



ubicquia®

How to make your parks
smarter and why it matters

Parks Solution Use Case eBook





How people-friendly are your parks?

Parks play a special role in the life of communities. They bring neighborhoods together, foster fitness and wellbeing, and provide unique opportunities for people to experience nature. But attracting visitors depends on keeping parks safe, well-maintained, and appealing. That can be a challenge for park authorities with limited resources.

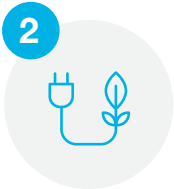
Shrinking budgets and labor shortages make it hard for many park departments to ensure public safety, track park use, and protect the environment and human health.

Connected smart technologies can change that by providing visibility and insights across the entire parks system.

Ubicquia's intelligent lighting-based solutions make it easy to adopt the capabilities you need to make your parks as people-friendly as possible. This guide explains how by looking at five ways park authorities at all levels can make their parks smarter:



Public safety



Park use



Resource optimization



Lighting control



Environmental monitoring

Safety starts with situational awareness

People use parks when they feel safe and secure, and avoid them when they don't. That makes it important to identify and respond to public safety risks quickly. Intermittent supervision and occasional drive-bys don't provide the kind of accurate, real-time, on-the-ground information park departments need. Intelligent infrastructure can help.



Video supervision helps spot crimes even before citizens call 9-1-1, enabling faster responses that can prevent incidents from escalating.¹

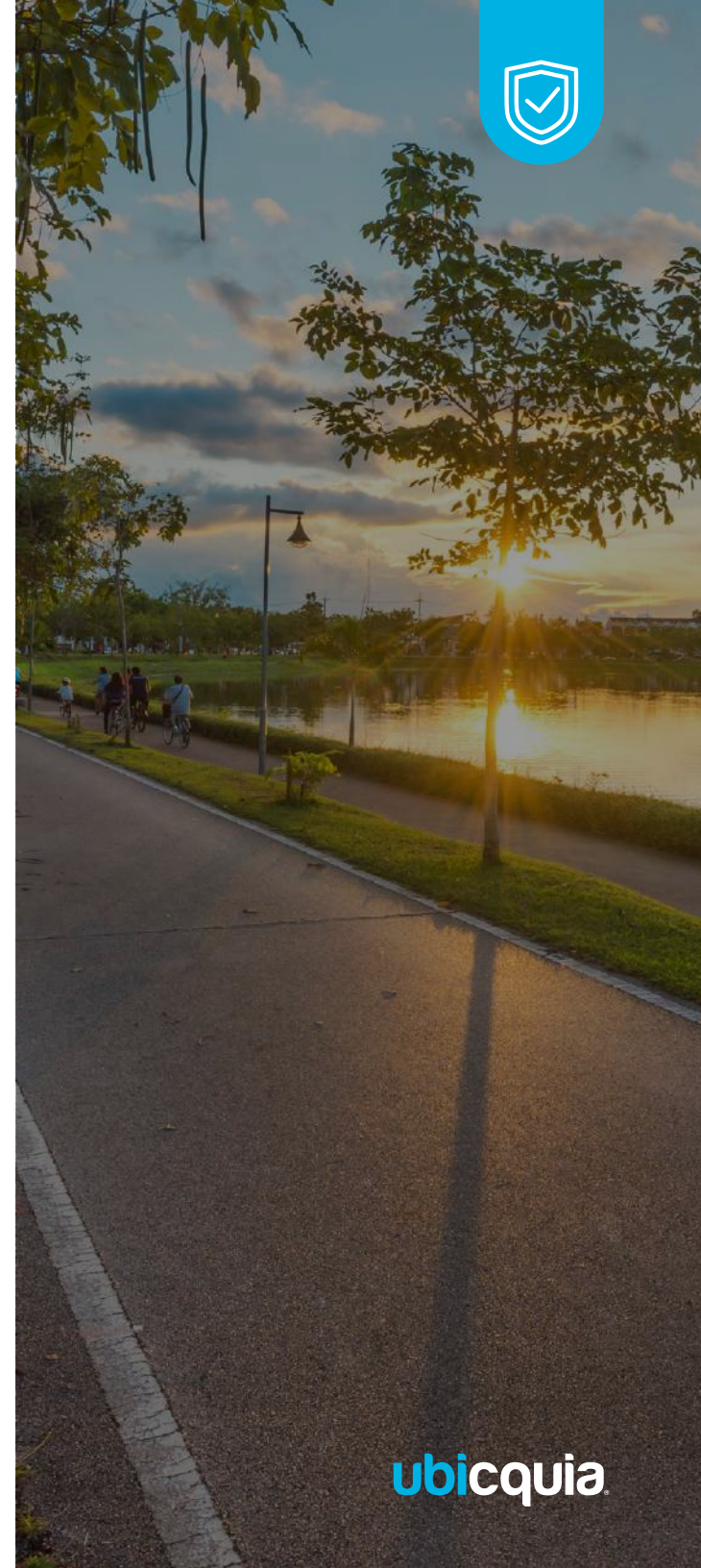
Put intelligence into action

Boost your in-park situational awareness and safety with intelligent infrastructure that supports:



LIVE VIDEO

Have eyes on your entire park at all times. Lighting-mounted video lets you supervise playgrounds, sports fields, trails, and buildings, and provides valuable evidentiary video to support investigations into possible criminal activity. You can set limits on what's captured to protect citizen privacy.





Safety starts with situational awareness



LIGHTING CONTROL

Intelligent lighting controls ensure parking lots, pathways, gazebos and other structures are lit well, in keeping with ambient light conditions. Better lighting helps park visitors feel safe and gives security teams a clearer view of what's happening on site.



WIRELESS CONNECTIVITY

In-park wireless access ensures visitors can share information and call for help if needed, which fosters a sense of safety and wellbeing.²



DATA ANALYTICS

Aggregate and analyze the information collected through video streams, park use tracking, and more to identify patterns so you can deploy resources more effectively.

Ubicquia solutions for park safety



UbiHub: Edge AI, Wi-Fi, microphones, cameras and lighting controls integrated in a single platform

UbiCell: Advanced lighting control that connects via a cellular network

UbiVu: Cloud-based management and analytics platform for your Ubicquia deployment

¹ Arizona State University Center for Problem-Oriented Policing. Video Surveillance of Public Places, 2nd Edition - Response Guide No. 4, 2021.

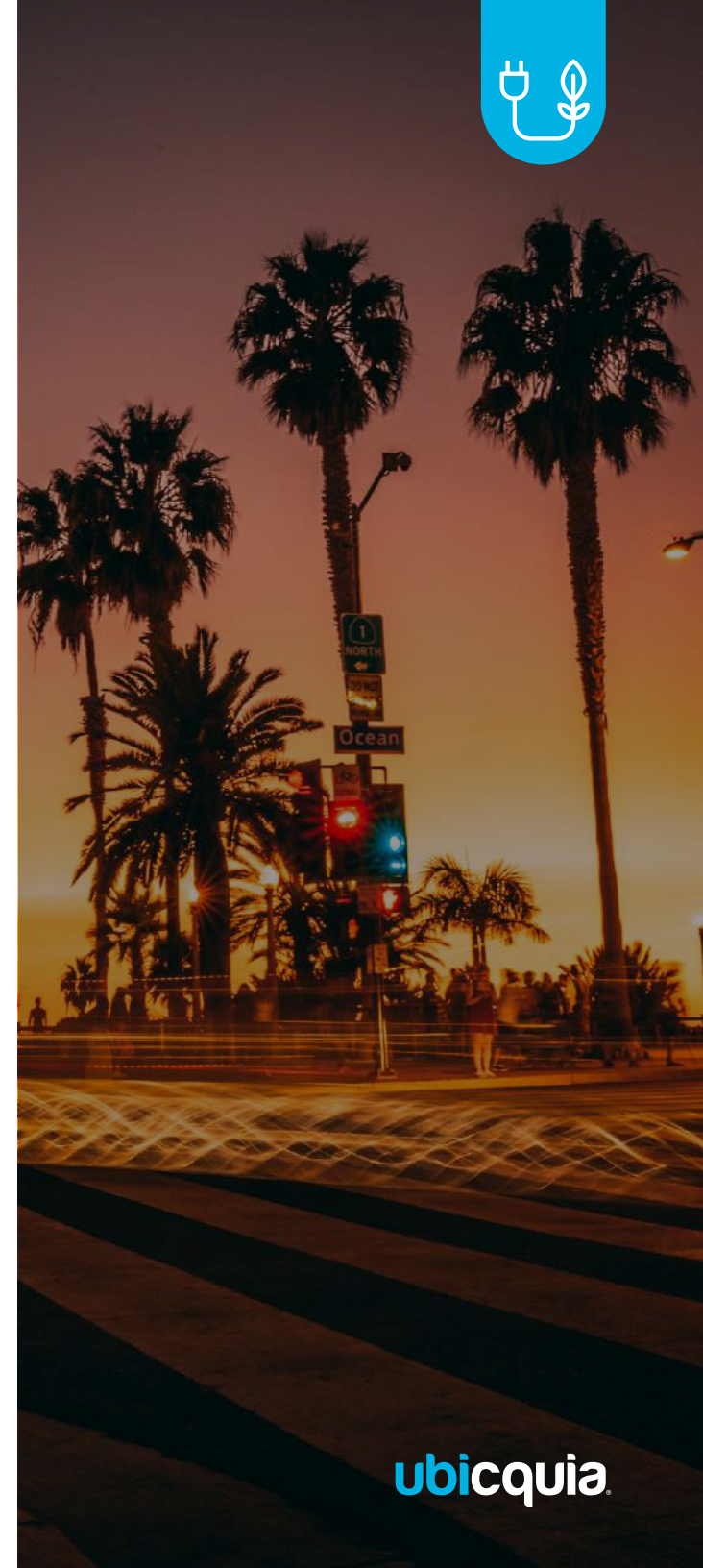
² National Recreation and Park Association. Issue Brief. "Creating Safe Park Environments to Enhance Community Wellness".

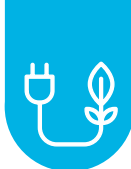
Usage data drives better decisions

Few park departments have detailed information about park use. That hampers their ability to identify maintenance priorities, plan for the future, and know which investments are truly paying off. The insights from data generated by intelligent infrastructure provide a solid foundation for smarter strategic decisions.



“Without benchmarks and measures, it is impossible to know whether a department is meeting the needs of its community members or whether it is doing better or worse, from one year to the next.”³





See the big picture

Gather usage data across your parks system, including:



INTERSECTION ANALYSIS

Deploy camera-based vehicle-counting technology on streetlights around parks to monitor traffic at key intersections. Correlate those traffic volumes with current park use and potential future demand to determine park needs going forward.



VIDEO TRACKING

Use streamed video to observe vehicle, pedestrian and bicycle traffic in parks and see which facilities get the most use. Use the insights to justify ongoing investments and build the business case for future amenities.



SMART PRIORITIZATION

Crunch the data from park use monitoring to prioritize maintenance and repair efforts and develop more accurate, targeted budget requests.



Ubicquia solutions for park use monitoring

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UbiVu: Cloud-based management and analytics platform for your Ubicquia deployment

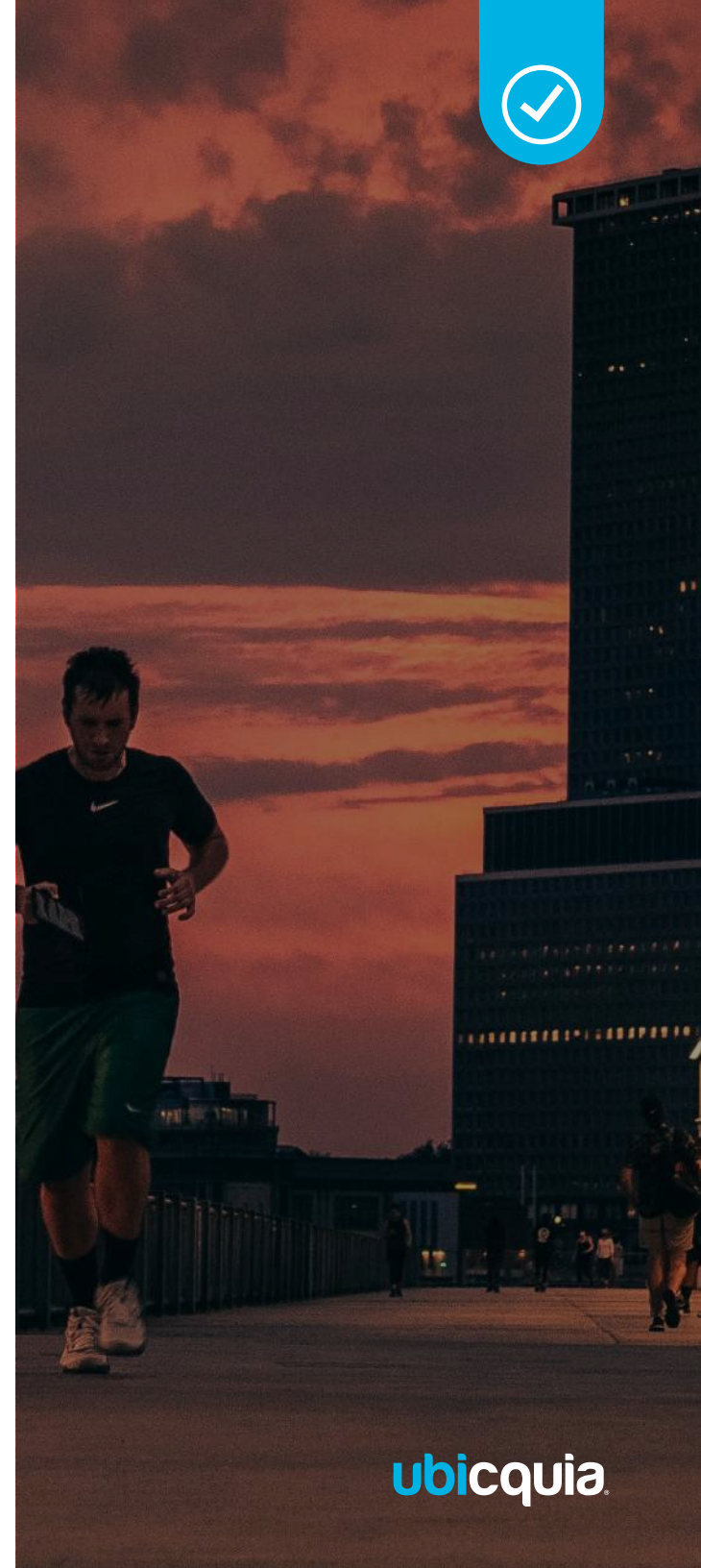
³Cohen, Deborah (MD, MPH) and Han, Bing (Ph.D.). "Measuring the Use of Public Neighborhood Parks." National Recreation and Park Association Monthly Magazine. 2018.

Intelligence lets you do more with less

Many park departments manage big, aging parks systems on limited budgets. They're also competing for talent with employers in other sectors who often have deeper pockets. Amid those constraints, departments need new ways of working smarter — not harder — to keep parks clean and well-functioning.



Despite record-high usage, two-thirds of surveyed park and recreation leaders reported budget cuts of 10% to 30% in June 2020.⁴





Go where the need is greatest

Optimize resources in parks of all sizes with intelligent infrastructure that supports:



REAL-TIME REQUIREMENTS

Many park departments today still rely on basic schedules for waste removal, grass cutting, sports field line-painting, and other routine tasks. That can mean crews are not where attention is needed most. Livestreamed video from cameras mounted on luminaires helps you see where maintenance is truly required so you can deploy teams with focus and keep your whole system in good condition.



DATA-DRIVEN DEPLOYMENT

Based on real-world observations of park upkeep needs, you can use data analytics over time to track which areas consistently require active effort and tailor your budget and resource planning to address them.



Ubicquia solutions for resource optimization

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UbiVu: Cloud-based management and analytics platform for your Ubicquia deployment

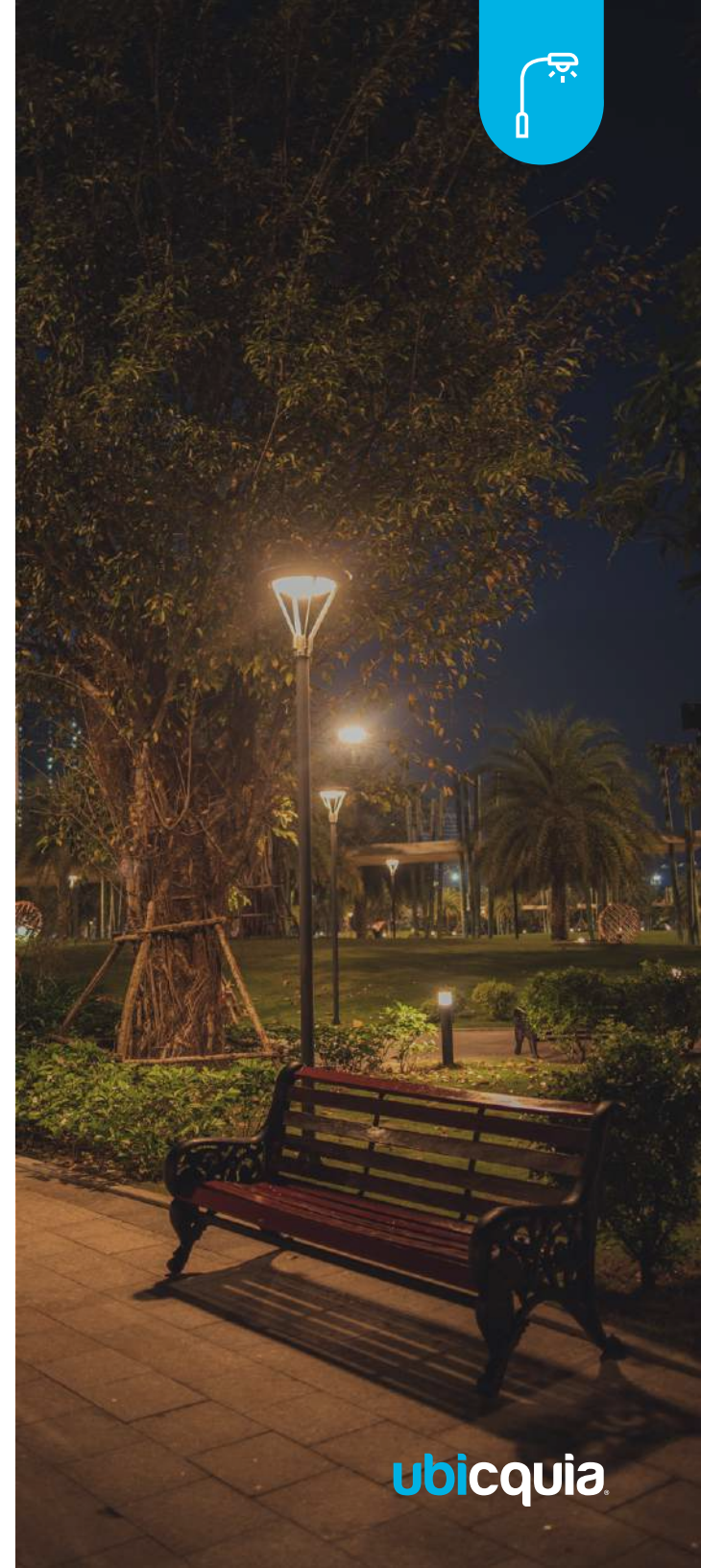
⁴Roth, Kevin. "As Park and Recreation Funding Falls, Demand Grows." National Parks Conservation Association monthly magazine. September 2020.

Lighting controls make parks more sustainable

Many government agencies are under pressure to make their operations more sustainable — especially park departments with their mandate to preserve natural spaces. Reducing energy use, protecting habitats, and providing dark sky environments requires new tools that provide better control over lighting and power consumption.



Lighting adds up to as much as 40% of municipal lighting costs and 15% of global electricity use — and is only going to grow over the next 20 years. Lighting controls can help bring that consumption down.⁵





Keep your lighting under control

Turn your existing lighting into intelligent infrastructure and minimize environmental impact with:



PRECISION SETTINGS

Advanced lighting controls make it easy to fine-tune your park lighting. Program fixtures to turn on and off in keeping with GPS-tracked changes in sunrise and sunset. Remotely dim individual lights or whole series of them to reduce energy use when full brightness isn't needed — and monitor power continuously to track and optimize consumption trends.



INTELLIGENT FEATURES

Use dimming and other control capabilities to maintain dark sky environments where night lighting isn't needed for safety. Dark sky environments minimize 'light noise' for people, plants and animals so they can have healthy biorhythms, and allow stargazers to take in the spectacle of the night sky.



Ubicquia solutions for lighting control

UbiCell: Advanced lighting control that connects via a cellular network

UbiVu: Cloud-based management and analytics platform for your Ubicquia deployment

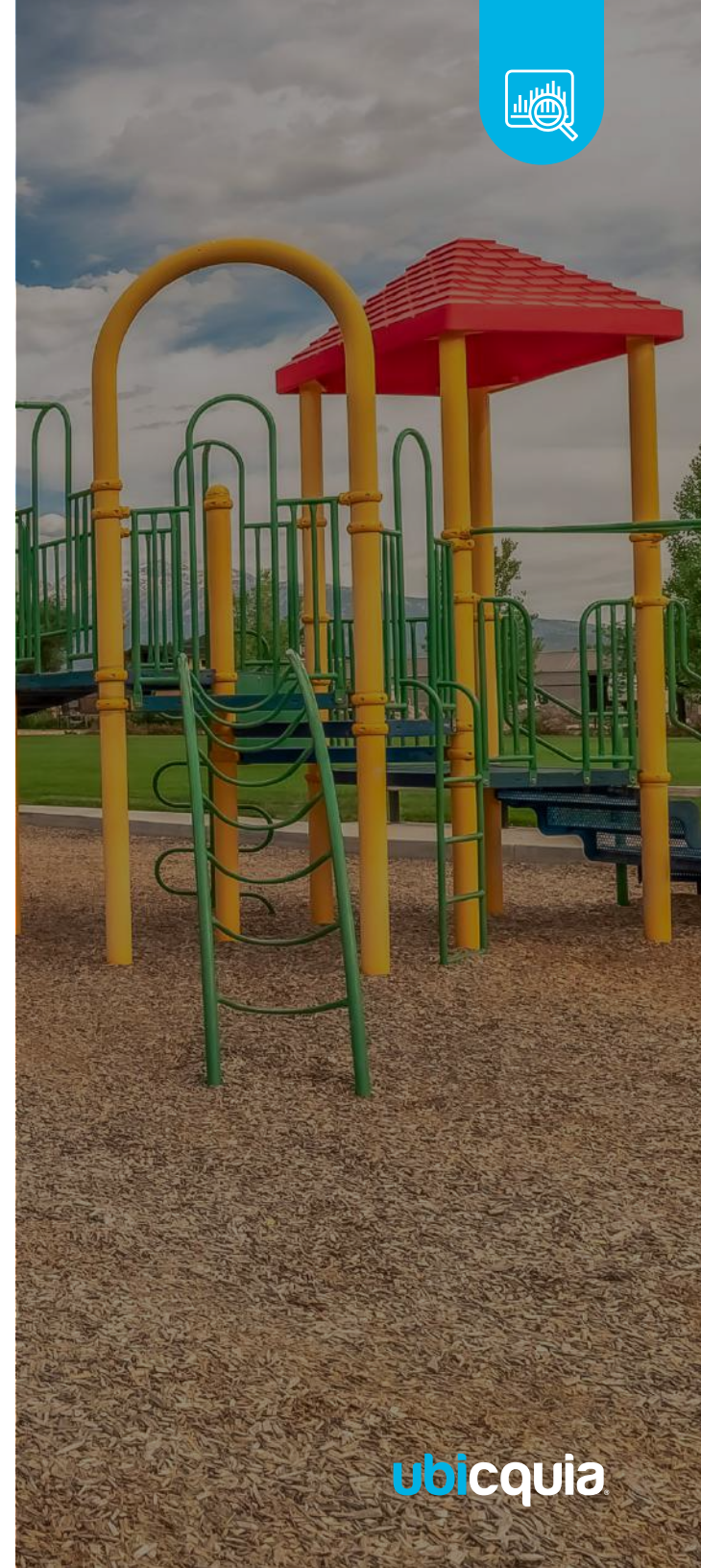
⁵ Copenhagen Centre on Energy Efficiency. Public lighting toolbox for municipal energy efficiency implementation. Accessed May 2023.

Park health and human health go hand-in-hand

Because parks are hubs of activity, their environmental conditions can have a big impact on people's wellbeing. Allergens, poor air quality, and excessive noise can affect the park experience and pose risks to human health. Intelligent infrastructure can help track key thresholds continuously.



Even short-term exposure to air pollution can have a negative impact on people's health — especially children and seniors — with risks from respiratory infections to heart disease. Monitoring is key to keeping citizens safe.⁶





Breathe easier with better data

Monitor park conditions in real time, including:



AIR QUALITY

Monitor allergens, particulate matter, temperature, pressure, and humidity for a well-rounded picture of air quality in your parks. If levels reach the thresholds you set for public safety, you can push alerts to park visitors so they can make choices to protect themselves, especially if they have asthma or other conditions that make them vulnerable.



AMBIENT NOISE

Noise isn't just a nuisance: it can increase stress levels in people and animals, affect concentration, damage hearing, and over long periods even lead to anxiety, high blood pressure, and other health issues. Monitoring noise in and around parks lets you know sooner when intervention is needed.

Ubicquia solutions for environmental monitoring

UbiHub: Edge AI, Wi-Fi, microphones, cameras and lighting controls integrated in a single platform

UbiSmart AQM+: Air quality and noise sensor that integrates with existing lighting infrastructure and UbiCell

UbiVu: Cloud-based management and analytics platform for your Ubicquia deployment



⁶World Health Organization. Health Consequences of Air Pollution on Populations. November 2021.

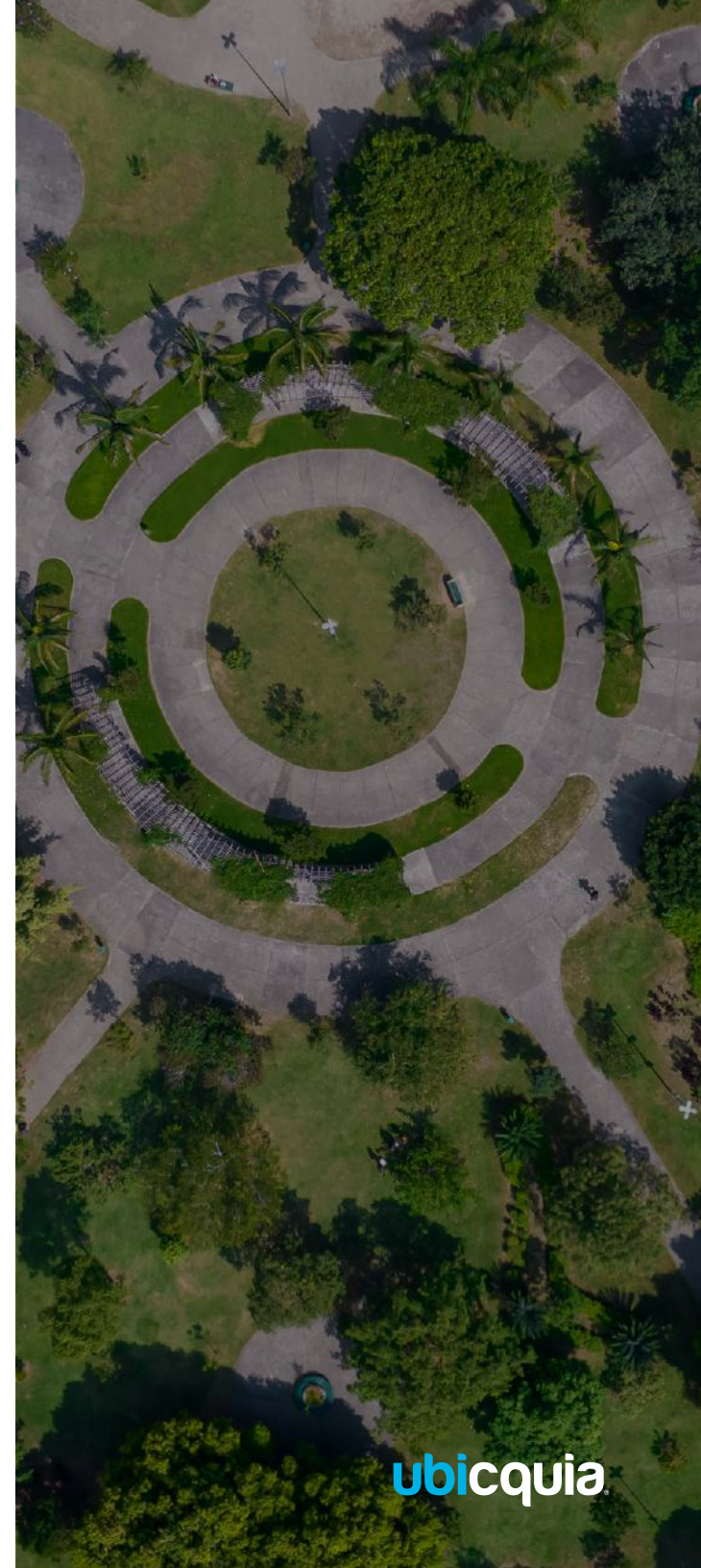
The only provider who does it all

Ubicquia is the ideal partner for park authorities seeking to increase safety, optimize operations, and improve environmental sustainability. We are the only vendor today who can cover the full range of smart park needs thanks to our single, integrated platform with cloud-based management capability.

Using existing lighting infrastructure, our platform deploys easily and economically — with no construction time or cost — and comes online in minutes. That affordability coupled with the money saved over time through energy savings and other efficiencies means Ubicquia enables smart parks for the lowest possible total cost of ownership (TCO).

Importantly, our award-winning technology is so compact and sleekly designed, it integrates seamlessly with your existing lighting infrastructure — even decorative fixtures — preserving the aesthetic appeal of your parks while boosting your connected capabilities.

For safe, optimized, sustainable parks, choose Ubicquia.



About ubicquia®

Ubicquia® started with a simple idea: we can use existing streetlights and utility poles to make communities smarter, safer and more connected. Since then, the company has helped municipalities, utilities, and communication service providers control lighting costs; accelerate 5G deployments; extend public Wi-Fi; deliver video security services; and protect against grid failures. Ubicquia's products are compatible with more than 360 million streetlights and 500 million utility poles worldwide. We are dedicated to making technology that is easy to install and affordable.

www.ubicquia.com

