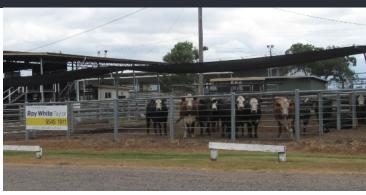


# **Agriculture**







Agriculture is one of the leading industries in Australia generating economic growth and employment. Sustainable Solutions International Pty Ltd (SSI) has extensive experience and vision to deliver environmental projects and Environmental Management Plans for the industry. By adopting a more sustainable approach towards waste minimisation, enormous potential can be realized with cleaner production and waste to energy applications.

#### SSI provides a wide range of services including:

- Recycled Water Management Plans and Water efficiency Management Plans (WEMPs);
- Design and installation of stormwater harvesting systems;
- Water efficiency continuous monitoring and reporting;
- Solid waste audits and the implementation of Solid Waste Management Plans;
- Waste to energy feasibility studies; and
- Energy audits and the implementation of Energy Management Plans.

### Benefits of a sustainable approach to Agriculture:

- Increase in organisational profitability by adopting management strategies to consume less resources such as water and electricity;
- Options for waste to energy from bi-products; and
- Reduced cost in waste management, landfill and utilities.

### WHAT DO WE OFFER?

### **Water Services**

The objective of our services are to deliver the most cost effective solution to protect the public health and safeguard the environment, while focusing on needs and the available resources.

### As a part of our services SSI offers:

- Water Audits to assess historical and current water use by individual operations. Based on the results, methods of improving water efficiency during wash down of stockyards, trucks and lairages. Audits can be carried out periodically to verify compliance with environmental guidelines, legislation and to allow for continuous improvement;
- Development of Water Efficiency Management Plans 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.





Asset & Maintenance Management

Design Construction Management & Commissioning Efficiency Audits & Cleaner Production Environmental
Compliance &
Licensing

Master Planning Plant Assessment & Optimisation

Sustainable Resource Management Risk Assessments (HACCP & HAZOP)













# **Agriculture**

#### **Solid Waste Services**

Agricultural industry residues, refuse and waste constitutes a significant proportion of world wide agricultural productivity. Effective agricultural waste management is essential to ensure a healthy, safe and productive enterprise. As a part of our solid waste services SSI offers:

- Solid waste audits to identify solid waste streams and composition of solid waste produced. During this process the engineering team also identifies areas of improvement regarding solid waste generation, disposal or opportunities to convert solid waste to energy;
- Solid Waste Management Plans inline with the EPA hierarchy for solid waste management: Avoid, Reduce, Reuse and Recycle;
- 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 to assess:
  - ♦ Energy consumption;
  - ♦ Energy intensive activities; and
  - ♦ Energy usage analysis.
- Energy audits are classified as Level I, II or III depending on the level of accuracy;
- Identification of energy saving opportunities through the implementation of renewable energy systems, such as:
  - Solar energy; and
  - Waste to energy (through the utilisation of anaerobic digestion to generate energy from waste treatment.

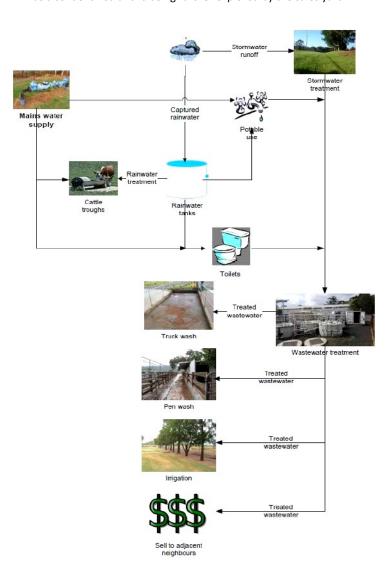


## **Key Projects**

### Scone Cattle Sales yard

The Scone Sales yard is located in Upper Hunter Shire Council town of Scone, NSW. The facility is a cattle sales yard processing on average 60,000 head/year. SSI was commissioned to audit the sales yard in order to identify suitable operation and management changes to minimise wastewater discharge to the local sewerage treatment plant.

SSI identified opportunities to reduce wastewater concentration and volume through minor operational changes, such as dry cleaning, and the incorporation of better suited equipment for wash downs. The opportunity to reuse treated water onsite and harness energy from waste was also identified and is being further explored by the sales yard.



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