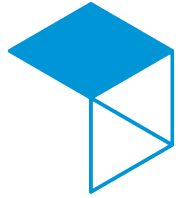


Reducing Household Electricity Consumption in Chisinau, Moldova

UNDP Moldova

Premier Energy MD

Behavioral Insights Team



THE
**BEHAVIORAL
INSIGHTS
TEAM**



*Empowered lives.
Resilient nations.*

Partners

Intervention Letters

“kWh” Norm Letter

Dear <<first_name>>,







We thought that you might be interested in the following information regarding your electricity use in 2019.

Your average monthly electricity usage was: <<kw2019_monthly>> kWh

Your average energy-efficient neighbor consumed: 87 kWh

This means that you consumed on average <<kw2019_kwh_dif>> kWh more electricity per month than your average energy-efficient neighbor. We encourage you to make efficient use of electricity just like your energy-efficient neighbors.

Here are some tips you can learn to save energy right away. Check the box next to each action that you can do this month.

		
<input type="checkbox"/> Turn off the lights when not needed	<input type="checkbox"/> Turn off and unplug appliances like your TV when you are not using them	<input type="checkbox"/> Switch to LED light bulbs
		
<input type="checkbox"/> Use energy-efficient appliances (A+, A++, A+++)	<input type="checkbox"/> Wash only with a full load and use cold water washing if possible	<input type="checkbox"/> Don't leave the refrigerator door open for too long and reduce cooling setting to the midpoint if it is set colder than that

Yours truly,

Inina Gutu
Proiect Eficienta Energetica

“Monetary” Norm Letter

Dear <<first_name>>,







We thought that you might be interested in the following information regarding your electricity use in 2019.

Your average monthly electricity bill was: <<kw2019_monthly_lei>> Lei

Your average energy-efficient neighbor paid on average: 156.80 Lei

This means that you paid <<kw2019_lei_dif>> Lei more per month than your average energy-efficient neighbor did because you consumed more electricity. We encourage you to make efficient use of electricity like your energy-efficient neighbors.

Here are some tips you can learn to save energy right away. Check the box next to each action that you can do this month.

		
<input type="checkbox"/> Turn off the lights when not needed	<input type="checkbox"/> Turn off and unplug appliances like your TV when you are not using them	<input type="checkbox"/> Switch to LED light bulbs
		
<input type="checkbox"/> Use energy-efficient appliances	<input type="checkbox"/> Wash only with a full load and use cold water washing if possible	<input type="checkbox"/> Don't leave the refrigerator door open for too long and reduce cooling setting to the midpoint if it is set colder than that

Yours truly,

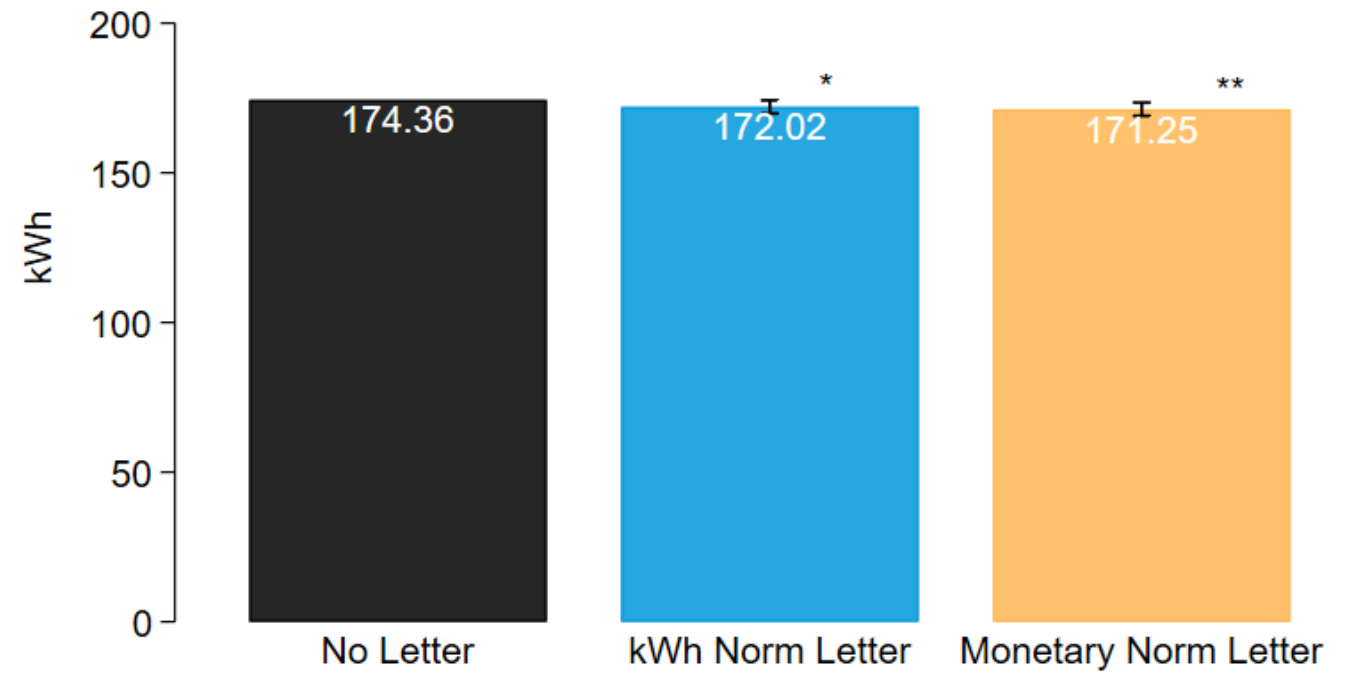
Inina Gutu
Proiect Eficienta Energetica

Trial Design

	Group 1	Group 2	Group 3
Sample Size	107,867	9,941	9,952
Message	No letter	kWh Norms Message	Monetary Norms Message
Personalization		✓	✓
Actionable energy-saving tips		✓	✓
kWh social norms comparison		✓	
Monetary social norms comparison			✓

Results

Household electricity usage during the post-intervention month



n=122,885

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$, + $p < 0.1$

Environmental Impact

- Treatment group households that received a behaviorally informed letter conserved **41,059 kWh of electricity** compared to those who did not receive the letter
- This eliminated the equivalent of **27,920 kg of CO₂ emissions¹** in one month.²
- If scaled, we expect the letters would eliminate the equivalent of **65,114 to 290,536 kg of CO₂ emissions.**

1. 0.68kg of CO₂ are produced as a byproduct for every kWh of electricity produced.
2. According to EPA, this is equivalent to CO₂ emission from burning 30,523 pounds (or 13,845 kg) of coal.

Scaling-up – intervention letters



Stimate domnule <<Prenume_Nume>>

Stimată doamnă <<Prenume_Nume>>.

În contextul actual de pandemie, înțelegem cu toții importanța necesității de a ne solidariza cu mesajul #StaiAcasa. Totodată, autoizolarea la domiciliu poate rezulta în un consum majorat de energie electrică. Considerăm că, v-ar putea interesa următoarea informație despre consumul dvs de electricitate în anul 2019 (an de referință).

Consumul dvs. mediu lunar a fost: << kwh_monthly_2019>> kWh

Consumul mediu lunar al **clienților care au aplicat măsuri de eficiență energetică**: 87 kWh

Prin urmare, dvs ați consumat, lunar, în medie, cu << kw2019_kwh_dir>> kWh mai mult decât **clienții care au aplicat măsuri de eficiență energetică**. Vă încurajăm să utilizați rațional energia electrică la fel ca și clienții eficienți din punct de vedere energetic.

Vă prezentăm câteva idei de economisire a energiei electrice. Bifați acțiunile pe care le puteți realiza în această lună.



Stingeți lumina atunci când nu aveți nevoie de ea



Deconectați și scoateți din priză echipamentele pe care nu le folosiți la moment (televizorul, calculatorul)



Înlocuiți becurile incandescente cu becuri LED



Folosiți echipament eficient energetic



Folosiți mașina de spălat doar la încălzitură maximă și alegând regimul cu temperatură redusă atunci când este posibil



Nu lăsați ușa frigiderului deschisă mult timp și setați temperatura medie de răcire

Vă încurajăm totodată să efectuați achitarea facturii pentru energia electrică utilizând internet banking sau portalul <https://pay.premiereenergy.md/>.
Cu respect,

Irina Guțu,
Proiect Eficiență Energetică

- All ‘inefficient’ HHs in focus (also outside Chisinau Municipality)
- Amended behavioral intervention letters (only kWh)

2020 Results: decreased speed of increased electricity use while in lockdown