

Health Care





The Australian health care sector is a big consumer of resources and producer of waste that leaves a big footprint on the environment. Some of the environmental challenges for the health care sector include excess water consumption and electricity use and the generation of solid waste and biohazard waste. The negative effect in the environment can be mitigated by adopting environmental sustainability strategies and ensuring compliance with procedures and regulations. This approach will make the health care sector more sustainable and will maximize the social, environmental and financial benefits.

Sustainable Solutions International Pty Ltd (SSI) has extensive experience in environmental and process engineering allowing us to offer our services to develop sustainability plans for hospitals to mitigate any negative impact on the environment and safety.

SSI delivers sustainable solutions and engineering design in compliance with regulatory conditions to meet the expectation of our customers, the community and the environment.

The onset of legionella in drinking water has been on major concern in Health Care and Aged Care facilities, and SSI has reviewed processes to minimise the ideal growth conditions for Legionella.

SSI provides a wide range of services including:

- Design and development, construction management and commissioning of new plants;
- Maintenance of water treatment plants, wastewater ment plants and rainwater harvesting systems;
- Assessment and feasibility studies of plant performance or upgrade;
- Environmental Management Planning;
- Monitoring, data management and analysis;
- Solid waste and energy audits; and
- Implementation of solid waste, water, wastewater and energy management plans.

Benefits of a sustainable approach to the Health Care Sector:

- Financial savings through improved water, wastewater, solid waste and energy management;
- Reduced demand for water and energy resources;
- Reduced impact on the environment; and
- Enhance environmental image and stewardship through forward thinking design, environmental management and environmentally friend initiatives.

WHAT DO WE OFFER?

The objective of our service is to deliver the most cost effective solution to protect the public health and safeguard the environment focusing on the industry needs and resources available.

Environmental Management

SSI provides environmental management planning and reporting to comply with local, state and federal government regulations and legislation and mitigate negative impact on the environment.

Environmental management in the Health Care Sector includes:

- Comprehensive or partial water audits to assess historical and current usage to verify compliance with legislation and guidelines;
- Development of Water Efficiency Management Plans by setting water conservation goals and identify water conservation opportunities;
- Development of Site Based Management Plans to identify environmental impacts and promote compliance with standards and legislation by suggesting appropriate management approaches. SSI is committed to preparing a comprehensive Environmental Impact Assessments (EIA) that addresses all the potential impacts to water, air quality, noise, biodiversity and local communities;
- Planning and liaising with government agencies and environmental authorities to obtain the necessary licences and permits for the development of the environmental infrastructure; and
- Annual Environmental Management and sustainability reporting.

Asset & Maintenance Management

Design Construction Management & Commissioning

Efficiency Audits & Cleaner Production Environmental
Compliance &

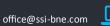
Master Planning

Plant Assessment & Optimisation

Sustainable Resource Management Risk Assessments (HACCP, HAZOP & FMFA)



For more information please contact: Sustainable Solutions International Pty Ltd





Water.Energy.Waste.





Water and Solid Waste Services

The objective of our services is to deliver the most cost effective solution to protect the public health and safeguard the environment focusing in the needs and the resources available.

As a part of our services SSI offers:

- Audits to assess historical and current water and energy use by individual operations and the solid waste generated. Audits can be carried out periodically to verify compliance with environmental guidelines, legislation and to allow for continuous improvement;
- Development of Management Plans for Water Efficiency, and Solid Waste inline with the EPA hierarchy for solid waste management: Avoid, Reduce, Reuse and Recycle, to set benchmark metrics and identify opportunities for water conservations; and
- Design and installation of Rainwater Harvesting System to drive water efficiency by reducing potable water demand.
- Training and awareness to educate staff and consumers about solid waste reduction, management and disposal; and
- Selection of best suited solid waste management technologies based on cost effectiveness, labour, equipment, consumables and civil works.

Energy Services

As a part of our solid waste services SSI offers:

- Energy audits classified as Level I, II or III depending on the level of accuracy to assess:
 - Energy consumption;
 - ♦ Energy intensive activities; and
 - ♦ Energy usage analysis.

Key Projects

The Wesley Hospital, Brisbane, QLD

The Wesley Hospital located in Brisbane, is a private hospital owned and operated by the Uniting Church of Australia. The Wesley is one of the largest private hospitals in Queensland offering a wide range of clinical services and providing tertiary level medical and surgical services.

SSI was engaged by The Wesley Hospital to perform environmental monitoring and reporting for the cooling tower operation. SSI installed data loggers in the inlet and bleed meter of the cooling towers and provided quarterly monitoring reports to identify reduction in water efficiency in the cooling towers.

Health Care

St Andrews Hospital, Ipswich, QLD

St Andrew's Ipswich Private Hospital is owned and operated by Ramsay Health Care. St Andrews Hospital is a 98 bed community hospital servicing the West Morton region.

SSI was engaged in the development of a Water Efficiency Management Plan in 2007. SSI audited and assessed all of the water fixtures in the hospital such as toilets, taps and cooling systems. SSI also gathered water consumption data using data loggers. After completion of the assessment, SSI identified water savings opportunities and proposed water efficiency alternatives to achieve a 25% water reduction.



Blue Care, Cape York Family Centre, QLD

Blue Care operates a remote drug and alcohol rehabilitation centre in Cape York. SSI conducted an audit of the site including the water and wastewater treatment plants and the operation of the facility. Maintenance of the Water and Treatment Plants was also conducted to ensure quality and operation.

A full site Failure Modes & Effects Analysis (FMEA) was conducted on the plants and other business activities to develop a Business Continuity Plan (BCP). The BCP now forms the management framework for emergency events and other events that would disrupt the continuity of the business.



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