Developing an Energy Education Program

FirstState
Community Action Agency
People Helping People Build Community

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This workshop will cover:

- Energy Education 101
- The Need for Energy Education
- The Benefits of Energy Education
- Components of an Energy Education Program
- Types of Energy Education Program
  - Single-time Energy Education Program
  - Reoccurring Energy Education Program
- Next Steps

?!? What ?!?

What is

Energy Education?

What is Energy Education?

QUIZ TIME!!!!

Question #1

What electronic device(s) consume(s) the most power when in standby mode?

A. TV

B. Printer

C. Laptop

D. DVR w/digital cable box

Question #2

Which among the following is most energy efficient?

A. Incandescent bulb
B. Compact fluorescent lamp (CFL)
C. Light emitting diode (LED)
D. All are equally efficient

Question #3

True or false:

It cost more to wash your clothes in hot water than washing in cold water.

Question #4

The biggest use of energy in the typical US home is:

A. Home electronics
B. Cooking
C. Heating/Cooling
D. Lighting

Question #5

True or False:

Caulking your windows and doors is the easiest way to save energy?

How many did you get right?

What is Energy Education?

- teach about energy consumption
- encourage households to reduce their home energy needs
- thereby reducing the need for energy assistance

?!? Who ?!?

Who is the target audience
for Energy Education programs?

Target Audience for Energy Education

Low-income households spend, on average, **7.2% of their income on utility bills**, which amounts to about $1,700 annually out of $25,000 in median household income.

That is *MORE THAN TRIPLE* the 2.3% spent by higher-income households for electricity, heating and cooling.

Lifting the High Energy Burden in America's Largest Cities 4/2016

Drivers of Household Energy Burdens

Type of Driver	Example
Physical	Inefficient and/or poorly maintained HVAC systems
	Heating system and fuel type
	Poor insulation, leaky roofs, and inadequate air sealing
	Inefficient large-scale appliances (e.g., refrigerators, dishwashers) and lighting sources
	Weather extremes that raise the need for heating and cooling

Lifting the High Energy Burden in America's Largest Cities
4/2016

Drivers of Household Energy Burdens

Type of Driver	Example
Economic	Chronic economic hardship due to persistent low income
	Sudden economic hardship (e.g., severe health event or unemployment)
	Inability or difficulty affording the up-front costs of energy efficiency investments

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Drivers of Household Energy Burdens

Type of Driver	Example
Behavioral	Lack of access to information about bill assistance or energy efficiency programs
	Lack of knowledge about energy conservation measures
	Increased energy use due to age or disability

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4/2016

Benefits of Energy Education

Type of Benefit	Examples
Physical	Access to additional programs or services for household repairs to improve energy efficiency
Economic	Decrease in utility bills giving the opportunity for savings or budget reallocations
	Decrease the number of disconnects
	Decrease in the need/request for bill assistance from government programs and non-profit agencies
Behavioral	Access to information about bill assistance or energy efficiency programs
	Increased knowledge and execution of energy conservation measures
	Awareness about the correlation of energy usage to the energy bill

?!? How ?!?

How to execute an

Energy Education programs?

Program Components

- Intake Process

- Energy Education

- Energy Advocacy

- Energy-related Referrals

- Data Collection

- Workshops

Intake Process

- **Fill out forms completely & accurately**
- **Build relationship with client**
- **Make copies and scans for additional resources/referrals**

Key to advocacy component:

- Clear and precise forms
- Good filing system

Energy Education

The topics covered include:

- **Age of the home**
- **Insulation of Windows &Doors**
- **Attic temperature & insulation**
- **Lighting**
- **Heating & Cooling**

Key to education component:

- Training and educating the Energy Educator(s)

Energy Advocacy

- **Utility bills frequently delinquent and/or facing disconnection**
- **Call Utility Provider with the client in the office**
- **Payment plan, budget billing and/or utility's energy programs (i.e. Beat the Peak)**

Key to advocacy component:

- ****Create relationships with Utility Providers****

Energy-related Referrals

Energy-related programs include:

- Housing Repairs
- Fuel/Utility Bill Assistance
- Heating Repair/Replacement Program
- Weatherization Program
- LIHEAP (Low Income Home Energy Assistance Program)

Key to referral component:

- Energy Directory of energy-related services and programs
- Relationships with outside agencies for referral process

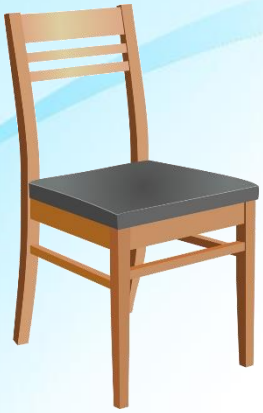
Data Collection

Areas of Data Collection:

- **Client's Basic Information** *(for validation/billing)*
- **Pre-assessment Information**
- **Monthly Data Usage** *(optional)*

Key to data collection component:

- If collecting usage data, a partnership with the local utility providers is primary
- Properly and completely filling out all forms



Energy Conservation Workshops

- **Focus on low-income communities**
  (i.e. community centers, PTA meetings, houses of worship, state service centers)
- **Open to the public and no charge**
- **Topics include both behavior changes and basic weatherization tips**

Key to workshop component:
- Attendance boosted though incentives
- Instructor has expertise in weatherization and conservation

Types of Energy Education Programs

	Single-Time Energy Education Program Model	Reoccurring Energy Education Program Model
Description	One-stop-shop for energy related needs or concerns	Comprehensive approach for monitoring usage
Energy Education Duration	Single office visit (possible follow-up)	6-12 months
Energy-related Referrals	One-time available resources	Given as needed through available resources
Data Collection	Information entered at point of intake	Usage information gathered on monthly basis

Types of Energy Education Programs

	Single Time Energy Education Program	Reoccurring Energy Education Program
Participation Time	1 Office Visit	6-12 months
Pros	Able to reach more clients	Education is more sustainable
	Less paperwork	Data allows more detailed analysis
Cons	Less measurable outcome data	Time spent entering and receiving data
	Less education available	Larger staff; more administrative cost

Funding Sources

Commonly utilized funds for Energy Education Programs include:

- **Utility Provider funds**
- **RGGI** *(Regional Greenhouse Gas Initiative)* **funds**
- **Addition into current Energy Assistance Program** *(example Assurance 16 within LIHEAP)*
- **Researching online grants**

Thinking of Starting an Energy Education Program?!?!

www.FirstStateCAA.org

https://www.energizedelaware.org/community-energy-centers

https://www.ecasavesenergy.org/resources/neighborhood-energy-centers

http://www.energyoutreach.org/what-we-do/energy-education-and-behavior-change