

ESC Market Transformation Conference

- NAESCO Distinguished Members Award



WELCOME

**Energy Service Coalition
Meeting
September 15, 2022**



Charles McGinnis
VP-Sales and Marketing
Sustainable Infrastructure



Helping prisons



improving infrastructure and
reduce energy/operational costs



creating healthy, productive
and sustainable environments



helping reduce the rate of
recidivism

DoCs in 22 states

We have developed and implemented performance contracts for DOCs in 22 states to date, often entering multiple project phases for these customers



reducing deferred maintenance



improving lighting and equipment



conserving water and energy



enhancing safety and security



without impacting state
budgets or taxpayer burden

Louisiana DoC

Significant Savings for DPS&C



953
buildings



7 locations

\$29.1M
invested

\$35.3M
Guaranteed savings
over 15 years

\$17.07M
Guaranteed
savings to date

\$18.51M
Actual savings to
date

109,411,092
kWh reduction

878,088
MCF reduction

125,750
metric tons
GHG reduction

LIGHTING BEFORE



LIGHTING AFTER



Virginia DoC

Significant Savings for VADOC

 **7** guaranteed savings projects



275
buildings



25 correctional complexes



\$93.5M
invested

\$128M
Guaranteed savings
over 15 years

\$58.9M
Guaranteed
savings to date

\$70.3M
Actual savings to
date



Green HVAC Training Program



Rehabilitate inmates by providing job training that transfers to employable skills outside of the correctional environment and contributes to a reduction in recidivism.



The program is integrated into our overall solutions for customers, the savings generated often offset the cost of the program — no taxpayer funds or appropriations needed.

A new study estimates **115,000** new HVACR workers must be trained by **2023** to meet the anticipated demand

Graduates may earn 10-15 industry certifications, concentrated on commercial applications



Reducing Recidivism

National Average: 68% (3-year rate)¹

- **Louisiana: 35.6%** – with the highest per capita incarceration rate in U.S.
- **Virginia: 23.9%** – second lowest recidivism rate in U.S.
- **Program Success Rate: only 4%** reoffending

Louisiana DoC



- 75 graduates
- 74 have not returned to prison
- 1st grad on track to earn \$95K

Virginia DoC



- 78 graduates
- 73 have not returned to prison
- \$2M saved on housing alone

Green Lab Institute - DOC

With 95% of offenders returning to our communities, the Green HVAC Vocational programs help them prepare for re-entry & employment.

\$1 today = \$4 tomorrow

Offenders who participate in general and vocational education while incarcerated are **40%** less likely to return to prison – saving \$4-\$5 for each dollar spent.

Money saved

Virginia only needed 5 graduates to remain out of prison for 3 years to pay for entire program. Currently, 40 graduates are working, resulting in an estimated **\$1.2M of savings** each year.

For long term offenders, training helps maintain DoC's HVAC systems – saving money.





“

The skills that I learned in the JCI program opened a door to endless possibilities and opportunities. ”

— Edward Higgins, Inmate at VADOC

Upon graduating from our program and his release from prison, Edward pursued a career in the HVAC industry and has gone on to earn a Bachelor of Science in Mechanical Engineering followed by a Master of Engineering, both from Old Dominion University.

Taking it into schools

Pathways HVACR Training and Learning Lab

Real-life experience better prepares students for professional or technical careers. We team with customers to develop career-themed curriculum, work-based learning, and community partnerships.



Potential Career Paths

Building Maintenance
Specialist

Green HVAC
Mechanic/ Technician

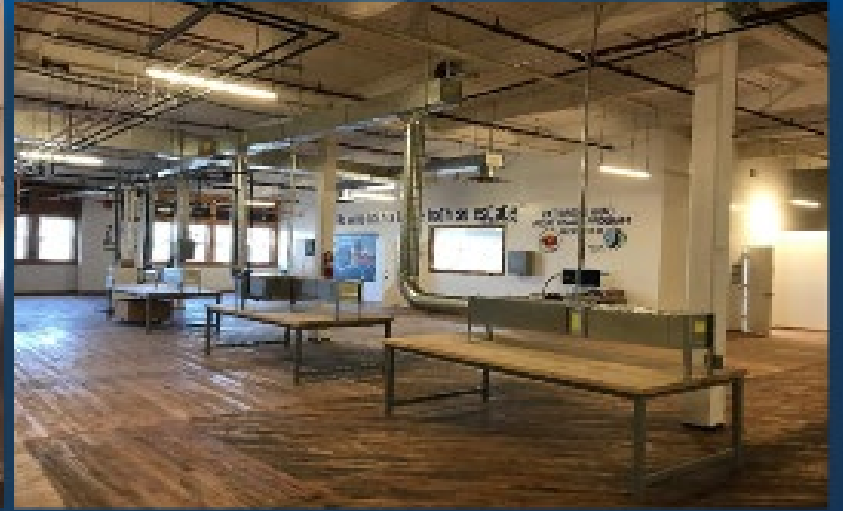
Facility Maintenance
Electrician

Students earn college credits and technical certifications, making them eligible for apprenticeships, internship, and jobs.

Energy Coordinating Agency HVACR Career Development Programs, Philadelphia Schools

HVACR Technology Learning Centers

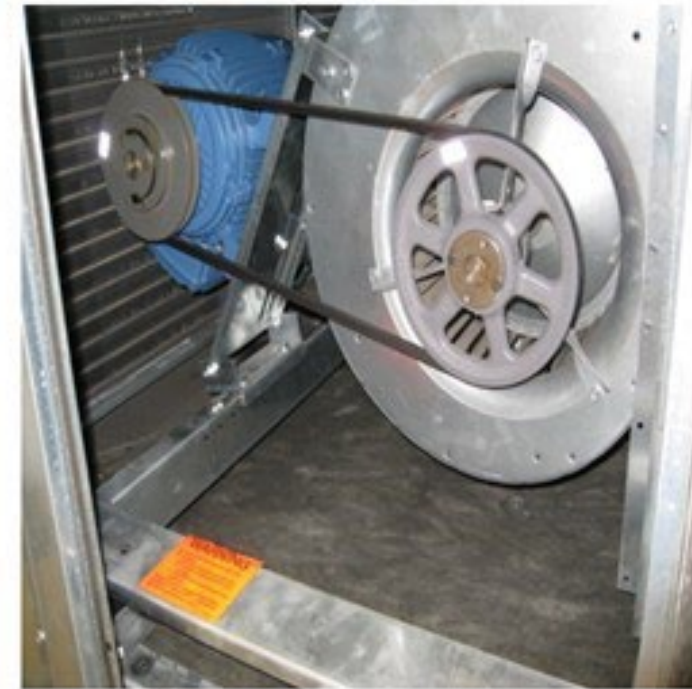
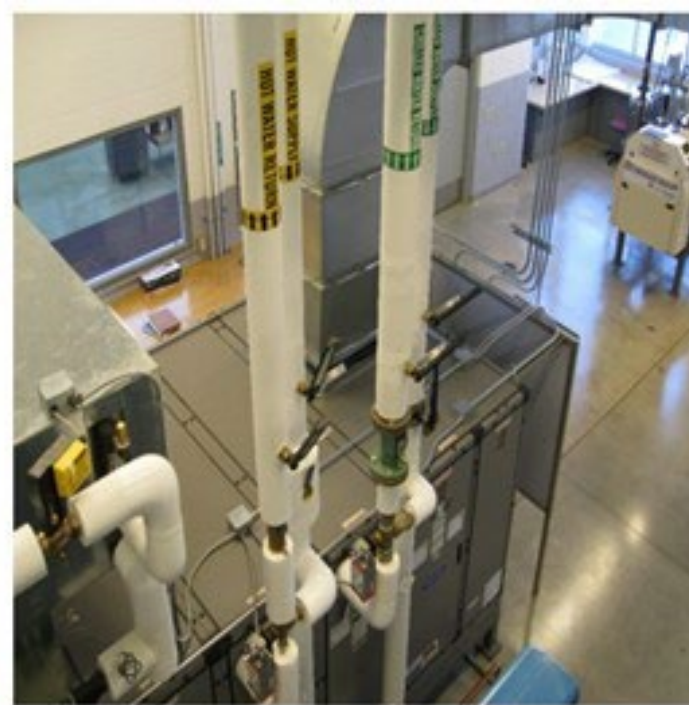
- Chiller, Boiler, VSD Air Handling Unit, VAV boxes, Fan Coil Unit, Building Automation System, Controllers, etc.



“The first time I came here, I thought I wasn’t going to be able to learn this because it’s too much. But now I see that I have the ability to do it. I want to be an HVAC technician. That’s what I want to be.”

Ruth Ruano, student

HVACR
Lab
Equipment
Examples



LIFT Innovation Center

Leaders Innovating for Tomorrow - career innovation center in Mattoon, IL

Each floor hosts a hands-on opportunity for students from multiple school districts to learn job skills

HVAC & Green Energy

Broadcasting & Marketing

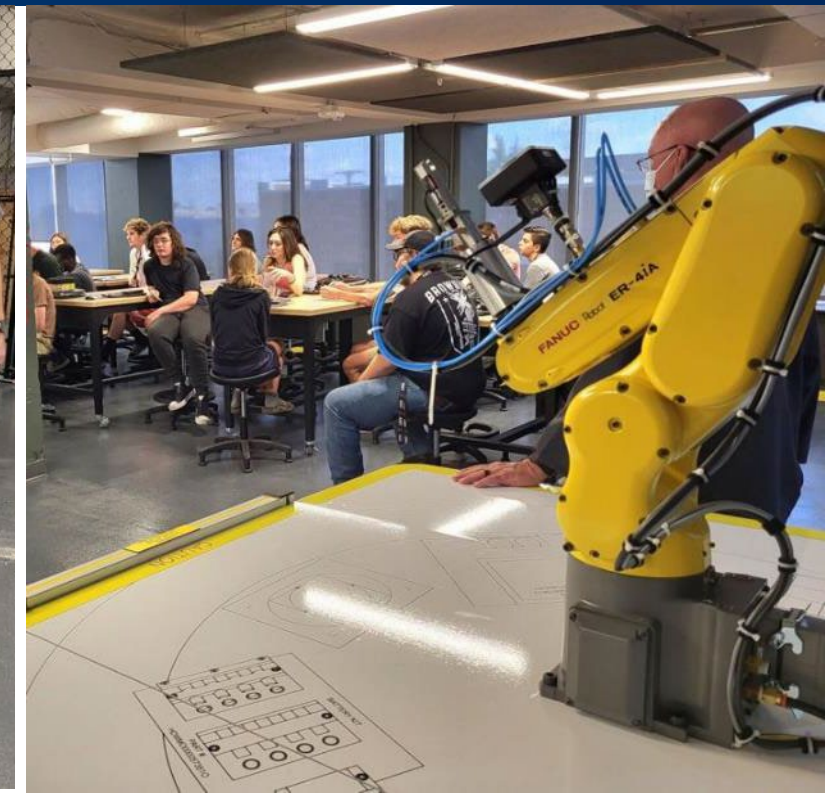
Information Technology

Childcare

Manufacturing & Construction

Leadership & Business

Culinary Arts & Hospitality



How can we leverage the Inflation Reduction Act (IRA)

Summary

Most consequential U.S. bill encouraging renewable energy & energy efficiency in history

Energy Security + Climate Change Provision	Total Spend + Funding Length
179D Commercial Buildings Efficiency Tax Deduction	Deduction of \$2.50/sf+ 10 years
HUD Grants/Loans Improve Energy, Water, and Climate Resilience of Affordable Housing	\$837M over 6 Years
Clean Energy Tax Credits - ITC	\$300B over 10 Years
Heat Pump Manufacturing	\$500M over 2 Years
Commercial Fleet Electric Vehicle (EV) Tax Credit	30% Tax Credit After 12/31/2022
Greenhouse Gas Reduction Fund	\$27B over 2 Years
25C Residential Energy Tax Credit	Up to \$1,200 of equipment cost 10 Years
Federal Bldg Decarbonization	\$3.375B over 9 Years
Energy Code Implementation Funding	\$1B over 7 Years
High Efficiency Electric Home Rebate Program	\$4.3B over 9 Years
Industrial Facility Decarbonization	\$5.8B w 50% cost share over 3 years
Energy Efficiency Contractor Training Grants	\$200M over 9 years

Energy Security + Climate Change Package

\$369 Billion over 10 Years

- Impact on the market expected to be 5-10x total bill funding
- 10-year funding horizon ensures renewable energy and energy efficiency are long term priorities

Barack Obama High School

Milwaukee, WI

- Johnson Controls partnership with MATC and MPS Barack Obama School
- Students to receive customized, hands-on training in HVAC and electrical programs



You can make a difference in peoples lives with ESPC.

Dedicated to Richard T. Barrett

Questions?

