

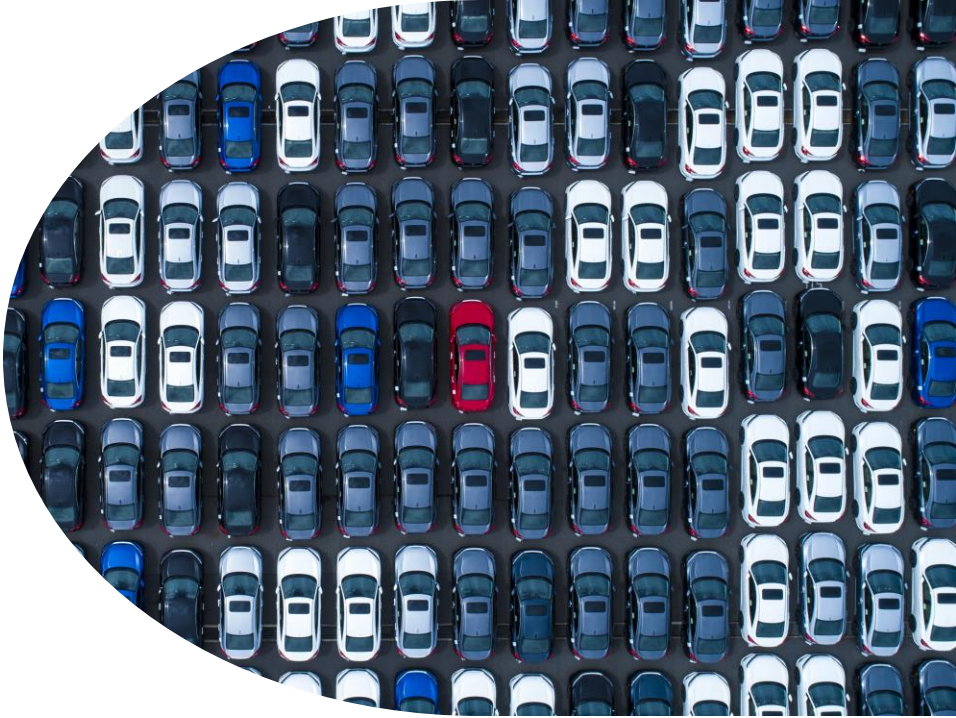
BGIS ➤

EMBRACING INNOVATION

FMA: National Summit - Maintenance Management in FM & Expo 2024

30 Oct 2024





"If I had asked people what they wanted they would have said a faster horse."

- Henry Ford -

BGIS GLOBAL REACH



50,000+

LOCATIONS GLOBALLY



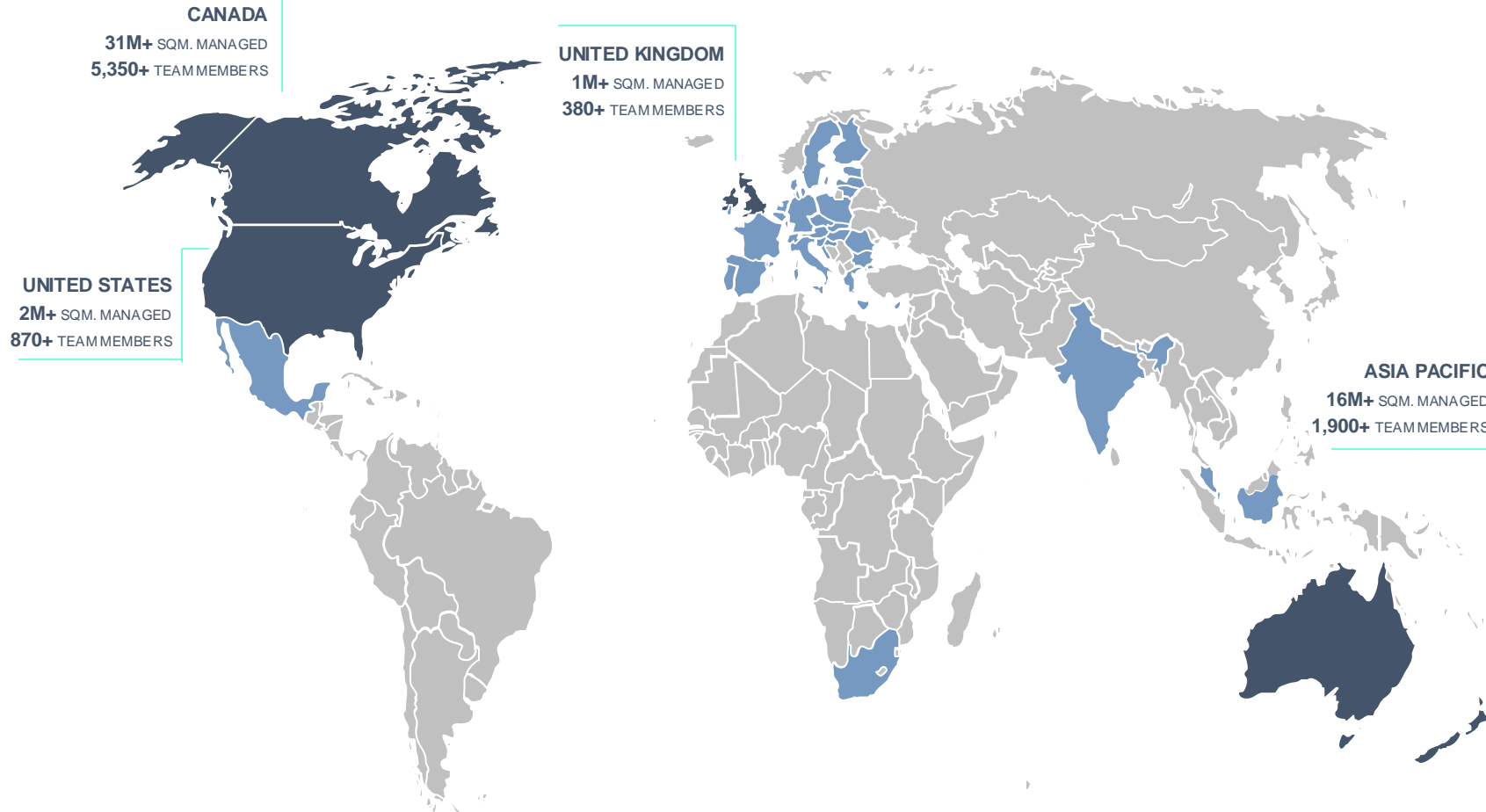
50M+ SQM

MANAGED SPACE
GLOBALLY



10,000+

TEAM MEMBERS
GLOBALLY



Core Operations

- Canada
- US
- Australia
- New Zealand
- UK

Operating Presence

- Europe
- India
- Singapore
- South Africa
- Mexico

BGIS is a technology enabled, technically-led global integrated facilities management (ifm) provider focused on providing disruptive business solutions for our clients, through a culture of caring, innovation and high-performance.

OUR APPROACH

Measure & Evolve

- Employee Innovation Awards
- Industry Awards
- Supplier Awards



Generate Ideas & Innovations

- Account-Level ideas captured
- Catalyst Innovation Portal – Case Studies
- Hackathons



Facilitate & Educate

- Speaking Engagements
- Teams Support Site
- Monthly Innovation Hour Webcasts
- Client-Facing Events



Implement

- Roadmap Approach to Implementation
- Alignment with Capital Planning
- Remote Command Centre (RCC)



Manage & Integrate

- Global Scorecard Metrics & Report-out
- Global Innovation Council
- APAC Innovation Council
- Self-funded Innovation Leadership



Operationalise

- Dedicated Innovation Specialist
- Strategic Account Management
- Innovation Dashboard (Account Pipelines)
- Pilot Leadership & Support



BGIS has a continuous approach to Innovation with evidence based outcomes

INNOVATION PROGRAM

For many of our clients, innovation is at the forefront of their corporate strategy, and they look to us for new ideas to drive efficiencies and cost savings, as well as sustainability outcomes.



Recent awards

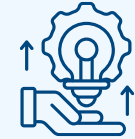
- Department of Defence Base Services Contractor Awards – Innovation of the year 2023
- RICS – Innovation Award 2023



100+
Innovation forums



300+
Innovative case studies



1000+
Innovative initiatives



Dedicated innovation role



Global innovation council and reporting



RECENT INNOVATIONS



- 4 litre & 9 litre extinguisher
- Water base
- Fluorine-free
- Bio-degradable

CASE STUDY

F500 Lithium-Ion Fire Extinguisher

The F500 Encapsulator Agent, when mixed with water, works by encapsulating a water-droplet and enhancing its natural cooling effect. When directed at a lithium-ion battery fire it also provides a blanket to drastically reduce toxic smoke emissions.



THE ISSUE

Due to the rising popularity of Lithium batteries, it's crucial that businesses and employees who commonly use products and devices powered by lithium-ion batteries understand the associated safety hazards as well as basic handling and storage guidelines to avoid workplace fires and injuries.



WHY IS THIS AN INNOVATIVE SOLUTION?

The current Australian Standard (AS2444) to support extinguishers does not specify lithium-ion fires. This is currently under review and expect to see amendments shortly. Therefore, the current classed fire extinguishers are not purpose designed to extinguish these fires. The F500 fire extinguishers (F-500 Lithium-Ion Fire Extinguisher) are approved for use for class A, B and F fires under the Australian Standards and designed to extinguish lithium-ion fires to prevent the fires from reaching thermal runaway, which can cause serious damage to infrastructures and put occupants lives at risk.



INVESTMENT/FINANCIAL

- 4l extinguishers retail price is \$249 when purchasing between 1-72
- 5l extinguisher retail price is \$310 when purchasing between 1-50



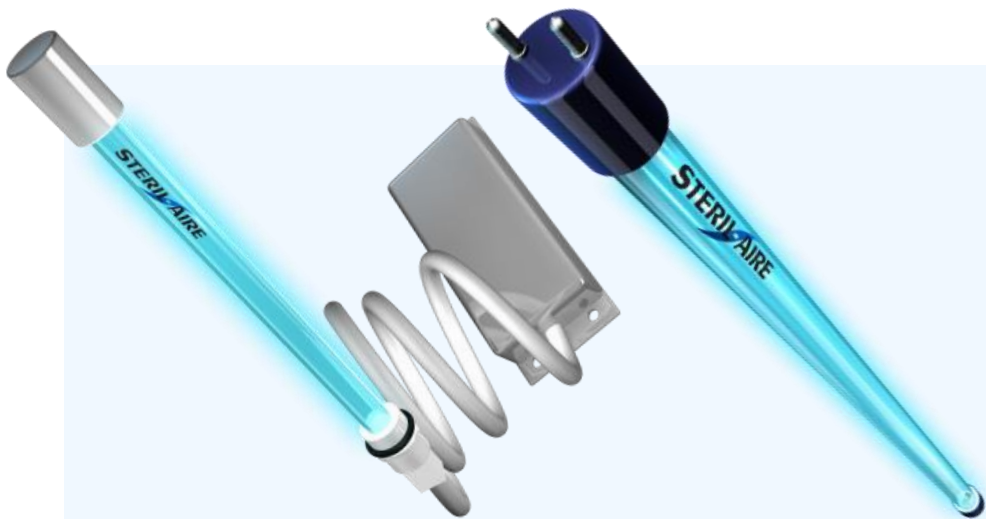
THE SOLUTION

BGIS identified the F500 Extinguisher, which is specifically designed to extinguish lithium-ion battery fires to prevent thermal runaway.



MEASURE OF SUCCESS

- Knowing the environment is protected to the best of our abilities
- Reducing the risk to building occupants client satisfaction



CASE STUDY

Air Handling Unit Ultraviolet Lighting

Steril-Aire is the global leader in high-output ultraviolet germicidal solutions for improved indoor air quality and energy efficiency. Installed in new or existing HVAC systems, the UVC lamps keep HVAC coils and drain pans clean, reducing energy consumption and costly cleaning programs. UVC Emitters improve HVAC environmental hygiene, making a vital contribution to indoor air quality.



DESCRIPTION

Numerous studies have shown that the heating, ventilating and air conditioning (HVAC) system is an amplifier, reservoir and transportation mode for mold and bacteria throughout a building. These biologicals have also been linked to hospital acquired infections as well as Sick Building Syndrome and allergy and asthma triggers.



APPROACH

BGIS is trialling the concept with the installation of 17 high-output ultraviolet lamps into existing AHUs at RAAF Richmond. The installation is to be carried out by our own BGIS Self Perform Team.



INVESTMENT

For the 17 UV lamps and installation the CAPEX investment is **\$65,428.04** including GST and mark up



MEASURES OF SUCCESS

6-month Pilot
Significantly reduced cleaning
Reduced maintenance
Reduce energy consumption (comparison of meter from last year to this year)
Greater cleanliness



ADDED VALUE

- Financial - Reduces the overall energy consumption of the AHUs, reducing the Defence electricity bill.
- Financial - Reduced maintenance / cleaning and increase cycle life of AHUs.
- Environment - Reduced energy consumption reduces the Defence carbon footprint.
- Capability - Reduced maintenance and issues relating to AHUs will lead to less downtime and disruption to Defence.
- Safety - Installation of the UV bulbs will increase the cleanliness (sterile) of the air circulating the hospital.



CASE STUDY

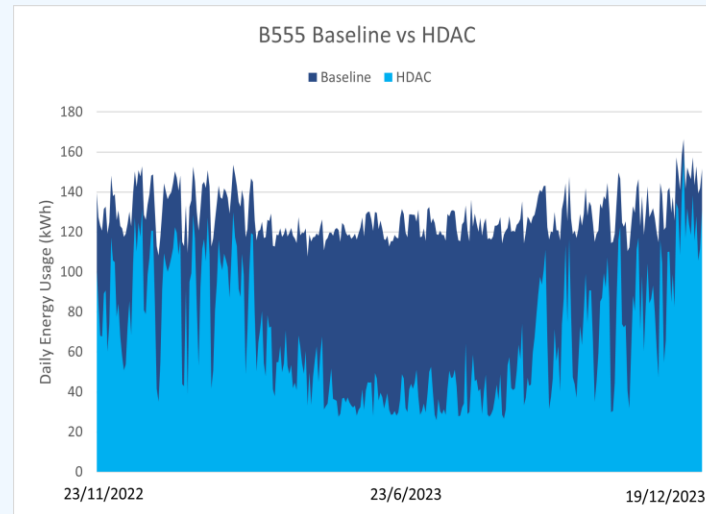
HDAC – Machine Learning

HDAC (HVAC Data Acquisition Control) utilises machine learning to ‘learn’ the connected systems operation and through its **Deterministic Artificial Intelligence**, making crucial adjustments to the system, which results in achieving significant energy savings and running costs.



Refrigeration and air conditioning is the largest single sector user of electricity globally. In commercial applications, this **contributes well more than 50% of the electricity spend!** Governments have mandated NetZero targets by 2050, therefore we all need to act!

HDAC (HVAC Data Acquisition Control) is a world first optimisation technology that can learn and make necessary adjustment through its artificial intelligence technology to generate significant energy savings and reduce running costs.



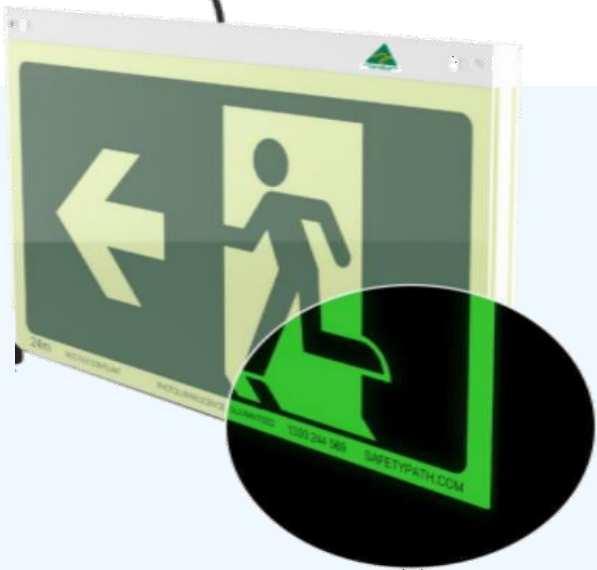
WHY IS THIS AN INNOVATIVE SOLUTION?

- Easy to implement, easy to train existing technicians and can be retrofitted
- Cost effective product that can be retrofitted to existing HVAC units across the base and generate energy savings of up to 40%!
- Machine Learning, Predictive Maintenance and easy to use dashboards with API functionality. Security approved for use on site.
- Reduction of energy savings
- Reduction of running costs
- Asset longevity and stability
- Customer satisfaction



KEY CONTACT DETAILS

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CASE STUDY

Environmental Exit Light

Hybrid LED Exit Sign utilises a photoluminescent technology that is charged through a 0.74-Watt LED strip when power is available. If power is lost it illuminates providing a clear indication path of exit for building occupants. It does not utilise a battery, therefore there is no requirement to conduct a 90-min discharge test. It is compliant with NCC and AS2293.1.



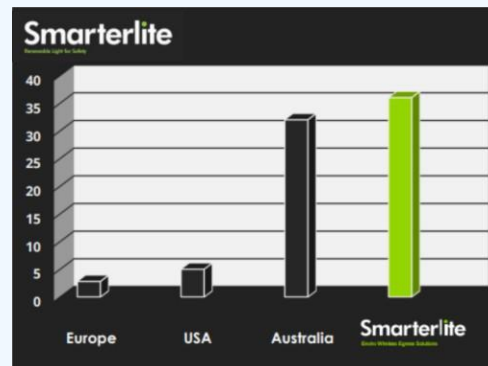
THE ISSUE

Standard LED exit lights utilise batteries and require a 90 min discharge test every 6-months. The fittings have an average shelf life of 5 years and produce a large amount of E-waste scaled over large clients' portfolios.



THE SOLUTION

Hybrid LED Exit Sign ingeniously replaces failure-prone electric-batteries with photoluminescent technology so that the Hybrid Exit Sign reliably works whenever the power goes out.



INVESTMENT/FINANCIAL

- \$240 per fitting – Reduced if procured in higher quantities



WHY IS THIS AN INNOVATIVE SOLUTION?

- Battery free
- Operate off 0.74 Watts of power – 75-90% reduction in energy
- No need for 90-minute discharge test
- E-waste savings of 1-2kg per sign
- Secure product – No Wi-Fi connection
- Australian made and own



MEASURES OF SUCCESS

- Energy Savings
- Cost Savings
- Lowers Environmental Harm, High ROI.



KEY CONTACT DETAILS

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CASE STUDY

The Good Oil – Plant Based Lubricant

The Good Oil is a premium penetrating lubricant and protectant, which is a new standard in efficiency, safety and environmental care. Made with a revolutionary, renewable, plant-based formula – no petroleum ingredients.



THE ISSUE

Penetrating lubricants contain hazardous and flammable substances and chemicals creating situations where worker and environment are exposed to unnecessary risk and impact.



THE SOLUTION

The good oil penetrating lubricant product provides the user a safe, green, non-hazardous solution. Additionally, this product is manufactured from renewable plant-based technology.



MEASURES OF SUCCESS

- Provides no environmental impact.
- Comparable pricing to its competitors.
- Able to remove competitors' hazardous lubricants off ChemAlert.
- Meets performance for technicians needs



INVESTMENT/FINANCIAL

- \$9 for 250ml bottle or \$12 for 500ml bottle.
- Pricing can be reduced if purchased in larger quantities



WHY IS THIS AN INNOVATIVE SOLUTION?

- **Performance:** Exceptional penetrating and lubricating properties – outstanding friction reduction – non-drying – long lasting protection. It is An environmentally friendly alternate product to its competitors such as INOX and WD-40.
- **Safety:** Non-flammable – non-hazardous – non-toxic.
- **Environmental:** Readily biodegradable – non-phytotoxic – no environmental impact. Made from plant-based products. No hazardous environmental emissions





CASE STUDY

Polymer Safety Bollards

The Polymer Safety Bollard is an alternate solution to a common steel bollard. The Polymer Bollard uses advance material technology to flex and fully recover from repeat impacts without the need for maintenance and costly floor or material repairs.

PRODUCT VIDEO LINK:

https://youtu.be/J24CEeN_Prw



THE ISSUE

Damage caused by vehicles is very common on base. This can cause damage to further assets and is a timely and costly exercise to replace the damaged bollards and associated equipment it is protection.



THE SOLUTION

The A-Safe Polymer Bollard was sourced as innovation means to replace bollards as they fail to become the minimum standard. This will save time and money over time as the Polymer Bollards can withstand consistent impact strikes.



MEASURES OF SUCCESS

- Reduction in reactive spend on bollards/barriers
- Reduction in property spend damage
- Reduced risk



INVESTMENT/FINANCIAL

The bollards vary in price depending on style and installation. For the traditional industrial bollards, it was \$500 a bollard.



WHY IS THIS AN INNOVATIVE SOLUTION?

- Traditional steel barriers are costly, difficult to maintain and often not fit for industrial environments. A-SAFE products are uniquely designed for the toughest industrial workplaces
- The A-Safe Polymer Bollard is made from the toughest tested material on the market making it a standout compared to anything designed with the same intended purpose

COSTS INCURRED ACROSS THE DEFENCE ESTATE

| Row Labels | Count of Request No | Sum of PO Value |
|--------------------|---------------------|---------------------|
| 2020 | 48 | \$100,793.03 |
| 2021 | 65 | \$127,706.7 |
| 2022 | 40 | \$52,267.33 |
| Grand Total | 153 | \$280,767.06 |

KEY CONTACT DETAILS

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CASE STUDY

Virtual Reality Safety Training

Client: Qantas

At BGIS, we are constantly innovating with our clients who look to us for new ideas to drive efficiencies. BGIS prioritises the safety of our people, vendors, clients and communities in which we operate and actively collaborate with our stakeholders to be safer together. It makes sense then to look for innovative ways to keep our people safe and well-prepared. That's why we've partnered with Next World in a trial to bring Virtual Reality safety training to our teams and clients. This cutting-edge technology allows us to provide immersive, hands-on learning experiences that are both engaging and effective.

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THANK YOU