

Using behavioral strategies to improve prepay and demand-side management

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Your host for today's event



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This is a virtual roundtable discussion

- Participation is essential
- Use Zoom's **chat** feature to pose questions and share comments
- Unmute your line when you're ready to speak (*6)
- Turn your video on



An illustration of a diverse crowd of people with their hands raised, set against a teal background. Numerous speech bubbles of various colors (white, light green, orange) are scattered throughout the scene. A prominent orange speech bubble in the center contains the text "Hello!".

Hello!



What the heck is behavior science?



EnergyCo

Home Energy Report

January 2018

Address: 111 First Long Line St.

Dec 1, 2017 - Jan 1, 2018

Hi John Smith,

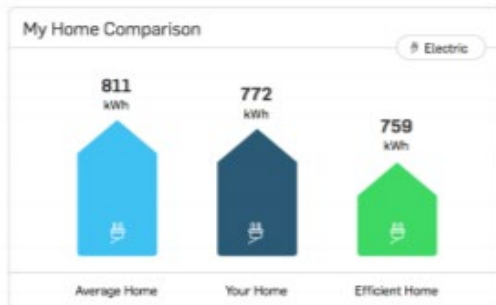
Way to go! You are among the **most efficient** homes in your area and the envy of your neighbors. Although you're doing a great job, there still may be ways for you to save even more.

Electric 772 kWh
Total Cost \$96

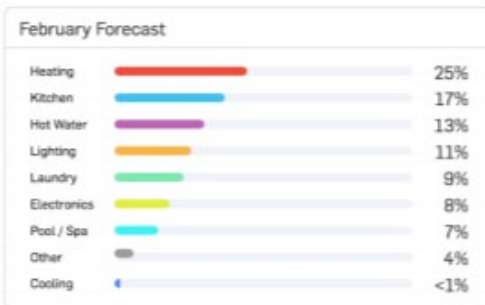
Excludes monthly charges, taxes, and fees.

THIS IS NOT A BILL

How am I doing?



How does my home use energy?



Who am I being compared to?

Group size: 324 Homes
 Square footage: 1,800-2,500
 Year built: 1978-1988
 Heating: Forced Air

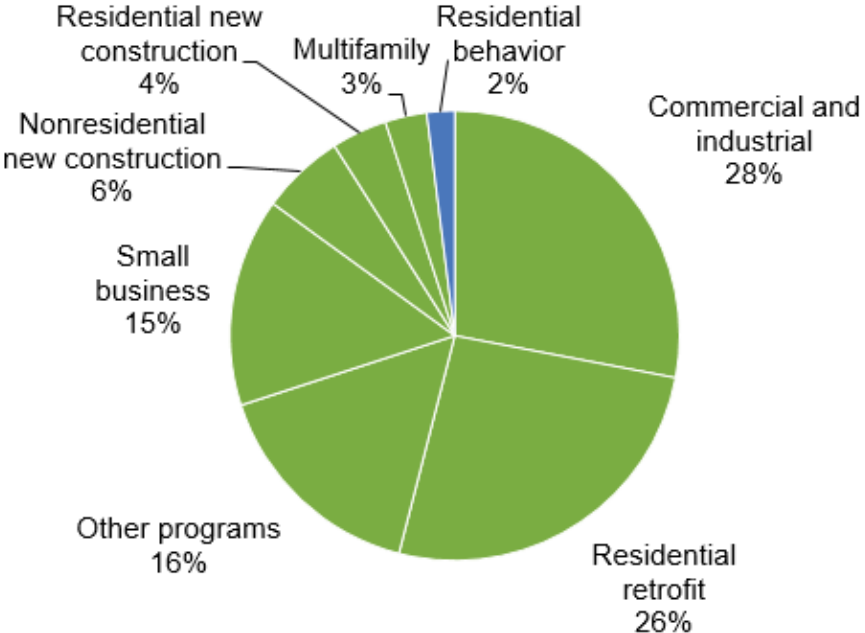
We compare you to similar homes near you. The lowest-consuming 25% of homes in your comparison group make up the Efficient category. Increase your accuracy by completing your home profile.

Improve the accuracy of your report. Update your home profile!



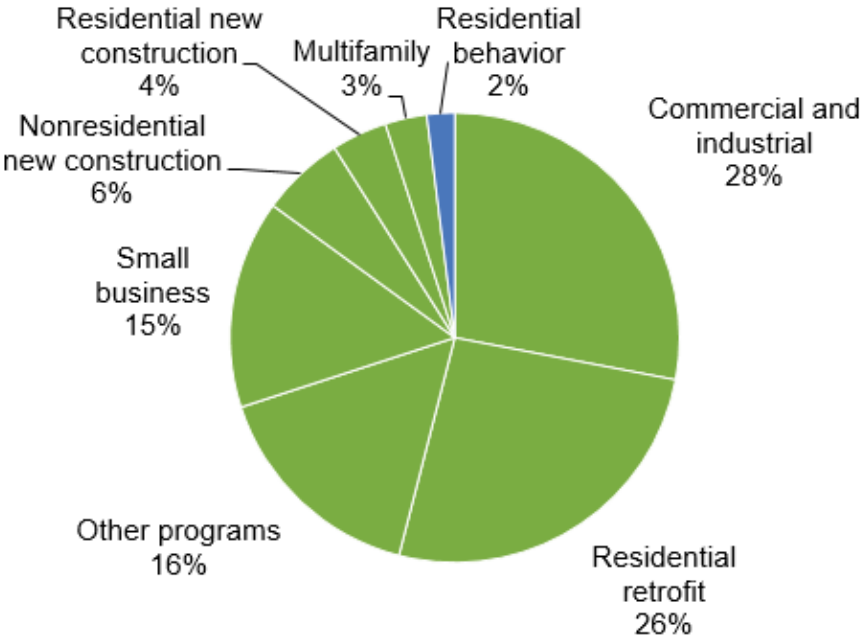
energyco.com/homeenergy

Role of behavior in portfolios

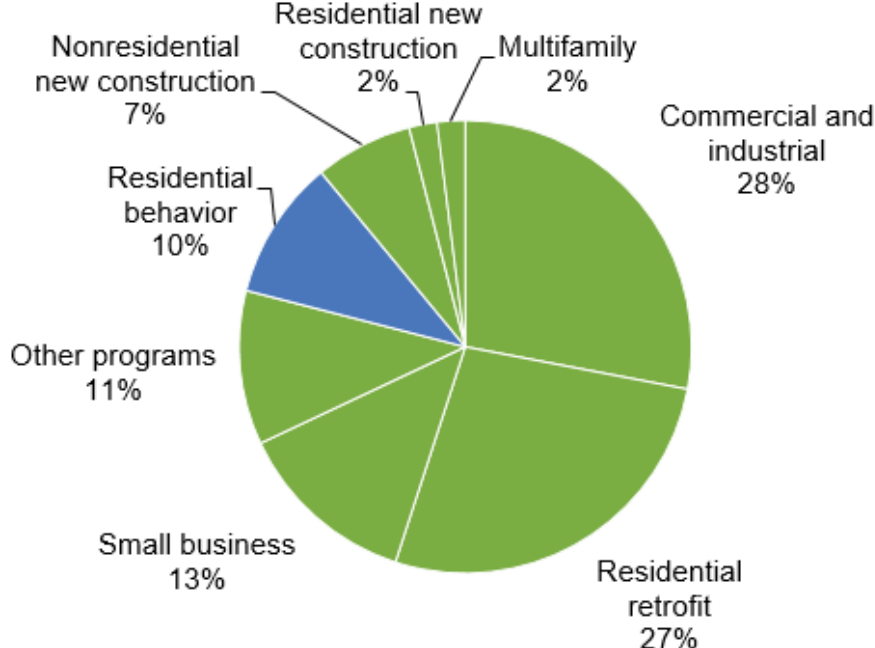


© E Source (DSM Achievements 2015)

Role of behavior in portfolios

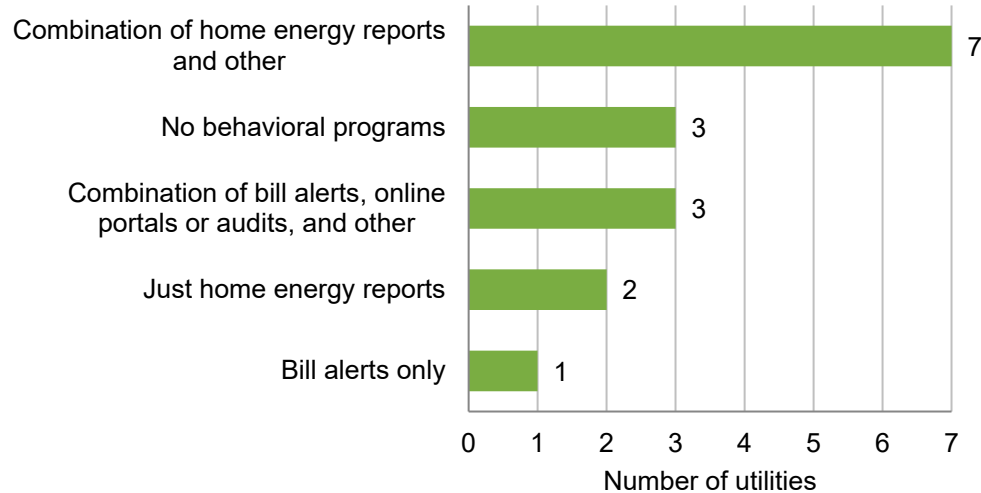


© E Source (DSM Achievements 2015)




© E Source (DSM Achievements 2015)

Poll: What behavioral programs does your utility offer?

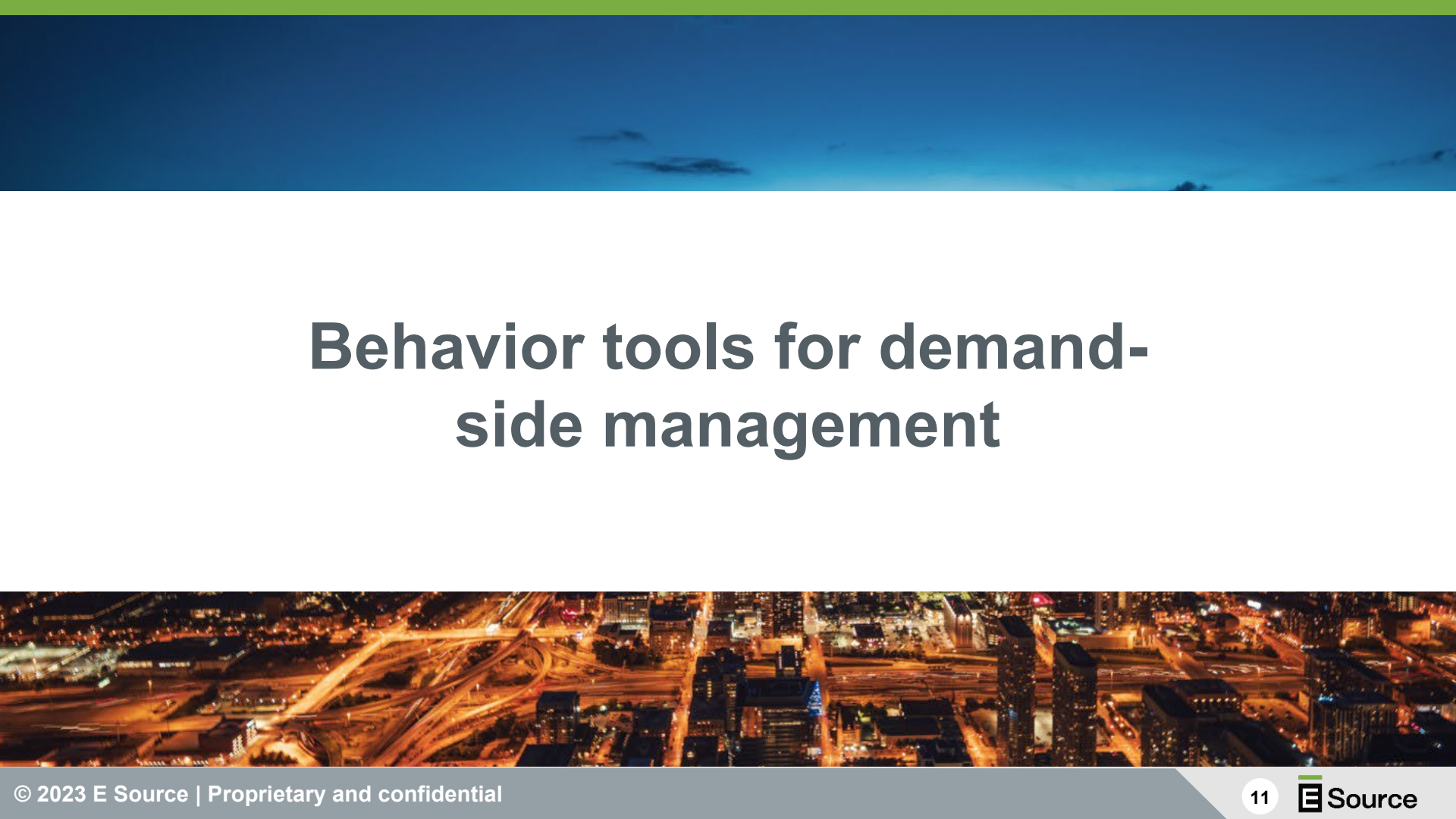


© E Source. **Base:** Event attendees (n = 16). **Question:** What behavioral programs does your utility offer? **Note:** Respondents could choose more than one option.



Your behavioral programs



A nighttime aerial view of a city with illuminated buildings and a complex highway interchange. The top of the image is a dark blue gradient.

Behavior tools for demand-side management

A menu of opportunities

Common behavioral strategies useful for utility programs



Commitment



Convenience



Feedback



Framing



Goal-setting



Incentives



Prompts



Social diffusion



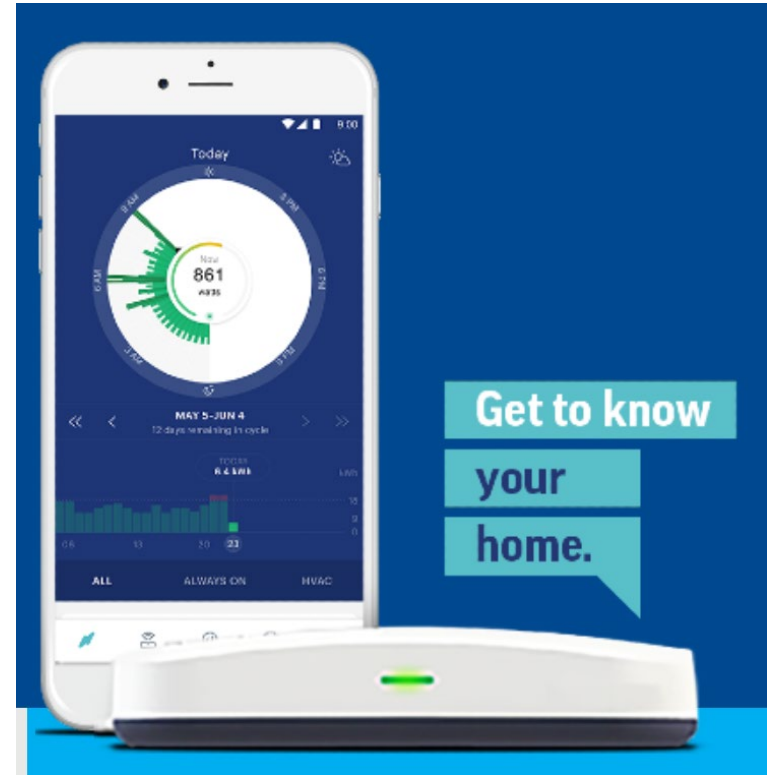
Social norms



Trusted messenger

Usage portals and apps

- Bill estimates, goals, usage info, tips
- Weekly challenges and rewards
- Feedback, goals, norms, convenience, competition



Source: [DTE Energy](#)

Marketplaces for behavior?



Samsung WF45N5300AV
Samsung - 4.5 Cu. Ft.
8-Cycle Front-Loading

★★★★★ (762)

PG&E Smart Choice

PRICE DROP! **\$600**

[See all 5 offers](#)



LG WM3500CW
LG - 4.5 Cu. Ft. 10-
Cycle Front-Loading

★★★★★ (249)

PG&E Smart Choice

PRICE DROP! **\$660**

[See all 9 offers](#)



LG WM3700HWA
LG - 4.5 Cu. Ft. 12-
Cycle Front-Loading

★★★★★ (423)

PG&E Smart Choice

PRICE DROP! **\$527**

[See all 8 offers](#)



Samsung WF45M5500AW
Samsung - 4.5 Cu. Ft.
10-Cycle High-

★★★★★ (683)

PG&E Smart Choice

PRICE DROP! **\$650**

[See all 6 offers](#)

Maximize Energy Savings!

Look for the **Enervee Score®**

The higher the score the more you save!

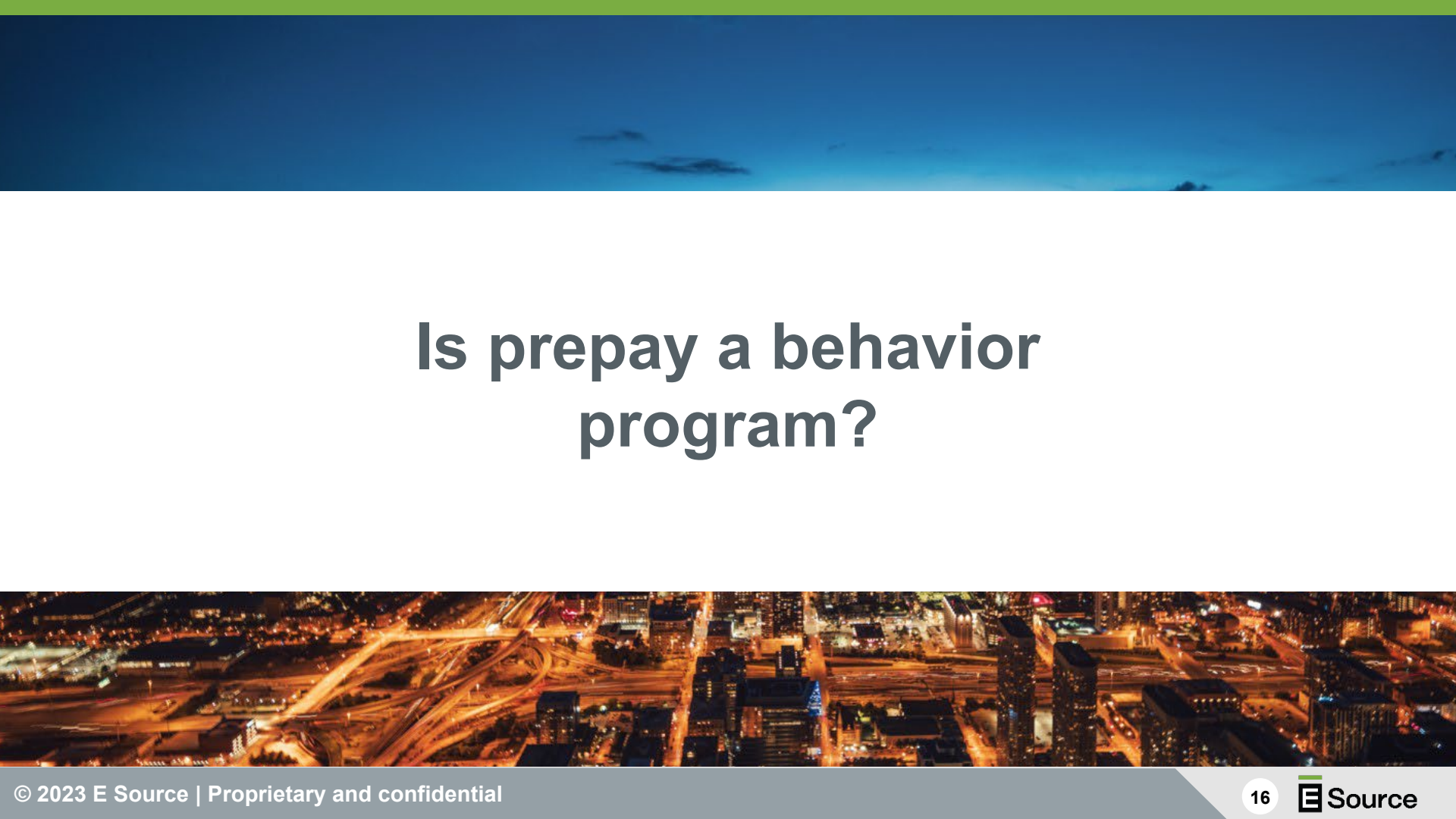
Source: [PG&E](#)

Energy advisers



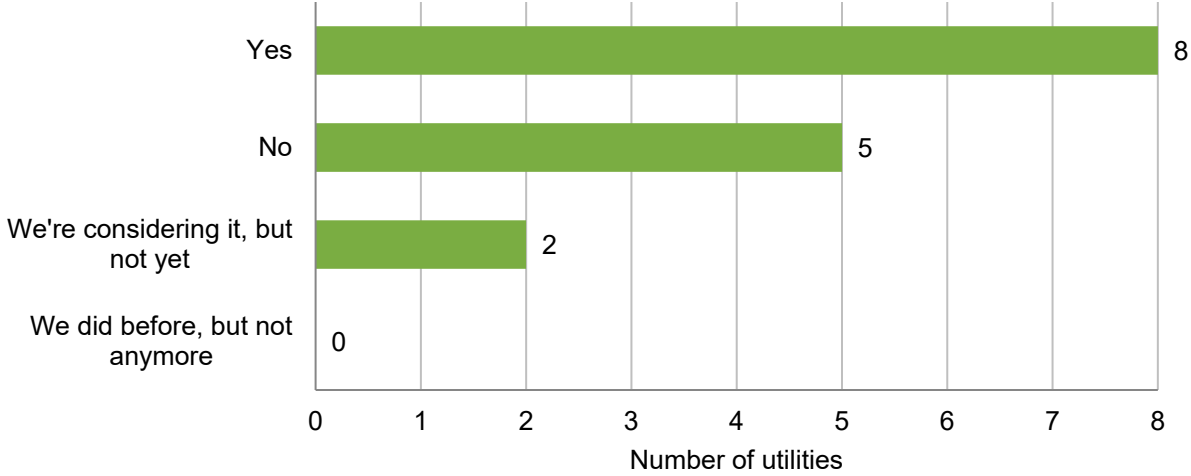
Source: Xcel Energy

- Customer advocate through program
- Trusted messenger, prompts and follow-through, convenience, information

A nighttime aerial view of a city with illuminated buildings and a complex highway interchange. The top of the image is a dark blue gradient.

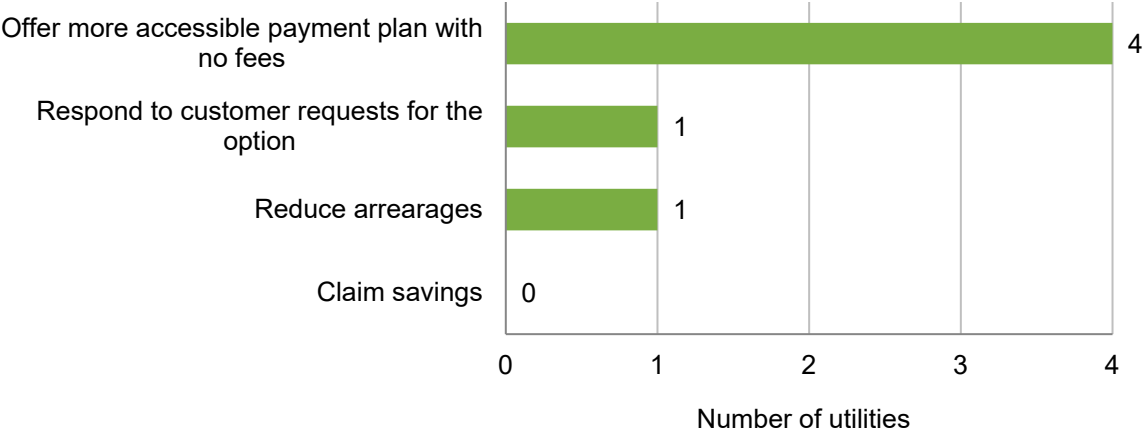
Is prepay a behavior program?

Poll: Do you offer prepaid billing at your utility?




© E Source. **Base:** Event attendees (n = 15). **Question:** Do you offer prepaid billing at your utility?

Poll: If you offer prepaid billing, why? What is your utility's goal?



© E Source. **Base:** Event attendees (n = 5). **Question:** If you offer prepaid billing, why? What is your utility's goal? **Note:** Respondents could choose more than one option.

A person is shown from the back, looking at a smartphone. The background is blurred, suggesting an indoor setting with other people and lights. The text is overlaid on a semi-transparent white box.

**Prepay offers customers
feedback, prompts,
convenience, goal setting.**

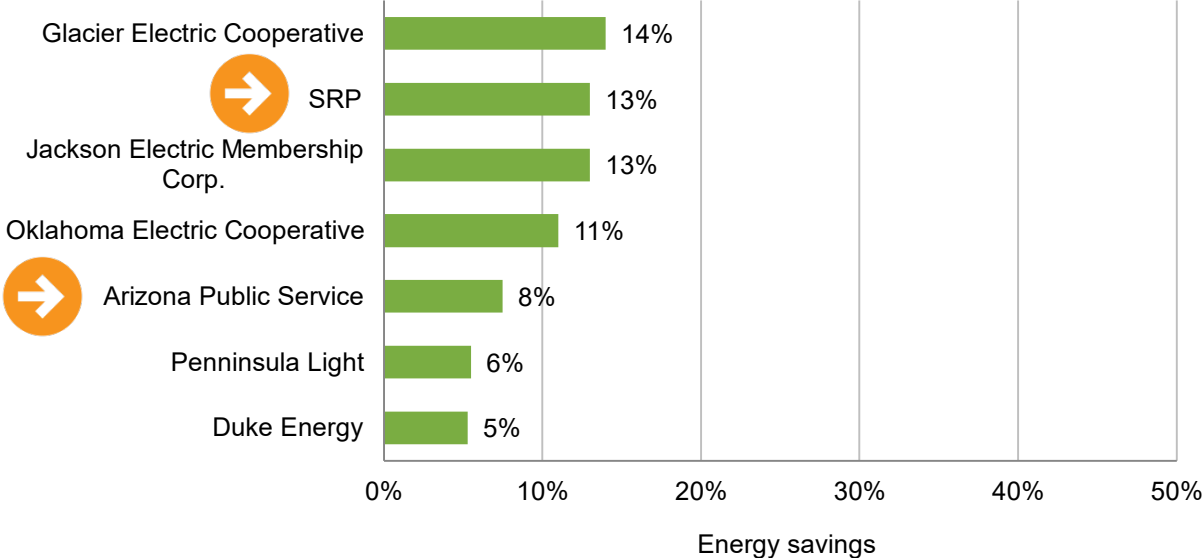


What is your prepay experience?

Your turn!

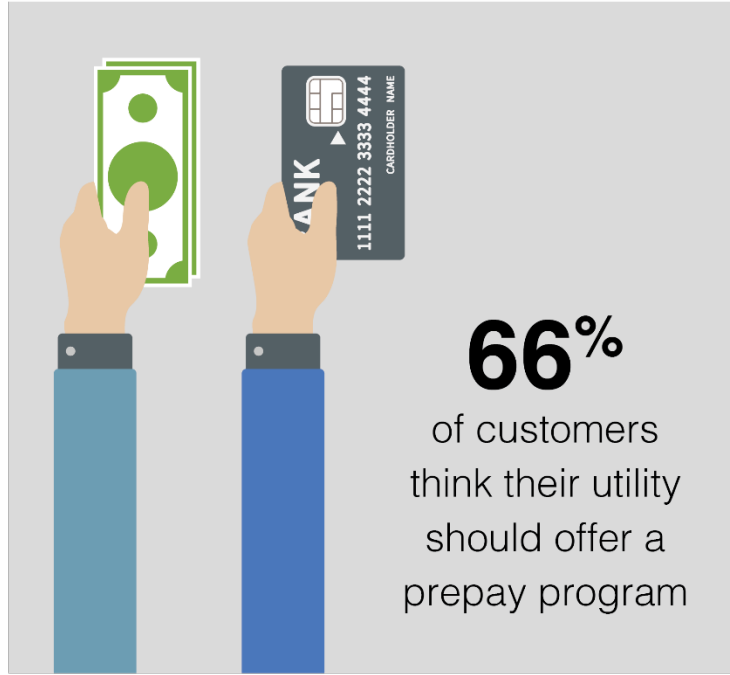


Prepay produces savings of 5%–14%

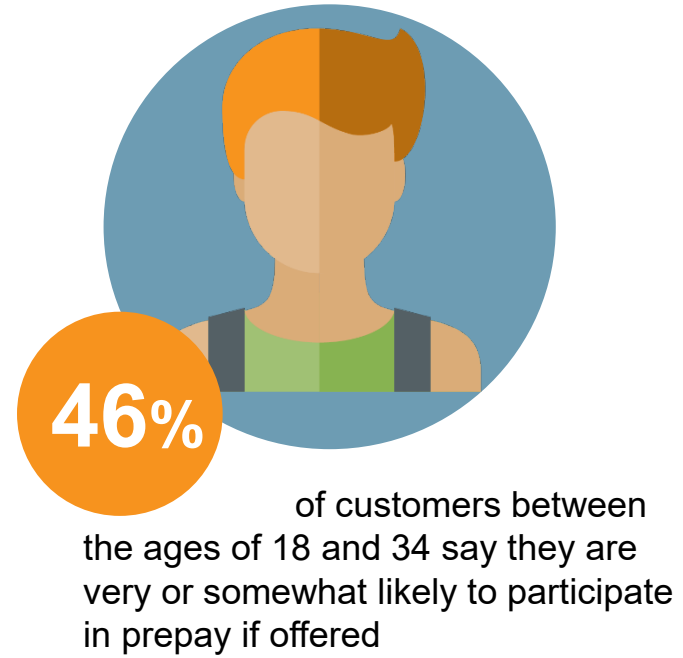


© E Source. **Notes:** Data current as of 2016. SRP's energy savings ranged from 11% to 13%.

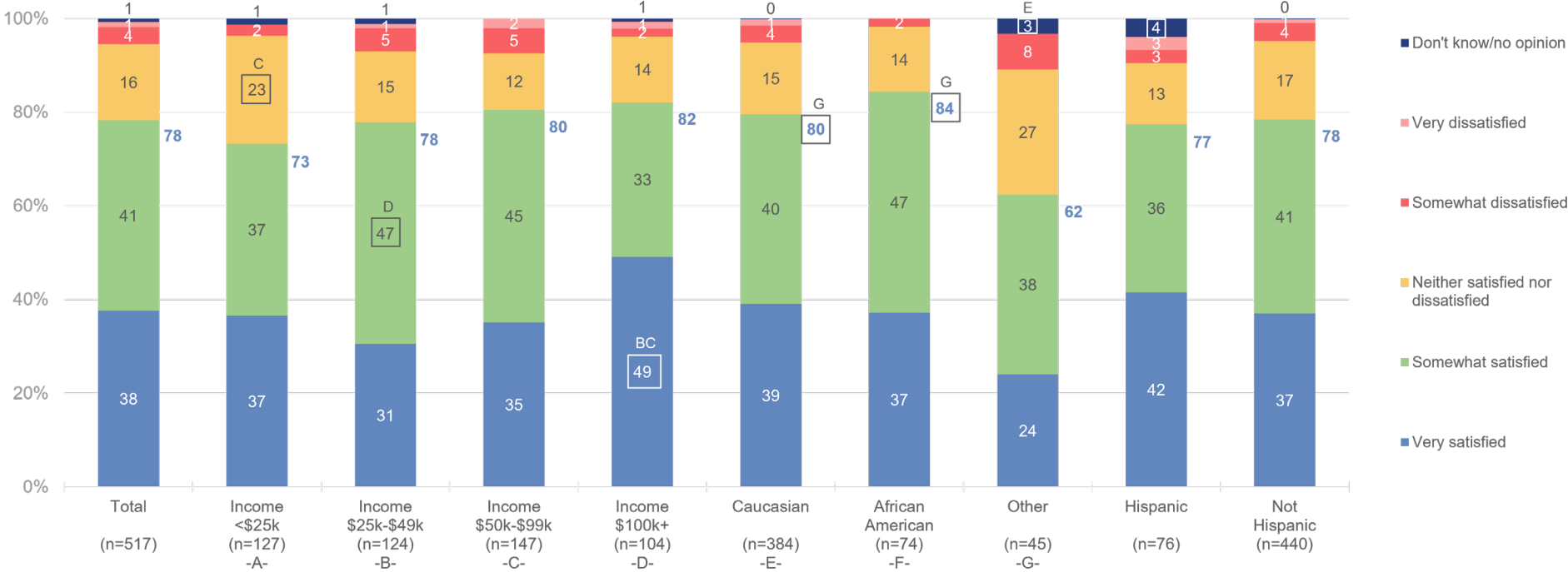
Customers want prepaid



Source: E Source 2023 Annual Prepaid Survey

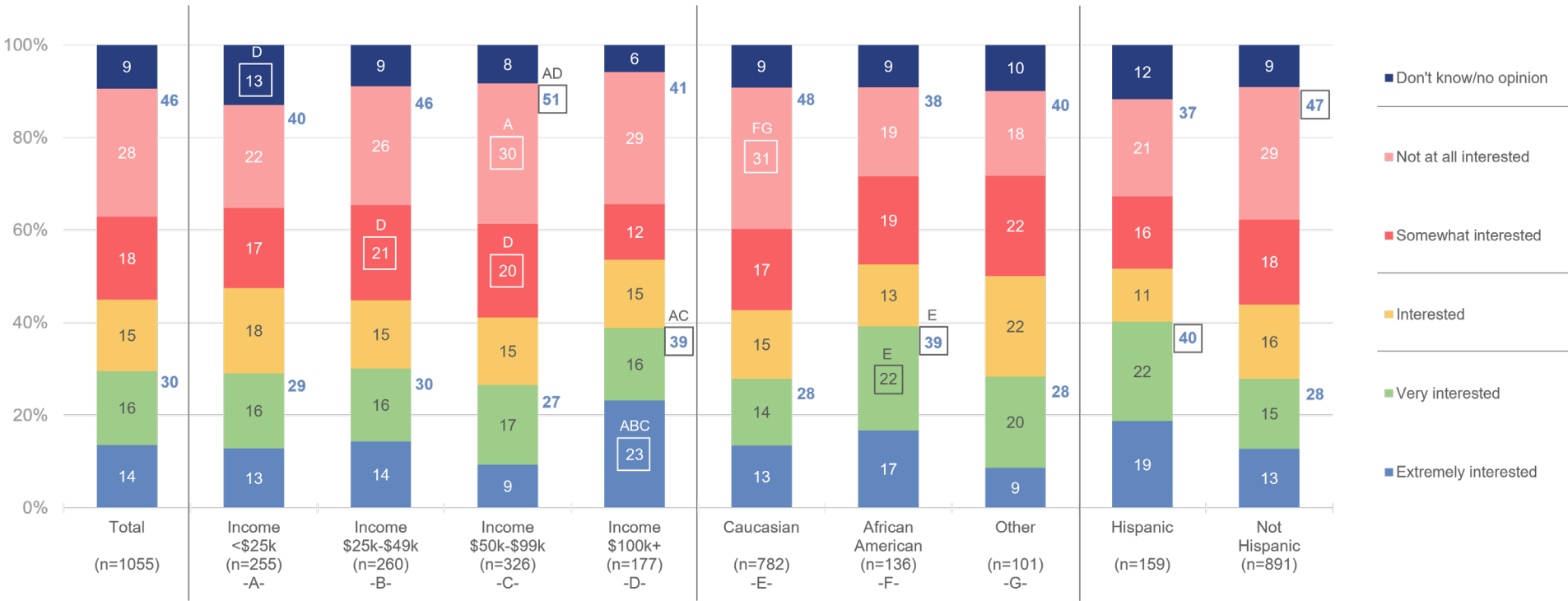


Satisfaction with prepayment



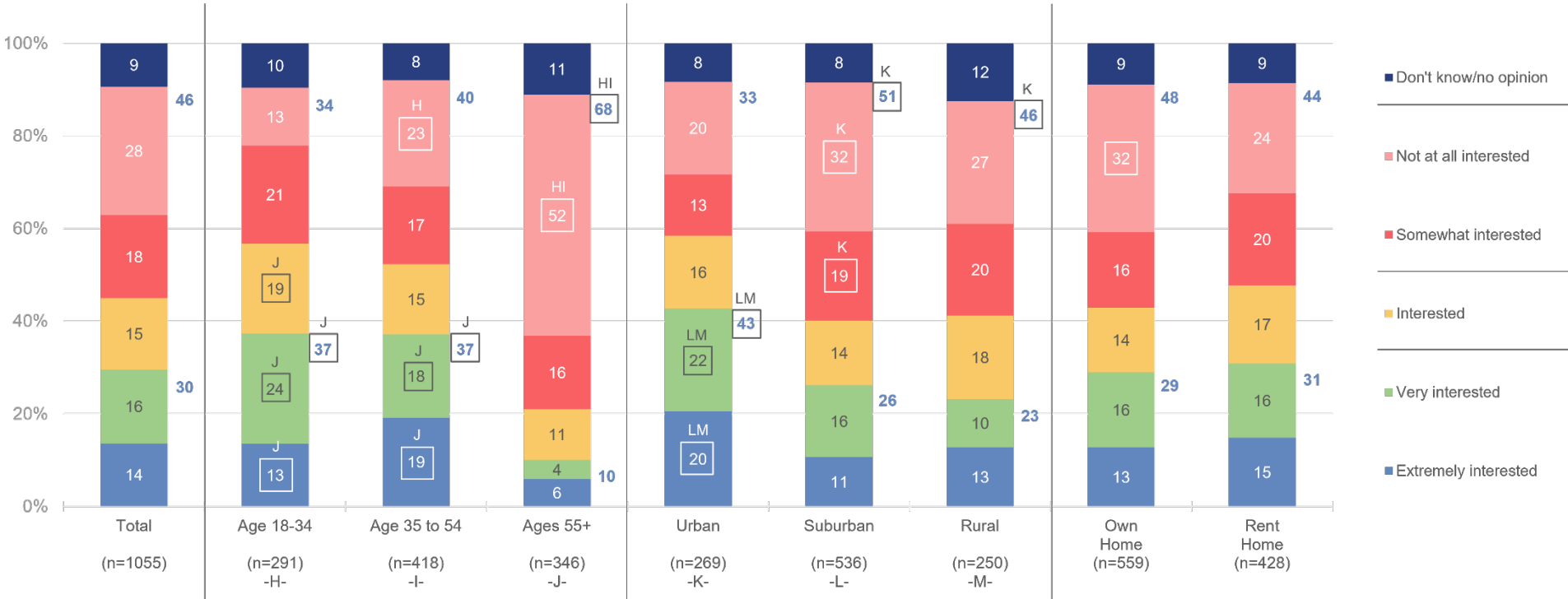
Base: Total Used Prepaid Card
 M5. How would you generally rate your satisfaction with using prepayment as an option to make purchases or contract for services?

Interest in voluntary prepayment for utilities



Base: Total Respondents
 M6. (See slide notes for full question) If your local utility or provider were to offer a voluntary prepaid option for consumers, how interested would you be?

Interest in voluntary prepayment for utilities (cont'd.)



Base: Total Respondents

M6. (See slide notes for full question) If your local utility or provider were to offer a voluntary prepaid option for consumers, how interested would you be?

© E Source (2023 Annual Prepay Survey)

Two benefits of prepaying for energy service

		Household Income				Race			Ethnicity	
	Total	Income <\$25k -A-	Income \$25k-\$49k -B-	Income \$50k-\$99k -C-	Income \$100k+ -D-	Caucasian -E-	African American -F-	Other -G-	Hispanic	Not Hispanic
Total Respondents	(1055)	(255)	(260)	(326)	(177)	(782)	(136)	(101)	(159)	(891)
	%	%	%	%	%	%	%	%	%	%
It eliminates surprises on the size of the utility bill	41	34	47 ^A	40	41	43 ^G	35	30	38	41
It improves family budgeting	35	34	36	35	35	36	30	37	32	36
I get control over my usage and cost	35	36	36	33	35	33	40	39	38	34
There is no need to make a security deposit to start service	29	28	27	30	27	29	31	30	27	29
It is a way to simultaneously keep lights on and pay down debt in small amounts	26	27	24	25	26	25	29	26	24	25
It is an alternative to making utility payment arrangement	21	21	15	21	26 ^B	20	21	24	25	20
You can apply the existing security deposit to pay any past due amount	14	18 ^D	14	16	9	14	16	13	15	14

Base: Total Respondents

M10. From your perspective, what would be the top two benefits of prepaying for energy service?





Let's discuss!



What's next?

Related research

- [Behavioral DSM programs resource center](#) (a collection of our research)
- [Residential behavioral programs and strategies](#), Beth Fitzjarrald, E Source (2023)—recently updated!
- [Prepay programs can change customer behavior and save energy](#), Beth Fitzjarrald, E Source (2021)



Demand-side management and PEWG

Upcoming research and events

2023 Prepay Energy Working Group

October 4 and 5
JEA headquarters
Jacksonville, Florida

DSM portfolios without lighting

Residential demand response update

State of the midstream

 **E Source****FORUM 2023****September 19-22****Sheraton Denver
Downtown**

www.esource.com/forum2023

Thank you!



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