

# Lighting the Way in Solar LED Technology



# CLEARWORLD™

## RETROFLEX® : THE ON-GRID, OFF-GRID, SOLAR LED SOLUTION

Optimal Design and Patented Retro-fit

All areas have an abundance of sunlight; solar lights are the best option to illuminate the streets, garden, parks and other public spaces.

Reduced dependence on conventional energy and less reliance on the national grid

Long-lasting and good-looking with CLEARWORLD'S sleek maintenance-free outer-casing design

Well-suited for commercial as well as domestic lighting applications

These lights do not pose any threat of accidents like live wires, electrocution, strangulation, and overheating

Flood and hurricane resistant

Tamper resistant

Dark sky compliant

Eliminate carbon footprint and contribute to a greener future



## Components

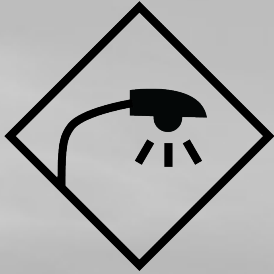
LED Diode (Many Styles/  
Lumens to choose from)

Nano Printed Lithium  
Battery, Longest lasting,  
smallest, and most heat  
and cold resilient  
technology available.

Patented Wrap around  
solar panel and design

Single or Dual LED head

Pole and pedestal  
heights available from  
13'-30'



# GPS & 5G

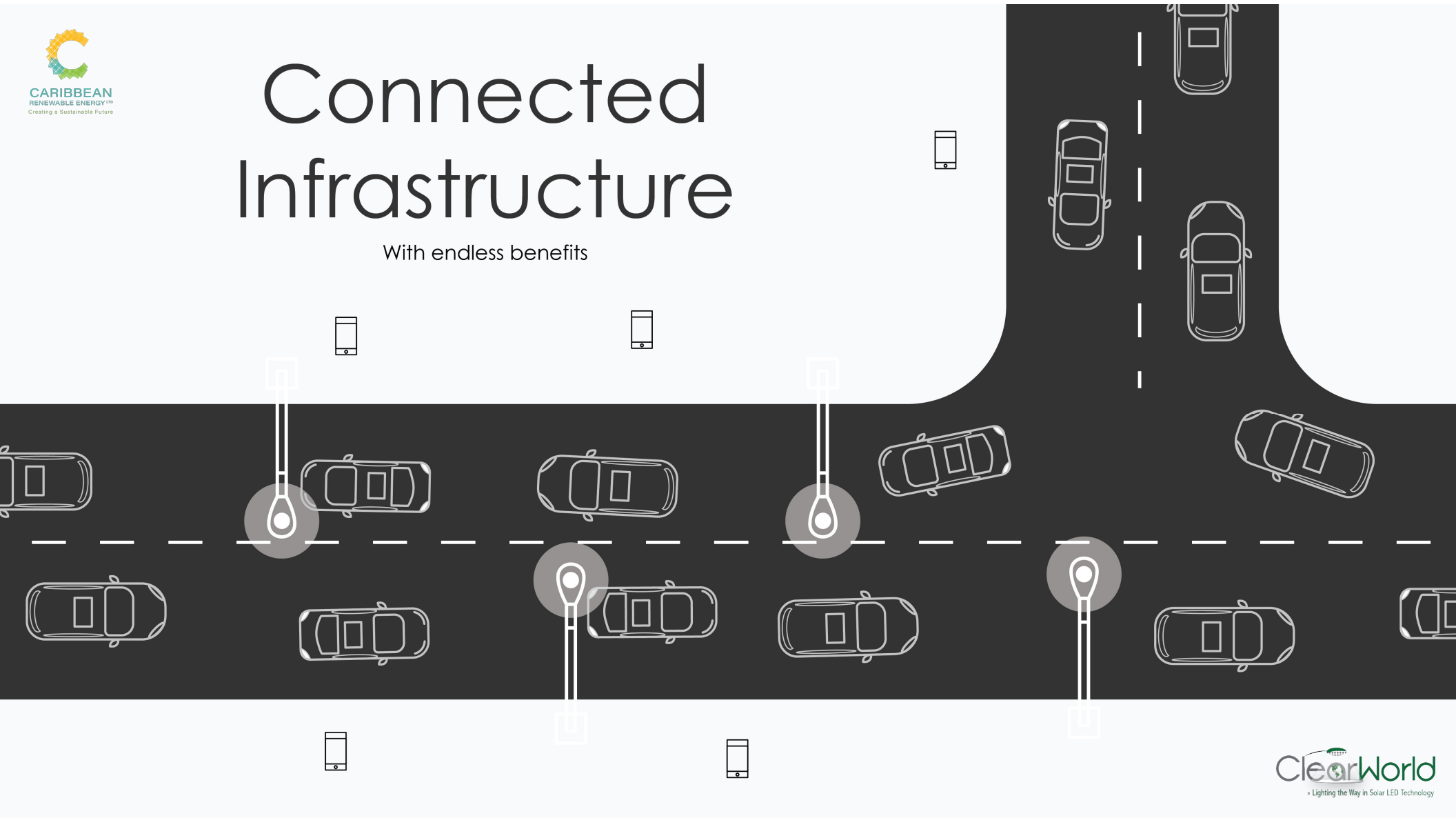
IOT Enabled Streetlights as a Network Infrastructure

Municipal assets have value to network operators



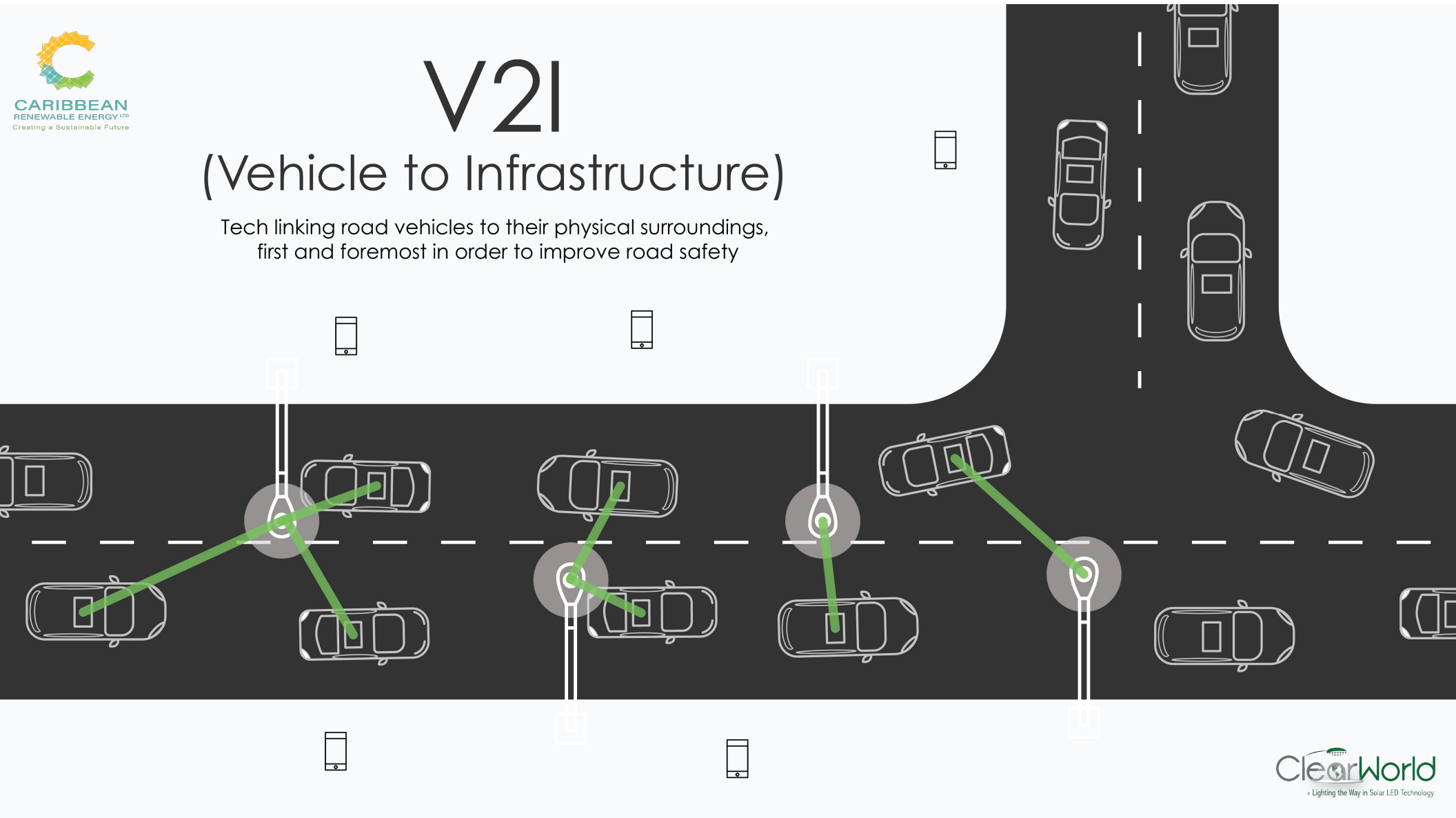
# Connected Infrastructure

With endless benefits



# V2I (Vehicle to Infrastructure)

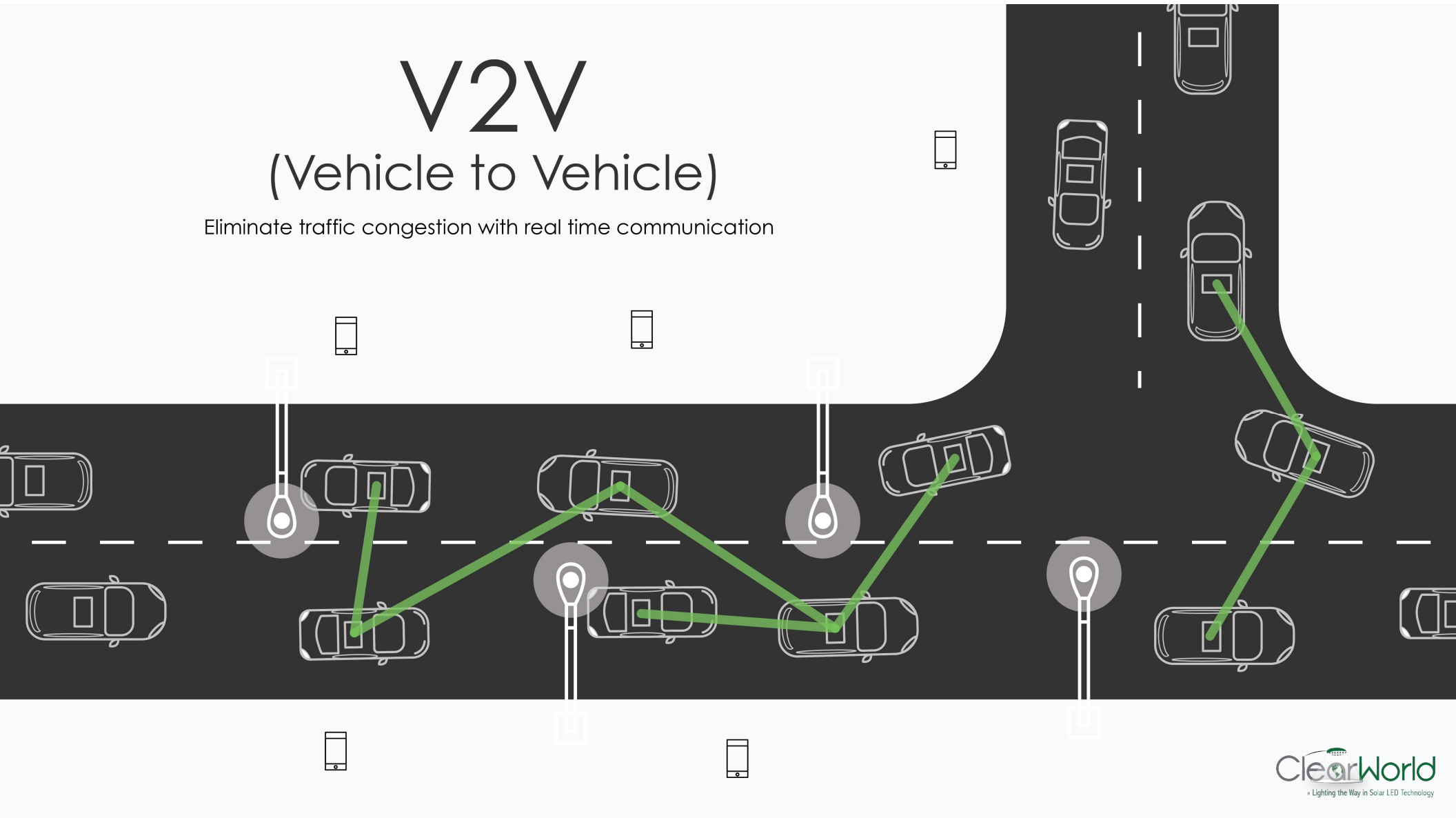
Tech linking road vehicles to their physical surroundings,  
first and foremost in order to improve road safety





# V2V (Vehicle to Vehicle)

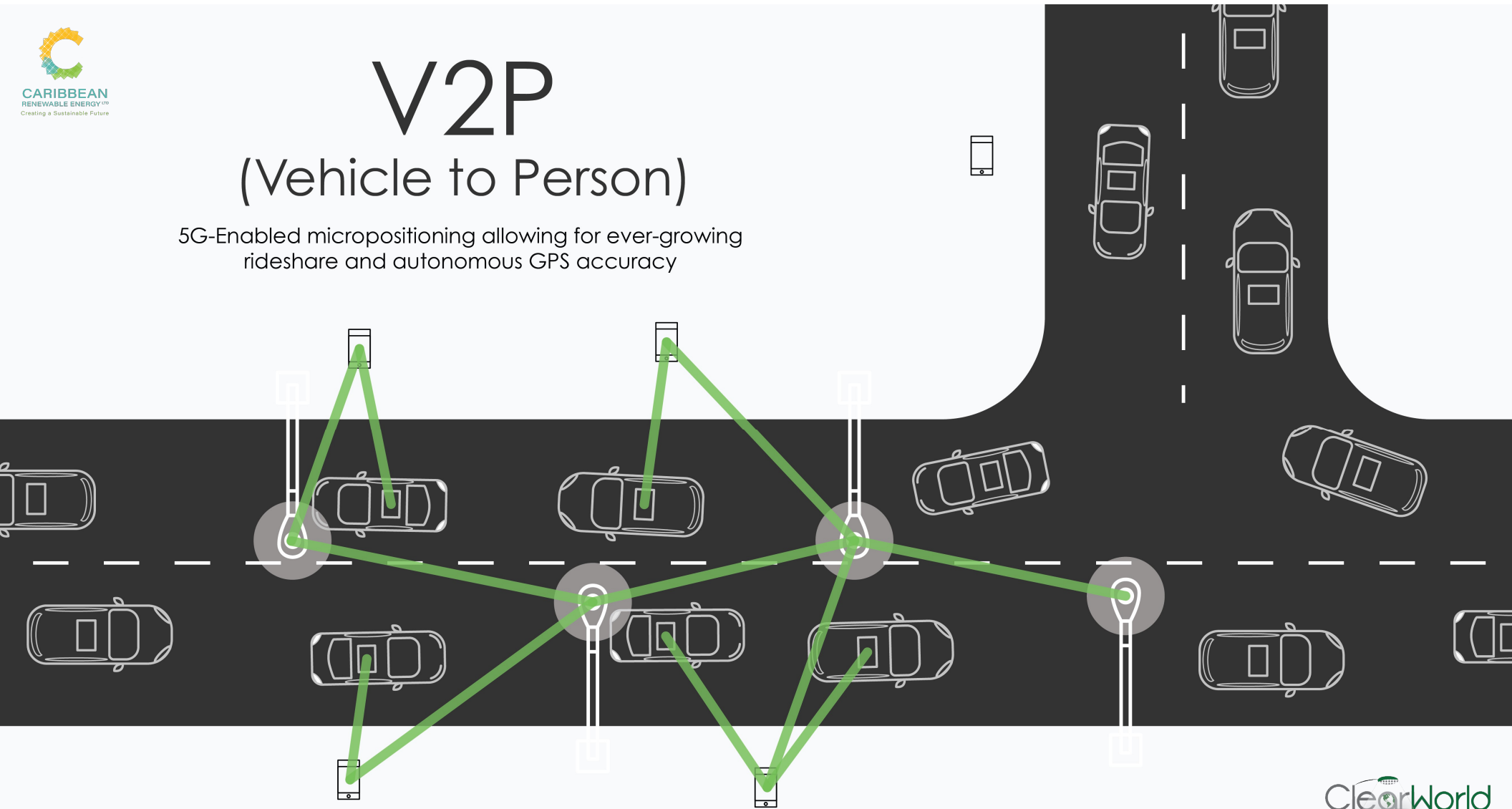
Eliminate traffic congestion with real time communication



# V2P

(Vehicle to Person)

5G-Enabled micropositioning allowing for ever-growing  
rideshare and autonomous GPS accuracy





# SECURITY

Smart Surveillance Infrastructure Technologies

Object, sound, and tracking detection





## Gun Shot Detection and Threat Analysis

Discrete gun shot detection can minimize threat levels,  
protecting public and private assets

Flexible, scalable video analytics application  
for perimeter surveillance and protection

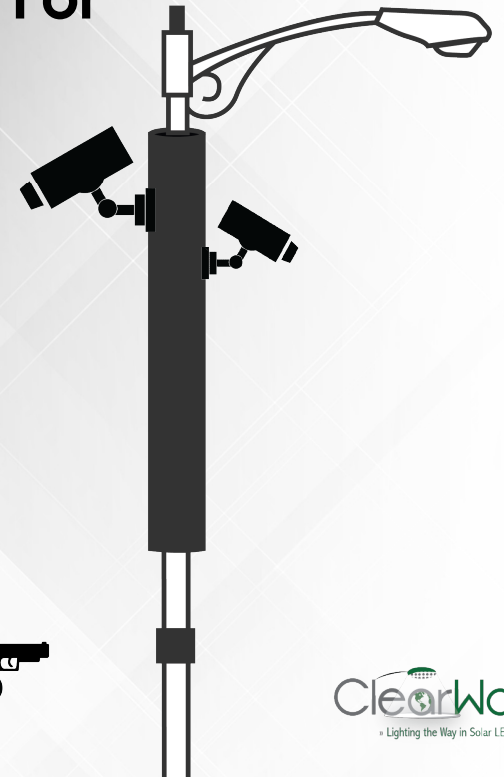
## Pedestrian & Vehicle Counting Analytics – For Secure Operations

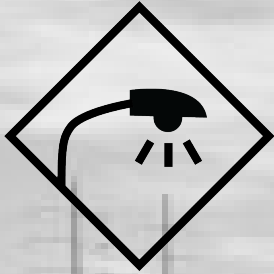
Automatic object detection and tracking

False Alarm Filtering

Efficient Live Monitoring

Free easy-to-configure application, installable on fixed network  
camera and video encoders with support for Camera Application  
Platform



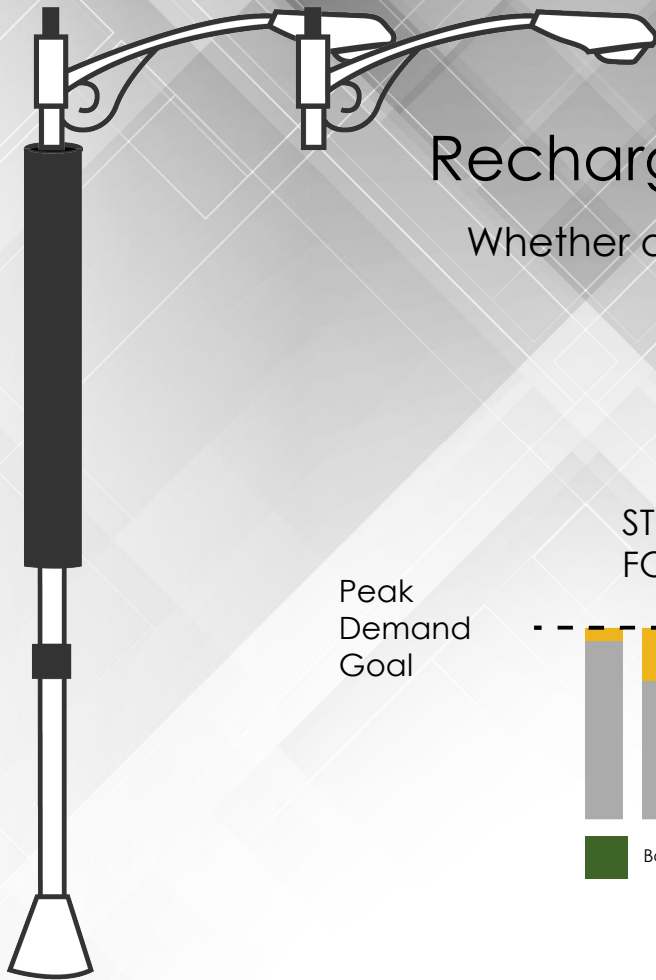


# STORAGE

Taking Advantage of the Hollow Streetlight Real Estate  
Demand response, load shifting, and peak shaving: at your fingertips

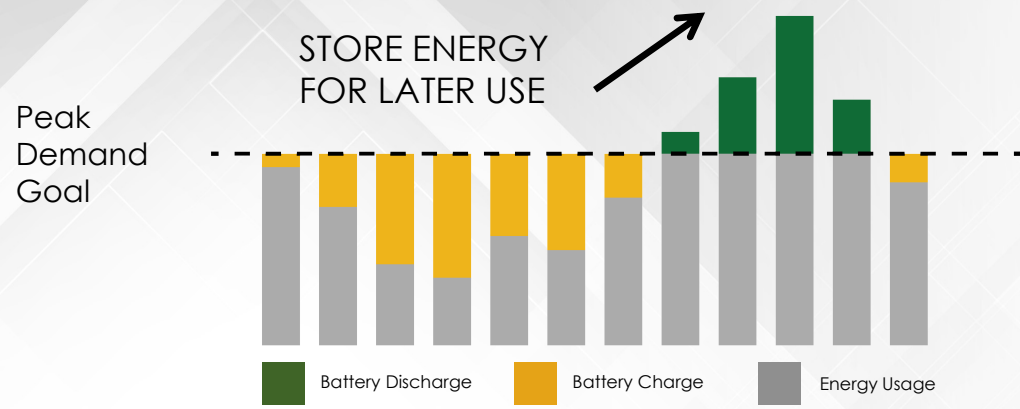


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# Rechargeable Lithium Ion Battery Pack

Whether a Utility, Municipality, or even a Private Business,  
Be in Control of Your Demand





## Connecting Smart Energy to the Grid

With IOT enabled energy storage taking advantage of the unused hollow real estate inside our patented streetlights, you can take control of your energy

Our software tells the street light when to store the grid's off-peak energy and when to allocate power to the various loads that you would like to offset attached to your meter or the distributed grid infrastructure

Measure, analyze, and control through our secure cloud-based IOT connecting your smart energy to the grid through our OpenADR Alliance\* approved platform

\*OpenADR approval allows us to physically and legally talk through, and to, the utility's servers, for utility and municipality owned assets

"The [OpenADR Alliance](#) was formed in 2010 by industry stakeholders to build on the foundation of technical activities to support the development, testing, and deployment of commercial OpenADR and facilitates its acceleration and widespread adoption. This approach needs to engage service providers (such as electric utilities and systems operators) within the domain of the Smart Grid that publishes OpenADR signals, as well as the facilities or third-party entities that consume them to manage electric loads. The OpenADR Alliance will enable all stakeholders to participate in automated DR, DER management, dynamic pricing, and electricity grid reliability."





Choose the technologies that fit your needs to create  
the perfect infrastructure for your company  
through ClearWorld™

ClearWorld

» Lighting the Way in Solar LED Technology

  
CARIBBEAN  
RENEWABLE ENERGY LTD  
Creating a Sustainable Future