

SMART CITIES

POWER DISTRIBUTION AUSTRALIA
CLEARVUE TECHNOLOGIES
IGNITE ARCHITECTS
AGD SYSTEMS
AUTOMATED
BSI GROUP
OZTECH
FLOTH

Sydney team goes green at new Chatswood office

The team from Floth's Sydney office have just finished collaborating with renowned interior architects Big City Design on the designs for their new office fitout in Chatswood.



After working together on projects for over a decade, Floth and Big City Design were able to team up to deliver a modern and dynamic office that not only showcases Floth's commitment to ecologically sustainable development (ESD), but also interprets the company's needs, corporate culture and personality into a built form.

A primary focus of the project was to create an environment where visitors and clients feel part of the Floth family from the moment they step through the doors. This was achieved through a transparent design where barriers are removed and natural light and views are maximised.

The open and egalitarian workplace design ensures the whole office can be seen at a glance, with the reception area adjacent to the general office, so that all Floth staff can work as one team. Two of the notable features of the office are the dramatic boardroom, which accentuates the building's angular glazed façade by projecting into the Chatswood streetscape and surrounding leafy districts; and the large, well-appointed breakout space that is at the heart of the office – perfect for town hall meetings, informal collaboration, regular technical learning sessions and social connectivity.



Photography: David James

From the orange coffered ceilings to the engaging signage used around the office and the green wall dividers, the colour palette used throughout the office is intended to match Floth's branding and sustainability values while injecting the company's friendly and youthful personality into the space.

Greenery is a significant part of the design, with plantings set to play an integral role in Floth achieving a WELL rating for the office. The sustainability credentials of every aspect of the fitout were carefully selected by the design team, in conjunction



with Floth. Close collaboration with the fitout contractor, Sense Projects, and furniture suppliers, AWM, during construction ensured compliance was met throughout the process.

The end result is a spectacular new 'green' office – located at Level 8, 799 Pacific Highway, Chatswood – which the team was very happy to move into at the end of March 2019.

AGD IS WATCHING: SMART TRAFFIC MANAGEMENT FOR EXPANDING CITIES

Monitoring and managing ever increasing vehicle and pedestrian traffic volumes is now a major challenge in our expanding cities. This applies not just to our highways and arterials, but also in centres of high density living, retail centres and carparks where the management of traffic movements and the safety of pedestrians, drivers and passengers, vehicles and other assets is a constant challenge for regulators, the building industry and the community.

AGD Systems Pty Ltd provides practical solutions to these challenges with intelligent traffic systems. The company is a specialist in delivering custom built traffic and pedestrian management systems using non-invasive methods such as radar and infrared instruments.

The scope of their business ranges from inter-urban arterial routes where they can provide systems for the counting, monitoring and reporting on vehicles travelling on roads, moving through key intersections and approaching major centres, through to apartment buildings and major retail and office carparks where AGD brings their skills and products to ramp monitoring, vehicle detection, integrated traffic signals and vehicle counting systems.

Amongst the many practical products that AGD brings to the market are the '318 Traffic Control Radar', the '326 Pedestrian On-Crossing Detector' and the '343

Highways Monitoring Radar'. Managing Director, Stuart Douglas said that all three products utilise proven enforcement grade radar and measurement techniques.

"The entire AGD product range is aimed at reliably delivering safer, greener, more efficient traffic and transport environments. These three products meet all these criteria."



The AGD '318 Traffic Control Radar' is a highly cost effective single lane loop replacement radar, ideal for use on approaches to pedestrian crossings and junctions.

The radar incorporates stationary vehicle recognition for queuing traffic detection and is a smart alternative to wear prone loops and magnetometers, being maintenance free, and the ability to mount onto existing poles, also significantly reduces installation costs.

Stuart said that the 318 is a next generation product which produces traffic movement efficiencies, being ideal for use on approaches to pedestrian crossings and junctions.

"It easily integrates with controllers and uses WiFi AGD Touch setup for simple, safe configuration. The 318's ability to detect stationary or queuing traffic makes it ideal for all computer integrated installations and other strategic applications."

The AGD '326 Pedestrian Detector' is a dynamic environment detector designed for the detection and monitoring of pedestrians and cyclists crossing the road at signalled installations and other applications where the detection and safety of moving pedestrians is required on a 24 hour basis.

The AGD 326 allows optimisation of the crossing phase, giving back more green time to traffic or alternately, when pedestrian volumes are high, giving more time for foot traffic. AGD Touch setup provides safe, easy remote setup via a smart phone or tablet. Stuart said AGD 326 provides greater performance across wider crossings than its predecessor product, the AGD 226 which is still used on over 25,000 sites worldwide.

"The AGD 326 is the ideal detection solution for any intelligent crossing, combining well with other AGD kerbside detector systems to significantly improve crossing safety."



The AGD 343 Highways Monitoring Radar is a new product in the Australian market. The 343 system provides an easy to integrate traffic flow monitoring solution that provides real time data on multi-lane highways. Designed for traffic profiling and incident detection, the 343 dramatically enhances highway safety, capability and efficiency, providing detailed traffic information in all weather conditions to inform control rooms and allow instant decision making.

Stuart said AGD Systems has a commitment to delivering premium products. "Our international R & D and manufacturing resources, plus wide practical experience from the thousands of units in use around the world, means that our customers can have total confidence in the performance of all our systems."

For more information contact AGD Systems Pty Ltd, Unit 17/15 Valediction Road, Kings Park NSW 2148, phone 02 9653 9934, email sales@agd-systems.com.au, website www.agd-systems.com.au

“The entire AGD product range is aimed at reliably delivering safer, greener, more efficient traffic and transport environments.

AGD Managing Director, Stuart Douglas



SMART CITIES = SMART WORKPLACES

“Ignite look to create workplaces that are about community, identity, as well as learning and mentoring.



Older buildings can become exemplar workplaces in the emerging smart cities of the future – it is simply a matter of applying intelligent design thinking.

Repositioning, refurbishing and redeveloping existing assets is a growing trend, particularly given the constraints on available land in urban centres and the increasing emphasis on sustainability, explains Ignite Architects Director, Jason Marriott.

Smarter spaces enable businesses to adapt flexibly to inevitable changes in operations, branding, technology, overhead costs, and human needs. They are also fundamental enablers of the new high performance, agile business models.

“While the efficient use of commercial space has been a traditional concern, current real estate pressures are more about effective area usage, remaining agile, growing smarter,

embracing digital technologies, and being healthy, all while shedding un-necessary excesses,” Jason said.

Ignite Architects endeavours to apply expertise across architecture, planning and design to creating commercial real estate that enables workforce talent to shine.

“While typical design responses prioritised offices, desks and circulation, smart workplace designers look at layouts based on workplace analytics.” Analytics help to tune office, desk and meeting room ratios; right-size shared spaces and collaboration areas; accommodate mobile workforce needs; and guide digital and smart furniture solutions.

Jason says Ignite’s team is also passionate about creating places that bring people together, where workplaces foster collaboration, connectivity and communication.

Ignite has been recently applying this thinking to a major workplace project in Auckland, as part of a comprehensive repositioning of a 22-level office building. The same inspired approach is also being utilised for a boutique office project in Sydney for a leading beverage supplier.

“We look to create workplaces that are about community and identity, as well as learning and mentoring,” Jason says.

“Gone are the days of people coming to sit in silence in a field of workstations pecking away on a keyboard. Things have changed – and are changing for the better.”

For more information contact Ignite Architects, 231-233 Commonwealth Street, Surry Hills NSW 2010, phone 02 9819 8600, email jasonm@ignitearchitects.com, website www.ignitearchitects.com



A CLEARVUE OF POWER GENERATION



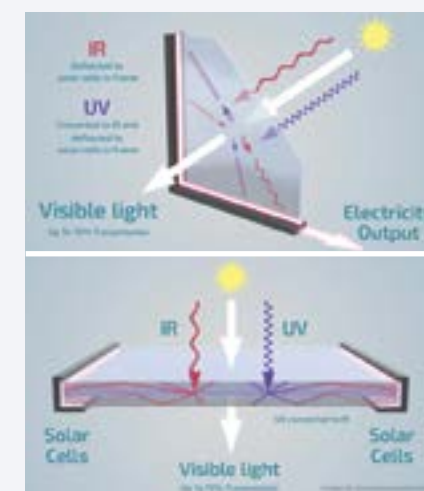
Capturing and utilising clean energy to power all aspects of human society is a global vision. ClearVue Technologies, based in Perth, is a leading player in Australia’s effort to develop clean, safe and sustainable sources of renewable energy. ClearVue has a specific focus on the building industry across all sectors including residential, industrial, commercial offices and greenhouses.

The company’s core offering is highly energy efficient, clear glass that generates electricity. ClearVue’s patented technology utilises an activated interlayer which sits within two panes of laminated glass that redirects infra-red and ultraviolet light to the edge of a window to harvest the solar energy with traditional PV elements.

Essentially ClearVue’s Technology produces clean renewable power via the windows in a building while retaining high transparency, letting in 70% of natural light. The same windows provide superior insulation

properties that also reduce heating and cooling costs. ClearVue is set to commercialise their clear glass products through strategic alliances with some of the world’s largest organisations.

Chief Executive Officer, Victor Rosenberg said that ClearVue’s window products can convert a glass building, such as a high rise office block, into a massive solar panel.



“Our innovative technology does not replace solar panels on the roof of a building but works in conjunction with them. The clean energy produced by the windows can power items like automatic blinds, automatic ventilation, electrochromatic switchable glass, WiFi systems and mobile electronic devices, thereby reducing energy costs, creating a better environment for the well being of occupants and increasing the value of the building. Our technology positions us at the centre of the Smart Cities movement – we can power many different smart city and smart façade technologies at and from our glass without the need for grid interconnection.”

The technology has been installed at Warwick Grove shopping centre in Perth, owned by the Vicinity Group. The northern entrance door atrium utilises ClearVue windows to generate power for lighting and other purposes.

ClearVue is also partnering with Edith Cowan University, Murdoch University and others under a CRC-P grant provided by the Australian

Federal government to trial the technology to power a self sustaining greenhouse.

ClearVue’s technology represents a paradigm shift in the way glass will be used in future in building construction, automobiles, agriculture and specialty products.

“ClearVue’s Technology produces clean renewable power via the windows in a building while retaining high transparency...”

For more information contact ClearVue Technologies, Suite 7, 567 Newcastle Street, West Perth WA 6005, phone 08 9220 9020, email info@clearvuepv.com, website www.clearvuepv.com

BSI URGES CONSTRUCTION ORGANISATIONS TO GET ON BOARD WITH BIM

“By embracing BIM, construction and consulting organisations can improve stakeholder management and relationships

bsi.

The ‘Digital Revolution’ continues to affect almost every aspect of human existence – and the built environment is no exception.

From building design and construction projects to infrastructure development and ongoing asset management, the industry continues to be transformed by new and evolving digital solutions.

BIM (Building Information Modelling) is an important aspect of this technological change and for those organisations that wish to compete in the vast global construction market, it must be embraced.

BSI has been working collaboratively with a range of stakeholders – from product manufacturers to network providers and government agencies to develop best practice in areas such as smart cities, infrastructure and the built environment.

This includes our series of BIM specifications, such as ISO 19650 which published earlier this year, (and is based on BSI’s PAS 1192-2 standard), training to help individuals with the practicalities of BIM and certification schemes, such as the BSI Kitemark for ISO 19650 – all designed to ensure the successful implementation of BIM.

These solutions have been transformational for the construction industry and are already being adopted across the globe, in China, the UAE, Australia, Germany and South America. As BIM models become more developed, there is no reason why such models should not be used by smart cities in considering development of portfolios of buildings.

This would allow coordinated designs of districts, integrated services and coordinated maintenance programmes for those assets when buildings become operational, as well as scenario modelling to assess the impact

of certain events on the existing assets and public safety.

The influence of digital technology on the built environment is only set to increase. BIM is transforming the way in which organisations within the building and civil infrastructure space work together. The role of project manager will shift focus to provide information management throughout the lifecycle of projects and developments.

By embracing BIM, construction and consulting organisations can improve stakeholder management and relationships, open up new business development opportunities, reduce and mitigate risks, improve accessibility to data and archived files, work more efficiently and most importantly, become more resilient.

For more information contact BSI, phone 1300 730 134, www.bsigroup.com/en-AU/Building-Information-Modelling-BIM/



POWER DISTRIBUTION AUSTRALIA PTY LTD

SMART CITIES | High and Low Voltage | Power Distribution Australia Pty Ltd



Power Distribution Australia Pty Ltd (PDA) is a family owned business operated by Tony Rossi and his daughter Emily.

The company has an extensive portfolio of completed works yielding quality results in both the public and private sectors, including many projects for Tier 1 developers.

With over 40 years combined experience in the high and low voltage industry, PDA provides overhead and underground electrical upgrades within Ausgrid, Endeavour Energy and Essential Energy networks.

Tony and Emily consider an important component of PDA’s success to be their philosophy of recognising employees and clients as an extension of this family collaboration; working in partnership with all stakeholders to deliver quality practical completion in a timely manner.

For more information contact Power Distribution Australia Pty Ltd, 249 Annagrove Road, Annagrove NSW 2156, phone 02 8880 3514, email emily@pdas.com.au, website www.pdas.com.au

PDA’s historical scope of works cover both small and large projects including but not limited to:

- Indoor substations
- Double and triple chamber substations
- Mini chambers
- Kiosk and Padmount substations
- Street Lighting
- Pillar cut in
- Overhead and underground network upgrades
- Earthing designs and construction

INNOVATIVE, AGILE, CONNECTED AND COMMITTED

Since 1990, Oztech Intelligent Systems has provided the Australian market with cutting edge DDC controller hardware and feature rich Building Management Systems, in addition to consulting and advisory services, from conceptual to full systems design, implementation, maintenance and service for their clients. Their end-to-end spectrum of services streamlines project design, delivery and lifecycle management of integrated systems solutions.



“Unlike the plethora of Systems Integrators in the market, we are Full Stack Developers that build innovative, feature rich systems using open API libraries such as Tridium’s Niagara 4 API, and are therefore not constrained by off-the-shelf feature sets,” said Oztech’s new forward-thinking Technical Director, John Lu.

“Our team of talented inhouse technical experts are trained to design and deliver bespoke class-leading solutions with innovations that both rival and exceed that of competing solutions from Tier 1 industry players.”

Over the last four years, Oztech has incorporated Tridium’s popular Niagara platform into their solutions portfolio. With its latest BMS solution developed on the Niagara 4 API via industry-proven Agile-Scrum methodologies of product development, the end result is a system that leverages the latest in open web technologies, does not require third-party plugins or standalone applications, and is totally flexible in deployment architecture such as being cloud-hosted or virtualised on client IT assets.

As an official Johnson Controls ABCS (Authorised Building Controls Specialist),

Oztech has further expanded their product line with class leading field products (sensors, motorised valves, damper actuators), open BACnet protocol field controllers, integration level controllers (such as Tridium’s JACE-8000 operating on the Niagara 4 framework).

This is complemented by a wide range of high quality yet cost-competitive products such as VAVs, FCUs, Modular Chillers, VSDs, Smoke Detection Systems, Tyco® Security, Access Control and CCTV solutions.

“Only well established, highly reputable companies are considered for Johnson Controls’ ABCS approval. Their business model and product philosophy also fitted perfectly with our innovative, agile, connected and committed criteria,” John said.

Coming in Q4 2019, Oztech’s new Landlord Package for Tridium Niagara 4 Building Management Systems allows building owners and facility managers to define zones within their commercial building freely,



allocate equipment (such as HVAC and lighting) to zone(s), add tenants to the user portal, configure and manage the associated operation and billing of building services such as afterhours air conditioning and lighting.

Aiming not to be the biggest but to be the best, Oztech’s nationwide team prides themselves on being approachable and flexible, in their client-engagement practices, enabling specific client-driven outcomes at competitive rates.

“We’re not just Systems Integrators. We are Software Developers that build innovative, feature rich systems using Open API libraries...”

Technical Director, John Lu



For more information contact Oztech Intelligent Systems, 15 Orion Road, Lane Cove NSW 2066, phone 02 9816 7000, email info@oztech.com.au, website www.oztech.com.au

LIGHT CONNECTS - AUTOMATED



The world of lighting is a fast moving environment in which technology is constantly changing and delivering innovative solutions for the control of lighting systems. Automated, the leading lighting control business in Australia and the region, is at the forefront of this technology.

Automated is a Certified Value Added Partner for the lighting control specialist



Signify (previously known as Philips) and is the Signify Ambassador for Australia and New Zealand. Automated markets the Philips Dynalite system to electrical contractors and trade customers.

Managing Director of Automated, Joseph Joukhar, said that Philips Dynalite is the finest lighting control system in the world. “The system creates sophisticated, energy

efficient lighting and building control solutions for residential, offices, hospitality, retail, industry, public spaces and more. It does so with reliability and never fails to impress.”

Joseph said that Dynalite does far more than simply turn lighting systems on and off. “Dynalite controls allow you to create ambience and recall different lighting scenes to suit the mood and the occasion. It can be configured from any point on the network and generate system status reports.”

Established in 1996, Automated has headquarters in Sydney and offices in Melbourne, Brisbane and Perth, with technical specialists trained in a number of lighting systems.

Automated has branched out globally, being the exclusive distributor for Dynalite to Vietnam and the United Kingdom. Automated also has an exclusive contract to

Philips PerfectPlay which provides industry leading LED floodlights that comply with international sports federation guidelines.

Automated has numerous projects to its credit, including state-of-the-art lighting for the Barangaroo carpark, innovative lighting control systems for aged care residents at Thomas Holt Flame Tree in Kirrawee, special effects at the Vivid Festival and advanced lighting control systems at the Tiffany & Co. flagship store in Sydney.

With a strong commitment to 5-year strategic planning and staff development, Joseph is committed to ensuring Automated continues to lead the market in lighting control systems.

For more information contact Automated, Suite 4, Level 5, 37 Pitt Street, Sydney NSW 2000, phone 02 9247 0731, email info@automated.net.au, website www.automated.net.au