

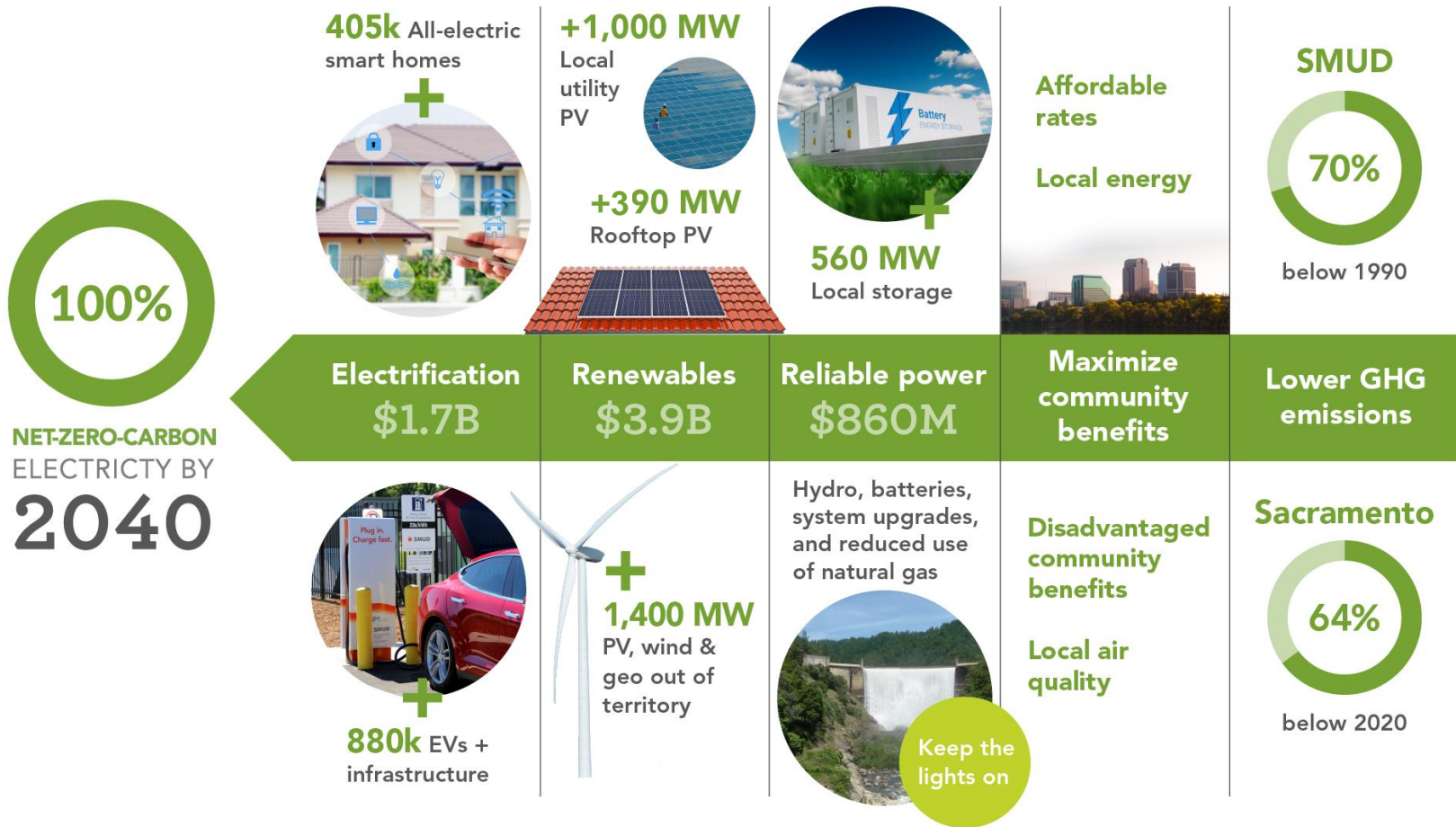
Exhibit to Agenda Item #1

Board Energy Resources & Customer Services Committee Meeting and
Special SMUD Board of Directors Meeting

Wednesday, October 16, 2019 scheduled to begin at 5:30 p.m.

Customer Service Center, Rubicon Room

IRP - \$6.5 billion of new investment



IRP Public Process

| ERSC Policy Committee meeting | ERSC Policy Committee meeting | ERSC Policy Committee meeting | ERSC Policy Committee meeting | Finance and Audit Committee meeting | Board meeting |
|--|---|--|--|---|--|
| APRIL 4 | JUNE 6 | AUG. 1 | SEPT. 5 | OCT. 2 | OCT. 18 |
| <ul style="list-style-type: none"> • IRP objectives and scenarios • Board/public comment | <ul style="list-style-type: none"> • High level scenario results • Board/public comment | <ul style="list-style-type: none"> • Detailed scenarios results • Public report released • Board/public comment | <ul style="list-style-type: none"> • Evaluate new scenarios and address Board questions • Board/public comment | <ul style="list-style-type: none"> • Evaluate new scenarios and address Board questions • Draft SD-9 language • Board/public comment | <ul style="list-style-type: none"> • Board adoption of SMUD IRP • Board/public comment |

- Independent analysis of numerous IRP scenarios
 - Absolute zero carbon (Not feasible with current technology)
 - Net zero carbon, various levels of carbon emissions, offsets
- IRP Report filed with CEC April 29, 2019
 - CEC to adopt staff’s determination in December 2019

Pathway To A Sustainable Future

“SMUD’s IRP filing lays out an ambitious road map for lowering greenhouse gas emissions in the Sacramento region while maintaining low rates and reliability.”

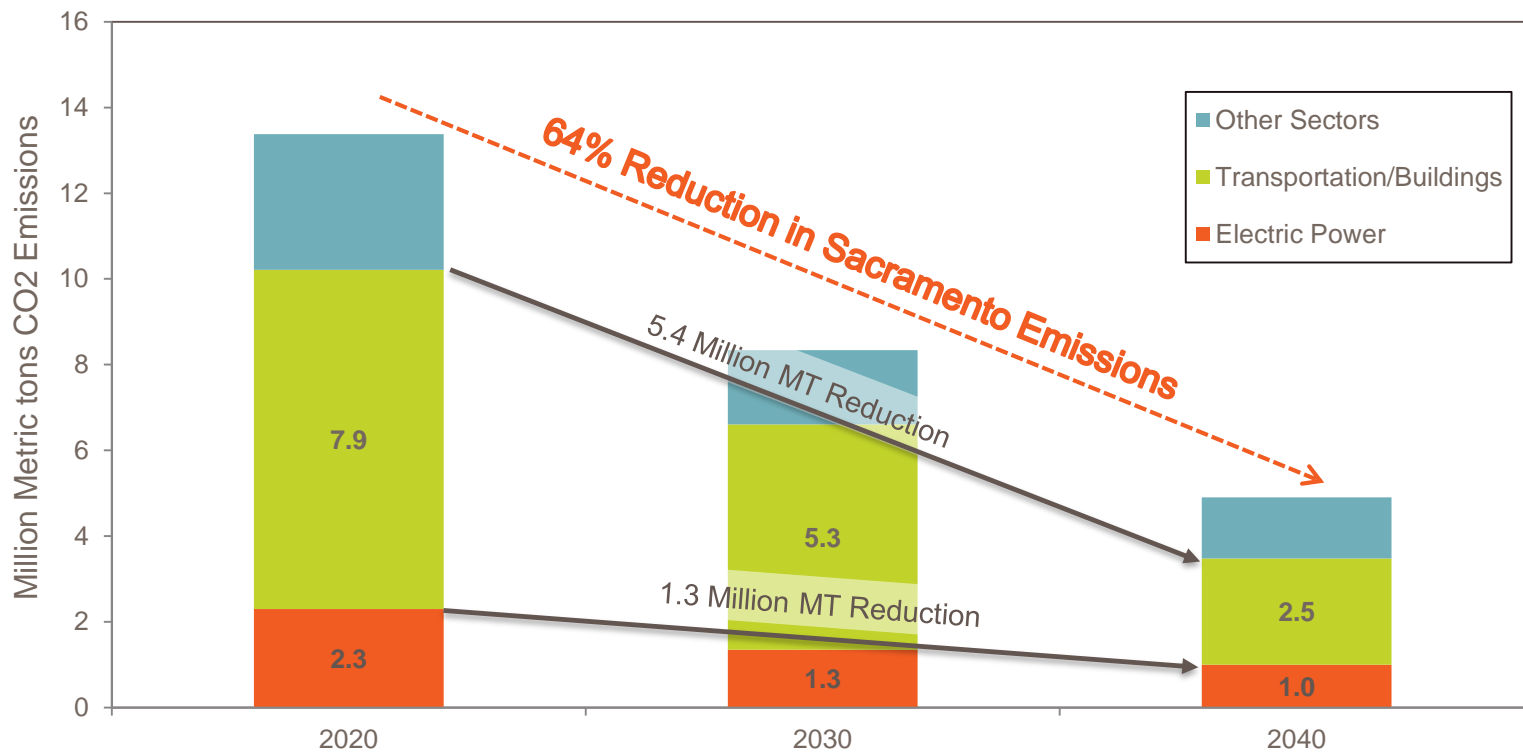
- *CEC staff report*

“The importance of SMUD’s proposed investment shouldn’t be understated, nor should its impact. Between now and 2040, the utility plans to invest nearly \$7 billion towards projects that generate renewable energy and help switch consumers’ energy use away from fossil fuels like natural gas and gasoline. This powerful commitment goes above and beyond greenhouse gas reforms required by the state, and will enable the region to be net zero for climate pollution in a little more than 20 years.”

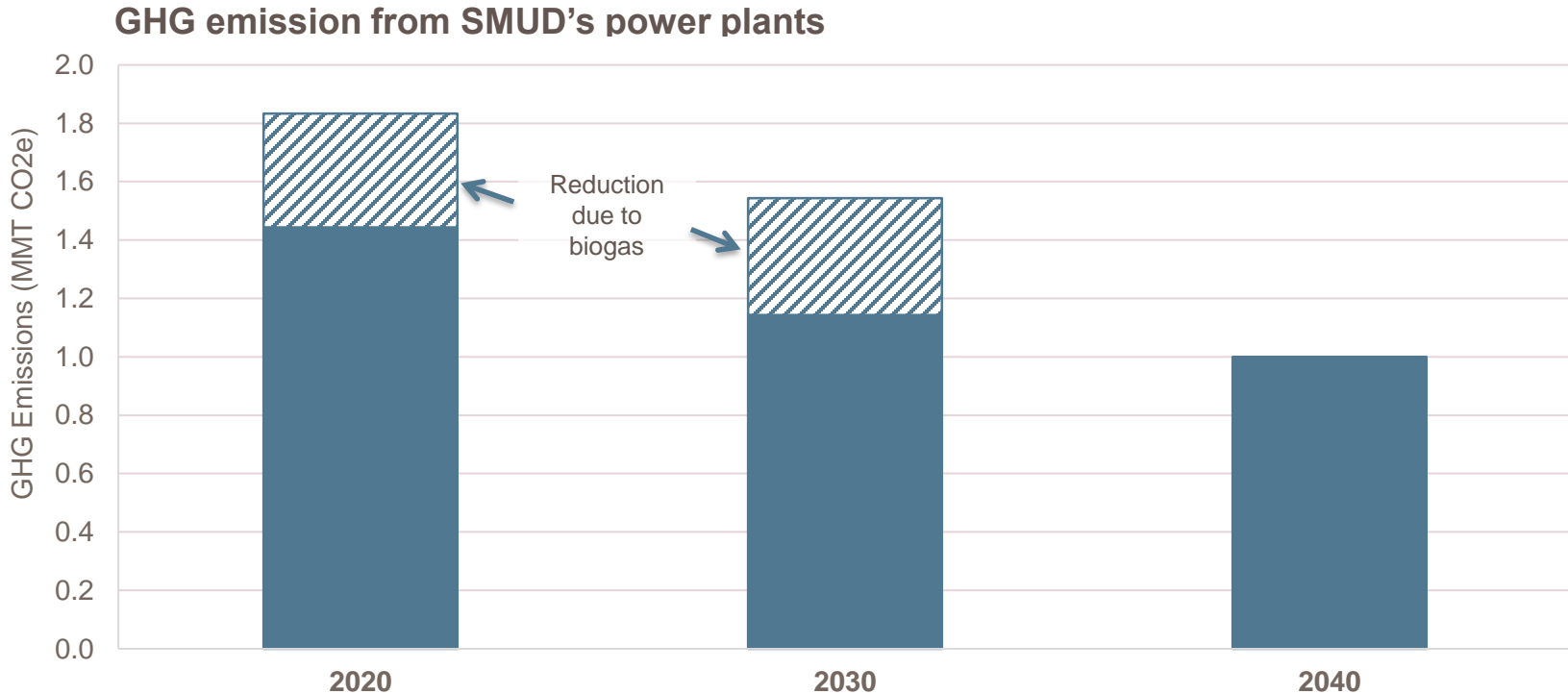
- *Environmental Defense Fund*

IRP Impact on GHG Emissions

Electrification significantly reduces Sacramento area GHG emissions

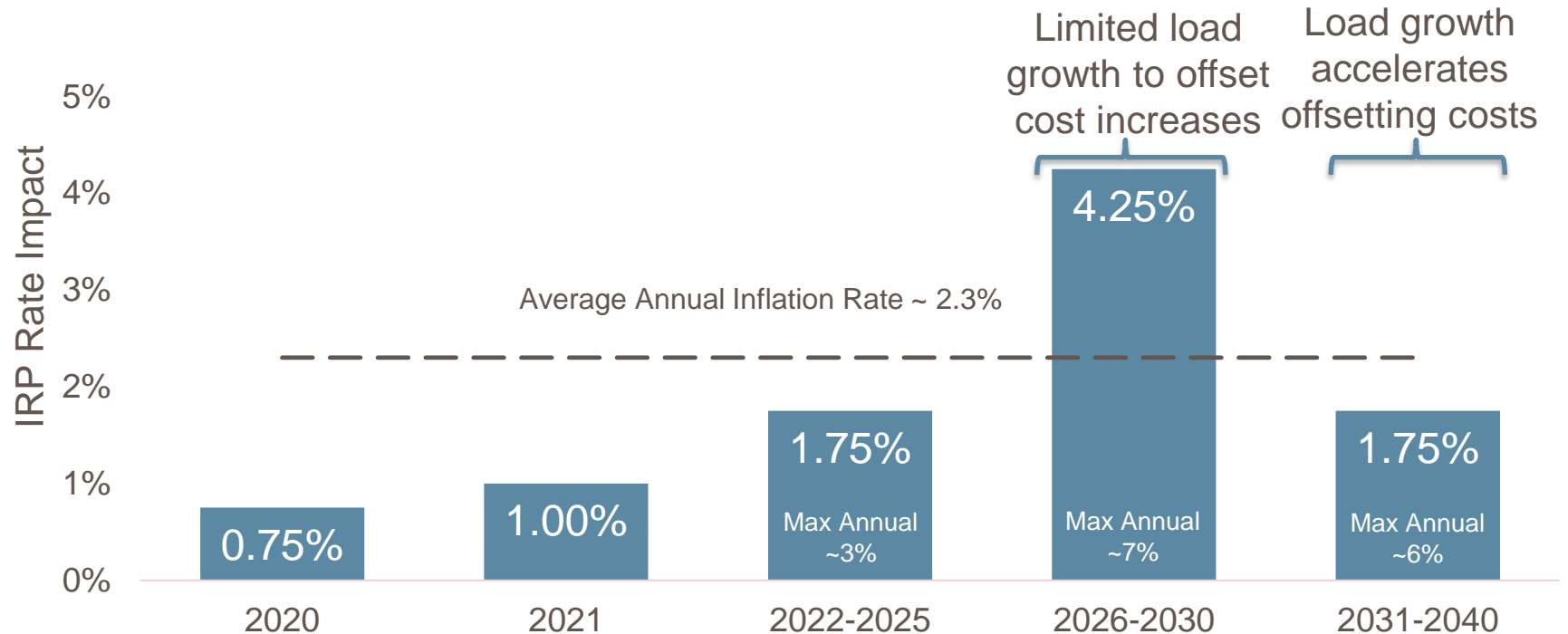


SMUD's Natural Gas Emissions



- Cogeneration plant emissions reduced ~ 30% by 2030; ~ 55% by 2040
- Cosumnes emissions down ~ 15% by 2030; ~ 40% by 2040
- GHG emissions in disadvantaged communities down ~ 30% by 2030, and over 50% by 2040
- Evaluate replacing thermal plants as alternatives mature and become cost effective, while ensuring reliability

Average Annual Rate Impact



- Rate impacts reflect IRP related costs only and do not reflect other increases from inflation, new regulatory mandates, or other planned or unexpected spending.
- Additional rate increases will likely be needed to address other costs not reflected in the IRP

2020-2023 IRP Implementation

**Electrify
Transportation
Initiatives**



**Expand
and Repower
Solano Wind**



**Clean
Safe
Reliable
Affordable**

**Develop
Storage**



**Building
Electrification**



**Modernize
Operations**



**Build Local Solar
Rancho Seco
Wildflower**



Q&A