



BE IDLE-FREE!

HOSTED BY CLARK COUNTY'S
CLEAN CITIES COALITION

MARCH 23, 2023

OVERVIEW

- Clean Cities Introduction
- Presentations
- Questions
- Upcoming Programs



Justin Mahana
Southwest Gas



Norma Havens
USA Fleet Solutions



Ron Zima ADpPR
IDLE FREE Guy™

- National network through the US Department of Energy
- Goal:
 - Reduce petroleum fuels
 - Approved alternative fuels
 - Idling reduction
- Purpose:
 - Reduce dependence on foreign oil
 - Provide cleaner air
 - Lower greenhouse gas emissions
- 75 Coalitions in the United States
 - ...but no representation in Nevada!
- Clark County is currently working towards a designation



WHY CLEAN CITIES?

Funding opportunities

National recognition

Collaborative space for the community

Capacity building

Cleaner air and fewer greenhouse gas emissions!





WHO IS A STAKEHOLDER?

- Anyone interested in reducing their petroleum fuel use!
- We want to work with:
 - Fleet managers
 - Car dealerships
 - Nonprofits
 - Municipalities
 - Fuel providers
 - Public Organizations
 - Trade unions and mechanics
 - Individuals interested in sustainable transportation

HOW TO PARTICIPATE?

Quarterly Stakeholder Meetings

Online Programming

In-Person Events

Join a Working Group

Opportunities to support, present & host





WANT TO LEARN MORE?

Visit our website by scanning this QR code

Email Nicole.Wargo@ClarkCountyNV.gov



Engines off Power on

Vehicle Power System



Who We Are

We power essential missions with clean mobile energy whenever, wherever you need it.

From off-grid remote locations to crowded cities; inside a vehicle or as a freestanding microgrid, the Stealth Power systems are exactly what our name suggests.

It's Smart, Unobtrusive
Energy that Scales.



Stealth Power Technology

Vehicle Power System

Automatic idle mitigation and full mobile power for onboard equipment, without engine engagement. For fleets with demanding electrical needs. Economize your fleet with sustainable and efficient stealth power.



Benefits for Fleets



Reduce Fuel & Maintenance Costs



Safety Redundancy & Emergency Jump Start



Improved Conditions & Worker Comfort



Less Shop Time & Increased Fleet Life



Reduce CO2 & Increase ESG Scores



Reduce Noise & Extend Night Operations



Mitigating One Hour of Idling Saves...

1 - 2.5

Gallons of Fuel Under Load

\$1.32

Estimated Daily Maintenance Cost

19 - 22.4

Lbs of CO2

25 - 50

Ghost Miles



Vehicle Power System

Automatic Idle Mitigation & Power

Scalable
SYSTEM CAPACITY

Manage
POWER FLOW "BLINKLESSLY"

Customizable
START/STOP SYSTEM



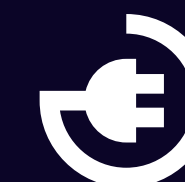
Power to:



Radios



Laptops &
Cameras



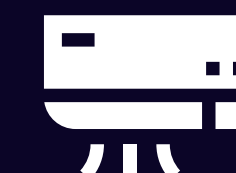
AC Electrical
Equipment



All OEM loads



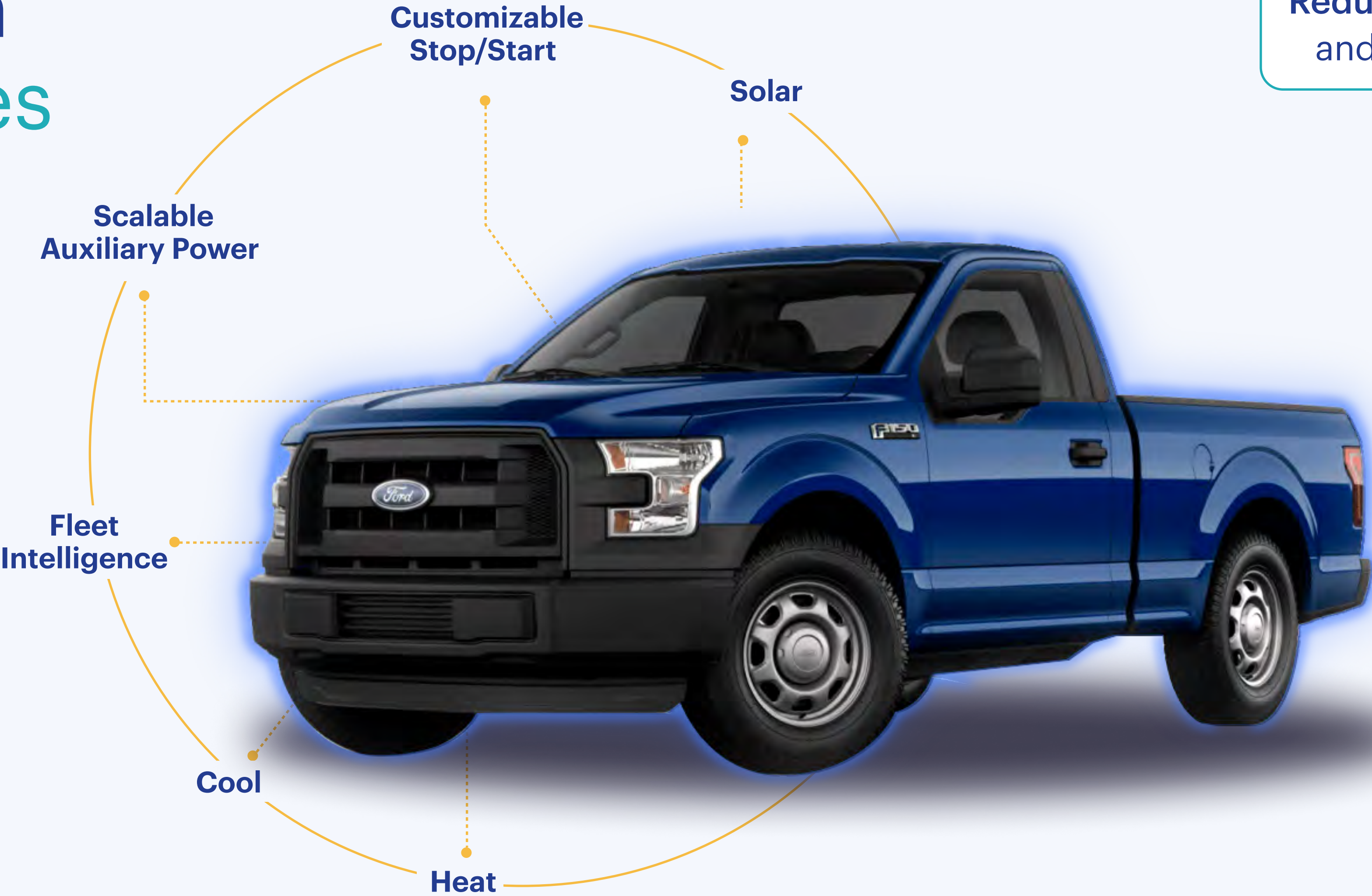
Lights



Auxiliary AC
& Heat

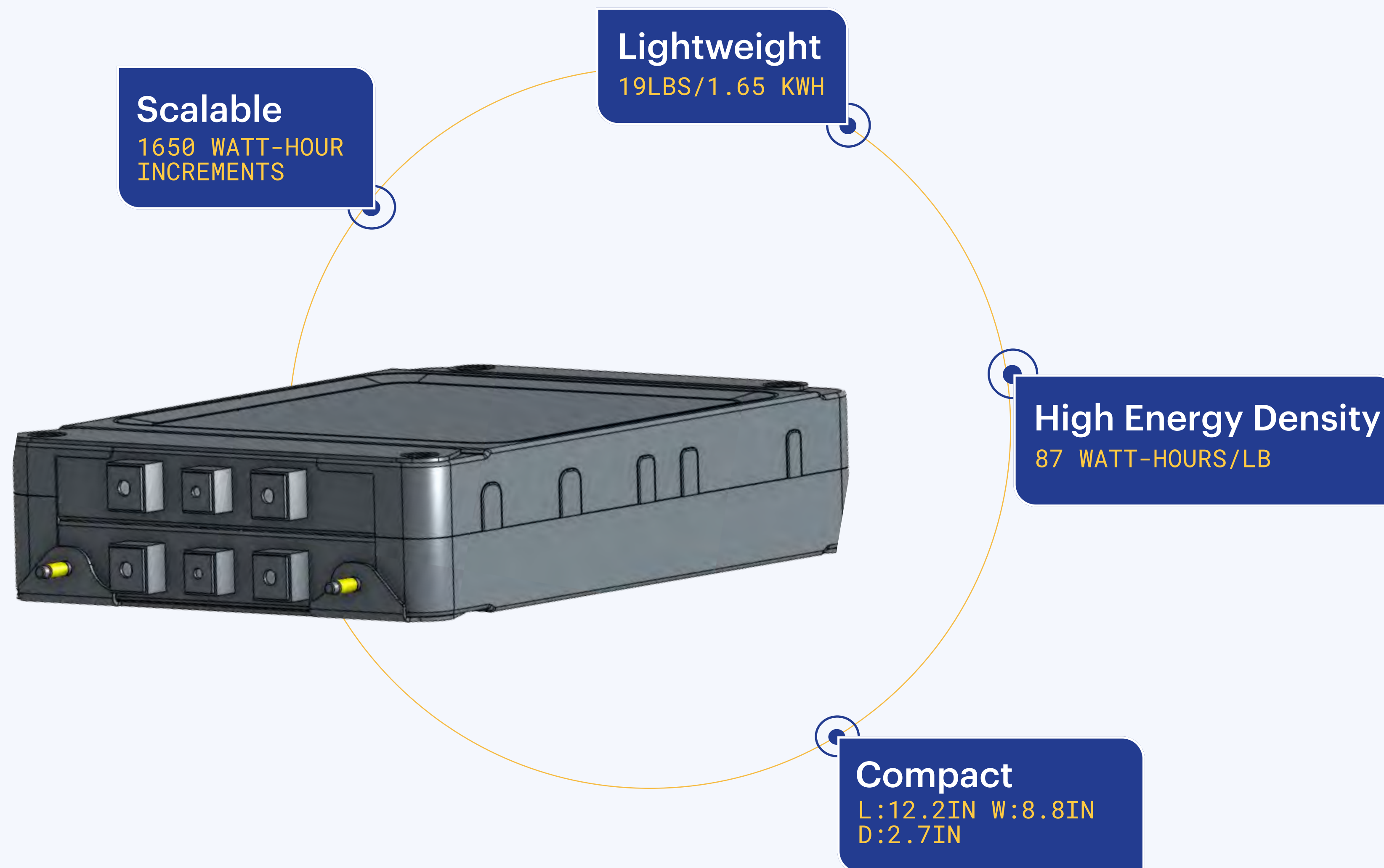
We ensure your crew is **never** left without power and your no-fail missions stay online.

System Features



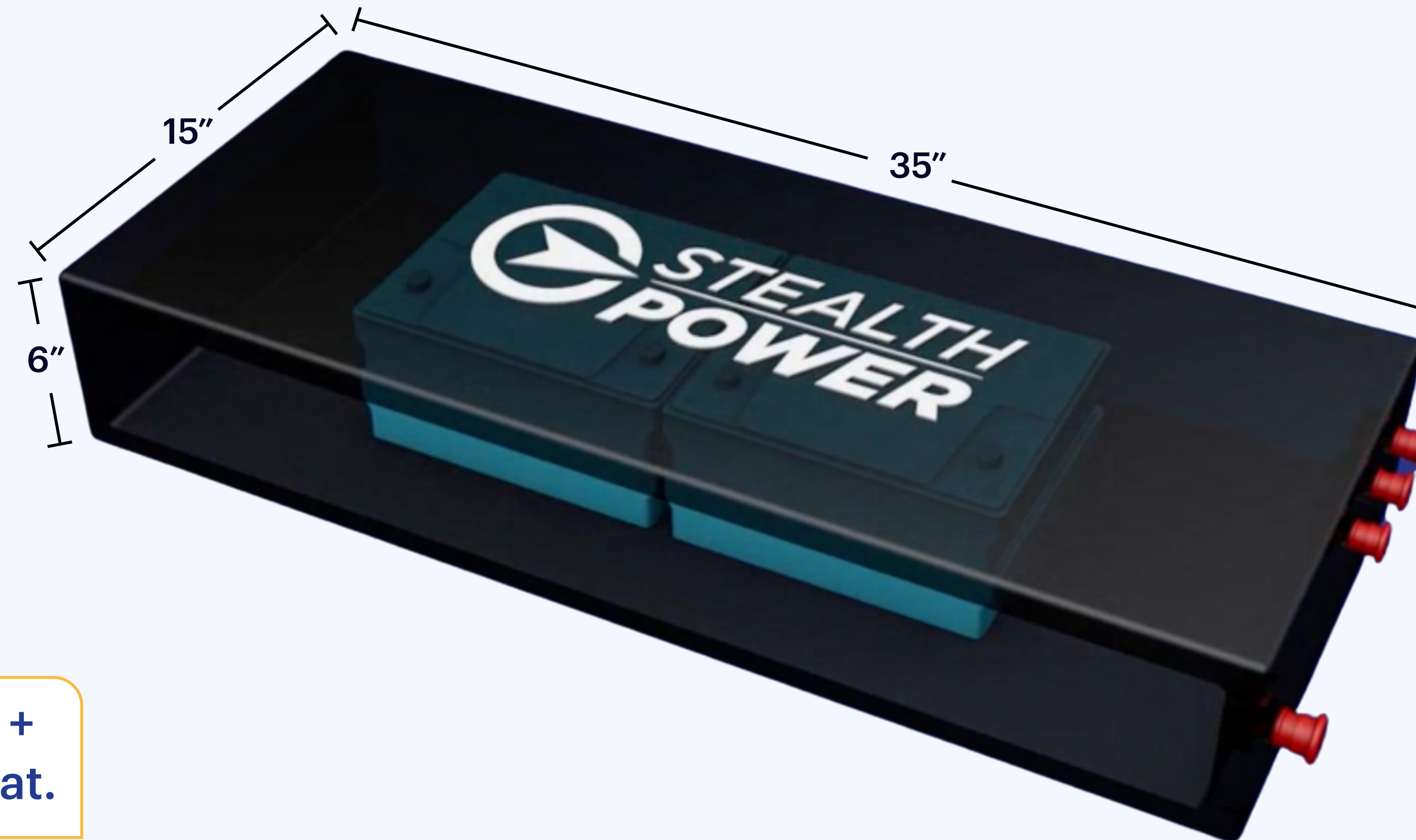
Redundancy for safety
and peace of mind.

Stealth Energy Module



VPS Enclosure

Lightweight, adding less than 100lbs to your load.



Minimal space claim + fits under the back seat.

Versatile + configurable in any direction.

Stealth Intelligence

Our active fleet management system uses cellular and GPS data to securely capture real-time status information. This information is made available to stakeholders through a customizable web application dashboard, real-time alert notifications and regular performance reports.

It is the only system on the market that aggregates information, reports on custom parameters, and collects empirical data from third-party equipment to put everything you need to see in **one customized, dashboard view**.

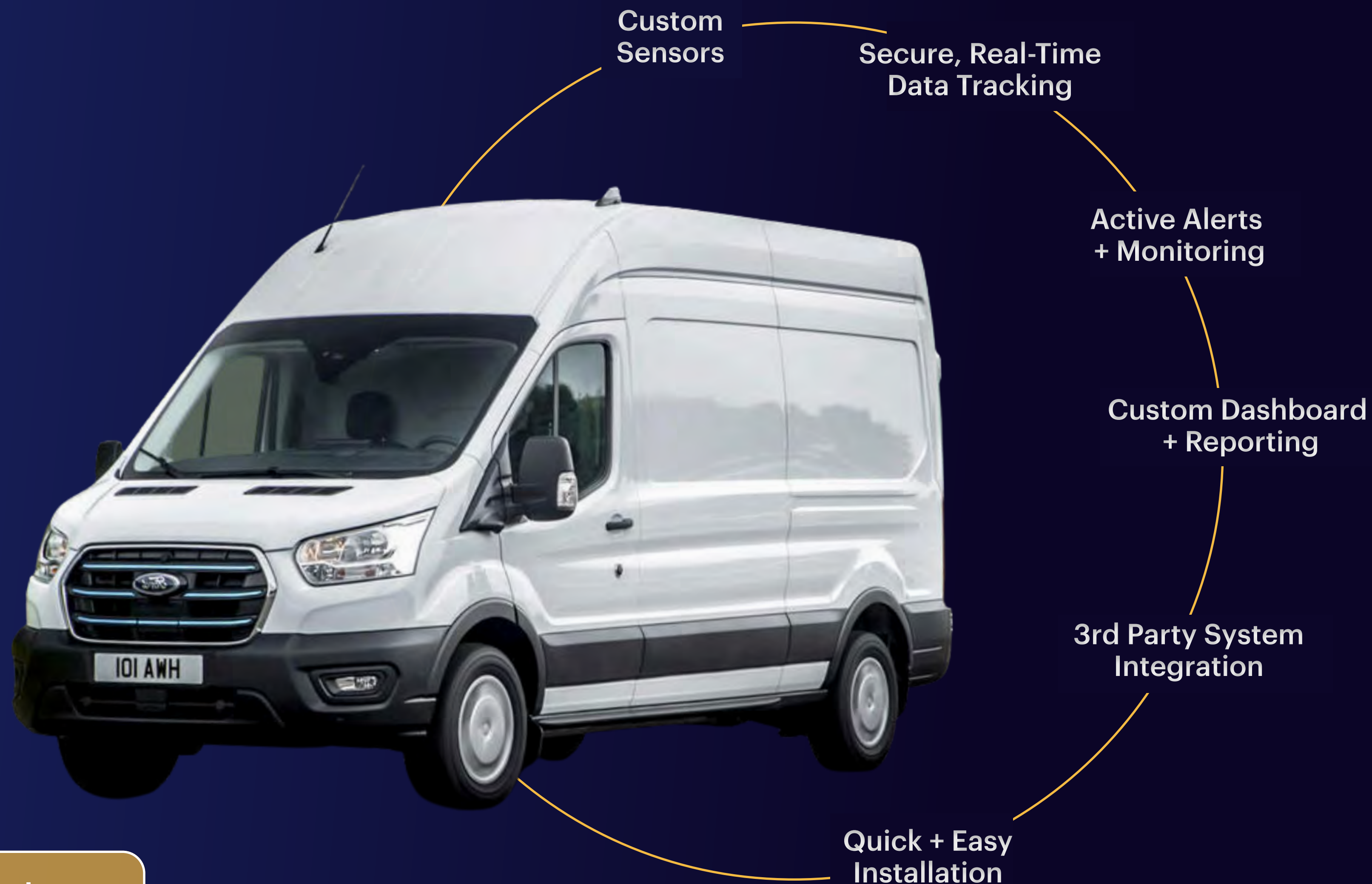


Real-time Data +
Performance Analytics

The Case For Real-Time Data

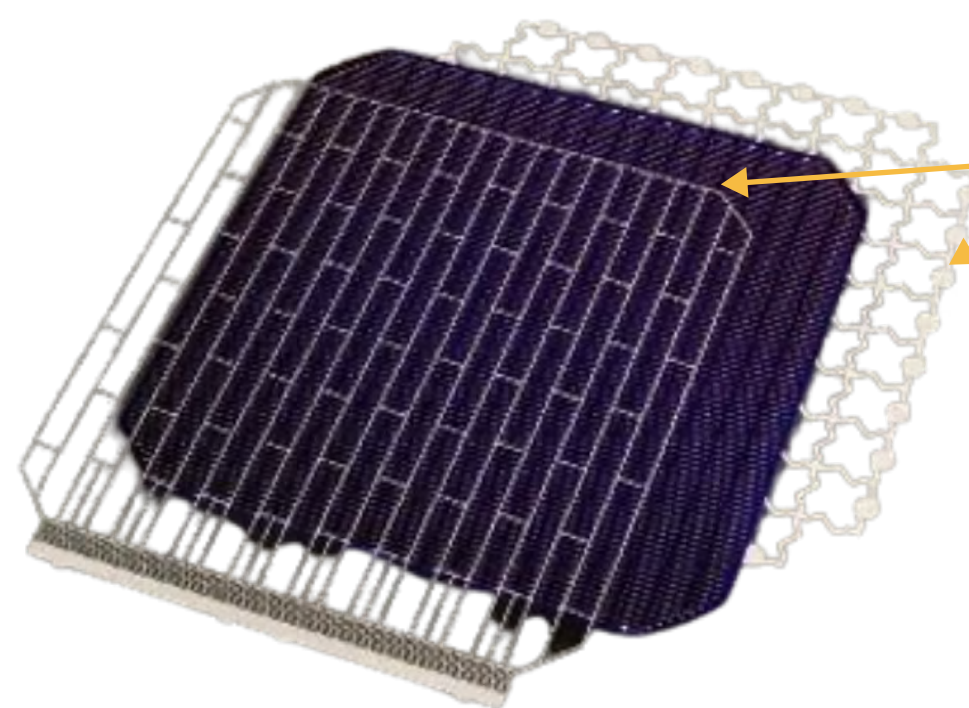


System Features



Customize your system
to optimize your operations.

Solar Power

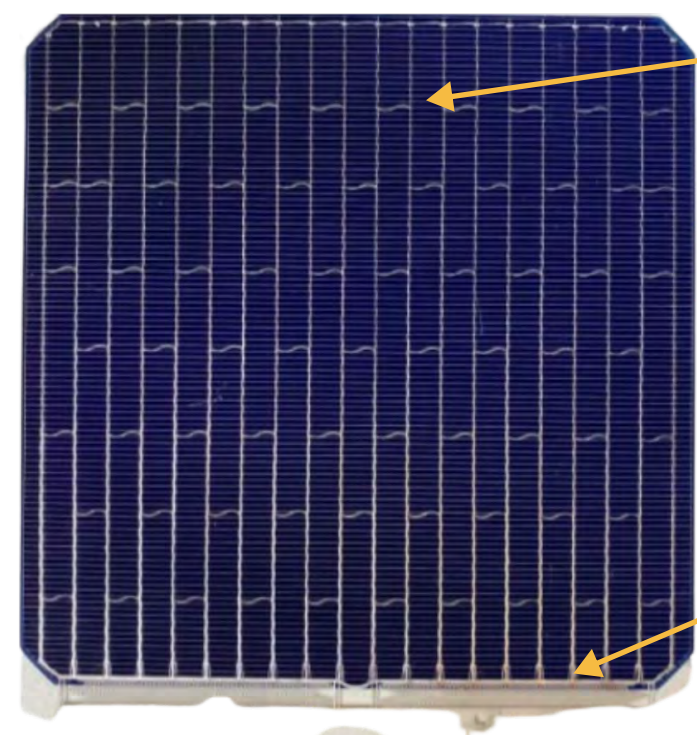


20 vertical busbars, 70 lateral busbars, and back-mesh act as rebars.

UV resistant materials.

Patented grids provide over 2100 independent, redundant connections.

Over 180 redundant spring interconnects eliminate metal fatigue.

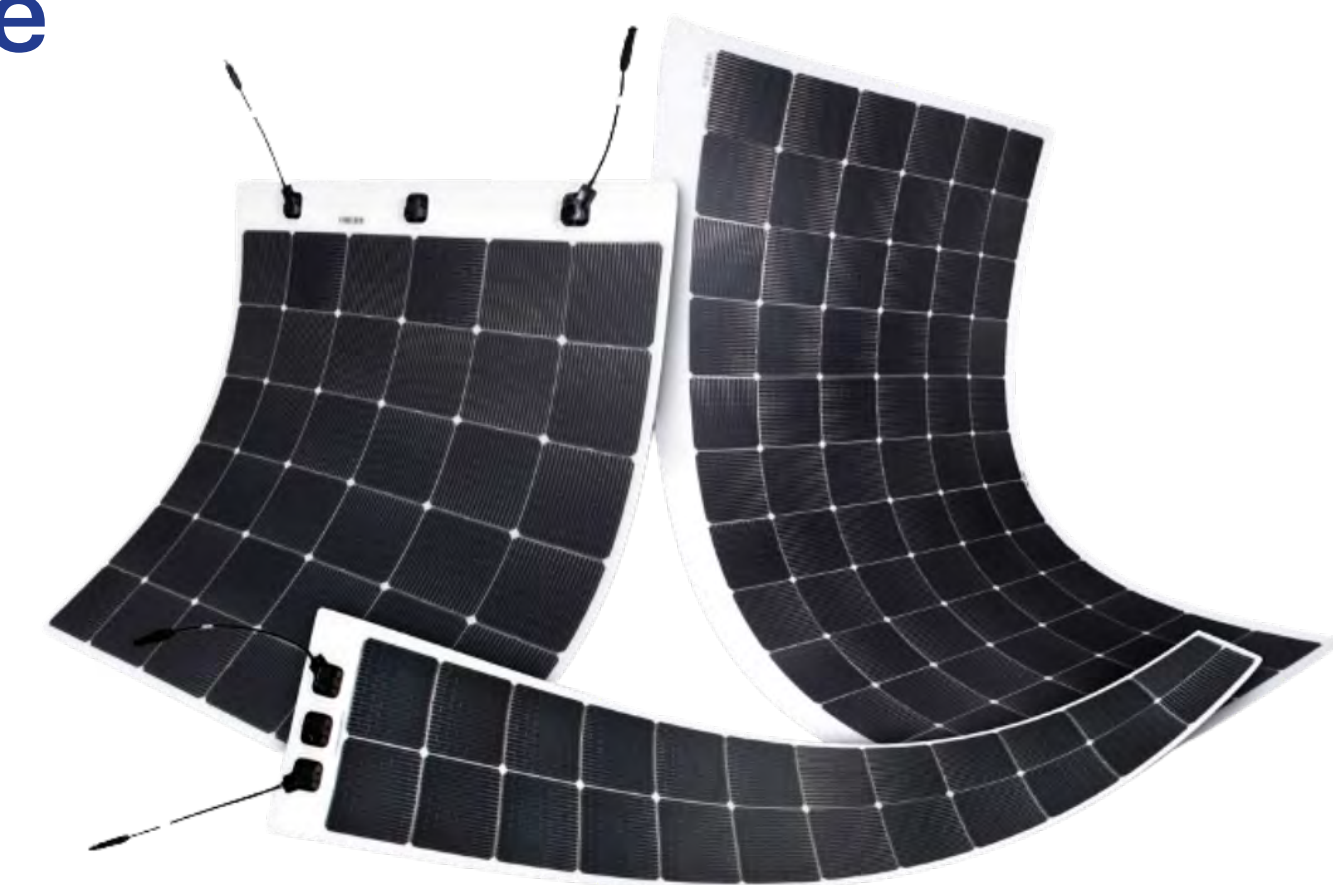
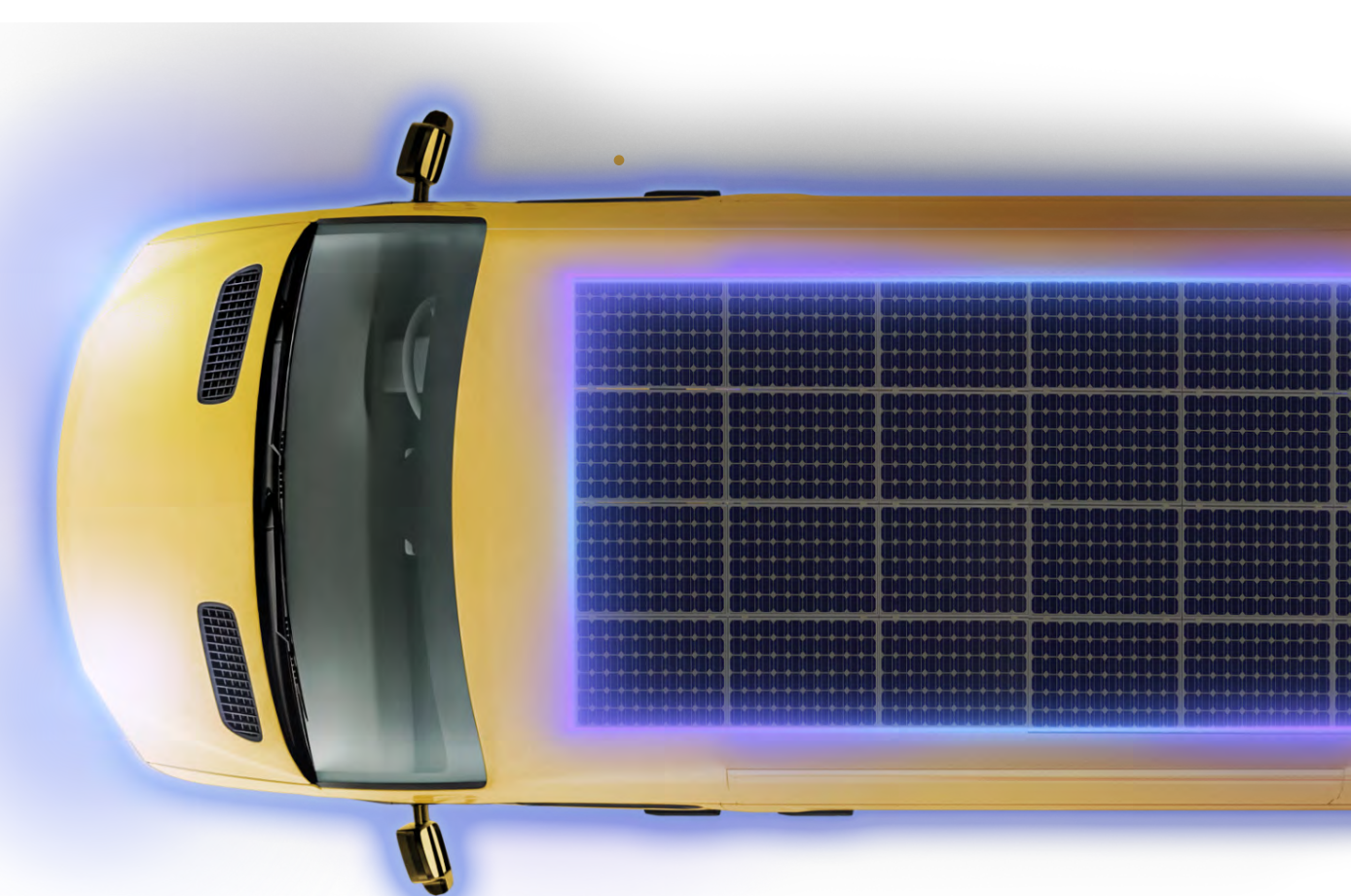


Take advantage of the

30%

Federal ITC on solar equipment to accelerate your positive ROI.

Increase efficiency and save money on our systems with this convenient tax credit.



Clients



Trusted by law enforcement, emergency response, private companies, and the U.S. Government.

Xcel Energy

Case Study



12/ day
Gallons of Fuel Saved



\$101/ day
Fuel & Maintenance
Cost Savings



392 lbs/ day
CO2 Emissions Reduced



4

F-350 WORK TRUCKS WITH
STEALTH POWER

42%

REDUCTION IN FUEL &
MAINTENANCE COSTS

New York City Fire Department Case Study



x



4,320/ day
Gallons of Fuel Saved



\$24,342/ day
Fuel & Maintenance
Cost Savings



96,758 lbs/ day
CO2 Emissions Reduced



400

AMBULANCES WITH
STEALTH POWER

30%

REDUCTION IN FUEL &
MAINTENANCE COST

Feedback From the Field



It provides officers constant, never-ending power.
They can power anything they want to power.
They can jump-start anything they want to
jump-start. They're never left stranded.



LT. Dale Barnard
Fleet Manager, Dallas Police Department



Stealth Power's idle mitigation system reduces
our payload by 35% and eliminates our weekly
maintenance routine.



Richard M.
Fleet Services, CenterPoint Energy

For A World That's
Always On.

info@stealth-power.com

Confessions of the IDLE Queen

Clark County Clean Cities 3/23/23

Presenter: Norma Havens –USA Fleet Solutions



**2006 Dodge Dakota 4 Door-4wd
14 mpg**

You can only manage what you can see and measure.

Idling over 55% of the time-

**Changed one behavior
Increased mpg to 19 mpg**



You can only Manage what you can See and Measure

USA Fleet Solutions motto



How much money could you personally save?

- \$4.40 per gallon/ 15,000 miles per year
 - 30 mpg= \$2200 per year / 5 year costs= \$11,000
 - At 20 mpg= \$3300 per year / 5 year costs \$16,500
 - At 25 mpg= \$2640 per year / 5 year costs \$13,200
- Improving your mpg by 10 mpg from 20-30 mpg= **1 year savings \$1100 / 5 year savings \$5500**
- Improving your mpg by 5 mpg from 20 to 25 mpg= **1 year savings \$660/ 5 year savings \$3300**
- Now X that by how many vehicles you have in your household.
- Small changes in driving behavior can save you significant money personally. **(3 vehicle savings \$16500-\$9900 over 5 years)**

(Based on calculations from FuelEconomy.gov)

Potential Company Savings

- **1000 vehicles with a 5 mpg savings = 1 year savings \$660,000
5 year savings \$3,300,000**
- **500 vehicles with a 5 mpg savings = 1 year savings \$330,000
5 year savings \$1,650,000**
- **100 vehicles with a 5 mpg savings = 1 year savings \$66,000
5 year savings \$330,000**

Based on \$4.40 per gallon and average of 15,000 miles.
(Calculations from FuelEconomy.gov)



Carlos-large city in So California

Regimented on tracking his fuel mileage

**Challenged him to change only one habit for 30 days.
30 days later he was saving \$100 dollars a month personally.
The one change.....Shut the car off when talking on the cell
phone.**

**You can only manage what you can see and measure.
....call it clueless...oblivious....consider how much his whole
family saved after a 'family talk' about idling.**



A Nafa fleet member's statistics after implementing telematics-Year One

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Idle Time												
Idle Percentage	58	59	45	46	40	30	31	29	33	30	28	33
Miles Per Gallon (MPG)												
Avg MPG	7.20	7.10	8.00	7.90	8.45	9.20	9.00	9.40	9.50	9.20	9.50	9.50
Miles Driven												
Total Miles (Month)	66,789	65,998	66,611	61,709	63,445	57,995	56,421	55,321	55,879	55,365	54,716	55,824
Fuel Consumption												
Gallons of Fuel	9,276	9,295	8,326	7,811	7,508	6,303	6,269	5,885	5,882	6,017	5,759	5,876
Safety (number of events)												
Over 80 MPH	502	436	389	256	241	230	257	198	164	140	136	124
Hard Acceleration	2,312	1,756	1,876	1,657	1,548	1,662	1,478	1,398	1,321	1,245	1,346	1,168
Hard Braking	3,642	3,541	3,365	3,298	2,796	2,432	2,511	2,375	2,269	2,145	1,698	1,325
GHG emissions												
CO2 emissions (pounds)	179,720	180,088	161,314	151,336	145,465	122,119	121,460	114,020	113,962	116,578	111,579	113,846
CO2 emissions (pounds/mile)	2.69	2.73	2.42	2.45	2.29	2.11	2.15	2.06	2.04	2.11	2.04	2.04
Potential emissions reduction												
Annual Miles	716,073											
Annual CO2 emissions (January factor - pounds)	1,926,854											
Annual CO2 emissions (Dec factor - pounds)	1,460,339											
Potential Annual reduction in CO2 emissions (pounds)	466,514											

California Service Company- 1000+ vehicles

- They wanted to improve their company MPG but they found that the group of 200 supervisors had the worst idle times.
- They could not effectively launch a idle reduction company wide if the supervisors were idling so much. (7-8 hours a day)
- Initiative to reduce idle time with supervisors started Jan 1.
- By the end of March they saved \$125K in fuel costs....with just the Supervisors.



Attributions for the following information

FuelEconomy.gov

Automotive Fleet Magazine

US Dept of Energy

Argonne National Laboratory

Tips to cut down fuel expenses at work and home

Automotive Fleet says fuel can take up to 60% of the fleet operating costs.

#1 Stop unnecessarily idling your vehicle

- Idling cost a 1/3 gallon per hour on cars and light duty to almost a gallon of fuel per hour on big trucks
- Engine size and Air Conditioning can increase that
- Newer gasoline and diesel engines only need 3 minutes to warm up
- Look for OPPORTUNITIES to reduce idle time. 1/3 of a large fleet idles over 30 minutes and up to an hour in the fleet yard every morning.
- Show employees how they can save in their own pocketbook (spouses, teenagers)
- Have an Idle Challenge with prizes

#2 way to minimize fuel consumption

Avoid Aggressive Driving

- **Aggressive driving (speeding, rapid acceleration and braking) wastes gas. It can lower your gas mileage by roughly 15% to 30% at highway speeds and 10% to 40% in stop-and-go traffic.**
 - **Gasoline savings = \$0.50-\$2.00/gallon** (based on \$5.00 gallon)
- **Speeding- Above 50 mph, gas mileage drops rapidly. For every 5 mph over 50mph it adds \$0.36 cents per gallon** (based on \$5.00 gallon)
 - Considerations: How much time is saved going 85 mph on I-80?
 - At 85mph 1hour 56 minutes. (cost you \$2.45 per gallon more than traveling at 70mph)
 - At 75 mph 2 hours and 12 minutes (only 16 minutes more
 - At 70 mph 2 hours and 21 minutes (only 25 minutes more than at 85 mph)
 - \$81.00 versus \$55.00 X how many trips x how many trucks
 - One trip a day for 20 days at 70 mph \$1100—at 85 mph \$1650 (\$550 more to get there 25 minutes sooner)

Evaluate your ICEV fuel usage

Statistics

Your vehicles' idling time and other statistics.

Total idle time
1,609.6 hours

Idle time improved from
55.2% for the previous 3
months down to 47.5% for
last week.

1,609.6 hours
worse than the benchmark

1,609.6 hours
worse than best-in-class

Average idling percentage
47.5 %

47.5 %
worse than the benchmark

47.5 %
worse than best-in-class

Local Construction Company:

Avg MPG 1.7

You can only manage what you can see and measure

Fully loaded rock hauling trucks....

Went from 75 mph to 70 mph and finally to 65 mph

MPG changed from 1.7 mpg to 3.2 mpgsaved almost half of their monthly fuel cost

Fuel then was \$2.50 gallon

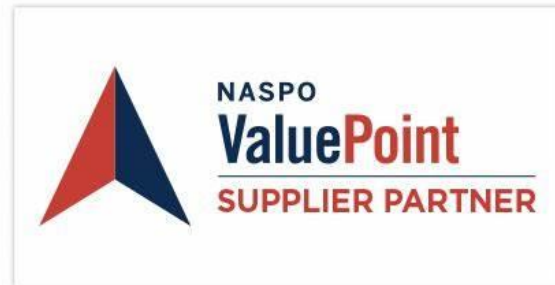


Q&A

Norma Havens

Norma@USAFleetSolutions.com

775-830-7358



How to Build an Idle Reduction Fleet Culture.



IDLE FREE Guy™
Idle Reduction Behavior
Modification Expert.



GoGreen.



IDLE FREE
Certified Fleets™



IDLE FREE Guy™

Idle Reduction Behavior Modification Expert.

- Former TV radio broadcaster.
- Sales and marketing: high tech, telecom.
- Cause branding: The Salvation Army.
- Father of two kids.
- Founder; The Children's Clean Air Network.
- Creator; **IDLE FREE** for our kids®

[Ron's full BIO.](#)
[LinkedIn Profile.](#)



Ron Zima ADpPR

U.S., Canada, fleets commonly spend:



40%
engine hours
on operator
idling behavior.

IDLE Cost Metrics: U.S. and Canada

“The typical fleet operation is spending 40% of engine hours on driver idling behavior.”

- Ron Zima, IDLE FREE Guy™

Point of View Paper
GoGreen Communications Inc. © 2023

GoGreen.

GoGreen.

“Idle reduction from driver behavior modification in a fleet’s gasoline and diesel burning assets is the biggest combined cost, greenhouse gas and air pollution reduction opportunity for fleet operators in the United States and Canada in all fleet industry sectors.”

Go**IDLEFREE**.com



‘Cascade of costs’ Driver ‘60’s idling’ beliefs behavior:

4

- Fuel.
- Added *maintenance, warranty cost.
- Lifecycle costs.
- Vehicle downtime.
- Employee productivity.
- Carbon emissions.
- Air quality.
- Costs @home; employee vehicles
- Safety risk (vacant vehicle idling).
- Fleet reputation.

*Maintenance expenses equal to roughly half of the total cost of ownership over the vehicle life.

Savings (Two Years) 2,480 Vehicles*

*Price of Fuel: Gas \$3.12 Diesel \$4.60

Fuel Cost Reduction:

High (50%)	\$5,240,703
Medium (40%)	\$3,865,907
Low (30%)	\$2,746,910

CO2 Reduction (Tons):

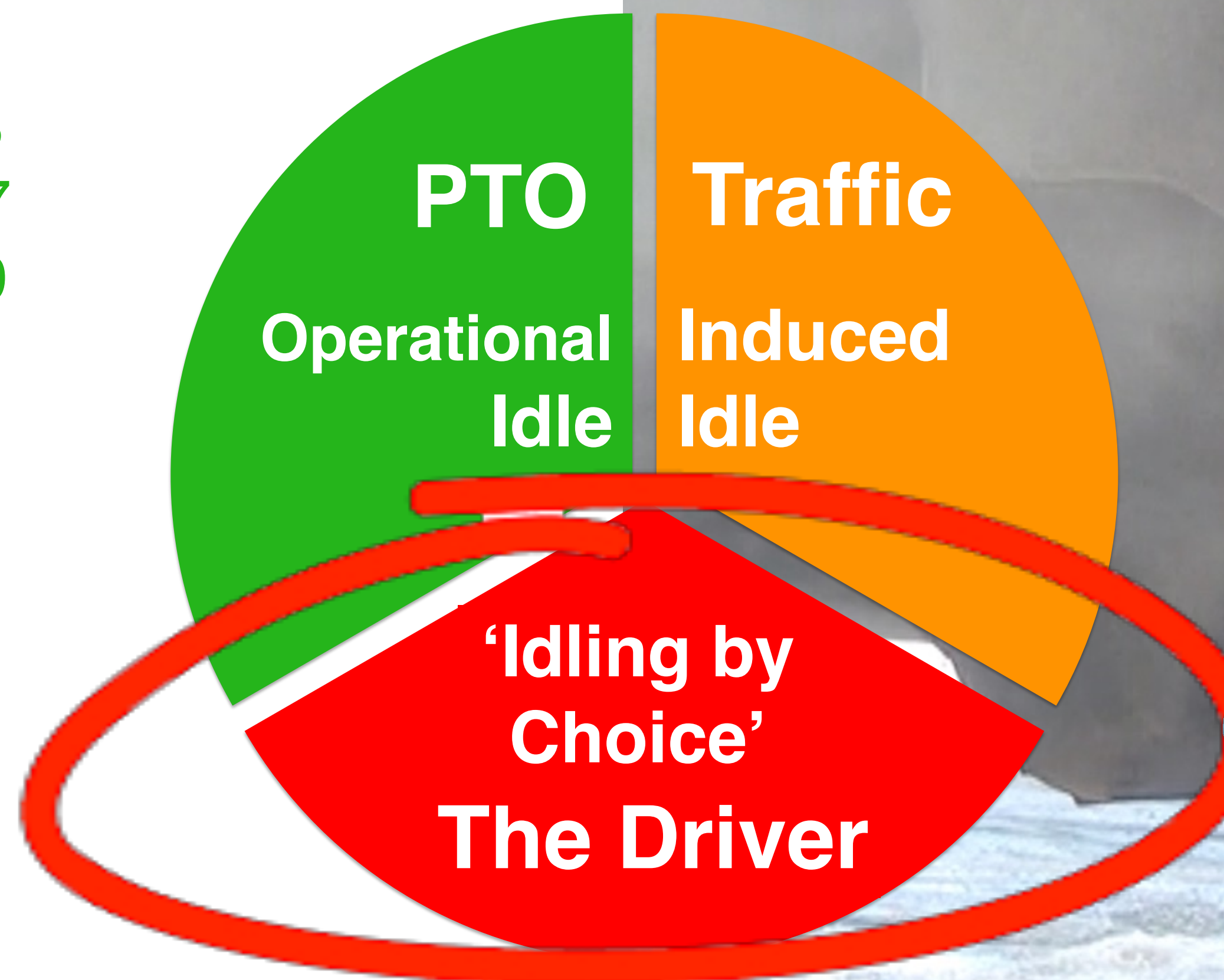
High (50%)	8,252
Medium (40%)	6,280
Low (30%)	4,710

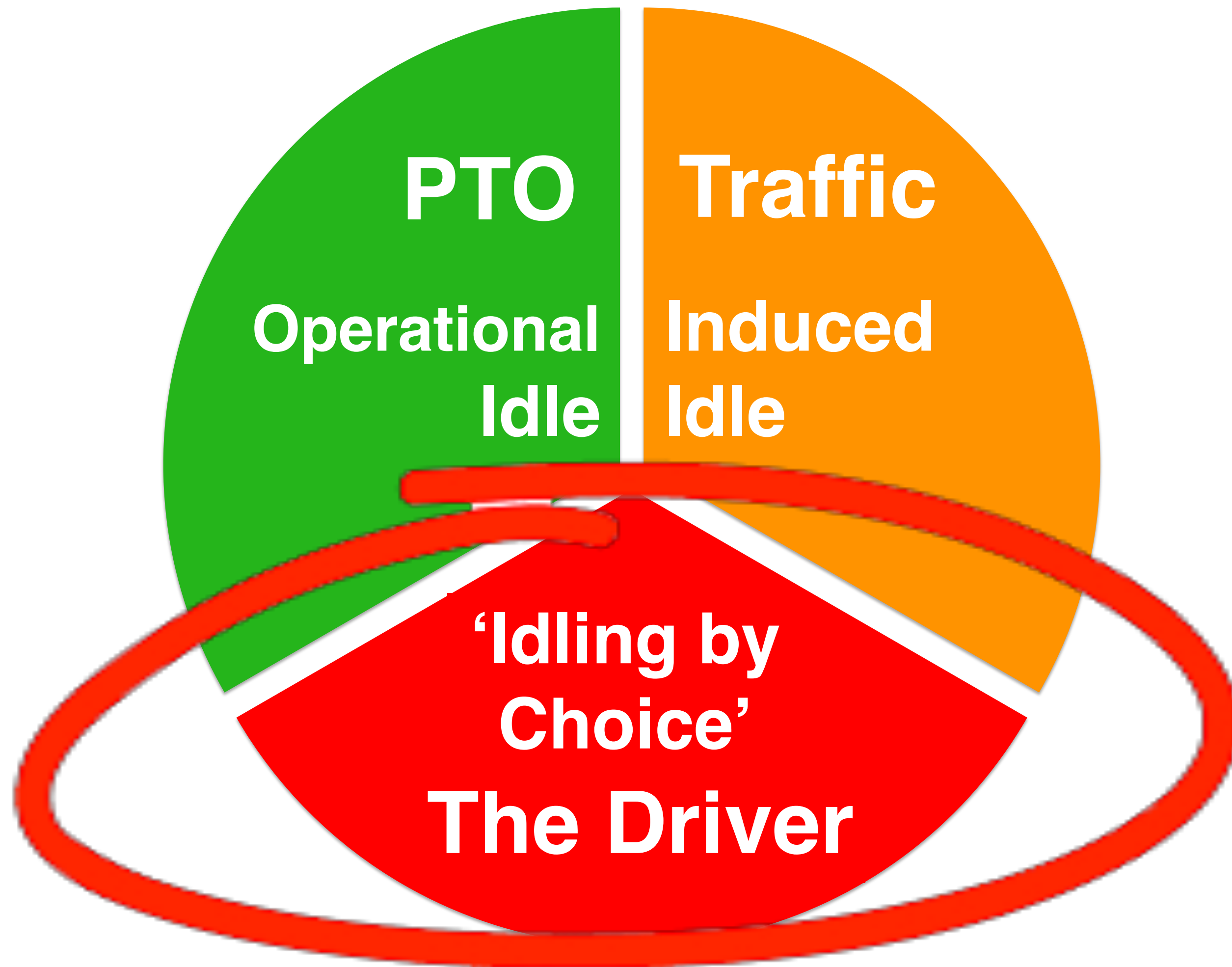
Net all costs of GoGreen program over two years.

*U.S. Energy Information Agency (EIA) U.S. national fuel averages as of 2022-12-19.

GoGreen.

Idle Reduction Opportunity Assessment™





Reduce 'by choice' idle.
Not Power Take Off (PTO.)
Not idle, stuck in traffic.

**When parked,
and it makes sense,
'go idle free.'**

IDLE MYTHS:

1. Idling GOOD.
2. Restarts BAD.
3. Long warmups GOOD.

Summary of OEM Idling Recommendations from Vehicle Owner's Manuals



Chevrolet:

“Avoid idling. Do not warm up the car.”

Ford:

“Don’t idle for more than 30 seconds.”

Proven formula: EMOTIONAL ENGAGEMENT.

Drivers will modify beliefs, behavior with effective messaging around THREE values:

- ✓ Their kids.
- ✓ Their cars.
- ✓ Their cash.



GoGreen.





Historical Response: Year One. 10

Outliers

Will Come Along

Early Adopters

Age groups 18+
Psychographics.
Genders.

Respond
Enthusiastically:

- Kids.
- Cars.
- Cash.

Why Company Idle Reduction Initiatives Fail.

The agenda and the messengers:

11

Company Engagement:

“Help the company be more efficient.”

“Help the company protect its vehicles.”

“Save money for the company.”

Home Engagement:

✓ *Their* kids, cars, cash.
Idle Reduction Communication.



Messengers



Receivers

Case Studies

Case Study – International Bus Fleet
Novice to experienced drivers.
80% reduction sustained over two years.

Case Study – Port Maintenance Fleet
Novice to experienced drivers.
40% reduction in 4 months during harsh winter.

Case Study – Interstate Fleet
Novice to experienced drivers.
55% reduction in 30 days





Home – Environment

Headlines

Environment News

Notices

About

Contact

City of Raleigh Launching Pilot of Idle Reduction Program with Goal of Becoming One of North America's First Idle Reduction Certified Fleets

8 Mar 2023

RALEIGH, N.C., March 8, 2023 /PRNewswire/ — GoGreen Communications Inc, the leader in idle reduction behavior modification involving corporate fleets of vehicles, is launching a pilot of its program with fleet operations at City of Raleigh, North Carolina. This will involve multiple departments across the city under the guidance of Vehicle Fleet Services.



[March 8, 2023 media release.](#)

IDLE FREE Guy™

Idle Reduction Behavior Modification Expert.

info@GoIDLEFREE.com



Ron Zima ADpPR



GoIDLEFREE.com

Thankyou!



IDLE FREE Guy™
Idle Reduction Behavior
Modification Expert.



GoGreen.



IDLE FREE
Certified Fleets™



QUESTIONS?

- Be respectful
- Raise your hand and wait to be called on
 - Or ask your question in the chat
- One question per person
 - We will take additional questions if time allows





UPCOMING

- April 20: In-Person Meeting
 - Meeting and networking event
 - “Electric Avenue” Expo
 - Be sure to RSVP!
- May 11: Medium- & Heavy-Duty EV Webinar
 - Matt Meyer, DANNAR
 - Marcie Willard, Lightning eMotors
- May 12: All-In Community Celebration!



THANK YOU!

NICOLE WARGO, CLARK COUNTY SUSTAINABILITY FELLOW

CLEAN CITIES COALITION

NICOLE.WARGO@CLARKCOUNTYNV.GOV



SCAN ME