

ACEEE

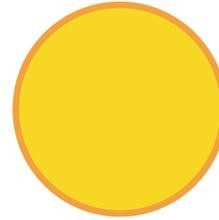
INTELLIGENT EFFICIENCY CONFERENCE

OVERCOMING BARRIERS TO ENERGY EFFICIENCY IN COMMERCIAL BUILDINGS

Shannon Smith
CEO



ABUNDANT



POWER

BUILDING DATA THAT WORKS

Abundant Power is a technology and data analytics company focused on providing transformative

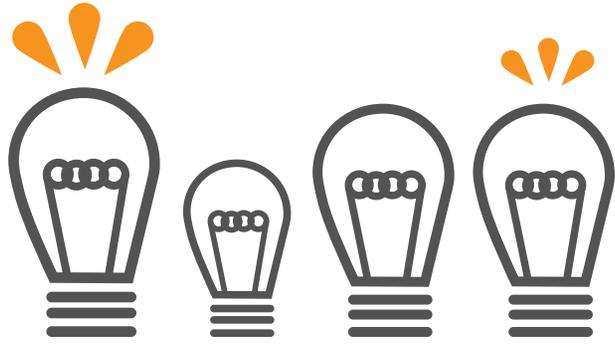
financial and technology solutions for the built environment ecosystem.



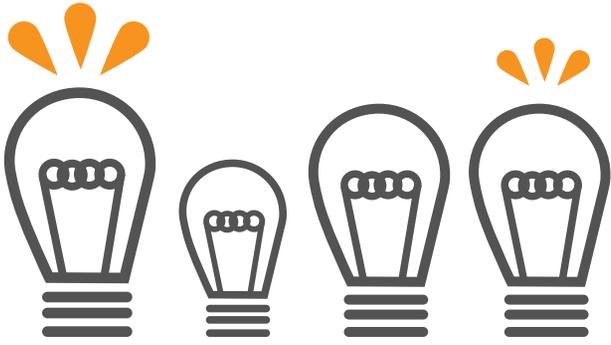
CleanSource Capital is an affiliate established to provide design and administration of proprietary funds dedicated to energy efficiency financing.

**WHAT ARE THE
CHALLENGES?**





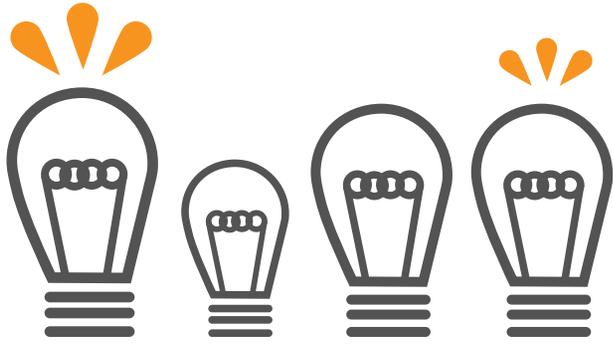
COLLABORATIVE DECISIONS
(ESPECIALLY WITH CAPITAL)



COLLABORATIVE DECISIONS
(ESPECIALLY WITH CAPITAL)



RIGID BUDGETS



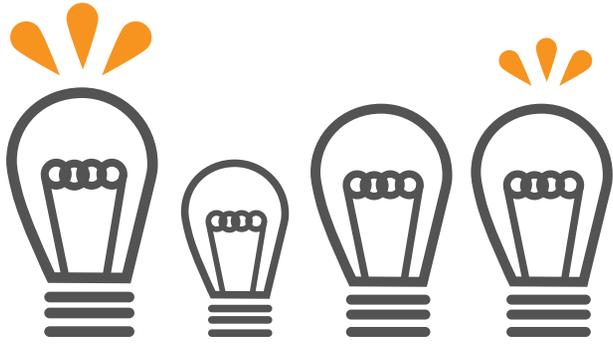
COLLABORATIVE DECISIONS
(ESPECIALLY WITH CAPITAL)



RIGID BUDGETS



LITTLE TIME



COLLABORATIVE DECISIONS
(ESPECIALLY WITH CAPITAL)



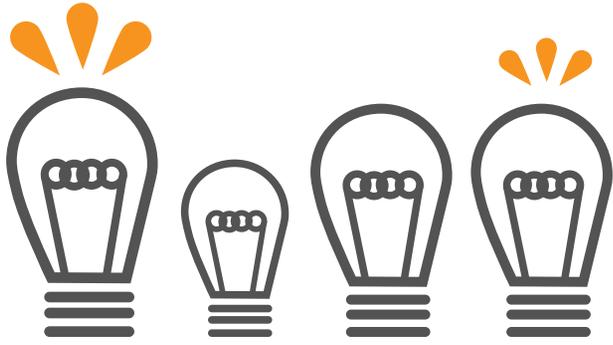
RIGID BUDGETS



LITTLE TIME



LACK OF INFORMATION



COLLABORATIVE DECISIONS
(ESPECIALLY WITH CAPITAL)



RIGID BUDGETS



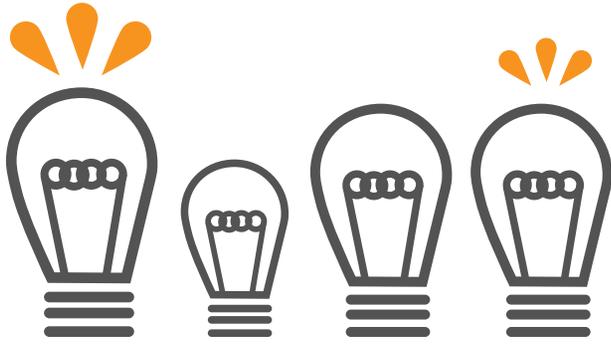
LITTLE TIME



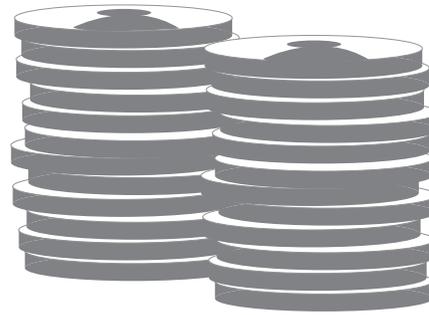
LACK OF INFORMATION



LACK OF TRUST



COLLABORATIVE DECISIONS
(ESPECIALLY WITH CAPITAL)



RIGID BUDGETS



LITTLE TIME



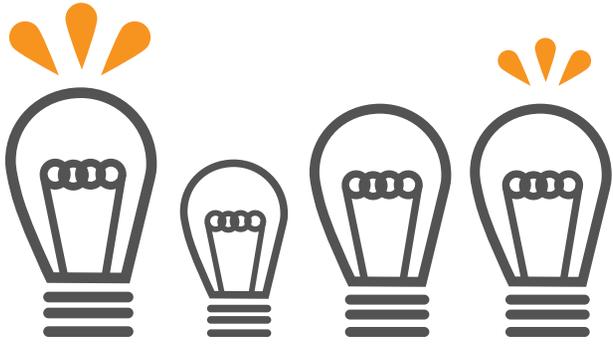
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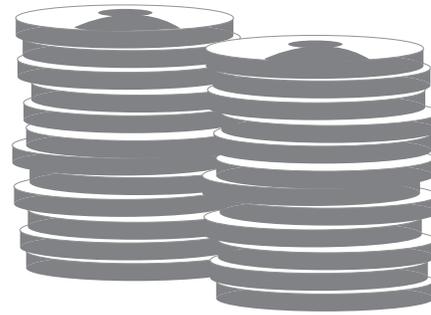
LACK OF TRUST



LANGUAGE
BARRIER



COLLABORATIVE DECISIONS
(ESPECIALLY WITH CAPITAL)



RIGID BUDGETS



LITTLE TIME



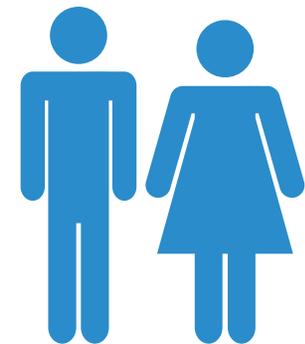
LACK OF INFORMATION



LACK OF TRUST



LANGUAGE
BARRIER



TENANTS COME FIRST

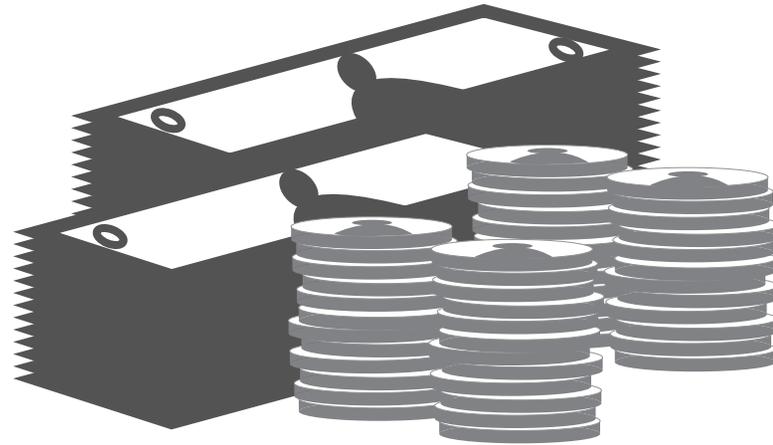
WHAT IS NEEDED?



POLICY



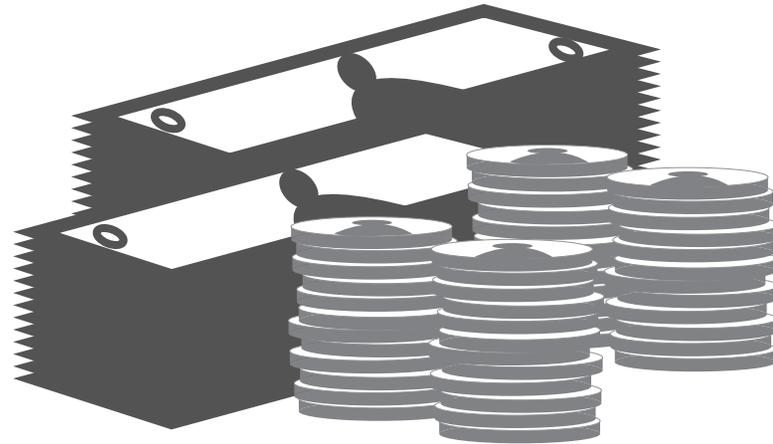
POLICY



FINANCE



POLICY



FINANCE

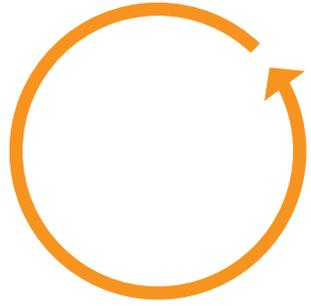


DATA

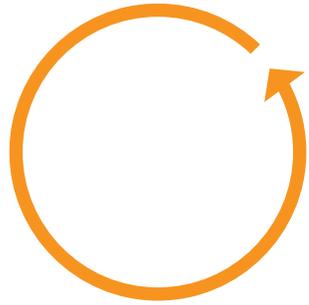


DATA

**WHAT DOES
DATA (ICT)
NEED TO BE?**



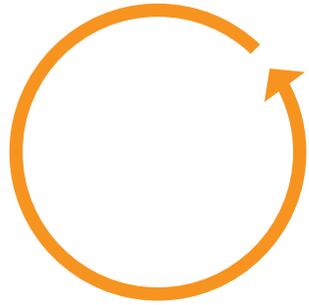
SIMPLE



SIMPLE



TRANSPARENT



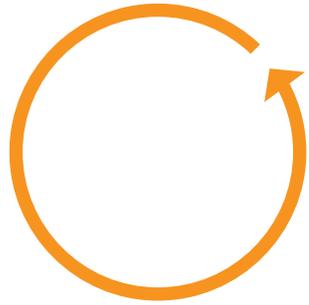
SIMPLE



TRANSPARENT



RELEVANT



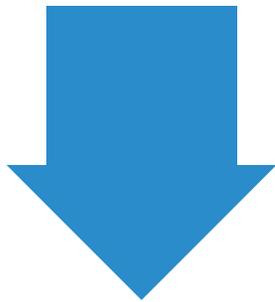
SIMPLE



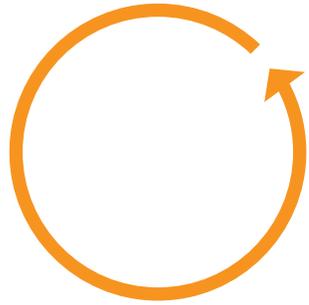
TRANSPARENT



RELEVANT



SPECIFIC



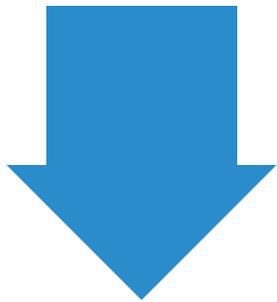
SIMPLE



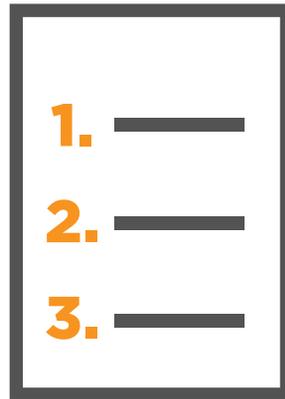
TRANSPARENT



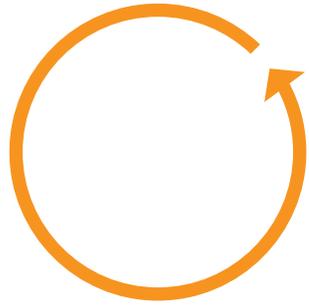
RELEVANT



SPECIFIC



ACTIONABLE



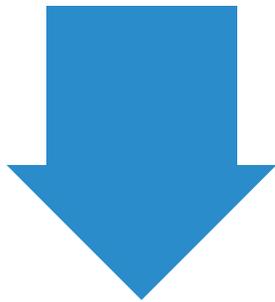
SIMPLE



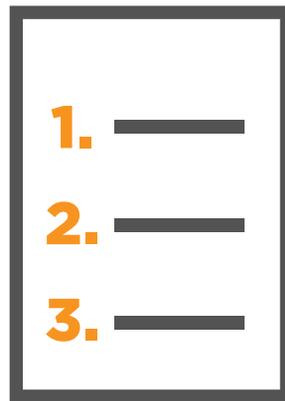
TRANSPARENT



RELEVANT



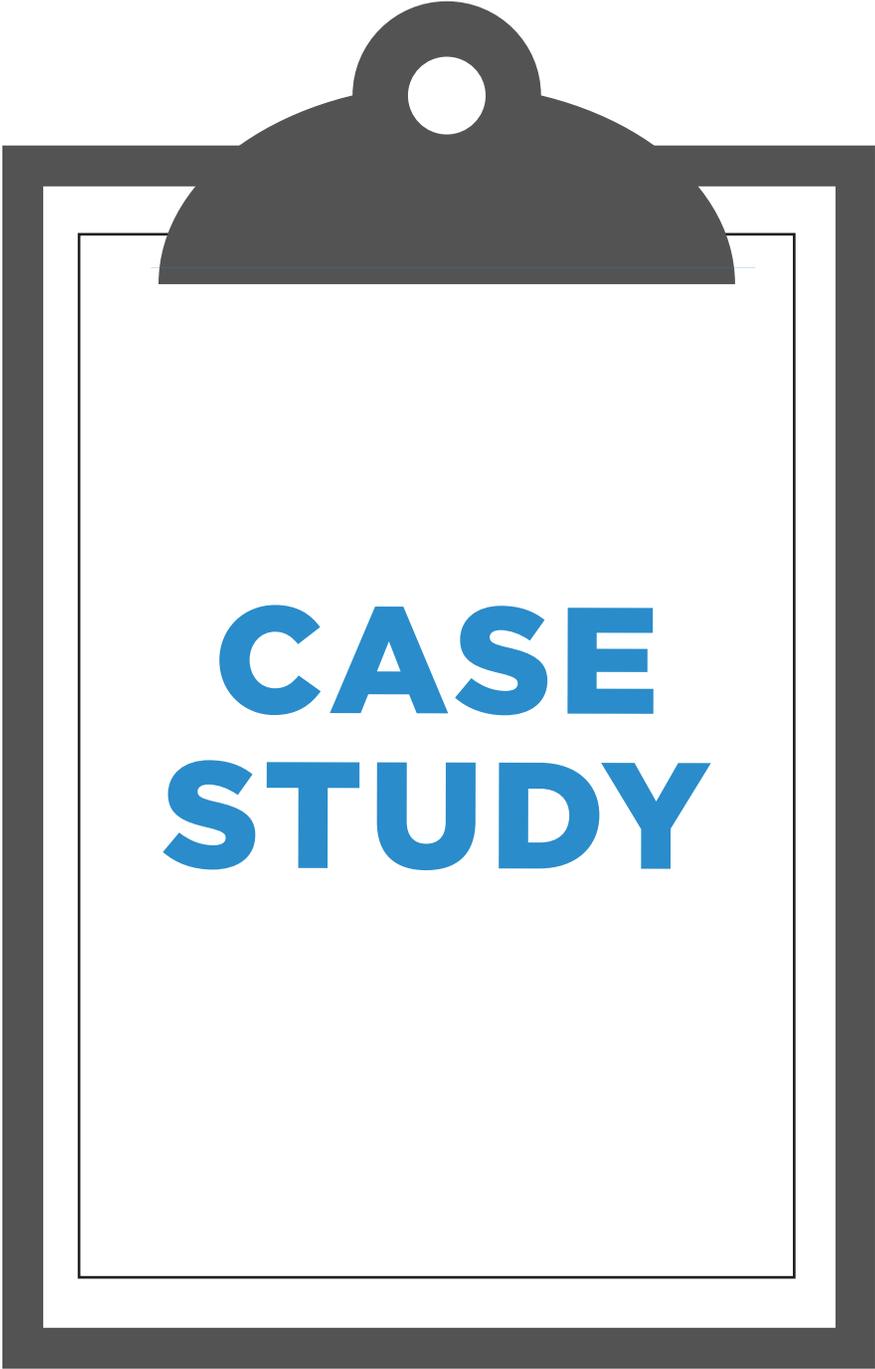
SPECIFIC



ACTIONABLE



ENGAGING

A stylized icon of a clipboard with a dark grey border and a white center. At the top, there is a dark grey clip with a white circular hole. The text 'CASE STUDY' is centered in the white area.

**CASE
STUDY**

GOAL:

Strengthen the tenant experience and lower costs through improved operational efficiency and lower energy use

APPROACH:

Continuous mechanical systems data analytics & Diagnostics

**BUILDING
TYPE:**

Multi-Tenant Commercial Office

**BUILDING
LOCATION:**

3 locations in Charlotte, NC

**BUILDING
AREA:**

494,000 SF (total of 3 buildings)

ISSUE:

As a rapidly growing, forward thinking company, Grubb wanted to leverage technology to ensure they could scale their footprint and service at the highest level while managing personnel costs.

Grubb deployed Abundant Power's Intelligent Building Analytics (IBAx) across three wholly owned multi-tenant office buildings.

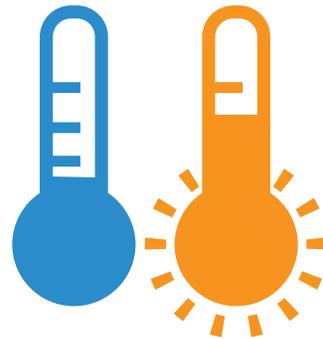
With Grubb's slogan of, "People who care. Places that matter", the tenant experience is a top priority.

HIGHLIGHTS:

average energy consumption savings of

>15%

notifying the property manager of critical issues as soon as they occur.



Deployed algorithms against HVAC data 24/7/365 that revealed comfort problems, improper equipment operations, and energy waste.



HIGHLIGHTS:

found that nearly

70%

of one facility's water-source heat pumps were running excessively despite control systems settings.

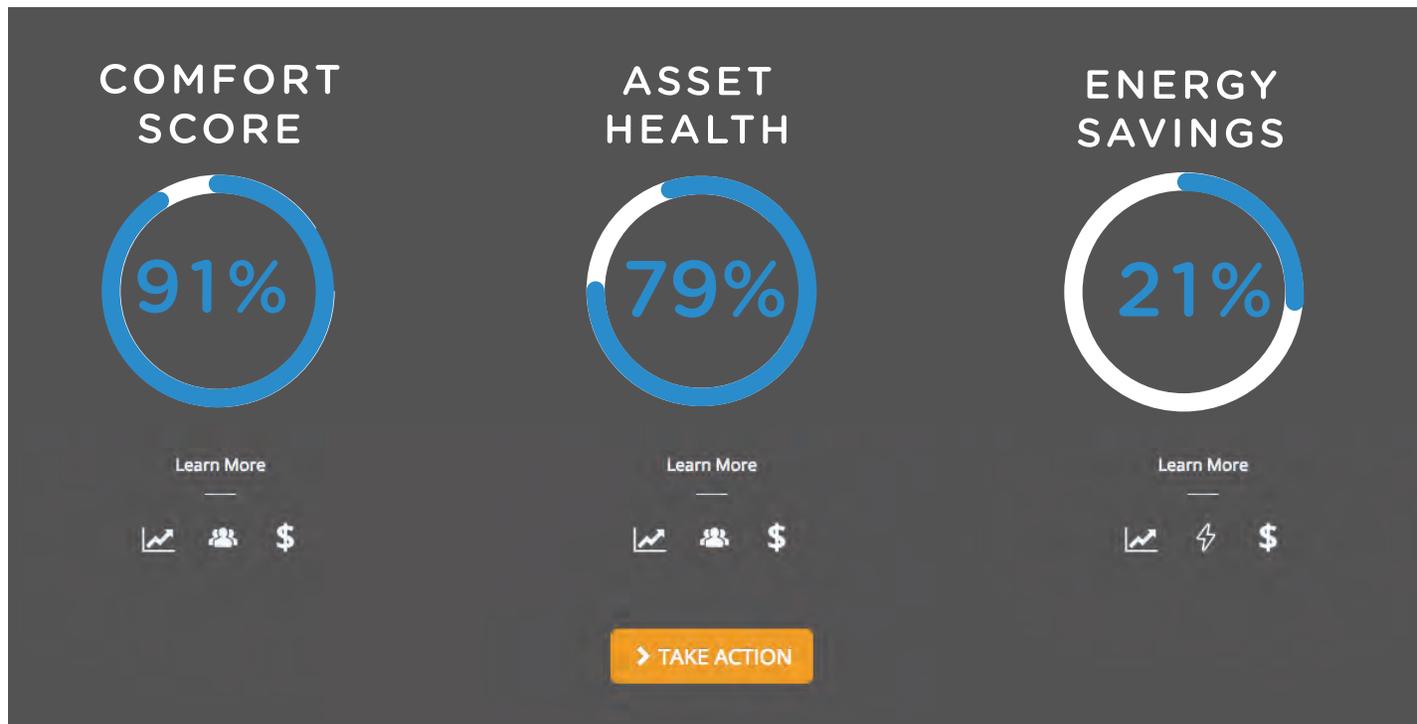


One entire floor remaining occupied mode throughout the evening, something that would not have been easily noticeable using traditional building management practices.

HIGHLIGHTS:

Heat and flow balance algorithms found terminal units (VAV boxes, fan-powered boxes) with electric reheat stuck resulting heating and cooling waste.

Utilized KPI's to unify building management approach and demonstrate performance to outside investors



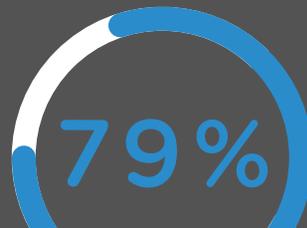
COMFORT SCORE



CAP VALUE AT RISK
YOU HAVE \$976,111 AT RISK
IN CAPITALIZED VALUE



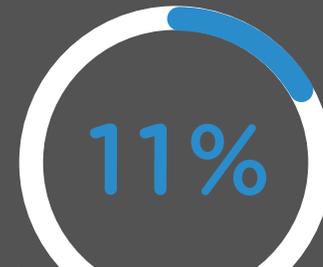
ASSET HEALTH



REPLACEMENT COSTS
YOU HAVE \$83,895
REPLACEMENT COSTS
EXPOSED



ENERGY SAVINGS



CAPITALIZED VALUE
THIS EQUALS \$14,129 IN
CAPITALIZED VALUE



 TAKE ACTION

INTELLIGENT DATA **THAT WORKS**

For Buildings. For Tenants. For You.





Shannon Smith
CEO

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ssmith@abundantpower.com