



CITY OF LARAMIE ENERGY SAVINGS PERFORMANCE CONTRACT

Investment Grade Audit (IGA) Presentation to City Council

March 23, 2021

Honeywell

Laramie
WYOMING

AGENDA

- Project Financial Overview
- Discuss Findings and Existing Conditions
- Life Cycle and Vulnerability Analysis
- Project Value to the City of Laramie
- Questions



FINDING MONEY & SAVINGS FOR LARAMIE



Proven Track Record and Local Performance Contracting References with 100% Accountability for Results

HOW MUCH MONEY HAVE WE FOUND?

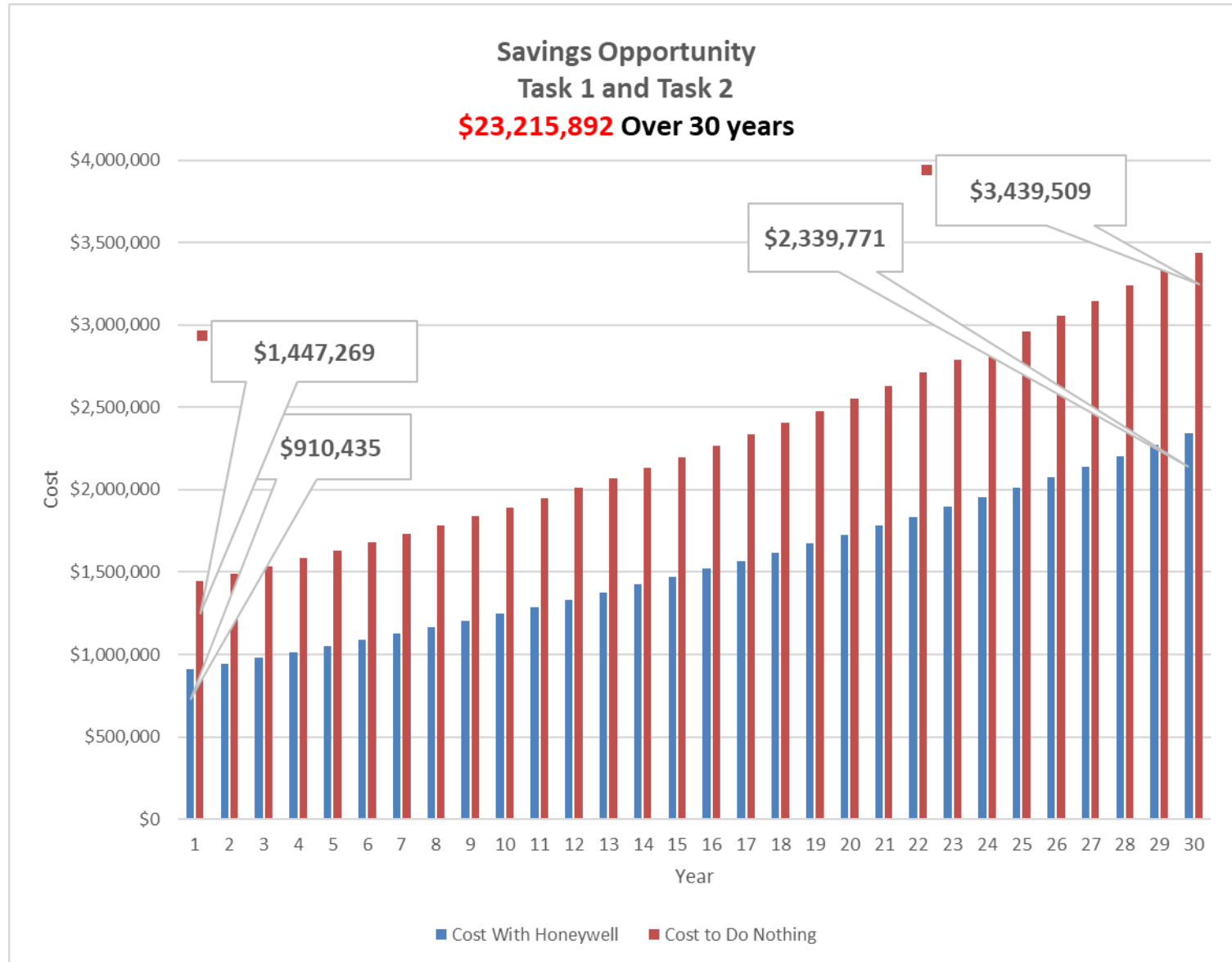
- **\$23,215,892 in Savings over next 30 Years**



HOW MUCH DO WE NEED TO INVEST?

- **\$15,761,807 Investment Cost to Capture Savings**
- **Investment in 2 Tasks**
- **Honeywell Guarantees Energy Savings**

COST OF DOING NOTHING



PROJECT PROCUREMENT

- Honeywell was awarded Infrastructure Renewal & IGA Contract Competitively Bid.
- Investment Grade Audit (IGA) Started on June 18, 2019.
- IGA Draft Report Submitted June 17, 2020.
- Open Book Pricing for Final Design & Engineering.

PROJECT TIMELINE

- IGA: June 18, 2019
- City develops Thrive Economic Development Plan: January 2020
- City of Laramie approves carbon neutral goal: March 3, 2020
- IGA Completed and Delivered: June 30, 2020
- Final Design and Bidding: July – September 2020
- 12-Months Installation Upon Award: October - September 2021
- Performance Guarantee 20 Years: 2021 – 2040

SUSTAINABILITY OUTCOMES

City Council Resolved in March 2020 to become a Carbon Neutral City by 2050

- Honeywell Project will Achieve 1694 Metric Tons Carbon Reduction Annually.
- **Goal Attainment 28% of Carbon Neutral Achieved upon Implementation.**
- Leaders within State of Wyoming with Environmental Responsibility Plan Achievement.
- WWTP Migration to Water Resource Recovery Facility.

BACKGROUND AND EXPERIENCE

Honeywell

- 135 Years
- \$37 Billion Company
- Leader in the Industry
- Pioneered Guaranteed Savings Contracting in the 1980's
- Over 7,000 Performance Contracts Implemented
- Over \$6 Billion in Savings Guarantees
- Over 500 Guaranteed Savings Contracts with Municipalities

FACILITIES EVALUATED

BUILDINGS

- Wastewater Treatment Plant
- City Hall & Fire Station 1
- City Annex
- Recreation Center
- Ice & Event Center
- Police Station
- Fire Station 3
- Parks Shop
- Animal Shelter
- Mosquito Shop

MEASURES

- Boiler Upgrades
- Chiller Upgrades
- Building Automation
- RTU Upgrades
- AHU Upgrades
- LED Upgrades
- Building Envelope
- Domestic Water Upgrades
- Emergency Generator
- Aeration Upgrades
- Clean Buildings

EXISTING CONDITIONS

- Current WWTP technology beyond life expectancy.
- Several General Fund Buildings HVAC and electrical systems beyond life expectancy.
- Several systems have efficiency losses from 15-50%.
- Several systems are obsolete.
- All exterior site and indoor lighting is inefficient.
- Maintenance and Repair costs rising by over 5% /yr.
- Approaching \$700,000 annual energy cost for buildings and infrastructure analyzed.

EXISTING CONDITIONS



Old Draft Air Boilers



Old RTU



Boiler Pipe Loop



ERV Mixing Section



Pneumatic Control Panel



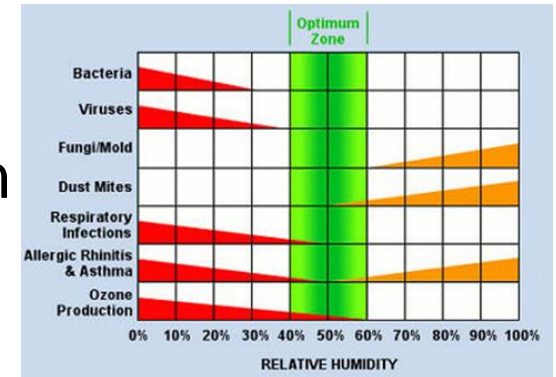
3-Way Valve

PROPOSED SOLUTIONS

- Replace WWTP Course Bubble Systems with Fine Bubble.
- Utilize Turbo Blower Technology at WWTP for Aeration.
- Install Back Up Generator System for WWTP.
- Lighting Systems Upgrade to LED Technology all Buildings.
- HVAC System Replacements at WWTP and GF Facilities.
- Boiler/Chiller Plant Upgrades GF Facilities.
- Building Envelope Upgrades GF Facilities.
- Temperature Control System Upgrades in GF Facilities.

CLEAN BUILDINGS

- Improve Indoor Air Quality
- Biological Contaminants Reduction
- Ultraviolet Light, Ionization, Monitoring
- Possible Energy Savings vs. Air Dilution Methods
- Humidity Control Requirements
- Low voltage systems



Plenum mounted ionization detector



Ionization Air Purification System



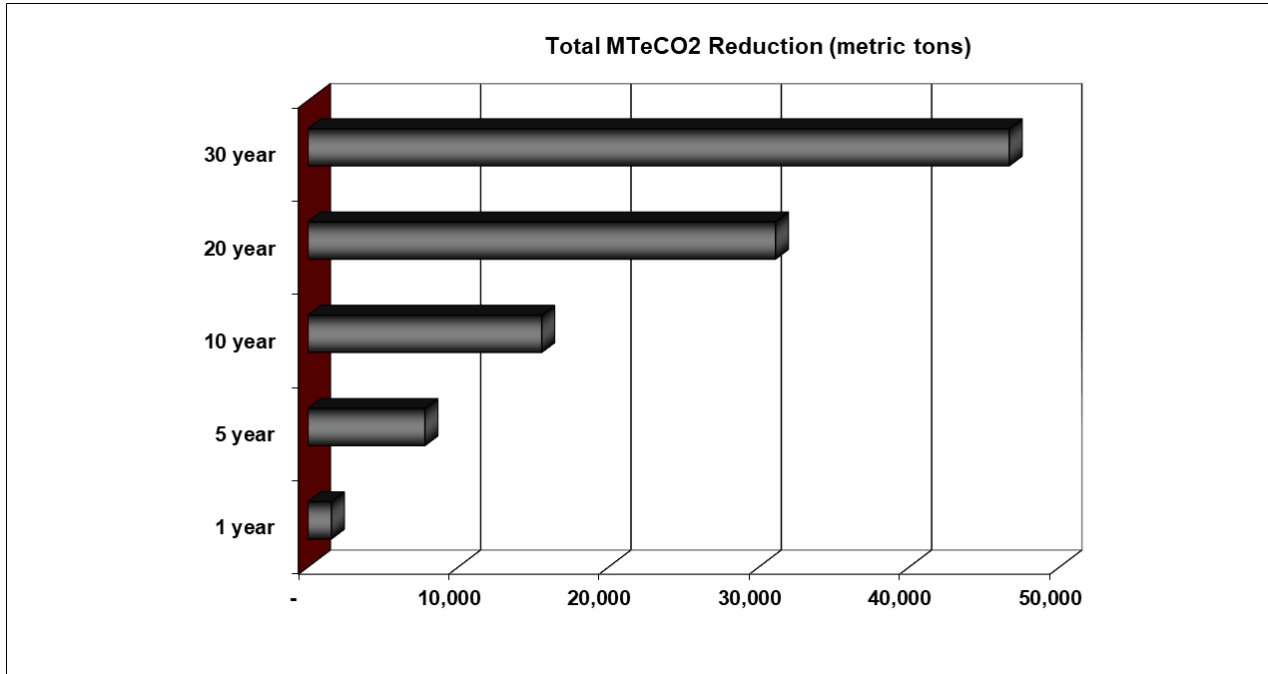
Duct mounted ionization detector

PROJECT VALUE

Benefits of Project to City of Laramie

- ➔ Asset Management of Water and Wastewater Critical Infrastructure.
- ➔ Energy and Operational Savings Fund the Project GUARANTEED.
- ➔ Proactive Management of City Infrastructure.
- ➔ Demonstration to Rate Payers Commitment to Update Infrastructure and keeping Operational costs down.
- ➔ Fiscally and Environmental Responsible Carbon Neutral Progress.
- ➔ Maintenance Operational Improvements Corrective to Preventive.

SUSTAINABILITY OUTCOMES



	Environmental Impact				
	1 year	5 year	10 year	20 year	30 year
Total MTeCO2 Reduction (metric tons)	1,555	7,775	15,551	31,102	46,653
Equivalent Cars/yr	328	1,641	3,281	6,562	9,844
Equivalent Forested Acres/yr	1,473	7,363	14,727	29,453	44,180

OPEN DISCUSSION



EPA ENDORSEMENT OF SRF & ESPC

Mr. Williams,

Yes, both the DWSRF and CWSRF can finance eligible projects that have Energy Performance Contracts in place. However, it is best to contact the SRF program in each state for information on eligibility. The SRF's are state managed programs and states may have additional restrictions based on states rules and regulations.

Please let me know if you have additional questions.

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**THE
FUTURE
IS
WHAT
WE
MAKE IT.**

Honeywell