



Energy & Water Efficiency for Community Colleges

Introducing *Sustainability-as-a-Service*[™]
from Sustainability Partners

AGENDA

- IGEN Challenge
- The Solution
- Sustainability-as-a-Service™ Business Model
- Technology Solution Examples
- SaaS Process Steps
- Customer Profiles
- Next Steps



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IGEN CHALLENGE



- Colleges operating with **capital constraints** and **budget uncertainty**
- Energy and water efficiency projects increasingly difficult to fund
 - **Internal Capex:** Energy infrastructure **upgrades compete with core mission** projects
 - **External Financing:** Require **long term contracts/financial obligations**
- Inability to keep pace with energy efficiency technologies or address deferred maintenance within timely procurement cycles
- Colleges denied access to upgrades that generate savings and support sustainable operations

THE SOLUTION: A NEW BUSINESS APPROACH... THE “INTER-UTILITY”



- End exclusive reliance upon utilities to provide dependable energy services
- Accept that **energy and water infrastructure**, though mission critical, is **not a core competency** for most institutions
- Recognize lights, water, fuel – infrastructure – can be acquired **as a service instead of owned**
- **Engage** first **inside/internal utility** – Sustainability Partners – and the Sustainability as a Service™ (SaaS™) model to design, fund, procure, install, maintain, warrant and continually upgrade equipment and infrastructure

Sustainability Partners completes circle -- connecting and aligning technology pace, payback periods, procurement cycles and customer need

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The SOLUTION – Sustainability as a Service



- **Public-Private Partnership** ("P3") approach to energy infrastructure investment
- Innovative approach to renovations and retrofits; **no impact to bond rating** or debt capacity
- **No capital cost** to IGEN member college – Sustainability Partners funds 100% of material and labor costs to implement qualifying projects
- Sustainability Partners invests in IGEN College's infrastructure to own and operate assets, **sharing** an agreed-to percentage of resulting **energy savings**
- **Turnkey** solution. Sustainability Partners is involved throughout project continuum from design/procurement through installation, commissioning, ongoing maintenance and, ultimately, technology refresh

BENEFITS TO SaaS™ MODEL



- **No capital outlay** or procurement dollars upfront – funded through savings on operating expenses
- **No long term commitment** – Positive impact on balance sheet and credit rating
 - Master SaaS agreement is month-to-month—no termination penalties
 - **College may terminate** relationship at any time on **30 days notice** and either (i) uninstall return the product or (ii) buy it out at fair market value based on straight line depreciation
- **Customer shares only realized savings with SP**
 - if Customer saves nothing, SP gets nothing
- **SP assumes burden of ongoing maintenance, warranty and risk of technology obsolescence**
- Broad domain expertise and technology agnostic
 - SP will use College's trusted vendors and preferred technology as long as fits underwriting criteria

**Service approach aligns incentives to maximize savings,
product reliability and overall satisfaction**

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DIFFERENTIATION: WHAT SAAS™ IS NOT

- Loan
- Lease
- Financing agreement
- ESCO
- Ordinary sharing-agreement



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EXAMPLES OF SUSTAINABLE TECHNOLOGY SOLUTIONS



- LED Lighting
- HVAC efficiency upgrades and replacement
- Building envelope (insulation, windows, coatings, thermal energy storage)
- Smart motors & controls (VFDs, sensor-based controls)
- Smart irrigation and plumbing systems



Source: Office of the Assistant Secretary of the Army for Installations, Energy and Environment (OASA[I&E]).

PROJECT PROCESS – SYNERGY AND SUPPORT W/TOTAL ENERGY CONCEPTS



- Identify potential project
- Gather information (high-level site walk/assessment, utility bills, TOU hours, etc.)
- Validate economic fit
- SaaS™ agreement (Addendum) drafted, negotiated and executed
- Baseline monitoring and verification – yields sample product for College approval
- Assumptions and Addendum refined and/or validated – sign-off and notice to proceed
- Materials ordered, installed and commissioned
- Ongoing monitoring, maintenance/warranty and continual refresh/upgrade

Zero Capital Outlay by College

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IDEAL SaaS PROJECT CANDIDATES



Renovation, Retrofit or Upgrade Projects for which College Does Not Have Capital That Would

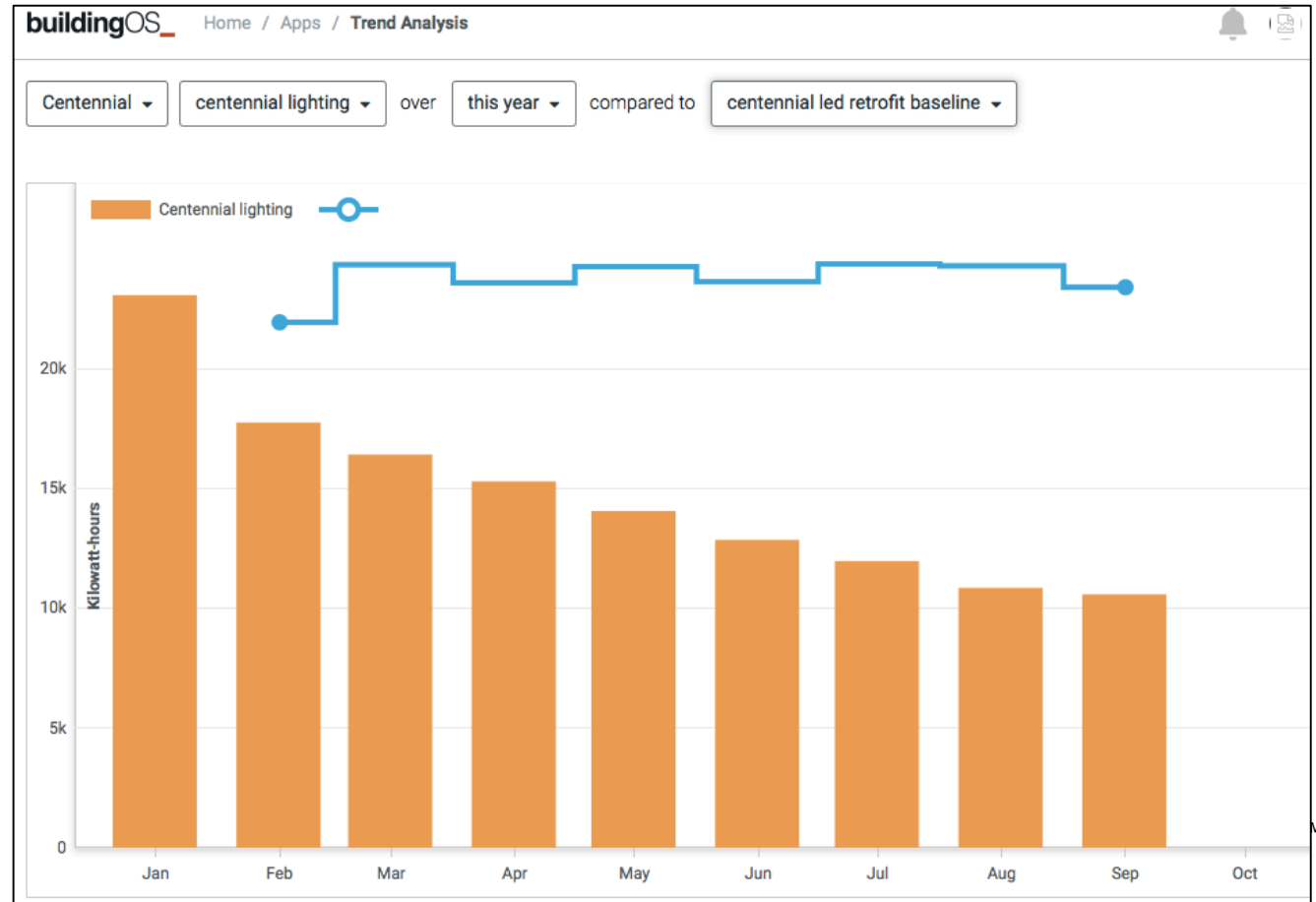
- Improve operational performance and enhance sustainability
 - Top Tier, Proven Technologies
 - Experienced, Professional Experts in installation, operation, maintenance and repair
- Lower costs and generate substantial savings
 - ***High Time of Use***
 - ***High Power Costs***
 - ***Significant Efficiency Gains***
 - ***Helpful Incentives***
- Positions IGEN and Member Colleges as Thought Leaders Promoting Sustainable Operations

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BASELINE ESTABLISHED SAVINGS MEASURED, VERIFIED & REPORTED



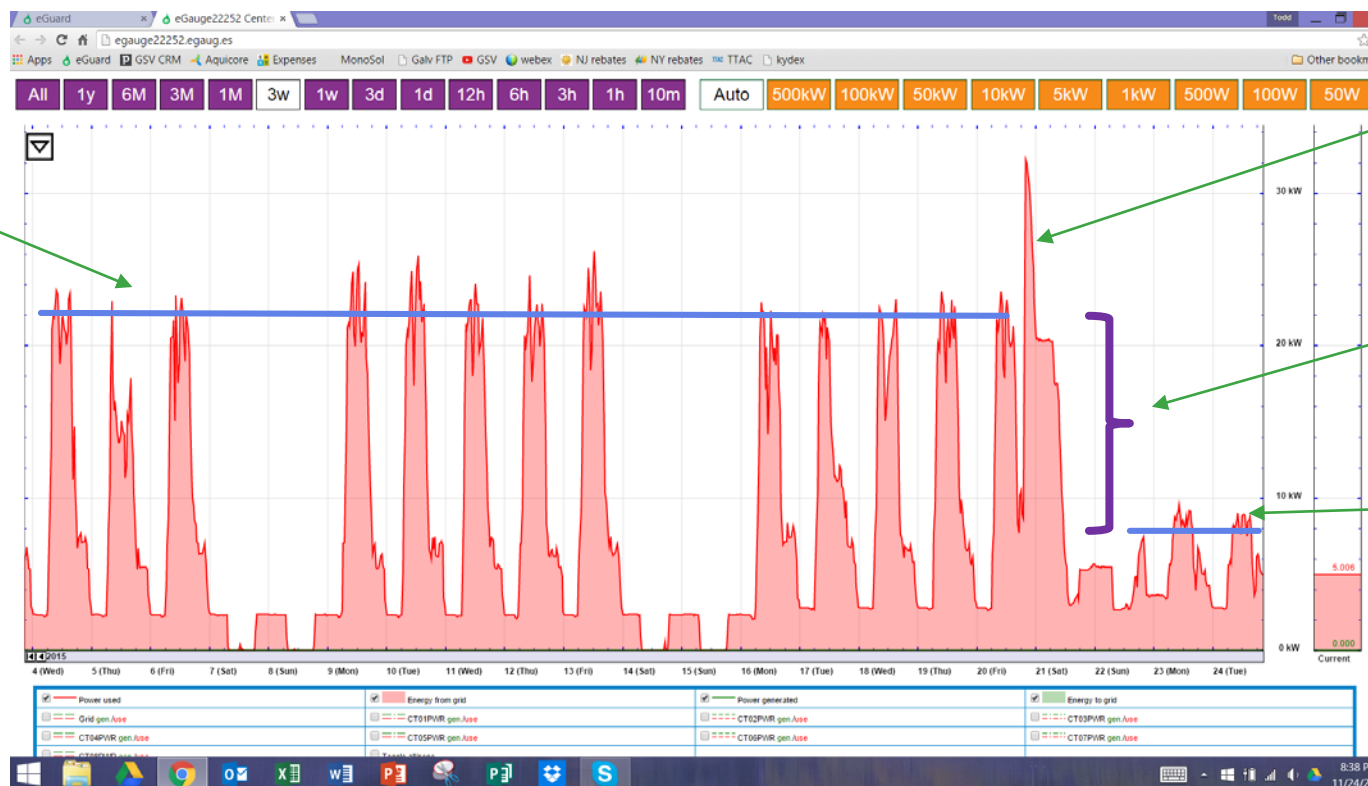
 **Cloud Logger**
38 ZEROS



MONITORING & VERIFICATION – RECENT PROJECT: ELEMENTARY SCHOOL



Pre-installation
baseline usage



Peak due to
weekend installation

66% Reduction
in kW use

Post-installation
usage

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MEASUREMENT & VERIFICATION (M&V) PLATFORM (*DAY-WEEK-MONTH VIEW*)



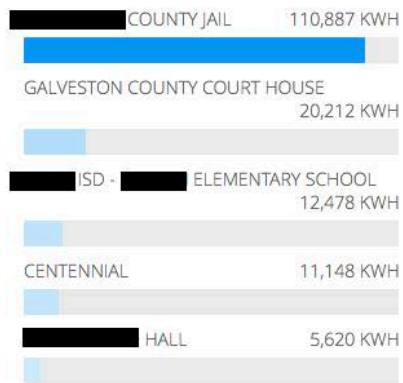
EXECUTIVE DASHBOARD

ADOC - Eyman Prison

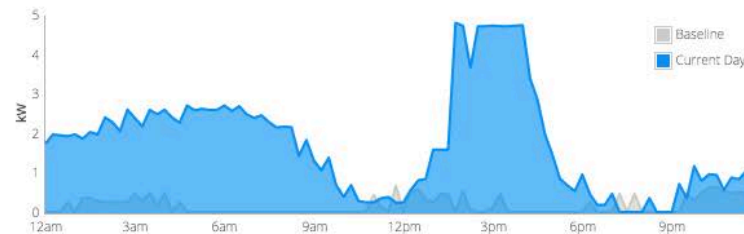


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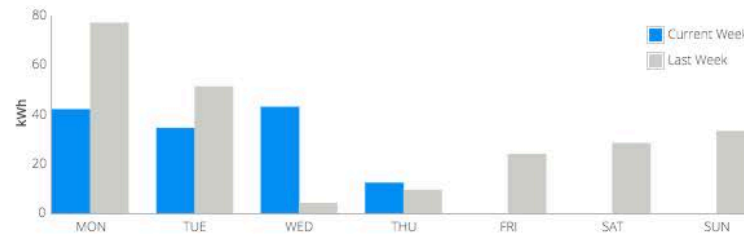
HIGHEST CONSUMPTION



LAST DAY RECORDED



CURRENT WEEK VS. LAST WEEK



MONTHLY ENERGY USAGE



NOVEMBER ▼ -72%

739 kWh

ENERGY COST

\$89

LAST MONTH: \$319 ▼ -72%

PEAK DEMAND

14 kW

LAST MONTH: 14 kW ▲ 0%

EUI (KBTU/SF/YR)

0.00 EUI

LAST MONTH: 0.00 EUI ▲ 0%

- Real-time energy monitoring continually verifies performance of ECMs
- Ensures accuracy of savings
- Enables early warnings for any necessary preventative maintenance

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COLLEGE PROSPECTIVE PROFILE – MARICOPA COMMUNITY COLLEGE DISTRICT (AZ)



MARICOPA
COMMUNITY
COLLEGES®



The Customer

- One of the largest Community College Districts in US
- 10 Campuses plus 2 Skills Centers
- Serves 265,000 students annually

About The Opportunity

- Project champion: Associate Vice Chancellor for Capital Planning (nationally renowned; FAIA registered)
- Budget challenges; District defunded by \$60M since 2009
- Aging infrastructure...half of all campuses established in 1960's
- Strategically address/prioritize colleges where needs are greatest

Potential Projects

- Phoenix Community College – Proposed LED retrofit of exterior bldg, parking facility, walkway lighting
- Mesa Community College – Level I audit in process of 46 structures for proposed LED lighting, smart irrigation
- Glendale Community College (North campus) – Proposed parking facility lighting retrofit to improve safety and reduce energy OpEx

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The SOLUTION – SaaS™ Contracting



- Two inter-related Agreements...
 - **Master SaaS Terms & Conditions** – IGEN executes on behalf of the collective college members
 - “Umbrella” agreement that does not obligate IGEN or Colleges from fiscal or execution standpoint
 - **M-SaaS Addendum** – Member Colleges negotiate standalone agreement with SP as addenda to Master Agreement that incorporate General Terms & Conditions
 - Project-specific arrangements under which SP commits to execute work/provide service and College commits to sharing resulting savings with SP as payment for service
- Procurement Options
 - IGEN signs contract directly with Sustainability Partners to facilitate SaaS™ delivery
 - IGEN (or Member College) join Purchasing Cooperative of America (PCA) and signs Master Agreement with SP

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PROPOSED IGEN PROGRAM OVERVIEW



- IGEN Launches Innovative Initiative to enable ***Sustainability Upgrades as a Service without***
 - Tapping Capital Budgets, Taking on Debt, Seeking Additional Appropriations or Raising Student Costs
- ***IGEN Signs Master Agreement*** to General Terms & Conditions on Behalf of Member Colleges
 - ***Earmarks \$50+ Million*** in Private Financing to Fund Sustainability as a Service Initiative
 - ***Member Colleges Negotiate Standalone Agreements*** to Capitalize on Specific Savings Opportunities ***as Addenda*** to Master Agreement
 - Creates Revenue Stream to Fund IGEN Activities
- IGEN and Member Colleges ***Lead by Example*** in Promoting More Sustainable Operations
 - Reduce Carbon Footprint and Greenhouse Gas Emissions While Saving
 - Demonstrate Sustainable = Sound, Fiscally Prudent Facilities Management

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NEXT STEPS



- **Site Walks** and **Project Evaluations** at Initial **Three Campuses** – Established Transaction and Prove the Concept
- Identify/Select **Additional 5 or 6 Campuses** for Pilot Projects
- IGEN Review & Execute Master Agreement with Sustainability Partners
- Announce Availability of \$50+ Million for IL College Infrastructure Upgrades
- Use SP Capital to Fund Upgrades that Lower Costs, Enhance Resilience and Increase Sustainability

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SUMMARY: INSTITUTIONAL ENERGY INFRASTRUCTURE INVESTMENT



- Never pay CAPEX again
- Never pay maintenance or labor again
- Upgrade at no cost when new technology saves more
- Get flexibility of month-to-month service agreement
- Benefit from investment off balance sheet and does not affect debt capacity

In true partnership fashion, we invest in our customer's energy infrastructure and enable them to better spend their capital on Mission Critical activities

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Thank You

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