

Veolia Energy Solutions

The content of this document was provided by Veolia Energy Solutions



Organisational Overview

Veolia Energy Solutions specialises in energy, water and waste services that provides a circular economy through integration. Realising efficiencies and sustainability initiatives is vital to the preservation of our planet and our contribution to social responsibility. We partner with communities, government and business to identify solutions that are quantified and qualified. We aim to be the benchmark for reconciling sustainable development with protecting the environment. Veolia employs over 187,000 people globally with 3,950 residing with Australia and New Zealand.

Veolia has developed a complete, turnkey approach to delivering Energy Performance Contracts that includes design, build, asset management, through life support and performance guarantees on utilities reduction and improved sustainability outcomes. This maximises return on investment, ensures occupant satisfaction and minimises the owner's risk. Our engineered solutions provide peace of mind to our customers, ensures competent delivery of project requirements and our ability to guarantee the environmental and financial outcomes. This is our main core business and by providing guaranteed solutions and outcomes this ensures our customers can focus on their main core business activities.

The Veolia Model: Veolia views its role as the advocate of the customer within the Energy and related technical services supply chain. We are technology and fuel source agnostic and focus entirely on the needs of individual customers to ensure the best overall return on energy efficiency investments. We develop partnerships with customers to ensure they are achieving their organisational key objectives and environmental aspirations. Globally and nationally we have a considerable amount of performance based contracts. These contracts are supported by our significant resource capacity within Victoria, nationally and globally to ensure energy efficiency and sustainability goals are delivered.

Veolia in Healthcare: Veolia serves over 6,000 healthcare facilities globally. Under the NSW EPC program we have won two major projects being the Illawarra Shoalhaven LHD and Mid North Coast LHD EPC solutions. In addition, Veolia have implemented other major EPC's in healthcare including Griffith Healthcare and Cairns Hospital. We have over twenty energy related health customers within Victoria and our unique approach ensures solutions are fit for purpose which supports our customer's current and future organisational goals and objectives.

Veolia in Water: As part of the Veolia group, Veolia is uniquely positioned to tackle water energy efficiency projects. We have local competencies in the entire lifecycle of water and waste water treatment from feasibility, design, implementation and on-going management of the plant, pumps, and building technology aspects of operations. The Veolia group has acquired and developed 150 years of innovation, experience, and internally designed tools to ensure the best return on energy efficiency investments.

Veolia in Education: Veolia is a major player in the Australian education sector, with several significant University and TAFE customers in Victoria. We currently have over thirty customers Australia wide, representing one hundred and eighty sites.

Veolia in other Government Facilities: All around the world, Veolia have built their reputation in providing solutions to governments. This has given us insight into the long term global trends in government energy management within facilities.

Company Details

Company Name Veolia Energy Solutions
ABN 30129471558

Primary Address in Victorian Government Level 1, 85 Buckhurst Street, South Melbourne, Vic, 3205

Telephone 03 9626 2222

Website www.veolia.com/au

Key Contact 1

Name Matthew Lee

Position State Manager

Phone +61 2 8572 0321

Veolia Energy Solutions

The content of this document was provided by Veolia Energy Solutions



Mobile +61 428 698 415
E-mail matthew.lee@veolia.com

Key Contact 2

Name Marcus Cheng
Position Energy Development Manager
Phone +61 2 8572 0320
Mobile +61 423798431
E-mail marcus.cheng@veolia.com

Financial Details

Minimum Contract Size	\$100,000
Maximum Contract Size	\$100,000,000
Public Liability Insurance	\$20,000,000
Professional Indemnity Insurance	\$10,000,000

Accreditations Veolia holds all required Australian industry accreditations and quality certifications relating to Energy Performance contracting. Veolia has NABERS Accredited professionals, Certified M&V professionals, Energy Auditors , Certified Emissions Reduction Leader and affiliated with the Energy Efficiency Council

Core Competencies

- Energy Performance Contracting
- Energy demand management and procurement
- Embedded energy private networks
- District cooling and heating
- Central Energy Plants
- Heating Ventilation and Air Conditioning systems (HVAC) Co and Tri generation systems
- Measurement and Verification
- Mechanical and Electrical Technical Services
- Lighting and Automation
- Upgrades Building Automation Controls
- Water efficiency and sustainability Waste to energy solutions
- Energy optimisation
- Energy Auditing
- Management of performance guarantee contracts

Service Limitations Veolia leverages from their significant environmental solutions globally. Our organisation offerings are diverse with a vast array of solutions on offer or currently under research and development.

Previous & Current EPC Experience

Project Name	EPC MNCLHD	
Customer	Mid North Coast Local Health District	Description / Solutions
Project Cost	\$7.7 million	<p>Veolia was selected to deliver energy and water efficiency upgrade for Mid North Coast Local Health District (MNCLHD) under an energy performance contracting (EPC) arrangement across the following sites in the district.</p> <ul style="list-style-type: none"> ▪ Bellinger River District Hospital ▪ Camden Haven Hospital ▪ Coffs Harbour Health Campus ▪ Dorrigo Hospital ▪ Kempsey Hospital ▪ Nambucca Health ▪ Port Macquarie Base Hospital ▪ Port Macquarie Community Health Centre ▪ South West Rocks ▪ Wauchope ▪ Woolgoolga <p>In line with the NSW government’s Energy Efficiency Action Plan initiative, this EPC contract was projected to deliver both short- and long-term benefits to MNCLHD, to be further optimised in line with quantitative Measurement and Verification (M&V) guarantees related to financial and operational savings. As with all large facilities, an energy-based upgrade has a firm base in LED Lighting Upgrades and Solar Photo-Voltaic production. The challenges facing hospitals is more than this, with Heating, Ventilation, and Air Conditioning (HVAC) presenting a significant cost for both utility expenditure, operational & maintenance expenditure, and overall environmental impact. Some Energy Conservation Measures (ECM) implemented are:</p> <ul style="list-style-type: none"> • LED Lighting Upgrade • Temperzone Split Ducted AC Network Upgrade to Chilled Water • Chilled Water System SMAC Upgrade (PR1, 2, 3) • Clinical Areas AHU Coil UV Emitter Upgrade • Solar PV System • Pan Sanitiser/Utensil Washer Upgrade • Window Film Application • HHW Pump(s) Variable Speed Drive Upgrade • Taps and Showers Flow Restrictors (WCM) • Water Sub-metering and Active Leak Monitoring <p>The preparation of this Energy Performance Upgrade focused not only on ECMs, but also Sustainable Engineering Design, principally in large-scale HVAC and Mechanical Upgrades not normally viable in a traditional Asset Management paradigm.</p> <p>A traditional approach to asset management rarely allows for an upgrade of technology, instead opting for a “like-for-like”, replacement on failure approach. This EPC framework has allowed for Sustainable Engineering Design to be implemented at a ‘whole-site’ scale, resulting in an innovative utilisation of new technology and holistic analysis combined with proven engineering concepts.</p> <p>On-going annual Measurement and verification (M&V) until 2026</p>
Annual Savings	\$1.0 million	
Payback Period (yrs)	7.7	
Date Completed	2019	

Veolia Energy Solutions

The content of this document was provided by Veolia Energy Solutions



<Referee Name 1>	Title: Danny Saunders
	Organisation: Mid North Coast Local Health District
	Relationship: Project Manager - Energy Environmental Sustainability
	Phone: To be provided on request
	E-mail: danny.saunders@health.nsw.gov.au

Project Name	EPC ISLHD	
Customer	Illawarra Shoalhaven Local Health District	Description / Solutions
Project Cost	\$5,300,000	
Annual Savings	\$735,000	
Payback Period (yrs)	7.23	
Date Completed	2020	
		<p>Veolia was selected to provide Energy Performance Contracting (EPC) services to the Illawarra Shoalhaven Local Health District (ISLHD) for Wollongong Hospital, Shoalhaven Hospital and Shoalhaven Cancer Care Centre. In order to rethink NSW Health's energy requirements for the three major hospitals and develop a tailored, comprehensive solution, Veolia undertook long-term asset master planning to identify where significant water, waste and energy efficiency improvements could be delivered across three large-scale health facilities. Key considerations also include:</p> <ul style="list-style-type: none"> ● Peak demand management for optimised energy consumption ● HVAC equipment upgrades ● Investigating options for renewable energy utilisation in order to enhance reliability, safety, comfort and productivity ● Implementation of Hubgrade, Veolia's Energy Management System. <p>On-going annual Measurement and verification (M&V) until 2026</p>

<Referee Name 2>	Title: Wayne Davies
	Organisation: Illawarra Shoalhaven Local Health District
	Relationship: Senior Manager Sustainable Procurement.
	Phone: To be provided on request
	E-mail: Wayne.Davies@health.nsw.gov.au

Project Name	EPC MWC	
Customer	Muswellbrook Workers Club	Description / Solutions
Project Cost	\$950,000	
Annual Savings	\$150,000	
Payback Period (yrs)	6.33	
Date Completed	2015	
		<p>Veolia has developed a complete, turnkey approach to delivering Energy Performance Contracts (EPC) for Muswellbrook Workers Club (MWC) that includes design, build, asset management and performance guarantees on energy reduction. This maximizes return on investment, ensures occupant satisfaction and minimizes the owner's risk.</p> <p>MWC awarded Veolia an EPC consisting of a comprehensive energy upgrade to its facilities with the aim of enhancing building comfort for its patrons while reducing environmental impacts. Veolia designed and implemented a customised performance based solution covering facility, capital and technology improvements to MWC. With guarantees provided on energy savings, Veolia delivered an energy asset upgrade that successfully reduced operating costs, energy consumption and greenhouse gas emissions. Through Veolia's best practice EPC solution, the club will save thousands in energy bills.</p> <p>Veolia's EPC solution included the following energy conservation measures:</p> <ul style="list-style-type: none"> ● The installation of a 100kW Solar PV system to reduce electricity consumption.

- Upgrade of the existing DX HVAC system with a new high efficiency air cooled chiller that operates on ozone friendly R134a refrigerant gas to provide chilled water, further reducing annual energy consumption.
- Replacement of the existing air handling units further increasing HVAC system efficiency.
- Replacement of the existing ducted split DX systems to CHW Fan Coil Units further increasing HVAC system efficiency.
- Implementation of economy mode and CO2 control to the new Air Handling and Fan Coil Units.
- Replacement of the existing Diesel Fired Heating Hot Water Boiler with a more efficient LPG Condensing Boiler.
- A full lighting upgrade through the installation of efficient LED lamps and fittings.
- The installation of a Building Management Control System (BMCS) to further improve environmental conditions and reduce energy consumption.

<Referee Name 3>	Title: Kenneth Taylor
	Organisation: Muswellbrook Workers Club
	Relationship: Maintenance Manager
	Phone: To be provided on request
	E-mail: ken@muswellbrookworkers.com.au