



Proposition 39: California Clean Energy Jobs Act – 2013

Program Implementation

Charter Schools Webinar
September 16, 2014



AGENDA

- 1) Proposition 39 Guidelines Overview**
- 2) Energy Expenditure Plan Handbook Overview**
- 3) Expenditure Plan General Form A**
- 4) Expenditure Plan Project Summary Form B**
- 5) Utility Data Release Authorization Form**
- 6) Energy Savings Calculators**
- 7) How to Submit (Upload Instructions)**



PROPOSITION 39 DOCUMENTS

All documents are online now!

- Guidelines, Handbook, Forms A/B, Calculators, etc.
<http://www.energy.ca.gov/efficiency/proposition39/index.html>

- CA Department of Education (CDE)
<http://www.cde.ca.gov/fg/fo/r14/prop39cceja13rfa.asp>

- QUESTIONS?

(855) 380-8722 (Toll free in state)

(916) 653-0392 (Out of state)

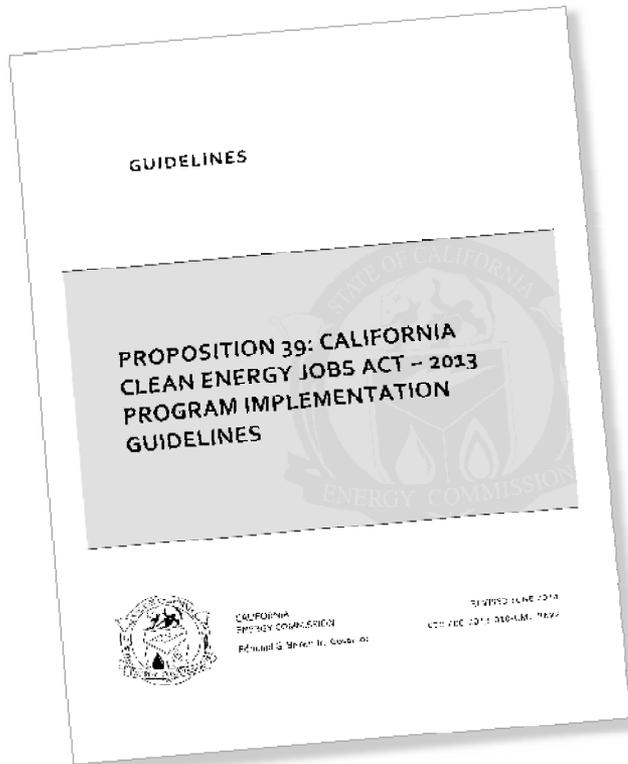
Prop39@energy.ca.gov



*Let's talk about
Proposition 39*



PROPOSITION 39 GUIDELINES OVERVIEW



- **General Overview**
- **Eligibility**
- **Award Allocations**
 - Funding Award Levels
 - Two-Year Combined Award Option
 - Energy Planning Funds Option
 - Cost Effectiveness Criteria
 - Short Payback Energy Measures
- **Eight (8) Step Process**



PROPOSITION 39 GUIDELINES OVERVIEW

General Overview

Chapter 1: Background and General Information

Chapter 2: Local Educational Agency Proposition 39
Award Program

Chapter 3: Additional Proposition 39 State Resources

Appendices



PROPOSITION 39 GUIDELINES OVERVIEW

Eligibility

- Eligible Projects: Energy efficiency measures and/or clean energy installations at a school site
- Eligible Applicants: LEAs: County Offices of Education, School Districts, Charter Schools and State Special Schools
 - All facilities within the LEA: School site facilities include: classrooms, LEA office facilities, auditoriums, multipurpose rooms, gymnasiums, cafeterias, kitchens, pools, and special purposes areas



PROPOSITION 39 GUIDELINES OVERVIEW

Funding Award Levels

- Awards are formula-based:
 - 85% based on average daily attendance (ADA) reported as of the second principal apportionment for the prior fiscal year
 - 15% based on the number of students eligible for free and reduce-priced meals (FRPM)
- Minimum funding award levels in a four-tiered system



PROPOSITION 39 GUIDELINES OVERVIEW

Funding Award Levels

Tier Levels	Average Daily Attendance Prior Year	Minimum Funding Awards
Tier 1	100 or fewer	\$15,000 plus FRPM
Tier 2	101-1,000	Based on prior year ADA or \$50,000 (whichever amount is larger) plus FRPM
Tier 3	1,001 to 1,999	Based on prior year ADA or \$100,000 (whichever amount is larger) plus FRPM
Tier 4	2,000 or more	Based on prior year ADA plus FRPM



PROPOSITION 39 GUIDELINES OVERVIEW

Fiscal Year 2013/14 Prop 39 Distribution:

Type of LEA	# of LEAs	% LEAs	\$ Allocation	% Allocation
Charter Schools	1007	50%	\$ 79,144,695	21%
Public School Districts	944	47%	\$ 296,121,492	78%
County Offices of Education	58	3%	\$ 5,595,462	1%
State Special Schools	3	Less than 1%	\$ 138,351	Less than 1%
TOTALS	2,012		\$ 381,000,000	



PROPOSITION 39 GUIDELINES OVERVIEW

Award Allocations *continued*



California Department of Education's
Website:

<http://www.cde.ca.gov/fg/fo/r14/prop39ccej13rfa.asp>



PROPOSITION 39 GUIDELINES OVERVIEW

Funding Award Levels

Common Charter School Question:

Question: My charter school is new and began instruction in fiscal year 2013/14. When can I apply for Proposition 39 funding?

Answer: New charter schools are eligible for Proposition 39 funding once CDE has received ADA counts provided during the second principal apportionment reporting period. The charter school would be eligible for a Prop 39 program award funding in their second year of instruction.



PROPOSITION 39 GUIDELINES OVERVIEW

Two-Year Combined Award Option

- LEAs with 1,000 or fewer prior year ADA are eligible to receive both the current year and the following year funding in the current year
- LEAs selecting this option shall not receive a funding allocation in the year following the request



PROPOSITION 39 GUIDELINES OVERVIEW

Energy Planning Funding Reservation Option

- In fiscal year 2013-2014 LEAs could request Energy Planning Funds without submitting an energy expenditure plan to the Energy Commission
- This option was only available three times in fiscal year 2013-2014 and is now closed



PROPOSITION 39 GUIDELINES OVERVIEW

Energy Planning Funding Reservation Option

- *Four Allowed Energy Planning Activities:*

- Energy Audits and Energy Surveys
- Prop. 39 Program Assistance
- Hiring (or retaining) Energy Manager(s)
- Energy-related Training for classified employees

*Energy Planning Activity Description
Guidelines – [Page 10](#)*



PROPOSITION 39 GUIDELINES OVERVIEW

Energy Planning Funding Reservation Option

- Results of Energy Planning Funds request in 2013/14:
 - 1,644 LEAs requested this option
 - Over \$150 million dollars



PROPOSITION 39 GUIDELINES OVERVIEW

Energy Planning Funding Reservation Option

- For years 2-5 of the Prop 39 Program:
 - Energy Manager – Up to 10% of award year
 - Energy-Related Training – Up to 2% of award year

Note: Request these on the EEP (Form A)



PROPOSITION 39 GUIDELINES OVERVIEW

Energy Planning Funding Reservation Option

Common Charter School Question

Question: My charter school is new and began instruction in fiscal year 2013/14. We will be eligible for Proposition 39 award funding in fiscal year 2014/15. Can we still apply for Energy Planning Funding?

Answer: Yes – for new charter schools that commence instruction in fiscal year 2013/14 or later, energy planning funds will be available in their first year of Proposition 39 funding eligibility.



PROPOSITION 39 GUIDELINES OVERVIEW

Cost Effectiveness Determination

- Savings to Investment Ratio (SIR)
- Simple Payback



PROPOSITION 39 GUIDELINES OVERVIEW

Savings to Investment Ratio (SIR) = 1.05

- The SIR is calculated based on net present value of savings divided by project installation cost

$$\text{SIR} = \frac{\text{Net Present Value of Savings}}{\text{Project Installation Cost}}$$



PROPOSITION 39 GUIDELINES OVERVIEW

Savings to Investment Ratio (SIR) *continued*

- Net Present Value of Savings is:

Energy Cost Savings + Maintenance Savings

Definition:

Total energy cost savings realized over the life of the equipment including kWh energy, kW demand, natural gas, and other liquid fuel savings



PROPOSITION 39 GUIDELINES OVERVIEW

Savings to Investment Ratio (SIR) *continued*

- Project Installation Cost equals

Project Installation Cost – Rebates – Other Grants
– Non energy Benefits

Definition:

The Project Installation Cost is the total of all project design, equipment and labor costs



PROPOSITION 39 GUIDELINES OVERVIEW

Eligibility – Publicly Owned Leased Facilities

- Charter Schools that lease a publicly owned facility, for example from a public K-12 school district, follow the general Proposition 39 program cost-effectiveness Savings to Investment Ratio (SIR) criteria



PROPOSITION 39 GUIDELINES OVERVIEW

Eligibility – Publicly Owned Leased Facilities

Common Charter School Question:

Question: Can a charter school apply part, or all, of its Proposition 39 award to fund energy improvements in the publicly owned facility spaces that it shares with another LEA (i.e. multipurpose room, library, office space)?

Answer: Yes

But Remember.....



PROPOSITION 39 GUIDELINES OVERVIEW

Eligibility – Publicly Owned Leased Facilities

Common Charter School Question (continued):

- Coordinate the Energy Expenditure Plan project with the other LEA
- Each LEA is required to submit a separate Energy Expenditure Plan application
- No double dipping
- No split-funded measures



PROPOSITION 39 GUIDELINES OVERVIEW

Eligibility – Privately Owned Leased Facilities

- Charter Schools in privately owned leased facilities may apply for Proposition 39 funding, following the general Proposition 39 program cost-effectiveness Savings to Investment Ratio (SIR) criteria
- If the charter school has not renewed its charter term at least once prior to applying for Prop 39 funding, an additional cost-effectiveness criteria applies:
 - In addition to meeting the savings-to-investment ratio (SIR) of 1.05, the eligible energy project must also have a simple payback within the remaining period of the “charter contract term”



PROPOSITION 39 GUIDELINES OVERVIEW

Eligibility – Privately Owned Leased Facilities

- Simple Payback:
Total Project Cost (\$)/Total Annual Energy Savings (\$/year)
- The eligible energy project are all energy efficiency measures and/or clean energy installations at the school site. The combined total project cost divided by the combined total annual energy savings.
- The eligible energy project must have a simple payback within the term of the charter contract term



PROPOSITION 39 GUIDELINES OVERVIEW

Eligibility – Privately Owned Leased Facilities

- Building Owner Written Certification to Transfer Energy Cost Savings to LEA if:
 - An LEA leases a privately owned facility or building that does not have a separate meter
 - An LEA leases a privately owned facility or building, and the lease payment includes the utility cost



PROPOSITION 39 GUIDELINES OVERVIEW

Eligibility – Privately Owned Facilities

- Charter Schools may own their school building(s) and apply for Proposition 39 funding, following the general Proposition 39 program cost-effectiveness Savings to Investment Ratio (SIR) criteria



PROPOSITION 39 GUIDELINES OVERVIEW

Eligibility – Privately Owned Facilities

Again.....

- If the charter school has not renewed its charter term at least once prior to applying for Prop 39 funding, an additional cost-effectiveness criteria applies:
 - In addition to meeting the savings-to-investment ratio (SIR) of 1.05, the eligible energy project must also have a simple payback within the remaining period of the “charter contract term”



PROPOSITION 39 GUIDELINES OVERVIEW

Remember..... If the charter schools is leasing a privately owned facility (or) the charter school owns the facility,

AND

the charter school has not renewed its charter term at least once prior to applying for Prop 39 funding

THEN the simple payback criteria also applies.



PROPOSITION 39 GUIDELINES OVERVIEW

Examples: Short Simple Payback Energy Measures

- Lighting measures (*with approximately 2-year payback*)



- 1) Replace incandescent light with compact fluorescent or light-emitting diode (LED) light
- 2) Convert incandescent/compact fluorescent (CFL) exit sign to LED exit sign
- 3) Replace 32 watt T8 fluorescent lamp with 28 watt T8 fluorescent lamp



PROPOSITION 39 GUIDELINES OVERVIEW

Examples: Short Simple Payback Energy Measures

- Lighting measures (*with approximately 4 years or less payback*)
 - 1) Convert T12 fluorescent lamp to T8 fluorescent lamp with electronic ballast or LED lamp
 - 2) Install occupancy control for intermittently occupied rooms



PROPOSITION 39 GUIDELINES OVERVIEW

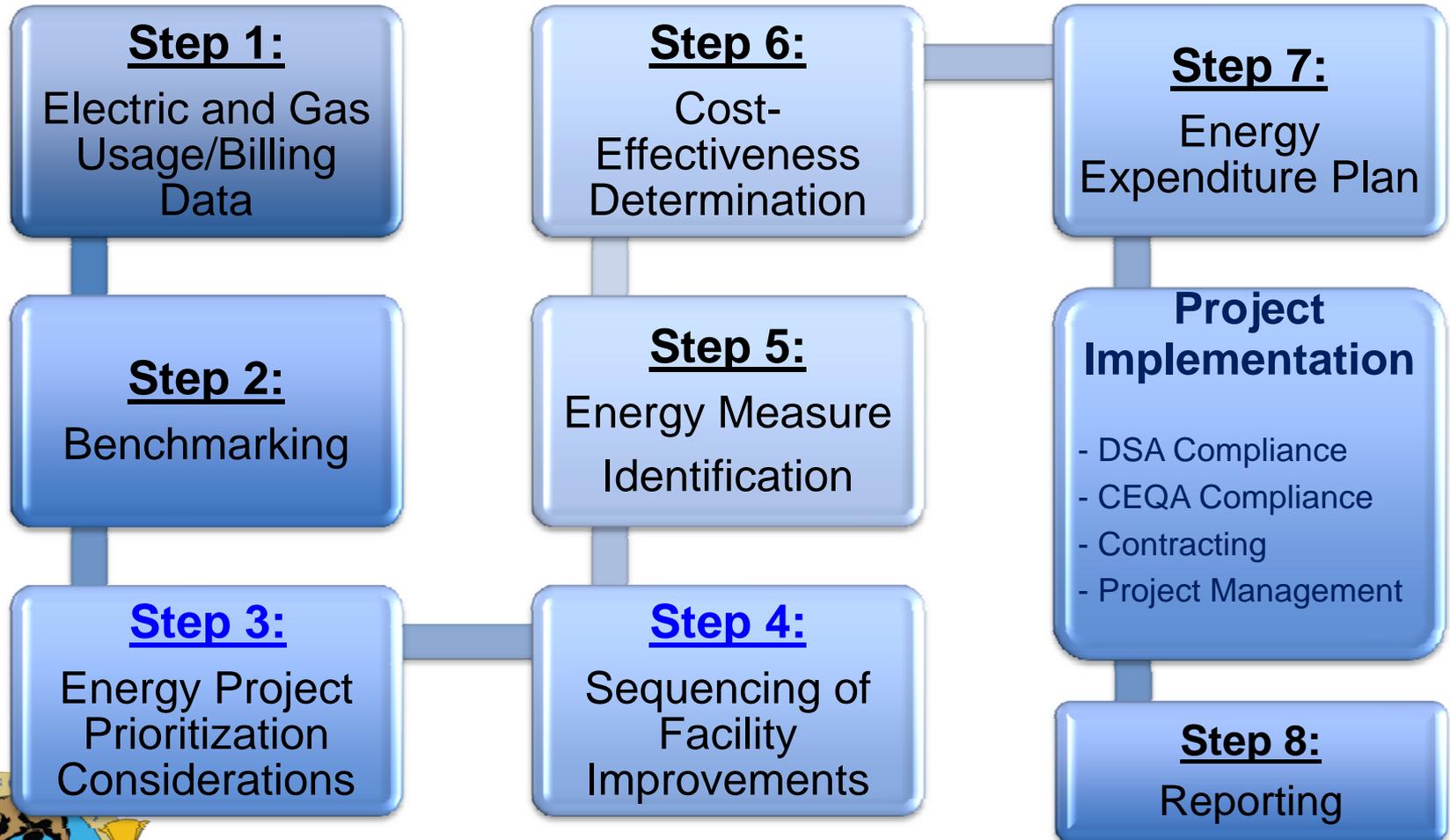
Examples: Short Simple Payback Energy Measures

- HVAC measures (*with approximately 2-year payback*)
 - 1) Replace manual thermostat with programmable thermostat
- Plug Load measures (*with approximately 2-year payback*)
 - 1) Install vending machine occupancy control



PROPOSITION 39 GUIDELINES OVERVIEW

8 STEP OVERVIEW



PROPOSITION 39 GUIDELINES OVERVIEW

Energy Expenditure Plans Submitted... *(as of 9/11/14)*

EEPs Submitted	# of EEPs	Total Funding
Total EEPs Submitted	199	\$ 133,953,748
Charter Schools EEPs Submitted	53 (25%)	\$ 8,914,548 (7%)



PROPOSITION 39 GUIDELINES OVERVIEW

Energy Expenditure Plans Approved... *(as of 9/11/14)*

EEPs Approved	# of EEPs	Total Funding
Total EEPs Approved	101	\$ 75,455,796
Charter Schools EEPs Approved (93% of charter school EEPs are multiple year plans)	27 (27%)	\$ 4,825,320 (6%)

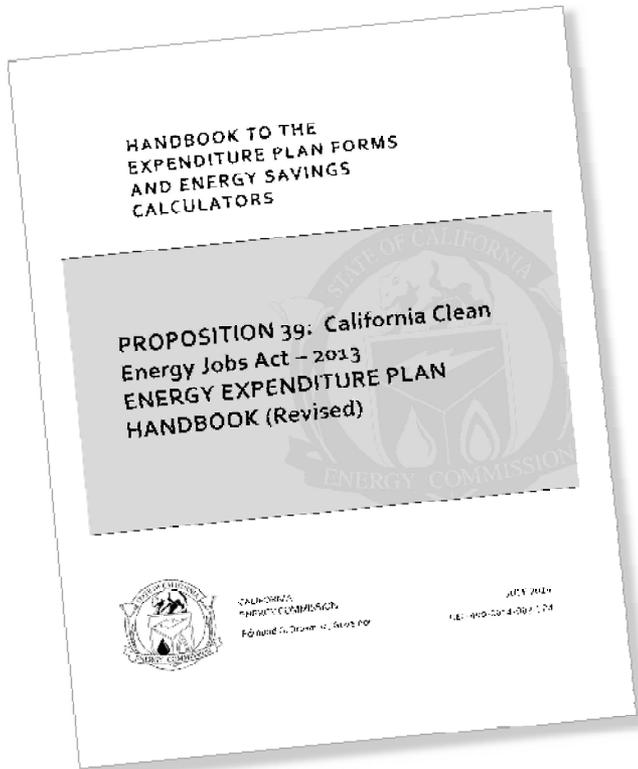


Let's discuss the Energy Expenditure Handbook



ENERGY EXPENDITURE PLAN HANDBOOK OVERVIEW

- **General Overview**
- **Energy Expenditure Plans**
 - What is it
 - Who may submit
 - What to include
 - When to submit
 - Where to submit
- **What to Compile Before Completing Form A and Form B**



ENERGY EXPENDITURE PLAN HANDBOOK OVERVIEW

Energy Expenditure Plan

- Application package to request Prop 39 program award funds

The image displays three overlapping forms from the California Energy Commission. The top-left form is a 'General Form B' with various sections for applicant information and project details. The middle form is a 'DATA RELEASE AUTHORIZATION FORM' with a table for project information. The bottom-right form is a 'CUSTOMER RELEASE AUTHORIZATION FORM' with a detailed consent section.

Project Name	Project Number	Project Type	Project Status	Project Location	Project Start Date	Project End Date



ENERGY EXPENDITURE PLAN HANDBOOK OVERVIEW

What to include in the Energy Expenditure Plan

- Expenditure Plan General Form A
- Expenditure Plan Project Summary Form B
- Utility Data Release Authorization Form
- Project Back-up Documentation (e.g. energy savings calculator, energy surveys and audits, building owner certification, etc.)

Note: Appendix A: Energy Expenditure Plan
[Checklist](#)



ENERGY EXPENDITURE PLAN HANDBOOK OVERVIEW

Project Back-up Documentation:



Chapter 6: Information Required for Energy Audits

- Required Format
 1. Facility Background
 2. Energy Efficiency Measure (EEM) Summaries
 3. Grants and Incentives
 4. Appendices:
 - Appendix A: *Baseline Energy Use, Benchmarking and Energy Balance*
 - Appendix B: *Energy Efficiency Measure Calculations*



ENERGY EXPENDITURE PLAN HANDBOOK OVERVIEW

When to submit

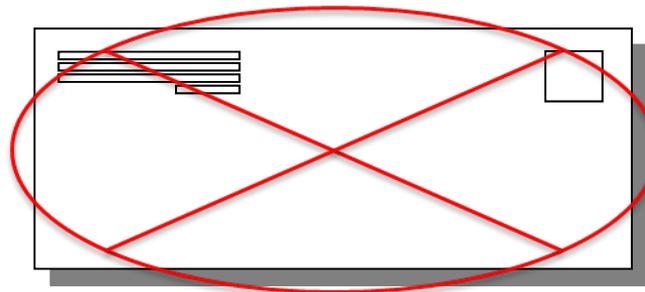
- The Energy Commission is accepting Energy Expenditure Plans now!
- LEAs can only submit one Energy Expenditure Plan per fiscal year
- LEA can submit every year or combine multi-year awards into a single Energy Expenditure Plan



ENERGY EXPENDITURE PLAN HANDBOOK OVERVIEW

Where to submit

- On January 31, 2014, a “welcome” email was sent to primary and secondary LEA contacts listed in the California School Directory
- The email provided a link to the Energy Commission’s *Proposition 39 Energy Expenditure Plan System*
- **No Energy Expenditure Plan will be accepted by mail, e-mail, fax, or courier delivery**



Let's talk about Expenditure Plan General Form A



Grant Amount Requested: \$ _____

Grant Balance Available: _____

Fiscal Year: _____

Expenditure Plan Submittal Option: _____

1. Applicant Information

Local Education Agency (LEA) Name: _____	Tier: _____
LEA CDS Code: _____	City: _____
Mailing Address: _____	Zip Code: _____
LEA Authorized Representative:	Phone: _____
Title: _____	E-mail: _____
Project Manager: _____	Phone: _____
Title: _____	E-mail: _____

2. Energy Planning Reservation Information *(only available for fiscal year 2013-2014 award)*

Did you request Energy Planning Funds? *(If no, move on to next section)* _____

Budget for Energy Surveys and Energy Audits: _____	Amount Spent for Energy Surveys and Energy Audits: _____
Budget for Proposition 39 Program Assistance: _____	Amount Spent for Proposition 39 Program Assistance: _____
Budget for Energy Manager: _____	Amount Spent for Energy Manager: _____
Budget for Training: _____	Amount Spent for Training: _____
Totals: \$ _____ -	\$ _____ -

3. Energy Manager and Training

Are you hiring an Energy Manager with funds requested in this Expenditure Plan? _____ Amount requesting for Energy Manager: _____

Are you using Proposition 39 funds for energy related training costs? _____ Amount requesting for Training: _____

4. Summary of Schools/Sites

List all schools/sites where Proposition 39 funds from this Expenditure Plan will be used. Each school/site listed must have a Expenditure Plan Project Summary Form B completed and attached. If more than 20 sites are identified please use Additional School Sites Tab as necessary.

	Estimated Project Cost				Estimated Project Cost				
	School/Site	CDS #	Total Project Cost	Proposition 39 Share	School/Site	CDS #	Total Project Cost	Proposition 39 Share	
1	_____	_____	_____	_____	11	_____	_____	_____	
2	_____	_____	_____	_____	12	_____	_____	_____	
3	_____	_____	_____	_____	13	_____	_____	_____	
4	_____	_____	_____	_____	14	_____	_____	_____	
5	_____	_____	_____	_____	15	_____	_____	_____	
6	_____	_____	_____	_____	16	_____	_____	_____	
7	_____	_____	_____	_____	17	_____	_____	_____	
8	_____	_____	_____	_____	18	_____	_____	_____	
9	_____	_____	_____	_____	19	_____	_____	_____	
10	_____	_____	_____	_____	20	_____	_____	_____	
	Estimated Total:							\$ _____ -	\$ _____ -

5. Job Creation Estimates

Please fill in the corresponding budget amounts for each applicable type of project which the Proposition 39 grant funds will be used.

Type of Project	Budget	Estimated Direct Job-Years Created	
Energy Efficiency	_____	0	Please list any state-certified apprenticeship programs being used:
Renewable Energy	_____	0	
Clean Advanced Distributed Energy	_____	0	
		0	
		Total: 0	
Apprenticeship Information	Budget	Estimated Apprenticeship Job-Years Created	
Apprenticeships	_____	0	
Other Trainee Fraction Title <i>(Please use Additional Trainees tab as necessary)</i>		Estimated Other Trainee Jobs Created <i>(Please use Additional Trainees tab as necessary)</i>	
_____		_____	
_____		_____	
_____		_____	
		Total: 0	

Will this project be subject to a community benefits agreement, community workforce agreement, or other mechanism that defines project co-benefits? _____

6. Self-Certifications

- _____ The LEA followed the Proposition 39 Guidelines regarding eligible energy project prioritization considerations.
- _____ The LEA followed the guidelines regarding sequencing of facility improvements.
- _____ The LEA commits to use the funds for the eligible energy project(s) approved in its energy expenditure plan.
- _____ The LEA commits that the information included in the application is true and correct based to the best of the LEA's knowledge.
- _____ The LEA commits that all California Environmental Quality Act (CEQA) requirements are completed.
- _____ The LEA will obtain DSA project approval as applicable pursuant to California Code of Regulations, Title 24.
- _____ The LEA acknowledges that the expenditures are subject to financial audit requirements (Public Resources Code Section 25200(a) and 26240(g)).
- _____ The LEA commits to complying with all reporting requirements.

Reminder: Please remember to include the signed Utility Data Release Authorization Form for your utility provider to release data to the Energy Commission

TYPE Name of Authorized Representative: _____ Date: _____

Expenditure Plan General Form A



EXPENDITURE PLAN GENERAL FORM A

Fiscal Year _____		Grant Amount Requested: \$ _____
Expenditure Plan Submittal Option: _____		Grant Balance Available: _____
1. Applicant Information		
Local Education Agency (LEA) Name: _____		Tier: _____
LEA CDS Code : _____		City: _____
Mailing Address: _____		Zip Code: _____
LEA Authorized Representative: _____		Phone: _____
Title: _____		E-mail: _____
Project Manager: _____		Phone: _____
Title: _____		E-mail: _____

Section 1

- LEA Authorized Representative
 - An LEA employee with the authority to execute, direct, or delegate the implementation of projects
- Grant Amount Requested (automatically calculated)
 - Section 3 & Section 4



- Grant Balance Available
 - <http://www.cde.ca.gov/fg/fo/r14/prop39ccej13rfa.asp>
- LEA CDS Code

EXPENDITURE PLAN GENERAL FORM A

2. Energy Planning Reservation Information *(only available for fiscal year 2013-2014 award)*

Did you request Energy Planning Funds? *(If no, move on to next section)* _____

Budget for Energy Surveys and Energy Audits: _____

Budget for Proposition 39 Program Assistance: _____

Budget for Energy Manager: _____

Budget for Training: _____

Totals: \$ _____ -

Amount Spent for Energy Surveys and Energy Audits: _____

Amount Spent for Proposition 39 Program Assistance: _____

Amount Spent for Energy Manager: _____

Amount Spent for Training: _____

\$ _____ -

Section 2

- Did you request Energy Planning Funds?
 - Planning funds were requested directly from the California Department of Education
- Budgeted Amounts
 - Left column
- Amount Spent
 - Right column



EXPENDITURE PLAN GENERAL FORM A

3. Energy Manager and Training

Are you hiring an Energy Manager with funds requested in this Expenditure Plan? _____

Amount requesting for Energy Manager: _____

Are you using Proposition 39 funds for energy related training costs? _____

Amount requesting for Training: _____

Section 3

- Energy Manager
 - Maximum 10% of grant amount
- Training
 - Maximum 2% of grant amount



EXPENDITURE PLAN GENERAL FORM A

4. Summary of Schools/Sites

List all schools/sites where Proposition 39 funds from this Expenditure Plan will be used. Each school/site listed must have a Expenditure Plan Project Summary Form B completed and attached. If more than 20 sites are identified please use Additional School Sites Tab as necessary.

Estimated Project Cost				Estimated Project Cost					
School/Site	CDS #	Total Project Cost	Proposition 39 Share	School/Site	CDS #	Total Project Cost	Proposition 39 Share		
1				11					
2				12					
3				13					
4				14					
5				15					
6				16					
7				17					
8				18					
9				19					
10				20					
Estimated Total:						\$	-	\$	-

Section 4

- Section used to calculate Grant Amount Requested
- Total Project Cost
 - Found in Form B, Section 6
- Proposition 39 Share
 - Found in Form B, Section 6
- Addition School Sites (tab)
 - If necessary enter additional sites in this tab



EXPENDITURE PLAN GENERAL FORM A

5. Job Creation Estimates

Please fill in the corresponding budget amounts for each applicable type of project which the Proposition 39 grant funds will be used.

Type of Project	Budget	Estimated Direct Job-Years Created
Energy Efficiency	_____	0
Renewable Energy	_____	0
Clean Advanced Distributed Energy	_____	0
		Total: 0

Please list any state-certified apprenticeship programs being used:

Apprenticeship Information	Budget	Estimated Apprenticeship Job-Years Created
Apprenticeships	_____	0

Other Trainee Position Title	(Please use Additional Trainees tab as necessary)	Estimated Other Trainee Jobs Created	(Please use Additional Trainees tab as necessary)
_____		_____	
_____		_____	
_____		_____	
_____		Total: 0	

Will this project be subject to a community benefits agreement, community workforce agreement, or other mechanism that defines project co-benefits? _____

Section 5

- Budget
 - Estimated budget for specified activity
- Other Training Positions
- Estimated Other Trainee Jobs Created
- Additional Trainee Positions (tab)
 - If necessary enter additional trainee information in this tab



EXPENDITURE PLAN GENERAL FORM A

6. Self-Certifications

- The LEA followed the Proposition 39 Guidelines regarding eligible energy project prioritization considerations.
- The LEA followed the guidelines regarding sequencing of facility improvements.
- The LEA commits to use the funds for the eligible energy project(s) approved in its energy expenditure plan.
- The LEA commits that the information included in the application is true and correct based to the best of the LEA's knowledge.
- The LEA commits that all California Environmental Quality Act (CEQA) requirements are completed.
- The LEA will obtain DSA project approval as applicable pursuant to California Code of Regulations, Title 24.
- The LEA acknowledges that the expenditures are subject to financial audit requirements (Public Resources Code Section 26206(e) and 26240(g)).
- The LEA commits to complying with all reporting requirements.

Reminder: Please remember to include the signed Utility Data Release Authorization Form for your utility provider to release data to the Energy Commission

TYPE Name of Authorized Representative: _____ /s/ _____

Date: _____

Version 1.0

Section 6

- 8 Self-Certification items
- TYPE Name of Authorized Representative
 - This should match the employee named in Section 1



*Let's talk about Expenditure
Plan Project Summary
Form B*



EXPENDITURE PLAN PROJECT SUMMARY FORM B

Local Education Agency (LEA) Name: _____
LEA CDS Code: _____

1. School or Site Information

School/Site Name: _____ Estimated Project Start Date: _____
School/Site CDS Code: _____ Estimated Project Completion Date: _____
School/Site Mailing Address: _____ City: _____ Zip Code: _____

Section 1

- LEA CDS Code
 - The LEA CDS Code entered in Form A, Section 1
- School/Site CDS Code



EXPENDITURE PLAN PROJECT SUMMARY FORM B

2. Benchmarking (Provide the following information from the previous fiscal year utility bills for the entire school/site)

Square Footage of School/Site: _____

Electric Utility: _____

Gas Utility: _____

Electric Utility _____

Gas Utility _____

Account #: _____

Account #: _____

Energy Bill _____

Fiscal Year: _____

Reminder: If the School/Site includes leased facilities, please include Building Owner Certification in backup documentation.

Energy Use Intensity Calculator			
Electricity	Natural Gas		Other Fuels
W/SF		Therms/SF	Gals/SF
kWh/SF		Cost/SF	Cost/SF
Cost/SF			
Energy Costs/SF/Year:		Energy Use(Kbtu)/SF/Year:	

Total Annual Gas Use (therms): _____

Total Annual Gas Charges (\$): _____

Other Fuels

Total Annual Propane Use (gals): _____

Total Annual Propane Charges (\$): _____

Total Annual Fuel Oil Use (gals): _____

Total Annual Fuel Oil Charges (\$): _____

Section 2

- Multiple Meters

- If multiple meters service a site than billing information should be consolidated

- Building Owner Certification

- The building owner certification is only required if the facility is privately owned or leased



EXPENDITURE PLAN PROJECT SUMMARY FORM B

4. Energy Efficiency Narrative Description

Please provide a narrative describing existing conditions, energy efficiency measures, and how these were prioritized. If a photovoltaic measure is being proposed on the site, please provide a description for why the site is a good candidate for a photovoltaic system.

Section 4

- Energy Efficiency Narrative Description
 - Include a description of the energy efficiency measures that have previously been implemented at the site, energy efficiency plan, or justification for solar projects



EXPENDITURE PLAN PROJECT SUMMARY FORM B

5. Photovoltaic Measure							
Size (kW AC)	Demand Savings (kW)	Year 1 Production (kWh)	Year 1 Energy Cost Savings (\$)	Inverter Efficiency (%)	Measure Cost (\$)	Rebates & Grants (\$)	Measure SIR

Section 5

- Size (kW AC)
 - Please site size based on AC rating



EXPENDITURE PLAN PROJECT SUMMARY FORM B

6. Site Project Summary

Total Demand Savings	-	Total Annual Fuel Oil Savings	-	Total Prop 39 Share	\$ -	Savings-to-Investment Ratio (SIR)	
Total Annual Electric Savings	-	Total Annual Cost Savings	\$ -				
Total Annual Natural Gas Savings	-	Total Project Cost	\$ -				
Total Annual Propane Savings	-	Total Rebates	\$ -				
Version 1.0							

Section 6

- Total Project Cost
 - Used in Form A Section 4
- Total Prop 39 Share
 - Used in Form A Section 4
- Savings-to-Investment Ratio (SIR)
 - Must be 1.05 or greater



Let's talk about the Data Release Authorization Form



UTILITY DATA RELEASE AUTHORIZATION FORM

Requirement

- Public Resources Code Section 26240(a) states, “In order to later quantify the costs and benefits of funded projects, an entity that receives funds from the Job Creation Fund shall authorize its local electric and gas utilities to provide 12 months of past and ongoing usage and billing records at the school facility site level to the Energy Commission.”



UTILITY DATA RELEASE AUTHORIZATION FORM

Authorization Form

- LEAs must identify all electric and natural gas accounts for **all** of its schools and facilities and provide a signed utility data release form for each utility provider allowing the Energy Commission to access both historical (the past 12 months) and future utility billing data through 2023
- LEAs only need to submit the Utility Data Release Authorization Form(s) once, which is part of their first Energy Expenditure Plan submission
- Energy Commission will work directly with the Utilities to transfer the LEA's energy usage data



UTILITY DATA RELEASE AUTHORIZATION FORM

- Utility Data Release Authorization Form(s) must be printed, signed by the LEA authorized representative, then scanned and uploaded
- LEA must forward the original signed Utility Data Release Authorization Form(s) to the respective utility providers
- Utility providers transfers data annually to Energy Commission on December 31st

1 st Energy Expenditure Plan Submission Period	1st Date Utilities Required to Report to Energy Commission	Historic Utility Billing Data Reporting Period	Future Utility Billing Data Reporting Period
1/1/2014 – 6/30/2014	12/31/2014	7/1/2012 – 6/30/13	7/1/2013 – 6/30/23
7/1/2014 – 6/30/2015	12/31/2015	7/1/2013 – 6/30/14	7/1/2014 – 6/30/23
7/1/2015 – 6/30/2016	12/31/2016	7/1/2014 – 6/30/15	7/1/2015 – 6/30/23
7/1/2016 – 6/30/2017	12/31/2017	7/1/2015 – 6/30/16	7/1/2016 – 6/30/23
7/1/2017 – 6/30/2018	12/31/2018	7/1/2016 – 6/30/17	7/1/2017 – 6/30/23



Let's talk about the Energy Savings Calculators



ENERGY SAVINGS CALCULATORS

- LEAs can use Energy Savings Calculator Tool instead of consultant's energy audit to apply for P39 grants
- The Energy Savings Calculators are a tool to assist LEAs to benchmark and to calculate energy savings
- The calculator tool includes **1 Benchmarking tool, 10 lighting measures, 8 HVAC measures, 2 plug load measures and one PV measure** calculators and these calculators cover over 75% of the recommendations in comprehensive studies
- The energy impacts used in the calculator for lighting and HVAC measures were derived from the Database for Energy Efficiency Resources (DEER). Interactive effects for savings are included in the energy savings calculator



ENERGY SAVINGS CALCULATORS

The energy efficiency measures are listed in four categories as follows:

Lighting Energy Efficiency Measures:

- ECM 1 Replace incandescent light with compact fluorescent
- ECM 2 Replace incandescent light with light-emitting diode (LED) light
- ECM 3 & 4 Convert incandescent/CFL exit sign to LED exit sign
- ECM 5 & 6 Convert T12 fluorescent to T8 with electronic ballast or LED lamps
- ECM 7 Replace 32 watt T8 lamps with 28 watt T8 lamps
- ECM 8 & 9 Replace exterior mercury vapor/HPS with LED/induction lights
- ECM 10 Install occupancy control for intermittently occupied rooms

HVAC/Mechanical Efficiency Measures:

- ECM 11 Replace old packaged/split HVAC unit (up to 65kBtu) with high-efficiency HVAC
- ECM 12 Replace old heat pump (up to 65 kBtu) with high-efficiency heat pump
- ECM 13A Replace boiler with high-efficiency condensing boiler
- ECM 13B Replace furnace with high-efficiency condensing furnace
- ECM 14 Seal existing leaky duct
- ECM 15 Install variable speed drive for pumps and fans
- ECM 16 Replace manual thermostat with programmable thermostat
- ECM 17 Replace old motor with premium efficiency motor
- ECM 18 Replace storage water heater with gas-fired tankless water heater

Plug-Load Efficiency Measures:

- ECM 19 Install smart strip/PC management to control computers/printers
- ECM 20 Install vending machine occupancy control

Simple Photovoltaic (PV) Self-Generation Project

- ECM 21 Install PV System



ENERGY SAVINGS CALCULATORS

Where can I get the calculator tool?

- The calculator tool can be downloaded from CEC Prop 39 website:

<http://www.energy.ca.gov/efficiency/proposition39/>



ENERGY SAVINGS CALCULATORS

- Only answer the questions highlighted in yellow, the tool will generate the energy savings
- LEA shall provide the energy savings results on Form B and submit the calculator as back up documentation
- LEA must use the calculator tool for each school. Do not combine measures from different schools or sites
- LEA must submit the entire calculator tool even if the school only intends to apply for funding for one measure
- Energy savings is calculated based on the energy cost entered in the benchmarking tab. Without this utility use data, the calculators will not work



ENERGY SAVINGS CALCULATORS

Benchmarking Calculator

Benchmarking Calculator		Version 5					
School Information							
School Name	John Kelly Elementary						
School CDS Code	33736769011396						
Mailing Address	86136 Center Street Thermal, CA						
Electric Utility:	Imperial Irrigation District	PG&E or SCE etc					
Gas Utility:	SoCal Gas						
Billing Period (Fiscal Year)	2012-2013	Fiscal year					
Total Square Footage of School	63,894						
		Energy Use Intensity (EUI) Calculator					
		Electricity		Natural Gas		Other Fuels	
		0.00 W/SF		0.06 Therms/SF/Yr		-	Propane gal/SF/Yr
		7.32 kWh/SF/Yr		\$ 0.07 Gas Cost/SF/Yr		-	Fuel Oil gal/SF/Yr
		\$ 0.96 Cost/SF/Yr				\$ -	Fuel Cost/SF/Yr
		Energy Costs/SF/Year: \$ 1.03		Energy EUI(Kbtu)/SF/Year: 84.1			
Electricity							
Average Maximum Demand (kW):	0						
Annual PV Electricity Production(kWh)	0	Do you have onsite PV? enter 0 if no PV.					
Electricity Purchase from Utility(kWh)	467660						
Total Annual Electric Use (kWh):	467660						
Total Annual Electric Charges (\$)	61552						
Natural Gas							
Total Annual Natural Gas Use (therms):	3651						
Total Annual Gas Charges (\$):	4167						
Other Fuels (if applicable)							
Total Annual Propane Use(gals):	0						
Total Annual Propane Charges(\$):	0						
Total Annual Fuel Oil Use(gals):	0						
Total Annual Fuel Oil Costs(\$):	0						
		Average Cost					
		Electricity	\$ 0.131	\$/kWh			
		Natural Gas	1.141331142	\$/therm			
		Propane	0.0	\$/gal			
		Fuel Oil	0.0	\$/gal			



ENERGY SAVINGS CALCULATORS

Utility Data

- Some small schools' electric bills do not have kW demand, enter 0, otherwise enter the average of maximum demand
- If multiple fuels are used, enter quantity for primary fuel and enter quantity of secondary fuel in a footnote
- If a school has a PV system, LEA must include PV kWh production in Annual PV Electricity Production data field
- If a school buys electricity or natural gas from a 3rd party supplier, enter the sum of commodity (from 3rd party) and transportation cost (from PG&E) into cost field
- If a school leases a building and has no electric or gas bills, talk to building owner to find the information



ENERGY SAVINGS CALCULATORS

Lighting Example

ECM 2	Replace incandescent light with LED light	Fill in your answers	Energy Savings Summary	
Measure 2	Quantity of incandescent bulbs to be replaced with LED lights?	10	This measure saves	0.10 kW peak demand
	What is the total wattage of all new LED lamps?	180	and	957 kWh energy use.
	What is the total installed cost for this measure?	\$ 120	and	-5.8 therms natural gas
	What is the utility rebate for this measure?	0	or	0.0 gallons of NA
			or	\$ 119.1 energy cost annually.
			Simple Payback is	1.0 years.
			Saving to Investment Ratio	14.22



ENERGY SAVINGS CALCULATORS

Lighting Example *continued*

- LEA needs to total the LED lights to be installed
- Enter the quantity, total LED wattage and total cost

Quantity	Incandescent	LED	Cost
5	60 W	15 W	\$ 60
5	75 W	21 W	\$ 60
10	270 W	180W	\$ 120



ENERGY SAVINGS CALCULATORS

Classroom HVAC Example

ECM 11	Replace old packaged/split HVAC unit with high efficiency HVAC	Fill in your answers	Energy Savings Summary	
	This calculator only applies to AC up to 65KBtu/hr or 5.4 tons		This project saves	2.01 kW peak demand
	Quantity of AC to be replaced with SEER 13 unit?	1	and	4,258 kWh electricity use.
	Quantity of AC to be replaced with SEER 14 unit?	1	and	-25.1 therms natural gas
	What is the total AC tonnage to be replaced with SEER 13 unit?	5	or	0.0 gallons of Fuel Oil
	What is the total AC tonnage to be replaced with SEER 14 unit?	5	or \$	530.9 energy cost annually.
	What is the IOU (or nearest IOU) area the unit is installed?	SDGE	Simple Payback is	37.7 years.
	What is the total installed cost for this measure?	\$ 20,000	Saving to Investment Ratio	0.62
	What is the utility rebate for this measure?	\$ -		



ENERGY SAVINGS CALCULATORS

HVAC continued

- This HVAC calculator cannot be used for 5.5 tons or larger. LEA needs to do a separate calculation using engineering study or modeling
- This calculator cannot be used for SEER 15 or higher. DEER database does not have impact for this measure



ENERGY SAVINGS CALCULATORS

Energy Efficiency Measure Savings Summary											
ECM	Energy Efficiency Project	Demand Savings	kWh Savings	Therm Savings	Propane Savings	Fuel Oil Savings	Cost Savings	Project Cost	Utility Rebate	Simple Payback	SIR
		kW	kWh	Therms	Gallons	Gallons	\$	\$	\$	Years	
ECM 1	Replace incandescent light with compact fluorescent light	1.59	14,663	(88.8)	-	-	\$ 1,825	\$ 300	\$ -	0.2	24.16
ECM 2	Replace incandescent light with LED light	0.10	957	(5.8)	-	-	\$ 119	\$ 120	\$ -	1.0	14.22
ECM 3&4	Convert incandescent/CFL exit sign to LED exit sign	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 5&6	Convert T12 fluorescent to T8 with electronic ballast or LED Lamps	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 7	Replace 32 Watt T8 lamps with 28 Watt T8 Lamps	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 8&9	Replace exterior mercury vapor/HPS with LED/Induction lights	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 10	Install occupancy control for intermittently occupied rooms	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 11	Replace old packaged/split HVAC unit with high efficiency HVAC	2.01	4,258	(25.1)	-	-	\$ 531	\$ 20,000	\$ -	37.7	0.62
ECM 12	Replace old heat pump with high efficiency heat pump	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 13A	Replace boiler with high efficiency condensing boiler	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 13B	Replace furnace with high efficiency condensing furnace	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 14	Seal existing HVAC leaky duct	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 15	Install variable speed drive for pumps and fans	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 16	Replace manual thermostat with programmable/smart thermostat	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 17	Replace old motor with premium efficiency motor	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 18	Replace storage water heater with gas-fired tankless water heater	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 19	Install smart strip/PC management to control computers/printers	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 20	Install vending machine occupancy control	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
ECM 21	Install photovoltaic system	0.00	-	-	-	-	\$ -	\$ -	\$ -	-	-
	Total	3.70	19,878	(119.7)	-	-	\$ 2,475	\$ 20,420	\$ -	8.2	1.05



ENERGY SAVINGS CALCULATORS

Bundling

- LEA can bundle short payback measures with long payback measures to meet SIR 1.05 requirement
- For example, short payback lighting measures could be bundled with HVAC or PV project, the total SIR can be found on Total-Summary tab



*Let's talk about how to
upload your Energy
Expenditure Plan*



HOW TO SUBMIT (UPLOAD INSTRUCTIONS)

How do I upload my Energy Expenditure Plan?

- Application must be complete before submitting – have all final documents in electronic format ready for upload
- Obtain the link from your LEA contact person to access *Prop 39 Energy Expenditure Plan [System](#)*
- LEA must identify itself in the system by entering its county-district-school (CDS) code. Key the CDS code without spaces or hyphens



- Verify LEA is correct before selecting “Proceed”

HOW TO SUBMIT (UPLOAD INSTRUCTIONS)

Energy Expenditure Plan upload *continued*

- There are four uploading [sections](#):
 - Expenditure Plan General Form A
 - Expenditure Plan Project Summary Form B
 - Utility Data Release Authorization Form
 - Project Back-Up Documentation
- Click “[select file](#),” search for document on computer, and press “upload” file
- Repeat process for all uploading sections to submit a complete Energy Expenditure Plan



HOW TO SUBMIT (UPLOAD INSTRUCTIONS)

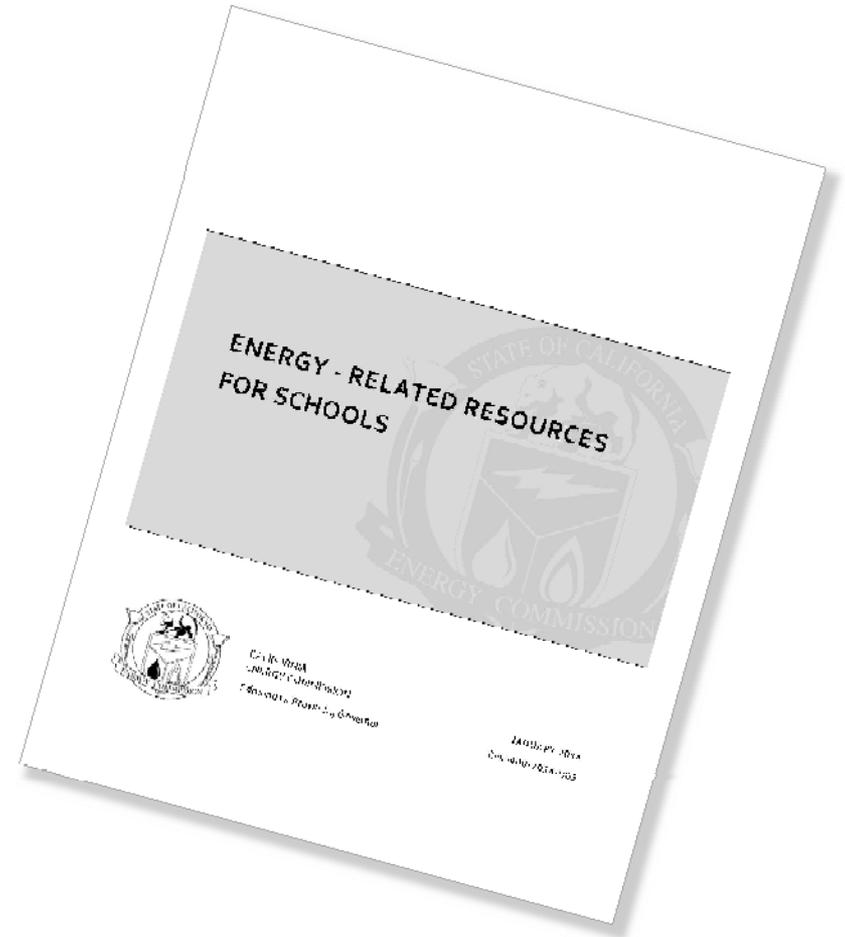
Energy Expenditure Plan upload *continued*

- It is crucial that all documents are uploaded appropriately; name all files accordingly for easy identification
- Once a complete energy expenditure plan is submitted, Energy Commission staff will begin the approval process
- Refer to the Energy Expenditure Plan Handbook for additional instructions if needed



ENERGY – RELATED RESOURCES

- Benchmarking Tools
- Commissioning Tools
- Energy Audits - Project Identification
- Energy Planning and Best Practices
- Energy Management and Project Implementation
- Funding Resources
- Training and Education



THANK YOU!

Please view the Energy Commission's website, or contact us by phone/e-mail if you have questions

<http://www.energy.ca.gov/efficiency/proposition39/index.html>

855-380-8722

Toll free (in-state)

916-653-0392

Toll line (out-of-state)

Prop39@energy.ca.gov

E-mail

