2.	Do you have a Dry waste bin in your area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.3.	Do you have paper & cardboard recycling in your area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.4.	Do you have toner & cartridge recycling?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.5.	Do you have a battery recycling box in your area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.6.	Do you have PVC recycling in your area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.7.	Do you have a return to pharmacy box/system for unsorted/ not required medications?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.8.	Waste recycling posters are visible, understandable & clear to ensure no contamination?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.9.	Have you considered a centralised waste station for recycling needs with the removal of underdesk bins?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.10.	Reusable items are used predominately over single use items?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.11.	We have reevaluated our stock PAR levels & recently assessed our imprest review report. <i>Example: Increased, reduced or deleted an item(s).</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.12.	Is the environmental impact of consumables considered in purchasing decisions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Identifiable Projects / Local Initiatives that align with the ESC Roadmap:

Have you identified actions in the above list which you could implement?

Please list below:

Possible Projects Identified	Responsible person	Due Date
<i>Example: Implementation of Dry Waste & Organic bins</i>		

SALHN Needs Assessment Form



Recycling & Waste Collection

Start small but think BIG!

This form will assist you to evaluate the waste and recycling needs within your workplace. The objective is to align all recycling initiatives with the SALHN waste management plan and to provide solutions for your work areas that will improve our recycling and diversion of waste from landfill.

Date: / / Location (Department / Ward):

Details of person completing the form

Name:
 Email:
 Phone number:

Current Waste in place (please list below)

Example: 2x General waste bins located in disposal room, 1x paper recycling bin in reception area etc.

Recycling required

Dry Waste Recycling	<input type="checkbox"/>	Toner Recycling	<input type="checkbox"/>
Cardboard/ Paper Recycling	<input type="checkbox"/>	Battery Recycling	<input type="checkbox"/>
Organic Recycling	<input type="checkbox"/>	Other (please specify):	
Plastic Recycling	<input type="checkbox"/>		

Do you require any of the below educational materials / equipment

Posters for the streams selected above	<input type="checkbox"/>
Multisort Recycling Bins (60L, 90L)	<input type="checkbox"/> Size required:
Changeover of receptacles in Disposal room	<input type="checkbox"/> Please specify:
Educational materials / Posters – "Where does dry waste go"	<input type="checkbox"/>

Site Audit

Do you wish for a site visit to audit what recycling would work best for your area? Yes No

If yes, what day work best for you: MON TUES WED THURS FRI

Any questions regarding waste recycling needs, please contact: HealthSALHNHotelServices@sa.gov.au



MEDIA and COMMUNICATIONS



Paediatrics



Neonatal



ICCU



BAS



Biomedical Engineering

- ✓ MAJOR component in this entire process
- ✓ Development of an **Intranet and Internet focus** was essential in conveying messaging
- ✓ Creation of motifs and designs that reflect the LHN's style gave consistency
- ✓ Departmental ownership / reflecting their individual needs
- ✓ Easy growth, modifications and enhancement
- ✓ Access to ALL staff across the LHN



#GoGreen@SALHN

Start small but think BIG!

#GoGreen@SALHN



Top 10 tips to recycle and reuse products, and reduce waste in the workplace:

- 1 Share ideas**
Start a conversation with your colleagues and share ideas about what you can do to improve the environment in your work area.
- 2 Get involved**
Implement sustainability projects your team can get involved in, and make these visible by creating a Sustainability initiatives/goals board in your area.
- 3 Be informed**
Understand how you, as individuals and a team, can contribute to reducing our carbon footprint. Find out what other areas are doing and access handy tips on the intranet.
- 4 Set challenges**
Set local team challenges or competitions for your colleagues to get involved in, such as a challenge to reduce printing and become a more digital friendly workplace, or to make artwork from recyclable products specific to your area.
- 5 Ask questions**
Ask your manager and colleagues questions about what you can do to improve the environment within your work area, and ask for support to make practical changes.
- 6 Audit activity**
Look at ways you can improve what you use every day, including whether there are environmentally friendly alternative products you can use. Share these learnings and successes with other teams!
- 7 Set targets**
Create attainable targets within your work area that you can work towards both now and into the future. Celebrate wins along the way too!
- 8 Separate waste**
Set up bin systems that allow you to separate different types of waste, such as organic waste from dry materials. Small changes can make a big difference!
- 9 Switch off**
Remember to turn your computer and lights off when you leave work for the day, where appropriate.
- 10 Become a local champion**
Be a key influencer and take action to improve sustainable work practices and sustainability initiatives across SALHN.

Start small but think BIG!

For more information, visit the [Environmental Sustainability at SALHN intranet page](#).



MITIGATION and ADAPTATION

Strategic
Planning

AUSTRALIAN COMMISSION
ON SAFETY AND QUALITY IN HEALTH CARE

Environmental Sustainability and Climate Resilience Healthcare Module Pilot

An Environmental Sustainability and Climate Resilience Healthcare Module (the Module) has been developed as a framework to support organisations reduce resource waste, eliminate low-value care, and address climate risks.

The Australian Commission on Safety and Quality in Health Care (the Commission) invites health services to participate in a pilot of the Module, commencing May 2024.

Benefits to participating in this pilot

The pilot aims to gather learnings from those that have already initiated work in health services to improve their environmental sustainability and climate resilience. These learnings will help to improve the Module.

The benefits of participating in the pilot include:

- Promoting the **exemplar efforts of your health service** that demonstrate impactful change in addressing climate risks
- **Networking with other pilot sites** working on this issue
- Learning from **leading experts** involved in environmental sustainability in health
- Access to a **catalogue of guidance material** to support health services implement the Module
- Identifying areas for refinement of the Module and **opportunities for future resources**.

Environmental sustainability



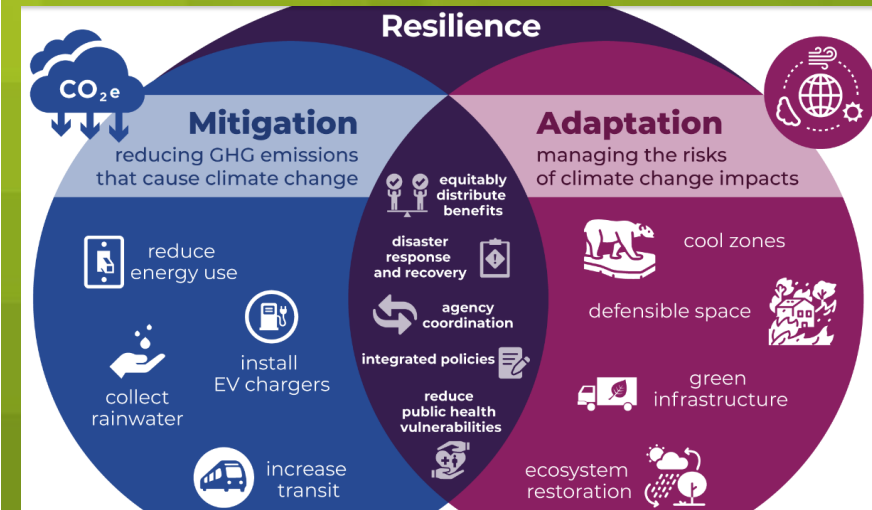
Climate change increases and exacerbates disease that leads to more patients requiring care. This care can also generate emissions and further contribute to the causes of climate change. Mitigating processes, practices and services that have high environmental impact ensures an environmentally sustainable way of providing appropriate care and reducing waste.

Climate resilience



Climate change creates additional strain on health services and threatens to disrupt access to care. Adapting health services by identifying environmental risks means the sector is more climate resilient and able to respond to the needs of those most effected by climate change.

ALL major primary public
sector healthcare hospitals
within SA elected to
participate



This pilot will not only provide the
commission current information on health
facilities across SA, but will form part of the
National Standards for reporting on ES
practices likely to be mandated across
Australia sometime in 2025



KEY STRATEGIC PRIORITIES

Health
Southern Adelaide
Local Health Network

SALHN STRATEGIC PLAN 2023-2027
Excellence in healthcare and research

VISION
Striving for exceptional care

PURPOSE
Working together to improve health and wellbeing for the communities we serve

VALUES

- EMPATHY**
Compassion, communication and connection is central to how we care
- TRUST**
We do what we say, and deliver on our commitments
- INCLUSION**
We are part of the communities we serve and we work with others to do our best

PRIORITIES

Deliver equitable services
We strive to understand the unique needs of diverse communities to provide the equitable and accessible care they value. We work with Aboriginal and Torres Strait Islander communities to Close the Gap. We aim to provide services free from discrimination to all, including Culturally and Linguistically Diverse, Disability and LGBTQ+ communities.

Provide quality care
We are committed to the delivery of safe, appropriate, accessible care, from the first 1000 days to the last 1000 days, across our services. We continually improve practice to provide acceptable, efficient and effective services to achieve person and family-centred care.

Drive innovation and research
We are at the forefront of discovering new ways to deliver better care through critical enquiry and research informed by lived experience. New knowledge and innovation informs the continued improvement, development and transformation of services.

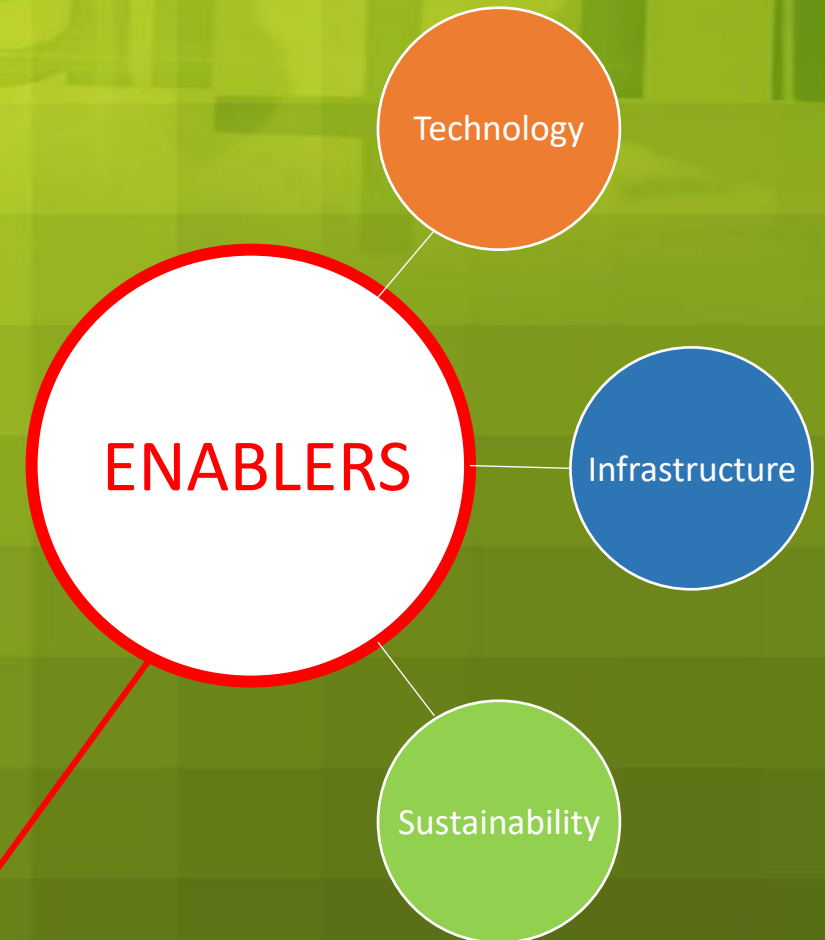
Look after the workforce
We are committed to providing a workplace where people grow, excel and exceed their career aspirations, by embedding a culture of collaboration, supportive leadership and continuous learning. We support the health, wellbeing and safety of the diverse workforce, empowering them to care for each other and the communities we serve.

Inspire through education and learning
We inspire through teaching and education to build an agile learning organisation for all to continuously improve the way we deliver care. We continue to support partnerships with tertiary institutions to empower the future workforce. We seek opportunities to promote health literacy in the community.

Grow cooperative partnerships
We are growing our partnership capability. We are connecting care by strengthening existing relationships and forging new partnerships to extend the reach of services and increase our collective impact in the community.

ENABLERS

- TECHNOLOGY**
People-centred technology that is driven by user experience
- INFRASTRUCTURE**
Infrastructure for today and the future
- SUSTAINABILITY**
Workforce, environmental and financial sustainability



Our inroad to gaining momentum was within the **KEY ENABLERS**

SALHN's Sustainability Strategy

SALHN SUSTAINABILITY STRATEGY

An enabler of the
SALHN STRATEGIC PLAN 2023-2027

Government of South Australia | **Health** Southern Adelaide Local Health Network

Environmental Sustainability Ambition and Focus areas

Our Vision

To foster a sustainable healthcare environment where every action contributes to a healthier environment and community.

Our Mission

To integrate environmental sustainability into every facet of healthcare delivery, aiming for a greener, healthier future for all.

For SALHN to achieve this ambition, SALHN strategy identifies three focus areas and seven goals that include:

FOCUS AREA 1: PEOPLE

Leadership

- Foster a culture of environmental citizenship.
- Empower staff to identify and drive local changes.
- Develop resources and leverage communications tools to enhance environmental awareness.
- Establish mechanisms to support collaboration and sharing.

FOCUS AREA 2: BUILDINGS AND FACILITIES

Buildings

- Embed green and healthy hospital design and construction into capital building projects.
- Utilise technologies in digital, transport and infrastructure to increase resource efficiency.

Energy

- Implement energy efficiency and clean, renewable energy generation.
- Enhance building management systems to resource use efficiency.

Water

- Reduce hospital water consumption.

FOCUS AREA 3: OPERATIONS

Transport

- Improve transportation strategies for patients and staff
- Promote and encourage staff, consumers and visitors to choose environmentally sustainable transport options.
- Leverage digital advances and flexible working.
- Usage of fleet and sustainable options

Procurement

- Embed environmental sustainability into procurement and product selection practices.
- Pursue options to replace single use and environmentally harmful products / items with more sustainable options (including life cycle analysis).

Waste

- Reduce, treat, and safely dispose of healthcare waste.
- Improve waste segregation systems to minimise waste to landfill and enhance opportunities for staff to recycle.

Environmental Sustainability Response

Our Strategic Priorities

SUSTAINABILITY PILLAR DELIVER EQUITABLE SERVICES

Ensure that **environmental initiatives**, such as green spaces and sustainable facilities, are **accessible to all**.
Implement eco-friendly practices that **contribute to a healthier environment**, indirectly promoting equitable health outcomes.

SUSTAINABILITY PILLAR PROVIDE QUALITY CARE

Implement sustainable practices that improve the hospital environment, leading to **better patient recovery rates and overall well-being**.
Use environmentally friendly materials and maintain **indoor air quality** to enhance patient care quality.

SUSTAINABILITY PILLAR DRIVE INNOVATION AND RESEARCH

Foster research in environmental sustainability within healthcare, exploring new sustainable technologies and practices.
Encourage innovation in reducing the environmental footprint of healthcare operations.

SUSTAINABILITY PILLAR LOOK AFTER THE WORKFORCE

Educate and engage staff in **sustainability initiatives**, creating a healthier workplace and promoting a culture of environmental responsibility.
Provide training on sustainable practices and encourage employee-led sustainability projects.



SUSTAINABILITY PILLAR INSPIRE THROUGH EDUCATION AND LEARNING

Train staff in sustainable practices, emphasising the role of each individual in achieving environmental goals.
Foster a culture where staff are motivated to contribute to sustainability initiatives.

SUSTAINABILITY PILLAR GROW COOPERATIVE PARTNERSHIPS

Collaborate with environmental organisations, other healthcare institutions, and communities to **promote sustainability**.
Joint initiatives and partnerships to share learning and resource optimisation.

Our Strategic Enablers

TECHNOLOGY
Utilise innovative technologies for energy efficiency and waste reduction. Implement environmentally friendly medical technologies and practices.

INFRASTRUCTURE
Design and maintain hospital facilities to be eco-friendly, with a focus on sustainable materials, energy-efficient buildings and green spaces.

SUSTAINABILITY
Embed sustainability in all aspects of hospital operations, from financial, procurement to waste management. Ensure that sustainability is a principle guiding strategic decisions and initiatives.

LEADERSHIP is KEY....

from then...to NOW

2016

- Local project in OR
- Great success story
- Media Campaign design
- Divisional presentations
- Conferences / Seminars
- Diversion rates success
- Waste to Energy option

2023

- CEO Meeting
- Request ES Committee
- Executive Sponsor commitment
- Committee support from CEO
- Chairperson request by CEO
- ToR established / endorsed
- Mission and Vision endorsed
- 1st ES Meeting in July 2023

2024

- Stakeholder building
- Admin support (exec)
- Strategy Building
- GGHH alignment
- Project Officer (exec)
- ES Strategy endorsement
- ES Officer proposal
- ELC approval
- GB approval
- ES Officer role endorsed
- ES role recruited
- Road Map planning
- STERILWAVE Trial
- SALHN awards

2025



The ROAD to SUCCESS

- **PLANNING**
- **STAKEHOLDER ENGAGEMENT**
- **IMPLEMENTATION – Small Scale**
- **RE-EVALUATION**
- **ADAPTATION AND MITIGATION**
- **RE-EVALUATION**
- **EXECUTIVE SUPPORT / GOVERNANCE**
- **TERMS OF REFERENCE**
- **ADMINISTRATION SUPPORT**
- **RE-EVALUATION**
- **IMPLEMENTATION – Larger Scale**
- **MEDIA AND COMMUNICATIONS**
- **STRATEGIC DIRECTION**
- **AUDITING AND SITE REPORTING**
- **SUSTAINABILITY STRATEGY ENDORSEMENT**
- **ENVIRONMENTAL SUSTAINABILITY OFFICER**
- **ROAD MAP DEVELOPMENT**
- **RE-EVALUATION**





Government
of South Australia

SA Health

Thank You

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#GoGreen@SALHN

Start small but think BIG!

