

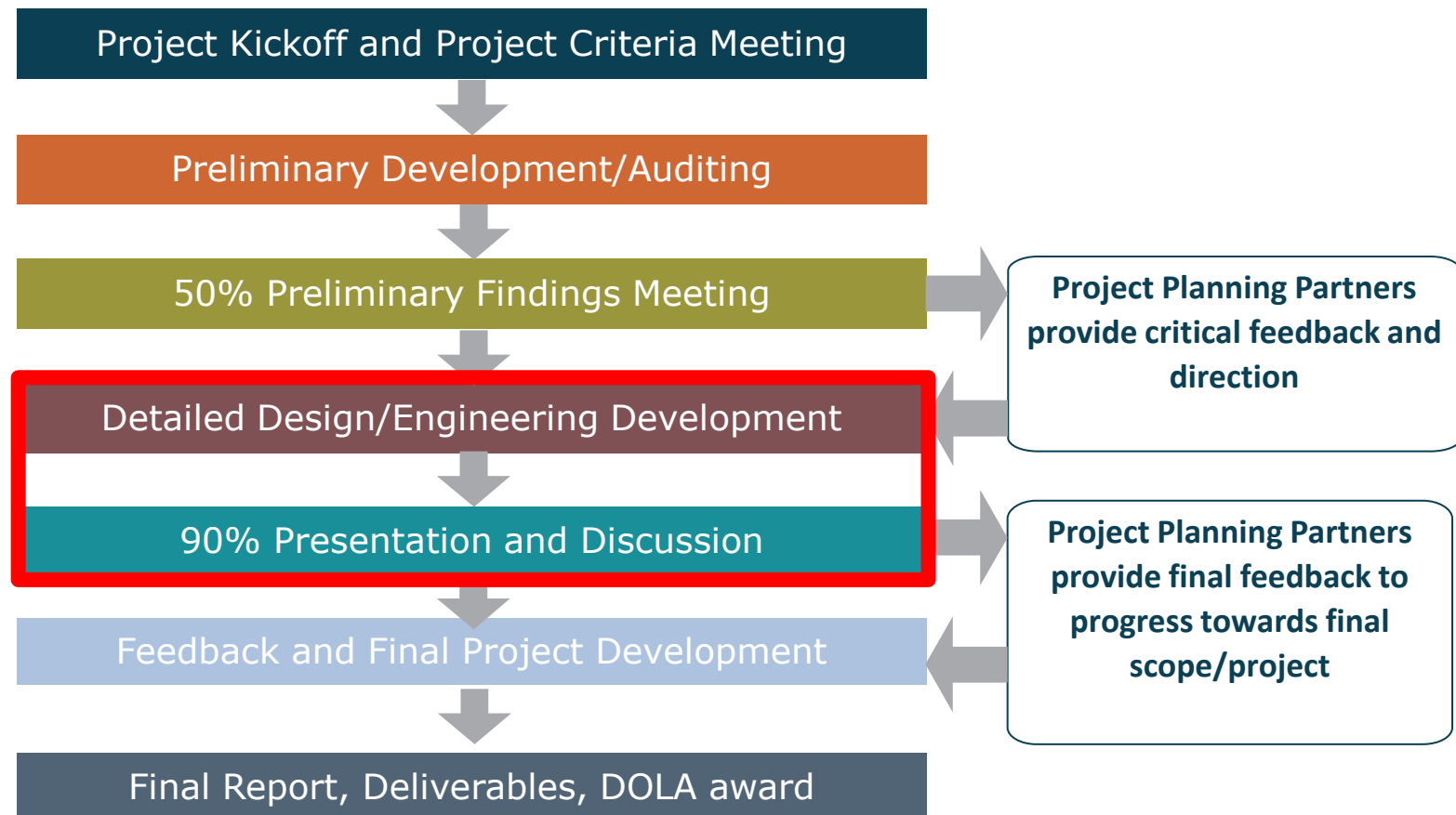


# City of Craig: Regional Solar Project Update

November 24, 2020



# Process Overview



# Regional Solar Planning – Review of Project Sites/Goals

Stakeholder	Site Name	Client's Stated Goals		
		Install Type	Operational Savings (net metering + peak shaving)	Resiliency
City of Craig	Craig Wastewater Treatment Plant	Ground	x	x
City of Craig	Craig Water Treatment Plant	Ground	x	x
City of Steamboat Springs	Steamboat Transit Ops Center	Rooftop	x	x
City of Steamboat Springs	Steamboat Wastewater Treatment Plant	Ground	x	x
Moffat County	Memorial Regional Health Hospital	Rooftop	x	
Moffat County	Moffat County Safety Center	Ground	x	
Moffat County SD	Moffat County High School	Ground	x	
Mt. Werner Water	Mr. Werner Water Treatment Plant	Rooftop	x	x
Town of Hayden	Hayden Police Station	Rooftop	x	x
Town of Hayden	Hayden SD Redevelopment	Rooftop	x	x
Town of Hayden	Hayden Wastewater Treatment Plant	Ground	x	x
Town of Oak Creek	Oak Creek Town Hall	Rooftop	x	
Town of Yampa	Old Town Hall	Rooftop	x	x
Town of Yampa	Yampa Sewer Treatment Plant	Ground	x	x
Yampa Valley Regional Airport	Yampa Valley Regional Airport	Ground	x	x

# City of Craig

*Project Overview*



# City of Craig – PV sites

## Features & Benefits

### Solar PV System – Craig Water Treatment Plant

<b>System Size (kWdc)</b>	209.1
<b>System Type (roof/ground)</b>	Ground
<b>Energy Reduction (kWh)</b>	23%
<b>Total Project Cost</b>	\$502,476
<b>DOLA Grant</b>	\$195,606
<b>Annual Savings</b>	\$30,687



### Solar PV System – Craig Wastewater Treatment Plant

<b>System Size (kWdc)</b>	271.8
<b>System Type (roof/ground)</b>	Ground
<b>Energy Reduction (kWh)</b>	37%
<b>Total Project Cost</b>	\$599,673
<b>DOLA Grant</b>	\$202,453
<b>Annual Savings</b>	\$39,722



- 30 yr+ system life
- Maintenance costs accounted for in project financials
- Hedge against future utility rate increases
- Carbon-free energy
- Includes solar Cx
- Solar O&M 3yrs
- Real time data analytic tracking
- **Re-located the northern array to the western location to account for poor soils conditions found during testing**
- **Small system de-rates to account for electrical capacity of the inverters**



# Benefits of Solar PV



- ~\$50,000 in DOLA grant funding
- **Risk mitigation** against future utility rate increases
- Reallocates \$\$ being paid to utility
- Demonstrates fiscal responsibility of District to voters
- 83% of Voters Support the State's 100% renewable goals

# Project Summary and Match

Site	System Cost	Annual M&V Cost (invoiced for 3 years)	Total Cost	Annual Utility Savings	DOLA Grant Funding	Match Amount Required	Net Present Value	Annual O&M ( 1 year only)	Total Financed Amount (System Cost - DOLA Grant + O&M) *	Lifetime Savings
Wastewater Treatment Plant	\$594,325	\$1,544	\$595,869	\$39,722	\$198,649	\$397,220	\$366,716	\$4,640	\$400,316	\$860,854
Water Treatment Plant	\$498,059	\$1,158	\$499,217	\$30,687	\$192,347	\$306,870	\$286,567	\$3,480	\$309,192	\$671,941

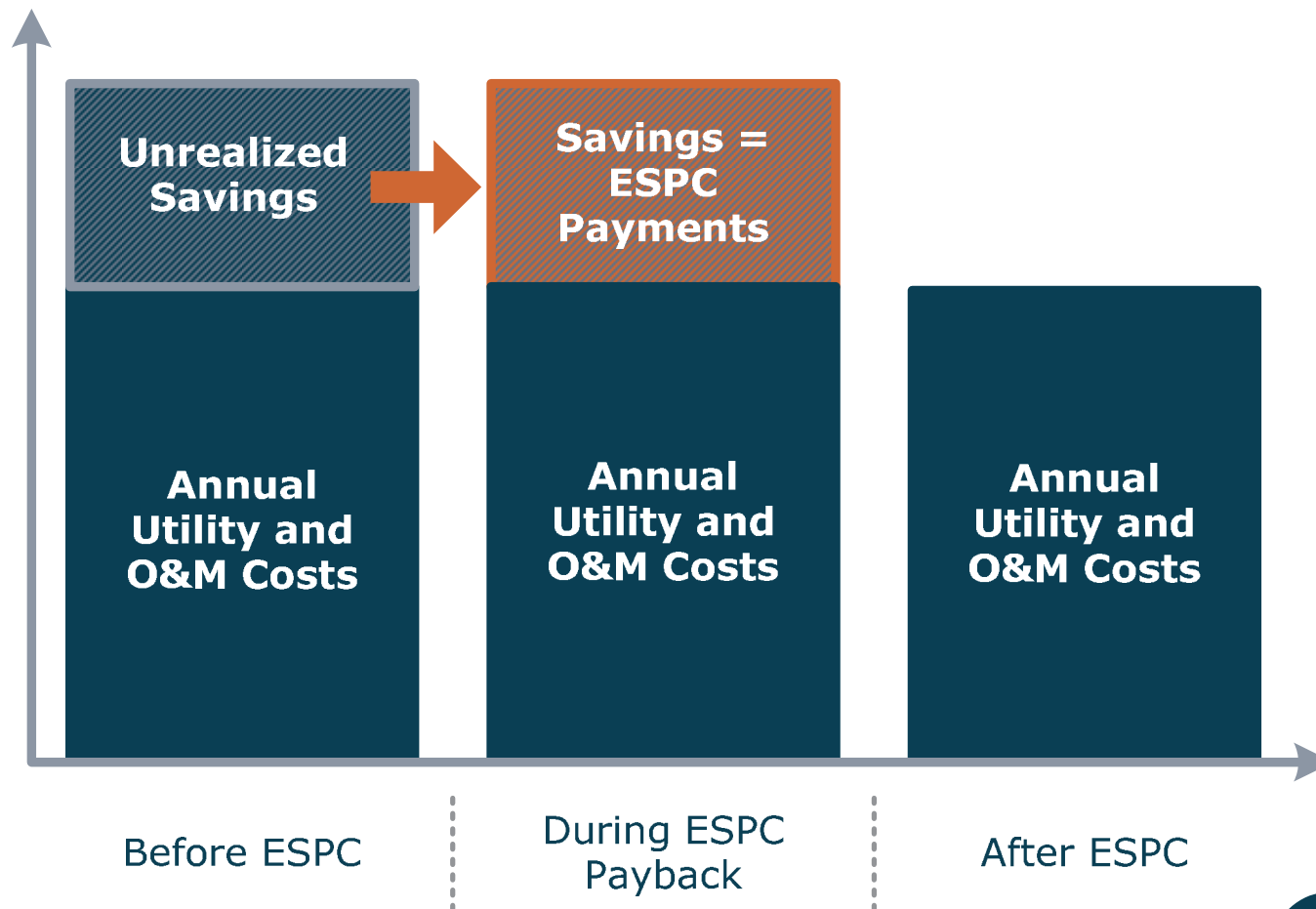
\* pending firm subcontractor bids and final interest rate

## Other Measures Investigated: LED Lighting

Stakeholder	Site Name	Annual Energy Savings	Annual Operations Savings	Project Investment
City of Craig	Craig Wastewater Treatment Plant	\$1,618	\$144	\$22,738
City of Craig	Craig Water Treatment Plant	\$2,411	\$358	\$32,244



# Funding Your Project Match through EPC



# Energy Performance Contracting Process



**COLORADO**  
Energy Office

[CEO\\_EPC@state.co.us](mailto:CEO_EPC@state.co.us)

MEASUREMENT & VERIFICATION ✓

- ENERGY PERFORMANCE CONTRACT
- FINANCING CONTRACT
- CONSTRUCTION

INVESTMENT GRADE AUDIT + PROJECT PROPOSAL CONTRACT

SELECTION OF A PRE-QUALIFIED ESCO

CLIENT COMMITMENT: (1) Build your team, (2) Sign MOU with CEO



# Next Steps and Schedule

Milestone	Timeline
<del>DOLA Grant Application Due</del>	<del>October 1</del>
Solar Project Finalized and RFPs for Installation	Q4 2020
Finalize funding strategy, DOLA Grant Announcement & Execute Energy Performance Contract	Q1 2021
Project Construction Window – Solar and Energy	May – Dec 2021
Measurement and Verification of Project Savings	2022-2024

Thank you!

