

An aerial photograph of a modern city skyline, likely Shanghai, featuring numerous skyscrapers and a prominent tower with a spherical top. The city is situated along a river, with a bridge visible in the foreground. The image is overlaid with a semi-transparent blue filter.

HP Reinventing Energy Management

Smart Energy Decisions Conference

Mary Curtiss, Head of Energy and Sustainability
HP Corporate Real Estate and Workplace Services
February 26, 2018



Agenda

- **HP's commitment to sustainability**
- **Energy management at HP**
- **Building a program**
- **The path forward**

Sustainability at HP

“At HP, we’re reinventing for a better world. Sustainability guides every aspect of our business, fuels our innovation and growth, and works to enable everyone, everywhere to thrive. It is the right thing to do for our business, for society, and for the long-term future of our planet.”

-CEO, Dion Weisler



HP business model

Sustainability is integrated throughout our business model



Operations Overview

- 200 global sites
- CDP, RE100
- Operations team
- Goals



CREWS Energy & Sustainability Team



Mary Curtiss
Global Lead



Erin McNichol
Program
Manager

Bob Weber
Program
Manager

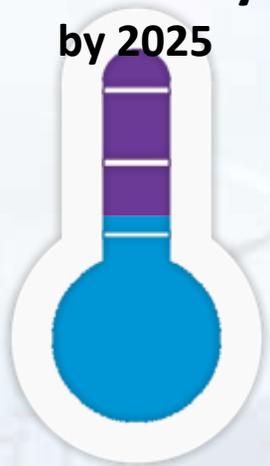


Kim Leng Lee
Program
Manager

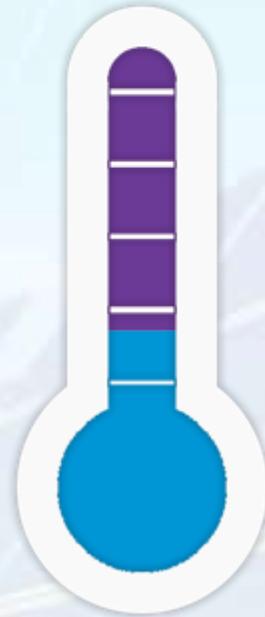
Our global sustainability goals

Driving HP's commitment to the environment

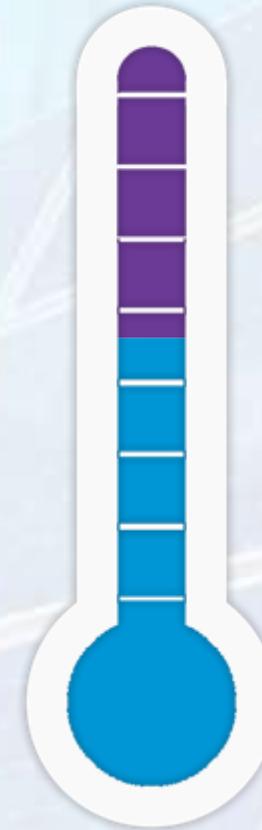
Water Efficiency by 2025



Carbon Emissions by 2025



Renewable Energy by 2020



Energy management challenges

- **Data**
- **Limited capital**
- **Small team, global portfolio**
- **Incentives misaligned**

Creating a programmatic approach

1st

Optimize resources

Optimize sustainability team, energy champions at the site level, embed sustainability into job description

+

2nd

Data collection

Invoice collection, facility manager relationships, using the right tools to analyze and report

+

3rd

Competitions and transparency

Energy champions, making data visible and clear and across the entire portfolio

+

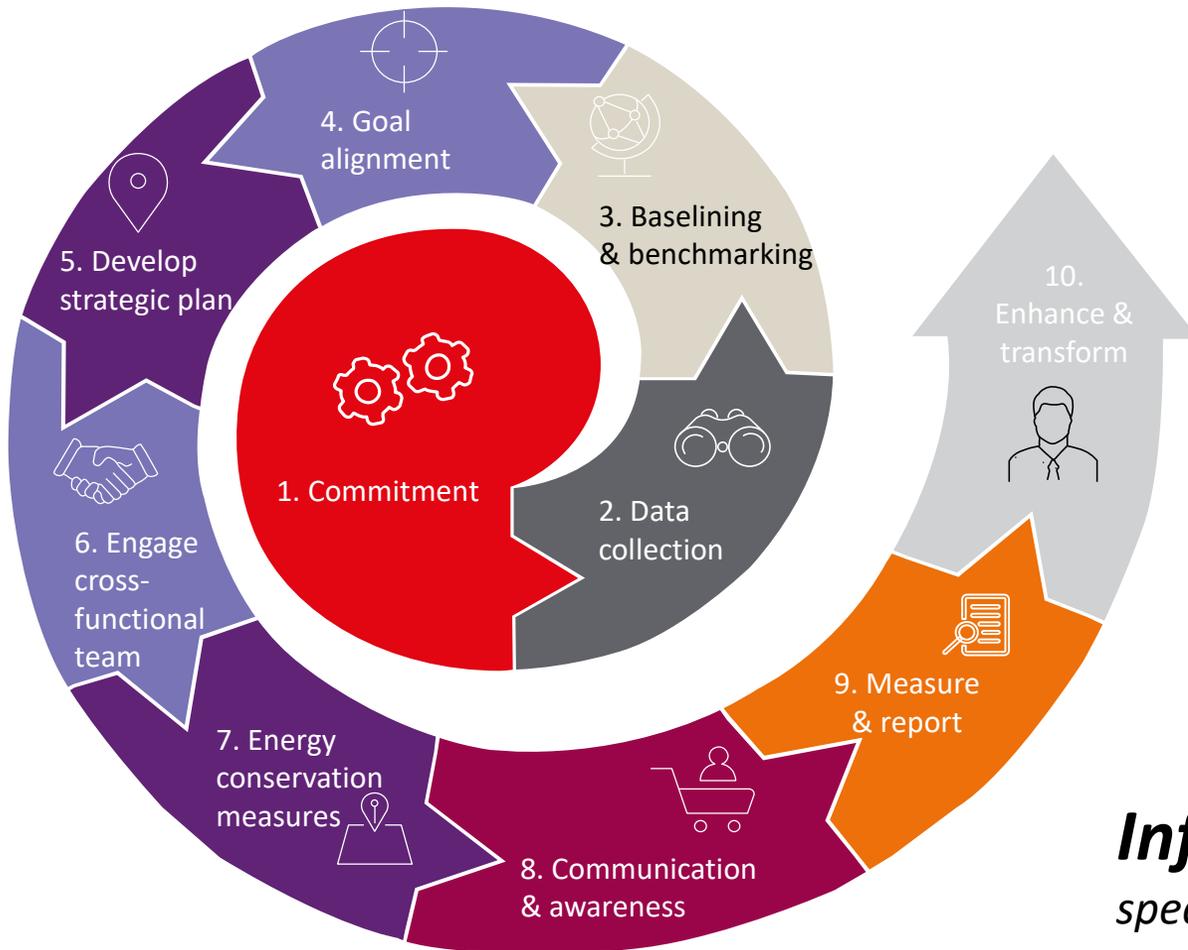
4th

Localize goals

Using data to set site specific goals

= Program Success!

10-step process improvement method built into facility operations



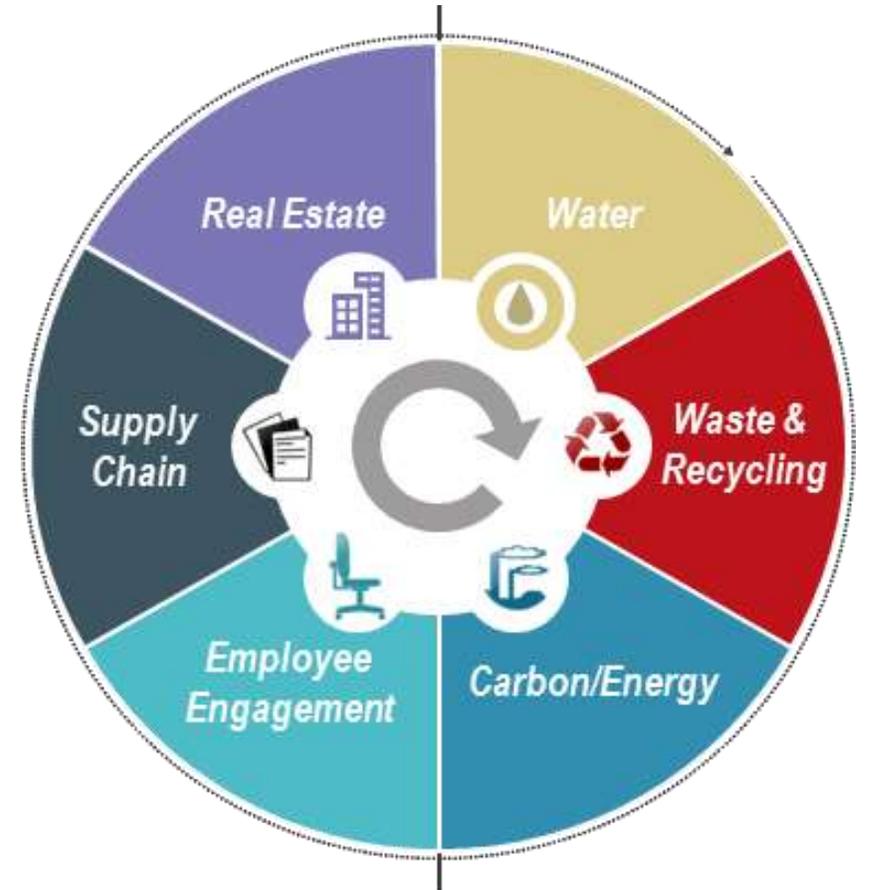
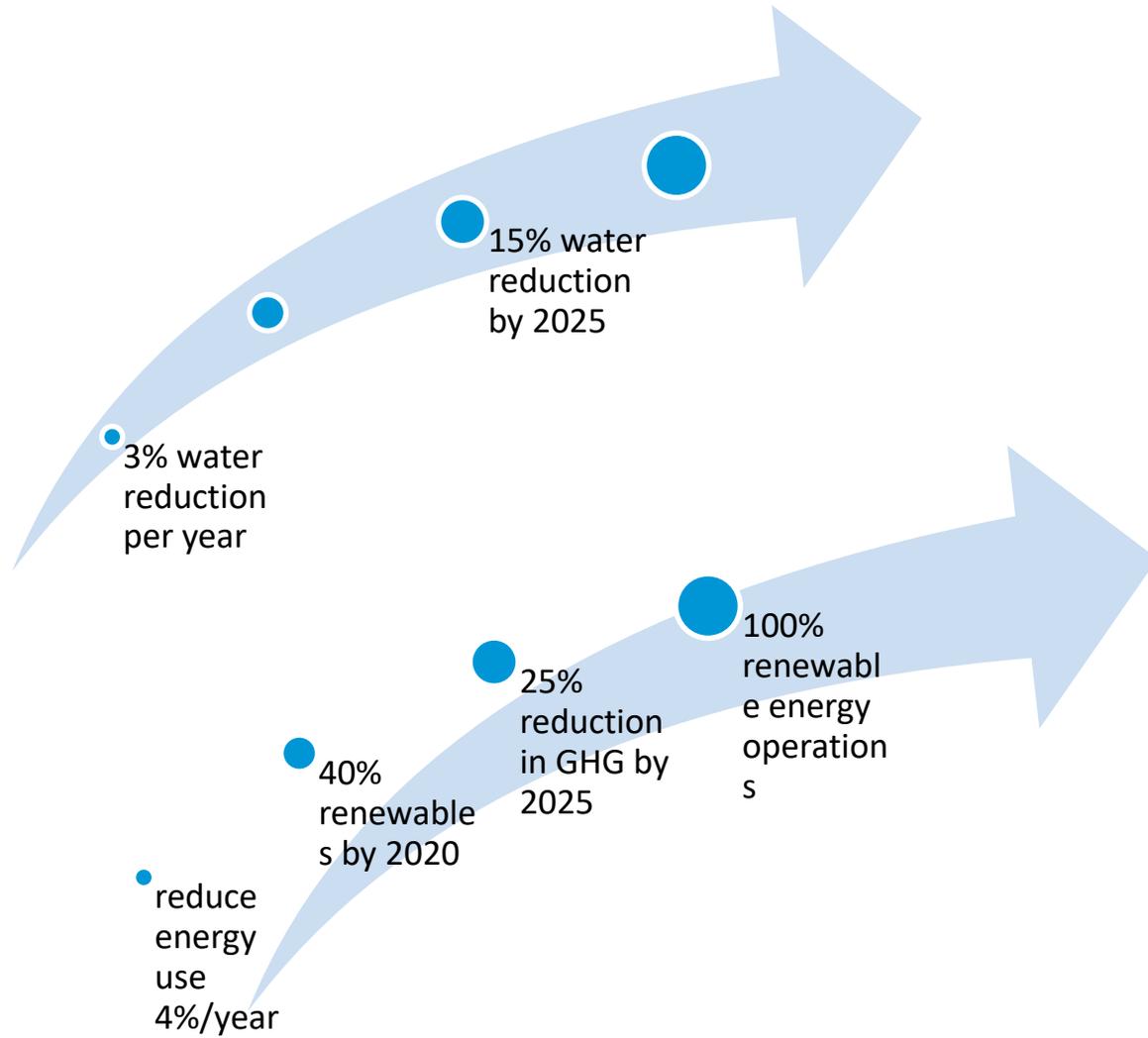
Core principles of our sustainability program:

Principle	Outcome
Strong governance model	Accountability and support for each site Shared responsibility for resource management
Continuous improvement & feedback	Nimble approach to a changing operating environment Engagement & awareness
Information available at all levels	Drive data-based decisions

Information: data that is (1) accurate and timely, (2) specific and organized for a purpose, (3) presented within a context that gives it meaning and relevance, and (4) can lead to an increase in understanding and decrease in uncertainty.



Goal roadmaps



Example: Localizing energy management

- **Driving ownership into team**
- **Making data visible**
- **Tying to performance metrics**
- **Localizing goals**
- **Telling the story**



HP Headquarters employee garden

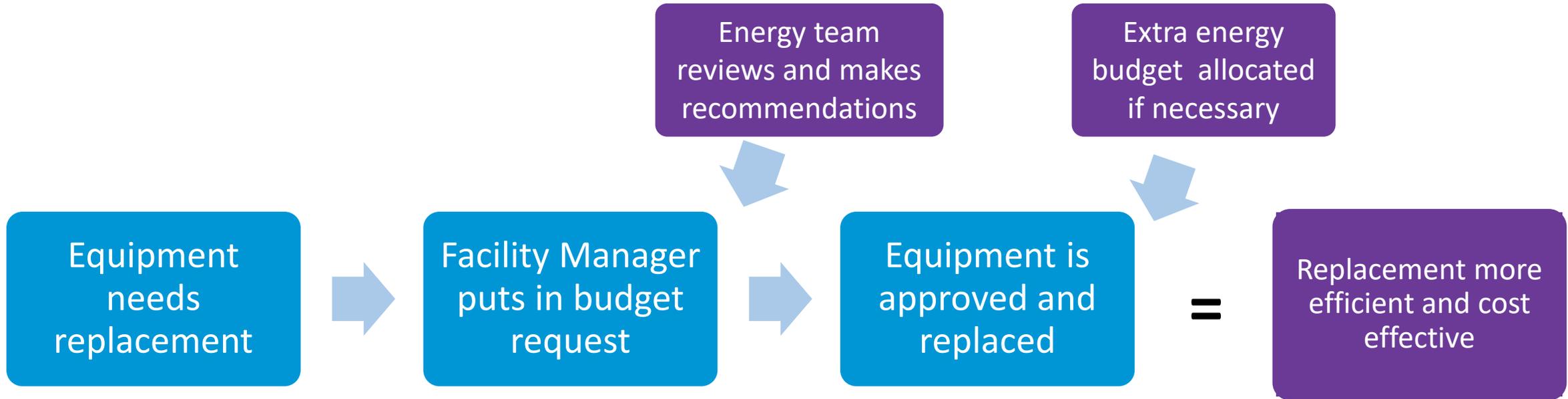
- Site wide retro-commissioning project
- Saved equivalent of 250 homes powered for 1 year
- Rebate funds from CPAU
- Funds went into projects that created a healthy environment at work, including the Palo Alto Garden
- Employees key to achieving sustainability goals



Example: end of life process

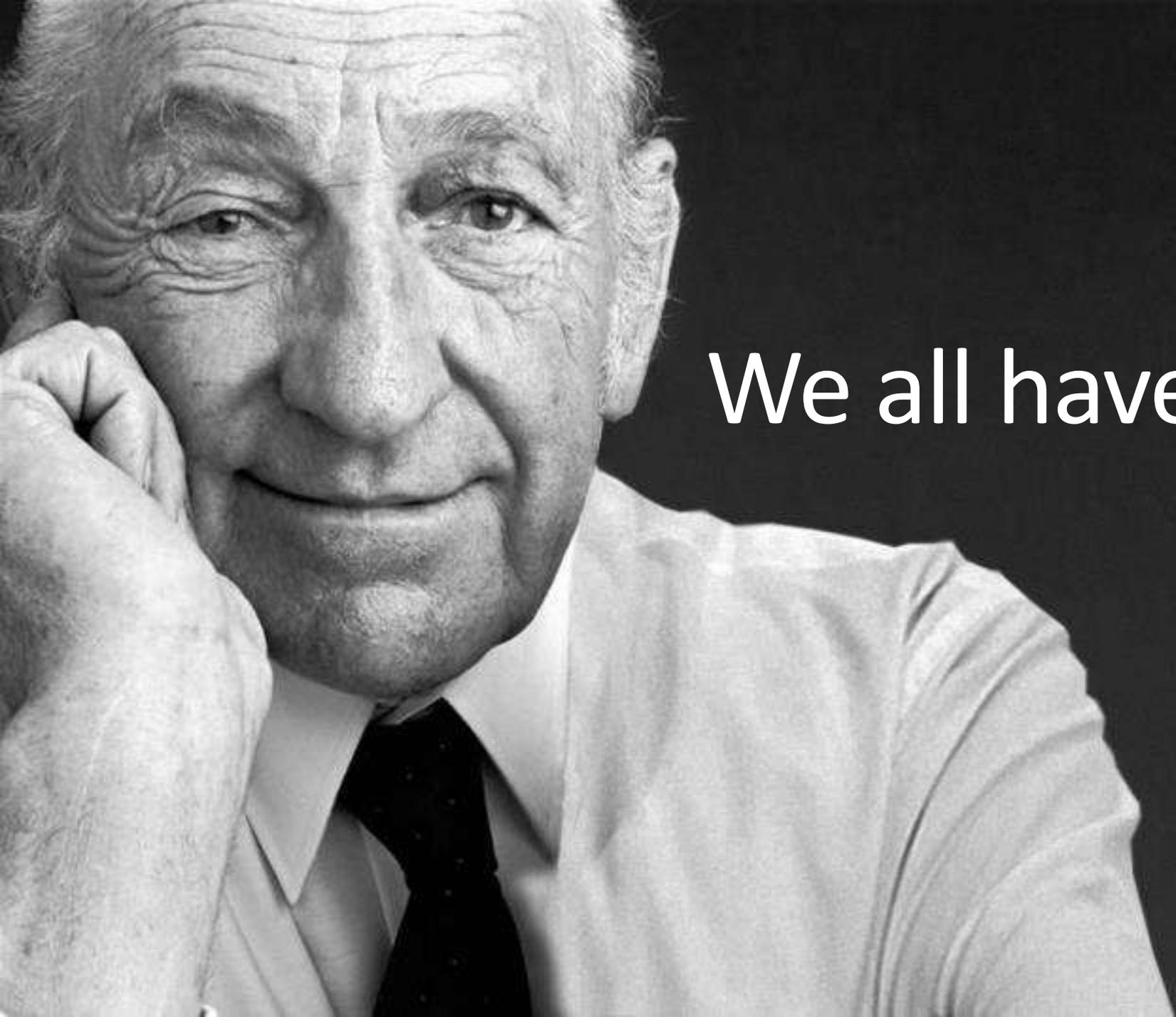


Example: end of life new process



An aerial photograph of a city skyline at dusk. The sky is a mix of blue and orange. In the foreground, there are several modern buildings with lit windows. In the background, the Tokyo Tower is visible, illuminated in orange. A blue rectangular box is overlaid on the left side of the image, containing white text.

Impactful energy management is about data, process, localization and aligned incentives.



We all have a role to play



@HPSustainable

David Packard

