FIVE STAR SOLUTION

Cut Your Energy Costs in Half!

ENERGY INTELLIGENCE CENTER

Safe and Efficient Buildings

WEBINAR: 03/10/2021 Noon to 1 pm EST

FOMO CORP

The Energy Intelligence Center is a wholly owned subsidiary of FOMO CORP. (US OTC: ETFM)

www.EnergyIntelligenceCenter.com

FIVE STAR SOLUTION – Presentation Contents

Overview

- **News: Political Tailwind**
- **Five Star Solution** - Overview
- **Clean-Tech Partners** - Synergy

Solution Highlights:

- **OptikW**
- **Clean Peak Energy**
- **Purge Virus**
- **Independence LED Lighting**
- **BuildingFit**

Big Data

Costs

Summary

POLITICAL TAILWIND – 1:2

$1.9 TRILLION COVID RELIEF: NEWS

- March 7th, the U.S. Senate passed the $1.9 trillion COVID-19 Relief Bill, which is expected to pass the House the week of March 8th.

- The bill includes **$519 billion** for state and local governments and schools, much of which will make up losses related to the pandemic and help schools reopen.

- The Centers for Disease Control and Prevention (CDC) guidelines include improvements to **ventilation**, and each state and school district may have some discretion on spending from within the relief funding.

- The bill also includes sub-sets for specific types of facilities.
  Example: **$200 million** may go toward infection control and the prevention and mitigation of COVID-19 in skilled nursing facilities.

POLITICAL TAILWIND – 2:2

BIDEN HARRIS

THE BIDEN PLAN TO BUILD A MODERN, SUSTAINABLE INFRASTRUCTURE AND AN EQUITABLE CLEAN ENERGY FUTURE

https://joebiden.com/clean-energy/

Buildings

Over the First Term

- Upgrade **4 million buildings**
- Weatherize **2 million homes**
- Creating at least **1 million jobs**
- Spur the **building retrofit** and efficient-appliance manufacturing supply chain.

Housing:

- Spur the construction of 1.5M **sustainable homes** and housing units.

Innovation:

- Drive dramatic cost reductions in **critical clean energy technologies**
- Ensure that those new technologies are **made in America**.

FIVE STAR SOLUTION - Overview

Saving Money is at the Center of our Work.

Combined with OptikW, the Energy Conservation Measures (ECMs) can typically each save 15% or more, adding up to **savings that can cut your HVAC energy bills in half.**

1: OptikW - Algorithmic software to optimize existing HVAC equipment by leveraging ambient conditions such as temperature, humidity, and dew point.

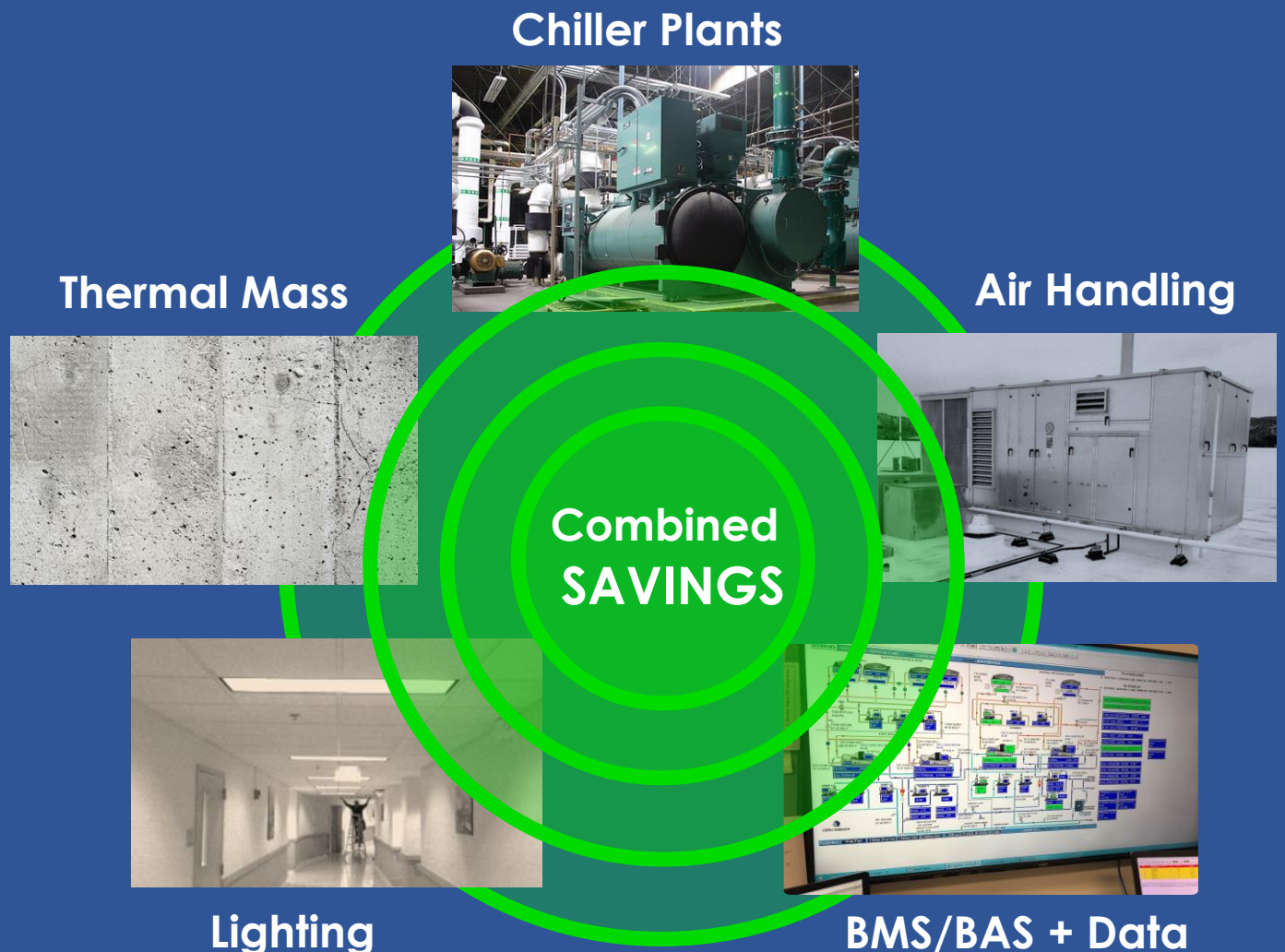
2: Clean Peak Energy - Algorithmic software that uses the thermal mass of your building as a "battery" to store temperature and reduce peak interval energy costs.

3: Purge Virus – Ultraviolet and bipolar ionization to clean indoor air and reduce the requirements for as much outside replacement air.

4: Independence LED Lighting - Energy saving lights to save 50% or more over traditional lights.

5: BuildingFit - Data analytics with measurement and verification to identify areas of savings and track performance.

CLEAN-TECH PARTNERS – Synergy



Each of our Energy Conservation Measures (ECMs) focuses on savings within a key focus area of a commercial or industrial building.

1: OptikW
Chiller Plants

2: Clean Peak Energy
Thermal Mass

3: Purge Virus
Air Handling

4: Independence LED
Lighting

5: BuildingFit
BMS/BAS + Data

We align one or more of the appropriate technologies to deliver maximum combined savings.

SOLUTION HIGHLIGHTS

- OptikW
- Clean Peak Energy
- Purge Virus
- Independence LED Lighting
- BuildingFit

OptikW – Chiller Plants / Heat Pumps

Algorithmic software to optimize existing HVAC equipment by leveraging ambient conditions such as temperature, humidity, and dew point.

Load Sharing:
Many chillers run at peak efficiency at 65% of load capacity, but many facilities are running their chillers up to full capacity. OptikW distributes cooling loads across the chillers, based on the exact specification of each chiller and the outside air conditions.

Synchronization:
OptikW synchronizes dozens of pieces of equipment within the HVAC system that are typically maintained or previously "tuned" prior to our engagement. Like an orchestra conductor, we synchronize the equipment and the ambient conditions to create the HARMONY that results in optimization and energy savings.

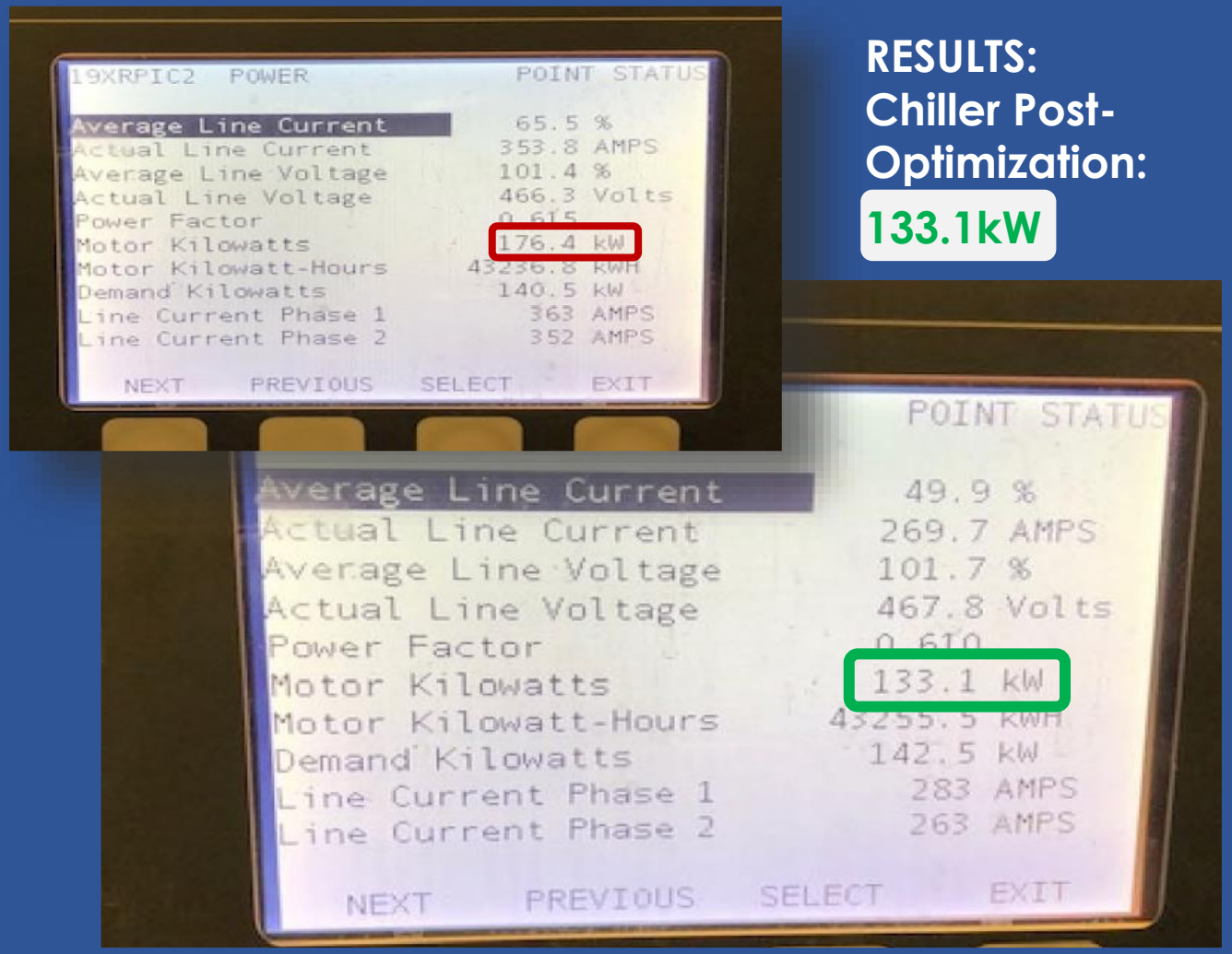
OptikW – Chiller Plants / Heat Pumps

Chiller (Status Quo) Pre-Optimization: 176.4kW

Sample Optimization Measure:

Increase the Cooling Tower fan speed (26.2 Hz) to reduce the Condenser Water Entry Temperature.

The small increase in energy cost creates a larger reduction in the chiller energy consumption.



RESULTS: Chiller Post-Optimization: 133.1kW

RESULTS: Data

The increase in Cooling Tower (CT) fan speed decreased the Condenser Water Entry Temperature (CWET) which in turn reduced the power consumption by 22% net.

For the same Chiller TONs of 388		
Chiller kW @ 28.2 Hz of CT Fan Speed	176	kW
Chiller kW @ 40 Hz of CT Fan Speed	133	kW
Chiller Power reduction	43	kW
CT Fan kW @ 60 Hz	18	kW
CT Fan kW @ 26.2 Hz	1.49	kW
CT Fan kW @ 40 Hz	5.30	kW
Increase in CT fan kW	3.81	kW
Net Saving of Power at Spot	39.49	22%

Note: To determine CT Fan kW consumption at 40 addition Hz, we use the industry max of 60 Hz and 18 kW to start the calculations. Formula 1: (Old Hz/Max Hz)^3 x Max Power = Old Power
(26.2 Hz / 60 Hz)^3 x 18 kW = 1.49 kW
Formula 2: (New Speed/Old Speed)^3 x Old Power = New Power
(40 Hz / 26.2 Hz)^3 x 1.49 kW = 5.3 kW

Clean Peak Energy

Clean Peak Energy – Thermal Mass

- Clean Peak helps facility owners and operators use their buildings for thermal energy storage to reduce energy consumption and reduce peak-demand costs.
- Thermal energy storage technology harnesses the thermal mass of large commercial office buildings to drive **savings in electricity consumption**.
- Zero capital construction costs + No permitting required.

Clean Peak Energy – Thermal Mass

How It Works:
When a large building's surface areas – largely concrete and drywall – are cooled by an additional 1- to 2-degrees, they store that thermal energy on multi-MW comparable scale.

The stored thermal energy is scientifically released back into the building's internal environment at optimum times.

Using the thermal mass of commercial office buildings, combined with their air-conditioning systems in the controlled manner allows the building to serve as a thermal energy storage.

Clean Peak Energy

Clean Peak Energy – Thermal Mass

The Results:

By raising the building's power demand moderately overnight and reducing its power requirement during peak-demand hours during the day, summer energy consumption is reduced.

Good for Business and the Planet:

Lower Monthly Operating Costs + Lower Carbon Emissions

PURGE VIRUS
STAY SAFE and HEALTHY

Purge Virus – Indoor Air Quality (IAQ) as a Service

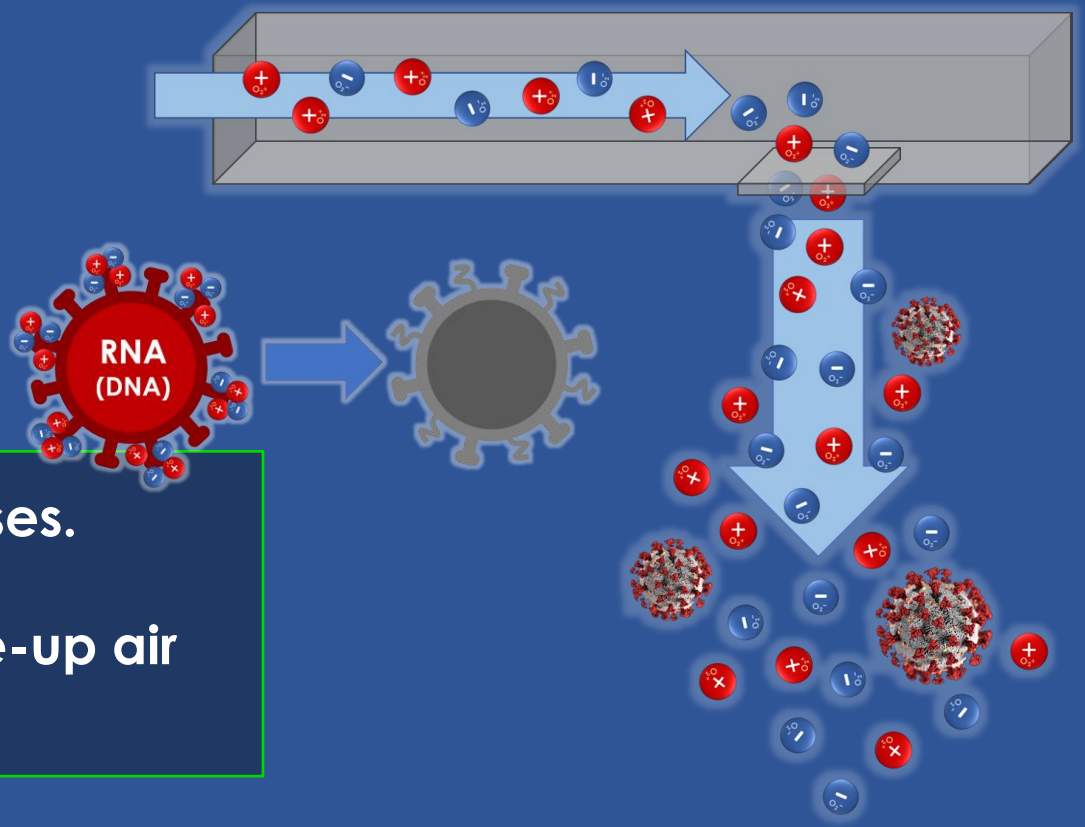
- We follow CDC guidelines for ventilation + air disinfection.
- We use advanced **bipolar ionization** that does not generate harmful ozone (UL 867 and UL 2998) or **ultraviolet technology** (UV-C 243.7nm) when appropriate.
- Both technologies safely integrate into HVAC systems.

Key Advantages

Purge Virus – Indoor Air Quality (IAQ) as a Service

Ventilation and Disinfection are complicated when it comes to aligning the right technology and correctly integrating **advanced filtration, air quality monitoring, energy recovery ventilators (ERVs) and economizers with Building Management Systems (BMS)**.

A surprisingly small percentage of HVAC service providers have the engineering and expertise to improve IAQ effectively and affordably. Purge Virus works with **PVBJ**, a leading HVAC company with multiple decades of experience and a track record that has earned the trust of Fortune 500 clients.

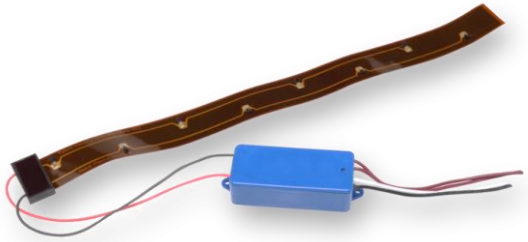


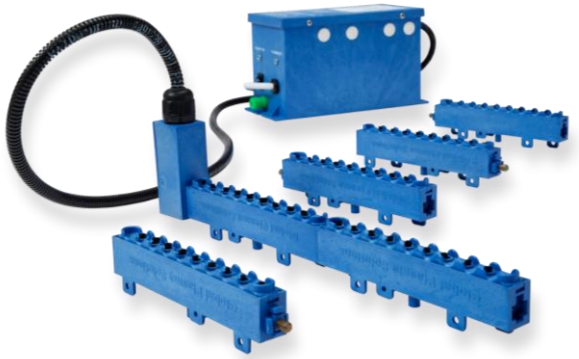
1. **Ionization destroys proteins on the surface of viruses.**
2. **Improved indoor air quality**
3. **Reduced requirements for intake of outside make-up air**
4. **Energy savings = reduced operating expense.**

Purge Virus – Indoor Air Quality (IAQ) as a Service

carbon fiber
ion emitters

Bipolar Ionization





The special carbon fiber ion emitters are soldered into the circuit traces for the ribbon devices (ideal for ductless HVAC) and the emitters are mounted on the other devices for ducted HVAC.

Designed for
3,200 CFM or 8 tons.
(e.g. PTACs) This ribbon system comes in 18" and 36" lengths
Ion Production:
> 35 Million +/- Ions/cc /ft.

Designed for
4,800 CFM or 12 tons
ideal for mid sizer HVAC systems.
Ion Production:
> 400 Million +/– Ions/cc

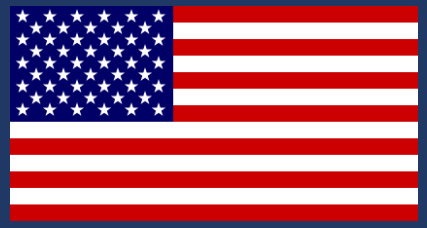
Designed for large HVAC e.g.
8,000 CFM / 20 tons or larger
(any length up to 240 inches in 6-inch increments: 50–250 CFM per inch of bar.)
Ion Production:
> 840 Million +/- Ions/cc per 6 in.

Independence LED Lighting – Energy Saving Lighting

Overview

- Made in America
- Top Return on Investment (ROI)
- Low OpEx
- Low CapEx
- 10 years in business and
  Industry leading10-Year Warranty
- **Save over 50% on lighting electricity**

BAA 25.101 (a)(1)+(2)
LED LIGHTING
Manufactured in U.S.A. with
Over 50% Domestic Components



Proven Track Record

- Installations range from Morgan Stanley's Corporate Headquarters to Walter Reed National Military Medical Center, and from small businesses to major real estate development firms such as CBRE.

Independence LED Lighting – Energy Saving Lighting

In addition to Corporate accounts, Independence has provided energy savings lighting solutions for the U.S. Department of Defense and Civilian Agencies.

U.S. Department of State
Diplomacy in Action

America's Navy
A Global Force for Good™

Marines
The Few. The Proud.®

U.S. Air Force

Department of Veterans Affairs

National Park Service

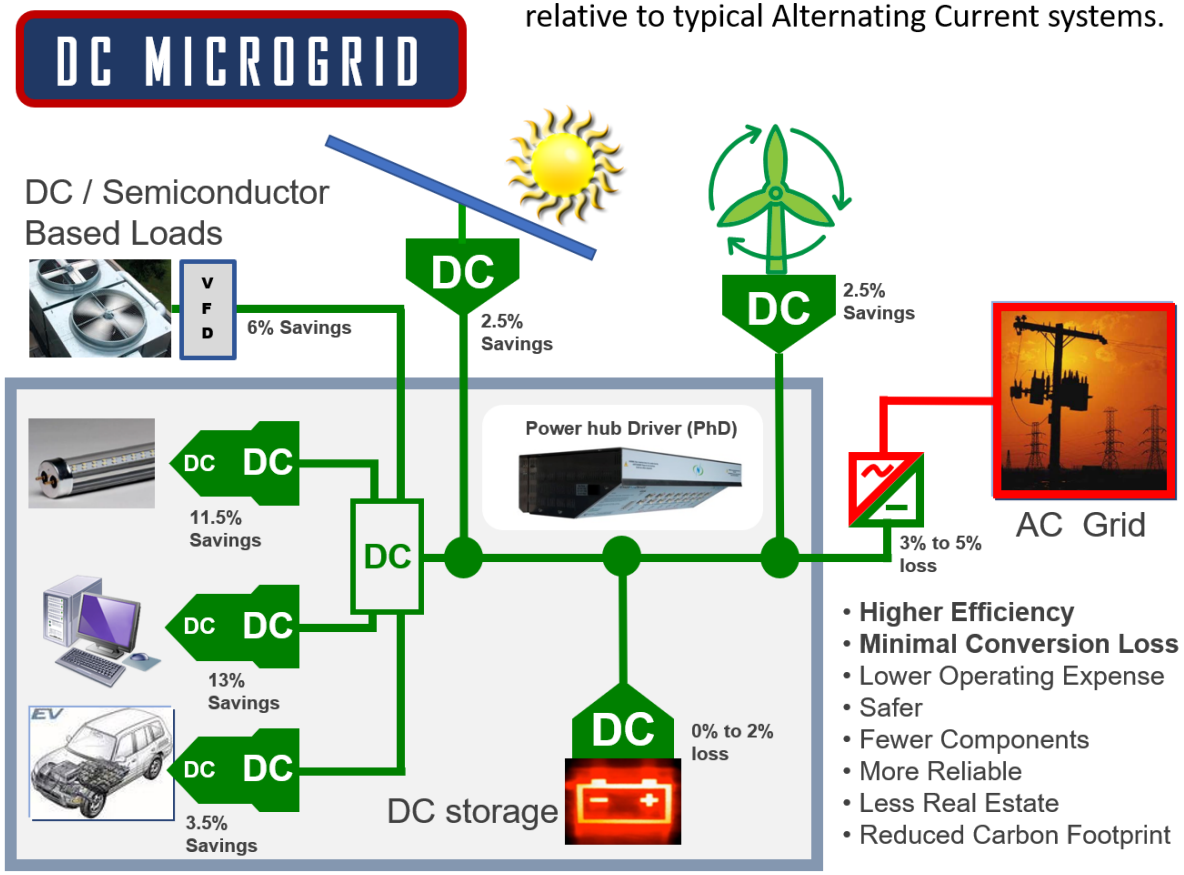
Forest Service
U.S. Department of Agriculture

Independence LED Lighting – Energy Saving Lighting

LED Options AC & DC!

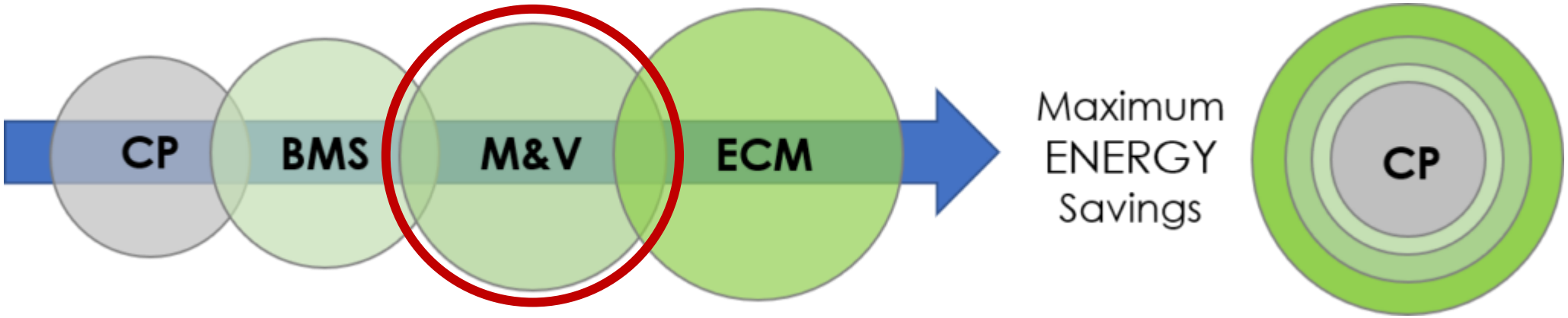
Energy Savings Beyond Typical LED Lights:
Direct Current (DC) saves energy for buildings of all types as well as indoor farms for Controlled Environment Agriculture (CEA).

Next Generation DC System: Energy loss is reduced at multiple points of operation relative to typical Alternating Current systems.



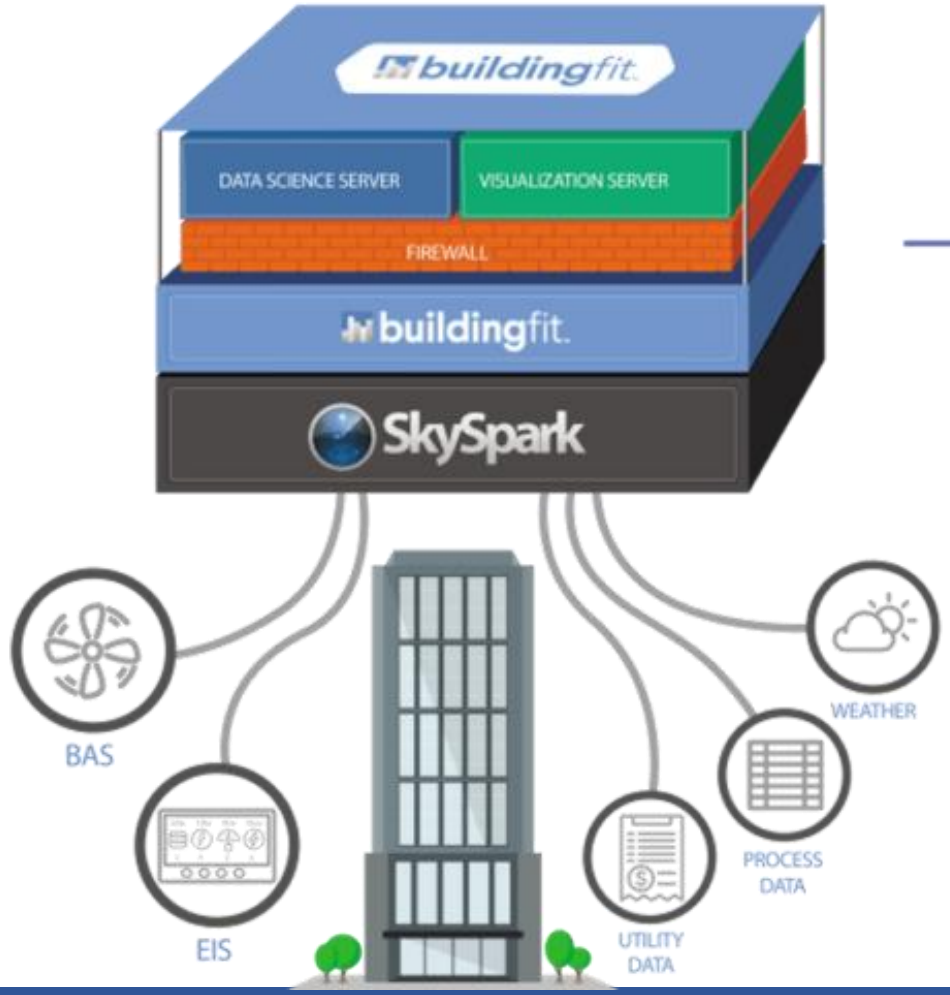
BuildingFit – Data Analytics and M&V

BuildingFit™ is a Fault Detection & Diagnostics (FDD), analytics and visualization platform that identifies opportunities, to make buildings more energy efficient, reliable, comfortable, and safe.



CP = Chiller Plant (multiple equipment types)
BMS = Building Management Systems or BAS, Building Automation Systems (multiple providers)
M&V = Measurement and Verification with Data Capture and Analytics **(Building Fit)**
ECM = Energy Conservation Measures – Optimizing power with algorithmic software (OptikW)

BuildingFit – Data Analytics and M&V



Historically siloed data from the Building Automation System (BAS), weather services, remote sensors, etc. can all now be viewed and analyzed in a single platform

BuildingFit

Engineered for **large quantities of data** from disparate sources such as building automation systems (BAS) and smart IoT devices, BuildingFit™ insights are delivered through analytics, Key Performance Indicators (KPI), automated reports, and interactive dashboards that help users prioritize daily operations, minimize energy waste and reduce costs.

Here is the list (to the right) of some of the top BMS/BAS systems that OptikW and BuildingFit™ integrate with to optimize HVAC energy consumption.

Vendor	System Name	Version
Alerton	BacTalk/WebTalk	
	Ascent / Compass	
Allen Bradley	PLC	
Automated Logic	WebCTRL	6.5+
Building Robotics	trendR	
Carrier	ComfortView	
	i-Vu	
Cypress Envirosystems		
Delta	DOW	v3.40
Distech	WebCTRL	
FieldServer technologies		2.00h
Honeywell	SymmetrE	
	EBI	
	Webs AX	
JCI	Metasys	
	N1/N2	
	N2	1.19
KMC Controls	All	All
McQuay International	Chiller	version 1.6
Mitsubishi Electric		2.10.00
Obvius	Acquisuite	
Onicon Corporation	Steam meter	v1.03gD
Regin		
Schneider	Struxureware BACnet	
	Struxureware LON	
Siemens	APOGEE	Insight
	APOGEE	Insight 11
	Desigo CC	2.1, 3.0+
	Talon	
TAC	Continuum	
	I/NET	
Trane	Tracer	SC
	Tracer	Summit v11+
		17.033
Tridium	AX	3.38+
	Niagara	4+
	Staefa	
	R2	

BIG DATA

Energy Intelligence Center:

- Utilizing its clean-tech partners for turn-key systems approach
- Mapping thousands of data points at the equipment level within the HVAC systems
- Data points communicate via platforms that generate Machine Learning and Artificial Intelligence (Ai)

Results: the next generation "smart" buildings.

COSTS

$0 to Low

- Savings Share “Performance” options available
- Monthly cost projection typically < energy savings.

SUMMARY

The largest energy management companies in the world do not focus as much as they should on these types of

proven and affordable efficiency technologies.

American can lead by example with the proof in the results.

Pilot programs are an easy way to see the performance at your facility.

QUESTIONS?

www.EnergyIntelligenceCenter.com/Contact

Thank You

Charlie Szoradi, CEO
Energy Intelligence Center
Charlie@EICteam.com