G4S Academy

SUSTAINABLE SECURITY:
8 CREATIVE APPROACHES





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INTRO: SUSTAINABILITY AND SECURITY SOLUTION DESIGN?

Sustainability is an ongoing puzzle - a delicate balancing act between profitability, long-term functionality and doing the right thing.

After all, there's only one earth and striving for sustainability will help preserve the planet and its resources for future generations.

But it's not always easy and the security industry faces its own unique challenges when it comes to sustainability.

For example:

- Often large security company fleets are required for transport between client sites. While many companies are upgrading to electric vehicles, it still takes time to offset these emissions.
- The physical technologies used, such as CCTV cameras and other electronic equipment, create carbon emissions and may also leak toxins into the environment when improperly disposed of.
- Security-related data alone needs a huge amount of online data storage space for videos, files and photos. Unnecessarily stored data is estimated to consume 16,000+ tonnes of carbon every year.
- Corporate uniforms create approximately 15,000 tonnes of waste every year.

Discovering sustainable solutions to these problems and designing sustainable security solutions will require an abundance of one of the earth's most precious resources: creativity.

WHEN IT COMES TO SUSTAINABILITY, LESS IS SOMETIMES MORE

When it comes to solving the problem of making our security approach more sustainable, the tendency has been to throw more money and technology at the problem. It's tempting to conclude that if we can just develop the latest tech, we'll be able to perform better and more efficiently.

However, we should let go of the idea that technology is always the answer, or that the problem needs to be solved in the conventional way.

In some situations, we actually benefit from looking back at simpler solutions that mankind has been using for hundreds of years. When we take a more creative and innovative approach, we often come up with solutions that are not only more sustainable - but also simpler, more robust and more affordable.

The following are eight creative and innovative approaches to security that allow teams to operate in a more sustainable way.

8 CREATIVE WAYS TO APPROACH SUSTAINABLE SECURITY

1. Use Naturally Existing Features



What if nature has already given you all the features you need to make a site more secure? Taking the natural features of a location into account when designing security solutions can save resources while preserving the environment.

For example, building your property next to a natural feature such as a lake, dense woodland or undulating ground ensures that no vehicles can approach from that direction. A water source directly next to the building is also valuable in the event of a fire or for other essential services such as cooling.

Plants or dense shrubbery can also serve as useful tools in your security design. A dense row of trees can be a great way to deter vehicles from approaching, while also adding shade and improving air quality.

In fact, there is evidence proving that simply planting trees in an area will reduce crime. The research shows that a 10% increase in trees within an area roughly equals a 12 percent decrease in crime. (This could be considered the opposite of the Broken Windows Theory, which states that visible signs of crime or destruction create an environment that encourages further crime and disorder.)

This can also apply to the topography of a site. For example, if you build your facility into a hillside it will naturally be secured on three sides. If you build on a high point, you'll have maximum visibility of the surrounding area. (There's a reason why castles and forts have been built in these naturally defensible positions for thousands of years.)

This approach is doubly beneficial. Not only does it save the energy and resources it would cost to install man-made features, it prevents the destruction of natural features and the loss of their benefits. For example, bulldozing the trees to install a row of bollards would not only cost more, but bollards don't offer the benefit of giving out oxygen.

2. Manage Sites Remotely

While there has been a global push towards remote work over the last several years, the COVID-19 pandemic forced many organisations around the world to take the leap. Remote work has now become more common than ever. According to a survey by Upwork cited in Security Magazine, 42.8% of the American workforce remains fully remote.

Working from home has proven to make workers more productive and to improve employee retention rates. It's also much more sustainable as well. Of course, security officers themselves can't work from home as they have to be on site to do their jobs. However, there are often many other supporting roles that can be performed from home, which will reduce commutes, decrease carbon emissions and lower energy usage.

Seek out any opportunity to have meetings online rather than in person, as this reduces the need for unnecessary business travel. If meetings absolutely must be held in person, the team should prioritise public transport or car sharing.

AI-based security camera technology can be useful in achieving this aim, because they aid human teams by identifying and flagging unusual behaviour. When you have an AI-powered security system monitoring for intrusions or abnormal behaviour, there is less need for a huge team on site to check the real-time video streams.

Of course, while remote working models offer higher productivity, lower costs and sustainability advantages, they also have their downsides. Remote workers can feel isolated and can be at higher risk of burnout due to the difficulty of separating work from leisure time.

If you implement a work-from-home model, it will be essential to build in safeguards for this and provide your employees with the necessary support.



3. Employ Humans Instead of Robots



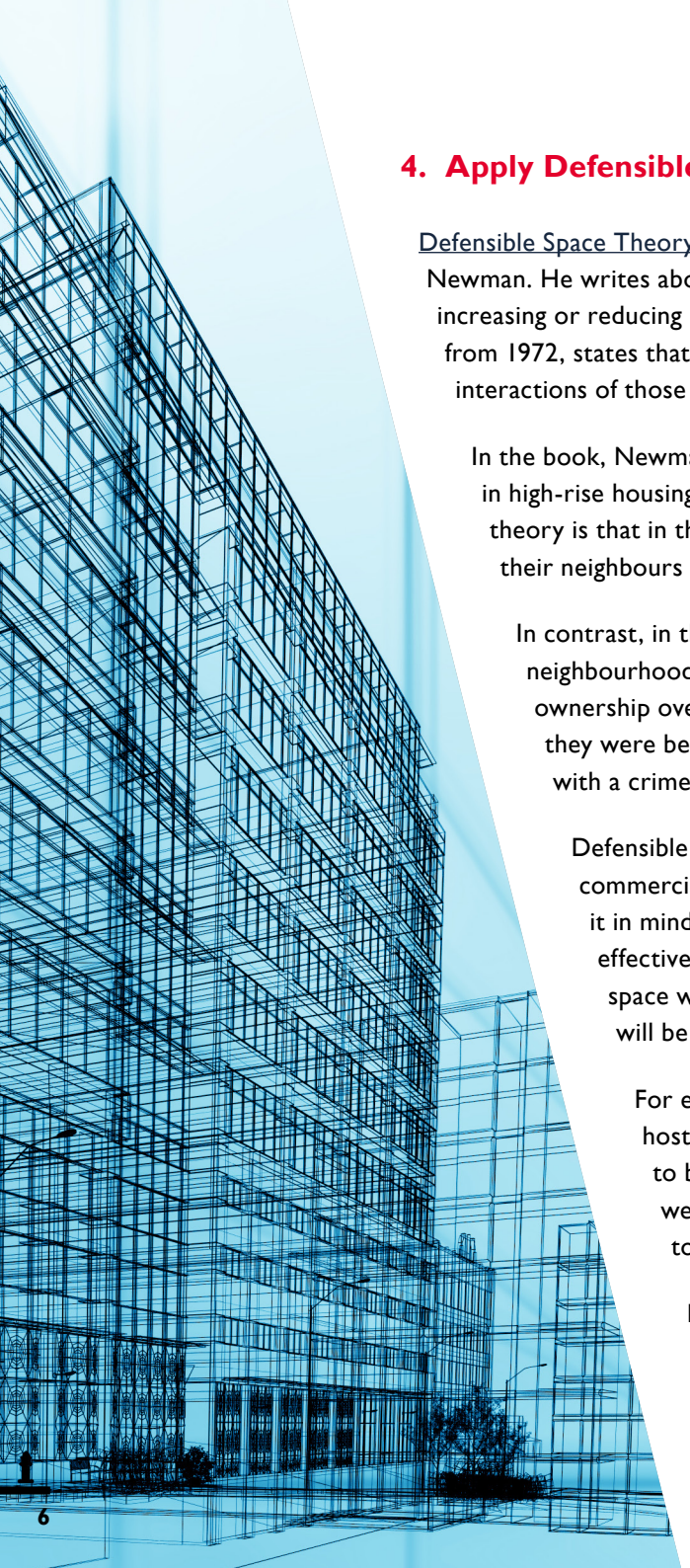
Although the trend has been towards automating everything that can possibly be automated, sometimes a human being really is the most effective AND sustainable choice for the job.

For example, Mercedes Benz has recently turned the clock backwards at its flagship factory by reducing their dependence on automation and hiring more humans. Of course, robots are highly efficient at doing one repetitive, programmable job over and over again. However, humans are better able to handle the bespoke complexity of the customisation options available for the S-Class saloon model.

There are so many different variables that go into manufacturing these cars, such as different types of cup holders, trims, wheels, etc. Robots are simply not as flexible and adaptable as humans when it comes to these individualised production orders.

Automation CAN be a better option in some circumstances, but not all. This is another example of a case in which more technology doesn't necessarily equal a better outcome. There are certainly applications for this idea in the security industry as well.

Before investing in technology to solve a security problem (which has energy and production costs), ask yourself whether the job could be done more sustainably by a human. In fact, even with the recent developments in AI, often a human is still the best detection and response solution for non-recurring situations.



4. Apply Defensible Space Theory

Defensible Space Theory is a concept developed by architect and city planner Oscar Newman. He writes about how architecture plays an incredibly important role in increasing or reducing crime. The theory, expanded upon in his book Defensible Space from 1972, states that security depends both on physical elements as well as the social interactions of those in the environment.

In the book, Newman writes about a study in New York that found higher crime rates in high-rise housing projects compared to low-rise housing complexes. Newman's theory is that in the high-rise buildings, the residents were more disconnected from their neighbours and felt no personal responsibility for the building as a whole.

In contrast, in the smaller low-rise complexes, residents could see their neighbourhoods and the common spaces more easily and felt a sense of ownership over the space. Plus, the design of the space made intruders feel like they were being watched, so they were less likely to feel like they could get away with a crime.

Defensible Space Theory is applicable to any built environment, from a commercial premise to a warehouse to an apartment building. By keeping it in mind when designing security solutions, you can use resources more effectively and maximise results. When done well, people who are using the space will hardly feel the presence of the security measures because they will be in harmony with the environment.

For example, sculptures and seating areas can serve as perimeter and hostile vehicle mitigation elements around a building, yet don't appear to be security. Mixing residential and commercial spaces alongside well-lit pathways and shared spaces means that there will be residents to keep a watchful eye 24/7.

Plus, these principles of design often have the bonus side effect of fostering community and making residents and workers feel less isolated and alone.

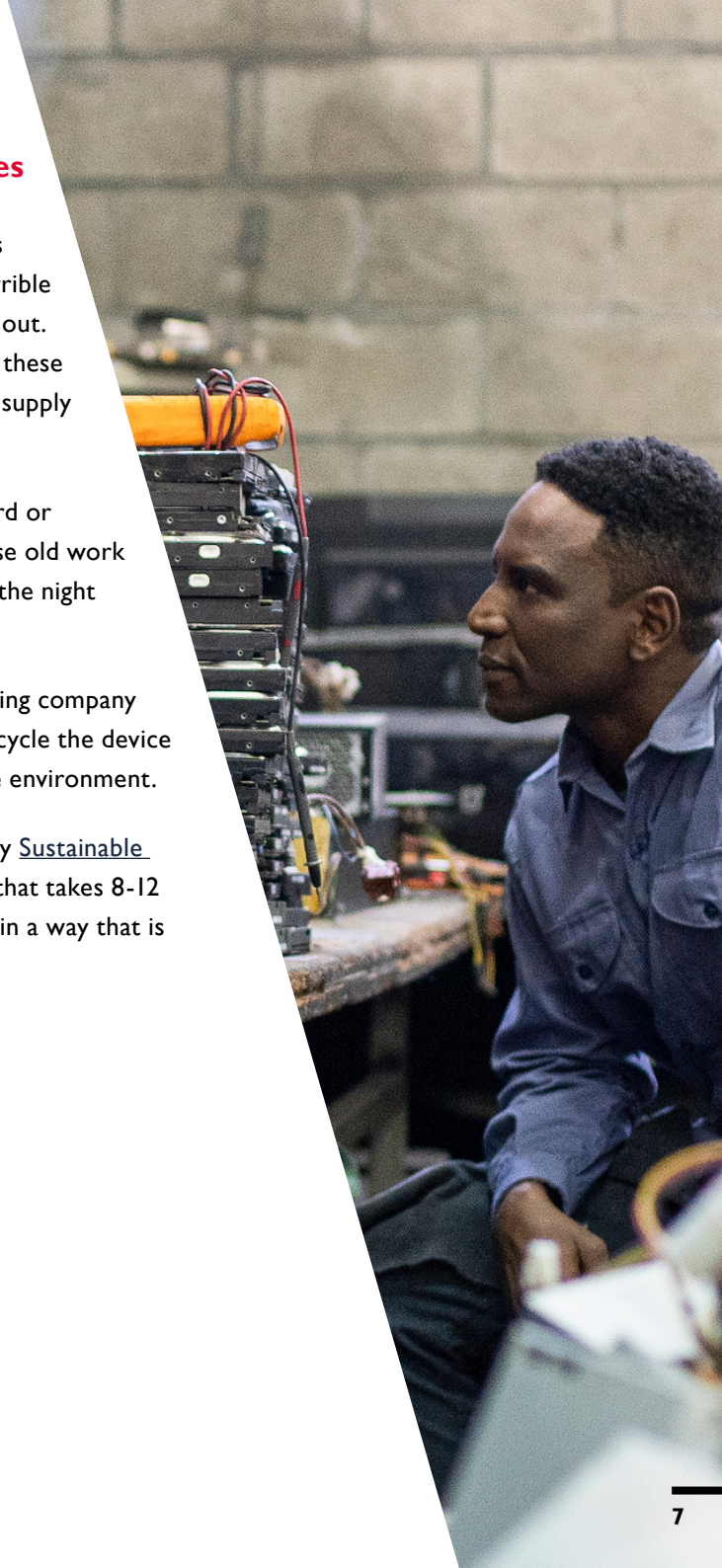
5. Don’t Throw Away or Store Old Work Devices

Throwing away old work computers is a security risk, as criminals can take advantage of carelessly discarded equipment. It’s also terrible for the environment, as hazardous materials inside them can leak out. Electronics are full of toxins such as cadmium, lead and arsenic. If these materials get into a landfill, they can leach into the soil and water supply and cause serious harm to humans and wildlife.

But you also don’t want to store old equipment away in a cupboard or storage room either. Since no one is really keeping an eye on those old work phones or laptops, it would be easy for someone to take one for the night without anyone noticing and hack into it.

The best and most sustainable thing to do is use a certified recycling company with a shredder that will destroy the harddrive. They will then recycle the device in the correct way so that the harmful materials don’t damage the environment.

Make sure the recycling company you choose has been certified by Sustainable Electronics Recycling International. This is a serious certification that takes 8-12 months to complete and ensures that all electronics are recycled in a way that is environmentally friendly and sustainable.





6. Use Sound In Innovative Ways

Sound is a simple tool that is incredibly low cost and creates no pollution or byproduct, but has been proven to improve security.

When shopkeepers in the UK had a problem with teenagers drinking and loitering outside their shops and posing a security threat, they used a device known as the "Mosquito". It emits an annoying high-pitched sound (somewhat like a dog whistle) that can only be heard by young people.

Anyone older than their mid-20s will not be able to hear the tone, but the younger crowds who were causing issues found it so irritating that they left the shops alone.

This wasn't the first time businesses used sound to deter loitering and antisocial behaviour. Anne Midgette writes for the Washington Post about how the Port Authority Bus Terminal in New York played classical music in their waiting areas. The article also mentions how, when the London Underground began playing classical music in their stations in 2005, "verbal abuse and physical attacks by young people" decreased by 33%.

Anne writes; "Playing music in any space redefines that space, much as painting a mural on the side of a building affects the space around it: It is transformed from a no-man's-land to a place with an identity, a kind of self-awareness."

When the music gives the space this type of self-awareness, those who might act in antisocial ways within the space feel more self-conscious about doing so. The music reminds them that the space is not theirs.

But of course, it's important to be careful with this type of approach. It can be a clever and environmentally friendly way to reduce security incidents, but it can also teeter into dystopian territory if it is not used in a compassionate way. Take for example, the homeless shelter and safe drug consumption site in downtown Price George, British Columbia that received criticism for blasting a three-minute opera clip on repeat.

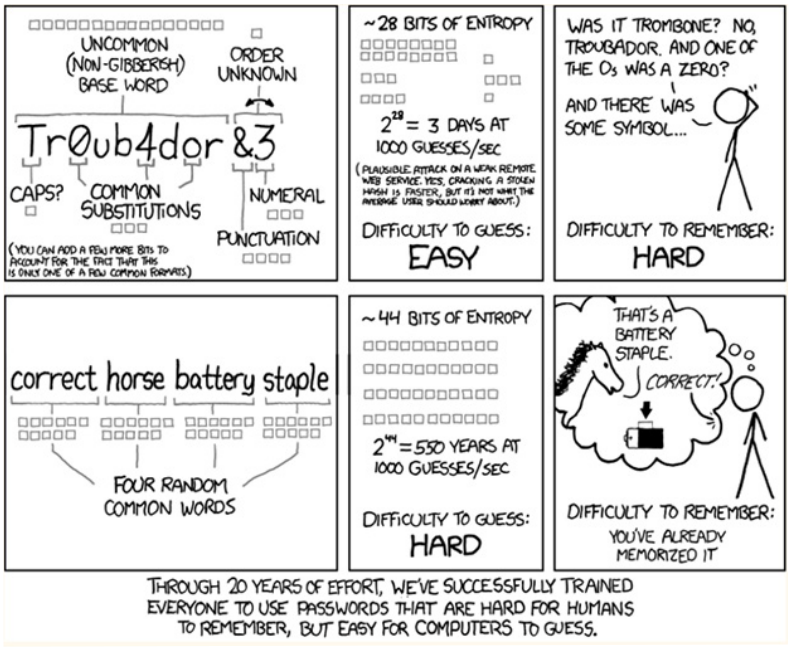
This approach was so obtrusive and extreme that it came across as cruel, especially in a space designed to help marginalised members of the community. While sound and music can be employed in creative ways to improve security sustainably, it has to be done with empathy.

7. Use Passphrases Instead of Passwords

The comic below is a great example of how something simple and human-focused is actually more secure than the alternative. Simply changing the way we create passwords could help security systems operate better AND be easier to use.

The accepted practice when it comes to passwords is to use a long string of random letters and numbers. But it turns out that this actually doesn't make sense, for humans or for computers.

By training everyone in the company to use passphrases rather than passwords, you could help make your databases more secure against hacking - in a way that consumes absolutely no extra resources. Also, since these passphrases are easier for humans to remember, you'll also spend fewer resources on tech support issues where employees have forgotten their passwords.



In fact, you'll likely find that your facilities are more secure. Security architect Avi Douglen has a "Rule of Usability" that is so famous it's been printed on a t-shirt.

"Security at the expense of usability comes at the expense of security."

In other words, if your secure system isn't easy for people to use, people won't use it. They will find a way to bypass the system and use an easier process that doesn't slow them down, thus negating the security benefit completely.

8. Go Looking For Problems

The typical approach to "staying up to date" with security threats is to keep an eye on the information sources and watch out for any newly discovered vulnerabilities that someone else has already discovered and told the world about.

But there's a problem with this approach. Hackers are creative and they are always looking for fresh ideas and new ways to carry out their attacks. They use the newest technology, as well as exploiting human vulnerabilities in unique ways to gain access.

When it comes to security, you'll protect yourself more effectively if you can be creative as well. Instead of just taking a reactive approach, you'll need to be proactively thinking outside the box and looking for situations where potential problems might occur.

This is a mindset that can be instilled within everyone on your team, so that the entire approach to security changes. Encourage your security staff not to just ask the same old questions and expect the same old answers. They should be curious and go looking for potential problems.

You can also hire for this quality. Instead of seeking out people who follow the rules and do things how they have always been done, look for candidates who demonstrate out-of-the-box thinking. By being inquisitive and creative, you'll be more likely to spot problems before they happen and save hassle, time and resources.



SUSTAINABLE CHOICES LEAD TO LONG TERM VALUE

Many security firms will begin striving towards sustainability efforts because they make logical sense to the company's bottom line, or because their clients and customers demand it. When you integrate sustainability into all key decisions, you future-proof the company.

Security firms often work with global businesses with corporate sustainability plans and net zero carbon goals. According to McKinsey & Company, sustainability can reduce costs and improve operating profits by up to 60%. In these business partnerships, there is a duty to uphold high sustainability standards, as this is something that clients expect. The pressure is high to seek innovative ways to champion sustainability across all products.

In addition, consumers are also increasingly sustainability-conscious and this factors into their brand loyalty. According to research by Oracle, 70% of people claim that they would cancel their relationship with a brand that didn't take sustainability seriously.

But the responsibility of making sustainable choices isn't simply about looking good for clients and customers. It's not just a business decision, it's a moral one too.

With this in mind, all security and safety measures should be considered within the context of sustainable design. Realistically, budgetary and logistic restraints often require compromise and tradeoffs.

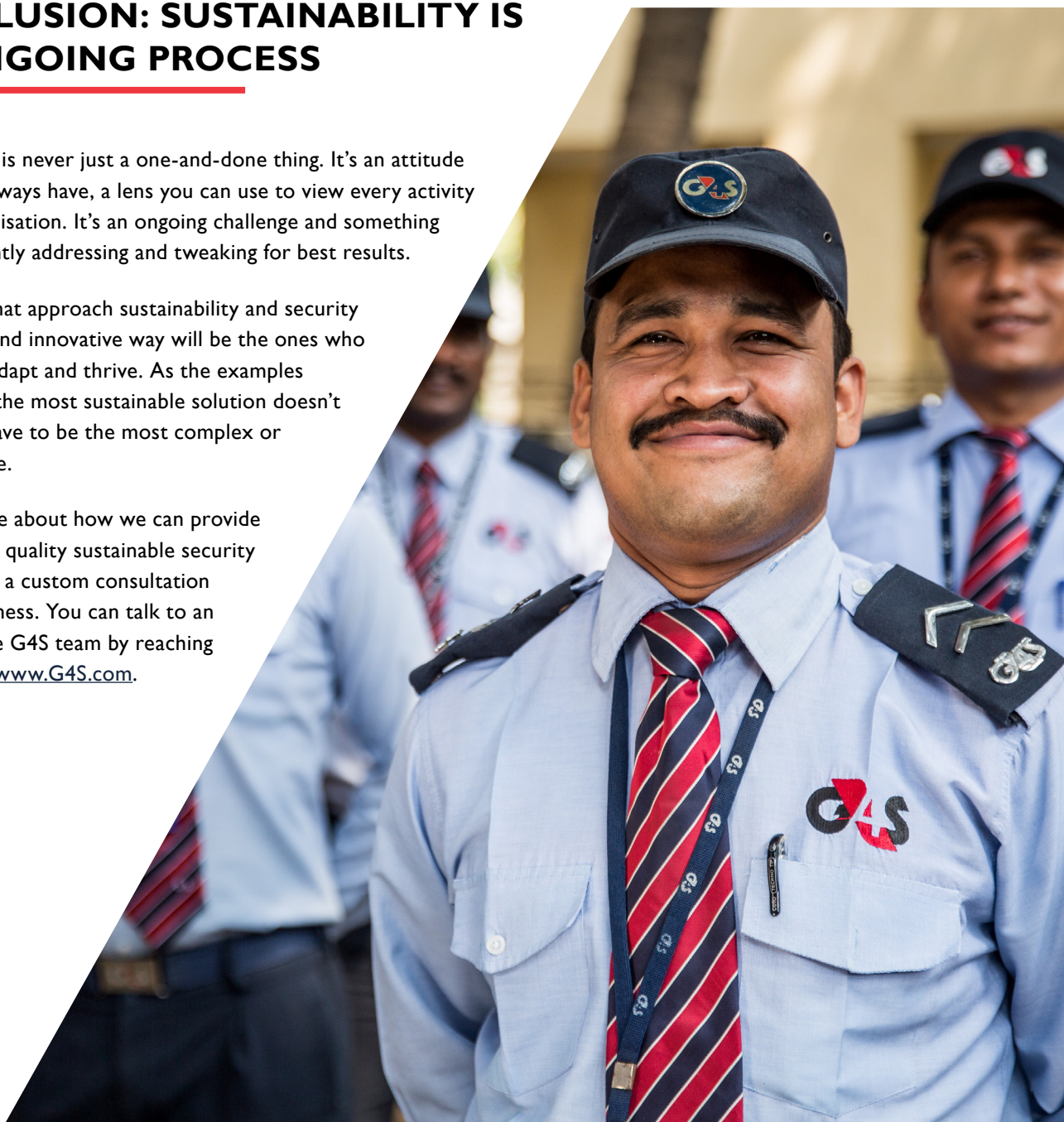
With creative thinking and unconventional ideas, we can offer alternatives that improve security while reducing waste, consuming fewer resources and allowing our facilities to operate more efficiently.

CONCLUSION: SUSTAINABILITY IS AN ONGOING PROCESS

Sustainability is never just a one-and-done thing. It's an attitude you should always have, a lens you can use to view every activity of your organisation. It's an ongoing challenge and something to be constantly addressing and tweaking for best results.

Companies that approach sustainability and security in this open and innovative way will be the ones who successfully adapt and thrive. As the examples above show, the most sustainable solution doesn't necessarily have to be the most complex or expensive one.

To learn more about how we can provide you with high quality sustainable security solutions, get a custom consultation for your business. You can talk to an expert on the G4S team by reaching out today at www.G4S.com.





VALUE CREATED TOGETHER

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