Western Health Environmental Sustainability Program

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Governance

- WH Strategic Plan 2015 - 2020
- Aim 4: Being socially responsible & using resources sustainably
- WH Sustainability Committee provides governance of healthcare environmental sustainability Program
- WH Environmental Management Roadmap (EMS) 2015 – 2020 documents reduction targets in energy, water, waste and ‘greening’, aims, objectives and actions to progress these targets over time
- Maintain effective environmental data management systems
- Annual Public Reporting
- Commitment to develop 50 Local Sustainability Action Plans (LSAPs) by June 2020.
- Departmental Managers provide nested governance for LSAPs
- ~100 ‘Green Champions’ progressing particular actions and initiatives with their energy, passion and commitment.
- All hospital staff are implicated via recycling programs and initiatives at Western Health

HES. What’s that?

Healthcare Environmental Sustainability (HES) is an acronym used to describe the myriad ways healthcare impacts the environment can be reduced. Examples include pharmaceuticals, buildings (efficiency and de-

Research

A key driver in the environmental program is the need to understand more unknowns, which in turn has become a commitment to environmental research. The benefits of such rigor have been numerous, leading to replicable projects, business cases, staff engagement and recognition.

In January, benchmark research by Western Health’s Forbes McGain et al. was released in The Lancet’s Planetary Health Journal. It found that the carbon footprint attributed to health care was 7% of Australia’s total; with hospitals and pharmaceuticals the major contributors. See graph below.

Projects

Host annual Healthcare Environmental Sustainability (HES) Forum with CAHA and IHEA.
- Energy
  - 306kW solar electricity that will provide 3% renewable energy to the Sunshine Hospital.
  - LED lighting roll out - avoiding 1,200MWh electricity p.a. (value~$120,000)
- Steriliser Project (research publication) saving 66MWh electricity p.a. (value~$6,600)
- Waste
  - Diversion of waste from landfill to recycling - saving 519tonnes p.a. (value~$75,000)
- Water
  - Breathing circuit washing project (research publication) saving 8MWh electricity p.a., and 100,000L water (value~$15,000)
- Greening
  - Tree planting on National Tree Day annually.
  - Forbes McGain et al. authored the first comprehensive research study to measure the carbon footprint of Australian healthcare (Lancet, Planetary Health, Jan, 2018).

Conclusion

WH’s HES program differentiates itself in both its comprehensive and bespoke nature. Finding its foundation in research enables WH to measure its impact reduction and demonstrate leadership by developing knowledge and sharing replicable methods.

10 Goal Areas:
- LEADERSHIP - Environmental research; Governance
- HES Forum
- CHEMICALS - Reduced cleaning chemical usage 80% compared to 2015 baseline
- 3. WASTE - 37% of hospital waste recycled; 24 waste minimisation programs
- 4. ENERGY - Largescale solar (315kW); LED retrofit, energy efficiency retro
- 5. WATER - Reduced consumption by 30% compared to 2007/08 baseline
- 6. TRANSPORTATION - Bicycle user group
- 7. FOOD - Organics dehydrator turns ~25 tonnes p.a. into soil
- 8. PHARMACEUTICALS - LCA on Morphine.
- 9. BUILDINGS - ESD incorporated into design
- 10. PURCHASING - Sustainable purchasing policies

Awards

Premiers Sustainability Awards 2016: Finalist, for HES Program.
2017: Winner, for ‘Single use metal instruments recycling Program
International Hospitals Conference: Corporate Social Responsibility (Bronze) Prize for HES Program.

Measures in 2017
- Reduced greenhouse gas emissions by 19% per m2 (infrastructure) and 16% per separation (activity)
- Reduced energy by 15% m2 floor space and 12% separation
- Reduced water consumption by 11% per m2 floor-space and 8% separation.
- Recycling increased to 35% from 2011.

Key Staff:
- Catherine O’Shea, WH Sustainability Officer
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