SOUTH AUSTRALIA POLICE SAFER COMMUNITIES



Government of South Australia

Annual Reporting 2023-24

Triple Bottom Line Reporting – Greening of Government Operations

South Australia Police (SAPOL) continues to work towards a more sustainable future through developing environmental standards and implementing environmental initiatives such as passive design measures, waste management, energy management (including solar energy) and water harvesting.

SAPOL is investigating cost-effective opportunities to improve energy efficiency, reduce greenhouse gas emissions and minimise energy costs associated with the operation of buildings. All accommodation projects pursue Ecologically Sustainable Development (ESD) initiatives.

Asbestos reduction and management continues to be an important activity for SAPOL, noting all sites have Asbestos management plans and where required annual inspections in place.

SAPOL remains committed to improvements in waste reduction and effective waste management measures for its major metropolitan police sites, this includes staff training.

2023-24 Activity

- SAPOL continued delivering a program of solar/ battery installation rollout across the portfolio with funding from Department for Energy and Mining's Government Building Efficiency Fund.
- The below ESD initiatives were adopted in new construction of Fregon, Pipalyatjara and Indulkana Police outposts in the APY Lands:
 - Tendering contractors were requested to provide innovation in the design and construction relating, alternative energy systems, water usage/storage system and building materials, including facade and roof technologies.
 - Energy efficient LED Interior lighting connected to movement sensor to minimise wasteful usage.
 - Mechanical services provided with timers to prevent unwanted operation after-hours, and plant specified with low pollutant GWP refrigerants.
 - External door positioning to promote passive ventilation within the building to minimise electrical air-cooling demand.
 - Recycled outdoor furniture.
 - Water sensitive design features soaking pits and drought tolerant landscaping and large roof overhangs married with deep surrounding verandahs increases roof catchment area and ability to optimise future rainwater harvesting.
 - Double skinned roof with upper 'shading' roof takes the majority of the solar load with venting to ridge and eaves drawing in cooler surrounding air.
 - Modular off site construction of main structures to reduce remote site travel journeys and frequency.



 SAPOL commenced construction of new facilities for relocation of Thebarton Barracks Mounted and Dog Operations Units at Gepps Cross and King William City Staging site incorporating the following environmental sustainability design factors:

<u>Energy:</u>

- The Gepps Cross Site will be all-electric and will not use fossil fuels (natural gas) for heating, cooling, or hot water services.
- Energy efficient Variable Refrigerant Volume (VRV) heat recovery Heating, Ventilation and Air Conditioning (HVAC) systems will be installed with wider temperature set points utilised as staff will be mainly transitional. The HVAC solution will allow for individual control of rooms and zones to enable spaces not in use to be switched off.
- Energy efficient light fittings (LED) with occupancy and daylight sensors.
- The horse stables and sheds will be naturally ventilated, with transparent panels to allow for maximum natural light access and reduce the need for artificial lighting.
- Integration of 200kW solar PV to offset operational energy use and batteries to manage demand.

Water:

- 350 000L of rainwater storage on site at Gepps Cross, saving annually 2945 150L of water from the mains network.
- The use of high water efficiency labelling and standards efficiency fittings.
- Adoption of Water Sensitive Urban Design strategies.
- Incorporation of sustainable use of stormwater runoff for non-potable uses by retaining site generated runoff.
- o Contribute to landscape amenity, biodiversity, and greening using infiltration of stormwater runoff.
- Water strategy including collection of rainwater for washdown and process water use.
- Drinking water fountains with bottle refill station facilities to promote heathy drinking practices and reduce the use of single-use plastic bottles.
- Stormwater management systems designed to reduce pollutants reaching municipal systems.
- Appropriate native landscape and internal plantings minimise irrigation water use.

Indoor and outdoor environments:

High quality internal environments designed to improve health and well-being, and productivity, including the following indoor environment quality initiatives:

- The office façade design, including shading, glazing types and daylight access, designed to prioritise passive daylight, whilst minimising heat gains and losses. This will assist in reducing the energy consumed by mechanical heating and cooling equipment. Glazing is high performance to assist with indoor thermal comfort and energy use.
- The building envelope (walls, floor, ceiling, glass) is designed to consider thermal performance and exceed the requirements of the National Construction Code 2019 Section J requirements.
- Use of ceiling fans where air movement is appropriate, to assist cooling and air movement.
- Deployed biophilic design techniques, such as the use of natural materials, colours, and forms.
- Maximised daylight with high levels of daylight access provided to spaces. Where the introduction of daylight is not possible, high quality lighting systems (CRI >80, flicker free drivers, low glare) has been incorporated to improve internal lighting conditions.
- Glare and heat loads managed through building façade mass and shading.
- A combination of light and dark coloured building materials to minimise the heat island effect, whilst allowing the building to blend with the surrounding natural environment.
- Planting around the building to create a localised cooling effect for people entering and leaving the facility.
- End of Trip facilities provided to encourage active transport to and from work.
- EV charging spaces provided to support the SA State Government transition to electric fleet vehicles.



- SAPOL also commenced early project planning in a new joint Agency initiative with the Attorney General's department for a new South Australia Forensics Centre (SAFC). A bespoke Sustainability Framework is being developed for the SAFC focussed on the following drivers:
 - Climate Change resilience
 - o Green House Gas (GHG) emissions reduction
 - o Circular economy
 - Water efficiency
 - Health and Wellbeing.

SAPOLs Statewide Built Asset Portfolio/Facilities

ESD initiatives are considered in all accommodation project works being undertaken in SAPOL and project designs as far as practicable addressing the prescribed criteria contained in the Department for Infrastructure and Transport (DIT) ESD Guide Note for Planning Design and Delivery.

SAPOL utilise the DIT Green fit out guide and the principles of ESD as a tool when negotiating with building owners in regards to utilisation of occupied space within a leased facility. SAPOL incorporates the overarching ESD objectives; reduce energy, conserve water, reduce waste, reduce pollution, improve Indoor Environmental Quality, reduce operating costs for facilities in line with ISO 55001. Accommodation projects pursue ESD initiatives incorporating:

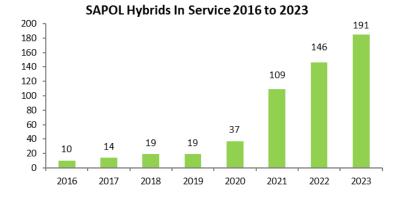
- Use of recycled or recyclable materials for construction and fit out where viable.
- Harvesting of rainwater for reuse in landscaping watering systems or building systems where potable water is not required.
- Installation of solar panels and consideration of batteries.
- Replacement of light fittings with energy efficient LED systems.
- Installation of energy efficient supplementary air-conditioning systems for afterhours use.
- Passive cooling systems such as sunshade louvres and natural ventilation where possible.
- Electric Vehicle Charging Station infrastructure.

Motor Vehicles

SAPOL has around 1171 general duties and administrative fleet vehicles that travelled approximately 30 million kilometres during 2023-24. SAPOL continually assess the composition of the fleet to reduce the environmental impact and have continued replacing six cylinder vehicles with four cylinder and hybrid vehicles where appropriate.

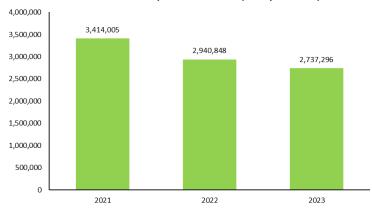
During 2023-24, SAPOL held 894 four-cylinder vehicles representing 77% of the total general duties and administrative fleet, noting it is a 10% increase on 2022-23 and an 87% increase since 2019-20 (five year period).

The introduction of hybrid vehicles has further reduced SAPOL's environmental impact in addition to five electric vehicles situated at Police Headquarters within its fleet. Below is a graph showing the move towards hybrid over 8 years:





The graph below details the reduction in SAPOLs fuel consumption over the last 3 years:



Vehicle Fuel Consumption 2021 to 2023 (litres per annum)

There are 709 vehicles (up 9.58% on previous year) in the SAPOL fleet that utilise diesel fuel and 191 Hybrid vehicles (up 6.11% on previous year). The below table details a number of key sustainability ratios for general duties and administrative fleet vehicles:

Total General Duties and Administrative Fleet	% LPG	% Diesel	% Hybrid	% Electric	ULP
1 171	-	709	191	5	266
	-	60.6%	16.3%	0.4%	22.7%

Future SAPOL Environmental Initiatives 2024-25 Activity

The below projects will provide further ESD opportunities for the upcoming 2024-25 year:

- Construction of new Naracoorte Police Station.
- Accommodation works to refurbish bathroom and kitchen amenities in Norwood and Port Adelaide Police Stations, incorporating a range of ESD initiatives including:
 - LED lighting, and motion sensors to increase energy efficiencies across the fit-out.
 - Reducing operational water consumption through measures such as Water efficient fixtures.
 - Consideration to reduce harmful chemicals, use long life/recycled materials where possible and choosing materials/suppliers that have sustainability considerations at the forefront of their business, including:
 - PVC free backings, sustainability, and recyclable programs in place.
 - Acoustic linings green tag certified, 100% PET (60% post-consumer recycled).

