QUARTERLY ENVIRONMENTAL STAKEHOLDER MEETING

Resource materials for the agenda topics requested by the stakeholder group.

April 30, 2020

RATE ADVISORY COMMITTEE

Group Discussion & Input

FlexSTEP UPDATE

THE 1ST VISION OF STEP

Energy Efficiency & Conservation was launched as the "Fifth Fuel" in our generation portfolio

- Added diversity to our generation mix
- Helped us avoid additional capital cost from the building of a power plant
- Reduced our dependence on fossil fuels

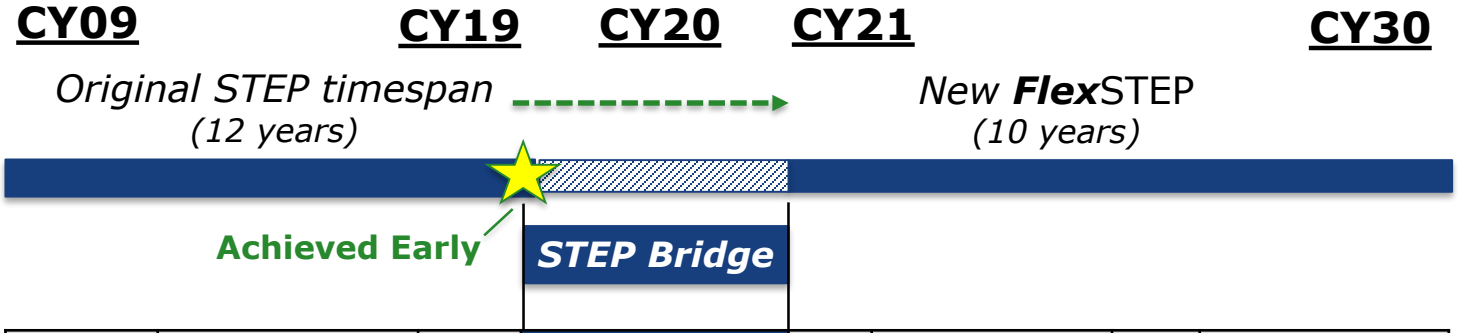
STEP Goals:

✓	MW Goal: 771 →	833 Achieved
✓	Budget: $849M →	$130M Under
✓	Completion: Early →	One Year

Energy Efficiency & Conservation are:

- **Part of our past, present & future**
- **Part of the *Flexible Path***

OUR PATH FORWARD



	11 Yrs.	+	1 Yr.	+	10 Yrs.	=	22 Yrs.
MW	825MW(1)	+	75MW	+	~600MW	=	~1500MW
$Ms	$719M(1)	+	$70M	+	~$700M	=	$1.5B

The STEP Bridge provides for continuity of customer programs as we transition into *Flex*STEP

(1) Estimated through completion of program in January 2020.

COVID-19 IMPLICATIONS

Program changes to support social distancing:

- All "onsite" services are on pause
- We are taking applications & continuing to process rebate applications
- We continue to explore additional opportunities to engage customers digitally

Impacted Programs

Residential
- Weatherization
- Home Energy Assessments
- Thermostats Installs

Commercial
- Onsite Assessments
- Demand Response Audits
- Inspections

We are closely watching to see if customers keep energy efficiency a priority & the impacts on our STEP Bridge goal

A NEW VISION

Proven model for delivering energy savings & empowering customer choice

Future-focused transition to low carbon & distributed generation

Dynamic, flexible program for promoting efficiency & new technology

***Flex*STEP balances the tried & true with new clean & innovative product offerings**

SIZABLE COMMITMENT

*Flex*STEP is projected as a 10-year program with:

- $700 million total program budget
- Significant commitments to diverse programs, at all income levels
- Results in estimated 600MW of demand savings

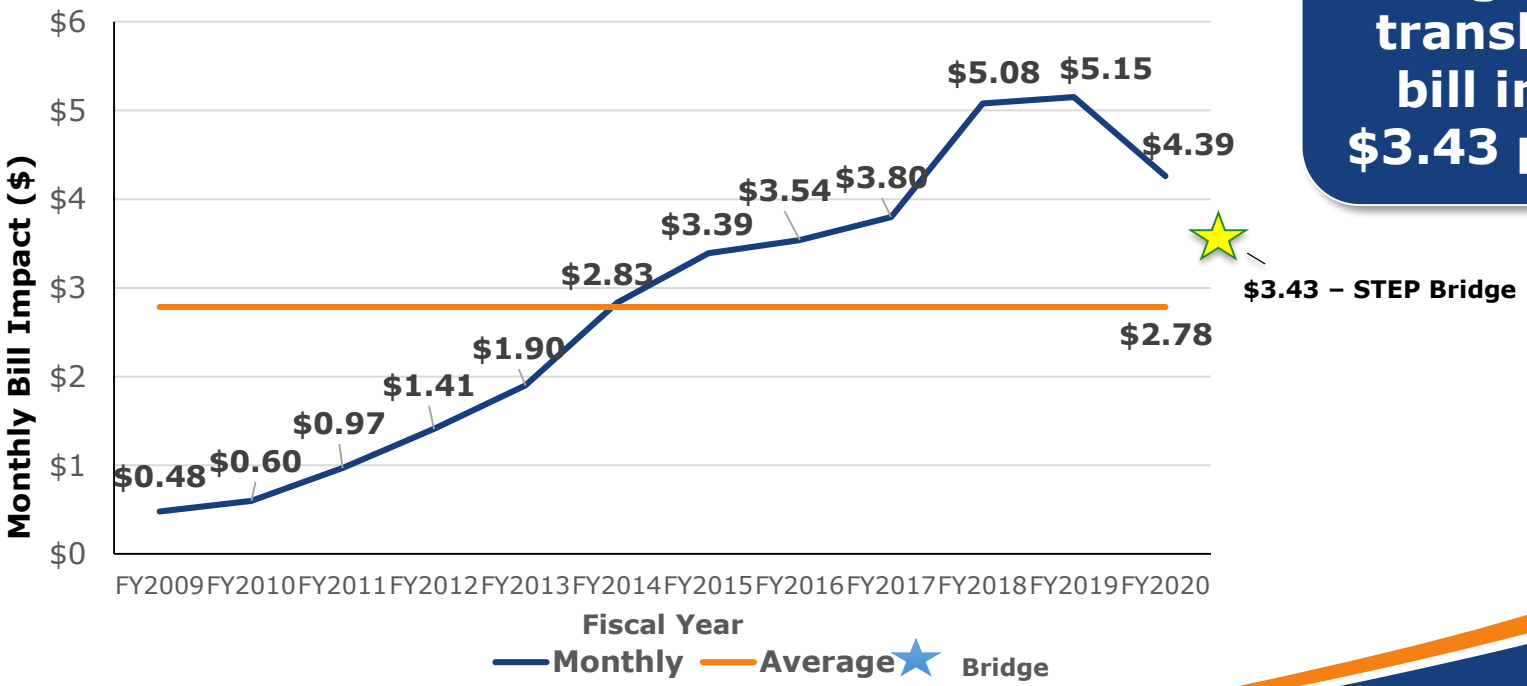
New *Flex*STEP program opportunities

New Solar Options	Expanded LMI Focus
Electrification	Battery Storage
Dynamic Load Management	Behavioral Based Programs

***Flex*STEP represents a significant commitment to clean energy & reduced emissions**

BRIDGE BILL IMPACT

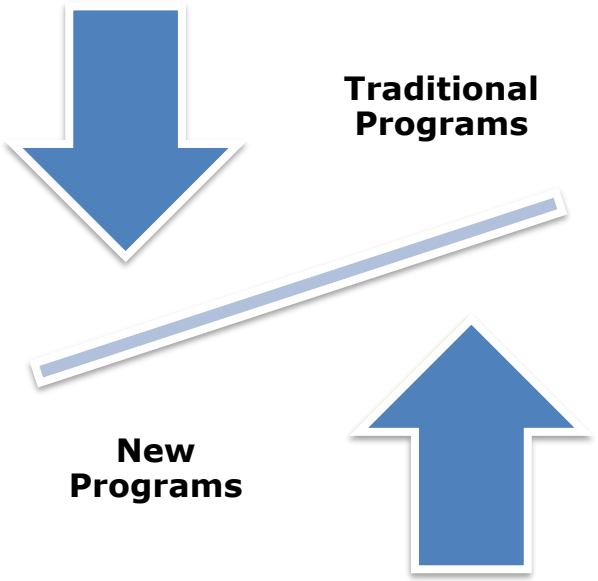
Residential Bill Impact from STEP
Based on an average of 1,000 kWh/month



At $70M, the Bridge program translates to a bill impact of $3.43 per month

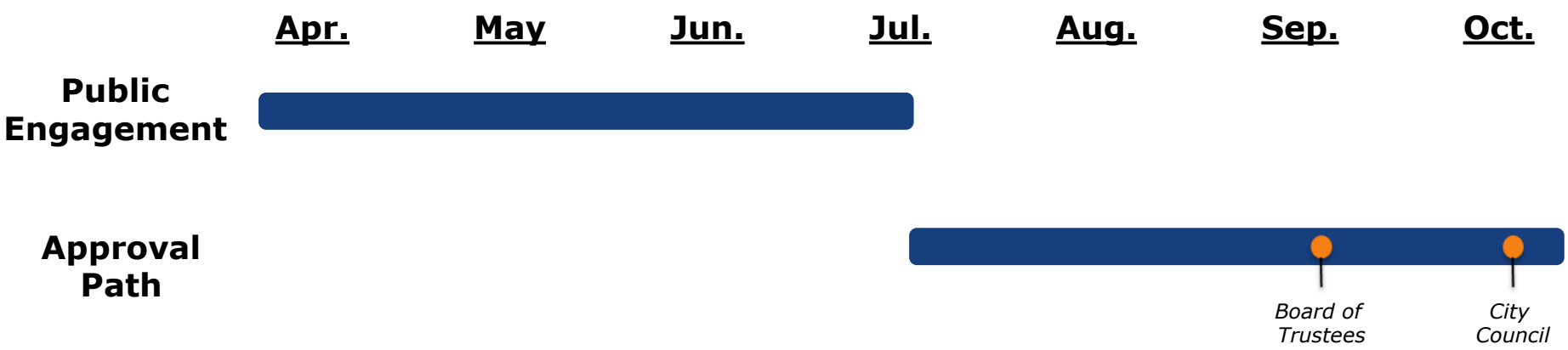
BALANCING OLD & NEW

- **Focused** on attaining long-term goal
- **Nimble** in adding new programs as technologies emerge, & removing programs as markets change
- **Flexible** in leveraging marketplace trends to grow uptake
- **Balanced** in managing a mix of cost effective programs to focus on all customers



We'll continue to watch market trends, benchmark & evaluate programs to ensure we're staying at the forefront of the energy industry

HIGH LEVEL TIMELINE

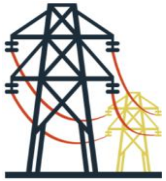


We will continue to engage with key stakeholders before taking *Flex*STEP to the City Council in the fall

FLEXPOWER BUNDLE

OUR GUIDING PILLARS & FOUNDATION

Reliability



Customer Affordability

Security

Safety

Environmental Responsibility

Resiliency

FINANCIALLY RESPONSIBLE

All business decisions are based on our commitment to being one of the best-managed and most financially responsible utilities in the nation!

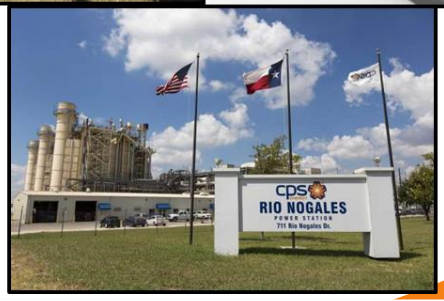
THE NEED FOR *FLEX*POWER BUNDLE

About 1700 MW capacity retiring within 10 years

- These aging plants run during summer peak, but are less reliable
- Failures at these plants carry high financial risk

***Flex*Power Bundle; envisions up to**

- 900 MW solar,
- 50 MW storage
- 500 MW gas toll or **equivalent technology that can meet the same requirements to firm up the solar and reliability of older units**



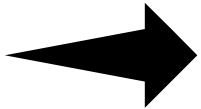
***Flex*Power Bundle replaces about half of our aging gas steam capacity while continuing our transition to cleaner energy.**

OUR APPROACH TO AN ALL-SOURCE RFP

Industry definition for All-Source RFP:
Any and all resources considered, requirement driven, open to all approaches and technologies

What We Want:

- Utility-scale assets
- Introduce more storage
- Solar power aligned with customer demand
- Lower carbon resources
- Firming Capacity to meet customer needs
- Maintain portfolio diversity



- ☑ **SOLAR**
- ☑ **BATTERY STORAGE**
- ☐ **GAS TOLL**

OR

- ☐ **ANOTHER FIRMING TECHNOLOGY THAT MEETS OR BEATS GAS**

**Our obligation to serve customers is best met by physical assets.
We have a strategic interest in adding more solar & battery storage and will consider our firming options.**

FIRMING POWER SUPPLY REQUIREMENTS

- Up to 500 MW that provides reliable generation capacity with availability:
  - All hours
  - All weather
  - Year-round
  - Low emissions
- Term of 4 to 10 years

Our obligation as a generator is to provide reliable power to our customers.

*FLEX*POWER BUNDLE RFP
CURRENT APPROACH

Request For Proposal Profile

Respondents would have option to bid on one or multiple resources

We continue our transition to more renewable power & have immediate needs for firming capacity. We are sequencing our RFP to make sure we meet our customers' needs.

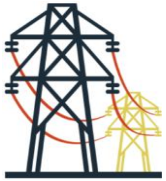
ASSESSING PATH FORWARD

- ***Flex***POWER Bundle Consultant RFP
  - Bids were due April 13
  - 20+ responses received
- Team assessing Covid-19 impacts to Power RFP timing
  - Supply chain
  - Financing
  - Resources to respond

SPRUCE NATURAL GAS CONVERSION

OUR GUIDING PILLARS & FOUNDATION

Reliability



Customer Affordability

Security

Safety

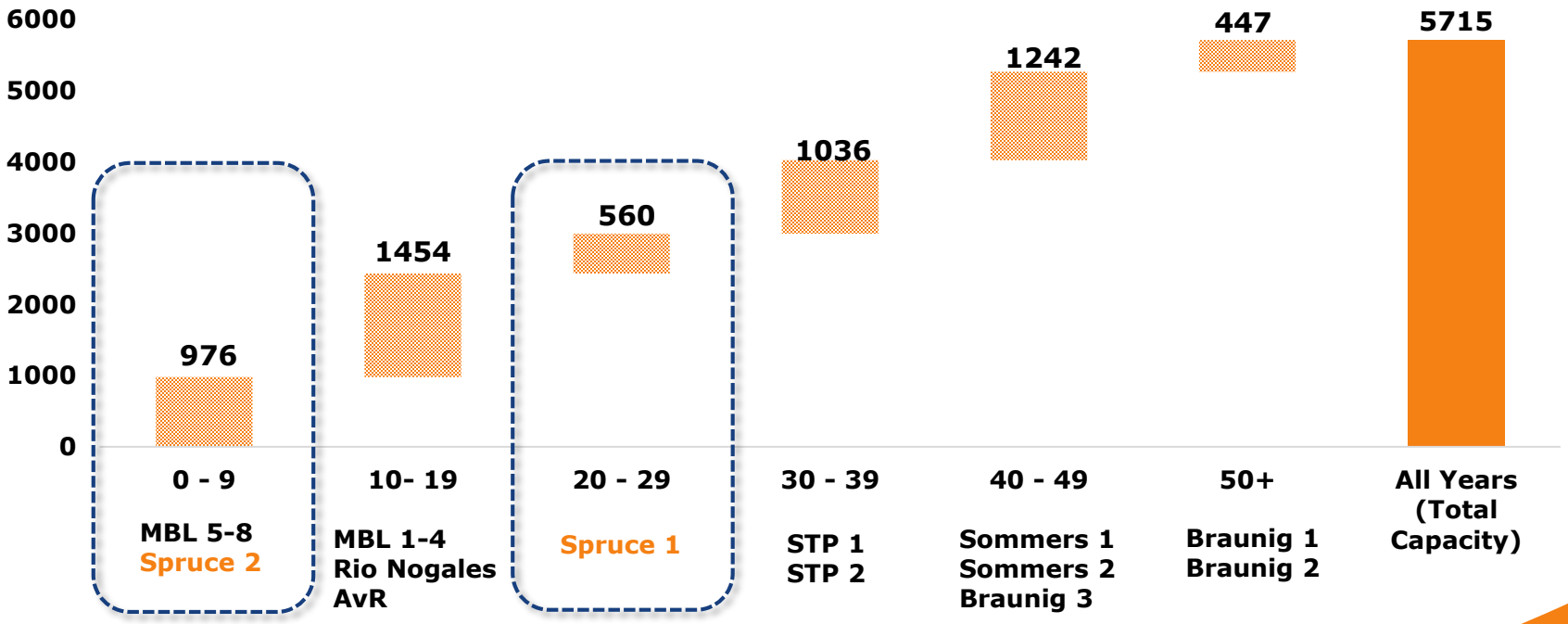
Environmental Responsibility

Resiliency

FINANCIALLY RESPONSIBLE

All business decisions are based on our commitment to being one of the best-managed and most financially responsible utilities in the nation!

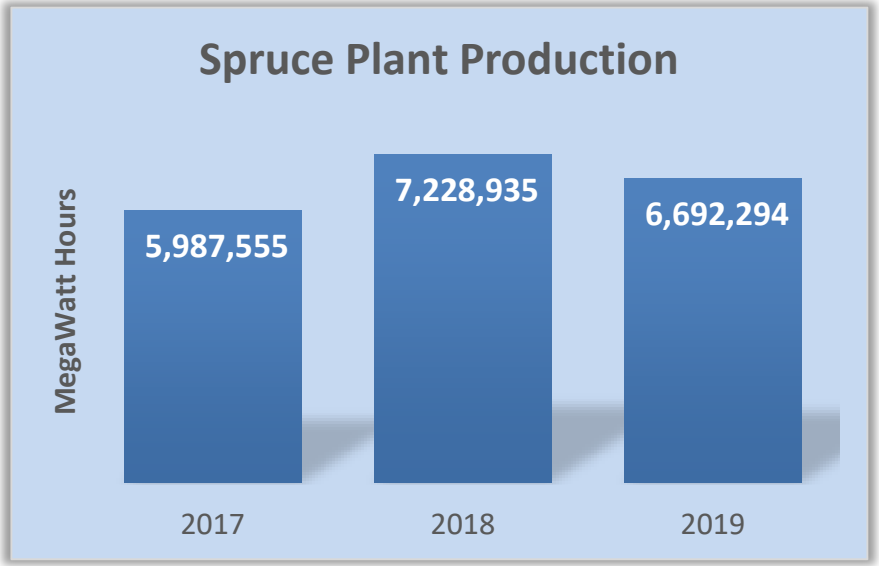
SPRUCE COAL UNITS

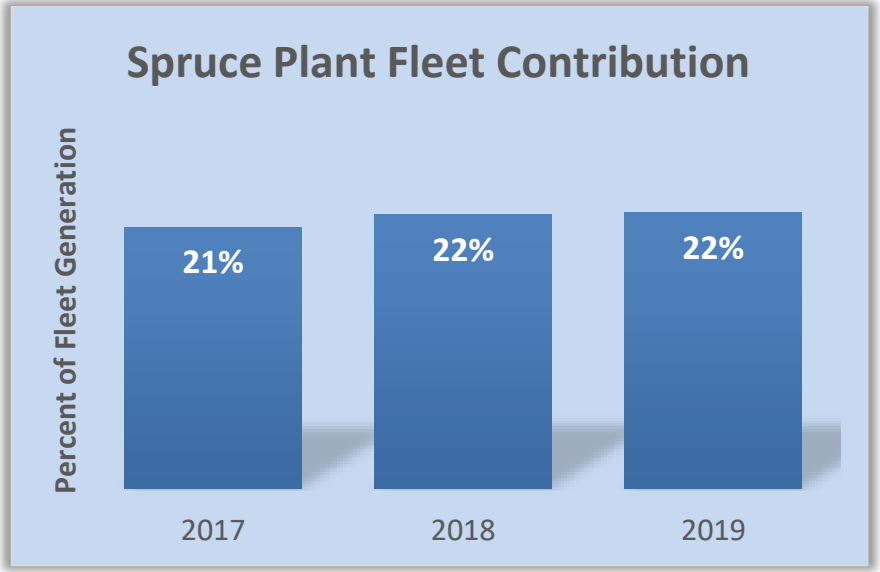


Spruce coal units are modern, efficient and relatively new units with significant remaining life.

SPRUCE OPERATIONS

Spruce consistently delivers over 20% of our total power generation





SPRUCE GAS CONVERSION?

- Spruce coal units are relatively new – reliable and efficient
- Units consistently dispatched by ERCOT based on economics
- Conversion is opportunity to preserve customer investment
- Natural gas will reduce air emissions

Aligning with our Pillars to deliver best value for our Customers

RENEWABLE NATURAL GAS (RNG)

RENEWABLE NATURAL GAS (RNG) IN OUR COMMUNITY

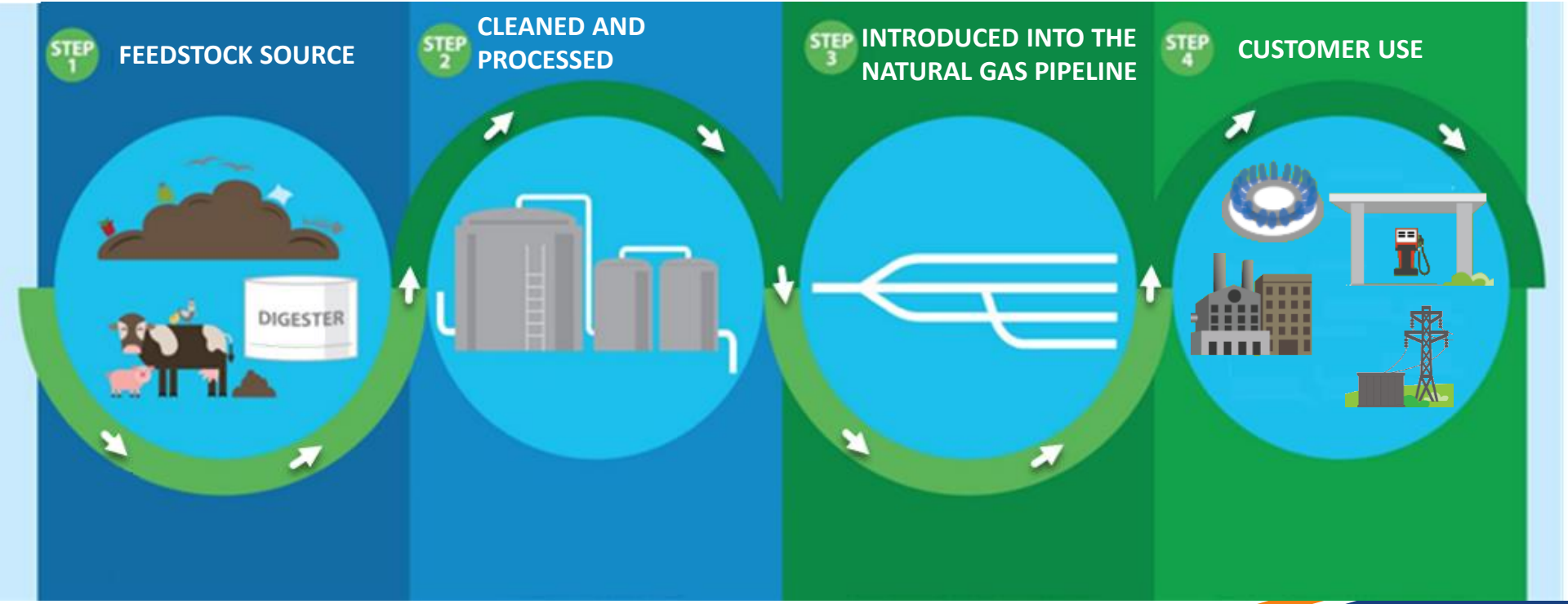
CPS Energy has an opportunity to facilitate a Renewable Natural Gas (RNG) project that will convert local landfill biogas to environmentally friendly pipeline-ready gas to be used locally as transportation fuel, and which will yield cost-savings for our customers.

- Innovative solution that reduces local greenhouse gas emissions
  - Captures local waste product and recycles into transportation fuel for local use
  - Displaces fuel that would otherwise be sourced from mining and long-distance transport
- Compatible with our existing pipeline system
- Economically responsible, good for our customers
- Complements our ***FLEXIBLE PATH*** strategy

RNG IS A TRASH-TO-GAS RECYCLING OPPORTUNITY

- Biogas (typically 45% - 60% methane) is naturally produced from the decomposition of organic waste and, when untrapped, has harmful GHG impact.
- RNG production captures this biogas from renewable and sustainable sources such as landfills, waste-water treatment plants and dairy farms.
- Biogas is treated, resulting in conversion to pipeline-quality natural gas which is known as Biomethane or RNG.
- RNG is delivered into our existing distribution system for delivery to customer end-users.
- RNG is can be used for any application already designed to be fueled by natural gas.

HOW THE PROCESS WORKS



Graphic adapted from U.S. Gain presentation on Wisconsin Clean Cities website (www.wicleancities.org).