



Phau Ntawv Qhia Txog Kev Yooj Yim

# Kev Ncaj Ncees hauv Kev Siv Hluav Taws Xob hauv Kuv Lub Tsev

## Kuv Them Kuv Tus Nqi Hluav Taws Xob Ntau Npaum Li Cas?

Phau ntawv qhia kev yooj yim no pab txheeb xyuas cov nqi them ntawm peb cov nqi hluav taws xob thiab qhov twg / yuav ua li cas peb thiaj li yuav txuag tau nyiaj. Peb cia siab tias qhov kev cob qhia no txhawb kev siv hluav taws xob kom zoo dua qub tuaj thaum siv (thiab tsis siv) cov khoom siv hluav taws xob hauv koj lub tsev. Yog tias koj nyob hauv Cov Nroog Twin, hu rau Natalya ([narevalo@ceed.org](mailto:narevalo@ceed.org)) mus nqa CEED Lub Tso Hluav Taws Xob Rau Lwm Qhov Siv (Power Pack) nrog cov khoom siv txuag hluav taws xob txhawm kom txuag tau nyiaj ntawm hluav taws xob thiab xyaum siv hluav taws xob kom tau txais txiaj ntsig zoo. Yog tias koj nyob deb, koj tuaj yeem nrhiav tau cov cuab yeej los ntawm cov khw muag khoom hardware hauv cheeb tsam koj nyob.

### Cov Khoom Uas Xav Tau

- [Daim Ntawv Khoom Siv](#) (luam tawm)
- Lub tshuab tshuab plaub hau
- Lub tshuab ntsuas Kill-A-Watt meter(s)
- Cov nqi hluav taws xob piv txwv
- Lub tshuab xam lej
- Nplooj ntawv
- Cov cim

## CEED cov peev txheej txhawm rau rub thiab luam tawm

- [Cov Khoom Siv Huab Taws Xob Hog](#)

## Cov khoom siv tej zaum muaj nyob hauv CEED's Cov Chaw Tso Hluav Taws Xob Mus Rau Lwm Qhov Siv

- Cov hlua ntxig fais fab ntau txoj (Multi outlet power strip)
- teeb 60W LED
- Kev thaiv kom txhob muaj cua tawm (Weather stripping)

## Cov kauj ruam yooj yim

### A. Kev Taw Qhia: Peb yog leej twg? Leej twg nyob ntawm no? Lub hom phiaj rau hnuv no [10 feeb]

### B. Kev siv hluav taws xob hauv tsev [15 feeb]

1. Muab cov ntawv thiab cov cim rau txhua tus neeg koom. Kom lawv sau: Sawv ntxov, tav su, yav yuav tsaus ntuj, thiab tsaus ntuj nyob rau hauv ntau lub ces kaum ntawm lawv daim ntawv.
2. Tom ntej no, txhawb kom lawv kos los sis sau cov npe ntawm cov khoom siv uas lawv siv thoob plaws ib hnuv hauv lawv cov ces kaum (xws li kos lub khob dej tshuaj yej hauv qab "Sawv Ntxov" vim kuv siv kuv lub hwj hluav taws xob rau ib khob tshuaj yej thaum sawv ntxov). Kom lawv ua lub voj voog rau cov khoom siv uas lawv siv ntau zaus hauv ib hnuv.
3. Piav tias qhov dej num no yog los pab kom pom qhov chaw uas lawv siv hluav taws xob siv tau tshwm sim nyob qhov twg. Siv cov lus nug tseem ceeb:
  - a. Dab tsi yog siv rais mus uas ib tus cwj pwm kiag lawm los sis kev yooj yim, tab sis tej zaum tsis tsim nyog?
  - b. Dab tsi yog siv dhau qhov uas tsim nyog?
4. Mus ncig luv luv ntawm chav tsev thiab kom cov neeg tuaj koom qhia lawv cov khoom siv feem ntau ntawm lawv.

## Tus nqi hluav taws xob

Peb tab tom yuav hluav taws xob txhua zaus peb qhib lub teeb los sis ntsaws thiab siv cov khoom siv, tab sis peb tsis paub tus nqi ntawm peb cov hluav taws xob tias raug nqi pes tsawg... thiab thaum txhua sij hawm peb mus tom kiab khw cov thawv qe yuav muaj ib qho qhia rau peb paub txog tus nqi. Ua ke, peb yuav txheeb xyuas xam seb peb qhov kev siv hluav taws xob raug nqi li cas.

### C. Nkag siab txog peb cov nqi hluav taws xob hauv peb tsev [20 feeb]

1. Kom nkag siab txog cov lej ntawm cov nqi hluav taws xob, qee qhov kev kawm paub txog lej yuav suav nrog. Txhawb kom cov neeg koom nkag mus rau hauv lawv tus av khaub hluav taws xob thiab rub tawm cov nqi dhau los. Yog tias qee tus tsis tuaj yeem nkag mus rau lawv daim nqi tau, lawv tuaj yeem nrhiav tus nqi nruab nrab ntawm cov nqi hluav taws xob nyob hauv lawv lub xeev tau: <https://www.eia.gov/opa/v1/qb.php?category=1012>
2. Muab daim ntawv tshiab, nplooj ntawv tsis tau sau. Qhia kom cov neeg koom kos cov kem nrog lawv lub npe nyob rau hauv kab ntsug, thiab "\$", "kWh", thiab "\$/kWh" nyob rau hauv kab rov tav. Siv cov kem rau cov hauv qab no:

	\$	kWh	\$/kwh
<b>Carlos</b>			

3. Kom cov neeg tuaj koom siv lawv cov nqi los sau cov kab ntawv khoob. Pab qhia thiab siv cov ntsiab ntsaws uas tsim nyog los ua kom tiav ntawm txhua kem:
  - a. \$: Nrhiav "TUS NQI THEM" ntawm koj daim nqi. Qhov no yog tag nrho cov nyiaj daus las them rau ib hlis ntawm hluav taws xob. Cov chaw muab hluav taws xob tuaj txog ntawm tus lej no raws li qhov koj siv hluav taws xob ntau npaum li cas, nrog rau cov nqi se thiab lwm yam nqi.
  - b. kWh: Tom ntej no, txheeb xyuas cov nqi siv hluav taws xob kom pom koj qhov kev siv kWh ntawm koj daim nqi. Koj yuav hluav taws xob ntawm "kilowatt-moo" (kWh). Ntawm lawv cov nqi, tej zaum yuav muaj ntau yam ntawm cov kab kWh, muab coj los sib ntxiv tag nrho ua ke rau kWh tag nrho uas tau siv mus lawm.
  - c. \$/kWh: Qhia cov neeg koom nrog faib lawv "COV NQI TXOG SIJ HAWM THEM" nrog rau tag nrho kWh uas tau siv mus lawm. Tus lej kawg yog cov nqi uas koj yuav tau them rau hauv ib kilowatt moo rau koj kev siv hluav taws xob rau hauv ib hlis.

### Peb cov nqi them yog dab tsi tiag?

Siv cov khoom siv uas nquag siv rau cov neeg koom nrog sib tham thaum pib ntawm lub rooj cob qhia (cov khoom siv uas siv voj voog nyob hauv lawv cov ntaub ntawv). Ua ke, peb yuav txheeb xyuas seb txhua yam khoom siv yuav raug nqi li cas rau peb.

### D. Kev yuav kilowatt moo [40 feeb]

1. Kom cov neeg koom nrog tuav lub rooj los zaum thiab zaum ua ib pab pawg loj.
2. Muab lub tshuab tshuab plaub hau thiab lub cuab yeej ntsuas Kill-A-Watt meter. Muab lub tshuab tshuab plaub hau ncig lub voj voog. Ua kom cov neeg tuaj koom nrhiav thiab sim saib "watts" uas sau rau saum lub tshuab tshuab plaub hau.

3. Coj cov neeg tuaj koom mus rau ze ze ntawm qhov chaw ntsaws hluav taws xob thiab ntsaws lub tshuab tshuab plaub hau. Siv lub cuab yeej ntsuas Kill-A-Watt meter, tshuaj xyuas lub tshuab tshuab plaub hau: nias ntawm teeb: siab / qis, kub / txias. Nco ntsoov saib seb muaj pes tsawg watts ntawm lub tshuab tshuab plaub hau thaum hloov pauv kev teeb.
4. Siv tus lej watt los ntawm lub 'meter' nyeem ua ke, xam cov nqi hluav taws xob ntawm lub tshuab plaub hau hauv ib xyoo twg:
  - a. Sau cov lej watts uas lub tshuab plaub hau siv mus lawm.
  - b. Muab Khwwb nrog cov xuab moo uas siv hauv ib hnuv. Sau tus lej kawg cia.
  - c. Muab Khwwb nrog hnuv uas siv hauv xyoo Sau tus lej kawg cia (tus lej kawg no yog suav tag nrho **watt moo hauv ib lub xyoo**).
  - d. Faib nrog ib pav (no yuav pauv ntawm watt moo mus ua **KILOwatt moo**). Sau tus lej kawg cia.
  - e. Kom cov neeg koom siv rov qab mus saib rau lawv tus lej kilowatt moo los ntawm kev nqis tes ua dhau los. Khwwb cov lej sau saum toj nrog \$ uas koj them hauv kilowatt moo. Sau tus lej kawg ntawm txhua cov neeg koom. No yog tus lej tias ntau npaum li cas ntawm tus nqi tshuab plaub hau rau koj hauv ib xyoo.
5. Faib cov neeg koom ua pawg li 2-3 pawg. Muab daim ntawv [Appliance Worksheet](#), piav qhia txog qhov sib npaug, thiab lub tshuab xam. Qhia kom cov neeg koom siv qhov xuj lej los xam cov nyiaj siv rau cov khoom siv nyob ib ncig thoob plaws hauv chav. Muab sij hawm li ~10 feeb rau cov pab pawg los kuaj thiab xam.
6. Qhia txog cov cuab yeej uas siv muaj txiaj ntsig: tub yees, qhov chaw xaj xov tooj, laptop, teeb, lub tshuab nqus tsev.
7. Thaum tag lub sij hawm lawm, txhawb pab pawg los qhia qee tus lej kawg thiab tso cai rau lwm pab pawg los twv seb cov khoom siv twg lawv tau kuaj.

### **E. Tus cwj pwm hauv kev siv hluav taws xob kom tau txais txiaj ntsig zoo tshaj plaws [10 feeb]**

1. Muab daim ntawv teev npe ntawm [Energy Hog Appliances](#). Nco ntsoov tias cov khoom siv tau teev tseg yog cov uas suav tias yog cov watts siab thiab siv zog, txawm tias tsis siv.
2. Siv cov lus nug taw qhia, pab txhawb kev xav luv luv hais txog Hluav Taws Xob Hog daim ntawv teev npe:
  - a. Cov khoom siv twg los ntawm cov npe koj siv ntau?
  - b. Yam khoom twg ua rau koj xav tsis thoob?
  - c. Dab tsi yog qee yam khoom siv hauv koj lub tsev uas tau muab tua lawm, tab sis tseem ntsaws?

## Kev Siv Hluav Taws Xob Kom Muaj Txiaj Ntsig Zoo

Kev siv hluav taws xob uas muaj txiaj ntsig zoo txhais tau hais tias siv lub hluav taws xob tsawg dua los ua hauj lwm tib yam - uas yog, kev tshem tawm cov khoom hluav taws xob tsis muaj nqi pov tseg . Kev txuag hluav taws xob tseem tuaj yeem ua rau peb txuag tau nyiaj thiab txo daim nqi kev siv hluav taws xob tau thiab.

Peb tuaj yeem ua dab tsi tau txhawm ua kom cov nqi hluav taws xob zoo tshaj qub tuaj?

1. Siv tev nau lau xis: kev siv cov cuab yeej watt qis.
2. Tus cwj pwm ntawm tus kheej: ntev npaum li cas koj siv txhua lub cuab yeej

### F. Kev Xav & Kaw Xaus [10 feeb]

1. Xaus lus; Cov neeg koom tau kawm dab tsi? Lawv yuav qhia dab tsi rau cov neeg hauv zej zog? Dab tsi tseem tsis tau teb?
2. Ua tsaug rau cov neeg koom nrog lub sij hawm thiab kev koom tes; peb cia siab tias lawv tau kawm tej yam tshiab thiab muaj lub dag zog los txuas ntxiv kev sib tham zoo li hnuv no.
3. Faib Cov Khoom Siv Fais Fab.